



**Improving institutions  
for green landscapes  
in metropolitan areas**

Evelien van Rij

---

# **Improving institutions for green landscapes in metropolitan areas**

---

---

The series **Sustainable Urban Areas**  
is published by IOS Press under the imprint Delft University Press

IOS Press BV  
Nieuwe Hemweg 6b  
1013 BG Amsterdam  
The Netherlands  
Fax +31-20-6870019  
E-mail: [info@iospress.nl](mailto:info@iospress.nl)

Sustainable Urban Areas is edited by  
Delft Centre for Sustainable Urban Areas  
C/o OTB Research Institute for Housing, Urban and Mobility Studies  
Delft University of Technology  
Jaffalaan 9  
2628 BX Delft  
The Netherlands  
Phone +31 15 2783005  
Fax +31 15 2784422  
E-mail [mailbox@otb.tudelft.nl](mailto:mailbox@otb.tudelft.nl)  
<http://www.otb.tudelft.nl>

---

---

# Improving institutions for green landscapes in metropolitan areas

## PROEFSCHRIFT

ter verkrijging van de graad van doctor  
aan de Technische Universiteit Delft,  
op gezag van de Rector Magnificus prof. dr. ir. J.T. Fokkema,  
voorzitter van het College voor Promoties,  
in het openbaar te verdedigen op vrijdag 12 december 2008 om 12.30 uur  
door

Helena Eva VAN RIJ

meester in de rechten en bestuurskundig ingenieur

geboren te Leiden

---

---

**Dit proefschrift is goedgekeurd door de promotor:**

Prof. dr. W.K. Korthals Altes, Technische Universiteit Delft

**Samenstelling promotiecommissie:**

Rector Magnificus, voorzitter

Prof. dr. W.K. Korthals Altes, Technische Universiteit Delft, promotor

Prof. mr. dr. ir. J.A. Zevenbergen, Technische Universiteit Delft

Prof. mr. J. de Jong, Technische Universiteit Delft

Prof. dr. A.J.J. van der Valk, Wageningen UR

Prof. dr. M.J. Oxley, De Montfort University, Leicester (UK)

Prof. V. Nadin, Technische Universiteit Delft

Prof. dr. A.M.J. Kreukels, Universiteit Utrecht

Improving institutions for green landscapes in metropolitan areas

Evelien van Rij

Thesis Delft University of Technology, Delft, the Netherlands

---

This research project was conducted within the scope of the NWO-programme GaMON (Social Scientific Research into "Nature and the Environment").

NWO does not guarantee the correctness and/or the comprehensiveness of the research data and results.

The author also wishes to acknowledge the financial assistance of the Dutch government through the Habiforum Program Innovative Land Use and Delft University of Technology through the Delft Centre for Sustainable Urban Areas.

Design: Cyril Strijdonk Ontwerpbureau, Gaanderen

Dtp: Yvonne Alkemade, Delft

Printed in the Netherlands by: Haveka, Alblasterdam

---

ISSN 1574-6410; 25

ISBN 978-1-58603-944-8

NUR 755

Legal Notice

The publisher is not responsible for the use which might be made of the following information.

© Copyright 2008 by Evelien van Rij

No part of this publication may be reproduced in any form by print, photo-print, microfilm or any other means, without written permission from the copyright holder.

---

---

# Contents

Preface and acknowledgements .....	1
<b>1 Introduction.....</b>	<b>3</b>
1.1 Research questions and the structure of this book.....	4
1.2 Research approach .....	9
1.3 The application of different theories .....	11
1.3.1 Multi-theory.....	11
1.3.2 Combining complementing theories.....	13
1.4 Introducing the cases.....	15
1.4.1 Midden-Delfland, Land Consolidation .....	17
1.4.2 Midden-Delfland, recent projects .....	21
1.4.3 The National Landscape Laag Holland .....	23
1.4.4 Cross-subsidy strategies in the Bloemendalerpolder .....	25
1.4.5 The Park Forest, Ghent Project.....	27
<b>2 Model for green area protection and improvement.....</b>	<b>31</b>
2.1 Green area protection and improvement in practice .....	32
2.2 From case study towards a model .....	35
2.3 Conclusion.....	42
<b>3 Landscape changes and the restructuring of the welfare state .....</b>	<b>45</b>
3.1 Signs of landscape changes .....	46
3.1.1 Signs concerning spatial quality .....	46
3.1.2 Signs concerning zoning.....	47
3.1.3 Signs concerning land ownership .....	47
3.2 Struggling landscape guardians.....	49
3.2.1 Recreational areas .....	51
3.2.2 Nature conservation sites .....	52
3.2.3 The importance of farmers for metropolitan green areas ....	57
3.3 Influences of the restructuring of the welfare state.....	57
3.3.1 Impact on sector departments .....	58
3.3.2 Direct impact on spatial planning .....	59
3.4 Conclusion.....	61
<b>4 Market or government; the limitations of Transaction Cost Theory .....</b>	<b>63</b>
4.1 Branches of Transaction Cost Theory .....	64
4.2 Transaction Cost Theory in the field of planning .....	66
4.3 Attempts to adopt Transaction Cost Theory.....	68
4.4 Institutional design based on explanatory Transaction Cost Theory.....	69
4.4.1 Public bureaus as a last resort.....	70

---

---

4.4.2	Different subsidizing strategies .....	72
4.4.3	Usability of explanatory Transaction Cost Theory .....	74
4.5	Planning, more than a tool to lower transaction cost between private parties .....	75
4.6	Low organization costs as a criterion?.....	76
4.7	Conclusion.....	77
<b>5</b>	<b>Market or government; the debate about cross-subsidy strategies .....</b>	<b>79</b>
5.1	Motivations for a cross-subsidy approach .....	80
5.1.1	Collaboration.....	80
5.1.2	Spatial quality .....	81
5.1.3	Finances.....	81
5.1.4	Different terms and different motivations .....	83
5.2	Evaluating the Bloemendalerpolder process .....	83
5.2.1	The planning process .....	83
5.2.2	Evaluating the process.....	87
5.3	Lessons that can be applied from the Bloemendalerpolder case.....	88
5.4	The constraints of a cross-subsidy approach .....	89
5.4.1	Legal constraints.....	90
5.4.2	Financial constraints.....	92
5.4.3	Skepticism about the improvement of spatial quality.....	93
5.4.4	Opposition because of rising land prices, limited transparency and inclusiveness.....	95
5.5	The uniqueness of the Bloemendalerpolder case.....	96
5.6	Conclusion.....	99
<b>6</b>	<b>Network or hierarchy .....</b>	<b>103</b>
6.1	Theories on networks and hierarchies .....	103
6.2	Hierarchical and network-oriented approaches in practice.....	106
6.3	Reasons to combine hierarchical and network-oriented approaches .....	113
6.4	Conclusion.....	117
<b>7</b>	<b>Spatial planning and land development .....</b>	<b>119</b>
7.1	The operational and strategic spatial planning-land development matrix .....	119
7.2	Roots of Dutch spatial planning and land development rationalities .....	123
7.3	Consequences of mono-rational approaches .....	126
7.3.1	“Farmland that will become vacant” .....	126

---

---

7.3.2	The effect of cross-subsidy approaches on land prices .....	128
7.3.3	Mismatch between strategic and collaboratively made plans and operational resources .....	128
7.3.4	The aim of planning .....	129
7.3.5	Overstretched use of strategic spatial planning rationalities .....	130
7.4	Institutional change and tensions between public interest and private rights .....	131
7.4.1	Compensation: zoning versus compulsory purchase .....	131
7.4.2	Cross-subsidy agreements and the “two hats problem” .....	134
7.4.3	Cross-subsidy approaches and the “I develop the project” principle .....	136
7.4.4	Compulsory purchase for green types of land use .....	137
7.4.5	Public interest versus private rights .....	139
7.5	Conclusion .....	139
<b>8</b>	<b>Slow Planning and incremental institutional change .....</b>	<b>143</b>
8.1	Slow Planning .....	143
8.1.1	Dynamic planning in Laag Holland .....	144
8.1.2	Slow Planning in Midden-Delfland .....	148
8.1.3	The Slow Planning approach .....	149
8.2	Institutional change in planning .....	150
8.2.1	Institutions’ different change frequencies .....	152
8.2.2	Institutional system .....	153
8.2.3	Planning institutions at different levels .....	154
8.2.4	Balanced institutional system: public interest versus private rights .....	155
8.2.5	Changing planning concepts .....	157
8.2.6	Radical change: market-coordinated spatial order .....	160
8.2.7	Incremental institutional change: Midden-Delfland Act .....	162
8.3	Conclusion .....	163
<b>9</b>	<b>Conclusion .....</b>	<b>165</b>
9.1	What is going on? .....	165
9.1.1	Soft Planning .....	165
9.1.2	Preservation instead of creation .....	166
9.1.3	Recurring costs .....	167
9.1.4	Future of metropolitan farmers .....	168
9.1.5	Cross-subsidy strategies .....	169
9.1.6	Model for green area protection and improvement .....	169
9.1.7	The restructuring of the welfare state .....	170
9.1.8	Slow Planning and incremental institutional change .....	171
9.1.9	Spatial planning and land development .....	172

---

---

9.2	Recommendations for practice.....	174
9.2.1	General recommendations .....	174
9.2.2	Specific recommendations .....	175
9.3	Methodological implications.....	179
9.3.1	Exploring a transaction cost methodology .....	179
9.3.2	Multi-theory approach.....	180
	<b>References.....</b>	<b>183</b>
<b>Appendix A</b>	<b>Interviewees .....</b>	<b>209</b>
<b>Appendix B</b>	<b>Dutch text on compensation .....</b>	<b>213</b>
<b>Appendix C</b>	<b>Dutch text on dynamics .....</b>	<b>215</b>
	<b>Improving institutions for green landscapes in metropolitan areas - Summary .....</b>	<b>217</b>
	<b>Verbeteren van instrumenten voor groene metropolitane gebieden - Samenvatting (Dutch Summary) .....</b>	<b>221</b>
	<b>Curriculum Vitae.....</b>	<b>225</b>

---

---

# Preface and acknowledgements

When I first read the research proposal, I was immediately enthusiastic; this was an opportunity to combine what I had learned at the Law Faculty, at the Faculty of Technology, Policy and Management and working for engineering and consultancy firms, confronting new challenges in the field of planning and institutional economics. Later on, when I realized that the future of metropolitan green areas in The Netherlands are by no means secure, I liked the subject even more; my research could possibly make a small contribution to protecting metropolitan green areas.

Writing a dissertation is like cycling the 11-cities tour; it is about remaining seated and continuing, it is about fun and challenges, it is about the land and loads of people, it is about working on your own and thankfully receiving the help of others. First of all, I would like to thank the people who, during interviews, were prepared to reveal what this research was about and all the others who provided all kind of information including pictures. I would especially like to thank Kees van der Vaart for introducing me to the Midden-Delfland case and Hans Leinfelder introducing me to the Park Forest Ghent case.

I would like to thank the Netherlands Organization for Scientific Research (NWO) for funding this research within their “Environment, Surroundings and Nature” (GAMON) program. Thank to Terry van Dijk and all others who cooperated to arrange this funding. I also wish to acknowledge the financial assistance of the Dutch government through the Habiforum Program Innovative Land Use and Delft University of Technology through the Delft Centre for Sustainable Urban Areas.

My supervisor, Prof. dr. W.K. Korthals Altes introduced me to planning and read every word I wrote critically. My other supervisor, Prof. mr. dr. ir. J.A. Zevenbergen introduced me to agricultural land management and supported me in my attempts to explain the legal tradition to a wider academic community. In an early stage of my research project I overheard my supervisors saying to each other: *“Ik denk dat we Evelien wel even kunnen laten zwemmen, ze komt wel weer boven.”* (“I think we can let Evelien swim for a while, she will come up again”.) Dear Willem and Jaap, I am grateful for your contributions, I enjoyed the freedom to swim and your confidence in my swimming skills.

TU Delft and the research institute OTB provided good conditions for this PhD-project. There are many colleagues to whom I owe many thanks: the section Geo Information and Land Development, the administration office, especially Itziar, Jeanet and Dirk, the PhD board, the peer-group and the pub-group. Herman, Hendrik, Janneke, Jeanine, Richard, Arta, Wiebke, Eva, Bastiaan and Fernao: thanks for all your advise. Sören Johnson, thank you for making the English text more clear and concise. Dr. M.T. Taşan-Kok, Tuna, thanks for the support on theory and methodology. Dr. D.A. Groetelaers, Daniëlle, I have been lucky to share a room with one of the few experts in Dutch land development institutions.

AESOP’s Planning, Law and Property rights group provided a good platform

---

for exchanging knowledge on this topic. Prof. dr. R. Alterman, Dr. L.B. Janssen-Jansen and Prof. dr. W.G.M. Salet: Dear Rachelle, Leonie and Willem, organizing the Inaugural Symposium of the Planning, Law and Property Rights International Academic Forum with you was a valuable experience.

I would like to thank Prof. dr. J.P.M. Groenewegen, Prof. dr. E.R. Alexander, Dr. M.J.G. van Eeten, Prof. dr. A.K.F. Faludi, Dr. T. Kauko, Prof. dr. M. Neuman, Prof. mr. J. de Jong and Dr. E. Buitelaar, for reading early work on this thesis. This helped me to embed this work in a broader body of knowledge. Prof. dr. A.J. van der Valk, Prof. dr. ir. A. van den Brink, Dr. E. Koomen, Drs. J.E.C. Dekkers, Ir. A.H.J. Segeren, Dr. ir. S.H. van der Arend, Dipl.-Ing. T. Hartmann, Dr. iur. B. Davy, thanks for the fruitful knowledge exchange.

To my former housemates at the Jozefstraat and to Henriëtte and Joop, the esprit de corps depends on everyday things which were often provided by you. Nico and Fabienne, I owe you much more than an ice-cream in exchange for the help with the pictures. I thank all my teammates and coaches during the years and Frans Bosman for giving me the opportunity to put my mind on something else. Thera, Enna and Inge, life is not always as it is in the movies, but you bring them closer together. Sanne, Menno, Albertien and Niels (& partners), thanks for your friendship and understanding. Gabriëlle, Luis, Rosemarijn, Saskia, Maaïke, Tessa, Gerdien, Corina, Jacobien, Marike, Inga, Madeleine, Michelle, Martijn and Gepke, thank you for asking "How is the research doing?" and for your suggestions on what to do with the things I complained about.

Linda, Anne, Femke and Tjeerd, thank you for the smiles on your faces. Ut-to, I wonder whether I would have ever got so much involved in policy and law without you. Brechje and your family, thanks for the hotline to Sneek. Who else can say, "elk woord is er één!" (every word counts!). Mama en papa, nothing helped me to write this dissertation as much as everything I have learned from you. Thank you!

Delft, July 2008

---

---

# 1 Introduction

People value green areas between urban areas (for an example, see Figure 1.1). However, these landscape values are not always taken into account when decisions are made that affect the landscape. For these values to play a role in such decisions, they need to be internalized. This thesis investigates how various institutions for green landscapes in metropolitan areas work, which problems hamper them, and how these institutions can be improved.

The quality of green areas close to cities is an established concern in planning practice. The green belts around cities such as Vienna (Abercrombie, 1910) and London are classic examples. Other well-known examples are the Green Heart in the Netherlands, the green wedges between the fingers of Copenhagen, greenways in the USA, and more recently, the Emscher Park in the German Ruhr Area (Shaw, 2002; Maruani & Amit-Cohen, 2007; Gailing, 2005). The distinction between urban areas and open space is a basic principle in Dutch spatial planning doctrine (Faludi & Van der Valk, 1994), and the *Nota Ruimte*, the new Dutch memorandum on spatial planning, follows this tradition, with the protection of open space continuing to be a major principle of spatial organization (Ministry VROM et al., 2004; Priemus, 2004).

However, despite the planning attention given to green areas close to cities, projects and policy strategies to protect and improve these green open areas often fail to produce the intended results. (For some international examples, see Alterman, 1997; Bannon & Cassidy, 2000; Romero, 2003; and for the Dutch case, Rekenkamer, 2006; Farjon et al., 2004; VROM-Raad, 2004a.) These areas are confronted with many claims for housing, water-management, nature development, industrial sites, and office buildings (Jacobs, 2004). Built developments are usually more profitable than green types of land use and therefore, they constantly threaten green areas near cities. The Netherlands Environmental Assessment Agency (*Milieu- en Natuur Planbureau*) predicts an increase in built-up land and a decrease in green areas (Borsboom-van Beurden et al., 2005). More research is needed to determine which factors can strengthen future institutional arrangements.

Changes to the institutional context also make it important to study institutions for green landscapes in metropolitan areas. Changes to the welfare state, including privatization, deregulation, and decentralization, have affected the ability of central planning departments to guide urban containment (Korthals Altes, 2002). Together with new EU-policies, these developments also affect green areas, for example due to rising agricultural land prices and retrenchment of governmental investment in agriculture. Taken together, these developments make it necessary to examine measures aimed at strengthening the countryside (Brody et al., 2006; Gallent & Shaw, 2007).

This research project is about institutions that aim to strengthen the countryside. In order to understand what influences landscape changes, this project started by investigating the changes in the landscape and the expected changes. It examined what has influenced these changes and what role

---

**Figure 1.1** People enjoying the green area of Midden-Delfland

institutions have played in this process. This will help to increase the understanding of the link between process and spatial quality, between plans and plan implementation, the importance of which has been stated by many authors (e.g., Bengston et al., 2004; Brody et al., 2006; Koontz, 2003). Although some planning literature touches on this aspect (e.g., Brody et al., 2006; Romero, 2003), there is still much to be learned about this subject since many case studies describe projects that have only been partially successful, and since the institutional context changes continuously.

In order to get a good understanding of the complexity of institutions in practice, I chose to conduct case studies. Because institutions operate within a complex institutional system, I chose to examine one specific system, in this case the Dutch one. The Dutch landscape is metropolitan and densely populated. Behind the scenes, much effort and money is spent to protect and improve metropolitan green areas, supported by institutions such as laws and policy programs. Studying the Dutch institutional system provides the opportunity to examine a system that is considered successful but which is currently facing difficulties (Pols et al., 2005; Ministry VROM et al., 2006; MNP, 2007a).

## 1.1 Research questions and the structure of this book

This book addresses the question how do institutions for green landscapes in metropolitan areas become effective, what problems hamper the effectiveness of these institutions, and how these institutions can be improved. After addressing the following sub-questions, this section explains the various terms involved in this issue.

The following sub-questions were formulated as a response to the case studies:

- 
1. What are the major developments in green areas near cities, and how are they related to institutional developments?

Based on the case studies, Chapter 2 introduces a model of the different ways the protection and improvement of green areas near cities can be influenced. Chapter 3 provides a general picture of the contemporary problems facing the landscape and their relation to recent developments in the institutional framework, such as the restructuring of the welfare state.

2. To what extent can private parties play a role in green area preservation: the market vs. government dilemma?

Chapter 4 discusses the limited applicability of Transaction Cost Theory as a tool for designing institutions for green landscapes in metropolitan areas. Chapter 5 discusses why cross-subsidizing green areas with built developments may in many cases not be a viable solution for financing green areas.

3. Are network-oriented institutions or hierarchical institutions more suitable for the protection and improvement of green areas near cities?

Chapter 6 deals with the strengths and weaknesses of hierarchical and network-oriented approaches, discussing ideas about network theory in policy analysis. It elaborates further on decentralization as a policy development and it explains why a combination of hierarchical and network-oriented approaches can work in practice.

4. Why do tensions occur between (1) measures a planning agency takes to influence spatial disposition and achieve a coherent distribution of land uses (referred to as spatial planning) and (2) the production of serviced plots for specific land uses (referred to as land development)? How does this affect institutions for green landscapes in metropolitan areas?

In order to be able to discuss the interaction between spatial planning and land development, in line with Needham (2000, p. 444), the concept of spatial planning is restricted to those cases in which a planning agency tries to influence many different aspects of the spatial disposition of a particular area to achieve a coherent distribution of land uses and activities. This can be done at either a strategic level, strategic spatial planning, or at an operational level (e.g., a land-use plan for a specific area). This dissertation defines land development as the production of serviced plots for specific land uses. Land development often refers to the implementation of one of the specific aspects covered by spatial planning. An example of this would be the purchase of land to construct a bicycle path. Chapter 7 investigates the tensions between the rationalities behind strategic spatial planning, operational spatial planning, and operational land development.

---

5. Do the major developments in the landscape and their institutional context require more dynamic planning processes, and are radical institutional changes required?

Chapter 8 discusses institutional change in planning and explains how Slow Planning can help to preserve dynamic green areas near cities and why this requires incremental institutional change.

### **Institutions**

This project looks at institutions for green landscapes in metropolitan areas. In this project, the term *institution* is used following North's (1995) definition. Institutions are the constraints that human beings impose on human interaction. They consist of formal rules such as laws and regulations and informal constraints such as conventions, norms, and traditions. In planning, there has been a debate about institutions (e.g., Healey, 1999; Koontz, 2003). Healey (1999) used the term *institutionalism* to refer to the embedding of specific practices in a wider context of social relations that cut across the landscape of formal organizations, and to the active processes by which individuals in social contexts construct their ways of thinking. This research project uses the term *institution* in the broader sense, including formal institutions because they have an important effect on the landscape and, unlike values and norms, leave more room for institutional design. This project examines institutions that have an effect on green areas near cities. These include land-use plans, collaborate visions of landscape change, green area funds, measures to support the activities of farmers (including new ones), compulsory purchase legislation, land banks, land subdivision permits, and measures requiring building developments to cross-subsidize green developments. In many cases, there is a strong link between the use of institutions and financial means. Therefore, institutions and the cost and benefits associated with them are jointly examined.

### **Internalization**

This research project focuses on institutions that internalize the values of green landscape. It uses an economic interpretation of the term *internalize*; this project is about the internalization of externalities. Externalities are costs or benefits that result from a decision, but are not borne by the decision maker, for example the costs associated with the loss of a nice view of a green landscape due to the development of housing. When these externalities are taken into account, they are said to be internalized. Webster and Lai (2003) gave a number of examples of internalization. For example, a polluter can compensate by means of a buyout, buying up neighboring residual properties (Webster & Lai, 2003, p. 99). Private negotiations or a court dispute resolution can lead to a compensatory contract to internalize an externality (Webster & Lai, 2003, p. 103). Another way of internalizing an externality is to levy a tax

on a polluter (Webster & Lai, 2003, p.159). Various institutions can be used to internalize landscape values, including built developments that cross-subsidize green developments, zoning, and land purchase by pro-green parties such as the government.

Internalizing can thus occur in many different forms. It is more complex than the simple idea that the polluter pays (e.g., Reinhard & Silvis, 2007), or the idea to fully integrate such things as attitudes, behavior and language into the decision makers' nature, through learning or unconscious assimilation (Winsemius, 1986), or the idea that the problem of steering would largely be resolved if other departments or societal stakeholders were to adopt a concern for your preferred scenario (Hajer & Zonneveld, 2000). Using the term *internalize* in this way makes it possible to compare many different institutions that have an effect on the positive externalities associated with green areas near cities.

### **Green landscape values in metropolitan areas**

Examining how landscape values can be internalized, it needs to be clear which values are being referred to. The basic idea is that city dwellers value green areas near cities (Koomen et al., 2005a; Savills & Evamy, 2005; Ministry LNV, 2006). This dissertation is about these green areas near cities that people value. These can be nature conservation sites, recreational areas, and agricultural areas (Crommentuijn et al., 2007). Frequently, the public does not distinguish between such areas; citizens value nature, including forests, rural landscapes, and parks in this term (Groote et al., 2006). In this dissertation, I will use this popular interpretation of *nature*. For example, if I discuss institutions to support habitats for endangered species, I will consider those habitats not for the sake of biodiversity as such, but because people like to see special birds.

In order to internalize landscape values, we need to have an idea about their size. How many green areas should be protected and improved? Some ideas on institutions for internalizing landscape values are based on reducing transaction costs and creating a market for green areas. This is based on the idea that the amount of green area to be protected and improved should be determined by the market. Chapter 8 discusses why these ideas are not likely to be implemented. To apply other institutions, a decision needs to be made about the size of the landscape values to be internalized. Determining this amount is not in the scope of this project. This is done by other projects in the Gamon research program. The value of green metropolitan landscapes can help to determine this amount, and this value is the topic of another research project in the same research program, conducted at the VU University Amsterdam (e.g., Koomen et al., 2005a). The decision whether or not to protect and improve green areas because they are valuable is also a political or planning decision, and this is covered by another project, conducted at Wageningen-

gen University (e.g., Van Dijk & Van den Brink, 2006). I just accepted the idea that preservation of certain metropolitan green areas is beneficial.

This research project is about institutions for green landscapes in metropolitan areas. The term *metropolitan landscape* is used for all areas that are under the influence of urbanities and urban spheres (Tress et al., 2004). This research is about metropolitan green areas, green areas between urban areas. Because the use of rural areas by city dwellers is the starting point of this project, I take the following Dutch planning principle as a guideline: In order to use the countryside for recreation, city dwellers should be able to reach the countryside using their common mode of transport. In the Netherlands, this would include bicycle or bus, as well as car. Since 1956, it has been an important principle of Dutch planning that agricultural land or a substantial recreation area should be accessible from each point in a town in a radius of less than four kilometers (Faludi & Van der Valk, 1994, p. 106). In order to get a rural experience, as opposed to a regular city-park, these areas should also have a diameter of at least four kilometers (see WWdL, 1958).

### **Improving**

Looking for measures to improve institutions, one needs to specify what is meant by improvement. Different research disciplines work with different criteria. Economists aim at efficiency improvements, lawyers are basically concerned with legitimacy, and ecologists seek to increase biodiversity. Planning institutions can be considered effective if they have the effects on spatial quality intended by the makers of these institutions. Efficiency depends on the time (effort) and money that is needed to accomplish these goals. In addition to these classic ways of evaluating, more goal-free evaluations exist (e.g., Scriven, 1972). Faludi (2000) stated that planners should be concerned with facilitating good decision making. This requires looking in detail at the decisions and actions of the people to whom the plan is addressed, and establishing whether they have adopted the message, and to what extent. Healey (2003) argued that planning institutions should be legitimate and called specifically for transparency and inclusiveness. Since this research project is multi-disciplinary, and in order to reach balanced conclusions, no one single criterion was used to discuss the improvement of institutions. Instead, based on the idea that complexity requires an analytic method using different points of view (De Bruijn & Van der Voort, 2000) and in line with the multi-theory approach which is discussed later, various criteria, some of them formulated during the interviews, were used, including effectiveness, efficiency, legitimacy and spatial quality.

---

## 1.2 Research approach

The research approach is inspired by ideas from Grounded Theory, as described by Glaser (1992). This is a research methodology that is based on generating theory from data in the process of conducting research. Instead of testing a predefined hypothesis, I started with some general themes and ideas derived from reading literature. On the basis of this literature and some pilot interviews, cases were selected. These case studies determined which institutions were to be examined, how the research questions were formulated, and the theories selected. Theory and methodology were selected and developed on the basis of case study data.

Because context matters for institutions (e.g., Salet, 2002), case studies were chosen. This method enabled me to define the research topic broadly, to cover complex and multivariate conditions, and to rely on multiple sources of evidence (Yin, 2003). Section 1.5 elaborates further on how the cases were selected.

Choosing an approach inspired by Grounded Theory, had consequences for the way data were collected during the case studies. Instead of working with a predefined hypothesis, a set of topics was selected, which would be studied in the case studies. The following topics were addressed in each study: What are the most important developments in the area affecting green areas: problems, threats, and opportunities? Which institutions are relevant? What is their impact? What are the costs associated with this approach? Issues studied included land prices, the land owners and their economic position, policy programs, and the interaction between different public and private parties. Each case study used a combination of data collecting techniques, including document analysis, web search, discourse analysis, visits to case study sites, juridical institution analysis, participant-observations, and semi-structured interviews.

The choice for semi-structured interviews had several reasons. First of all, this permitted respondents to tell their story, starting with their position and their point of view. This approach allows the interviewer to get detailed information about topics that are important to the interviewee and the process, but which the interviewer was previously unaware of (Emans, 2002). In this way, the case study material determined which topics would be examined further, and provided the basis for selecting theories to address the questions that emerged.

Interviews formed the central part of the research. Prior to the interviews other data collecting techniques, especially web search, were used to collect information about the link between the interviewee and developments in the landscape. This helped me to understand the interviewee's story and prevented me from missing important topics. After the interviews, the topics raised by the interviewees were further examined, using other data-collecting techniques and during other interviews.

---

Because of the importance of the interviews, the interviewees were carefully selected. Following Guba and Lincoln (1989), the interviewees were selected to provide a maximum variation in sampling. People were selected who were most likely to think differently about the issue at stake. In order to avoid elite-bias (Hutjes & Van Buuren, 1992), people were interviewed who came from all levels in the organizations. I also interviewed people who were active in different phases of a policy process. Interviewees were selected on the basis of the insight they could give into the working of the processes and institutions. Respondents represented various groups: (1) the public sector (different levels of government and different professions), (2) private parties (farmers, property developers, inhabitants), and (3) nongovernmental organizations in the field of nature conservation, farmers' interests, landscape preservation and recreation.

During the interviews, the following topics were discussed: What role has the interviewee had with respect to developments in the green metropolitan landscape? What are the strengths, weaknesses, threats, and challenges for the landscape and the institutions that affect the landscape? According to the interviewee, what are the most important actors and institutions? Which changes can make institutions more successful? What costs are associated with the different institutions? In general, broad and open questions were asked. Depending on the interviewee's responses, questions were pursued in greater depth. Laymen sometimes ask how one can know that an interviewee is telling the truth. First, this is overcome by comparing with other interviews and the results of other data-collecting techniques. However, whether interviewees tell the truth is hardly relevant, because the interviews are used to examine actors' point of view, and to examine the roles of different actors in the actor-network (Enserink et al., 2002). My background in system engineering and policy analysis helped me to conduct the interviews in this way.

In addition to the interviews, I analyzed documents such as policy statements and plans, annual reports, minutes of meetings, decrees, local and national newspaper articles, maps, cadastral data, statements of pressure groups, and written agreements. The accessibility of these documents has increased tremendously due to the almost universal use of internet. Parts of these documents was analyzed using ideas on discourse analysis discussed by Van den Brink and Metze (2006), by examining the usage of dominant terms and the reasons why they were used.

The case study areas were also visited, and the following aspects were investigated: What kinds of changes are taking place in the area? For example, are new barns or houses being built, or new recreational areas being developed? Have farmers started new activities such as campsites? How prosperous is the region? What do the nature preservation sites, the recreational areas, the farms and houses look like? Are there any signs of public protest? Participant-observations were made; for example, a discussion evening about

a new policy statement was attended, as were meetings dealing with the establishment of a new land bank.

My background in law helped me to analyze the legal institutions behind the changes, and the manner in which these legal institutions become effective. This leads to the following question: how can parties be forced to take or to refrain from particular actions? By comparing interviewees' statements about the experienced effects of the regulations with an analysis of the legal documents, a link was made between the law in the books and the *de facto* impact of legal institutions.

### 1.3 The application of different theories

When studying institutions for green landscapes in metropolitan areas, I faced the problem that there is no single theoretical and methodological tradition in this field. I chose a multi-theory framework for a variety of reasons: (1) the limitations of using Transaction Cost Theory as an institutional design tool for benchmarking institutions for green landscapes in metropolitan areas and hence the need to consider other theories, (2) Williamson's model on different institutions, theories and research disciplines (see Table 8.1), and (3) the various criteria society uses to judge these institutions. After discussing the need for a multi-theory framework, I will explain the method used to select the various theories.

#### 1.3.1 Multi-theory

For some years, high expectations have been placed on Transaction Cost Theory in planning (Alexander, 2001a, 2001b; Webster & Lai, 2003; Buitelaar, 2003, 2004). This theory assumes that different institutions have different effects on transaction costs and that these transaction costs should be reduced in order to increase efficiency. Alexander (2004) stated that Transaction Cost Theory is a very useful tool for designing institutions.

In view of this, an attempt was made to apply a transaction cost framework in this project (see Chapter 4). Unfortunately, as Chapter 4 explains, the usefulness of Transaction Cost Theory as an institutional design tool for benchmarking institutions for green landscapes in metropolitan areas turned out to be limited. Therefore, support from other theories was needed. This is in line with Williamson's (1998) statement that despite its broad reach, Transaction Cost Theory does not tell us everything. It takes its place alongside other – sometimes competing, sometimes complementary – theories. (See Salet, 2002, for an introduction of various institutional theories.) Williamson (1998) categorized institutions in four levels (see Table 8.1), with each level having its own theoretical framework. I used this categorization for the selection of theories.

The first level of Williamson's (1998) model consists of norms, customs, mores, traditions – all informal structures with a spontaneous origin. These informal institutions are the domain of social theory such as history and anthropology. The second level, the institutional environment, provides the formal rules within which economic activity is organized. The definition and enforcement of property rights play an important role at this level. This level is the domain of disciplines such as the economics of property rights, legal studies, and political science. The third level involves institutions of governance; these institutions are the object of Transaction Cost Economics. At this level, we find alternative models of coordination which can be based on market mechanisms or not. Choices for specific contracting strategies and make-or-buy decisions are made at this level. The fourth level deals with resource allocation on the basis of price and output. Neo-classical economics is the most important discipline that deals with this level.

In practice, the division of institutional levels over research disciplines and theories is not as strict as this model would suggest. For example, legal studies are also concerned with basic principles of law such as the protection of property rights, stipulated in conventions (Alkema, 2000), which can be categorized as level-one institutions. Legal studies also often deal with choices concerning governance structures (which are level-three institutions). Similarly, government and market are not the exclusive subjects of Transaction Cost Economics; other disciplines such as legal studies, policy analysis, and planning theory also address them.

What can Williamson's model teach us when selecting a theoretical framework to explain how institutions for green landscapes in metropolitan areas can be improved? Can a theoretical framework be selected by determining the level of these institutions and then choosing the theory Williamson associated with that level? At first sight, these institutions might appear to be level-three institutions. However, a closer look shows that institutions of all levels affect how metropolitan rural landscape values are internalized. The price of land and of agricultural products, level-four issues, influences the ability of farmers to maintain metropolitan rural areas. Norms such as the wide acceptance of planning and zoning in the Netherlands, compared to the more property-oriented system in Belgium, level-one issues, also have consequences for the way landscape values are internalized and for the possibilities of institutional change. Last but not least, things like land readjustment legislation and legislation on developer's payments to the government, level-two institutions, also play an important role. Because institutions for green landscapes in metropolitan areas can be found at all levels, it is necessary to take different theories into consideration.

The interaction between the different levels, the way institutions operate as a system with interwoven checks and balances (see Hart, 1994), is another argument for using a multi-theory framework. The different levels of the

---

model suggest that the higher levels are influenced by input from the lower levels, starting with the first level. For example, many scholars studying governance structure take the legal framework as a black box given and criticize its inflexibility. However, disciplines such as law deal with adjustments to second-level institutions. Because these lower levels influence the possibilities for different governance structures, theories dealing with these levels are useful for improving institutions at other levels too. Interaction between the levels urged me to use various theories, complementing one another.

Besides, in a reaction to the current enthusiasm for Transaction Cost Theory, Pearce (2005) pointed out that despite the importance of efficiency, the planning system needs to be examined and assessed using a much broader set of criteria such as equity, redistribution, fairness and justice. Some economists have stated that by broadening the efficiency concept, Transaction Cost Economics can also take these other criteria into account. Alexander (2001b) illustrated this by stating that if the parties to a transaction are not limited to the actors who are directly involved, but include all the relevant stakeholders, then, minimizing overall net transaction costs may enhance democracy and participation. Alexander added that transaction cost analysis can help aggregate efficiency and equity goals. Chapter 4 puts this in perspective. Other disciplines such as legal studies, policy analysis, and planning theory also address these subjects, and they often take criteria other than efficiency such as justice, fairness, and spatial quality into account in a direct and clear way. As mentioned earlier, in order to get a balanced perspective, this project uses various criteria to discuss how institutions can be improved. This is another reason to use more than Transaction Cost Theory, including theories from other disciplines such as planning, law, and policy analysis.

All in all, a multi-theory framework was chosen for various reasons: First, because an approach based solely on Transaction Cost Theory was not applicable; second, because many different institutions interfere; and, finally because society judges institutions on many different criteria.

### 1.3.2 Combining complementing theories

Even with a multi-theory approach, a selection of theories still had to be made. Inspired by Grounded Theory (Glaser, 1992; see Section 1.2), I selected many theories on the basis of the case study data. In practice, theories were selected in two phases: first, before the data collection, and later, on the basis of the collected data.

Before the data collection, I started with a frame of reference. I studied law, as well as “System Engineering, Policy Analysis and Management.” The later study acquainted me with organization theory and ideas on network management. At the start of this research project Institutional Economic Theories, such as Transaction Cost Theory, seemed promising for studying institutions

---

for internalizing landscape values. For this reason, these theories and their applications in planning (in particular Webster & Lai, 2003) were studied, and ideas were elaborated for a methodology for applying this theoretical framework to case studies (Van Rij & Korthals Altes, 2005). In addition, case specific literature from the fields of planning, geography, and rural economics on the interaction between institutions and metropolitan rural landscapes was studied. This literature was both theoretical and practical, serving both as a theoretical framework and as an object of study. This framework influenced the first decisions about data collection.

During and after the data collection, a further selection of theories was made. The rest of this section explains how case study data was used to select theories, following Grounded Theory. This selection was based on the sub-questions presented in Section 1.1.

The first sub-question identified the major developments in the landscape and the associated institutional developments. Because planning theory, geography, and rural economics lack a comprehensive framework on this topic, taking a Grounded Theory approach, I developed a model of how the process of green area protection and improvement works on the basis of the case studies. The model describes the ways in which a government can influence the protection and improvement of metropolitan green areas. This model has been validated by presenting it to interviewees and experts. This model also allows important institutional developments and physical developments in metropolitan green areas to be analyzed jointly.

As discussed in Chapter 4, the second question, the market or government dilemma, can only be partially addressed by Transaction Cost Theory. In order to evaluate public, private, or combined approaches, the topic of Chapter 5, a number of theories were useful. Planning theory (e.g., Healey, 2003) was used to evaluate processes based on their inclusiveness and ability to stimulate learning. Policy analysis theory on Public Private Partnerships (e.g., Koppejan, 2005) was used to analyze the ability of processes to achieve actual cooperation and meet public demands for as little public expenditure as possible. Legal theory was used to address the legitimacy of these processes. Combining and comparing these various theories made it possible to conduct a nuanced multi-criteria analysis of market or government oriented approaches.

To address the third question, the network or hierarchy dilemma, it was necessary to incorporate network theories into the research. Theory from the field of policy analysis (De Bruijn & Ten Heuvelhof, 2000) helps to explain the concepts of network and hierarchy as they are used in discussions about policy and management. In planning theory, the network concept has also been welcomed (Hajer & Zonneveld, 2000; Healey, 1999; Van Dijk, 2006). Moving towards a network approach even has consequences for the organization of government. In this light, decentralization is an important topic, which is dis-

cussed using Organization Theory, following Mintzberg's (1983) approach.

The fourth question dealt with tensions spatial between planning and land development. To discuss these tensions, I developed a matrix, with the strategic and the operational level on one axis and spatial planning and land development on the other. Chapter 7 uses planning theory to describe different forms and functions of planning (e.g., Faludi, 1989; Hajer & Zonneveld, 2000; Alexander, 2001a; 2001b; Korthals Altes, 1995; 2007). Theories from policy science and administrative law explain why contemporary tensions are rooted in ideas about sector and facet planning (e.g., Dutch Lower Chamber, 1970-1971; De Haan & Fernhout, 1981). Legal theory (e.g., Van Buuren et al., 2002; Van Wijk et al., 1997) was used to explain the tension between public interest and private rights. Van Eeten and Roe's (2002) theory on coupling-decoupling-recoupling and Davy's (2007) ideas about poly-rationality inspired the discussion on the improvement of the institutional system.

The fifth question was whether the major developments in the landscape and their institutional context require more dynamic planning processes and whether they might require radical institutional changes? To examine this question, planning theory advocating the acceleration of planning processes was used (e.g., Alexander, 2001b; Buitelaar, 2007; Gallent & Shaw, 2007). On the basis of case study data and the model I developed in Chapter 2, this idea was countered with the concept of Slow Planning. To determine the time it takes institutions to change, several theoretical approaches were used. Institutional change is a topic in planning theory (e.g., Healey, 1998; Salet, 2002; Webster, 2005). In institutional economics, Williamson's (1998) model (Table 8.1) discussed the different frequencies at which different institutions change. Considering legal certainty, law scholars have advocated incremental change (e.g., Raitio, 2003; Hart, 1994). To discuss the idea of continuity of an institutional setting and the importance of a good fit between new institutions and the existing institutional framework, theory on policy analysis and organizational change was also used (e.g., Van Bueren & Ten Heuvelhof, 2005; Scott-Morgan, 1994).

## 1.4 Introducing the cases

Because success or failure of institutional arrangements depends on goodness-of-fit (Alexander, 2004) and national frameworks of institutions operate as coherent systems, the research project took one national institutional context as a starting point. This made it possible to investigate trends, identify dilemmas, and make recommendations in a coherent way. Although conditions will be different in other places, structuring dimensions, process characteristics and lessons learned might be quite similar.

The Dutch context was chosen for a variety of reasons. In such a densely

populated country as the Netherlands, urban sprawl is an ever-present threat. According to Alterman (1997), Dutch planning and land management institutions represent one of the world's most successful systems to preserve farmland. Despite the successes of the Dutch system, at this moment the Dutch institutional framework is facing difficulties. As stated earlier, all this makes the Dutch institutional framework worth studying. In order to compare this framework with a similar institutional framework, but one based more on individual property rights than on the idea of public goods, a minor case study was also conducted in Belgium.

Cases were selected on the basis of their similarity with respect to some variables and their heterogeneity with respect to other variables. This made it possible to study the topic of metropolitan green area protection and improvement from a broad perspective (Miles & Huberman, 1994). The cases are all situated near big expanding cities in metropolitan areas. In these areas, land is scarce and needed for built developments, infrastructure, agriculture, recreation and nature. Except for the Flemish case, which was used primarily for comparison, all cases are located in the Netherlands, specifically in the most dense and industrialized area of the country, the *Randstad* (Faludi & Van der Valk, 1994). In addition, all cases represent areas larger than the regular city-park, and all of them are easily accessible from a city or town, so that they can be used for a stroll. Various types of land use, nature-conservation, agriculture, and recreation are apparent in most cases. The variety of institutional settings was an important selection criterion. Cases in different phases of development were also selected (Swanborn, 1994). Data collection took place before the summer of 2007. The different cases vary in their successfulness, in the involvement of private parties, and in the innovative nature of the institutions used. The Flemish case was only studied to examine the impact of nationally developed institutional systems and to become more aware of the particularities of the Dutch institutional system. Because areas were selected partly on the basis of reflecting an interesting combination of institutions, areas where few special institutions are involved run the risk of being overlooked. Therefore, literature study was used to provide special attention to those areas which have not received much specific attention in policy programs.

The land consolidation project in Midden-Delfland was chosen as a case study area because the project used what are currently rather conventional institutions. Because the project is almost finished, it is also possible to examine its results. The land consolidation project in Midden-Delfland provides information on the way important institutions reach their goals. The recent situation in Midden-Delfland was studied to provide insight into the contemporary problems that metropolitan green areas face. Because Midden-Delfland is such a rich case, this case was studied in more depth than the other cases. As the first case studied, this case also provided a general picture, which

Figure 1.2 Midden-Delfland in the Netherlands (Open areas are white)



was tested during the other case studies. The Bloemendalerpolder case was selected because it is an example of a public-private partnership in which private parties are contributing to the development of green areas. Laag Holland was selected because recent institutions such as the National Landscape Concept are being put into practice in this area. The Park Forest Ghent project was selected because it is taking place in an institutional context that differs from the Dutch situation, though not too much, and because this project is in a more advanced state than other Flemish projects.

The following sections provide some area characteristics about the specific cases. Then, they discuss the reasons to use the examined institutions. This is followed by an introduction into the specific institutional arrangement used in the area. The last part of each section tells which research topics the case addressed.

### 1.4.1 Midden-Delfland, Land Consolidation

The land consolidation project in Midden-Delfland has already been studied by Kreukels (1980), Ritsema (1987), Van Rij (2006), Van Rij et al. (2008), and Van Rij and Korthals Altes (2008). The Midden-Delfland, a green area of 6,600 hectares, is situated between the agglomerations of Rotterdam and The Hague (see Figure 1.2). The distance between the city centers of Rotterdam and The Hague is only 23 kilometers, in which not only urban neighborhoods and suburbs are located, but also the city of Delft. Midden-Delfland is a typical Dutch landscape of peat polders with ditches, windmills and attractive cultural-historical villages (Figures 1.3, 1.4). The land is used for agriculture – mainly dairy farming – recreation, and nature reserves.

Already in the middle of the twentieth century many reasons were put forward for a specific institutional arrangement in Midden-Delfland. At that time, it was recognized as one of the most threatened metropolitan green areas in the Netherlands (WWdL, 1958, pp. 66-67, p. 104; see Figures 1.5 and 1.6). The

**Figure 1.3** Windmills in Midden-Delfland



**Figure 1.4** Cows, greenhouses and a windmill in Midden-Delfland



reasons for the land consolidation project were (1) the growing likelihood that the cities of Delft and Rotterdam would become one connected urban area, (2) the lack of recreational areas, and (3) the decreasing conditions for farming. Later, urban pressure was also felt from the Westland, a “city of glass” that comprises approximately 2,500 hectares of greenhouses, located just north-west of Midden-Delfland; a large group of market gardeners here are looking for new sites on which to build greenhouses.

**Figure 1.5 National planning agency: the development of the west of the country**



Source: WWdL, 1958

**Figure 1.6 The same area as shown in Figure 1.2, showing open areas in 1950 (not colored) close to the Midden-Delfland area**

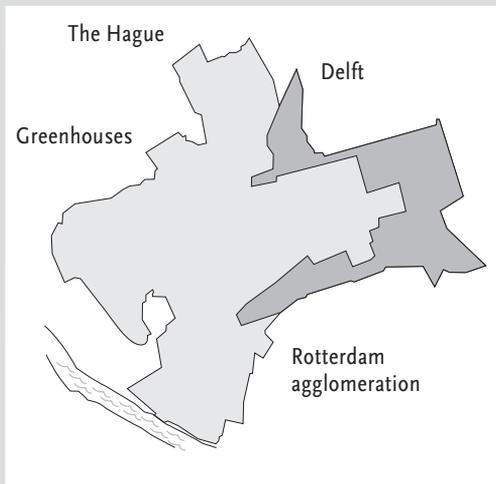


Source: WWdL, 1958

Because of these threats, the national government decided to start applying a special policy for green areas between cities, the National Buffer Zone (*Rijksbufferzone*) policy, in Midden-Delfland first. In order to apply this policy, a special law was adopted in 1977 to implement a specific land consolidation project. The Midden-Delfland Act aims (1) to contain city growth, (2) to develop recreational zones adjacent to the cities, and (3) to create good conditions for farming in the rest of the area. To develop the recreational zones, the Act mapped out zones where compulsory purchase was permitted (Figure 1.7). The land consolidation project included physical measures to improve farming conditions and land reallocation within the 4,000 hectares that formed the heart of the Midden-Delfland area, to create an economically viable agricultural zone.

Many parties were involved in this large project. The entire project was coordinated by a land consolidation committee, consisting of leading representatives from the municipalities, the province, the Farmers' Union, the Midden-Delfland Countryside Union, the district water board, and the ANWB (the Dutch Automobile Association). The central government provided most of the budget, about €200 million, and the necessary civil servants from the Government Service for Rural Areas (*Dienst Landelijk Gebied/Bureau Beheer Landbouwgronden*: DLG/BBL). A recreational board was established to coordinate maintenance of the recreational areas, consisting of representatives from the

**Figure 1.7 Map of the Midden-Delfland Reconstruction Act (indicated in light grey), showing the periphery of the Midden-Delfland area and the zones where compulsory purchase for creating recreational area would be permitted (indicated in dark grey)**



central and local governmental authorities that provide funds. In the recreational zone, the government owns the land and leases it to the district recreational board. The Nature Conservation Union owns the land used for nature conservation. In the agricultural area, some land is owned by the government or other parties and leased out to farmers; however, much land is owned by the farmers themselves.

In 2008, after about thirty years, the project is nearly completed. Under the authority of the land consolidation committee, civil servants from DLG/BBL have developed recreational areas and carried out the land consolidation project. Municipalities have changed their *bestemmingsplannen* (municipal land-use

plans that, for a designated area, sets out the activities that may take place on the land). Because no built areas have been developed, the openness of metropolitan green areas has been preserved. This is not the case for comparable areas not included in the Midden-Delfland Act, as a GIS-based comparison with other National Buffer Zones showed (Van Rij et al., 2008). A comparison of current maps (see Figure 1.2) to maps from 1950 (see Figure 1.6) shows that the Midden-Delfland area has less urban development than the surrounding areas. The area included in the Act can be visited for free and receives around 5.6 million visits per year. Ninety percent of the visitors stated that the recreation and agricultural areas were good or excellent (Recreatieschap & NIPO, 2005). Most people I interviewed stated that the Act had achieved its main goals, preserving metropolitan green area and creating recreational capacity (Van Rij, 2006). They stated that the preservation of the countryside in Midden-Delfland was a direct result of the Act. In addition, some respondents even said that the area needed a new Midden-Delfland Act.

Since the Midden-Delfland land consolidation project is a clear example of an established means of protecting and improving metropolitan green areas, data on this project has been used in almost every chapter of this book. The model for green area protection and improvement (Chapter 2) is based on this project. In Chapter 3, which looks at landscape change and the restructuring of the welfare state, the institutions used during the land consolidation project are compared to more recent institutions. Attempts to apply a Transaction Cost Theory model to the land consolidation project in Midden-Delfland are discussed in Chapter 4. Chapter 6, which discusses networks and hierarchies, looks at the combination of network-oriented and hierarchical approaches in the Midden-Delfland Act. Chapter 7 discusses the idea that the land consoli-

---

dation in Midden-Delfland worked because it combined spatial planning with land development. In Chapter 8, the land consolidation project is presented as an example of Slow Planning and incremental institutional change.

### 1.4.2 Midden-Delfland, recent projects

Not only is the land consolidation project in Midden-Delfland an interesting case, but current problems in the area and recent attempts to deal with these problems are also worth studying. To study these current issues, the same area was considered as the land consolidation project. More information about these recent projects can be found at the website of the Midden-Delfland municipality, [www.Midden-Delfland.nl](http://www.Midden-Delfland.nl), or at [www.iods.nl](http://www.iods.nl) (see also Van Rij, 2006; Van Rij & Korthals Altes, 2007a & 2007b, 2008).

At present, the major problem is the problematic economic situation of farmers. On the one hand, this is caused by high land prices due to the urban proximity, and on the other by difficult farming conditions associated with small-size parcels and farms, high water-levels and congested roads. At the same time, the profitability of new built developments such as houses and green-houses threatens the openness of the landscape and can cause land prices to increase.

Various policy initiatives have been introduced to deal with these problems. As in the rest of the Netherlands, central government sponsors farmers and nature conservation unions by means of subsidies. In addition to that, in Midden-Delfland, a so-called green fund was established. The villages in the Midden-Delfland area made a deal with two cities abutting the green area, in which the cities put about €8 million in a green fund in exchange for adjustments to municipal boundaries which made developments next to the cities possible. The fund is designed to pay landowners to maintain landscape elements. Nevertheless, these payments are not sufficient to keep economically vital farmers in the area. To achieve this, a land bank has been discussed. However, the current fund was not considered large enough to establish a land bank.

In recent years, different planning processes have been started. Unlike the 1970s, in the early 2000s, central government attempted to divest the responsibility for the area to the province and the municipalities. The province and the newly formed municipality in the green zone, the municipality of Midden-Delfland, started up communicative planning processes. The provincial project was initiated to overcome the deadlock in the process of building a major highway through the area; it started by making an inventory of all the interested parties in the area, such as leisure, agriculture, transport, and nature. The basic idea of this project was that if the highway is not constructed, no measures to support leisure, agriculture or nature conservation will be taken. At present, due to procedural hiccups, this process has not yet reached a final result. The

---

Figure 1.8 Regional Vision Midden-Delfland@2025



Source: Gemeente Midden-Delfland, 2005

municipality held a conference in a barn, formulated a vision for the area (see Figure 1.8) and installed an area-coordinator. However, because of its limited means, budgets and number of skilled civil servants, the municipality can not be expected to arrange and fund substantial measures to protect and improve the Midden-Delfland area, such as a land bank, on its own. Besides, in order to acquire funding for the removal of greenhouses, in line with provincial policy, the municipality of Midden-Delfland planned to build new houses at the Maaslandsedam in the land consolidation project area. Nevertheless, at present, due to the efforts of this municipality, Midden-Delfland has become part of central government's plans in the framework of the *Urgentieprogramma Randstad* (Urgent policy program for the *Randstad*; see Figure 1.9) (Ministry V&W, 2007). Because these developments are too recent, this could be examined in this dissertation only to a very limited extent.

Data on the recent situation in Midden-Delfland has been used in Chapter 3 to discuss policy development and landscape change. Differences in transaction costs associated with recent measures to financially support farmers are discussed in Chapter 4. Some recent examples from the Midden-Delfland area are used to illustrate difficulties associated with cross-subsidy strategies in Chapter 5. Consequences of a shortage of hierarchical elements and a neglect of the importance of land development institutions in recent planning processes are discussed in Chapters 6 and 7, respectively.

Figure 1.9 Randstadurgent



Source: Ministry V&W, 2007

Figure 1.10 Laag Holland



Source: Gebiedsbureau Laag Holland, 2007

### 1.4.3 The National Landscape Laag Holland

The National Landscape, Laag Holland, is located north of Amsterdam (see Figure 1.10). More information on this can be found at [www.laagholland.nl](http://www.laagholland.nl) (see also Kloen & Guldemond, 2004; Didde, 2007). Laag Holland is a cultural historic green area (see Figure 1.11) of 51,400 hectares that consists of Waterland, a small scale peat polder landscape like Midden-Delfland, and of polders reclaimed in the seventieth century one of which is a UNESCO monument. Parts of the area are also protected by the EU's Bird and Habitat Directive. The land is used for agriculture, mainly dairy farming (see Figure 1.12), recreation, and nature conservation.

In general, landscape problems in Laag Holland are similar to those in Midden-Delfland: urban pressure, difficult circumstances for farming, and problems maintaining nature conservation sites. The Living in Waterland (*Waterlands wonen*) movement, an initiative to develop houses in various places in the area is an example of this urban pressure.

Different institutions have an effect on the Laag Holland area. Like Midden-Delfland, Laag Holland is part of a National Buffer Zone. In 2004, the *Nota Ruimte* declared Laag Holland as National Landscape. Despite the name, implementing the policy of National Landscapes has been decentralized to the province and the municipalities. They cooperate within a committee supported by civil servants. The main activity of this committee is to coordinate and subsidize projects such as the building of four ecological barns, an education project for primary schools, and an excursion boat (Gebiedsbureau Laag Holland, 2007). They advise on changes to land-use plans, but do not in general

**Figure 1.11** A village on Marken in Laag Holland



Photo: Nico Langeveld

**Figure 1.12** Farm in Laag Holland



Photo: Fabienne Jesse

purchase land or implement physical measures. An exception to this is the land bank for agricultural preservation. This small scale experiment aims at buying land at market prices and leasing it to farmers for a low price on the condition that the farmer works sustainably.

At present, the National Landscape policy has only been in place for a few years and therefore its effects cannot be measured as was possible in the Midden-Delfland land consolidation project. Nevertheless, because the measures taken within the framework of Laag Holland are modest, expectations of

Figure 1.13 The Bloemendalerpolder, east of Amsterdam



the effect of the institutions are low. As Janssen et al. (2007, p. 15) found, provinces are hardly able to convert policy into practice in National Landscapes, putting too much focus on process and the creation of public support.

The Laag Holland area was used to validate ideas developed on the basis of the Midden-Delfland case, and this is presented in Chapters 2 and 3. Chapter 4 uses the example of the strategies to subsidize farmers on the boat-lands in Laag Holland to explain how efficient institutional arrangements can be made in terms of Transaction Cost Theory. In Chapter 5, the discourse used within the Living in Waterland movement is analyzed to explain how a cross-subsidy strategy can be used to clear the way for developments. Chapter 6 also discusses the Living in Waterland movement and the modest measures taken to implement the National Landscape policy to illustrate the effect a decentralized approach can have on the protection and improvement of green areas. Chapter 8, which presents Slow Planning, discusses how a plea for more dynamics was used to permit new built developments in Laag Holland.

#### 1.4.4 Cross-subsidy strategies in the Bloemendalerpolder

The Bloemendalerpolder is located directly to the east of Amsterdam (see Figure 1.13) and it covers an area of 500 hectares. The preparations for the project, in which new built developments are supposed to cross-subsidize

**Figure 1.14** Impression of the Bloemendalerpolder



green areas, have been studied by Farjon et al. (2004) and Van Rij (2007). At present, the Bloemendalerpolder is used for large scale agriculture and some other land uses such as the storage of materials (see Figure 1.14). The area offers hardly any opportunities for recreation.

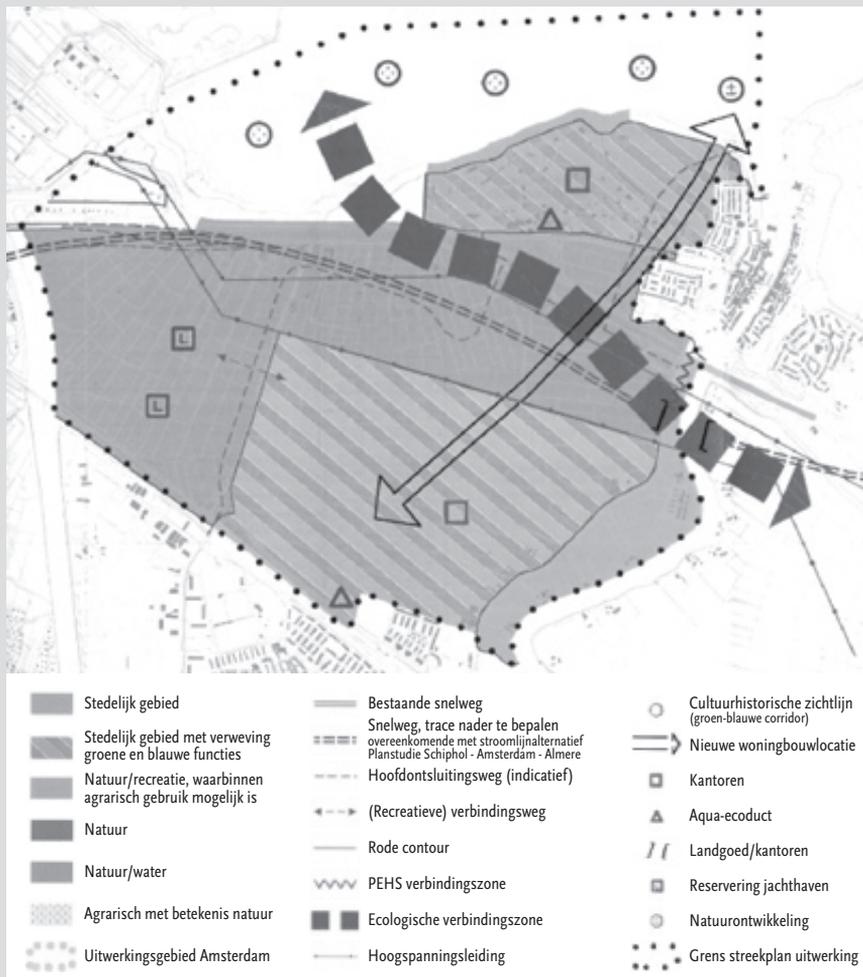
There are a number of reasons for the decision to start a process to develop the Bloemendalerpolder. First, the Amsterdam area is confronted with a housing shortage; in addition, the Bloemendalerpolder is hardly used for recreation at present. Because the area is part of the protected Green Heart, as well as being a National Buffer Zone, developing houses on the entire area might cause much resistance. In order to solve this problem, the idea of developing houses on a third of the polder was proposed, and using the money raised in this way to make the rest of the area more suitable for nature conservation and recreation.

During the discussion on the *Nota Ruimte* (Ministry VROM et al., 2004) in 2004, the decision was made to use the profits earned from developing a third of the polder on the remaining green area. In recent years, many farmers have sold their land to property developers. Earlier, the DLG/BBL had also acquired land in the Bloemendalerpolder. During an interactive planning process, public parties and private land owners, most of them property developers, worked together. This resulted in a new provincial structure plan for the area (see Figure 1.15). The province of North-Holland and the DLG/BBL played a key-role in this process.

Because the process is not finished, a full evaluation of the process and its outcomes cannot be made yet. An early estimation gives the following impression. The parties cooperated and reached a first “tentative agreement” (Lenkeek, 2007). These new plans are likely to make two thirds of this area more suitable for recreation and nature conservation, which could be considered an improvement of the spatial quality. However, to complete these plans, at present, additional financing still needs to be found.

In the first place, data from the Bloemendalerpolder case was used for the

Figure 1.15 Map from the provincial plan for the Bloemendalerpolder



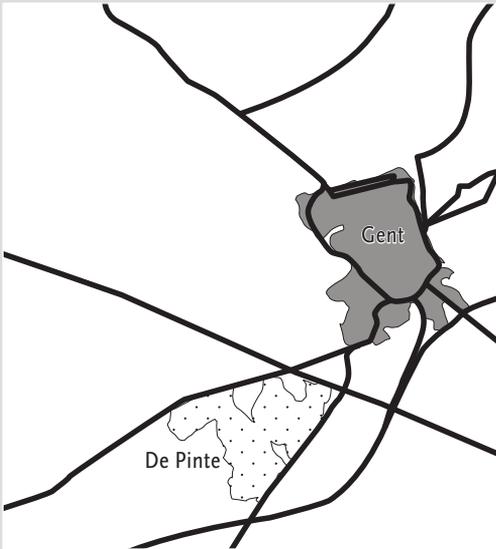
Source: Provincie Noord-Holland, 2006c

discussion on cross-subsidy strategies in Chapter 5. This project is also an example of a combined use of hierarchical and network-oriented elements, the topic of Chapter 6. Chapter 7 discusses how linking a new plan for the Bloemendalerpolder with agreements on financial contributions by property developers can lead to tensions between spatial planning and land development. In Chapter 8 on institutional change, the Bloemendalerpolder case illustrates how institutional innovations are possible when they are based on elaborated practice.

#### 1.4.5 The Park Forest, Ghent Project

The Park Forest area is situated south west of the city of Ghent (see Figure 1.16) in Flanders, the northern part of Belgium. More information on this case

Figure 1.16 Park Forest area near Ghent



can be found at [www.parkbos.be](http://www.parkbos.be) (see also Van Herzele, 2006; Leinfelder, 2006; Leinfelder & VandenAbeele, 2007). In total, the project area consists of 1,200 hectares, of which only some parts are planned to be developed into a forest pole (see Figure 1.17). At present, the area where the Park Forest is planned is basically used for agriculture. As can be seen in Figure 1.18, there are also some estates in the area. The ribbon developments are a sign of the proximity of the city of Ghent.

Problems that led to the plan to develop a park forest were the general shortage of forests in Flanders, a lack of green space for recreation, and urban sprawl. The Flemish government included the plan to create a Park Forest near Ghent in the Structure Plan for Flanders (Ministerie van de Vlaamse Gemeenschap, 1997). In order to create the Park Forest, a regional land use plan (*Regionaal Uitvoeringsplan, RUP*) (Ministerie van de Vlaamse Gemeenschap, 2005) was developed that delineated the various land uses per parcel of land and regulated the compulsory sale of properties.

At the time of the case study, funding for forestation had been designated by the forestry agency, and negotiations with estate owners were underway. In general, at that time, attempts to purchase farmland had not been successful, and the compulsory sale process was facing obstacles. In addition, funding for most other parts of the area had not been designated yet. It is not sure whether funds will be made available in the future. All in all, the future of the Park Forest, Ghent project was uncertain.

The Park Forest, Ghent case was studied in less depth than the other cases. The purpose of the comparison was to identify elements of Dutch practice that seemed self evident at first sight. The institutional framework of the Flemish case study is only explicitly discussed in the chapter on institutional change (Chapter 8).

Figure 1.17 Plan for Park Forest, Ghent



Source: Ministerie van de Vlaamse Gemeenschap, AROHM-ARP, 2001

Figure 1.18 Impression of the Park Forest, Ghent area



Source: Agenschap voor Natuur en Bos, Jean-Pierre Nicaise



---

## 2 Model for green area protection and improvement

In the last decades the idea has become more popular that inspiring planning concepts and land-use plans are not sufficient to protect the green metropolitan landscape (Alterman, 1997; Hajer & Zonneveld, 2000). In practice, many different measures are taken to protect and improve green areas. Many authors (e.g., Albrechts, 2006; Bengston et al., 2004; Brody et al., 2006; Koontz, 2003) have stressed the need to increase the understanding of the link between process and spatial quality as well as between plans and plan implementation. Albrechts (2006) even pleaded for the formulation of a “practicing theory” that deals with implementation and evaluation of theoretical models in daily planning processes. Planning literature pays much attention to institutions that facilitate the decision about where to plan which type of land use. The democratization of these institutions was considered to solve the void between policy and practice (Boonstra, 2006).

However, in order to solve this void, little attention has been paid to institutions that can be used to influence the coming about of activities at the planned location. Often, planners consider this to be the task of sector departments. Priemus (1996) and Korthals Altes (2007) explained that policy implementation by sector department have a large impact on strategic planning (see Section 7.2). There is a lack of literature on the activities that are undertaken in practice to influence metropolitan green areas. This gap is partially filled by studies of the link between spatial planning concepts and projects (Gallent & Shaw, 2007). However, in order to get sufficient insight into institutions that influence the type of land use at a specific location, a joint framework needs to be developed that includes both planning institutions and other ways to influence the protection and improvement of these areas.

Although Pols et al. (2005) wrote a report about changes in agriculture, land prices and consequences for the landscape, most of the research about economic forces in rural areas and other factors that might influence the protection and improvement of metropolitan green areas, have been developed by distinct disciplines. Knowledge about developments in metropolitan green areas and the influence of policy on these developments is divided over many different people, such as geographers, planners, ecologists, agricultural economists, and not in the last place local stakeholders. As a consequence a coherent framework for these developments is lacking. Van der Ploeg et al. (2000) stressed the need for scholars to develop an empirically Grounded Theory on rural development practices. Although a start to fill this gap has been made (e.g., Marsden, 2004), these theories still focus on some specific aspects, such as ecology and agriculture. These theories do not deal with recreational areas, which are important parts of metropolitan green areas. Besides, they do not give a comprehensive picture of factors that influence metropolitan green areas, such as land ownership, zoning and maintenance.

Therefore, this chapter explains which spatial planning and land development measures are taken to protect and improve metropolitan green areas.

---

**Figure 2.1 Construction works for the recreational area in Midden-Delfland**



Photo: Kees van der Vaart

Because knowledge on the factors that influence this is divided over many sub-disciplines which all claim to be important, it is difficult to determine which factors should be included in such a framework. On the basis of the case studies, these factors have been selected. The case studies were also used to develop a model to explain how these factors are related, and which ways can be used to influence the protection and improvement of metropolitan green areas. This model shows a mixed approach, based on changing zones, spatial quality and ownership situation. This model can be used to disprove the idea that if no measures are taken to support metropolitan green areas, no changes will take place.

This chapter consists of two parts. The first part discusses the tactics used for the protection and improvement of the metropolitan green area in Midden-Delfland. The second part shows the model, based of this case study, for the ways to influence the protection and improvement of metropolitan green areas.

## **2.1 Green area protection and improvement in practice**

Spatial planners used spatial quality, zoning, as well as ownership to protect and improve the green area of Midden-Delfland. Improving spatial quality is not only an end it is also a mean. To make people feel attached to the area and in order to create support for the green area, government increased spatial quality. The DLG/BBL developed large recreational zones for which contract work was carried out (see Figure 2.1). For example, contractors planted trees, constructed bicycle tracks and excavated lakes for windsurfing. The

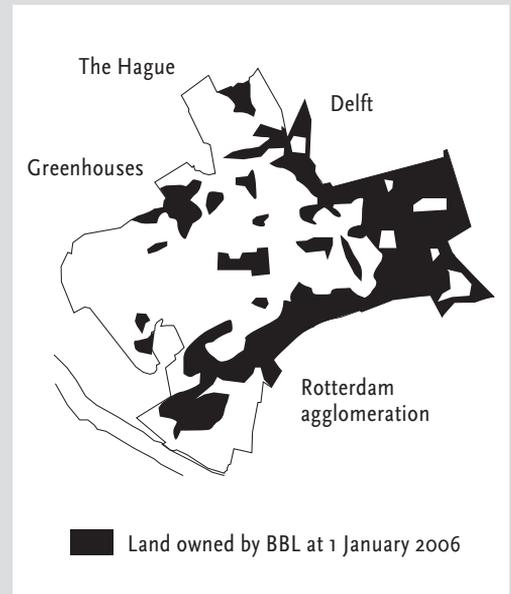
government also carried out works to support the agricultural land owners within the area. The idea behind this was that if farmers could not make a living in this area, this would be a threat to the quality and quantity of metropolitan green area. Therefore, consolidation of land and improvements in infrastructure were meant to increase the quality of agricultural area in order to support the economic position of the guardians of the landscape, in this case the farmers.

Furthermore, zoning measures were important tools. During the project the detailed Dutch municipal land-use plans, (*bestemmingsplannen*), and provincial structure plans (*streekplannen*), were adjusted. In addition, a special Act for the area was made which gave Midden-Delfland a particular status. Along with the Act, funds were made available for the area. In the Act, the boundaries of the area were defined. Therefore, it was clear where the restrictive policy was to be applied.

The Act also stated that a Land Consolidation Committee should be formed. One of the tasks of this committee was to decide which individual building projects could hamper the land readjustment process and in order to avoid that should not be permitted according to article 9 of the Midden-Delfland Act. In practice, the committee also tested whether the building projects were in line with the goals of the entire project which were open space preservation, improving farming conditions and creating recreational areas. This procedure, in addition to the normal municipal *bestemmingsplan*-procedure, was important as the attitude of Dutch communities to building activities differs from the attitude of British communities. Unlike municipalities in the UK (Webster, 2002), Dutch municipalities have a tendency to welcome developments (Needham & Faludi, 1999; Korthals Altes, 1995). The procedure before the Land Consolidation Committee formed an important extra barrier to development. As a consequence of these measures, farming was one of the few types of land use allowed. The relatively low land prices show the effectiveness of zoning in Midden-Delfland. According to the project's land purchaser, plots were sold for prices ranging from €2 to €4 per square meter, whereas in other metropolitan rural areas land prices could reach €40 (DLG, 2006).

Another important part of the project concerned changing the ownership situation. The Act mapped out the zones where compulsory purchase for creating the recreational area would be allowed. These zones were planned in the area adjoining the cities most threatened by urban sprawl. This tactic fits

**Figure 2.2 Landownership by the BBL (Bureau Beheer Landbouwgronden, central government's agency for agricultural land purchase) in Midden-Delfland**



Source: DLG, 2007

**Figure 2.3 Board showing that the farmer is financially supported for his nature conservation activities: “In this polder farmers and sponsors work on the protection of birds together”**

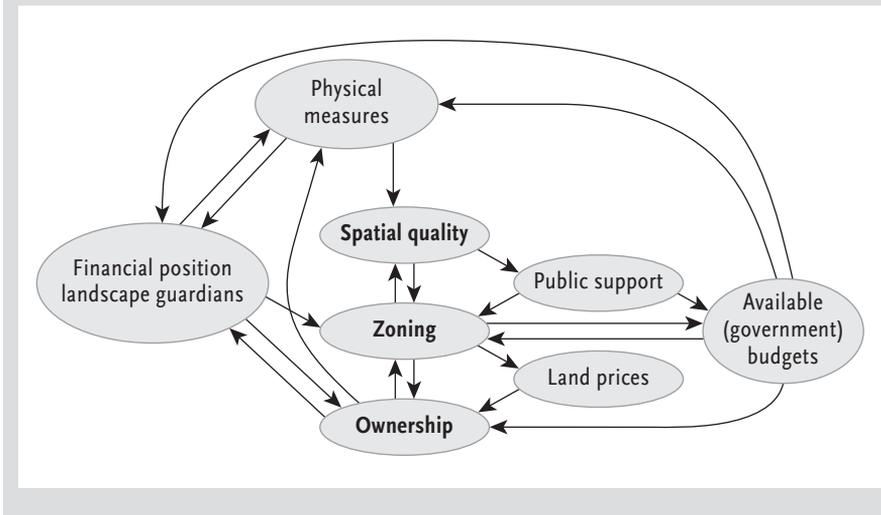


the idea that protected areas act as a buffer for sprawling (Brody et al., 2006). In parliament, during the debate on the Midden-Delfland Act, the tactical importance of these recreational areas adjoining the cities was explicitly considered (Ritsema, 1987). These areas became state property to safeguard the open landscape in Midden-Delfland (see Figure 2.2). To protect the agricultural zone, the recreational zone adjoining the cities was situated in the areas most threatened by urban sprawl (Figure 1.7). Nowadays, the governmental organization for managing the natural heritage (*Staatsbosbeheer*) owns the recreational areas. These areas are being let out to the recreational board and a golf course operator on a long lease. The ownership situation had also changed in the agricultural zone. Agricultural plot sizes were increased by land reallocation. The government also leased parcels of land to farmers in order to create larger farms that can produce more economically.

Besides that nowadays, the government is attempting to improve farmers' economic situation by giving farmers the opportunity to apply for nature management subsidies. For example, farmers can receive subsidies if they adapt their agricultural techniques and the timing of seasonal work to accommodate meadow-nesting birds (Groote et al., 2006) (Figure 2.3 shows an example of supported farmland). Also, the government supports other guardians of the landscape. The Nature Conservation Union receives these kinds of subsidies too. In addition, the nearby municipalities, the province and the Ministry of Agriculture, Nature and Food Quality pay for the recreational area.

In order to pay for these measures, governmental budgets have been made available. In the case of the Midden-Delfland land consolidation project the total expenditure for the project by central government through the DLG/BBL was roughly estimated at about €200 million of which €18 million was used for hiring civil servants, €100 million was used to acquire land and €82 mil-

**Figure 2.4 Model for green area protection and improvement which explains the interaction between spatial quality, zoning and land ownership**



lion was spent to carry out the works. However, not only the cost of design and construction should be taken into account but also maintenance costs. The maintenance costs of the recreational areas, agricultural areas and nature conservation sites in Midden-Delfland are discussed in Section 3.1.

## 2.2 From case study towards a model

There is evidence that stringent legal controls are not sufficient to successfully preserve farmland, and that various means are needed to influence spatial developments (Alterman, 1997). In case studies in the United States, Bengston et al. (2004) found that multiple institutions, which strengthen and complement each other, are needed to increase effectiveness and avoid unintended outcomes. Based on findings in Germany, Gailing (2005) advocates for parallel planning and implementation. This means that the interaction between zoning, spatial quality, and land ownership needs to be considered if developments in metropolitan green areas are to be understood.

Based on the Midden-Delfland case, I examined various means that a government can use to influence the protection and improvement of metropolitan green areas, and I analysed how these means relate to each other (Van Rij, 2006; Van Rij & Korthals Altes, 2008). Using this example, I developed a model for green area protection and improvement which explains the interaction between land ownership, zoning, and spatial quality (Figure 2.4). The aim of this model is to provide insight into developments in the landscape and the underlying driving forces behind these developments. Other case studies were used to validate the model and to make some minor improvements. The model was further validated by various experts.

In this model, *spatial quality* is defined as the attractiveness of the physical landscape. Spatial quality is high when a landscape is attractive and likely to

Figure 2.5 Landownership by the central state



Source: Interdepartementaal beleidsonderzoek, 2006

be enduring. This can be reflected by peoples' appreciation of an area or the attention paid to it by the media and interest groups.

*Zoning* is the principle of assigning labels to a specific area. The term zone is used for all kinds of area-specific labels that have consequences for the use of that area and the policies to be applied on that area.

The term *ownership* is used to describe parties that are legal owners of piec-

es of land or hold particular rights to them. Unlike zoning, ownership is ruled by private law. Government land ownership, especially by sector departments (see Figure 2.5), is an important tool to control developments.

Five other concepts revolve around these three central concepts. The *landscape guardians* are the agents that own and manage the landscape. Obviously, owners are important as the holders of the property rights to the land, but they may permit other actors to manage areas in varying degrees (Groote et al., 2006). The most important guardians are farmers, nature conservation unions, and governmental bodies. In general, these guardians are responsible for the implementation of *physical measures* including maintenance. The term *public support* is used for the activities of people, often organised in interest groups (see Figure 2.6). These activities are intended

to place the area on the political agenda, getting media attention and raising funds for the area. Physical measures can make the landscape more attractive and can consequentially have a positive effect on public support (see Figure 2.7). *Land prices* refer to the prices for which the land is sold or rented. Finally, the term *available (government) budgets* refers to all the funds available for the area.

These concepts are linked in the following way: spatial quality can be influenced by physical measures, resulting in a positive or a negative change. If a government builds a new road, for example, this can be a direct threat to spatial quality and an indirect threat because the road might attract new development. Places with high spatial quality often receive considerable public support. If the area is appealing and usable, it will be appreciated. In that case, people are often willing to spend time and money to help to protect and improve the area. Public participation in a communicative planning process can help to avoid place-blind approaches (Healey, 1999). Civil servants can promote a green area in order to gain public support for the area. This makes it more likely that green area preservation will be put on the political agenda. When there are large amounts of public support, with supporters lobbying to protect an area, it is more likely that government funds will be made available and that restrictive zoning decisions are made.

There is also a link between spatial quality and zoning. When a choice has to be made between metropolitan green areas for the site of a new housing development, the least attractive one is usually chosen. Various interviewees

**Figure 2.6 Public support for farmland protesting the development of a nature conservation/recreational area: “We want cows, no mosquitoes”**



**Figure 2.7** Tree planting in the Park Forest Ghent; physical measures can increase public support



Source: Agentschap voor Natuur en Bos, Jean-Pierre Nicaise

**Figure 2.8** Decreased spatial quality



Figure 2.9 Land zoned for green houses for sale



suggested that landowners applied this principle, by decreasing spatial quality (see Figure 2.8) of agricultural land before lobbying for a change of zoning. They may try to make the area look ugly, for example by storing recreational vehicles there, hoping that a municipal council will then decide to change the zoning, revitalising the area by building houses (e.g., Van Amersfoort et al., 2006). On the other hand, zoning can also contribute to spatial quality, by prohibiting undesirable land-use. Besides, land-use plans often need to be adjusted to permit physical measures to be carried out.

Zoning and the availability of government budgets are related. For example, the designation of a greenbelt can help to make government budgets available. In addition, money may be needed when land-use plans are adjusted. For example, when certain uses are limited and specific attributes, like the right to build, are no longer part of a private property, owners may need to be compensated.

Zoning and ownership are linked in various ways. First, if a government wants to implement physical changes and therefore want to purchase land, changes in zoning can be a basis for compulsory purchase (see also Røsnes, 2005). Second, land prices play a crucial role in the link between zoning and the ownership of land (VROMraad, 2004b). Land in a zone where building is permitted (or expected in the future) is much more expensive than land in a green zone where the right to build is separate from the ownership of the land, and the land can only be used for farming (e.g., Cheshire & Sheppard, 2004) (see for example Figure 2.9). Therefore, land-use plans are used to prohibit unwanted forms of land use and to keep prices low, so that farmers can

**Figure 2.10** Farmer advocating a good milk price for a healthy agricultural sector



afford land.

If the market is convinced that the zoning is relatively permanent, it is likely that farmers will buy the land, as opposed to other parties. A problem that arises, which was mentioned by many interviewees, is that if zoning is not considered to be relatively permanent, the value of the land determined by agricultural profit is lower than the price for which the land is sold (see Figure 3.8). This makes farm enlargement, needed for efficient production, prohibitively expensive (Figure 2.10 illustrates the problem of low agricultural incomes). If a farmer cannot earn enough money, he cannot invest in more land, and it is unlikely that he will find someone willing to take over the farm. When a farmer stops farming, his property might be split up, causing the characteristic agricultural scenery to disappear (see Figure 3.1). Therefore, ownership has an effect on the landscape guardians, on the implementation of physical measures, as well as on spatial quality. The financial position of the landscape guardians is thus also an important aspect of spatial planning.

The financial situation of the landscape guardians and the ownership situation can also influence zoning. If owners face financial difficulties, they can decide to sell the land to property developers. In that case, it is more likely that these property developers will exert pressure on the municipality to change the land-use plan.

Available funding plays an important role here, making it possible for the government to intervene. Government can improve the spatial quality of the landscape by implementing physical measures, making the area more suitable for recreation, nature conservation or agriculture. Various levels of government can create protective land-use plans for the area. They can support the land-

**Figure 2.11** Land owned by the Nature Conservation Union in Midden-Delfland



scape guardians financially, by subsidising farmers, district recreational boards, or Nature Conservation Unions. The ownership situation can be improved by reallocating land and leasing plots to farmers at a low price. In some cases, the government might decide to buy land outright, for example to develop a recreational area. Ownership does not only influence current land use, but can also influence future land use; the Nature Conservation Union (see Figure 2.11) is less likely to sell land to a property developer than a farmer.

It is important for the government to employ these various means to influence the protection and improvement of metropolitan green areas. These means do not only complement and strengthen each other; they also influence people's trust in the success or failure of a policy program. As discussed in Chapter 8 on Slow Planning, these various means of influencing the protection and improvement of metropolitan green areas have different time frames. Spatial quality can change at any moment: if contract work is carried out or recreational vehicles are stored on a plot. Zoning has a longer time horizon because land-use plans are not easily changed. However, every four years a new municipal council is elected and can decide to change the land-use plans. Adjustments in the ownership situation can last longer. If land is owned by a pro-green agent, or given to a nature conservation union, it is less likely that constructions will be developed on this land. By changing the ownership situation, a governmental body can not only change current use, but also influence who the owner of the land will be in the future. In the Netherlands, ownership by farmers of plots right next to cities is seen as a threat to metropolitan green areas. From this perspective, the time dimension is not part of the model, but does play an important role in the background. In line with the

concept of Slow Planning, measures that reduce the dynamics in spatial quality, zoning and land ownership can help to protect and improve metropolitan green areas successfully.

## 2.3 Conclusion

In order to effectively influence spatial quality, instead of paying attention to the question what should be planned where, more attention should be paid to the question how we can influence the development of these activities there. In this light, based on the case studies, a model was developed on the ways to protect and improve metropolitan green areas. This model might function as a tool for practice.

These interventions can aim at changing zoning, supporting spatial quality and modifying land ownership. Zoning is a classical tool for planners to influence spatial developments. Zoning can be used to prohibit profitable, unwanted types of land use such as the construction of dwellings. If the market expects the zoning to be durable, zoning will also keep land prices low. Without these low land prices continuing, land can not be bought at low prices for agricultural purposes and continuation of agrarian-type land use is often not possible.

However, although in the Netherlands a binding zoning system is in place, other measures are considered to be needed to effectively protect metropolitan green areas. This is not just because of problems concerning the enforcement of these land-use plans. Even agricultural zoned plots can be split up and used for activities with lower spatial quality such as allotment gardening. Besides that, farmers can decide to sell their land, and by decreasing spatial quality, land owners can put pressure on municipalities to change land-use plans. In order to protect and improve metropolitan green areas, a mixed approach, based on upgrading spatial quality as well as changing the ownership situation can be used. Improving spatial quality is not only an end in itself, it is also a mean to mobilize public support needed for the protection of metropolitan green areas, especially at times when adjustments to land-use plans are being considered. Recreational areas and nature protection areas may strengthen public support.

Besides spatial quality, ownership is important for the protection and improvement of metropolitan green areas. The ownership situation does not only affect current land use, it also influences land use in the future. Once land is sold to property developers, they might exert pressure on a municipality to change land-use plans. Because of this, the financial position of the guardians of the landscape (in most cases the owners), in particular farmers, is important for spatial planning. Government can support them by contributing to their financial position or by improving the ownership situation through land

---

reallocation and leasing out plots to farmers for a low price. However, to protect and improve green areas adjoining the cities for recreation, the government might need to buy land and change the ownership situation completely. This requires appropriate legislation for compulsory purchase and land reallocation.

The different means available to influence spatial developments discussed here not only increase people's trust in the success of a policy program, they also contribute to a more durable outcome as the various ways of influencing the protection and improvement of metropolitan green areas have different time frames. In that way, this approach fits the idea of Slow Planning, the subject of Chapter 8. All in all, the model explains how a combination of institutions that aim at changing spatial quality, zoning and the ownership situation, which go with substantial expenditure, can successfully protect and improve metropolitan green areas.

---



---

### 3 Landscape changes and the restructuring of the welfare state

In the Netherlands, changes to metropolitan green areas are cause for concern (VROMraad, 2004b; MNP, 2007a; Boersma & Kuiper, 2006). The Dutch parliament passed a motion to force the Minister of Housing, Spatial Planning and the Environment to propose measures to stop messy types of land use (Dutch Lower Chamber, 2006-2007b). The Dutch Advisory Council on Housing, Spatial Planning and the Environment (VROMraad) (2004b) was concerned about the development of factory farms and non-agricultural types of land use and the Netherlands Environmental Assessment Agency (*Milieu- en Natuurplanbureau*, MNP) (2007a) was worried because of urban sprawl in its 2007 report.

With the help of the model discussed in Chapter 2, the case studies illustrated why the picture provided by the studies mentioned above is incomplete. Built developments affect landscape values. However, if these developments are only studied at the moment they have become present in the landscape, it is too late to protect the green landscape. Therefore, insight is needed in the early signs of landscape changes, which are discussed in Section 3.1. Insufficient maintenance can result in a decrease of spatial quality: messy types of land use, unsafe areas and evanesce of specific species. By only paying attention to the maintenance of small landscape elements, the major problem with respect to maintenance, the maintenance of the fields might be neglected. Therefore, Section 3.2 pays attention to the economic situation of those parties who are responsible for maintaining the fields. Since large parts of metropolitan green areas are owned by farmers and since maintenance by farmers involve relatively low costs for the government, special attention is paid to farmers in small scale metropolitan rural areas for who it is difficult to compete on a global market.

Neo-liberalism has had and still has much influence on policy and society (Peck & Tickell, 2002). Various authors have discussed how neo-liberalism with its ideas on free-market economy and globalization has led to restructuring of the welfare state with reducing the role of the state, austerity financing and enhancing the role of individual and other actors (e.g., Peck & Tickell, 2002; Taylor-Gooby, 2005). According to Korthals Altes (2002) and Jessop (1994), the restructuring of the welfare state has led to hollowing-out the nation-state and the rise of supranational regimes and regional and local governance.

In Dutch green metropolitan landscapes, globalization is felt through the influences of changes through reforms of Europe's Common Agricultural Policy (CAP) (Dammers & Keiner, 2006) and European state aid regulation (European Commission, 2008), which urge farmers to compete on a global market. The restructuring of the welfare state, in particular deregulation, privatizing and decentralization, has had an effect on metropolitan green landscapes since it affected the way spatial planning could become effective by coordinating sector departments (Korthals Altes, 2007). These developments also played a role in spatial planning directly (e.g., Van Buuren, 2005; Dutch Low-

---

er Chamber, 2004-2005, p. 7, p. 45, p. 46). The effects of these developments have been a growing cause for concern. The Dutch Advisory Council for the Rural Area, *Raad landelijk gebied*, warned about the consequences of thoughtless privatization and deregulation (Raad landelijk gebied, 2006). Environmental interest groups discussed the risk of decentralizing tasks to municipalities which might be willing to favor property developers (e.g., Van Dusseldorp et al., 2007). Also parliament has adopted a more critical attitude towards decentralization in this field (e.g., Dutch Lower Chamber, 2006-2007b; 2006-2007c). Elaborating on this discussion Section 3.3 investigates influences of the restructuring of the welfare state on landscape changes.

### 3.1 Signs of landscape changes

Landscape changes can become irreversible before they become visible. At the moment new developments occur, people start to express their concern about metropolitan green areas. After people experience these new developments, the topic is placed on the political agenda and examined. However, if the decision to internalize landscape values is made after the new developments are finished, this might be too late. Therefore, this section uses the model, presented in Chapter 2, to examine early signs of landscape changes. Because most developments are expected in land maintained by farmers, they receive the most attention.

#### 3.1.1 Signs concerning spatial quality

Signs of decreasing spatial quality express themselves differently in the different types of metropolitan green areas. For recreational areas, these difficulties can be indicated by untidy and unsafe conditions; litter is not removed and due to a lack of supervision, criminal activities such as drug dealing and prostitution start to find their way to these accessible, quiet areas close to cities. Although nature conservation sites generally lay further away from the cities and are less accessible, these problems may also occur there. In addition to that, nature conservation sites face problems concerning the preservation of species. For example in Laag-Holland's so-called Boat-Lands (*vaarlanden*), which are only accessible by boat, the consequences of insufficient maintenance could be experienced. The grass in these areas, which forms an important habitat for endangered meadow birds, had not been cut for a long time since farmers decided that leasing these lands was not profitable any more. As a result, the habitat has changed; the pH-level of the water has altered and trees have grown. Because predators can hide in these trees, the area is no longer attractive for meadow birds.

Despite these problems in recreational areas and nature conservation sites,

the most important changes for the future metropolitan landscape have to do with the economic position of small-scale, metropolitan farms. A decrease of the economic position of small-scale metropolitan farmers might be visible in the landscape. One of the early signs of landscape alteration is changing vegetation (Van Rij, 2006); experts can see that the grass is not well maintained. This can be viewed as a sign that farmers cannot invest in their grass or that they do not consider it worthwhile to invest in their land. Another sign of changes in agricultural economics is the increase in horses (VNG & SRP, 2006). Although horses have always been part of agriculture, an unrestrained growth of facilities for horse riding, replacing the traditional picture of grazing cows, might detract from the picturesque view of the countryside and might cause land prices to rise. Another sign of urban proximity and a precursor of built development are messy types of land uses. Sometimes, landowners can try to force changes in the *bestemmingsplan* by allowing all kinds of messy land uses on their land, such as the storage of recreation vehicles and old tires and asking for a new *bestemmingsplan* to improve spatial quality through new built developments (Boersma & Kuiper, 2006).

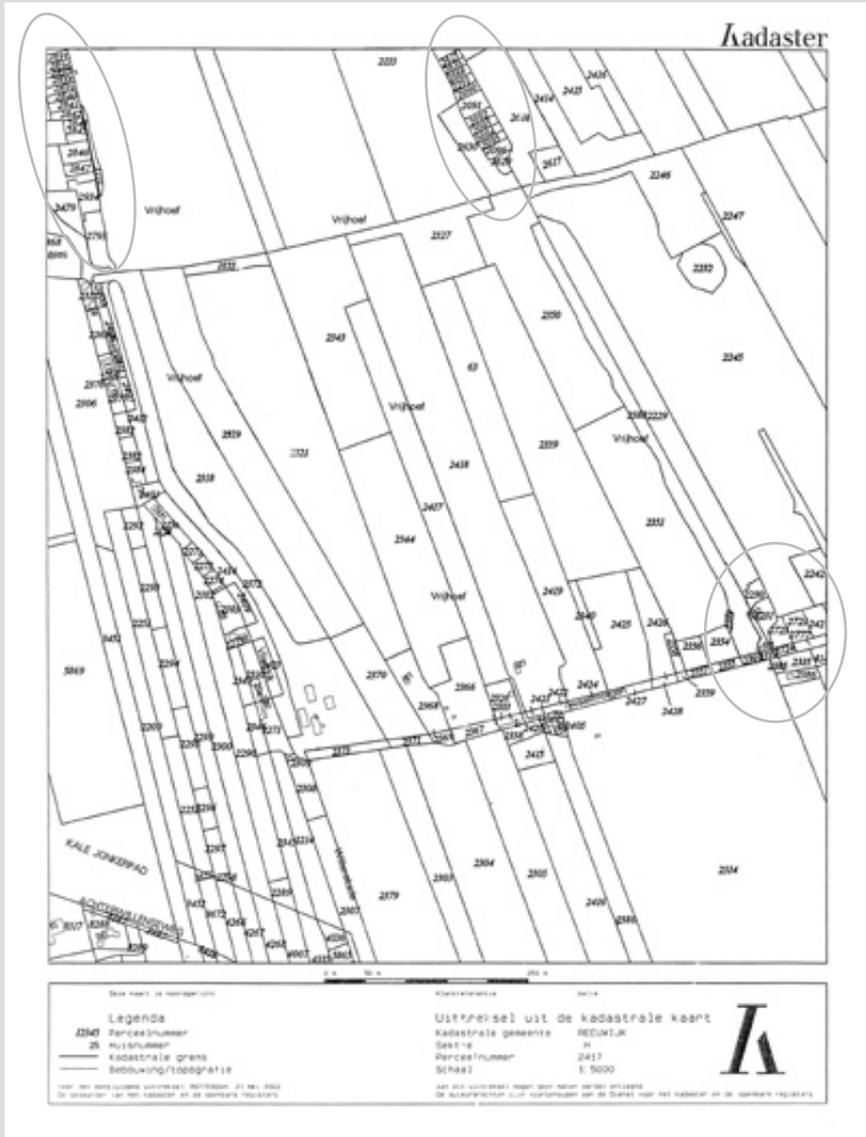
### 3.1.2 Signs concerning zoning

Besides these visual signs, there are other signals of future changes to the landscape. Building houses in the countryside is discussed more often (e.g., Didde, 2007). An example of this is the study of the Netherlands Institute for Spatial Research (RPB) about houses in the countryside (*Landelijk wonen*) (Van Dam et al., 2003). Official policy documents, such as the study *Developing for Waterland 2020 (Bouwen voor Waterland 2020)* (Provincie Noord-Holland, 2004) and the regional Plan for Living in Waterland (*Streekplanuitwerking Waterlands-wonen*) (Provincie Noord-Holland, 2006b), have been clearing the way for new *bestemmingsplannen* to allow additional houses to be built in the countryside. These documents indicate that *bestemmingsplannen* for metropolitan green areas might be changed in the future.

### 3.1.3 Signs concerning land ownership

Rising land prices show that people expect that building is going to be allowed in these metropolitan green areas (e.g., DLG, 2006; Cheshire & Sheppard, 2004). Since developments in the countryside are closely related to rising land prices, many signs of landscape change have something to do with ownership. Because of high metropolitan land prices, it is often too expensive for farmers to buy a farm or to enlarge their farm. For example in Midden-Delfland, the average farm is relatively small (Koole et al., 2003). The economic situation and prospects are especially worrying for farms of this size (Van der Meulen et al., 2005; CBS, 2006). An aging farming population is also a sign that

Figure 3.1 Subdivision of former agricultural plots on the cadastral map of Reeuwijk



Source: Dienst voor het Kadaster en openbare registers

young farmers cannot buy new land and that retiring farmers are waiting to sell their land for high urban prices (Pols et al., 2005). Despite changes in vegetation, the consequences of this changing landownership situation are often not visible. In some cases, this change can be visible, when farmers subdivide their land instead of selling it to other farmers, because they can get a higher price by subdividing it and selling the parcels individually. The cadastral map (Figure 3.1) shows an example of this. These subdivided parcels are often used for allotment gardening, and as a result, the traditional scenery disappears.

**Table 3.1 Different land use types in Midden-Delfland\***

Land use type	Land owner	Responsible for maintenance	Surface in ha	Revenues	Contributions by the government €/ha/year
Agriculture	- Farmers - State - Others	- Farmers	4.000	- Subsidy per ha - Nature subsidy - Green fund - Agrarian production	420 133 100
Recreation	- State	- Recreational board	1.500	- Contributions various governments	2.200
Nature	- Nature conservation unit - State	- Nature conservation union	270	- Subsidy - Donations - Lottery - Investments	85

\* The amounts are indicative only.

Unlike other countries, in the Netherlands, a parcelling subdivision permit, a possible institution to cope with this, does not exist.

### 3.2 Struggling landscape guardians

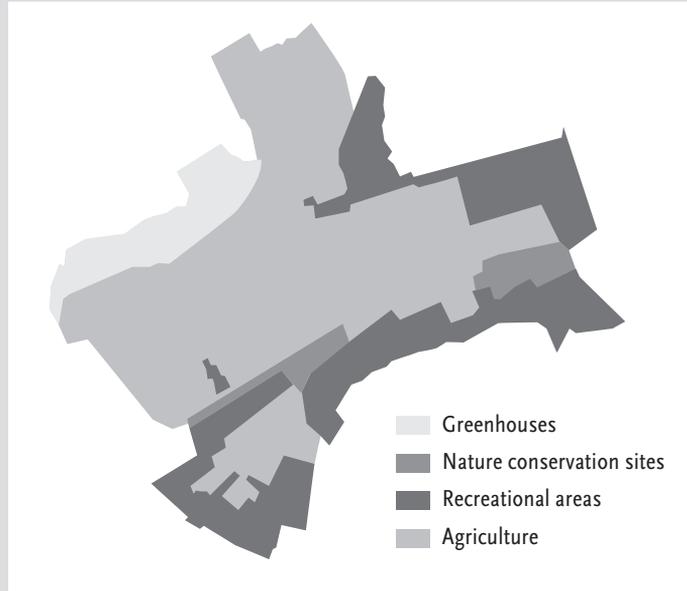
Chapter 2 explained why land-use plans are not a sufficient tool to protect and improve metropolitan green areas; zones can be changed especially if spatial quality declines. Difficulties concerning the economic position of guardians of the landscape and insufficient maintenance might catalyze this. According to various government departments, problems concerning maintenance and maintenance costs have been underestimated (Ministry VROM et al., 2006). Not surprisingly the recurring costs for nature conservation have been investigated recently (MNP, 2007b). During the case studies, interviewees expressed their worries about the economic position of metropolitan farmers in particular (Van Rij, 2005). This section explains how recurring costs and benefits especially concerned with maintenance and interests can have an effect on developments in metropolitan green areas. It also explains why the economic position of farmers is an important issue.

Subsidies, agricultural incomes and land prices are the crucial economic factors associated with the landscape. In terms of the model presented in Chapter 2, the availability of sufficient budgets can influence recurring costs and revenues that determine the economic position of the landscape guardians. If the landscape guardians are unable to maintain the land, they cannot supply sufficient spatial quality. In such cases, public support for the green area may fade. In addition, interviewees expressed that landscape guardians might, because of their financial difficulties, be willing to sell their land to parties that would try to change the zoning.

Table 3.1 introduces the different guardians of metropolitan green areas in Midden-Delfland. Basically, in the Netherlands, as the Midden-Delfland example illustrates (see Figure 3.2), there are three types of green land use: nature,

Table 3.1

**Figure 3.2** Midden-Delfland reconstruction area on which the new types of land-uses are indicated



Source: Reconstruction program Midden-Delfland, approved 23 December 1983 by the minister of VROM and the State Secretary of Agriculture and Fishery

**Figure 3.3** Example of extensive recreational area



Photo: Kees Van der Vaart

Figure 3.4 Example of intensive recreational area

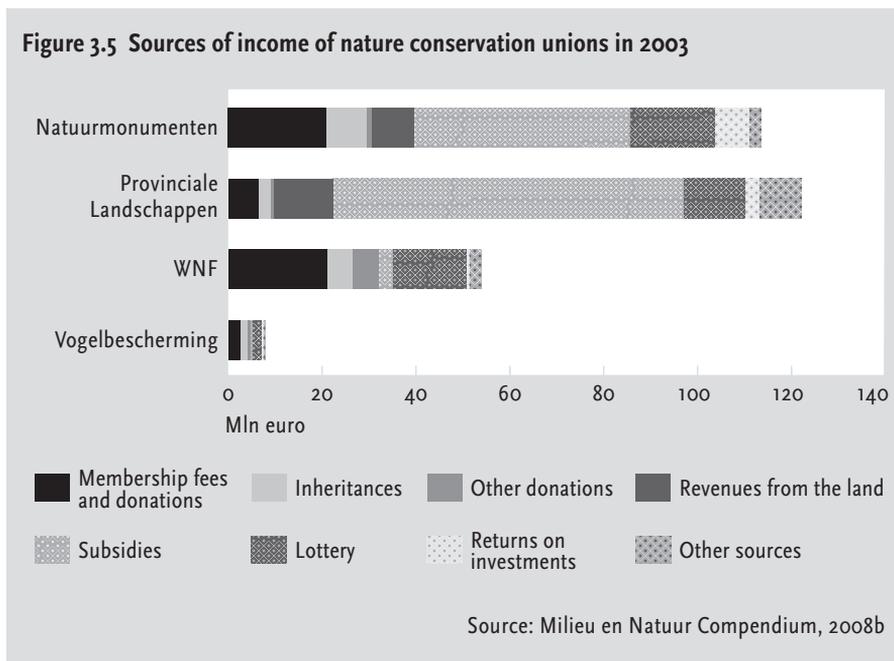


Photo: Kees Van der Vaart

agriculture and recreation. The largest proportion of land is farmland, maintained by farmers who own their land or hold a long lease. In general, land for recreation and nature conservation has been acquired by the state or nature conservation unions. Nature conservation unions and recreational boards composed of various governments are responsible for maintaining these areas.

### 3.2.1 Recreational areas

In Midden-Delfland, maintaining the recreation areas, such as shown by Figures 3.3 and 3.4, costs about €2,200 per hectare per year. This funding is provided by both central and local governments. For the government, maintaining recreational areas is the most expensive compared to the nature conservation sites and the agricultural areas. Some other recreational areas generate some income from festivals and catering facilities. Because, in general, these recreational areas do not generate any income, their maintenance is very costly for the government. Although these high expenditures might be considered a matter of inefficiency, this is not necessarily the case. Because recreational areas are located next to cities, they face many difficulties. Good maintenance and surveillance are needed in order to keep criminal activities out of the areas. In addition, these areas have the highest amount of visitors per hectare. This can justify the large amount of money spent on these areas. When interviewed, some civil servants, who are responsible for maintaining these areas, said that they find it hard to convince politicians to spend money on these areas. Although budgets for reconstructing these areas to meet new



demands were lacking, the general picture is that the maintenance of these areas and the budgets available for doing so are adequate.

### 3.2.2 Nature conservation sites

In the Netherlands, the state or special non-governmental nature conservation organisations are responsible for maintaining nature conservation areas. In Midden-Delfland, the nature conservation union, *Natuurmonumenten*, spends an estimated €920 on maintenance per hectare per year. Of this, €85 is provided by the government and €835 is derived from private donations, returns on investments and sponsors such as the lottery (e.g., *Natuurmonumenten*, 2005) (see for other non governmental nature conservation organisations *Milieu en Natuur Compendium* (2008b) and Figure 3.5). The State Forestry Organisation (*Staatsbosbeheer*) is mainly sponsored by the state, but it faces difficulties managing with the standard sums that are set for maintaining their sites (*Staatsbosbeheer*, 2004). For the government, using non governmental organisations to maintain nature areas is rather inexpensive because the government only has to provide subsidies.

People might not be aware that the maintenance of nature conservation areas is costly, and they might also not be unaware of the possible consequences of a lack of maintenance on spatial quality. This lack of awareness can have important consequences for policy decisions. Maintenance is needed to preserve specific species and to keep green areas attractive, accessible and safe for visitors. In the Netherlands, nature conservation is targeted towards a specific habitat which often differs from the habitat resulting from non interference. Therefore, nature conservation involves maintaining the cultivated habitat. Maintenance costs differ depending on the vegetation and the choices with respect to the types of habitats to be conserved. For example,

**Figure 3.6 Impression of a Boat-Land area**



it was estimated that the maintenance of one hectare of reed meadow costs €296 per year and the maintenance of one hectare of swampy meadows costs €1,608 per year (Staatsbosbeheer, 2004).

Traditionally, maintaining meadowland was relatively inexpensive, since these lands could be leased out to farmers. The changing economic situation of farmers could be seen in the nature conservation areas of Laag Holland earlier than in the agricultural areas. These signs might serve as a warning signal for agricultural areas in general. Because of the need to produce competitively on a global market, in Laag Holland, it was no longer profitable for farmers to lease and maintain the Boat-Lands (see for an example of what these areas might look like Figure 3.6). As explained earlier a lack of maintenance resulted in a decrease of the conditions needed to preserve endangered species. In order to counter this development in the Boat-Lands of Laag Holland, money has been made available to cut the trees, to change the pH-level by scattering lime, and to pay for maintenance by farmers. If the state forestry organization had acted earlier, they would not have had to spend so much money to counter this development. This is an example of guardians of nature conservation sites struggling with maintenance costs and of the possible effects of the changing economic situation of farmers.

### **Agricultural areas**

The largest part of the Dutch metropolitan landscape is maintained by farmers (Vader & Leneman, 2006) (see for an example Figure 3.7). They derive their basic income from agricultural production. This part of their income is determined by world market prices. In addition to this, in 2006, every farmer received a subsidy per hectare, of approximately €420 per hectare, designed to replace EU production subsidies. It is expected that this subsidy will be reduced in coming years (De Bont et al., 2003). Besides this, farmers can apply for nature conservation subsidies. For example, farmers can receive subsidies if they adapt their agricultural techniques and the timing of seasonal work to

**Figure 3.7** A farm with the city Delft at the background

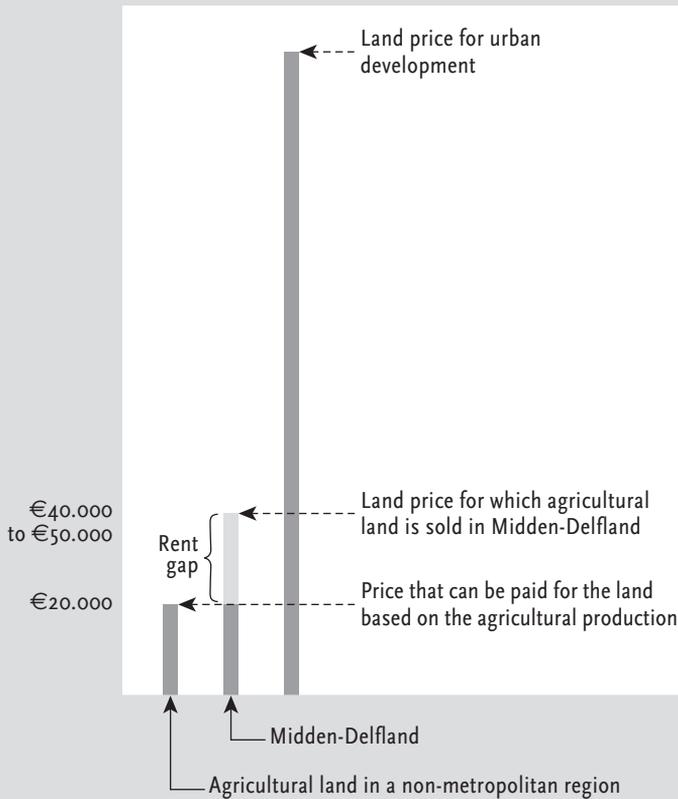


accommodate meadow-nesting birds (Groote et al., 2006). On average, farmers in Midden-Delfland received €133 per hectare per year in this way. (Information about the amounts of conservation subsidies in other Dutch areas is available at Milieu en Natuur Compendium (2008a); the situation in Midden-Delfland is typical). In Midden-Delfland, there is also a special local green fund, which can be used to pay landowners for “green and blue services”. For example, farmers can receive €50 per year for a historic outdoor toilet and €5 per three years for a willow tree. On average, farmers receive €100 per hectare per year in this way.

The economic position of farmers can be threatened by decreasing income and increasing costs (Pols et al., 2005). Van der Ploeg et al. (2000) spoke of a “squeeze on agriculture.” At least till 2007, farmers’ income had decreased. This problem was attributed to general changes in the market for farm products, the land market, and agricultural policy (Bervaes et al., 2001; Ellenkamp, 2002; Koomen et al., 2005b). According to EU-policy, farmers need to compete in a global market. A net reduction in EU-subsidies for Dutch farmers and, at least till 2007, low global prices for agricultural products had reduced the income of farmers. Although, for example in 2007, agricultural prices have increased, the financial situation of small-scale farmers, making a living in the Dutch peat polders close to the cities, are still cause for concern (Kuiper & De Regt, 2007). Reasons for this are the small plot sizes, congestion on roads and high water levels. Raising water levels (Janssen et al., 2005) might contribute to this problem and some interviewees speculated that over time, farming in these areas will not be possible.

In order to produce more efficiently, farms need to be enlarged (Vader & Leneman, 2006). However, because of the proximity to the city, land prices are

Figure 3.8 Approximate land prices per ha in 2006

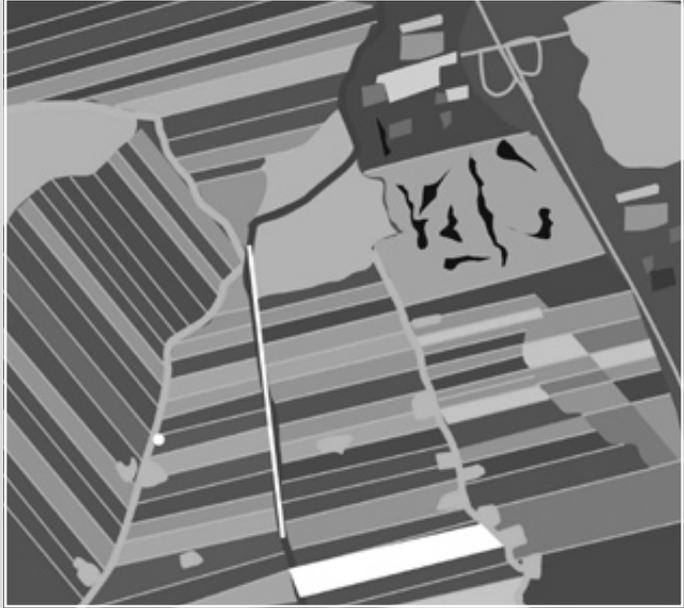


Source: Van Rij, 2006

high in metropolitan agricultural areas (DLG, 2006; Cotteleer et al., 2007). This can have an important effect on the landscape (VROMraad, 2004b). Unlike most of the owners of recreational areas and nature conservation sites, who wrote off their land, farmers have to consider the money they have invested in their land and the interest they pay for the borrowed amounts. The price farmers have to pay for land is high because people believe development in these areas may be allowed in the future. As a result, farmers may pay more in annual interest than they earn from agricultural production. Because ground rents are based on land prices, the difference between annual interest charges or rents and annual revenues is called the “rent-gap”. Figure 3.8 illustrates this.

This rent-gap makes farm enlargement, which is needed for efficient production, prohibitively expensive in metropolitan areas. If a farmer cannot earn enough, he cannot invest in more land. These farmers will probably not be able to find successors to take over their farms. This is especially a problem in the Dutch peat polders, where the soil conditions, which go with small plot sizes, make farming less profitable and where farm sizes have remained quite small. These small-scale farmers are facing economic problems and have a

**Figure 3.9** The landscape seen as a bundle of points, lines and planes (here indicated in white)



gloomy perspective (Everdingen et al., 2005; Van der Meulen & Venema, 2005). Many interviewees mentioned the declining economic position of farmers as maintainers of the landscape as the most important threat to these small-scale landscapes.

In recent years, attempts have been made to respond to this economic trend by creating new sorts of income for farmers and searching for new ways to use old farms. Although, especially in metropolitan areas, new activities such as farm-care, farm-recreation and the purchase of local products can contribute to agricultural incomes, in general, they have little economic impact (Vader & Leneman, 2006). Interviewees expressed concern about these new activities, giving examples of farmers who had started a sideline and soon neglected their agricultural activities. This phenomenon can be illustrated with a metaphor. As Figure 3.9 illustrates, a landscape can be thought of as a bundle of points, lines and planes. The points, the former farms or parts of them, can easily be used in another way, for example as restaurants, holiday houses, or shops for local products. This permits the farms to be maintained. The lines in the landscape, the roads, can be used for recreation. In general, they are owned by government, and their maintenance is an obvious task for local governments. Unlike the points and the lines, the maintenance and financing of the planes, the fields, are cause for concern. There are hardly any activities other than farming that can both provide an income and maintain the open green landscape.

---

### 3.2.3 The importance of farmers for metropolitan green areas

A comparison of the different types of land use shows the economic importance of farmers for metropolitan green areas. Because of the amount of metropolitan green areas, which needs to be maintained, maintenance costs are a crucial factor in metropolitan landscape protection and improvement, forming an important factor in planning. As we have seen, maintaining recreational areas is the most expensive for the government. A report from the Netherlands Environmental Assessment Agency (*Milieu- en Natuurplanbureau*, MNP), which also considered the costs for acquiring land, showed that if no distinction is made with respect to habitats, nature conservation by farmers is less expensive than nature conservation by the state or NGOs (MNP, 2007b). In the Midden-Delfland example, maintenance by non governmental organisations was the least expensive for the state. However, it is not likely that these organisations could increase their income (primarily from sponsors and donations) enough to allow them to maintain an area far larger than what they currently maintain. On the other hand, farmers do not need to be fully sponsored because they also receive income from their agricultural production. From a governmental point of view, having farmers maintain metropolitan green areas is an economical alternative. In addition, there are few alternatives to having farmers maintain these areas, and visitors appreciate small-scale agricultural landscapes (Frerichs & De Wijs, 2001; Crommentuijn et al., 2007; Enting & Ziegelaar, 2001). Therefore, the economic position of farmers in small-scale metropolitan landscapes and the problems they face should receive attention.

### 3.3 Influences of the restructuring of the welfare state

To understand what influences the protection and improvement of metropolitan green areas, in addition to the problems faced by farmers, the effects of the restructuring of the welfare state require attention too. As discussed in the introduction of this chapter, neo-liberalization and globalization have led to restructuring of the welfare state and a power shift from the nation-state to supranational regimes and regional and local governance (e.g., Peck & Tickell, 2002; Taylor-Gooby, 2005; Jessop, 1994). In the Netherlands, deregulation, privatization and decentralization are often placed within this perspective. This section first discusses the indirect effects of the restructuring of the welfare state on the way strategic spatial planning used to become effective through coordinating central government sector departments (see Chapter 7), such as the Ministry of Agriculture, Nature and Food Quality and the Ministry

---

of Transport, Public Works and Water Management. After that, it discusses its direct impact on spatial planning.

### 3.3.1 Impact on sector departments

The restructuring of the welfare state and globalization has had a considerable impact on the ways government departments operate. As Chapter 7 explains, strategic spatial planning often does not change the landscape directly but becomes effective by coordinating sector departments (Korthals Altes, 2007; Priemus, 1996). In the Netherlands, as part of the restructuring of the welfare state, the way sector departments operate has changed and the traditional links between the ministry concerned with spatial planning and sector departments has weakened too. Recent changes in policy, especially of budgets for implementing physical measures and changing landownership situations, have weakened these links considerably.

Budgets for the agricultural sector have decreased for various reasons. In general, agricultural issues are losing their place on political agendas and subsidies have decreased. In line with reforms to the CAP, EU-subsidies, originally meant to protect European agricultural production, are being reduced (Dammers & Keiner, 2006). Additionally, European state aid regulation prohibits individual states from hampering competition by subsidizing their own companies, which makes subsidizing farmers increasingly difficult (see for more information about this, European Commission (2008)). In Midden-Delftland, this hampered the set up of a local Green Fund (*Groenfonds Midden-Delftland*) to pay farmers for the maintenance of landscape elements (see also Section 4.4.2). After three years were spent on the EU-state aid procedure, only some activities of farmers could be subsidized. At a national level, Dutch rural policy has been influenced by the ideas about a smaller role for the state. Following the idea of “from taking fully care to guaranteeing” (“*Van zorgen voor naar zorgen dat*”) (Ministry LNV, 2005), it is the official policy of the Dutch Ministry of Agriculture, Nature and Food Quality to place more responsibility in the hands of private parties (Raad landelijk gebied, 2006). In line with the policy of decentralization, the new Dutch land consolidation law decentralized budgets for land consolidation (Van Rij & Zevenbergen, 2005). Consequently, interviewees expressed their worries about the reduction of these budgets. Reduced budgets for agriculture means that planning departments have fewer opportunities to coordinate changes in the landscape.

Ideas on reducing the role of the state, austerity financing and enhancing the role of individual and other actors have had an effect on policy aiming at changing the land ownership situation, which used to be an important task of the Ministry of Agriculture, Nature and Food Quality. This is affected by the Ministry of Finance’s aim to deal with the amount of land owned by the state more efficiently (Interdepartementaal beleidsonderzoek, 2006). Besides,

**Figure 3.10** Protesting decentralization: a property developer and a mayor carry away central government's arrow towards green on a local policy arrow towards built area



Source: Van Dusseldorp et al., 2007, © Arend van Dam

it is not expected that the government will decide to set up new land consolidation projects (Korthals Altes & Van Rij, 2005, p.35). In line with this, the creation of a modest land bank in Laag Holland was controversial, because especially at present, buying land is considered a too drastic and expensive instrument to preserve landscapes. Instead of buying land for nature conservation, the government has decided to offer subsidies to landowners in order to persuade them to conserve the nature on their land (MNP, 2007b). Only very rarely, the purchase of land is part of new policy. All in all, because sector departments leave more room for the market, budgets have been reduced, policies affecting land ownership have become unpopular and planning departments have fewer opportunities to influence spatial quality by coordinating sector departments.

### 3.3.2 Direct impact on spatial planning

Ideas about the restructuring of the welfare state have not only influenced sector departments' policy, but have also influenced planning. This section first discusses whether decentralization or centralization has dominated spatial planning. Then, it discusses how the retreat of the state and the enhancement of the role of individual and other actors have had an effect on spatial planning policy.

Because, as discussed in Chapter 6 and illustrated by Figure 3.10, Dutch municipalities have a tendency to favor new developments (Korthals Altes, 1995), decentralization of planning powers might lead to an increase in built developments in metropolitan green areas. Therefore, while discussing the improvement of institutions for protecting and improving metropolitan green areas, decentralization requires attention. Addressing spatial planning issues at the appropriate governmental level is an important issue in the new Memorandum on Spatial Planning (*Nota Ruimte*) (Ministry VROM et al., 2004).

The central adage is “local if possible, central if necessary” (“*decentraal wat kan, centraal wat moet*”) (Ministry VROM et al., 2004). Although, decentralization and deregulation have been policy aims of the *Nota Ruimte* and for the new Dutch Spatial Planning Act (*Wet ruimtelijke ordening* 2008) (Dutch Lower Chamber, 2004-2005, p. 7, p. 45, p. 46), Galle (2008) stated that spatial planning has been centralized; the new act created new institutions, for example it allows central government and the provinces to make *bestemmingsplannen*. On the other hand, Van Buuren (2002; 2005) stressed that this act can have a negative effect on nature, the landscape and the environment, because, for example in line with decentralization and deregulation, provincial approval is no longer needed for new *bestemmingsplannen*, and he expected that the higher levels of government will not use the new institutions provided by the new act.

In recent projects, examined during the case studies, compared to the older land consolidation project in Midden-Delfland, decentralization seemed to have been more dominant. The example of Living in Waterland (*Waterlandswonen*) (discussed in Section 6.2), illustrates how increasing municipalities influence on changes to land-use plans might result in an increase in built development. In an attempt to keep land prices low in Midden-Delfland by creating as much certainty as possible about the durability of restrictive policy (see Van Rij & Korthals Altes, 2007b), interviewees wondered whether provinces and central government would use new institutions provided by the new Dutch Spatial Planning Act. In this way, decentralization and deregulation might give more room to forces with no interest in protecting metropolitan green areas that without government intervention are strong in urban-rural interplay processes.

In line with attempts to restructure the welfare state, in spatial planning, the idea of getting money from the market has gained popularity. Hajer and Zonneveld (2000) stated that as demands for developments increase, a passive zoning-oriented planning system becomes insufficient. Therefore, they argued for a more active spatial development system of planning. Spatial development planning starts from the premise that spatial quality requires new procedures that permit the government to be actively involved in developments. The Fourth Report on Physical Planning (VINO), published in 1988 (Ministry VROM, 1988), already mentioned that it was official Dutch national policy to encourage Public Private Partnerships, PPP. Chapter 5 discusses possible consequences of these PPP-approaches, such as an increased number of built developments in metropolitan green areas.

All in all, as the protection and improvement of metropolitan green areas used to be based on an influential central government, not in the last place on influential sector departments, the restructuring of the welfare state might have reduced and might still be reducing possibilities for protecting and improving metropolitan green areas.

---

### 3.4 Conclusion

This chapter shows that, today, there are reasons to be concerned with the improvement of institutions for green landscapes in metropolitan areas. On the basis of this picture of landscape changes and the impacts of the restructuring of the welfare state, the sub-questions for this research, addressed in the following chapters, were formulated (see Section 1.1).

Because, in an early stage, developments in the landscape are often hidden under the surface, contemporary problems concerning metropolitan green areas might not be well understood. Basically, recurring costs and revenues of the guardians of the landscape might influence many changes in the landscape. In this light, subsidies, agricultural incomes and land prices are crucial factors. Although, sometimes, maintainers of recreational areas and nature conservation sites have problems to raise enough money to maintain the preferred spatial quality, most landscape problems have to do with the economic position of farmers. In agricultural areas, one of the major problems concerns the so called rent-gap. The price for which farmers can buy land is high because people believe development in these areas may be allowed in the future. As a result, annual interest charges for these lands are higher than the declining annual revenues by agricultural production.

The model for green area protection and improvement (Figure 2.4) can be used for discussing the following signs of landscape changes. With respect to spatial quality, newly built houses, vegetation changes, messy types of land use and facilities for horse riding might be signs of landscape changes. With respect to zoning, studies and policy documents about houses in the country side can be seen as a forerunner for changes in *bestemmingsplannen*. Raising land prices is a sign that people believe that built developments are going to be allowed. With respect to the landownership situation, the influence of urbanization shows itself in high land prices, the subdivision of parcels, an aging agricultural population and small farm sizes.

The model can also be used to discuss the consequences of the restructuring of the welfare state. In order to cut back on governmental expenditure, government has decided more often not to implement physical changes or to use land purchase by the government as a steering mechanism. In the meantime, the government tried to reduce subsidies to the guardians of the landscape. Due to decentralization and deregulation, zoning institutions can become less effective tools to preserve metropolitan green area. As a result of deregulation, decentralization and privatization, central government's influence, especially strategic spatial planning's influence through sector departments is losing strength.

---



---

## 4 Market or government; the limitations of Transaction Cost Theory

At the beginning of my project, Transaction Cost Theory seemed a good basis for a methodology to study institutional arrangements for internalizing landscape values. Transaction Cost Theory is based on the idea that different institutions have different effects on transaction costs, which need to be reduced in order to increase efficiency. For some years, expectations have been high for Transaction Cost Theory in planning (Alexander 2001b; Webster & Lai, 2003; Buitelaar 2003, 2004; for an overview see Lai, 2005). According to Alexander (2004), this theory should make it possible to compare the efficiency of both planning and market institutions, no matter whether private or public parties are involved or whether private or public interests are at stake.

However, Adams (2005) discussed the practical limitations of Transaction Cost Theory. Buitelaar (2007) also found limitations; even for the relatively simple cases he investigated, small size housing sites, he found it more or less impossible to quantify transaction costs since the relation between institutions and transaction costs was too complex and these costs were diverse, and often hidden and indirect. The high expectations that have been expressed, combined with the skepticism about whether the theory can be applied in practice made it interesting to attempt to adopt this theory for the improvement of institutions for internalizing landscape values.

This chapter discusses whether Transaction Cost Theory is a useful institutional design tool for improving institutions for internalizing green landscape values in metropolitan areas. This was examined by (1) investigating transaction attributes and their relation to specific institutional arrangements, (2) making models for specific institutions, such as *bestemmingsplannen*, in a transaction framework and trying to compare them, (3) indicating the transaction costs of a project using financial reports and estimates made during interviews.

This chapter starts with a brief introduction to Transaction Cost Theory and related theories. Then, it discusses their application in planning. The third section describes the attempts that were made to adopt Transaction Cost Theory in this research. The fourth section explains in which situations applying the theory descriptively can contribute to the design of institutions for internalizing landscape values. The subsequent section discusses why planning is not only a tool to lower transaction costs between private parties and how this affects the application of Transaction Cost Theory on the institutions studied in this project. The sixth section explains why transaction costs, specifically the organization costs made by government, only have a limited use as a criterion for improving institutions for internalizing landscape values in urban-rural interplay processes.

---

## 4.1 Branches of Transaction Cost Theory

Transaction Cost Theory is closely related to Property Rights Theory. This dissertation addresses them together as Transaction Cost Theory. This theoretical framework is based on the following assumptions (for a comprehensive overview of work on this theory, see Groenewegen, 2004 and Buitelaar, 2007). If property rights are properly assigned, goods will be allocated efficiently. Often, however, the costs that go with transacting property rights are too high. As a consequence, not all property rights are traded and the situation stays suboptimal. This can potentially be resolved by reducing transaction costs. Transaction costs are the costs involved in transferring goods.

Transaction costs influence the supply of public goods. According to Samuelson (1954), a public good is a good that all enjoy in common in the sense that each individual's consumption leads to no subtraction from any other individual's consumption of that good. These are the kind of goods that once they are provided all can consume but no one will wish to pay. This hinders their provision. The transaction costs for making a contract between all potential consumers to enforce their financial contributions are high. As a consequence, these contracts are seldom made, and the free market does not necessarily supply optimum amounts of these goods (Oxley, 2004).

When transaction costs are high, companies may decide to make goods themselves instead of purchasing them on the market. When goods are transferred within a firm instead of a market, the internal costs of planning within a firm can also be seen as transaction costs. The same can be said when goods are transferred within a government. In this case, the cost of civil servants can also be seen as transaction costs. In order to avoid misunderstandings, I use the term organization costs to address these costs within a firm or within government.

A large part of transaction costs literature describes a posteriori how an institutional system has evolved in a certain way in order to economize (for applications in planning, see Lai, 2005 and Needham & De Kam, 2004). Williamson's (1998) discriminating alignment hypothesis assumes that the institutional arrangement chosen in the end is the one with the lowest costs. According to this theory, a number of critical transaction attributes influence the development of efficient institutions: asset specificity, uncertainty, frequency (Williamson, 1985), and the number of participating actors (North, 1991). The "make or buy decision," the decision to use hierarchical, in-house structures, keeping the transaction within the firm or government, instead of using market mechanisms, depends on these characteristics.

In line with Williamson (1998), the government is usually considered the organization of last resort: Try markets, try hybrids, try firms, try regulation, and resort to public bureaus only when all else fails. The underlying assumption is that public actors have fewer incentives to economize (Moe, 1984). Be-

---

sides, it is more difficult to analyze and economize transactions in the public context; it is not easy to measure what is being exchanged, which also makes it difficult to enforce agreements (North, 1995). Based on this theory, following Moe (1984) and Coase (1960), the following questions can be asked: First, will the good at issue be transferred if the government only delineates property rights? Second, if this is not possible, can the government intervene directly to reduce private transaction costs, thereby facilitating the private reduction of market failures. Many government advisors seeking more efficient, privatization based, policy approaches choose such solutions (Wolfson, 2005; Brusse et al., 2002). Third, if transaction costs facing private parties are prohibitively high, government may conduct the transaction. According to Club Theory, in some cases, clubs in economic terms, groups of parties, might fulfill this task more economically. Club goods can be jointly consumed but are rendered excludable (Buchanan, 1965; Webster, 2002), which might allow organization costs to be reduced.

Transaction Cost Theory is also used a priori, to design more efficient institutional arrangements. In doing so, the literature implicitly justifies the necessity of reducing transaction costs in two ways. However, considering these two justifications as one can easily result in too high expectations about the usefulness of the theory and thus in shortsighted policy decisions.

The first way of justifying reducing transaction costs is in line with North (1995). The argument is that transaction costs should be reduced because transferring as many goods as possible in a market results in more efficient allocation. In some cases, reducing transaction costs for private transacting parties could even lead to an increase in costs for the government. An example of such a measure would be setting up a land registry in developing countries, or developing new types of administrative property documents (Kim, 2004; Zevenbergen, 2000). Despite the increased governmental expenditure, an overall increase in welfare is possible because goods are transferred more often, and more economic activities are undertaken.

Webster and Lai (2003, p. 10) stated that when considering the costs of a policy program, there may be alternative organizational arrangements that could deliver greater benefits at lower costs. The second way of justifying reducing transaction costs is based on this idea; transaction costs and organization costs should be reduced because costs should be minimized in general. From that perspective, it is often argued that transaction costs must offset social benefits. If the transaction benefits are not taken into consideration, applying the second way of justifying reducing transaction costs and organizational costs can lead to a thoughtless reduction of governmental expenditure and public services, which could result in no transactions taking place. Therefore, in line with Williamson's (1998, p. 44) suggestion that a trade-off should be made between the benefits of added coordination/cooperation on the one hand and the costs of added bureaucracy, increased organization costs and

---

transaction costs on the other, the transaction benefits need to be considered (Van Rij & Korthals Altes, 2005; Pearce, 2005; Henneberry, 2005; Buitelaar, 2007). Since transactions form complex networks with many loops and interactions, the possible effects of a given transaction on other transactions should also be examined. The basic idea of this way of justifying reducing transaction costs is that economizing requires a reduction of the total organization costs and transaction costs in order to optimize benefits and minimize costs.

## 4.2 Transaction Cost Theory in the field of planning

As stated earlier, Transaction Cost Theory has been considered a promising tool for institutional design in spatial planning and land development. Transaction Cost Theory has been mentioned in advisory documents for the Dutch government about the improvement of institutions (VROM-raad, 2004a; Segeren et al., 2005; Wolfson, 2005; Brusse et al., 2002).

However, in planning research, the most extensive empirical attempt to improve institutions by analyzing transaction costs was made by Buitelaar (2007), but his results were discouraging. Even for the relatively simple cases he considered, small size housing sites, it was almost impossible to quantify transaction costs since these costs were diverse, and often hidden and indirect. Buitelaar also mentioned the complex relations between institutions and transaction costs, due to the many types of institutions at different levels and loops between them. Moulaert (2005) stated that unequal power relations between private and public interests and their struggle over space restrict the applicability of Transaction Cost Theory in planning. In order to increase the understanding of the usability of Transaction Cost Theory for planning, this section discusses how this theory can be applied to institutions used to facilitate maintenance of the landscape, to facilitate the land market and to facilitate spatial disposition, for example by means of *bestemmingsplannen*.

Some theoretical concepts derived from Transaction Cost Theory can help to find more efficient institutions for maintaining the landscape. For example, Webster (2007) describes why based on the idea of clubs, assigning collective property rights over open spaces, for example to shop owners, will give these private parties incentives to invest in them and preserve them. This can reduce organizational costs.

The function of planning institutions, especially zoning plans, has been explained in terms of transaction costs in various ways. This section discusses the explanations of Alexander (2001a; 2001b) and Lai (2007). Studying this helps to address the suggestion that the values of green landscapes can be internalized by lowering transaction costs.

Alexander (2001a; 2001b, p. 767) stated that the goals of any planning and

---

development control system are: “To provide information that will reduce the uncertainties of the processes involved in production and transformation of the built environment; to assure that the information provided is authoritative or reliable; and to maximize the contribution of the proposed system of planning and development control to net transaction cost reduction.” Although Alexander (2001a; 2001b) mentioned only the production and transformation of the built environment in his description of the goal of planning in terms of Transaction Cost Theory, testing whether his description can be applied to planning institutions which protect the non-built environment is interesting because this might help to formulate a more general theory. In his article, Alexander (2001b) mentioned various types of transactions, transaction parties, and transacted goods on which his argument was based. A precise examination of this might provide insight into the goals of planning and the possibility of basing institutional arrangements on market mechanisms.

According to Alexander (2001b, p. 757), the goods and services transacted are land, capital, and professional/contractor services. He identified a number of transaction parties: landowners, developers and property buyers (Alexander, 2001b, p. 757). Later, when he discussed a transaction with the “output/product” statutory land-use plans, he distinguished the following transaction parties: planning and building commissions, the office that manages the government owned-land, developers, and initiators (Alexander, 2001b, p. 762). Comparing these two examples, it is unclear whether planning facilitates transactions between landowners, developers and property buyers, or whether planning is the output of a transaction between planning and building commissions and developers.

This group is even more diverse when, in his analysis, he extends the group of transaction parties to all relevant stakeholders (Alexander, 2001b, p. 767). He states that, if the parties to a transaction are not limited to the actors who are directly involved, but include all the relevant stakeholders, minimizing overall transaction costs may enhance planning goals such as democracy and participation. He acknowledged that he only identified goals which allow transaction costs analysis.

This ambiguity about the goals of planning and the types of transactions that are analyzed raises difficulties, which are addressed in Section 4.5. This is an important issue, since it affects the type of transaction that is supported by planning: Can a given transaction take place in a market or not? Which way of justifying reducing transaction costs is applicable? Should transaction costs be reduced because transferring as many goods as possible in a market results in more efficient allocation, or should transaction costs and organization costs be reduced because costs should be minimized in general?

With respect to this, Lai (2007) distinguished Coasian situations (based on Coase, 1960) and Pigovian ones (based on Pigou, 1932). In a Coasian situation, property rights can be rearranged through the market and output can be

---

maximalized. On the other hand, in Pigovian situations, transaction costs are prohibitively high and the market can not internalize externalities. Lai (2007) stated that the Coasian situation should be the starting point for planning, and that the Pigovian situation is inferior and should only be applied if transaction costs are prohibitively high.

Although he does not emphasize it, Lai (2007, p. 361) acknowledged two roles for a planning system. According to him, all externalities that are non-tradable are legitimate candidates for land use planning controls. He uses the example of the national heritage. In addition, the planning system can be used to reform institutions, lowering transaction costs and making more transactions possible. He stated that a dependable planning system that is not subject to frequent and arbitrary changes would be conducive to the lowering the high transaction costs in markets.

### 4.3 Attempts to adopt Transaction Cost Theory

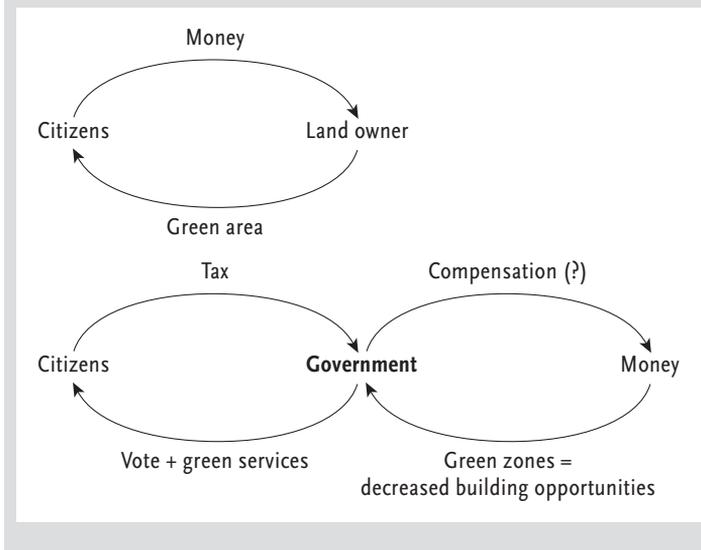
The attempts to adopt Transaction Cost Theory in this project were both practical and theoretical. The theoretical part consisted of making conceptual models (see Van Rij & Korthals Altes, 2005; and see Figure 4.1). In order to increase the understanding of the relation between institutions and transactions, I created models that specified which transaction a specific institution is used for. These models make the transaction parties explicit, the things that are exchanged, the type of transaction costs and benefits, and the effect this transaction has on other transactions.

The practical part, during the case studies, consisted of asking specific questions about transactions and transaction cost during the interviews, as well as studying financial reports. In order to examine transaction costs, organizational costs, transaction benefits and the effects on other transactions, the following questions were asked:

- What was the institutional framework in which transactions to internalize landscape values took place?
- How did this institutional framework affect these transactions?
- Which transactions took place and which did not?
- What was the transaction benefit?
- Which costs, transaction costs, organizational costs, and other payments accompanied these transactions?
- Which causal connections, which transaction attributes, influenced the efficiency and effectiveness of these transactions?

On the basis of the answers to these questions and the study of documents such as financial reports, an explanation could be made why, considering the transaction attributes, certain strategies to subsidize farmers, might be

**Figure 4.1** Early attempt to make a model based on Transaction Cost Theory



more efficient. During the case studies, attempts were also made to indicate the size of the transaction costs including the organizational costs of certain projects, as well as the costs of specific transactions within these projects. This experiment was set up to compare institutions on the basis of the transaction costs involved. This allowed me to examine whether transaction costs are a usable criterion for improving institutions for internalizing landscape values.

As a spin-off, this focus on transaction costs during the case studies brought unexpected topics to my attention. For example, the need to employ land purchasers for many years on the Midden-Delfland land consolidation project led to the idea that, instead of the time needed to make planning decisions, the time needed to assemble land determined the duration of the project to a large extent (see Section 8.2). The focus on transaction cost also brought to light costs that have received very little attention in the debate on institutions for metropolitan green areas, such as maintenance costs (see Section 3.1).

#### 4.4 Institutional design based on explanatory Transaction Cost Theory

I use the term explanatory Transaction Cost Theory to refer to those branches of the theory that use a posteriori analysis to explain why certain institutions are more likely to be efficient than others. First, this section discusses the contribution to the institutional design process of theories that start by examining whether goods can be transferred in the market, and which only resort to public bureaus if the market and other hybrid alternatives fail. Explanatory Transaction Cost Theory will also be used in Section 7.4.1 to discuss the

dilemma between serving public interests by providing spatial quality on the one hand and protecting private property rights for the sake of the economy on the other. The last part of this section discusses how efficient institutions can be developed by analyzing transaction attributes, such as asset specificity, uncertainty, frequency, and the number of participating actors.

#### 4.4.1 Public bureaus as a last resort

As discussed earlier, various scholars (e.g., Moe, 1984; North, 1995; Coase, 1960) have proposed taking the transfer of goods in a market as a starting point, only resorting to public bureaus if this and other hybrid alternatives fail. These theories can help to explain why governmental interference in spatial disposition systems might be efficient, for example by means of *bestemmingsplannen*, as well as to explain why having farmers maintain green areas might be efficient. These two topics will be discussed in the next sections.

What role might be economical for the government in a spatial disposition system? The first question is whether the green amenities of rural metropolitan areas can be transferred in a market if the government only delineates property rights. In general, land is transferred through the market when property rights are properly assigned. The land that is transferred in this way is so valuable for a specific user that he is willing to pay the price of the land and the transaction costs. This is definitely the case when land is used to build houses. However, this is rarely the case for green amenities, which are enjoyed by many people. In the Netherlands, there are examples where homeowners have insured their free view of the countryside (e.g., Wing, 2008; Havermans, 2008). Nevertheless, in most cases green amenities are consumed by a large number of people and this makes transacting them more difficult. Theoretically, many people are willing to pay a small amount to enjoy the view over these green areas. However, making and enforcing a contract between the landowner and all these people is not likely because of the high transaction costs related to the large number of people. Green amenities are public goods. A government could try to reduce these transaction costs, for example by subsidizing the cost for making a contract between millions of people. However, because of the large number of people involved, it will be very expensive to accomplish this in a market. All in all, the single assignment of property rights is not likely to result in the provision of metropolitan green areas.

Another suggestion for reducing transaction costs to permit the supply of green areas to be regulated through the market is introducing a tax-based spatial order (this will be discussed in Section 8.2.6). In that case, if somebody wants to develop an area, he must pay for the value of the green area that will be lost. This tax is supposed to make builders take the public value of open space into consideration. Since so many people enjoy green areas, this transaction cannot take place directly through the market; however, the govern-

**Figure 4.2** A cultural historic landscape in Laag Holland which requires expensive maintenance



Photo: Nico Langeveld

ment could reduce transaction costs by enforcing this transaction. Some people have proposed that such a system could replace the Dutch zoning system.

However, as will be discussed in Section 8.2.6, this is not likely to be an adequate solution in practice. First, operating and enforcing such a system will be expensive. The transaction costs for effectively and legitimately valuing the amount that needs to be internalized are high. In practice, it is not possible to determine the value of a specific green area to be compensated in such a way that it effectively restricts built developments. Recently conducted studies were unable to provide such data (Koomen, 2008; Brander & Koetse, 2007; Nicholls & Crompton; 2005a & 2005b). Besides, a tax-based spatial order system does not fit the existing system. Considering this, it is not likely that transaction costs can be reduced enough for landscape values to be sufficiently internalized within a market.

In addition, the large number of transaction parties involved makes it unlikely that the transaction of green amenities will take place in a market on an efficient scale. This explains why there may be a role for governmental regulation by means of *bestemmingsplannen*.

This line of reasoning can also help to analyze which parties can maintain green areas most efficiently. As discussed in Chapter 3, maintaining the landscape is expensive (for example, mowing in areas such as shown by Figure 4.2). As agricultural entrepreneurs, farmers have a private incentive to maintain the land. If measures are taken that enable city dwellers to cycle or walk alongside the land and enjoy it, this can be an efficient way of providing metropolitan green areas. The same can be said about other partners in green ar-

ea development like nature conservation unions and landscape organizations, composed of people with a specific interest in maintaining the green area, such as local home owners. According to Club Theory, organizational costs might be lower than in the case of governmental provision because there is a more direct relation between the supply of the club good and the consumption. Following this reasoning, there is only a need for the government to take care of those green amenities that are not taken care of by other parties, such as recreational areas which are intensively used.

#### 4.4.2 Different subsidizing strategies

Transaction Cost Theory can be applied to compare different approaches to subsidizing farmers for their nature conservation work. In his dissertation, Van Ark (2005, p. 56) discusses an example of this as it has been described by Groenevelt (2004) (see also Polman et al., 2005). Reducing transaction costs for subsidizing nature conservation by farmers was an important aim of the Dutch minister Veerman (e.g., Dienst Regelingen, 2006). Although it was said that he had stated that only 10% of the budget for these subsidies should be spent on transaction costs, including monitoring costs, the problem of high transaction cost is still on the political agenda (e.g., Dutch Lower Chamber, 2007-2008).

An example of a new subsidizing strategy that entails lower transaction costs is the experiment with the boat-lands in Laag Holland (see also Section 3.1). Transaction Cost Theory can help to analyze this strategy. In this case, farmers were made responsible for the maintenance of land owned by the State Forestry Organization. A contract was set up between the local agricultural nature conservation union and the government. The union was responsible for the daily supervision of the farmers. After six years, the project will be evaluated by measuring the number of rare birds, at which point renewal of the contract can be negotiated.

Transaction Cost Theory can explain some of the advantages of this form of contracting over traditional subsidies. First, one of the attributes of this transaction is asset specificity; the rare birds can only be preserved in these specific habitats, and there are only a few farmers nearby who can maintain these areas for a relatively low price. This permits the farmers to wait for the government to come up with a good price, since the number of potential contract partners for the government is limited. On the other hand, if a farmer signs such a contract with the government, he might need to make long term investments, whose returns will depend on government policy. Due to policy changes, nature conservation has always been an uncertain source of income. Added to that, this type of transaction does not take place often; the transaction frequency is low.

These transaction attributes require special contracts; the contract must

---

be written so that it increases the confidence of the involved parties. This was accomplished by making six-year contracts; the farmers can be sure that the government will not change the contract suddenly. The role of the local agricultural nature conservation union also reduces transaction costs, by reducing the number of contracting parties and monitoring costs (see also Oerlemans et al., 2007). Because the overall situation will be monitored after six years and the union does not want to lose its good name, the union is not likely to behave opportunistically. Because the farmers and the controllers of the conservation union live close to each other in a small community, monitoring is not expensive, and opportunistic behavior on the part of the farmers is unlikely. Despite the asset specificity, the uncertainty, the low frequency, and the number of contracting partners, a contract with relatively low transaction costs could be made.

Another example of using transaction cost theories to compare approaches to subsidize farmers for their nature conservation work is the study of the increase of ground rents in Midden-Delfland. As part of the land consolidation project, in order to support farm enlargement, the government had previously leased out pieces of land to farmers. Recently, central government decided to make the ground rent market based. This has resulted in an increase in ground rents, because land prices are high in Midden-Delfland. The government defended this decision in the following way. An increase in ground rents can threaten the economic position of farmers. However, in order to avoid unfair competition, EU regulations on state aid force the government to base the ground rent on market prices. If farmers need to be supported for the sake of the landscape or nature conservation, this support should be accomplished by introducing subsidies for this purpose. These statements on EU regulations can be questioned. First, it is hard to prove that the former ground rents were not market based. Besides, due to the poor relation between agricultural revenues and land prices in these areas compared to other areas, the former ground rents were not likely to cause unfair competition.

Separate from the decision to increase ground rents, the Green Fund (*Groenfonds Midden-Delfland*), a system for “green and blue services,” was set up locally in Midden-Delfland (for an example of the application form for these subsidies, see Figure 4.3). For example, farmers can receive €50 per year to maintain a historic out-door toilet and €5 per three years for a willow tree. The expected extra annual income contributed by this system is expected to be about €3,000 per farm. In an area with 80 farms, this sums up to a total of €240,000. A transaction cost analysis shows that €81,750 was invested to enable the local agricultural nature conservation union to operate the system, and €99,844 was spent testing the system and developing a nature conservation plan for each farm. Besides these costs, money was also spent on civil servants. Only after nine years of policymaking, three of them spent on the EU state aid procedure, could the money in the green fund actually be used

---

Figure 4.3 Application forms for ‘green and blue services subsidies’

**Aanmeldingsformulier puntensysteem  
Groenfonds Midden-Deffland met ingang van 2006**



**1. Gegevens aanvrager**

Naam: .....

Adres: .....

Postcode en plaats:.....

Telefoonnummer: .....

E-mail adres: .....

Bankrekeningnummer: .....

Hebt u een actief boerenbedrijf?     ja     nee

**2. Basisvoorwaarden**

Is uw grond gelegen in het Reconstructiegebied Midden-Deffland of in de Groeneveldse Polder?     ja     nee

<u>Natuur/biodiversiteit</u>	<u>bedrag per jaar</u>	<u>eenheid</u>	<u>aantal</u>
1. Toepassen van mozaiekplanning in het graslandgebruik t.b.v. weidevogels (minimaal één maaitrap in mei, maaien met een tussentijd van 7 dagen, langzamer rijden, per keer minimaal 25% van het te maaien land, op basis van een graslandgebruiksplan dat met Vockestaert wordt opgesteld)	€ 440,- + € 35,- (eigen mechanisatie) of € 50,- (loonwerk) of € 220,- (weghalen gras in loonwerk)	bedrijf  ha maailand  maaitrap	..... ha maailand  ..... maai- trappen
2. Gebruik van een wildredder bij het maaien	€ 5,-	ha maailand	..... ha
3. Instandhouden oud grasland (> 10 jaar)	€ 60,-	ha	..... ha

Source: Vockestaert, 2006

to pay landowners for “green and blue services.” The transaction cost-benefit ratio suggests that the same effect might have been achieved more economically. For most farmers, these subsidies cannot compensate for the increase in ground rents. Besides, this institutional change has resulted in a strong increase in transaction costs. Not changing the ground rents, would have been an implicitly more efficient way to subsidize the preservation of the metropolitan green landscape.

### 4.4.3 Usability of explanatory Transaction Cost Theory

All in all, explanatory Transaction Cost Theory could serve as a basis for institutional design in some cases. Such theory could help to analyze existing and new institutional approaches. It is especially useful for analyzing contract strategies, such as the contracts for subsidizing farmers for their nature conservation work. However, in general, the improvement of institutions to internalize landscape values requires an approach that allows more different institutions to be compared and that provides more specific statements about the institutions’ effects.

---

## 4.5 Planning, more than a tool to lower transaction cost between private parties

Making a conceptual model for transactions which are influenced by *bestemmingsplannen* forced me to specify the transaction, the transaction parties and the goods being exchanged. It became clear that the literature is ambiguous about the transaction, the transaction parties and the goods being exchanged. More clarity however can help us understand the aim of planning, how planning influences spatial quality, and whether extra attention needs to be paid to protecting private property rights. Therefore, this section first discusses how the information provided by planning influences spatial quality. After that, it distinguishes two roles of planning and it explains why this distinction is relevant.

According to Alexander (2001b), planning becomes effective by providing information to reduce uncertainty. This might give the impression that, because this information can provide useful knowledge on future possibilities, just providing good information will make people voluntarily act in accordance with plans, in the absence of binding regulations. Although this can be the case, there may be other reasons why parties act in accordance with the information provided by the plan. Chapter 7 will discuss this on the basis of a distinction between strategic spatial planning and operational spatial planning. In the case of strategic spatial planning, non-regulatory types of coordination can be used to coordinate different parts of the government by providing information. One of the reasons for this, provided by Transaction Cost Theory, is that both parties belong to the same entity (Webster & Lai, 2003, p. 45) (see Chapter 7 for further reasons). In the case of operational spatial planning, coordinating private parties works differently. The government can provide certainty by providing clear information on its own course of action. This might guide investments of private parties. However, especially when a planning system aims to protect green areas, regulations such as *bestemmingsplannen* might be needed to make parties act in accordance with the information provided by the plan.

When discussing transactions which are influenced by land-use plans, Alexander (2001b) was imprecise about the type of transaction parties and the transacted goods. Are these parties land owners, the planning authority, or people in general? Is the transacted good the land or the obligation not to build on the land? This distinction is crucial if Transaction Cost Theory is to be applied in planning, because it determines whether a transaction can take place in a market or not. To use Lai's (2007) terms, the question is whether the Coasian line of reasoning or the Pigovian line of reasoning is applicable. Since land is traded in the market, this first line of reasoning applies when land owners transfer land with the help of planning as a transaction cost reducing measure. The second line of reasoning, which explains why government may

---

take action to internalize non-tradable externalities, applies when government internalizes green metropolitan landscape values.

As discussed in Section 4.4, the number of involved parties means that the second line of reasoning needs to be applied when considering the amenities of metropolitan green areas. Since they are enjoyed in common in the sense that each individual's consumption leads to no subtraction from any other individual's consumption, the amenities of metropolitan green areas can be seen as public goods. Even if attempts are made to lower transaction costs, in almost all cases, green amenities are not traded, which makes them a candidate for planning control. All in all, planning is more than a tool to lower transaction cost between landowners in a market; the aim of planning is also to internalize non-traded externalities.

Distinguishing these two roles of planning is important because if planning institutions are only seen as tools to reduce transaction cost in a market, they are considered to benefit land owners. However, if their aim is also to provide non-traded goods to the public (see for example Figure 4.1), they do not necessarily benefit land owners. In order to have an effect on spatial quality, binding regulations and budgets for compensation are required. In addition, more attention is needed for stipulations that protect the property rights of those who are forced to provide these goods.

This distinction is also relevant when discussing reducing the costs borne by the government. If planning institutions are used to reduce transaction costs between private parties in a market, it might be efficient to spend governmental money to reduce these transaction costs, thus allowing more transactions to take place and goods to be allocated more efficiently. This might be different when the aim of planning is also to provide non-traded goods to the public and the transaction is performed by the government. The reduction of the costs that go with such transactions is one of the topics of the next section.

## 4.6 Low organization costs as a criterion?

When planning is used to provide non-traded goods to the public, then, just as a firm takes a "make or buy decision," the government can decide whether to provide goods by itself. The costs of coordination within a firm or government are called organization costs. Organization costs can be seen as a specific type of transaction costs. It has been implicitly presumed that just as transaction costs in a market should be reduced, these organization costs within the government should also be reduced (e.g., Buitelaar, 2007). Lowering organization costs, however, can lead to downsizing the government, which in turn means that fewer transactions will take place. To balance this, it has been proposed that transaction benefits also be considered (Van Rij & Kort-

---

hals Altes, 2005; Pearce, 2005; Henneberry, 2005; Buitelaar, 2007). Applying such an analysis on a project level can take the form of a cost benefit analysis that includes organization costs.

In the case studies, I have tried to investigate organization costs and transaction benefits. However, because numerous civil servants, administrators and representatives of non governmental organizations spend time on a given project, it is practically impossible to accurately estimate the costs of these actions. For example, in the case of Midden-Delfland, it was only possible to estimate the expenditure the central government made for the project through the DLG/BBL, the Government service for rural land management. These estimations were based on financial statements and rough estimations by civil servants from DLG/BBL. It is hard to determine which part of this sum represents transaction costs and which organization costs, because a substantial part of the costs of implementing works were transaction costs as well. Besides, some organization costs are shared over many transactions, for example the costs of tax and elections. Besides, in practice in the cases, many transactions in theory consisted of a large number of different transactions.

During my case studies, it became clear that, in practice, the transactions being investigated were very complex. They interfered with each other in a network of transactions. Given this network of transactions, it was impossible to specify the transaction costs, organization costs, transaction benefits, and the effects on other transactions: too many actors were involved and there were too many links between the transactions. Despite the examples discussed in Section 4.4, as in Buitelaar's (2007) research, it was not possible in my case studies to specify or identify the many different transaction costs and benefits in such a way that this could be used as an institutional design tool. Despite Lai's (2005) statement that the greatest limitation of neo-institutional economics for empirical planning analysis is largely a matter of the infancy of paradigms in planning study, Dawkins (2000) statement that no consensus has been developed on the appropriate way to measure transaction costs would still appear to stand.

## 4.7 Conclusion

This chapter has discussed why Transaction Cost Theory is only of limited use as a tool to improve institutions for internalizing green landscape values in metropolitan areas. This made it necessary to use other theories, in order to provide a more thorough view of ways to improve planning and land development institutions.

Explanatory Transaction Cost Theory helps to explain that, due to the large number of transaction parties involved, it is not likely that internalizing green metropolitan landscape values will take place in a market on an efficient scale.

---

Consequently, there might be a role for governmental regulation, in particular by means of *bestemmingsplannen*. Explanatory Transaction Cost Theory also helps to explain why the majority of metropolitan green areas might be more efficiently maintained by farmers than by other parties, since farmers have a private interest as agricultural entrepreneurs. Finally, Transaction Cost Theory is a useful tool for examining institutional efficiency when comparing similar transactions, such as the government paying farmers for their nature conservation work. However, in general, the improvement of institutions to internalize landscape values requires an approach that makes it possible to compare more different institutions and that provides more specific statements.

Studying the application of Transaction Cost Theory in planning contributed to understanding what the aim of planning is, how planning becomes effective, and whether extra attention should be paid to protecting private property rights. When applying transaction cost research in planning, it is important to remember that planning is not only a tool to lower transaction cost between private parties who transact land in a market; it is also a tool to internalize non-traded externalities. Since in almost all cases, green amenities are not traded in a market, the second goal is especially relevant for research on improving institutions for metropolitan green areas.

Recognizing that planning can also be used to provide non-traded goods to the public can help to understand why binding regulations might be needed to make private parties act in accordance with the information provided by the plans, and why budgets for compensation might be needed to implement the plans. If, instead of reducing transaction costs in a market to the benefit of all land owners, planning is also used to provide public goods, more attention needs to be paid to protecting the property rights of those who are forced to provide these goods.

In order to use Transaction Cost Theory to make planning institutions more efficient, it is important to consider the two different goals for which planning institutions can be used. If planning institutions are used to reduce transaction costs between private parties in a market, spending government money to reduce these transaction costs might be an efficient use of resources: if more transactions take place, goods will be allocated more efficiently.

However, if planning is used to provide non-traded goods, lowering organization costs may have the opposite effect. Lowering transaction costs for coordination within an organization will lead to downsizing the government, resulting in fewer transactions. To avoid this, transaction benefits and the effects on other transactions also need to be considered. Applying such an analysis on a project level can take the form of a cost benefit analysis that includes organization costs. During my case studies, however, it became clear that, in practice, the network of transactions being studied was too complex to permit transaction costs, organization costs, transaction benefits, and the effects on other transactions to be used as an institutional design tool.

---

## 5 Market or government; the debate about cross-subsidy strategies

At times when the welfare state is being restructured and the government is making major cutbacks (see Section 3.3), the funding of green areas may face serious problems. In the most recent Dutch memorandum on physical planning, the *Nota Ruimte* (Ministry VROM et al., 2004), cross-subsidizing green areas by built developments is often mentioned as the way to finance them. The national government, decentralizing its responsibility for green area development and maintenance, has simply stated that it expects private parties to contribute financially (Ministry LNV & VROM, 2006). Using profits from property developments is proposed as the way to do this. Many Dutch planners have high expectations of the possibility of using property profits for regional green areas. The new Land Servicing Act (*Grondexploitatiewet*), which is part of the new Spatial Planning Act, and became effective in 2008, has strengthened these expectations (e.g., Ministry LNV & VROM, 2006, pp. 36-37).

Because of these high expectations, much effort has been put into examining ways of claiming profits from property developments for regional green (De Graaff & Kurstjens, 2002; NVB, 2005; Evers et al., 2003; Nationaal Groenfonds & Bouwfonds Woningbouw, 1999; PPS-Bureau Landelijk Gebied, 2002; Ecorus, 2005). Publications have thus far been limited to discussing the concept, suggesting the direction that should be taken, and analyzing some inspiring cases (Priemus, 2002a; 2002b; Van der Veen & Janssen-Jansen, 2006; De Wollf et al., 2006; De Zeeuw, 2007). Nevertheless, these studies have not resulted in a wide application of the concept yet (De Zeeuw, 2007).

The Bloemendalerpolder has often been put forward as an example of a successful project using property profits for regional green. I therefore studied this project to examine to what extent the project has actually worked and whether the approach could be applied elsewhere. A closer look at the Bloemendalerpolder project gives some lessons which can be used in other projects. Nevertheless, the unique circumstances of this project and the disadvantages which go with cross-subsidy strategies in general mean that expectations about cross-subsidy strategies being widely applied soon should be tempered.

The Bloemendalerpolder, directly to the east of Amsterdam, covers an area of 500 hectares. Because it was originally a part of the protected Green Heart and a National Buffer Zone, development was, for a long time, not expected. Recently, an interactive planning process was started, with public parties and private land owners, most of them property developers, working together in a “design and calculate” process to create new dwellings on one third of the area and to make the other two thirds more suitable for recreation and ecological restoration. Because the parties cooperated and reached an anticipation agreement about developing houses and the green area, this project can be seen as an example of a working cross-subsidy approach.

The first part of this chapter discusses why using property profits for regional green has become a popular idea. Section 5.2 asks whether the Bloemendalerpolder process has lived up to these expectations. Then, Section 5.3

---

examines the lessons about designing a cross subsidy planning process that can be learned from the Bloemendalerpolder project. Section 5.4 elaborates on the reasons that can be used by people who decide not to use a cross-subsidy approach. The final section discusses why the Bloemendalerpolder approach is not easily applicable on a large scale.

## 5.1 Motivations for a cross-subsidy approach

Since the 1990s, cross-subsidizing green areas with built developments, the so-called “Red for Green” approach (“*Rood voor Groen*,” where red, the built developments on a map, supports the green areas) has become an important concept in the planning debate in the Netherlands (e.g., De Zeeuw, 2007; Van Rij, 2005; Evers et al., 2003). The basic idea is that money can be generated by building and selling houses, and that this money can then be invested to develop nature conservation sites or recreational areas. The idea behind this is that the “polluter,” should pay. The “polluter” is in this case the built developments. This is seen as a fair way to compensate for the loss of green due to the construction of houses. Besides that, a cross-subsidy approach is often considered as more than just a financial approach (Evers et al., 2003). The approach implies that government has decided to actively cooperate with property developers and other parties to develop an area as a whole.

The growing attention for such a cross-subsidy approach is part of a wider trend in Dutch planning and land development. Up to the end of the 1980s, active land development by municipalities was the standard approach in the Netherlands (Groetelaers, 2005). Municipalities bought land, developed it, and sold it to builders. If they made a profit, they often chose to use this profit to finance public facilities such as local green areas. The Ministry of Agriculture, Nature and Food Quality took care of larger, regional, green areas. However, the last decades of the twentieth century brought some changes to this situation. With the restructuring of the welfare state, an increasing demand for cross-subsidy strategies has emerged. There are several motives for cross-subsidy strategies: (1) a cross-subsidy approach fits the idea that public and private parties should develop a region collaboratively and (2) a cross-subsidy approach fits the idea that, in order to improve spatial quality, a passive, zoning-oriented system should be replaced by an active, implementation-oriented system. (3) A cross-subsidy approach is seen as a way to make property developers cover the costs of green area developments.

### 5.1.1 Collaboration

One of the reasons for a cross-subsidy approach is that it fits the idea that public and private parties should develop a region collaboratively. The goal of

---

collaborative planning is to break out of traditional hierarchical and bureaucratic processes and to involve new groups and networks (Healey, 1997; 2003). In this light, planning is a process by which societies and social groups interactively manage their collective affairs. According to Healey (2003), such a collaborative planning process should be as inclusive as possible. One of the advantages of collaborative processes is that they can create the possibility for learning (Healey, 2003). By using a collaborative approach, the available knowledge can be used better and new developments will address local demands better.

### 5.1.2 Spatial quality

Another reason for a cross-subsidy approach is that it fits the idea that a passive, zoning-oriented system needs to be changed to a more active, implementation-oriented system in order to improve spatial quality. Although ideas about such a change are not new (e.g., Faludi & Van der Valk, 1994), also recently calls for such a change have dominated the Dutch planning debate (Hajer & Zonneveld, 2000). This is based on the premise that spatial quality requires new procedures that allow for a more active involvement with changing socio-spatial processes. The network society is considered to require a more direct coupling of the conceptual technologies (plans, maps, visual documents) that have always characterized strategic planning with the implementation strategies and financial instruments. A cross-subsidy approach fits the idea that active development instead of passive zoning is needed to develop spatial quality.

### 5.1.3 Finances

An important reason for the cross-subsidy approach is that it allows private money to be invested in green areas. Financial considerations often play an important role in Public Private Partnerships (PPPs) (Koppejan, 2005; Priemus, 2002a). Koppejan (2005) defines a PPP as a structured cooperation between public and private parties in the planning, construction and/or exploitation of facilities in which they share or reallocate risks, costs, benefits, resources and responsibilities. In general, private parties are expected to contribute financially to a PPP project. In the mean time, participating in a PPP can be financially attractive for private parties too. For example, in case of government guaranteed loans, the Bank for Dutch Municipalities (*Bank Nederlandse Gemeenten*, BNG) offers a lower interest to public parties and PPPs. Usually, before parties formally agree to cooperate, a so-called PPP formation process takes place. This is an interactive negotiation process in which actors define the content of the project, investigate possibilities and risks, and negotiate the distribution of costs, benefits, risks and responsibilities (Koppejan, 2005).

---

When PPP is used for spatial developments, the PPP formation process often coincides with the planning process.

PPP has gained increasing attention in the last decades for various reasons. Since the late 1980s, instead of municipalities actively developing land, PPP approaches have been used more often (Groetelaers, 2004; 2005; Groetelaers & Korthals Altes, 2004; Leväinen & Korthals Altes, 2005). Since the Fourth Report on Physical Planning Extra (VINEX) (Ministry VROM, 1990) had stated that it was official national policy to encourage PPPs, developers and investors have made extensive purchases of land. This makes the traditional method of financing, by selling land to property developers, more difficult. Because the Dutch government can often not recover the costs of public facilities in the traditional way, they are looking for new ways to recover these costs. This is one of the reasons why PPP cross-subsidy approaches are receiving increased attention.

Cross-subsidy strategies have also received attention because of changes with respect to sectoral departments with an aligning interest (Korthals Altes, 2007). Sectoral departments with an aligning interest are departments that are not responsible for spatial planning but that are important for the implementation of these plans by implementing their policy. These departments needed to cut expenditures and chose to leave more room for the market, thereby threatening the work of planners. For example, there is now less guarantee that new housing projects will be built in the locations (and at densities) that are favored by the planning agency (Hajer & Zonneveld, 2000). The same holds for the development of regional green areas, which used to be done by the Ministry of Agriculture, Nature and Food Quality. Because national funding for public services is no longer self-evident, the idea that planning can and should generate its own financing – “money from the market” (Van der Veen & Janssen-Jansen, 2006) – has become more popular.

The provinces, in particular, have welcomed an implementation-oriented cross-subsidy approach since deregulation and the new Spatial Planning Act have changed their role in planning (De Zeeuw, 2007; Korthals Altes, 2007). Until 2008, the role of the province was to make regional plans and to approve or disapprove municipal *bestemmingsplannen*. Under the new planning act, they will no longer be able to approve *bestemmingsplannen*. To fill this gap, provinces consider becoming more active. For example, the province of North-Holland became the project manager of the interactive planning process for the Bloemendalerpolder. Such an active, implementation-oriented approach takes money. In line with the idea of decentralization, the Ministry of Agriculture, Nature and Food Quality had handed over the responsibility and budgets for regional green areas, to the provinces. Responsibilities might be decentralized without decentralization of budgets, and decentralized budgets might easily be reduced (Van Rij & Zevenbergen, 2005). Considering the limited budgets available, a cross-subsidy approach appears a logical choice.

---

### 5.1.4 Different terms and different motivations

Different terms for interactive processes go with different motivations for choosing a cross-subsidy approach. The terms collaborative planning, spatial development planning and PPP are all used to address planning processes in which public and private parties collaboratively develop space. However, the meanings of these terms vary because of the different backgrounds of the people who use them and their different objectives for using the terms. Collaborative planning is primarily used by planning theorists when referring to the advantages of public participation. They are interested in legitimacy and a process' capacity to stimulate learning. The term spatial development has its origin in Dutch land development practice. The main objective for using this term is to advocate for an active development of spatial quality. Economists and policy analysts use PPP in an attempt to avoid the presumed inefficiencies of the public sector (Miraftab, 2004). In practice, the terms collaborative planning, spatial development planning, and PPP are all used in a broader sense, addressing the same processes, combining different motivations and frequently overlapping.

## 5.2 Evaluating the Bloemendalerpolder process

In order to examine whether the Bloemendalerpolder approach can be applied elsewhere, more insight is needed into the process. Because the process is not finished, the process and its outcomes can not be fully evaluated. Nevertheless, on the basis of the developments to date, some estimations can be made. This section first discusses the main developments in the Bloemendalerpolder process, and then makes an early attempt to evaluate the process.

### 5.2.1 The planning process

Because the Bloemendalerpolder was part of the Green Heart and a National Buffer Zone, built development was impossible for a long time. Since 1958 (WWdL, 1958), the Green Heart concept and the idea of National Buffer Zones have been important elements of Dutch planning policy. The Green Heart is the protected metropolitan green area that is surrounded by the ring of the most important Dutch cities (Van der Valk & Faludi, 1997). A National Buffer Zone is the term given to a green corridor between major agglomerations (Faludi & Van der Valk, 1994).

In an attempt to safeguard more valuable green areas around Amsterdam, and given the housing shortage in the Amsterdam region, the idea about restrictive policy for the Bloemendalerpolder changed (see for an impression of

---

**Figure 5.1** Spatial quality of the Bloemendalerpolder



the spatial quality of the Bloemendalerpolder Figures 1.14 and 5.1). This had two consequences. First, property developers started to acquire land in the polder, because they saw opportunities to build (Farjon et al., 2004). At the same time, a wide debate started on red (built developments) and green (nature areas and recreational developments).

To make it possible to build in the Bloemendalerpolder, the National Buffer Zone and the Green Heart had to be adjusted. According to Dutch rules, decisions about the borders of the Green Heart and the National Buffer Zones must be made in parliament. A lively debate took place in the Lower Chamber, but in the end, using the right of amendment (Dutch Lower Chamber, 2005-2006d), parliament reached an agreement with the Minister of Housing, Spatial Planning and the Environment on condition that only one third of the polder was zoned for housing and two thirds was developed as a green area (Ministry VROM et al., 2004). The idea was that the development of the green area would be financed through the development of the houses. The province then included these agreements in its plan for the area (Provincie Noord-Holland, 2006c and Figure 5.2).

This “deal” posed a challenge for various layers of government. First, the polder lies in two relatively small municipalities, Muiden and Weesp. Because of the large scale of the project, it was unlikely that these communities would be able to carry out the project on their own, as was indicated by their inability to use their public pre-emption right in time. At the same time, the provincial role in planning is changing, following changes in spatial development planning policy and the new planning law. The province now needs to consider acquiring land, negotiating with private parties and signing development contracts. The province of Noord-Holland decided to take on this task and became the project manager of the interactive planning process for the Bloemendalerpolder.

Still, the province was not the only public party that faced changes. Up to then, the DLG/BBL, which had acquired the land in the Bloemendalerpolder for the National Buffer Zone, had mainly been involved in land consolidation projects and developing nature and recreation areas. Recently, in line with spatial development planning and PPP, cross-subsidizing “green” development through “red” development has risen on their policy agenda. For DLG/BBL, this entailed that to finance their green projects, it needed to be involved in built projects too. A special new division, PPP Agency for Rural Areas (*PPS-bureau landelijk gebied*) was set up to address this. In addition, experts in land development calculations for building projects were hired.

Another new governmental agency that was just able to play a role in the Bloemendalerpolder project was the joint ministerial development authority, the GOB (*Gemeenschappelijk Ontwikkelings Bedrijf*). Especially in the case of property, past experience has shown that ministries with different interests can act at odds. Because due to the popularity of spatial development planning, the strategic use of land ownership has become important, this authority was set up to coordinate between different ministries that own land or have a specific interest in a project area (Dutch Lower Chamber, 2005-2006c). In practice, the most important task of the GOB is to organize meetings of high-ranking officials from each ministry and to stress the importance of cooperation.

To avoid delaying the PPP process and weakening the position of public parties with internal disputes, in the case of the Bloemendalerpolder, a public party meeting preceded every meeting between public and private parties. The private parties, five property developers, did the same. Furthermore, in line with the concept of democratic control, all plans, whether made interactively or not, need to follow official approval procedures. So, all plans needed to be presented to democratically elected authorities for approval. In order to prevent carefully made plans being defeated in the politic arena, both politicians and civil servants participated in the PPP process.

To guarantee that plans were based on available funding, the public-private meetings were arranged according to the “design and calculate” principle (*tekenen en rekenen*). One working group was established to draw various plans for the entire area while a parallel working group calculated the costs and revenues of the different alternatives. For these calculations, the basic

**Figure 5.2** Provincial plan for the Bloemendalerpolder



Source: Provincie Noord-Holland, 2006c

assumption was that the entire project (including the green developments) should break even after providing a normal profit to the property developers for their building activities. The major costs were associated with civil engineering, land acquisition, development of the green area, infrastructure, and interest. The income would come from the purchase of houses and profit from storing dredged sludge. Specialists in planning and calculations supported this process. Combining design and calculations meant that the plan could be optimized simultaneously, thus increasing the likelihood that the plans could be implemented.

Besides the “design and calculate” principle, the process proceeded “from rough to detailed.” This is based on the notion that trust between public and private parties needs time to grow and that a successful contract can be made after a process of joint step-by-step concept building (Koppejan, 2005). To accomplish this, the process was split-up in different rounds. The first round defined the broad outlines, and every subsequent round added more detail to the plans. Every round is supposed to end with the signing of an agreement about the content of the plans, financial matters, and the division of responsibilities. The condition that the content of the plans needed to be approved during normal public hearings and following political procedures should always be included in these agreements. After the first agreement was signed, it was incorporated in an official provincial structure plan. In this way, a change of regulations was linked to agreements under private law (Needham, 2006).

While the PPP process was taking place, citizens expressed the desire to participate more in the planning process. In response to this, a so-called “design studio” was set up. For six months, people could visit a location near the development area and discuss their ideas and interests with spatial planners (Gemeente Muiden, 2005). Introducing this “design studio” meant that inclusiveness was increased, that information from local people and interest groups could be used and that less resistance could be expected at the time of official planning approval.

Public and private parties signed their first “anticipation agreement” (Lenkeek, 2007) and a provincial structure plan for the area had been approved (Provincie Noord-Holland, 2006c). The planning process is not finished at present. During the “design and calculate” process it became clear that it would be nearly impossible to make a plan of such proportions, and with these ambitions, pay for itself. Therefore, at this moment, possibilities for additional financing are being investigated. Representatives of the parties involved in the “design and calculate” process have stated that they are generally satisfied with the way things are going. Although it is not certain that the entire green area, including the special bridge to enable species to cross the water (in Dutch: *ecoduct*) can be financed by the development of houses, a private party stated that the contributions to public facilities including the green area are much higher than in other projects.

---

## 5.2.2 Evaluating the process

Because it is not finished, a full evaluation of the process and its outcomes cannot be made yet. An early estimation gives the following impression: the project might make a positive change in spatial quality. Still, the plans have attracted some critical comments, because of the construction of housing on one third of the fields and the changes to the remaining green area. Nevertheless, the new plans will make this area more suitable for recreation and nature conservation, which could be considered an improvement of the spatial quality.

Since there are different motivations for choosing a cross-subsidy approach, I needed to use different criteria to evaluate the approach. Planners who are interested in collaborative planning evaluate processes on their legitimacy and their capacity to stimulate learning. This is based on a normative assumption that a planning process should be transparent and as inclusive as possible (Healey, 2003). Considering the aim of spatial development planning, it can be examined whether an active development of spatial quality has taken place. In the light of PPP, the question can be asked whether certain facilities have been developed while spending as little governmental money as possible. All in all, in order to get a nuanced idea of the usefulness of a cross-subsidy approach, I used the following criteria: the effect on spatial quality, the amount of public and private money invested, legitimacy, inclusiveness, and the learning that results.

As far as the amount of public and private money invested is concerned, both public and private parties consider more contributions from the other side possible and reasonable. All in all, my knowledge of other contracts between public parties and property developers for various projects gives me the impression that the contribution to the green area being made by private parties is quite high.

With respect to inclusiveness and transparency, the process shows a tension between optimizing the effects on spatial quality and the amount of private money invested versus optimizing inclusiveness and transparency. In the Bloemendalerpolder case, the “design and calculate” process reduced inclusion and transparency. The reason for this is that shared image building, developing trust, and negotiating financial matters could hardly be achieved without a certain degree of privacy. These conditions are needed for successful cooperation, which in turn increases the chance that the plans will be implemented in a way that does not place too heavy a burden on governmental budgets. The problem of exclusion and reduced transparency was partially addressed by the introduction of the “design studio.” In addition, plans made during the “design and calculate” process still have to follow normal plan approval procedures, including public hearings, decisions made by democratically chosen representatives, and the possibility for lodging objections. It would

---

seem that this allows a balance between inclusiveness and transparency on the one hand and implementability on the other hand.

The interactive planning process in the Bloemendalerpolder shows how learning can take place. First, public and private parties involved in the “design and calculate” process learned from their interaction. Since property developers automatically consider costs and benefits, public parties could learn how to meet the new inhabitants’ wishes more efficiently. Second, learning took place because public and private parties needed information about each others’ finances position, opinions, and core values to conclude their negotiations successfully. To gain this information, public parties hired experts in land development calculations for building projects, and private parties hired people who had previously worked in the public sector. This mutual learning allowed cultural differences to be bridged. Public parties also learned about PPP thanks to the PPP Agency for Rural Areas (*PPS-bureau landelijk gebied*) and the PPP Knowledge Center (*Kenniscentrum PPS*), set up by the Ministry of Finance. The information exchanged between public parties and private parties during the early stages of the process helped the subsequent decision-making process. Another type of learning was the knowledge exchange between professionals from different backgrounds, such as spatial planners and experts in land development calculations. In this way, the Bloemendalerpolder case shows how an interactive planning process with cross-subsidy strategies creates possibilities for learning.

Before the Bloemendalerpolder case can be used as a model for future projects, the success of this case needed to be evaluated. Although questions about the private investments and the increase in spatial quality have been expressed, and some concessions have been made with respect to inclusiveness and transparency, in general the achievements are promising enough to analyze the case. In this way, lessons can be learned for the design of other PPP processes and we can consider whether the approach could be constructively applied on a wider scale.

### 5.3 Lessons that can be applied from the Bloemendalerpolder case

Studying the Bloemendalerpolder case can help the process design of other similar projects. Lessons learned concern the collaboration between different public parties, the combination of design and cost calculation, and the set up of the process.

Considering earlier PPP projects (Priemus, 2002a), the first concern for the public parties involved in designing a process structure was to organize themselves. Earlier PPP experience had shown that private parties withdrew from the PPP process because they considered the public parties to be fragmented

---

and unreliable (Koppejan, 2005). The large number of public and private parties involved, and conflicting interests between the provinces in their role as developers of green areas and the municipalities in their traditional role as land developers for built area can make cross-subsidy projects complex. To avoid delaying the PPP process and weakening the position of public parties by airing internal disputes, in the case of the Bloemendalerpolder, a public party meeting preceded every meeting between public and private parties. For the same reasons, the private parties, five property developers, did the same. This kind of meetings can be helpful in other projects too.

Democratic plan approval procedures are another reason why public parties are sometimes regarded as unpredictable. Although a governmental body may bind itself to the results of negotiations, to respect the rights of others, it must make reservation that plans are still subject to the normal approval procedures. A planning decision made during an interactive process always runs the risk of being revised during the official approval procedure. In the Netherlands, all plans, whether they are made interactively or not, need to follow official approval procedures. The Bloemendalerpolder process shows that it might be helpful to have both civil servants and politicians participate in the PPP process, in order to prevent carefully made plans from being dismantled in the political arena.

The Bloemendalerpolder process also teaches the importance of combining design and cost calculations. To avoid a misfit between plans and funding, according to the “design and calculate” principle, the planning process was combined with the calculation of the costs. This made it possible to optimize plans during the process and to learn during the process. Besides, combining the design and the cost calculations increased the likelihood that the plans would be implemented.

Organizing the different rounds according to the “from rough to detailed” principle can also be helpful in other projects. In this way, planning permission can be linked to the agreements resulting from a PPP process. During the process, learning can take place and plans can be elaborated. In addition, organizing the design process in rounds allows trust to develop gradually.

## **5.4 The constraints of a cross-subsidy approach**

In order to examine whether a cross-subsidy approach is worth applying on a large scale, this section looks at some of the reasons why such approaches have not always the intended outcome. These reasons include legal constraints, financial constraints, or opposition to such an approach due to supposed disadvantages. During the discussion about cross-subsidy strategies and the evaluation of the Bloemendalerpolder process the following ques-

---

tions emerged: What are the legal constraints and to what extent can they be dealt with? Can investments in green areas counterbalance the loss of green area caused by building? What is the impact of cross-subsidy approaches on land prices, and how does it affect open space preservation by farmers? Are there any conflicts between transparency and inclusiveness and the planning process needed for a cross-subsidy approach?

### 5.4.1 Legal constraints

In practice, cross-subsidy strategies are limited by legal constraints. For example, Priemus (1996) complained that it is hard to achieve regional land price equalization. This section describes the legal problems which public parties face when they want to make an effective cross-subsidy contract. In the Netherlands, this had been the topic of many discussions (e.g., Ministry VROM & Ministry of Finance, 2001), and as a result, the new Land Servicing Act was introduced in 2008. De Wolff (2007) discussed the difference between the old and the new legislation. Because there has been little experience with this new legislation and since the new legislation builds on the old, the previous situation will be described first, and after that, the situation under the new act.

In the Netherlands, as explained earlier, active land development by municipalities has been, and often continues to be, common practice. Municipalities can earn money by selling land to property developers, which they can then spend on all kinds of facilities like green areas. If municipalities do not own the land, or if property developers do not want to sell their land in exchange for a right to buy serviced land later, municipalities need to enter into agreements with them in order to obtain money for public facilities. In the Netherlands, as in many countries (e.g., Korthals Altes, 2006b), it has been common practice for municipalities and landowners to enter into such agreements. Of course, this did not mean that municipalities could recover unlimited funds. On the contrary, these amounts were generally limited to costs directly related to the development of buildings, such as the costs of local infrastructure, and they did generally not include financing for regional green areas (e.g. Kistenkas, 2005; Priemus & Louw, 2002; for the Norwegian case see Røsnes, 2005).

In order to provide legal certainty, agreements about the recovery of costs should fit the conditions stipulated in the municipal land servicing account ordinance (Van Buuren et al., 2002). Although municipalities were allowed to make ordinances that are less restrictive on the costs that can be recovered, many municipalities used the ordinance of the Dutch Association of Municipalities which limited the type of costs which could be recovered to costs directly related to the built development. Besides, although a municipality could decide not to adjust a *bestemmingsplan*, municipalities could not force property developers to enter into an agreement about their payment for

---

public facilities. Because municipalities often felt uncertain about the costs that could be recovered, contracts about this were preferably made with large and well-known property developers (De Wolff et al., 2006). These developers stuck to these agreements, not because they feared that a municipality would enforce them in court, but because they did not want to lose their good name and opportunities to develop new projects in other cities.

In order to deal with property developers who do not want to enter into such an agreement, the Spatial Planning Act was changed. The new act distinguishes various ways of achieving cross-subsidization. As with the old act, active land development is still possible. A reason why municipalities might prefer to use this approach is that they can use the money they have earned for any purpose they chose. However, municipalities cannot always acquire land and they do not always want to take the risk involved in investing in land.

In order to strengthen the position of public parties, the new Land Servicing Act introduced some new institutions (De Wolff, 2007). Under the new Land Servicing Act, developers of housing can be required to contribute to the development of green areas. However, if a property developer does not want to enter into an agreement with the municipality voluntarily, these contributions can only be made obligatory when three criteria are met: (1) profit, (2) causality, and (3) proportionality (De Wolff, 2007). (1) The costs for the green area can only be recovered if the dwellings benefit from the green area. (2) The development of the green area needs to have a causal connection to the development of the dwellings. In other words, the green area would not have been developed if the dwellings had not been developed. (3) The costs can only be recovered proportionally to the profits of the other parts of the project. Because there is little experience with the new act, it is too early to tell whether these conditions will make it possible to recover enough money to develop large, regional, green areas. However, considering the three criteria, the amount of money recovered will be limited.

While these contributions are obligatory, property developers can also decide to enter into an agreement with public parties voluntarily. When agreements are voluntary, it may be difficult to include all private property developers. Since private parties will most likely only enter into such an agreement when building opportunities are scarce, this approach will only be effective when land-use plans are very restrictive. Because there is little experience with the new system, it is difficult to tell whether property developers will enter into such agreements. Although the Minister of Housing, Spatial Planning and the Environment had stated that the criteria of profit, causality and proportionality do not have to be applied on these agreements (Dutch Upper Chamber, 2006-2007, pp. 1-4), it is still difficult to tell whether these stipulations will influence these voluntary agreements. According to De Wolff (2007), the new act has extended the possibilities for cross-subsidy approaches.

---

Although, the new act might have extended and restricted the possibilities for cross-subsidy approaches, the act does not imply a complete change, active land development is still possible and other possibilities for cross-subsidization are still uncertain and limited. Because of this, Schipper et al. (2006) stated that, in practice, there are still too few possibilities for legally implementing cross-subsidy strategies, even with the new act.

### 5.4.2 Financial constraints

To make a cross-subsidy approach work, property developments must be profitable enough to make sufficient money available for the effective improvement of spatial quality in metropolitan green areas. For various reasons, this is often hard to accomplish.

First of all, property development profits can vary. Ideas about cross-subsidies have become popular in times that house prices have risen sharply (De Wolff, 2007). However, in some periods, such as the 1980s, the Dutch government has needed to subsidize built developments (Groetelaers, 2004; Golland & Boelhouwer, 2002). In such cases, cross-subsidization was out of the question. Even in times of rising house prices, as during the first decade of the twenty-first century, the amount of the “plus value” can significantly limit cross-subsidy opportunities. The word “plus value” refers to every increase in property prices due to (expected) planning decisions (Alterman, 2005). If this “plus value” is not large enough, a cross-subsidy strategy can not be applied.

Another problem is the different time frames associated with profitable building projects and projects to protect and improve metropolitan green areas. When interviewed, civil servants involved in green area preservation explained that, in general, incidental cross-subsidy budgets are not large enough to cover recurring costs of maintaining large green areas. As explained in Chapter 3.2, these recurring costs are considered to be the main problem associated with metropolitan landscape preservation. For example, in the case of the Midden-Delfland, a so-called green fund was set up. The villages in the Midden-Delfland area made a deal with two cities neighboring the green area, in which the cities put about €8 million in a green fund in exchange for adjustments to municipal boundaries which made developments next to the cities possible. The fund is used to pay landowners for “green and blue services,” as is explained in Section 3.2.3. However, these payments are not sufficient to keep economically vital farmers in the area. To achieve this, a land bank would be needed. However, when the “green and blue services” system was established, the fund was not considered large enough to invest in a land bank. Therefore, even in this case – which is often mentioned as a successful example of a cross-subsidy project – the captured “plus value” was not enough to solve the problem of maintenance and to create a sustainable solution for the future of the green area.

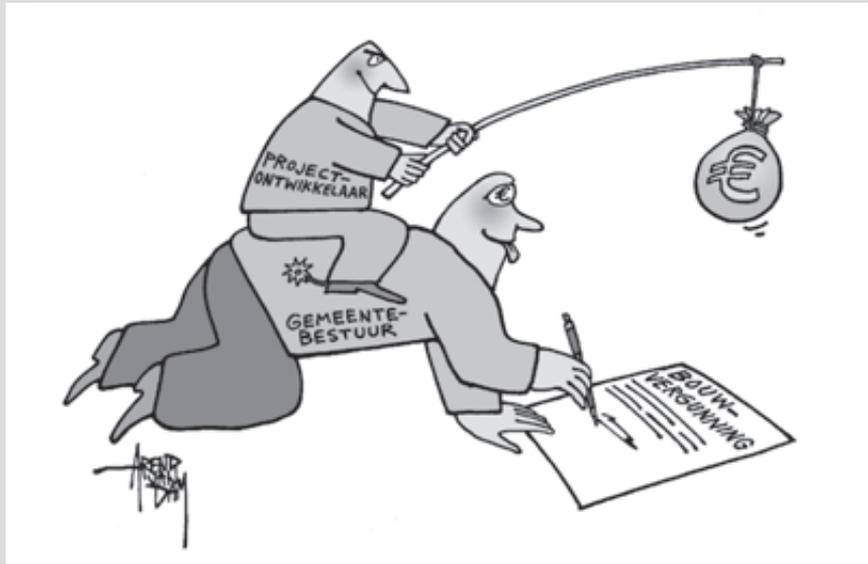
In the Bloemendalerpolder, extra money will most likely be needed to implement all plans beyond the money derived from the built up developments. Because, built developments are often not able to finance regional green developments, the overall advantages of a cross-subsidy approach are disputed. This makes the application of cross-subsidy approaches less attractive.

### 5.4.3 Skepticism about the improvement of spatial quality

Deciding whether or not a cross-subsidy approach is attractive depends on whether the project will lead to an improvement in spatial quality. Do the investments in green area counterbalance the loss of green area caused by the built up developments? First of all, in almost every cross-subsidy project, the total amount of green area is reduced because of the new developments. The money that is invested in green areas is used to change existing agricultural green areas into nature conservation sites or recreational areas, as in the Bloemendalerpolder, or for example to build ecoducts – viaducts for animals – as in the “Hart van de Heuvelrug” project (De Wolff et al., 2004). Changing existing agricultural areas into nature conservation sites or recreational areas is not always considered positive because it can change and, according to some, “damage” the landscape (e.g., Van Tets, 2007). Because of this disputable effect on the landscape and the fact that the total amount of green area is generally reduced, investments in metropolitan green areas often cannot counterbalance the loss of green due to built up developments. This makes it less likely that people will support such a cross-subsidy approach.

Another issue is that the debate about cross-subsidization can open the door for built developments. The example of “Living in Waterland”, an attempt to clear the way for new *bestemmingsplannen* to allow additional dwellings to be built in the National Landscape Laag Holland, illustrates this. To prepare for changes in the *bestemmingsplannen*, which were necessary to permit construction, many policy documents were produced. These documents discussed the need to revitalize the countryside stating that the cross-subsidy approach should be adopted (Provincie Noord-Holland, 2003, 2006a, 2006b, 2007). However, in practice, when changes to *bestemmingsplannen* were discussed, the cross-subsidy approach hardly seemed to play a role any more. For example, while changing *bestemmingsplannen*, instead of investing in a green fund or developing a large green area, only small investments like planting hedgerows were discussed. In other cases, interviewees stated that a contribution to green areas was not possible, because of the small scale of the developments and the high building costs. Besides, referring to some totally different projects, they stated, investments in recreational facilities were already made. In this way, the opportunities to build, which were given by the province with a cross-subsidy approach in mind, were only used for built developments without cross-

**Figure 5.3 Dutch municipalities are criticized for granting building permits out of financial interest**



Source: Van Dusseldorp et al., 2007, © Arend van Dam

subsidizing green areas. In this light, it needs to be considered that Dutch municipalities, like property developers, have a tendency to favor new developments (Korthals Altes, 1995). Figure 5.3 illustrates the opinion about this of people advocating against new built developments in Laag Holland. In general, municipalities are willing to use any building opportunities the province allows them. This demonstrates the risk of a cross-subsidy approach for spatial quality: it can create opportunities for building, without providing improvements to green areas. These possible effects on spatial quality make the application of the cross-subsidy approach less attractive.

Not only the debate about cross-subsidization can open the door for built developments, the debate on public participation in general can open the door for built developments or for governmental cutbacks based on the idea that private parties who participate in a planning process will have an interest in metropolitan green areas and will take care of the protection and improvement of these areas. Involving private parties in a planning process in order to make plans that are supported by the public has often been advocated. For example, the Netherlands Institute for Spatial Research (*Ruimtelijk Planbureau, RPB*) stated that the commitment of private parties is essential for successful landscape protection and improvement (Janssen et al., 2007, p. 10) and that in practice policy attempts are made to apply a cross-subsidy approach in order to supplement rather limited governmental budgets and to involve private parties in the project (Janssen et al., 2007, p. 14). However, for the outcome of a policy development process it is important to consider which private parties are involved (Van Rij & Van Eeten, 2003). A distinction of private parties into parties that are expected to contribute financially to metropolitan green

---

areas and people who value these areas, can explain why mixing up ideas about collaborative processes and PPP, in particular cross-subsidy approaches, might result in insufficient protection and improvement of metropolitan green areas. If ordinary people who value metropolitan green areas are involved in a collaborative planning process, it is likely that a planning decision will be made to protect and improve green areas. However, it is not likely that financial contribution by these ordinary people will be large enough to replace former governmental budgets for green area protection and improvement. On the other hand, if only parties that are expected to contribute financially, such as property developers, participate in the planning process, they might not be willing to sufficiently protect and improve metropolitan green areas. Therefore, unclearness about the type of private parties that participate in an interactive planning process and their expected contributions might result in insufficient metropolitan green area protection and improvement. This might be a reason not to support policy documents that rely on PPP-processes without specifying the type of the involved private parties. In stead, regulation might be needed to make property developers contribute to plans that are valued by ordinary people.

#### **5.4.4 Opposition because of rising land prices, limited transparency and inclusiveness**

Another disadvantage of a cross-subsidy approach is its potential effect on land prices. Den Drijver-Van Rijckevorsel et al. (2007) discussed why in case of cross-subsidy projects, land prices are influenced by land prices for built and green area developments. Besides, rising land prices were seen as an important issue when strategies to support affordable land prices for farmers in Midden-Delfland with the municipality, farmers and the landscape union were discussed (Van Rij & Korthals Altes, 2007b). Cross-subsidy approaches create building opportunities. In turn, when people expect that built development will be allowed, land prices tend to rise. High land prices make it difficult for farmers to buy new land to begin farming or to enlarge a farm. In time, this can be an important threat to metropolitan green areas. This can be a reason to reject the cross-subsidy approach in specific areas.

As discussed earlier, in order to create the opportunity for shared image building, developing trust and negotiating about finances, it can be helpful to reduce the number of participating parties in a planning process and to reduce the openness of the discussion. However, in this way, the process can become less transparent and less inclusive. Since collaborative planning is considered an important concept in contemporary planning, the reduction of transparency and inclusiveness can be seen as an unwanted development. As a consequence, people in favor of transparent and inclusive planning processes might advocate against cross-subsidy process.

---

## 5.5 The uniqueness of the Bloemendalerpolder case

Though a great many documents have been written about cross-subsidy projects, the number of projects that come up to expectations is limited. This raises questions about whether such approaches can be applied in the way proposed by these documents. Interviewees often mentioned the Bloemendalerpolder as an example to show that it is possible to finance large-scale green areas using the profits from property development. In order to determine whether the approach used in the Bloemendalerpolder can be used elsewhere, the project and the conditions that made the process likely to become successful have been examined. A number of unique circumstances appear to have contributed to the process. This section discusses the landownership situation, the prior restrictive policy, the powerful parliamentary resolution on the hectares to be cross-subsidized, the willingness of powerful parties to play key roles, and their eagerness to make the project a showcase. Because of these unique conditions, it cannot be expected that the same approach could often be applied elsewhere with the same results.

The first condition is landownership. Interviewees involved in the Bloemendalerpolder PPP process stated how important it was that the DLG/BBL had acquired land in the Bloemendalerpolder for the National Buffer Zone policy. As a result, this agency was able to participate in negotiations with the private parties from the very start. Because the government had acquired land at an early stage for a low price, there was a considerable “plus value.” The existence of “plus value” also matters for private parties, and financial incentives are often an important motivation behind getting involved in a PPP process (Koppejan, 2005). In the Bloemendalerpolder, the high price for houses in the region contributed to this “plus value.”

When asked what mattered during the PPP negotiations, interviewees mentioned the parliamentary decision to allow built developments on one third of the polder on condition that the other two thirds of the polder be developed as green area. Therefore, this starting point was unquestionable. This is a clear example of the importance of a prior strong restrictive policy combined with a powerful resolution on the cross-subsidy strategy. These unique factors, combined with its former special status as part of the Green Heart and as a National Buffer Zone and the involvement of parliament, all contributed to the success of the cross-subsidy approach in the Bloemendalerpolder. Unfortunately, these unique conditions are not likely to be present in many other cases.

To serve public interest, public parties participating in negotiations with property developers require sufficient skills and authority (Figure 5.4 addresses the weakness of some municipalities). Because applying a cross-subsidy approach on this scale was relatively new and since the approach had often

**Figure 5.4** Municipalities are sometimes considered to be too weak to negotiate with property developers



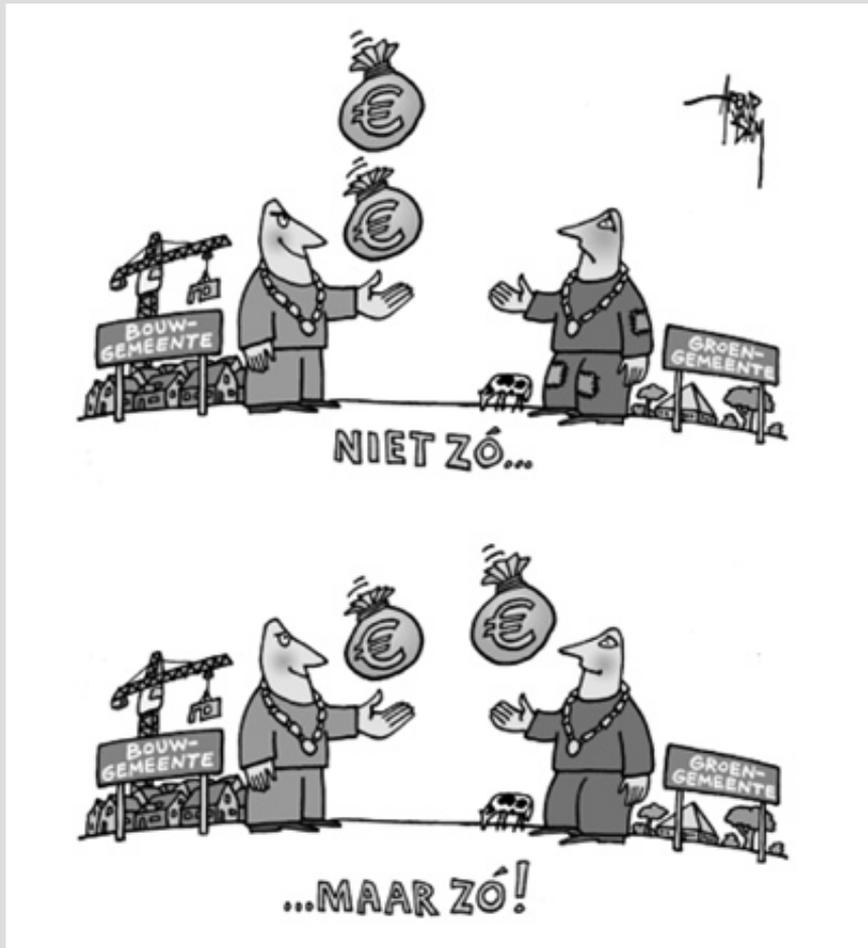
Source: Van Dusseldorp et al., 2007, © Arend van Dam

been promoted in policy documents, the government wanted to make this project a success. As a result, various governmental parties were involved in the project: the province, the DLG/BBL and the GOB. For all of them, it was important to make this project a showcase. Consequentially, the public parties involved were represented by specially trained servants.

The involvement of the province, the DLG/BBL and the GOB helped to overcome the fact that the project lies in two municipalities. Applying a cross-subsidy approach is difficult if green areas and new built areas lie in different municipalities, since municipalities are seldom willing to spend money on public facilities in other municipalities (Figure 5.5 illustrates this problem). In the case of the Green Fund in Midden-Delfland, cross border cross-subsidization was possible because the agreement on this issue was part of a more general deal which included adjusting administrative boundaries and creating building opportunities. In the Bloemendalerpolder, this problem could be dealt with because the province and central government took over many of the municipalities' tasks. This shows that cross-subsidization between different municipalities is possible under special conditions.

The involvement of the new established GOB was also unique for this project. This was important for the project because it facilitated the coordination between different ministries. This central government agency has close ties to the cabinet and strengthened the position of the public parties, making private contributions for developing green areas more likely. This challenges the idea that decreasing the power of central government should contribute to spatial quality (Van den Hof, 2006) and that PPP should involve a shift from national to regional and local government (Hajer & Zonneveld, 2000), which is

Figure 5.5 Cartoon criticizes different earnings by municipalities which can build and green municipalities which cannot build



Source: Van Dusseldorp et al., 2007, © Arend van Dam

the topic of Chapter 6. To increase spatial quality, not only knowledge about the area is required, which is often in the heads of local authorities, but the power to implement decisions is also a *sine qua non*.

Because the Bloemendalerpolder case is unique, it is not likely that the approach can be applied on a wide scale. Quite frequently, interviewees asked ironically for examples of successful regional cross subsidy-projects. While I was conducting interviews for a study on land development policy and land development institutions related to the *Nota Ruimte* (Groetelaers et al., 2005), a number of public parties mentioned that they had considered cross-subsidy approaches, but that they had not implemented such strategies, for the reasons mentioned in this chapter. The limited number of successful cross-subsidy projects contrasts sharply with the number of policy documents and initiatives that mention cross subsidy approaches as development strategy

---

for specific areas or the Dutch landscape in general. This is supported by De Zeeuw (2007, p. 43), who stated that despite numerous cross-subsidy initiatives, the number of successful projects was very small.

The most important conditions that made the Bloemendalerpolder case work were its former status as National Buffer Zone and part of the Green Heart, the parliamentary decision about the balance between green and built developments, the “plus value,” the land ownership by the DLG/BBL, and the involvement of higher layers of government, who considered the Bloemendalerpolder a showcase. Most of these conditions are unique for the Bloemendalerpolder, which makes it considerably less likely that cross-subsidy approaches will work equally well in other cases.

## 5.6 Conclusion

In the Netherlands, using profits from property development has been proposed as the way to finance the development and maintenance of green areas at a time when government expenditures are being severely reduced. This fits ideas about the restructuring of the welfare state and modern planning concepts such as collaborative planning, PPP, and spatial development planning. In the Dutch planning community, the expectations associated with cross-subsidy approaches have been high. The general call for deregulation, privatization, and cutbacks in government expenditure has increased the need for cross-subsidy strategies.

A cross-subsidy approach can be analyzed in terms of the green area protection and improvement model presented in Chapter 2. In relation with a change of zoning, a cross-subsidy approach makes private budgets available that can replace governmental budgets. These budgets are used to change the ownership situation, to acquire land and to carry out works, for example the planting of trees. These physical measures are supposed to increase spatial quality. This increase of spatial quality can be disputed by stating that the traditional landscape disappears and the total number of green areas is decreased.

The model can also help to explain some weak elements of a cross-subsidy approach. The possible changes in zoning, more precisely changes to *bestemmingsplannen*, affect the entire system described by the model. If property developers expect that constructions will be allowed in the future, they can decide to buy land. It is not in their interest to maintain the land in a landscape friendly way, and spatial quality may decrease. If property developers decide to buy land, land prices might increase and farmers can not take over farms or enlarge their farms. In time, this can affect spatial quality. In this way through the land prices, new possibilities for cross-subsidy projects in land-use plans might have an effect on the ownership situation. Because this ownership situation has an effect on the financial position of the guardians of

---

the landscape, this might decrease spatial quality. Additionally, as will be discussed in Section 6.2, policy statements that cross-subsidy approaches should be applied might go with a reduction of budgets for metropolitan green areas since it might be unfoundedly expected that these budgets will be provided through cross-subsidy strategies.

In contrast with high expectations associated with cross-subsidy approaches, study of the Dutch case in general, and the Bloemendalerpolder case in particular, suggests that the possibility that built developments can cross-subsidize green area developments is limited. The approach is more likely to be successful when there is a “plus value”, when public parties own land in the area, when construction in the area has long not been allowed, and when authoritative and experienced public parties are involved. If these conditions are not met, a cross-subsidy approach is less likely to work. In addition, the case material showed reasons not to choose for a cross-subsidy approach. For example, investments in green area cannot counterbalance the loss of green area imposed by the built up developments. Cross-subsidy policy might also result in rising agricultural land prices, and it might be difficult to use incidental cross-subsidy budgets to pay for the major expense associated with metropolitan green areas, including the recurring costs of maintaining large green areas.

Interactive planning approaches can also come into conflict with the ideals of collaborative planning, such as inclusiveness and transparency, since a degree of closedness might be needed to reach agreement with private parties about their contribution to the green area. Another factor that can make cross-subsidy projects complex is the large number of public and private parties involved, not least the conflicting interests between the developers of regional green areas, the provinces, and the traditional land developers for built areas, the municipalities. Finally, there is a risk that the debate about cross-subsidy approaches could be misused to make the public enthusiastic about a combination of new built and green developments, whereas ultimately only the built developments are implemented. For all of these reasons, people might hesitate about applying cross-subsidy approaches.

The Bloemendalerpolder case shows how a cross-subsidy approach can be used for the development of green area. However, the uniqueness of the Bloemendalerpolder case and the arguments against cross-subsidy approaches do not lead to high expectations that cross subsidy approaches will be widely applied.

The study of cross-subsidy approaches is not only interesting for practice and for the discussion about market or government; it is also an example that fits the discussions on other research questions. A cross-subsidy approach combines spatial planning with land development (see Chapter 7) by linking the decision about the land uses, a combination of houses and green area, with financial agreements on the use of profits from the development of

---

the houses for the development of green areas. The study of cross-subsidy approaches shows why this coupling can be problematic. A planning decision to allow cross-subsidy approaches can have an effect on land prices, which can affect the land ownership by farmers and which in turn can have an effect on spatial quality. This demonstrates why it might be useful to take land development topics such as land prices into consideration when a spatial planning decision is made.

The study of cross subsidy approaches also demonstrates one of the major reasons why spatial planning and land development are decoupled. In an attempt to protect private property rights, Dutch legislation limited the type of costs which can be recovered. One of the underlying principles is that planning decisions should be made based on criteria such as spatial quality or in the case of a collaborative decision, inclusiveness, whereas land development should implement democratically made plans while spending as little of the tax payer's money as possible. Therefore, cross-subsidy approaches might demonstrate classic tensions between spatial planning and land development. Considering these tensions, it is no surprise that a profound legal framework is needed to deal with these tensions and that this framework is the object of constant fine-tuning.

The cross-subsidy example also demonstrates the possible effects of the restructuring of the welfare state. An unlimited combination of privatization, deregulation and decentralization can threaten the green metropolitan landscape. Basically, private parties act in their own interest. Although some investments in green areas might be in the interest of property developers because they might increase house prices, in general, they are not likely to invest sufficiently in regional green area by themselves. Without regulation to enforce contributions to green areas, sufficient contributions by private parties will not likely be made. Decentralization can have an effect on the way a cross-subsidy approach is applied. Since Dutch municipalities have a tendency to welcome the development of new houses, their decision to use cross-subsidy approaches to open the door for built developments might threaten metropolitan green areas.

The cross-subsidy case also demonstrates how a combination of hierarchical and network influences, such as will be discussed in Chapter 6, can contribute to a cross-subsidy approach. Hierarchical influences, such as strict preconditions and the involvement of public parties with authority can help to make a deal with private parties. On the other hand the knowledge and support of the property developers and other private parties within the network are also a *sine qua non* to make a cross-subsidy approach a success.

This discussion on cross-subsidy strategies illustrates why instead of a dynamic cross-subsidy approach in some areas a Slow Planning approach, as will be discussed in Chapter 8, might be chosen. Because a cross-subsidy approach goes with the construction of houses, it is not applicable to preserve

---

cultural historic green areas. For some areas, where because of the landscape's uniqueness and value, the decision has been made to preserve the landscape without new built developments, a Slow Planning approach, which reduces landscape dynamics, might fit better.

Because a cross-subsidy approach is a new concept in planning, the debate on cross-subsidy institutions also fits the debate on radical or incremental institutional change (see Chapter 8). Institutional change is associated with uncertainties; the larger the change, the larger are the uncertainties. To deal with these uncertainties, the new Land Servicing Act builds on existing legislation. Still, with this new Act the possibilities for cross-subsidy approaches are uncertain. This can impose a risk for metropolitan green areas; if, while relying on new and uncertain institutions, governmental budgets are decreased. Then, budgets for the protection and improvement of metropolitan green areas might be insufficient.

---

# 6 Network or hierarchy

As discussed in Section 3.3., the restructuring of the welfare state was considered to require decentralization of the government, and, in order to avoid place-blind and “undemocratic” planning, network-oriented-planning approaches have been widely advocated in the planning debate (e.g., Hajer & Zonneveld, 2000; Healey, 1999; Van Dijk, 2006). On the other hand, during interviews, people working on the protection and improvement of metropolitan green areas complained that, due to the absence of powerful hierarchical institutions, it was not likely that sufficiently thorough measures would be implemented. In line with this, Van Egmond (2007) director of The Netherlands Environmental Assessment Agency (*Milieu- en Natuurplanbureau, MNP*) warned of the risk of over-decentralization. This illustrated a basic dilemma in metropolitan green area preservation: whether to use network-oriented or hierarchical approaches. The aim of this chapter is to use theories and case study material to discuss whether and under what circumstances a shift from a hierarchical towards a network-oriented approach is preferable.

This chapter is structured in the following way. First, theories on networks in the field of policy analysis, planning and organization theory are explained. Then, in Section 6.2, practical examples are provided of hierarchical and network-oriented approaches. After that, Section 6.3 discusses the reasons for combining network-oriented and hierarchical elements.

## 6.1 Theories on networks and hierarchies

Different research disciplines have discussed the concepts of network and hierarchy. This chapter starts by explaining the use of these concepts in policy analysis on the basis of the work of De Bruijn and Ten Heuvelhof (2000) (see Figure 6.1). Then, it discusses how these concepts have influenced planning theory. These theories use the concept of networks to study the interaction between government and society. Changes towards a network approach also have consequences for the organization of the government itself. In this light, decentralization is an important topic. Following Mintzberg’s (1983) approach, organization theory will be used to discuss this.

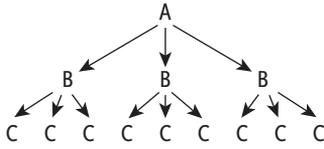
In a hierarchy, one central actor can make a plan, and by doing so, he can determine what his subordinates have to do. The basic idea is that the context remains stable between plan making and implementation, and the superior has the information and the power to effectively steer in a top-down manner. Hierarchical coordination mechanisms are associated with top-down steering and centralization.

A network, on the other hand, is a more horizontal structure with important bottom up forces. The various actors forming the network have their own resources to influence the results of the processes in the network. These actors interact and form clubs, which shape the network. In general, these

---

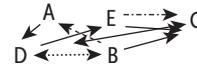
**Figure 6.1 Visualization of the concept of network and hierarchy**

### Hierarchy



- Top down
- Superiors and subordinates
- Plan
- All information available
- Stable

### Network



- Bottom up/flat
- Mutually dependent parties with various resources
- Process
- Complex
- Dynamic

Source: De Bruijn and Ten Heuvelhof, 2000

networks and their contexts are dynamic and complex. The basic idea about governmental steering in networks is that the government influences the rest of the network, but is also influenced by the network. Besides, there is the idea that governmental steering should be organized in such a way that it can cope with uncertainties, insecurities and changes. Network-oriented approaches are associated with bottom-up forces, decentralization, the involvement of local actors, and collaborative planning.

In the planning debate, much attention has been paid to network-oriented institutions as opposed to outdated hierarchical coordination mechanisms. The old, hierarchical, concept of blueprint planning, well-known and much criticized (Faludi, 1973), is based on the idea that a development plan can cover all relevant aspects and that later developments have to comply with this plan. In this approach, government controls developments hierarchically, often neglecting local forces. Due to various factors, local knowledge is often superior to the knowledge available centrally at the time the plan is made. As a consequence, plans and subsequent decisions may not correspond (Faludi, 2000). Traditional research led planning made by professional planners has been considered unable to cope with changes in space and society. As a reaction to hierarchical approaches, enthusiasm for network forms of planning has grown. Critics such as Van Dijk (2006), as well as Hajer and Zonneveld (2000), stated that consequently, planning practices need to move towards network-oriented coordinating mechanisms, which demands a drastic change in approach.

In the planning debate, various arguments have been used to advocate for network-oriented approaches. These approaches are considered (1) to be more effective at coordination, (2) to be more effective due to the use of local knowledge and ongoing learning, (3) to be more democratic, and (4) to create opportunities for financial contributions by private parties, such as with PPP (discussed in Chapter 5). These aspects will be discussed in the following sections.

---

First of all, network-oriented approaches are considered to be a more effective coordination mechanism than the apparently ineffective classical vertical approach (Van Dijk, 2006, p. 1463). Central decision making often fails because there is no central agency that is able to control all relevant dimensions of the planning process (Van Gunsteren, 1976). Instead, policy outcomes are the result of a dynamic process in which interdependent agents exchange resources and need to cooperate (Healey, 1997; Hajer & Zonneveld, 2000; De Bruijn & Ten Heuvelhof, 2000). Boonstra (2006) discussed the gap between rural policy and practice. He stated that when policy makers lack public support, their policies become dysfunctional and ineffective. Behind this is the assumption that planning is a process by which societies and social groups interactively manage their collective affairs; planning coordinates among actors, and if actors agree with the plans, they will implement those plans and planning can be effective. These ideas will be put into perspective in the next chapter using ideas about coordination in the case of strategic spatial planning, operational spatial planning, and land development.

Another pro-network argument is that network approaches are more effective due to the use of local knowledge and ongoing learning. For example, Korthals Altes (2006a) stated that implemented planning processes corresponding to the plan can be suboptimal solutions if they are not able to address new challenges. Ongoing learning, defined as the ability to change and manage social relations (Healey, 2003), is needed to cope with this. Healey introduced the concept of collaborative planning to avoid place-blind approaches, to break out of traditional hierarchical and “bureaucratic” processes and to involve new groups and networks, new “partnerships” (Healey, 1997; 2003). In line with concepts from the field of network theory, collaborative planning is considered to enable learning and to cope with dynamic and complex contexts better, because of the input of bottom-up forces.

Despite arguments based on effectiveness, the main argument for choosing network-oriented approaches is that they are considered to be more democratic. For example, Healey (1999) advocated the introduction of new and more interactive relationships among governance, citizens and businesses in order to cope with the democratic deficit. Since planning decisions often fail to be in line with what “the people” want, involving “the people” in a collaborative planning process should be an answer to this. The more inclusive the process, the more democratic and transparent it is considered to be.

It is often stated that governmental tasks need to be decentralized to achieve such an interactive process (e.g., Selnes & Kuindersma, 2006). Mintzberg (1983) explained which organization structures suited specific contexts. He distinguished organization structures which are hierarchical and those which are network-oriented. Partially in line with network theory, network-oriented organization structures are needed for complex and dynamic situations. Hierarchical structures are more adequate for organizations in a hostile

---

environment, where standardization is possible and stability is preferred. According to Mintzberg, decentralization can be useful since in a large organization, no one central person can have all the information needed for decision making. Decentralization transfers the power to make decisions to the place of impact. In other words, decentralization can avoid place-blind approaches. This permits an organization to react to changes more adequately.

Decentralization of the government and network-oriented steering mechanisms used by the government, are often analyzed jointly. The reason for this is that decentralization is considered to enable the government to use network-oriented steering mechanisms involving local parties. This project uses Mintzberg's theories in addition to planning and network theories, because the government's decision to use hierarchical or network-oriented approaches to make and implement its plans is related to decentralization within the government.

## 6.2 Hierarchical and network-oriented approaches in practice

Before describing examples of hierarchical and network-oriented approaches, this section discusses the often heard claim that the long-established Dutch institutions in the field of spatial planning and land development are hierarchical (e.g., Van Dijk, 2006). A closer look at the Dutch legal system gives the impression that this idea needs to be revised. First, the Dutch state has never been organized in a fully hierarchical way. The organization of the Dutch state, constituted in 1848, was set up as a "decentralized unitary state," combining local autonomy and centralism (e.g., Faludi, 2005; Kickert, 1996, p. 92). Municipalities, provinces and central government each have their own tasks connected with diverse checks and balances.

The organizational characteristics of the Dutch administration can also be found in the Dutch system of planning institutions. The Dutch spatial planning system has essentially been organized locally (Van Buuren et al., 2002, p. 8). The power to make plans which are binding on citizens, the *bestemmingsplannen*, has always been primarily in the hands of the municipalities. Provinces and central government can make planning statements. However, in order to change binding *bestemmingsplannen*, in most cases, they needed to convince the municipalities. To do this, in addition to good arguments, funding decisions, called "golden cords" (Needham & Faludi, 1999) and coordination between political parties are used. Since the beginning of the twentieth century, more hierarchical, centralized elements have gradually been introduced into the planning system (Van Buuren et al., 2002). Examples of these are the rarely used NIMBY proceedings to locate facilities of national importance that are unwanted by municipalities, and the more frequently

used central government procedures to bypass the *bestemmingsplan* to locate roads and railways of national importance. The new Dutch Spatial Planning Act can be seen as both an example of centralization as well as decentralization. The new act gave the provinces and national government the power to make *bestemmingsplannen* in specific cases. This can be seen as an example of centralization (see also Galle, 2008). However, the fact that provincial approval for new local *bestemmingsplannen* is no longer needed is an example of decentralization.

Although decentralization has always been one of the core characteristics of the organization of the Dutch state (Van der Pot et al., 1995, p. 583), the actual idea that in order to bring citizens and the government closer to each other, tasks should be transferred from central government to local government dates back to the late 1970s and early 1980s. In 1980, the *Decentralisatienota* (Decentralization Memorandum) saw light (Dutch Lower Chamber, 1980-1981), and decentralization has never left the policy agenda since then (e.g., Ministry VROM et al., 2004).

As discussed in Section 3.3.2, decentralization is one of the policy aims of the *Nota Ruimte*. This memorandum also stated that for many green area projects no special budgets will be reserved because they should be financed by cross-subsidy strategies. As discussed in Chapter 5, such strategies are hard to accomplish. Since most tasks concerning green area protection and improvement have been decentralized, the difficult task of implementing “Rood voor Groen” cross-subsidy strategies has been left to local parties.

Decentralization is one of the main themes of the new Dutch act on land consolidation and budgets for green areas (*Wet inrichting landelijk gebied*, *Wilg*). This act introduces an investment budget for rural areas (*Investeringsbudget Landelijk Gebied*, *ILG*). Whereas national government traditionally played a central role in land consolidation, the aim of the new act is to reinforce the role of the provinces for planning, including implementing plans in rural areas. An important change is the far-reaching decompartmentalization of central government contributions for implementing area-specific policy for rural areas (Van Rij & Zevenbergen, 2005). During interviews, provincial civil servants expressed their worries about reductions to these budgets. At the time the new act became effective, some signs of changes could already be perceived. For example, no large scale land consolidation projects have been set up. This picture fits findings from the Netherlands Court of Audit (*De Algemene Rekenkamer*), which stated that the decentralized implementation of nature conservation policy involves risks (Dutch Lower Chamber, 2006-2007d)

In line with this decentralization movement from national government towards the provinces, examples can also be found of provinces decentralizing tasks to municipalities. For example, the province of Zuid-Holland stated that their policy was “to do what the province is obliged to do” (“*de provincie doet wat moet*”) (Provincie Zuid-Holland, 2006). In a decree, the province de-

cided that it could therefore leave most subjects that used to be regulated in its nature preservation decree, in the hands of the municipalities (Provincie Zuid-Holland, 2006). Besides, like the *Nota Ruimte's* statement on cross-subsidies, the province of Zuid-Holland suggested that budgets for improving spatial quality, for example by removing green houses, should be arranged locally by means of cross-subsidy strategies. In line with this, the municipality of Midden-Delfland planned to build new houses at the Maaslandsedam to finance the removal of old greenhouses. This project has been severely criticized since it would allow houses to be built in the land consolidation project area (e.g., Midden-Delfland Vereniging, 2006).

Although older planning institutions are often considered hierarchical, a closer study of the cases showed that some network-oriented elements could also be found. In the case of land consolidation in Midden-Delfland, municipal zoning-rights were unaffected. Despite the problem being formulated in the central government's memoranda (WWdL, 1958), the basic ideas for the land consolidation project were elaborated locally. Organized in the Midden-Delfland Study Foundation, local authorities such as municipalities and the province determined the outlines of the project and the methods of intervention (see Figure 6.2). Later, the Midden-Delfland Act, made by central government, was based on these ideas. During the debate in parliament, the role of the public was an important issue (Kreukels, 1980). In the Seventies, the drawing up of plans was influenced by spontaneous "people's congresses." Later, public participation became more formal during the program phase, with public hearings on the separate detailed plans, and appeal procedures. The act only laid down broad outlines and procedures; substantial room was left for subsequent decision-making at the local level with a central role for the Land Consolidation Committee. The Act stated that this committee should be formed. This committee, responsible for the entire project was composed of representatives from all the parties involved: the municipalities, the province, the Farmers Union, the Midden-Delfland Countryside Union, the district water board, and the ANWB (the Dutch Automobile Association). This committee meant that the process incorporated characteristics of a collaborative planning process. At the same time, central government arranged for civil servants, instruments provided by the Act, and most of the budgets. The National Buffer Zones were also designated by the central government. In fact, according to Kreukels (1980), in an early stage of the process, national resources were a reason that local parties involved central government.

A combination of a hierarchical and network-oriented approach can also be found in the Bloemendalerpolder project. In that case, the following hierarchical influences, explained in Section 5.2, were present. Central government was involved in the decision to build houses in the polder, and most interviewees were convinced that the parliamentary decision on the balance between built developments and green area development was the most im-

Figure 6.2 Interim report Midden-Delfland Study Foundation



Source: Stichting onderzoek Midden-Delfland, 1967

portant reason why this balance was not changed during the process. More top-down influences were experienced because many non-local public parties were involved such as the DLG/BBL, the PPP agency for rural areas, and the GOB.

In addition to these hierarchical elements, the Bloemendalerpolder planning process also contained some network-oriented elements. First of all, the involvement of private property developers can be seen as an example of a network approach. As discussed in Chapter 5, this involvement had important effects on developing the green area on a value-for-money basis. However, this type of network approach has also been criticized because not all parties were equally involved. Therefore, as explained in Section 5.2, the “design-atelier” was set up to enable people to discuss their ideas and interests with spatial planners. In addition to the reasons of increasing legitimacy and transparency, an advantage of the introduction of this “design-atelier” was that information from local people and interest groups could be used and that less resistance was expected during the official planning approval procedures.

The effects of recent decentralization attempts can also be seen in Midden-Delfland. At the time the land consolidation project came to an end, a new collaborative planning process was set up. The newly formed municipality in the green zone, the municipality of Midden-Delfland held a conference in a barn attended by representatives from all kind of parties. After the conference, a vision was presented for future physical planning for the area (see Figures 1.8 and 5.3). The main theme of this vision was the preservation of “grazing cows” for the future. Some of the interviewees complained that the ministry had only sent low level bureaucrats. Therefore, they did not expect that adequate measures could be taken to implement the vision. They said

that because of limited means, budgets and number of skilled civil servants, it cannot be expected that the municipality of Midden-Delfland can take care of the green area by itself.

At the same time, the province did not appear to be very eager to take measures to preserve Midden-Delfland's green area (Van Rij, 2006). For example, the province stated that because of EU-state-aid regulations, it would make no sense to try to preserve the presence of farmers in the area. Although EU-state-aid regulation makes it more difficult to preserve rural landscape, the province seemed to underestimate the possibilities. As a consequence, people in the area got the impression that the province was not trying hard enough to find solutions.

In the mean time, due to active lobbying by the municipality of Midden-Delfland, the ideas presented in the vision document found their way to central government's political agenda and became part of the *Urgentie programma Randstad* (Urgency Program for the *Randstad*) (Ministry V&W, 2007). This document stated that Midden-Delfland had been pre-selected for the *Nota Ruimte* budget. Although the consequences of this are not yet clear, it gives the impression that the central government will make financial contributions to the green area in Midden-Delfland, which increases the chances that measures will be implemented successfully.

Decentralization also characterized the approach to the National Landscape Laag Holland. In line with the *Nota Ruimte*, central government decided to organize the National Landscapes in a decentralized way. The local organizing committee (*gebiedsbureau*), was proud to follow a network-oriented approach and stated that their plans faced hardly any resistance. During interviews, civil servants from the Ministry of Agriculture, Nature and Food Quality, who worked as account managers for the National Landscape Laag Holland, explained their involvement. In practice, since the policy for the area had been determined, these civil servants were not been involved in any meetings about Laag Holland for a number of months. Most of their involvement had consisted of checking whether the measures to be taken by the province fitted the characteristics of the National Landscape as indicated in the *Nota Ruimte*, and preparing the visit of the Minister of Agriculture, Nature and Food Quality to Laag Holland. Before this visit, they had had to make arrangements to make the investment of a small amount of central governments money in a controversial land bank possible. This land bank was controversial, because it flew in the face of the contemporary idea that governmental land purchase is a too drastic and expensive instrument to preserve landscapes. Nevertheless, the minister chose to support the land bank because this was an important pilot project; the land bank was one of the few institutions that could possibly solve the major problem in Laag Holland, the gap between land prices and agricultural incomes and its effect on landscape maintenance (as discussed in Chapter 3).

Figure 6.3 Vision statement Midden-Delfland@2025

Thema IV  
Midden-Delfland® 2025:  
*Koe in de Wei*

*Streefbeeld 2025*  
De melkveehouderijsector is een belangrijke economische drager als producent en als beheerder van het landschap. Er is een diversiteit aan melkveebedrijven, van zuiver melkproducerende bedrijven tot bedrijven met diverse nevenactiviteiten. De melkveehouderij speelt in op de directe nabijheid van de stad. De stedeling heeft de boer ontdekt. Gericht beleid geeft individuele boeren de leusur over te gaan tot schaalvergroting of tot vermindering van de activiteiten.

Schaalvergroting vindt altijd plaats binnen de randvoorwaarden die het landschapontwikkelingsplan voor Midden-Delfland® daaraan stelt. Koeien horen in de wei. Boeren innibben op hun bedrijven alternatieve activiteiten, passend bij de plek waar zij zitten. Kinderen bezoeken Midden-Delfland® en worden door boeren onderrichtet over het landschap en de daarin aanwezige bijzondere flora en fauna.

De boeren worden betaald voor de groene en blauwe diensten die zij leveren om Midden-Delfland® in stand te houden.

*Nieuwlandelijke veranderingen*  
Het Landschapontwikkelingsplan (LOP) Midden-Delfland® verschaft de ruimte en de kaders voor de schaalvergroting, bedrijfsverandering en het veranderen van de functies van agrarische gebouwen. Het gebiedsbeleid ondersteunt een gezonde bedrijfsvoering.

Agrarische activiteiten horen bij Midden-Delfland®. De boeren hebben een eigen visie opgesteld en zijn volop bezig nieuwe ontwikkelingen op te pakken.

De gemeente Midden-Delfland® ondersteunt en faciliteert de boeren zodat zij volop die kansen kunnen benutten. Het Groenfinancieel Midden-Delfland® is omgevormd tot een regionaal fonds waarin het Stadsgebied Haaglanden en de Stadsgebied Rotterdam participeren.



*De stedeling heeft de boer ontdekt*

Source: Gemeente Midden-Delfland, 2005

Differences between the financial contributions made by central government to the National Landscape Laag Holland and the land consolidation project in Midden-Delfland might illustrate differences in hierarchical influences. For the period between 2007 and 2013, DLG calculated that €160 million will be required to reach the policy goals for the National Landscape Laag Holland (Mulder, 2006, p. 16; Provincie Noord-Holland, 2006d, p. 5). However, in addition to the investment budget for rural areas which is spent in many rural areas, central government only contributed €3.79 million to the National Landscape Laag Holland to reach the specific policy goals for the National Landscape. Per hectare, per year, central government contributes €10.50 (€3,790,000/7 year/51,400 ha).

Because some of the national budget for rural areas is also spent in Laag Holland, it is more difficult to compare the National Landscape policy in Laag Holland with the land consolidation project in Midden-Delfland. Nevertheless, a comparison of the amounts spent by central government in both projects illustrates their different character. Unlike the €10.50 spent per year per hectare in Laag Holland, in Midden-Delfland €1,010.00 per year per hectare was spent (€200,000,000/30 year/6,600 ha). This illustrates the different character of central government's involvement in the land consolidation in Midden-Delfland and Laag Holland. Compared to the measures taken in Midden-Delfland, such as the purchase of land (sometimes compulsory), land readjustment, and the implementation of physical changes, the measures that are being taken in Laag Holland are very modest. These include subsidies for the building of four ecological cowsheds, an education project for primary schools, and an excursion boat (Gebiedsbureau Laag Holland, 2007). Civil servants from the Ministry of Agriculture, Nature and Food Quality were surprised by the small number of projects,

Figure 6.4 Green or Cash, Waterland sacrificed to short-sightedness



Source: Van Dusseldorp et al., 2007; photo: Hans Jansen

but understood this considering the limited amount of money available.

An example of the possible consequences of decentralizing zoning powers is the “Living in Waterland” movement (*Waterlands wonen*) (see also Section 8.1.1). This is a discussion on changing *bestemmingsplannen* within Laag Holland in order to make the development of new dwellings possible. The board of the National Landscape has no special power and is only allowed to give advice. Besides, the municipalities, which often welcome new built developments, dominate this board. When the province wanted to make a new provincial structure plan, they decided to follow a bottom-up approach. They asked the municipalities about their preferences for the new plan. After a long period during which no new built developments had been allowed in Waterland, the municipalities, like most Dutch municipalities, were eager to create new building opportunities. In line with their preferences, the province started to calculate the number of houses that could be built. The *Nota Ruimte* stated that in the National Landscapes only built developments were allowed that were needed in order to respond to local demographic changes. Based on these calculations, the province stated that 6,000 new dwellings could be allowed, of which 3,000 could be built on green fields. The province then made a study about the places suitable for these developments and, for example, selected the very attractive peninsula of Marken (see Figures 1.11, 8.2, 8.3). Shocked by these plans, public interests groups started to protest and wrote a pamphlet called “Green or Cash,” (“*Groen of Poen*”) (Van Dusseldorp et al., 2007, see Figure 6.4). According to them, local governments can not and should not decide about plans leading to irreversible damage to the Dutch landscape because their vision is limited to municipal borders, local budgets

Figure 6.5 Example of a greenhouse in Midden-Delfland



and their four-year term. Therefore, the writers of the pamphlet pleaded for more central government steering (Van Dusseldorp et al., 2007, p. 5) Members of parliament questioned the Minister of Housing, Spatial Planning and the Environment (Dutch Lower Chamber, 2005-2006e). It became clear that the old status of the area as a National Buffer Zone would most likely be more protective than the status of National Landscape. No decision has been made on the number of new houses to be allowed.

Worries about the likeliness that local parties, especially municipalities, will protect and improve metropolitan green area are widespread. A civil servant from the municipality of Amsterdam stated that the Greater Amsterdam Authority is one of the few authorities keen on preserving the countryside near Amsterdam in order to make Amsterdam, compared to other large international cities, an attractive place for living and business. He was worried about the pro-building attitude of the municipalities surrounding Amsterdam and the boroughs that together form greater Amsterdam.

Compared to other municipalities, Midden-Delfland's active open-space policy is exceptional. During interviews, people explained that the municipality's profile as guardian of open space is more or less the reason that it exists. During the process of merging different municipalities in the area into a large one, it was decided not to combine the municipalities with large green areas with the municipalities with large numbers of greenhouses, in order to avoid extension of the greenhouse areas (Figure 6.5 shows an example of a greenhouse). If this had not been the case, it is quite likely the municipality would also have proposed development for the Midden-Delfland area. The earlier mentioned example of the Maaslandsedam points in this direction.

### 6.3 Reasons to combine hierarchical and network-oriented approaches

Despite complaints that planning institutions are outdated and hierarchical, a closer look at institutions in the field of spatial planning and land devel-

opment shows that, in practice, a combination of hierarchical and network-oriented elements has often been used. Besides, case studies show that both elements have advantages and disadvantages. An analysis of the reasons for using or not using hierarchical and network-oriented approaches might help to improve institutions for metropolitan green areas. This section first describes the reasons for applying network-oriented institutions in general. Then, it discusses the effects of hierarchical and network-oriented elements on attempts to strengthen green area protection. After that, it examines the effects of both elements on the decision whether or not to adjust *bestemmingsplannen* for the development of houses in the countryside.

Like other studies discussed at the beginning of this chapter, the cases studied in this project showed reasons for applying network-oriented institutions. Beyond the normative statement that transparent and inclusive network-oriented processes are more democratic (Healey, 1999), applying these network-oriented processes might create possibilities for ongoing learning (Healey, 2003). In large complex projects, it is often impossible to lay down all plans at once. For example during the Midden-Delfland land consolidation project, the involvement of many different parties during various phases of the process, first in the Midden-Delfland Study Foundation and later in the Land Consolidation Committee and the public hearings, made learning possible. The same can be said of the recent collaborative planning process in Midden-Delfland. Despite central government's policy with their attention to nature conservation, the most important issue in Midden-Delfland turned out to be the "grazing cows." In the Bloemendalerpolder, the interactive planning processes led to a better trade-off between the costs of specific green area developments and spatial quality for the new inhabitants. In terms of the model described in Chapter 2, network-oriented planning institutions help to develop the type of spatial quality that is preferred by metropolitan inhabitants.

In line with findings from De Bruijn and Ten Heuvelhof (2000), another advantage of network-oriented processes, often mentioned by civil servants, is that the more parties are involved, the more likely they will support the plans. During the preparations for the land consolidation in Midden-Delfland, the local ideas about combining measures for recreation and agriculture helped the subsequent planning and implementation process. Similarly, in the Bloemendalerpolder, it is not likely that property developers would have supported the green developments if they had not have been involved in the planning process.

Still, it can be questioned whether all parties or only a selected group should participate in all stages of a planning process, and whether no hierarchical elements are required. Boonstra (2006) stated that closeness and a lack of public support makes policy dysfunctional and ineffective. He assumed that if actors are involved in the making of plans, and if they agree with them, they will implement them, making the planning effective. However, although

---

this might be the case for strategic spatial planning, as will be discussed in Chapter 7, this might be different in the case of operational spatial planning and land development. In most cases, people who have an interest in an area and want to express their wishes in a collaborative process are not the same people as those who are likely to invest in the area. It is not likely that private parties will voluntarily implement planned activities that are primarily in the general interest.

For example in the Bloemendalerpolder, as discussed in Chapter 5, to get property developers to contribute to the green area, more was needed than an inclusive network-oriented process. In order to make private property developers contribute to green areas, only land owners were invited to the “design and calculate process” (see Chapter 5), reducing inclusiveness. This was done in order to reduce complexity and build trust. According to network management theory, to increase effectiveness, only those stakeholders that one needs to be able to implement a certain strategy should be allowed in the policy network (Koppejan et al., 1993). Shared image building, developing of trust and negotiating financial matters would hardly be possible without closeness. Since hierarchical elements were needed to make property developers contribute financially, the idea that a more network-oriented approach and more public support will necessarily make institutions for the protection and improvement of metropolitan green areas more effective needs to be put into perspective. In the case study areas, implementing plans required not only spatial planning institutions but also land development institutions (see Chapter 7). Especially with the latter institutions, it seems that hierarchical elements play an important role in their effectiveness (see also Røsnes, 2005).

This also gives some perspective on the idea that decentralization is always required. As discussed in Chapter 5, in the Bloemendalerpolder case hierarchical elements were needed, such as the GOB, to coordinate among the various public parties. In order to address private parties who accuse their public partners of being a multi-headed monster (Koppejan, 2005), some authority is needed to smoothen the interaction between public parties. The involvement of the province, the DLG/BBL and the GOB and the parliamentary decision on the amount of green area, played a crucial role in empowering the public parties during their negotiations with the private parties.

Another argument against decentralization is that central government's resources are often needed to implement plans. For example, in Midden-Delfland, it was crucial that the central government provided funding and had a substantial number of civil servants available. In this light, for example in the case of the new Land Consolidation Act, decentralization might hamper implementation. Although decentralizing powers to the province might result in a policy that is more suitable for local circumstances, the question remains whether the provinces will have enough means to translate policy objectives into a workable implementation (Van Rij & Zevenbergen, 2005). Decompart-

---

mentalization and decentralization of money might be positive, but it could also mean that the ministers and civil servants concerned lose attention for the policy field, and could mean that the financial resources they pass on to the provinces decrease too.

A practical example of decentralization going hand in hand with reduced government budgets can be found in Midden-Delfland. During the land consolidation, after the plan-making phase, the involvement of central government and the province was reduced. After that, they tried to decrease their financial contributions as well. Later, during the collaborative process in the barn, the lack of involvement of high ranking civil servants made people skeptical about the availability of money to implement the plans. Only after the area was put on central government's Urgency Program for the *Randstad* did it seem more likely that resources would be made available.

The measures taken in the National Landscape Laag Holland also fit this picture. Despite the name National Landscape, the implementation of this policy is decentralized to the province and the municipalities. As in other decentralized, network-oriented settings, the measures implemented as part of the National Landscape policy were very modest. Not surprisingly, when some hierarchical influences were felt during the visit to the area by the Minister of Agriculture, Nature and Food Quality, the chance for some more far-reaching measures occurred.

Decentralization combined with the statements about the cross-subsidy approach in the *Nota Ruimte* also show some of the risks involved. Difficult tasks, like executing a cross-subsidy approach, can be decentralized. In such cases, on paper, these policy goals still seem to be important. However, decentralization combined with decentralized financing might reduce the chance that these policies will be implemented. One of the risks involved in decentralization is that tasks are delegated to local authorities without providing them with appropriate funds and institutions to implement them.

Another problem of over-decentralization is that it might be difficult for local authorities to implement decisions that have negative consequences for the region. This problem occurs especially when the general interest is not the same as the local interest. For example, according to De Vries and De Regt (2004), the Rotterdam region lacks recreational areas. However, measures to safeguard and increase the amount of green area suitable for recreation can be against the interests of local farmers. In the Midden-Delfland Land Consolidation Project, hierarchical elements were necessary to break through stalemates, such as moving individual farmers from an area designated for nature and recreation to another area, as they were not all willing to cooperate voluntarily. Only central government was able to create specific new legislation on compulsory purchase and land reallocation. In such cases, without decisions from a higher authority, measures to protect and improve large scale recreational areas might not have had much effect.

---

Decentralization might also have an effect on changes to *bestemmingsplannen* that make new built developments possible. In contrast with the enthusiasm in the planning literature for decentralized network-oriented approaches, Dutch legal experts have expressed their concern about leaving the preservation of nature conservation sites and precious landscapes in the hands of municipalities since Dutch municipalities have a tendency to welcome new built development (Van Buuren, 2002). The “Living in Waterland” movement illustrates this. As long as the decision on building in Laag Holland was left in the hands of the municipalities and indirectly with the province, it was likely that houses would be built in the countryside of Laag Holland. This was only countered by central government due to parliamentary interference. In the Bloemendalerpolder case as well, parliamentary decisions limited the number of new houses. Attempts by the municipality of Midden-Delfland to strengthen the green countryside have often been mentioned to show that local governments can safeguard the countryside. However, considering the special position of this municipality after the regrouping of municipalities, Midden-Delfland can be seen as an exception to the rule. Besides, the municipality of Midden-Delfland’s intention to build houses at the Maaslandsedam, in line with provincial cross-subsidy policy, makes me qualify the statement that local government, such as Midden-Delfland, will safeguard the countryside.

Various examples have illustrated that, although most projects to protect and improve metropolitan green areas take place in dynamic and complex environments, a fully decentralized, network-oriented approach might not contribute to increasing spatial quality, efficiency and effectiveness. The Bloemendalerpolder and the land consolidation in Midden-Delfland illustrated the need, over the course of the project, to reduce complexity, and they illustrated the usefulness of institutions able to deal with the different interests of the many parties involved in the project. Therefore, in line with Mintzberg (1983), due to the hostile exogenous factors and in order to reduce the complexity of planning processes, planning processes require hierarchical elements too.

## 6.4 Conclusion

The aim of this chapter was to discuss whether and under what circumstances a shift from a hierarchical towards a network-oriented approach is preferable. First of all, in practice, older, supposedly outmoded planning institutions turned out to contain both hierarchical and network-oriented elements. A detailed examination of institutions illustrated how a combination of both elements helps democratic and effective protection and improvement of metropolitan green areas.

This can be explained in terms of the model described in Chapter 2. In order to get public support for an area, it is important that the area’s physical

---

appearance fits the ideas about spatial quality that the people who use the area have. To learn about their ideas, a network approach for plan making might be useful. Besides, a network approach might help to make plans more acceptable for the guardians of the landscape. To implement projects and make changes to zoning and the landownership situation, measures taken by higher levels of government are important. In order to make representatives from central government enthusiastic about plans, it might be helpful to involve them in the plan making process. These top-down influences might also strengthen the general public's belief that the plans will be implemented.

Important reasons to choose for a transparent and inclusive network-oriented process are that it is democratic, it enables learning, and it can raise public support. Such an approach is suitable for the plan-making phase, when it is decided what should be planned where. If land development institutions and physical changes to the landscape are considered, however, a fully bottom-up approach might have some pitfalls. Hierarchical elements might contribute to the effectiveness of projects, especially when specific parties do not have an interest in all the elements of the project. Hierarchical elements can help to make public participants speak with one voice and make negotiation with a reduced number of private parties more effective. Since local interests are not always the same as more general interests, the involvement of central government could contribute to the protection and improvement of metropolitan green areas. One of the most important reasons for involving higher levels of government is that physical measures and changes to the landownership situation often require substantial budgets, civil servants, authority and adequate institutions. Although, at first glance it would appear that only operational land developers need these hierarchical influences for successful implementation, spatial planners might also consider involving higher levels of government during the planning phase, as this might increase the chance that central government will make resources available. Besides, given the financial and organization structure of Dutch government, it is more likely that central government will decide not to allow more construction in new land-use plans than that local governments will.

## 7 Spatial planning and land development

This chapter discusses tensions between (1) measures a planning agency takes to influence spatial disposition and to achieve a coherent distribution of land uses (referred to as spatial planning) and (2) the production of serviced plots for specific land uses (referred to as land development). Strategic spatial planning, operational spatial planning and land development use different worldviews or rationalities. Since spatial quality requires a combination of a zoning-oriented planning system on the one hand, and land development in order to facilitate development on the other hand (Korthals Altes, 2007; Siraa et al., 1995, p. 29), conflicts caused by these different rationalities can cause problems. For example, Henneberry (2005) stated that large parts of the British planning profession hold the view that planning is an end in itself, and Adams (2005) stated that the near-neglect of property rights remains a severe weakness of much of the British planning system. At present, the interaction between spatial planning and land development and between the strategic and operational level is especially interesting because, as discussed in Chapter 3 and elsewhere, the restructuring of the welfare state makes it necessary to adjust coordination mechanisms within spatial planning and land development.

This chapter fulfils two functions. Chapter 3 explained that both spatial planning and land development have an important impact on landscape changes, and this chapter examines the differences between spatial planning and land development rationalities to help understand the contemporary problems facing the landscape. Second, understanding spatial planning and land development rationalities can help institutional change; new institutions are more likely to be successful if they fit the basic principles of these rationalities. This chapter thus provides a basis for Chapter 8, which deals with institutional change. Since rationalities are rooted in a context, the method used to discuss rationalities within the Dutch institutional framework was inspired by discourse analysis (see Chapter 1).

This chapter addresses the differences between spatial planning and land development and between the strategic and operational level. To discuss this issue, I constructed an operational and strategic spatial planning-land development matrix (see Section 7.1.); in Section 7.2, I discuss the roots of the rationalities within the Dutch planning tradition. Section 7.3 illustrates how mono-rationality can result in a limited understanding of landscape problems. Section 7.4 gives examples of problems facing institutional change caused by tensions between public interests and private rights.

### 7.1 The operational and strategic spatial planning-land development matrix

The model presented in Chapter 2 relates spatial quality, the implementation of physical measures, zoning, land prices, and ownership situation. In that

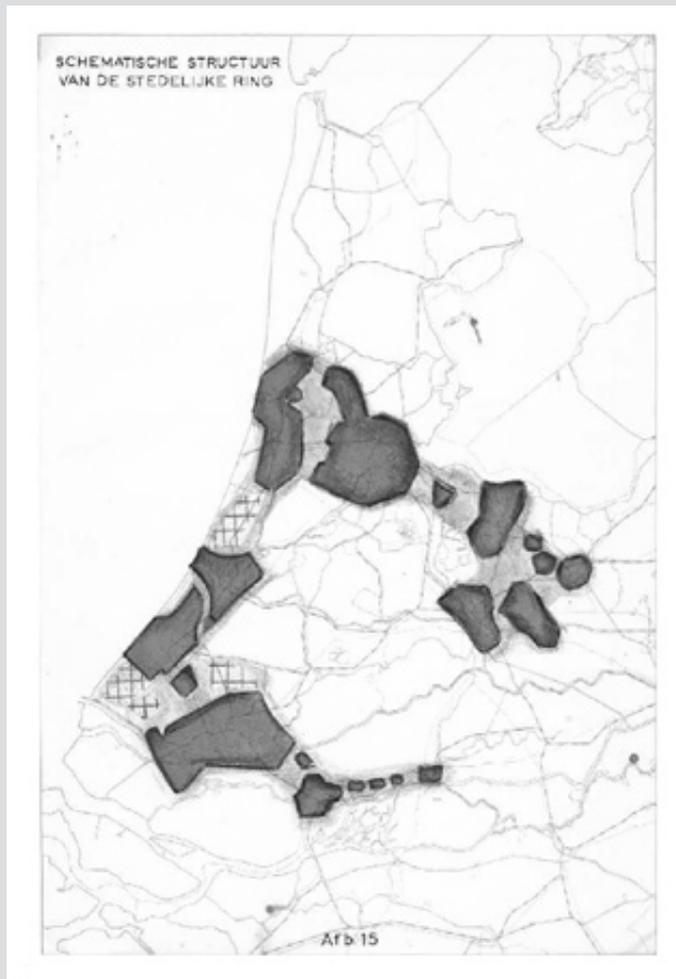
**Figure 7.1 Planning, land development, strategic and operational level matrix**

way, it combines spatial planning and land development issues. As discussed in Chapters 2, 3 and 6, it emerged from the case studies that money and legally binding stipulations, subjects concerning operational land development and operational spatial planning, have a considerable influence on spatial quality, the main concern in strategic spatial planning. In order to explain the interaction between spatial planning and land development, I made a model, Figure 7.1, which not only distinguishes spatial planning and land development, but also distinguishes a strategic and an operational level.

Depending on one's perspective, land development can be considered a part of planning, or planning can be considered a part of land development; land development can be considered the implementation phase of a planning process, or planning, like other activities such as land acquisition, reparcellation and physical changes to the environment, can be seen as one of the activities that together form the land development process. Following the idea of polyrationality, the idea that we can experience other rationalities and listen to different voices as soon as we let go of our own rationality a bit (Davy, 2007), this dissertation treats both fields on an equal basis.

The operational and strategic spatial planning-land development matrix distinguishes four groups: strategic spatial planning, operational spatial planning, operational land development and strategic land development. In order to distinguish spatial planning from land development, in line with Needham (2000, p. 444), the concept of spatial planning is restricted to those cases in which a planning agency tries to influence many different aspects of the spatial disposition of a particular area to achieve a coherent distribution of land uses and activities. This dissertation defines land development as the production of serviced plots for specific land uses. Basically, these measures concern land ownership and the implementation of physical measures. Land development often refers to the implementation of one of the specific aspects, sector interests, covered by spatial planning. Although land development is often considered operational, and planning is often thought of as strategic planning,

Figure 7.2 The *Randstad* with the National Buffer Zones



Source: WWdL, 1958

both planning and land development can take place on a strategic and an operational level. On the strategic level, general policy is formulated. On the operational level, concrete actions are undertaken that have an effect on specific pieces of land and specific land owners.

### Strategic spatial planning

When the literature refers to spatial planning, this is frequently strategic spatial planning (e.g., Faludi, 1989); strategic spatial planning coordinates projects and measures taken by various actors. Strategic plans are often indicative; communicative tools are used to coordinate among actors. Strategic spatial planning generally takes place at the regional and national level. Figure 7.2 illustrates one of the most important strategic spatial planning concepts in the Netherlands, the *Randstad* (WWdL, 1958).

A practical example of Dutch strategic spatial planning would be the making of a new memorandum on space. Korthals Altes (1995) described how the Ministry of Spatial Planning mediated the demands of the various sector departments such as the ministries concerned with transport, agriculture and economic affairs when preparing a new memorandum. In the Netherlands, this type of planning worked; sector departments generally acted in accordance with the basic principles of the strategic plans because they had been actively involved in preparing the plans, because they needed the plans to make sure that the land was allocated according to their departments' interests, and because the information provided by the plans was valuable for them (Korthals Altes, 1995). Section 4.5 suggested that it might also matter that these departments belong to the same entity, the government.

In the case studies, the effect of strategic spatial planning was experienced in different ways. Strategic spatial planning documents provided the basic planning concepts that guided the most important measures applied in the case study areas, such as the National Buffer Zone concept (see Figure 7.2). These concepts influenced the measures that were taken by the sector departments and the budgets available for these measures. The influences of strategic spatial planning can be explained in terms of the model presented in Chapter 2; in a sometimes derived way, strategic spatial planning can influence available governmental budgets, decisions to adjust zoning, and decisions to implement physical measures.

### **Operational spatial planning**

Operational spatial planning influences land uses on specific pieces of land. Since much land is privately owned and most planning is enforced by public parties, operational spatial planning involves the government imposing rules on private parties. Private parties with an interest in new plans are often involved in the making of those plans. The type of parties involved differs between strategic spatial planning and operational spatial planning: strategic spatial planning generally involves coordination between different parts of the government, whereas operational spatial planning is about influencing the land uses of public and private parties.

In the case study areas, as in the rest of the Netherlands, operational spatial planning centers round the *bestemmingsplan*. This is a planning document made by the municipality which determines the type of land use allowed on every parcel of land. In the Netherlands, the Government Service for Rural Areas (*Dienst Landelijk Gebied/Bureau Beheer Landbouwgronden*: DLG/BBL) also makes operational spatial plans in the case of land consolidation projects. Municipalities incorporate these plans in their *bestemmingsplannen*. The determinations made in *bestemmingsplannen* have a direct effect on private property rights. In the case studies, potential changes to these plans played an important role. For example, the possibility that a new *bestemmingsplan* might

allow construction can cause land prices to increase. In terms of the model presented in Chapter 2, operational spatial planning through *bestemmingsplannen* is one of the most important zoning measures in the Netherlands.

### **Operational land development**

Operational land development influences spatial quality by changing land ownership and implementing physical measures. It involves land transactions, implementing physical changes, and land reallocation. Financial matters play an important role here. Civil servants concerned with land development can come from various backgrounds, such as law, land-economics, geodetic engineering, or civil engineering. They make contracts, develop schedules for land development activities, and create land servicing budgets. Their contact with private parties differs from that of people working for planning departments. Land developers make one-to-one agreements that also deal with financial aspects.

In general, land development is executed by sector departments implementing sector policy or by the restates departments of the municipalities working on new building sites. The case studies revealed many examples of land development measures: the acquisition of land by DLG/BBL, the making of an agreement between the public and private parties in the Bloemendalerpolder, and the implementation of physical measures to create a recreational area. In terms of the model presented in Chapter 2, land development aims at changing the landownership situation and carrying out work to improve spatial quality.

### **Strategic land development**

Although most land development takes place at an operational level, there are examples of strategic land development. For example, the Ministry of Agriculture, Nature and Food Quality developed a policy on the price that the government will pay when acquiring agricultural land (e.g., Ministry LNV, 2008; Raad Landelijk Gebied, 2008), and the Ministry of Finance formulated a policy for the management of land ownership by the different ministries (e.g., Interdepartementaal beleidsonderzoek, 2006). Because most land development takes place on an operational level, this chapter does not discuss strategic land development separately.

## **7.2 Roots of Dutch spatial planning and land development rationalities**

Rationalities are rooted in a context. To understand the difference between planning and land development on an operational and strategic level and the different rationalities behind them, it is important to understand the theoret-

ical and practical context in which these differences have been discussed and elaborated in the Netherlands. Dutch theories on sector and facet planning and on planning and implementation are used to illustrate how different rationalities, using different criteria, could develop here.

In the Netherlands, facet planning is used to coordinate land use issues between policy sectors. This section first discusses Dutch ideas on the distinction between sector and facet in order to illustrate the difference between spatial planning and land development. After that, the distinction between (1) allocation of land uses, (2) construction, (3) maintenance, and (4) availability (De Haan et al., 1986, p. 272) is used to explain differences between operational planning and operational land development. After that, these distinctions are used to discuss central norms within strategic spatial planning, operational spatial planning, and operational land development.

As in other countries, the Dutch administration recognizes different sectors such as agriculture, transport and housing. The ministries and their departments are organized on the basis of this division into sectors. These sector departments implement most of the strategic spatial plans. Healey (1999) stated that many sectoral policy communities, with their focus on particular functions or topics such as economic development, housing and agriculture, have developed as isolated bastions. Topics such as spatial planning require that these sectors be coordinated. This type of coordination has been called facet planning (Dutch Lower Chamber, 1970-1971; De Haan & Fernhout, 1981; De Haan et al., 1986). As Priemus (1996) explained, physical planning is "facet policy," which seeks to spatially integrate a number of policy sectors, among them Transport & Public Works, Agriculture, Nature Management and Fisheries, Economic Affairs, and Housing and the Environment. Other types of facet planning, such as economic planning and social planning, have been presented in the literature, though in practice they have not been elaborated as thoroughly (De Haan & Fernhout, 1981; De Haan et al., 1986).

The concept of facet planning can illustrate strategic spatial planning's attitude towards government expenditure. Priemus (1996, p. 152) explained that in the strict sense, strategic spatial planning can be regarded as coordination requiring little or no expenditure, since the largest expenditure relevant to spatial planning takes place in the sectors that implement the policy. This has been considered an advantage for spatial planning. Because the cost of implementing strategic spatial planning goals is very high, the planning department would never have enough money. Since the planning department does not have the money to implement the planning goals, it is clear that other departments are expected to implement the policy (Hajer & Zonneveld, 2000).

Since spatial planning has been considered a separate type of facet planning from economic planning, spatial planning should be based on spatially relevant arguments, rather than economic or environmental ones. This is reflected in Article 10 of the Dutch Spatial Planning Act, which states that a

*bestemmingsplan* may only contain stipulations needed for a good spatial order. Consequentially, stipulations in a *bestemmingplan* may only be based on spatially relevant (*ruimtelijk relevante*) arguments. For example, a municipality is not allowed to sell its planning power to the highest bidder or to demand disproportional contributions from developers in exchange for a new *bestemmingsplan*.

In practice, a terminology has developed to explain the spatial relevance of what appear at first sight to be economic arguments. For example, a municipality is permitted to defend its choice not to change the *bestemmingsplan* to allow construction if a developer does not contribute to public facilities financially, by arguing that implementing the plan is not financially possible. In this case, the financial impossibility of implementing the plan is considered to be a spatially relevant argument.

To understand the different type of norms used within land development, this dissertation uses De Haan et al.'s (1986, p. 272) distinction between (1) allocation of land uses, (2) construction, (3) maintenance, and (4) availability ([1] *bestemming*, [2] *inrichting*, [3] *beheer*, [4] *beschikking*). Although many definitions have been given about planning and its relation to implementation (for Dutch examples see De Haan & Fernhout, 1981; Dutch Lower Chamber, 1970-1971; Kreukels, 1980), De Haan et al.'s (1986) distinction between strategic planning and implementation is relevant because it can help to explain the different norms in spatial planning and land development. "Allocation of land uses" refers to the different plans described in the Spatial Planning Act that determine the activities which may take place on the land (De Haan et al., 1986, p. 272). "Construction" and "maintenance" refer to physical measures such as contract work. "Availability" refers to how the property rights to the land can be made available for the activities that are planned on the land, for example by means of purchase by the government or land reallocation (De Haan et al., 1986, p. 274). In the Dutch administrative system, "allocation of land uses" is taken care of separately by spatial planning departments (*ruimtelijke ordening*). "Construction, maintenance and availability" are often referred to as land development, and are taken care of by sector departments or the municipal estates departments.

This enables different departments to use different norms. Those departments concerned with construction, maintenance and availability can implement these plans based on the idea that implementation should be effective and efficient in line with the Dutch system for Policy Budgets and Policy Accountability (*Van Beleidsbegroting Tot Beleidsverantwoording*, VBTB) (e.g., IOFEZ, 2004). On the other hand, since one of the norms of spatial planning is that spatial planning decisions should not be made on the basis of a government's interest as a private party buying and selling land and making contracts to implement planning, spatial planning departments can plan on the basis of spatially relevant (*ruimtelijk relevante*) arguments, as discussed earlier. Regard-

**Figure 7.3** Farmer in the Midden-Delfland region who does not work competitively



ing planning as policy preparation can help us understand why spatial planning is led by norms such as a “good spatial order” and legitimate plan-making instead of efficient and effective implementation.

## 7.3 Consequences of mono-rational approaches

Chapters 2 and 3 were written to increase the understanding of problems with respect to green landscapes in metropolitan areas and ways to deal with them. Basically, these chapters combined knowledge on problems and solutions from spatial planning and land development. To illustrate that this knowledge is often not combined, this chapter gives examples of what can happen when a mono-rational approach is used instead of a poly-rational one.

### 7.3.1 “Farmland that will become vacant”

The debate about “farmland that will become vacant” (*vrijkomende landbouwgronden*) illustrates how a mono-rational approach to strategic spatial planning can hinder the improvement of spatial quality. The assumption that farmland will become vacant and will turn into nature has often been expressed in the Dutch strategic spatial planning debate (Pols et al., 2005; Frouws, 1998). The former Chief Government Architect, Crowel, spoke of land that will become vacant since there is less need to safeguard national agricultural production and to produce agricultural products near densely populated areas (e.g., Hulsman, 2007). The question then becomes what the appropriate types of future land use will be. In the eyes of Crowel, central government

**Figure 7.4 Conversion of agricultural land to this kind of nature conservation sites will not take place autonomously**



lacks vision in this matter, and this is the problem; instead, the government should have an idea which of the areas that will become vacant will be zoned as recreational areas and which will be reserved for new types of agriculture (Hulsman, 2007).

On an operational level, in the case study areas, people did not speak about “farmland that will become vacant”. In fact, Van der Kamp, Midden-Delfland’s alderman, expressed his worries about this way of reasoning. He acknowledged that some farmers in the region do not work competitively (see Figure 7.3). However, he was worried that people might think that the conversion of agricultural land to nature will take place autonomously, and since there are *bestemmingsplannen*, no other action will be needed to preserve metropolitan green areas (see Figure 7.4). In that case, people might forget that the land has a value and that the land is owned by people. Chapters 2 and 3 discussed the importance of ownership, maintenance and land prices for the protection and improvement of green metropolitan landscapes.

The debate about “farmland that will become vacant” illustrates how strategic spatial planning is concerned with facet aspects and is not concerned with “construction, maintenance and availability”, which can cause the strategic spatial planning debate to disregard such topics as land prices, landownership and maintenance costs, all of which play an important role in operational land development. Disregarding these aspects can help to create ideas about ideal types of land use. However, it also distracts attention from the landscape problems which were discussed earlier, such as the cost of maintaining the landscape and the financial position of farmers. In that way, it might actually hinder the protection and improvement of spatial qual-

ity. Awareness of operational aspects can help to understand problems associated with green metropolitan landscapes and can help to find ways to deal with them.

### **7.3.2 The effect of cross-subsidy approaches on land prices**

The effect of cross-subsidy approaches on land prices illustrates how insufficient knowledge of land development topics can cause spatial planning decisions to become counterproductive. As explained in Chapter 5, a planning decision to welcome some cross-subsidy approaches intended to improve the quality of green areas can cause land prices to increase in a large area and by doing so can threaten the future for farmers. In turn, this can affect the quality of metropolitan green areas. If people expect that built developments will be allowed, land prices tend to rise and high land prices make it difficult for farmers to buy new land to begin farming or to enlarge a farm. This is an example of a spatial planning decision with unwanted consequences because it did not take land development aspects such as land prices into consideration.

A cross-subsidy approach combines strategic spatial planning (for example, the general decision to apply cross-subsidy strategies in the *Nota Ruimte*, Ministry VROM et al., 2004), operational spatial planning (for example, adjustments to *Bestemmingsplannen*), and operational land development (for example agreements with developers). By doing so, it breaks through traditional distinctions of sector and facet planning and “allocation of land uses, construction, maintenance and availability” principles. When considering large institutional changes, a thorough examination of the effects of the change using a poly-rational approach might help to reduce the risk of unintended side effects.

### **7.3.3 Mismatch between strategic and collaboratively made plans and operational resources**

For operational spatial planning and land development, financial resources and the governmental power to limit private property rights are important tools to influence spatial quality. If strategic spatial planning takes a mono-rational approach, only focussing on spatially relevant aspects, it might pay to little attention to the availability of resources at the operational level. As discussed in Chapters 3, 5 and 6, decentralization and privatization might reduce the availability of resources at the operational level. A mismatch between strategic and collaboratively made plans and operational resources might affect the working of strategic spatial planning.

Chapter 6 discussed the problem of collaboratively made decisions that lack funding and appropriate institutions to implement them. For example,

---

the mismatch between the budgets for the National Landscape and the aims of the *Nota Ruimte* illustrates this problem (Mulder, 2006). The large number of green projects that, according to the *Nota Ruimte*, should be funded by cross-subsidy strategies (Ministry VROM et al., 2004; see also Chapter 5) is another example of planners making plans which have little chance of implementation.

Planning processes designed with the coordinating principles of strategic spatial planning in mind run the risk of not being implemented on an operational level because of a lack of resources. The idea that if local parties have a real say in the planning process, the plans will be voluntarily implemented can lead to the idea that no financial resources or binding regulations are needed. Although coordination without binding regulation and without financial resources might work for strategic spatial planning, it might not work sufficiently on the operational level. All in all, when approaches used within strategic facet planning to coordinate sector departments, are used for operational coordination, these coordination mechanisms might be less effective.

### 7.3.4 The aim of planning

The last sections gave examples of coordination mechanisms used in strategic spatial planning, operational spatial planning and operational land development. Section 4.5 discussed different theoretical notions regarding planning. This section links these notions to the rationalities introduced in this chapter.

Alexander (2001a; 2001b) defined the aim of planning as the provision of information to reduce uncertainties in order to facilitate the market. The working of plans through providing information might suggest that on an operational level, like strategic spatial planning, providing information is sufficient to coordinate parties who voluntarily act according to the plan. However, in operational spatial planning, in the case study areas, planning was basically experienced through zoning. More precisely, this was through the *bestemmingsplannen*, the most important land-use plans in the Netherlands. These determined the types of land uses that were allowed. As discussed in Section 4.5, one of the aims of these institutions is to safeguard the green amenities of the land for public use. This requires non-voluntary coordination mechanisms, such as legally binding rules. Examining the reasons why parties act according to the information provided by plans illustrates the basic difference between the ways strategic spatial planning influences society and the way operational spatial planning and land development influences it.

Earlier chapters already explained why the protection and improvement of metropolitan green areas requires a combination of strategic and operational levels, and why it requires both binding and non-binding plans. Chapter 6 explained the need to combine network-oriented, communicative coordination

---

mechanisms with hierarchical and legally-binding coordination mechanisms such as *bestemmingsplannen*. In line with Chapter 5, since private parties tend to act according to their interests, in the case of cross-subsidy strategies, legally binding coordination mechanisms such as signed agreements and binding land-use plans are needed to support a joint vision. This requires strategic spatial planning, operational spatial planning and land development.

As discussed in Chapter 4, these considerations on the aim of planning have consequences for the relation between spatial planning and the need for budgets to compensate those parties whose land uses are being restricted. Financial resources for compensation did not have to be considered when planning was limited to strategic spatial planning coordinating different sectors in line with the concept of facet planning. However, when operational spatial planning and operational land development are used to provide non-traded goods to the public, it becomes clear why binding regulations and budgets for compensation might be needed. This might explain why mismatches between strategic and collaboratively-made plans and operational resources might occur.

### 7.3.5 Overstretched use of strategic spatial planning rationalities

The examples discussed above illustrate how the use of strategic spatial planning rationalities can be overstretched. This might lead to insufficient consideration of operational land development problems and to the idea that coordination mechanisms used in strategic spatial planning can also be used in operational situations. This might cause institutional and landscape problems to be overlooked and unfruitful trajectories for institutional change to be elaborated.

Since strategic spatial planning is considered to be facet planning in the Netherlands, it should be based on spatially relevant considerations. Unlike operational spatial planning and land development, strategic spatial planning does not generally depend on binding regulations or financial resources needed to compensate or persuade others to implement plans. Strategic spatial planning can work within this frame since it basically coordinates among different facets, different ministries.

On the other hand, operational spatial planning and land development are confronted with concrete private rights. Therefore, especially in the case of operational land development, there is every reason to consider private ownership rights, land prices and budgets for maintenance. However, if these aspects are not considered at the strategic level, this might lead to insufficient understanding of the problems that affect the landscape, which might in turn hamper institutional change. Unawareness of the importance of binding regulations and budgets for compensation might contribute to this. Therefore, the

improvement of institutions for green landscapes in metropolitan areas requires a poly-rational approach.

## 7.4 Institutional change and tensions between public interest and private rights

One of the core issues in debates on institutional change in spatial planning and land development is the tension between the public interest and private property rights. To protect spatial quality and improve the effectiveness and efficiency of land development institutions, less strong protection of private property rights might be welcomed. However, as discussed in Section 7.1, rationalities in the field of land development have always been concerned with the protection of private property rights. Since these rationalities are part of what Williamson (1998) called the institutional level of embeddedness (see Table 8.1), it might influence the possibilities to change many other institutions. This section examines examples where tensions between public interest and private rights influenced institutional changes. This illustrates differences between the rationalities and might help to understand which institutional changes are more likely to be implemented or take place and which not. It also illustrates why incremental institutional change might be a more useful approach than radical institutional change (this will be further discussed in Chapter 8).

### 7.4.1 Compensation: zoning versus compulsory purchase

Tensions between the public interest and private rights are one of the main issues when institutional changes in planning and land development are discussed (e.g., Ploeger & Groetelaers, 2007; Van der Pot et al., 1995, p. 317). To illustrate how different rationalities deal with this, this section will discuss basic ideas on compensation for changes to *bestemmingsplannen* and compulsory purchase.

The protection of fundamental or human rights, including the protection of private property rights, basically concern protection from the state (Van der Pot et al., 1995). Article 14 of the Dutch Constitution and Article 1, Protocol No. 1 of the European Convention on Human Rights guarantee the Fundamental Right to Property. Chapter 8 deals with institutional change and will discuss the necessity of secure property rights for the functioning of economic and legal systems; only if property rights are sufficiently secured against powerful parties, such as the state, will people invest in property and can an economy be established.

The protection of the right to property dominates Dutch compulsory pur-

chase legislation. The Dutch constitution, founded in 1848, explicitly prohibits unlawful expropriation (Article 14). It contains no mention of the general right to property, since this is considered self-evident. According to Van Buuren et al. (2002, p. 113), it is also self-evident that, due to the far-reaching character of compulsory purchase, strict rules are needed to protect the party who is forced to sell. Therefore, compulsory purchase legislation contains strict conditions for the application of compulsory purchase and it states that full compensation must be paid (Van Buuren et al., 2002; Van der Pot et al., 1995). For example, this legislation determines that a civil judge can determine the amount that is to be compensated with the help of an expert committee (Article 27, Compulsory Purchase Act (*Onteigeningswet*)).

Unlike compensation in the case of compulsory purchase, which is based on individual property rights, collective interests are more important in the debate on compensation when changes are made to *bestemmingsplannen*. It has even been suggested that spatial planning institutions have eroded the constitutional stipulation on expropriation (Van der Pot et al., 1995, p. 317). Examining the rationalities behind legislation on compensation for changes in *bestemmingsplannen* can help to explain these differences.

One of the basic ideas here is the legal principle of “*égalité devant les charges publiques*” (the equal bearing of public burdens). In the Netherlands, this principle is explained in the following way: the burdens that go with a certain governmental decision may not burden an individual or a specific group substantially more than others (Van Wijk et al., 1997). In the Dutch debate on the entitlement to compensation due to changes in *bestemmingsplannen*, the following passage from the explanatory memorandum to Article 49 of the Spatial Planning Act on compensation (Dutch Lower Chamber, 1955-1956, p. 18, original Dutch text can be found in Appendix B) has often been used (Van Buuren et al., 2002, pp. 253-268): “Damage caused by *bestemmingsplannen* is always damage caused by limitations to the freedom of individual citizens. The government does not have to pay damages if these limitations to the freedom of individual citizens do not exceed the realization of the limitation of freedom due to the fact that citizens live together on a small surface. This limitation can be considered to burden all citizens equally. However, it is possible that measures need to be taken that limit individual freedom more. Then, there are grounds for compensation. The administrative judge will address this as a “disproportionate burden.”

This example illustrates tensions between public interest and private rights and also illustrates the differences between compensation in the case of compulsory purchase and compensation in the case of changes to *bestemmingsplannen*. In the case of changes to *bestemmingsplannen*, not all damage has to be compensated, only a disproportionate burden. Although the entitlement to compensation has been extended in recent decades, far from all citizens who suffer damage due to *bestemmingsplannen* receive compensation

(Van Buuren et al., 2002, p. 256). For example, the new Dutch Spatial Planning Act states that damage within the sphere of normal risk in a society (*normaal maatschappelijk risico*) should not be compensated (Article 6.2.1 Wro). The act specifies this by stating that, except in a few specific cases, damage less than two percent of the value of the damaged good will not be compensated (Article 6.2.2. Wro). Additionally, unlike the civil law judge who can determine the amount of compensation, the administrative judge only decides whether the effects of a certain governmental decision burden an individual or a specific group too much, using a limited juridical review to examine the municipality's decision on the amount of compensation (Van Wijk et al., 1997, p. 369).

These examples on compensation illustrate how the balance between public interest and private rights can be interpreted differently. In the case of compulsory purchase, the debate on compensation centers around the idea of fully protecting individual property rights, whereas one of the leading principles in the debate on compensation for changes in *bestemmingsplannen* is that people have shared interests in planning and that living in a densely populated country entails some burdens, with or without planning.

Transaction Cost Theory (see Chapter 4) can help to explain why the Dutch rationalities on compensation might lead to efficiency. Compensation involves transaction costs such as the costs associated with estimating the amounts to be compensated, the costs of civil servants dealing with the request for compensation, and the costs of legal procedures. Basically, three situations can be identified when a change in zoning results in a public benefit and individual damage:

1. Public benefit < individual damage  
The public benefit of a planning decision is smaller than the individual damage it would cause.
2. Public benefit > individual damage > transaction costs compensation  
The public benefit of a planning decision is larger than the individual damage it would cause, and this individual damage is larger than the transaction costs involved in compensating it.
3. Public benefit > transaction costs compensation > individual damage  
The public benefit of a planning decision is larger than the individual damage it would cause, and this individual damage is smaller than the transaction costs involved in compensating it.

In the first case, since the total costs are higher than the total benefits, making no planning decision is the most efficient choice. In the second case, since the total benefits are higher than the total costs, it is efficient to make the planning decision. Since the individual damage is larger than the transaction costs involved in compensating it, compensating the planning decision is the most efficient. For example, this might be the case with compulsory purchase, or when a change in a *bestemmingsplan* causes major damage. In the third case,

public benefits are also larger than the individual damage, so making a planning decision is efficient. However, since the individual damage, the amount that could be compensated, is smaller than the transaction costs involved in compensating the damage, it is not efficient to compensate in this case. By using terms such as “a non-disproportionate burden,” “limitations to the freedom of individual citizens that do not exceed the realization of the limitation of freedom due to the fact that citizens live together on a small surface,” and “damage within the sphere of normal risk in a society,” the Dutch rationalities would appear to deal efficiently with situations such as described in the third case. This might be one of the reasons that many binding planning decisions could be made in the Netherlands and that the Netherlands could have developed into a planner’s paradise (for the idea of a planner’s paradise see Faludi & Van der Valk, 1994).

### 7.4.2 Cross-subsidy agreements and the “two hats problem”

Making a cross-subsidy agreement, as explained in Chapter 5, requires a combination of spatial planning and land development since agreements on spatial planning issues such as green area developments and built developments are made jointly with agreements on property developers’ financial contributions. Here, tensions emerge between spatial planning and land development rationalities and between serving public interests and protecting private property rights. Central terms in this discussion are the “two hats problem” (*dubbele petten probleem*) and “ownership planning” (*eigendomsplanologie*). After these terms have been explained, this section will discuss why attempts were made to decouple spatial planning rationalities and land development rationalities, and how this was done. Then, it will show that these rationalities have not been fully decoupled and explain why there is a call for recoupling. This section finishes by discussing the consequences of this for institutional change with the help of Williamson’s model (see Table 8.1).

The “two hats problem” refers to the conflicts associated with the government’s double role as both regulator and as a private party, buying and selling land and entering into private agreements (Ministry VROM & Ministry of Finance, 2001). An example of this double role is a municipality that uses revenues earned by selling land prepared for building to finance public services or supports social housing by asking lower prices for land to be used for its construction. This double role also occurs in the case of cross-subsidy agreements between governments and property developers.

The “two hats problem” addresses a tension between financial interests and planning ethics (Ministry VROM & Ministry of Finance, 2001). A conflict of interest can occur between the role of the government (often a municipality) as regulator and its interest as a private party working to realize its

---

policy goals efficiently. For example, this double role could become a problem if a municipality made a certain planning decision in favor of a property developer who is willing to make a higher contribution to the municipality in exchange for a change to a *bestemmingsplan*. The Ministry of Housing, Spatial Planning and the Environment and the Ministry of Finance have acknowledged this problem: there is a chance that policy decisions are made exclusively on the basis of profit (Ministry VROM & Ministry of Finance, 2001 pp. 33-34).

The terms “ownership planning” addresses similar problems. It is used when plans are made in favor of a specific land owner; spatial characteristics should be the input for planning, not ownership situation. In the Netherlands, the word “ownership planning” has a negative connotation (e.g., Molenaar, 2004; Groetelaers, 2004). Dutch municipalities have been accused of applying “ownership planning” when planning profitable new types of land use, such as building houses, on their own land.

In the Netherlands, formal and informal institutions deal with the “two hats problem” and “ownership planning.” Spatial planning and land development have been decoupled in the planning and development process. Spatial planning generally takes place within facet departments and land development is taken care of by sector departments. Both fields have developed their own rationalities, and spatial planning and land development often occur in different phases. Besides, as was discussed in Section 7.2, in line with the idea of spatial planning as facet planning, planning decisions should be made on spatially relevant considerations.

The “two hats problem” also plays a role when the juridical limitations to cross-subsidy approaches are discussed (e.g., in Section 5.4). Juridical institutions that address this issue seek to balance public interests such as efficient improvement of spatial quality with the rights of developers and owners of private property. In order to protect spatial quality, the law allows the government to restrict the ways private owners may use their lands, for example by means of *bestemmingsplannen*. In order to arrange funds for public services, the law allows the government to force property developers to contribute financially. However, since the combination of spatial planning institutions and land development institutions gives the government significant power, and in order to protect private parties against the government, these powers of the government have been limited. For example, in accordance with Article 42 of the former Spatial Planning Act (WRO), land servicing contracts could only determine that property developers must pay costs directly related to the development of buildings, such as the costs of local infrastructure, but they could not force the developers to finance regional green areas. If contracts between property developers and municipalities were made that forced property developers to pay more, the courts would decide that they were invalid (Van Buuren et al., 2002, p. 134). Under the new act, property developers can be forced

---

to contribute to the development of green areas. However, these contributions can only be made obligatory when three criteria are met: (1) profit, (2) causality, and (3) proportionality (De Wolff, 2007; see Section 5.4). Although the new act also leaves more room for voluntary agreements between municipalities and property developers, this is also restricted by law, with Article 6.24 of the new Spatial Planning Act stating that these agreements must be voluntary and must fit a regional vision of spatial development.

Despite the reasons for decoupling spatial planning and land development, there are important reasons for coupling them. The *Nota Grondbeleid* (policy document on land policy) explained that the double role enables municipalities to ask low prices for land prepared for building social housing, and that revenues obtained by selling land are used to finance public services (Ministry VROM & Ministry of Finance, 2001). Coupling can help land development departments to execute their tasks more efficiently. Often, they can only buy land at a low price if they acquire it before plans have been made public. For example, when asked what mattered in the negotiations with private parties about the combined green and built development in the Bloemendalerpolder, civil servants stated that it had been essential that public parties owned land in the area. Otherwise, it would have been less likely that the DLG/BBL would have been invited to the negotiations. All in all, despite the theoretical reasons for decoupling spatial planning and land development, practice suggests that coupling is required. Sophisticated institutions might help to facilitate this.

In order to serve the public interest, there have been calls for the creation of more possibilities for cross-subsidy approaches, and for the private rights of property developers to be further curtailed. In terms of Williamson's model (see Table 8.1), the desire to involve private parties requires that the underlying formal rules change. However, these formal rules, as stipulated in the Spatial Planning Act, can only change when this fits underlying informal institutions and their implicit rationalities, such as the principle that public interests and private rights should be balanced. Therefore, awareness of the different rationalities behind spatial planning and land development, such as ideas about sector and facet planning, might help to improve institutions successfully.

### 7.4.3 Cross-subsidy approaches and the “I develop the project” principle

The term *zelfrealisatiebeginsel* (the “I develop the project” principle) refers to the principle that the landowner can avoid compulsory purchase if he can implement the *bestemmingsplan* in the way proposed by the government (Van Buuren et al., 2002, p. 117). On the other hand, if the government can prove that compulsory purchase is necessary for the implementation of the plan, or that the public interest requires a specific implementation of the plan, then,

the government is allowed to proceed with the compulsory purchase (for a summary of jurisprudence, see Schueler & Mellenbergh, 2006, p. 6).

Spatial planners have advocated the abolition of the *zelfrealisatiebeginsel*, stating that it hinders planning objectives and that uncertainty about the principle might lead to time-consuming legal procedures and project delays (e.g., Priemus & Louw, 2003; Schueler & Mellenbergh, 2006; Dutch Lower Chamber, 2005-2006b). According to De Wolff et al. (2004), the *zelfrealisatiebeginsel* makes it more difficult for municipalities to acquire land and prepare it for building themselves. As explained in Section 5.1, this so-called active land development has been and still is an important way for municipalities to control developments and to create funds for cross-subsidy strategies (Groetelaers, 2005). The PPP-Agency for Rural Areas stated that the *zelfrealisatiebeginsel* principle might hinder cross-subsidy projects (PPS-bureau landelijk gebied, 2002). The discussion on the abolition of the principle illustrates how tensions between public interest and private right influence institutional change.

On the other hand, as Priemus and Louw (2003, p. 376) already expected, abolition of the *zelfrealisatiebeginsel* is not something that jurists will undertake lightly. Considering the importance of protecting private property rights, abolishing the *zelfrealisatiebeginsel* is an idea at odds with the legal system. In fact, abolition of the principle would conflict with the Fundamental Right to Property as protected by the European Convention on Human Rights (Alkema, 2000; Schueler & Mellenbergh, 2006). Consequently, the Minister of Housing, Spatial Planning and the Environment decided not to follow this route toward institutional change any further (Dutch Lower Chamber, 2005-2006b).

As was seen with the “two hats problem” and “ownership planning,” the attempt to abolish the *zelfrealisatiebeginsel* illustrates that an attempt to change institutions to serve the public interest better could encroach on private rights. In this case, formal rules could not be changed because they did not fit the underlying principles stipulated in the European Convention on Human Rights. This illustrates how a specific institutional change that fits spatial planning rationalities might not fit land development rationalities.

#### 7.4.4 Compulsory purchase for green types of land use

The discussion whether compulsory purchase can be used to acquire land for recreation and nature conservation also illustrates how public interest can conflict with private property rights. Considering the protection and improvement of green metropolitan landscape, the Advisory Council for Rural Areas (Raad landelijk gebied, 2008) recently advocated the use of compulsory purchase to acquire green areas. The council stated that this was needed to make the implementation of spatial plans for projects like the National Ecological Network (*Ecologische Hoofdstructuur, EHS*) more successful. In this way, compulsory purchase for green types of land use might be in the public interest.

Opposed to that, farmers concerned about their private property rights have protested the use of compulsory purchase for green types of land use. Off the record, I have heard experts say that the objections of farmers were addressed in a gentlemen's agreement between the Minister of Agriculture, Nature and Food Quality and representatives of farmers, in which the minister promised not to use compulsory purchase for the acquisition of new nature and recreation areas. In practice, according to the Advisory Council for Rural Areas, compulsory purchase via the civil judge has hardly ever been used to acquire regional recreation areas near cities or to acquire land for the National Ecological Network, with the exception of the Midden-Delfland area (Raad landelijk gebied, 2008, p. 8).

One of the factors that might have influenced this tension is the different land values for meadows where construction is allowed or is going to be allowed and for green areas. The Dutch government has a standing policy of paying less for areas that are going to be developed as green areas, such as recreation areas and nature conservation sites, than for areas that are going to be developed for construction (Raad landelijk gebied, 2008, p. 8). In the case of compulsory purchase, the type of land use can influence the amount of money received by the former land owner. Consequently, the compensation the government has to pay land owners in the case of compulsory purchase differs according to the land-use plan made by the government. Even when planning decisions have been made based on spatially relevant arguments, it might be hard for farmers to accept that land prices will be much higher on one side of a line on a map than on the other side of that line. This might be even more difficult to accept when there are few objective arguments for drawing this line (for example, the proximity of a road), and when, as in the case of compulsory purchase, farmers cannot choose to wait for the next *bestemmingsplan*, which might allow new development.

The differences in land prices is a particularly delicate issue in the case of compulsory purchase for green areas, because farmers might be forced to sell their land at a low price to the same government which made the planning decision that affected the price. Although the planning decision is generally made by another department than the department which manages the compulsory purchase, and the decisions might be made using different and appropriate rationalities, there might still be a tension between the rationalities; land owners might wonder whether the government made its planning decision on spatially relevant arguments or on the basis of financial arguments. The supposed gentlemen's agreement not to make compulsory purchases for green areas has been used to reduce this tension. This gentlemen's agreement might be interpreted as a reflection of an underlying institutionalized principle that defends private property rights. A change to this agreement might require this underlying principle to be reconsidered as well.

---

### 7.4.5 Public interest versus private rights

Tension between public interest and private rights is an important issue within operational spatial planning and land development. In the case of compensation, an institutional framework has been developed to deal with this. Since strategic spatial planning, operational spatial planning and operational land development use different rationalities to deal with this tension, coupling spatial planning and land development requires these rationalities to be considered. In spatial planning rationalities, serving public interests by improving spatial quality is an important aim, and using spatially relevant arguments to make decisions is an important norm. In land development, efficient policy implementation is an important norm. Unsurprisingly, land development measures are often confronted with private property rights. Since operational land development often confronts private property rights, norms to protect private property rights play an important role in land development rationalities.

The “two hats problem,” “ownership planning,” the “*zelfrealisatiebeginsel*,” and compulsory purchase for green types of land uses all illustrate the importance of deeply rooted institutions such as the principle that private property rights should be protected against the state. If attempts are made to change formal rules, such as planning regulations, to serve public interests, it is important to consider these deeply rooted institutions. This concurs with Van Eeten and Roe’s (2002) statement that recoupling, in this case combining land development and spatial planning in a new way, can only be achieved if it fits the actual situation and context dynamics.

## 7.5 Conclusion

This chapter has discussed the differences between strategic spatial planning, operational spatial planning and land development rationalities to create a better understanding of contemporary problems facing the landscape and ways to protect and improve green areas. This understanding might help when making decisions on measures to protect and improve the landscape. Understanding these different rationalities can also help institutional change, since institutional change is more likely when new institutions fit the basic principles of these rationalities.

Distinguishing the operational and strategic levels might help to understand the differences between spatial planning and land development. It explains why coordination in the case of operational spatial planning and land development differs from coordination in the case of strategic planning. Unlike strategic planning, which coordinates different governmental departments or sectors, operational spatial planning and land development, which

---

foremost coordinate private parties, generally requires binding regulations and adequate budgets to be effective. In the past, budgets for implementing plans only played a significant role in land development, and this was generally taken care of by sector departments. With the restructuring of the welfare state, the influence of these sector departments has declined, and the availability of budgets needs to be reconsidered. Examining the different rationalities shows why, in line with Chapter 6, a combination of network-oriented and hierarchical coordination mechanisms might be fruitful.

Seeing strategic spatial planning as concerned with facet aspects and not with “construction, maintenance and availability”, strategic spatial planning debates can disregard land development issues. Although disregarding these issues could stimulate ideas about ideal types of land uses, it might also distract attention from the problems discussed in Chapters 1 and 2. This might in turn hinder the improvement of spatial quality.

Spatial planning and land development have been historically decoupled, as a way of dealing with the conflict between the government’s role as regulator and as a private party, which buys and sells land and enters into private agreements. In practice, this decoupling was accomplished by putting spatial planning and land development in different departments which used different rationalities and different norms and which were active during different phases of the development process. This decoupling was influenced by basic principles such as the “sector and facet” concept and the idea that (1) allocation of land-uses, (2) construction, (3) maintenance, and (4) availability are separate tasks. The central norms in spatial planning rationalities are improving spatial quality, legitimate plan making, and deciding on the basis of spatially relevant arguments, whereas the central norms in land development are efficient and effective implementation. Because land development measures are likely to conflict with private property rights, the principle that private property rights should be protected has been deeply rooted in land development institutions.

Transaction Cost Theory, which was discussed in Chapter 4, can help to explain how Dutch spatial planning rationalities, for example the application of the concept of “*égalité devant les charges publiques*,” have produced efficient decisions on compensation. When individual damage due to a planning decision is smaller than the transaction costs involved in compensating this damage, it is not efficient to compensate this damage. Embedding this idea in institutions, so that not all planning damage needs to be compensated, might have contributed to the Netherlands developing into a planner’s paradise.

When spatial planning and land development are coupled, as in the case of cross-subsidy strategies, and when attempts are made to change institutions, their deeply rooted principles, the rationalities behind their approaches, should be considered. This fits one of the basic ideas of Williamson’s model which will be discussed in Chapter 8: changing governance structures may

require changing formal rules. However, these formal rules can only change if they fit underlying informal institutions, such as the rationalities. Therefore, awareness of the different spatial planning and land development rationalities, such as the idea that private property rights must be respected, might help to improve institutions.



## 8 Slow Planning and incremental institutional change

This project was conducted within the framework of the Metroland research program. The English version of the factsheet of this program states: “In the metropolitan landscape, the complexity and dynamics of societal developments no longer allow the classical role of the government and its policy instruments to be effective. Dutch spatial planning needs to critically analyse the driving forces in the metropolitan landscape and why classical spatial planning is not effective anymore, in order to define new adequate ways of co-ordinating spatial developments” (Metroland, 2008). In addition, Van Dijk (2006) noted that contemporary planning institutions for green metropolitan areas are too slow in today’s dynamic society and suggested that, to cope with this, institutions needed to be changed radically.

The case studies conducted in this project showed another picture. In Laag Holland, a plea for more dynamics was used to prepare the way for new *bestemmingsplannen* that allow new built developments. This might hamper the protection and improvement of the metropolitan green area. Opposed to that, Midden-Delfland’s Slow Planning process, involving a land consolidation process that took over thirty years, resulted in successful open space preservation (Van Rij et al., 2008). Slow Planning can be defined as a way of spatial coordination to preserve potentially high dynamic landscapes by reducing dynamics and increasing the time frame of projects (Van Rij & Korthals Altes, 2008). The first part of this chapter examines “dynamic” and Slow Planning and elaborates the concept of Slow Planning.

Using institutional economic theory and legal theory, the second part of this chapter considers institutional change. Radical institutional change can hamper Slow Planning. Uncertainty about restrictive planning institutions can give room to those forces that are strong in a non-regulated market, which are the forces that can lead to built developments. Besides, radical institutional change can be accompanied by unintended side effects. On the other hand, institutional change might be needed to improve institutions for internalizing landscape values. This chapter analyzes changing planning concepts in Laag Holland, new land development legislation, and hypothetical institutions for market-coordinated spatial order as examples of institutional change which could affect the protection and improvement of metropolitan green areas. The Midden-Delfland Act serves to illustrate how institutional change can work.

### 8.1 Slow Planning

Interviewees and scholars have criticized planning institutions such as the land consolidation process in Midden-Delfland for their sluggishness (see Chapter 2 and Van Rij et al., 2008). The extended time frame of land consolidation processes is a frequently heard complaint (Van Rij & Zevenbergen, 2005;

**Figure 8.1** Examined locations for new built developments in Waterland



Source: Mulder, 2005

Van Dijk, 2006). In general, planning has often been criticized for being slow, and sluggishness is generally seen as one of the shortcomings of planning processes (De Jong, 1999, p. 185). Sluggish institutions can make plans too static and can make changing them too time consuming. In this light, Webster (2005) mentioned the negative effects on efficiency of old or outdated plans. Critics argue that today's dynamic society requires quicker adaptation of plans and land uses. Ideas about globalization, defined as the "accelerated circulation" (Brenner, 1999, p. 431) of all kinds of flows, tend to emphasize the need for swifter decision making of decisions, since otherwise these flows may bend away in today's "rapidly changing territorial organization" (p. 432). The rural-urban fringes, in particular, are considered to as "dynamic and rapidly changing environments" (Gallent & Shaw, 2007, p. 635). In general, the planning literature views the extended time frame of planning and implementation processes as important shortcomings (Carmona & Gallent, 2004; Gallent & Carmona, 2004). This section compares examples of dynamic and Slow Planning.

### 8.1.1 Dynamic planning in Laag Holland

Inspired by the idea of discourse analysis, the terms used in the discussion on "Living in Waterland" were examined (see also Section 6.2). This illustrated the role dynamics can play in planning. Figure 8.1 shows possible locations for new houses in Laag Holland, and Figures 8.2 and 8.3 give an impression of the area. After years during which very few built developments were allowed,

Figure 8.2 View of a village at the peninsula Marken



Photo: Nico Langeveld

Figure 8.3 Reasonably new developments on Marken with traditional houses in the background



central-right cabinets (2002-2007) chose a more development-friendly policy with more decentralized decision making. Since Dutch municipalities have a tendency to welcome new built developments, many official local policy documents aimed to prepare the way for new *bestemmingsplannen*. To allow the development of dwellings in the countryside, these documents used a discourse

Figure 8.4 Study on local attitudes towards housing in Waterland



Source: Overman, 2003

contrasting dynamics and vitality to the sluggishness associated with terms such as “lock up” and “museum.”

Built developments have been proposed as a solution to problems associated with a lack of dynamics (e.g., Mulder, 2005). The regional plan on living in Waterland (*Streekplanuitwerking Waterlandswonen*, Provincie Noord-Holland, 2006b) claimed the following (the original Dutch text can be found in Appendix C): “Planning policy for greenfield developments consisted of “freezing” precious rural areas and small settlements and concentrating the necessary built developments in less valuable areas close to larger built areas. A lack of renewal and rejuvenation has apparently decreased the livability in the small settlements and has started to turn the landscape into a museum (p. 11).

New greenfield development must contribute to:

1. the vitality of the settlements;
2. the vitality of the countryside;
3. Waterland’s identity regarding landscape, cultural history and nature conservation (p. 22).”

The lack of vitality to which these documents refer was not grounded by research. On the contrary, in a quantitative analysis, Koomen and Van Wilgenburg (2006) found that the Dutch countryside and small settlements were surprisingly vital with respect to population/demography, economic activity, and available facilities. Large cities, such as Amsterdam, located near the case study areas provided many facilities for the surrounding areas, and because of the proximity of these cities, people often spoke of a single housing market in the large city and the surrounding green metropolitan areas. Consequen-

**Figure 8.5** Protest against the development of new commercial areas in Laag Holland: “Keep Waterland Green, No business park here, Support [www.kloosterdijk.nl](http://www.kloosterdijk.nl)”



tially, it can not be stated that the Dutch countryside and small settlements are not vital, nor that they necessarily lack new built developments. A survey among the local population showed that the majority of the people in Waterland did not favor new developments, especially large scale ones (Overman, 2003; see Figures 8.4 and 8.5).

With respect to green metropolitan area preservation, the term vitality was used strategically. At first sight, the use of the word vitality suggests a concern about the landscape, nature preservation, and the economic situation of farmers. However, in the policy documents on “Living in Waterland,” the term vitality was used to address topics such as addressing local housing demand and maintaining existing facilities (Mulder, 2005). Building houses was supposed to create a basis for local facilities, and thus was supposed to increase vitality. Consequently, the term vitality was used to advocate new built developments.

Another concept that is used in a similar way is “preservation by development” (“*behoud door ontwikkeling*”). This was the leading concept of the Belvedere memorandum, dealing with the preservation of landscapes and monuments (Ministries OC&W, VROM & LNV, 1999). The basic idea is that monuments and landscapes can be preserved better if they serve other purposes, which are not in conflict with their preservation (for example, an old church might be used as a congress center). However, in many policy documents, this concept was used to advocate for building houses in the countryside (e.g., Mulder, 2005, pp. 6, 14; Provincie Noord-Holland, 2006b, pp. 7, 9, 12, 31). All in all, assuming that the economy in green metropolitan areas needs to be more dynamic and that current land use is “frozen” might be used to advocate for built developments, thereby hampering the protection and improvement of metropolitan green areas.

### 8.1.2 Slow Planning in Midden-Delfland

Although interviewees and planning literature have often criticized Slow Planning, the land consolidation process in Midden-Delfland illustrates how this process became effective due to Slow Planning rather than in spite of it. The Midden-Delfland Act was made in 1977, and the land readjustment procedure is finally expected to be finished in 2008 (see Figure 8.6 for one of the last projects). The project took more than thirty years, which is generally considered to be a long time for a planning project. Farmers who participated at the beginning of the process have often been succeeded by a new generation during the project. During these thirty years, the main goals of the project, preserving open space, developing recreational areas, and improving farming conditions, remained unchanged (Van Rij et al., 2008). The land readjustment procedure was governed by a durable platform for collaboration, the Land Consolidation Committee. This committee has been a powerful discussion and decision-making platform in the area.

Asked about the project's shortcomings, interviewees often mentioned its long duration. They mentioned the emphasis on discussion in the 1970s, and the sluggish planning procedures provided by the many opportunities to present objections. My examination of the process showed that the project's long time frame was not basically due to sluggish planning. In fact, much time was needed to assemble the land required for the project. In order to avoid pushing up the land prices, the acquisition of land was a time-consuming process.

Still, the question needs to be answered: Was the land consolidation project in Midden-Delfland effective due to the project's long time frame or despite of it? Throughout the project's thirty years, the basic planning policy objectives remained unchanged. As a consequence of these clear objectives, no other types of land use, such as building houses, have been seriously discussed for thirty years. During this period, the Land Consolidation Committee decided on whether or not to allow new construction. Consequently, no built developments took place during this long planning process, except for a few, mostly agrarian, buildings (Van Rij et al., 2008). In this way, the land consolidation process reduced land-use dynamics, especially construction, in the area.

Other measures implemented during the land consolidation process also aimed to reduce dynamics. Land reallocation was used to make the agrarian sector more economically vital and therefore the farmers' role in the area more durable. The transition of land ownership to the state forestry organization and the nature conservation union was also used to create a durable ownership situation with owners who were not likely to allow construction on their land. In the meantime, new recreation areas created durable public support for the area. Although increasing land-use dynamics in the short

**Figure 8.6** One of the last projects in the Midden-Delfland land consolidation, creating a recreational area near Vlaardingen, picture taken in 2008



term (Van Rij et al., 2008), all these measures aimed at reducing dynamics in the long term. Besides, a lack of dynamics with respect to zoning can also decrease dynamics with respect to ownership situation and vice versa. If a pro-construction municipal council wants to change *bestemmingsplannen*, this can be countered if the land owner does not want to develop the land, or if the public supports the green areas.

Though the basic planning policy objectives were not questioned during the project, now that the end of the project is near, they are being questioned; ideas about building houses in the area, for example the Maaslandsedam project, are entering the discussion. With the end of the Midden-Delfland Act, plans are no longer submitted for approval of the Land Consolidation Committee, which has always been a de facto extra barrier to development. Many interviewees, for example inhabitants, farmers and local politicians, were concerned that the Land Consolidation Committee is being disbanded.

### 8.1.3 The Slow Planning approach

As stated earlier, there is a tendency to associate dynamic planning with good planning and Slow Planning with bad planning. The Laag Holland case illustrates how a plea for more dynamics can threaten metropolitan green areas. At first sight, terms such as “vitality of the countryside” and “preservation by development” would appear to support the green functions in the countryside. However, in policy documents, they were used to advocate for built developments in the countryside. This illustrates how dynamic terms with a positive

association can threaten green metropolitan areas.

Opposed to that, the example of Midden-Delfland shows that Slow Planning does not have to have negative effects on the protection and improvement of green metropolitan areas. In fact, if the goal is to preserve rural landscapes in a dynamic metropolitan context, decreasing urban dynamics can help to achieve it. In this way, Slow Planning can be an asset for preserving green areas. It is a way of spatial coordination to preserve potentially high dynamic landscapes by reducing dynamics and increasing the time frame of projects (Van Rij & Korthals Altes, 2008).

Slow Planning is by no means a passive approach. In view of the negative developments described in Chapter 3 – rising land prices, reduced agricultural incomes, and the constant pressures for built developments – only action can protect and improve green metropolitan areas. In fact, in line with the idea of Slow Food, Slow Planning requires a sophisticated approach based on durable policy objectives for an area. On the operational level, Slow Planning requires a mix of spatial planning and land development institutions. As long as the basic policy objectives are not changed during a project, increasing the time frame can be a key to Slow Planning. In the meantime, the model presented in Chapter 2 demonstrates the different measures that can help to reduce dynamics in the long term: measures dealing with spatial quality, zoning and the ownership situation. To ensure spatial quality, measures can be taken to improve the recreational usability of the area or to guarantee that the landscape is maintained. Zoning can be used to prohibit dynamic urban types of land use and to preserve agricultural land uses. Finally, low land prices and policy to keep them low can be used to ensure that farmers continue to own land. Land ownership by nature preservation unions or the state forestry organization is another way to create a durable pro-green landownership situation.

Different time frames are required to change spatial quality, zoning and the land ownership situation, especially when considering opportunities for new development. A combined strategy aiming at spatial quality, zoning and ownership is therefore more likely to be durable. Besides, a combined strategy can strengthen the general public's opinion that a green area will be durable. In this way, Slow Planning, as it was applied in Midden-Delfland, in what was sometimes considered an outmoded planning process, actively and effectively reduced urban dynamics.

## 8.2 Institutional change in planning

On the one hand, institutional change may be needed to create institutions that apply a Slow Planning approach. On the other hand, many Slow Planning institutions have been used for quite some time and a Slow Planning ap-

---

proach requires a reliable and predictable institutional framework; too radical institutional change can hamper Slow Planning. To address this dilemma, this section elaborates on institutional change.

In planning, the necessity of institutional change is often treated as a starting point. In their article on a theory of institutional change, Buitelaar et al. (2007) only discussed the circumstances under which institutional change takes place, and they did not discuss motivations for institutional change. Referring to Innes (1995) and Healey (1998) and Healey et al. (2002), Buitelaar et al. (2007) stated that institutional design is the essence of planning and that the goal of planning is to break through the institutional pathways and their structural forces. Healey (2006) wrote that new concepts have to challenge and shift an array of already routinized governance processes, with their complex mixture of conscious modes of practice and ones that are taken for granted. New concepts have to “jump” boundaries and “break through” resistance, involving implicit and explicit struggles. When advocating for institutional change, these scholars seldom explore the reasons for choosing change or not to choosing it, or the possibility of changing institutions incrementally.

Spatial planning objectives can urge scholars in the field of planning to advocate radical institutional change. For example, Van Dijk (2006) advocated a radical change in institutions instead of slow iterative adaptation. He argued that more radical changes are necessary because slow adaptation may result in a situation where formal rules no longer fit the situation by the time they are applied (Van Dijk, 2006). Likewise, Priemus and Louw (2003) remarked that a radical amendment of Dutch compulsory purchase legislation seems necessary to safeguard the public dimension of urban development.

Other literature has discussed why institutions seem to evolve instead of being radically changed or designed (e.g., Nelson, 1979; Alexander, 2004; Adams, 2005). Webster (2005) argued that institutions evolve and that it takes a long time for good policies to be discovered and bad policies to be dropped. Consequently, radical changes can result in large errors. Salet (2002) wrote that there can be a tension between planning motives and the way institutions evolve. For example, Raitio (2003) explained the importance of legal certainty and Visscher (1986) discussed the risks associated with careless institutional change. In a more general context, Hart (1994) discussed the persistence of law as one of the necessities for a legal system.

To put the aforementioned pleas for radical institutional change in perspective, the remainder of this chapter discusses the reasons for iterative institutional change. It discusses Williamson's (1998) model on different levels of institutions and the change frequencies of these different levels. It explains that since institutions operate as a system, this can be a reason to change them iteratively. This is illustrated by different practical examples. In addition, the example of the Midden-Delfland Act is used to illustrate how iterative change can take place.

---

### 8.2.1 Institutions' different change frequencies

In order to gain a better understanding of the change frequency of institutions, this section discusses Williamson's (1998) model (Table 8.1) on different levels of institutions and the times it takes for these institutions to change. Although Williamson's model originates in economics, it provides useful insights for other institutional disciplines too.

The first level of institutions consists of norms, customs, mores, traditions and other informal structures that have developed of themselves over time. In general, these institutions are taken for granted and change slowly, on the order of centuries or millennia. An example of this is the principle that "*pacta sunt servanda*" (agreements must be respected), or the Dutch predilection for order and neatness, as Faludi and Van der Valk pointed out (1994). These informal institutions are the domain of social theory, such as history and anthropology.

Williamson (1998) calls the second level the institutional environment. The institutions at this level are the products of politics and provide the rules of the game within which economic activity is organized. According to Williamson (1998), polity, judiciary and bureaucracy of government are located at this level. This level defines the formal rules by which a society operates, and the definition and enforcement of property rights plays an important role in this. Institutional choices made at this level are very important to economic activity, but cumulative and gradual change is hard to orchestrate. Times of crisis can provide windows of opportunity that provide occasions for sharp breaks from established procedures. This happens rarely and Williamson stated that major changes in the rules of the game occur in the order of decades or centuries.

Institutions of governance, which determine how the "game" is played, are located at the third level. At this level, we find alternative models of coordination which can be based on market mechanisms or not. Choices for specific contracting strategies and make-or-buy decisions are made at this level. Transaction Cost Economics addresses this type of questions. These decisions can be reconsidered every year or decade.

The fourth level deals with resource allocation on the basis of price and output. Neo-classical economics is the most important discipline that deals with this level. Adjustments in price and output take place continuously.

The change frequencies in Williamson's model are only indicative. Some aspects of property rights, "level two" institutions, have not changed since the Roman Empire. Other aspects, such as protective provisions in the case of Dutch land readjustment, have changed several times during the last hundred years (Zevenbergen & Van Rij, 2005). The more durable aspects of property rights, for example those which have not been changed since the Roman Empire, are often embedded in "level one" institutions, such as the command-

**Table 8.1 Williamson's model on different institutional levels**

Level	Institutions	Change frequency (years)	Theory and research disciplines
1	Embeddedness: informal institutions, customs, traditions, norms, religion	$10^2$ to $10^3$	Social theory e.g. history and anthropology
2	Institutional environment: formal rules of the game – especially property (policy, judiciary, bureaucracy)	10 to $10^2$	Economics of property rights, legal studies, political science
3	Governance: play of the game – especially contract (aligning governance structures with transactions)	1 to 10	Transaction cost economics
4	Resource allocation and employment (price and quantities; incentive alignment)	continuous	Neo-classical economics and Agency Theory

Source: Williamson, 1998; Groenewegen, 2004

ment that you shall not steal.

The idea that the change frequencies of institutions differ and that more fundamental institutions change more slowly concurs with findings from the field of parliamentary history. Visscher (1986) found that it took parliament longer to change more complex and important statutes than simpler ones. Changes that were relatively more fundamental, such as changes to the Dutch civil code and the approval of the European Social Charter, took the most time (Visscher, 1986).

## 8.2.2 Institutional system

The arrows between the different categories of institutions in Williamson's model illustrate the way different institutions interact with each other and operate as a system; changes to one institution can have consequences on other institutions. In his work on the concept of law, Hart (1994) explains how legal institutions form a system. Williamson's model incorporates this concept into a general institutional system.

Because institutions work within an institutional system and interact with each other, path dependency can develop (North, 1991). Path dependency means that decisions in the past determine which developments are possible in the future. Salet (2002) stated that divergent traditions have established themselves in different countries, and that different patterns of institutional change also appear. For example, a set of level-two institutions can be based on a level one norm. This level one norm can limit the possibilities of institutional change at the second level. Since institutions interfere with each other, the set of institutions that have come into existence influence the chance that particular institutions will emerge.

Understanding that institutions operate as a system can have consequences for the decision whether to change institutions or not, or whether to change them incrementally or radically. There are transition costs associated with changes to an institutional system, such as the cost of learning to work with the new institutions and the cost of the risks associated with these

changes. Unpredicted effects of one changed institution on other institutions can cause increased transition costs. These transition costs are a special type of transaction costs (Challen, 2000). If new institutions fit the existing institutional framework and are based on it, it is less likely that the institutional change will bring high transition costs (Van Rij, 2006, p. 72). Incremental change may provide certainty to agents, when planning their behavior (e.g., Raitio, 2003). The importance of continuity in an institutional setting and of a good fit between new institutions and the existing institutional framework have been emphasized by various authors (e.g., Alexander, 2004; Scott-Morgan, 1994; Van Bueren & Ten Heuvelhof, 2005).

Because institutions operate as a system, when considering changing a specific institution, it is important to consider the institutional context. Because higher levels, starting with level one, have an important influence on the possibilities for different governance structures, theories dealing with these higher levels are useful for improving institutions at other levels too. This knowledge urges us to take various parts of the institutional system into consideration when dealing with institutions for internalizing landscape values: both the higher level institutions that affect them and the lower level institutions that are influenced by them.

### 8.2.3 Planning institutions at different levels

This section uses Williamson's (1998) model to compare planners' ideas on the change frequency of planning institutions to more general ideas. Williamson's model is also used to explore which planning institutions are more fundamental and to explain which institutions can be influenced by a certain institutional change and are therefore important to consider when discussing institutional change.

A close look at institutions for metropolitan green areas shows that institutions at all levels do influence the internalization of green metropolitan landscape values. Considering planning history, norms such as the wide acceptance of planning and zoning in the Netherlands, compared to the more property oriented system in Flanders might be examples of "level one" institutions. The second institutional level consists of such things as land readjustment legislation, compulsory purchase legislation, and legislation on developer's payments to the government. An example of third level institutions is the policy decision to aim at more Public Private Partnerships. The price of the land and agricultural products is determined at the fourth level of institutions.

Many of the changes to institutions that planners have proposed – such as the previously discussed propositions of Van Dijk (2006) and Priemus and Louw (2003) – are changes to level-two institutions, the formal rules of the game, the rules that determine property rights. According to Williamson

(1998), these institutions take between 10 and 100 years to change. However, these changes can be so fundamental that they affect basic concepts about property rights, which are “level one” institutions. From this perspective, a short change frequency for planning institutions would be an exception to general change frequencies. In fact, the model puts the claim that planning institutions change too slowly into perspective; planning institutions do not change more slowly than institutions in general.

Although not every planning institution fits exactly one institutional level, Williamson’s (1998) model can also help to explain why some planning rules can be changed more easily than others, and why some changes to the planning system proposed by planners are more likely to be implemented than others. Specific stipulations, for example a provision in a *bestemmingsplan* about the type of land use permitted in an area, or a contract between a municipality and a developer are examples of the most dynamic type of planning rules. The rules of the planning game, such as the Spatial Planning Act are less dynamic. They determine how changes to more dynamic rules such as *bestemmingsplannen* can be made. Therefore, the Spatial Planning Act is a more static institution, which changes less frequently. Other kinds of rules are even more static, for example the basic protection of ownership rights. In most of the European continent these rights are protected by civil codes, which seldom change. The basic underlying presumptions on which these codes are based, for example fundamental rights and other juridical principles are, like all Williamson’s “level one” institutions, very static.

In general, when one considers formal rules, the more extensive the procedures to make them, the lower the change frequency and the more durable they will be. Besides, rules made by a higher authority often overrule those made by a lower authority, and when they do so, these rules are often more fundamental. In general, the more institutional change affects more fundamental institutions, the harder it is to accomplish these changes, because they affect the institutional system more.

#### **8.2.4 Balanced institutional system: public interest versus private rights**

As we have seen, institutions become effective within a system of institutions. Different institutions within such a system keep each other in balance. Section 7.4 discussed the sophisticated balance between public interest and private rights. Because this balance and the idea that property rights should be protected against the state can be seen as “level one” institutions, changes to institutions that affect these “level one” institutions will be hard to accomplish. First, this section discusses an example of institutional balance within the Flemish institutional system. Then, it discusses the debate on the *zelfrealisatiebeginsel* and new Dutch land consolidation legislation, considering the

tension between institutional changes which are preferable from a planning perspective and the necessity to durably protect private property rights for the sake of the legal system.

Studying the Flemish institutional system, it appeared to me, as a foreign researcher, that at first seemed to be imbalances were actually balanced by other institutions. At first sight, it was striking that the *Ruimtelijk uitvoeringsplan RUP* (a combination of a land-use plan and a document introducing land development institutions to execute the plan) could change permitted land uses so drastically. The introduction by the plan of the possibility for compulsory purchase (see Figure 8.7) to develop a forest also seemed quite radical. However, a closer look at the institutions and how they were applied in practice, revealed a less radical situation. Institutions unknown in the Dutch context, such as the *verkavelingsvergunning* (parcel subdivision permit), continued to be effective and protected existing development rights.

Besides that, the introduction of the possibility for compulsory purchase might *de facto* not make a difference. In Flanders, this option must be used within five years of the RUP becoming effective (Leenders et al., 2006). Although the RUP became effective in 2005, at the time of the interviews in the beginning of 2007, this option had not been used. Interviewees expressed their worries about this and said that there was a fair chance that the option would not be used in time. Different reasons were mentioned for this. Some blamed the Flemish government agency for rural projects, the *Vlaamse Landmaatschappij (VLM)*, for acting too much in the interest of farmers and estate owners. Others stated that, because of unknown, perhaps political reasons, other departments than the VLM, which are responsible for estimating the compensation, did not give priority to these estimations. As a consequence, they doubted whether the possibility for compulsory purchase would be used in time. In that case, the introduction of the possibility for compulsory purchase would not change the balance between the public interest and private property rights *de facto*. This example illustrates how the old balance within the institutional system might be continued informally.

The tension between public interest and private rights also played a role in the discussion on new Dutch legislation on land reallocation projects. For example, in order to make land reallocation procedures less complex, stipulations about estimating the value of the land and compensating a possible loss in value were not included in the new Dutch land consolidation legislation (Van Rij & Zevenbergen, 2005). Planners stated that, in practice, they would continue to use their estimation models and therefore, private interests would be protected. However, at least from a legal perspective, a legal stipulation is more secure provide more protection than an informal statement that administrative procedures will be continued. Therefore, with Zevenbergen, I previously argued that, considering the importance protecting property rights has for the entire institutional and economic system, the rights of landown-

Figure 8.7 Areas where compulsory purchase is allowed, marked in dark grey



Source: Ministerie van de Vlaamse Gemeenschap, 2005

ers deserve better protection by law (Van Rij & Zevenbergen, 2005). From our point of view, replacing these legal stipulations by informal practices would be a too radical institutional change.

The examples discussed in this section and in Section 7.4 illustrate how institutions operate within a system and how the working of some institutions depends on other institutions. The abolition of the *zelfrealisatiebeginsel* and new Dutch land consolidation legislation illustrated how radical institutional changes designed to better reach planning goals can conflict with core principles of the institutional system such as the protection of property rights. When discussing these changes, it is important to consider that insecure ownership rights can threaten the legal and economic system because they would discourage investments and make juridical reasoning meaningless. It is therefore important to consider why these more fundamental rules are in use. Understanding this can help to design institutional changes that fit the general institutional system.

## 8.2.5 Changing planning concepts

When discussing institutional changes in planning, the concepts that underlie Dutch planning doctrine need to be considered too. In its study on National Landscape, the Netherlands Institute for Spatial Research (*Ruimtelijk Plan*

Bureau, RPB) stressed the importance of long term policy decisions and durable concepts (Janssen et al., 2007). Strategic spatial planning concepts are important because they guide other strategic decisions that influence the landscape. Memoranda on space can determine that certain types of land use are not allowed in areas that are specified in the memorandum, such as the Green Heart. In the Netherlands, the most important planning concepts, such as the Green Heart, have been said to form a body of thought, a doctrine (e.g., Faludi & Van der Valk, 1994; Faludi, 1999). The basic principles of this doctrine and the different labels used by this doctrine, such as the Green Heart, are institutions. This section discusses theory on changing doctrine. Then, it briefly discusses how two important concepts in Dutch planning doctrine, the Green Heart and the National Buffer Zone, affect the preservation of metropolitan green areas. The example of the "Living in Waterland" movement illustrates how an established concept, in this case the National Buffer Zone, had more impact on the preservation of open space than the more recent National Landscape concept.

In their book on planning doctrine, Faludi and Van der Valk (1994) dealt with change in planning. They stated that "doctrine may impede change. After all, doctrine represents an investment. To unravel it is not a step to be undertaken lightly (p. 25). ... As will be evident, the gist of our proposals is not to radically change doctrine but to make it more robust. The reason is that existing doctrine serves a useful purpose" (p. 246). In this way, Faludi and Van der Valk stressed the importance of a durable doctrine based on durable concepts. Like the persistence of Law, which is a crucial ingredient for a legal system (see Hart, 1994), a doctrine also depends on its recognition over time. On the other hand, like many other planners, Faludi and Van der Valk (1994) saw rigid concepts as a major weakness of planning (p. 251), which is why they also wanted to open up doctrine (p. 246).

The tension between dynamics and stability in planning concepts can be illustrated by the Dutch discussion on the Green Heart and National Buffer Zones; these planning concepts may be more than fifty years old, but they are still dominant. The Dutch planning debate has often dealt with the question whether the Green Heart and the National Buffer Zone concepts should be replaced by concepts that would fit today's society better. Although some scholars have stated that the Green Heart is an inadequate and outdated concept (e.g., Van Eeten, 1999; Nyfer, 1996), this old concept is still being used and is still considered an important part of Dutch planning doctrine (Faludi & Van der Valk, 1994; Van der Valk & Faludi, 1997; Kuhn, 2003; Maruani & Amit-Cohen, 2007). A little less well known, the National Buffer Zone concept dates back to the same period and is also an important aspect of the doctrine (Faludi & Van der Valk, 1994; Lambregts & Zonneveld, 2004; Van Gessel, 1990). Land-use change analysis using GIS showed that, although National Buffer Zones have been situated in the most threatened parts of the *Randstad*, built devel-

---

opments in the Green Heart and the National Buffer Zones were significantly smaller than in the rest of the *Randstad* (Koomen et al., 2007; Van Rij et al., 2008; Koomen, 2008). This shows that despite the criticism of these concepts as being outdated, they are durable and have an important influence on the preservation of metropolitan green areas.

The “Living in Waterland” movement in Laag Holland (discussed in Chapter 6) illustrates the difference between the National Buffer Zone concept, now more than fifty years old, and the more dynamic “National Landscape” concept, introduced in 2004. Both concepts determine what kinds of developments are not allowed. The *Nota Ruimte* allows the development of houses in “National Landscapes” as long as the net migration is neutral (*migratiesaldo 0*); the number of new houses can not exceed what is needed to cover the natural population growth in an area (Ministry VROM et al., 2004, p. 85). Although this stipulation might be useful for guiding developments in non-metropolitan agricultural areas, for metropolitan green areas, this is not as restrictive as it might seem; according to the province of Noord-Holland, in Waterland, this would have meant that 6,000 dwellings could be developed (Provincie Noord-Holland, 2006b). For National Landscapes in general, the RPB concludes that the balance between preservation and development has tipped toward development (Janssen et al., 2007).

The National Buffer Zone policy allows no further urbanization in National Buffer Zones (*vrijwaren van verdere verstedelijking*) (Ministry VROM et al., 2004, p. 69). In the debate about “Living in Waterland,” the area’s status as National Buffer Zone played a more important role than its more recent status as “National Landscape.” Answering questions in parliament about the development of new houses in Waterland (Dutch Lower Chamber, 2005-2006a), the Minister of Housing, Spatial Planning and the Environment said that she would contact the province in order to bring the local policy in line with the National Buffer Zone policy (Dutch Lower Chamber, 2006-2007a).

In light of the discussion about the flexibility of planning doctrine, it is interesting to consider the different effects an established label such as the National Buffer Zone concept and a new label such as the “National Landscape” had on the protection of green metropolitan areas. The discussion on “Living in Waterland” illustrates how the established National Buffer Zone concept was more important for restricting built development than the new National Landscape concept. This suggests that paying respect to old concepts that have proved their worth in a specific area can help to protect metropolitan green areas. In this way, the idea of robust doctrine fits the concept of Slow Planning.

---

## 8.2.6 Radical change: market-coordinated spatial order

One of the reasons people have stated that planning is too slow for modern times is that planning adapts to new developments more slowly than dynamic market mechanisms. In line with the contemporary planning or market debate, as discussed in Chapter 4, Webster (2005) stressed that compared to market order, allocation by planning and political decisions responds less directly to changes in society. Unlike planning, in a perfect economic market, transactions are instant (Alexander, 2001b). The time required to come to a decision can be considered to be one of the costs of a land use decision (Buitelaar, 2007). Therefore, within the framework of the “reinventing landscape planning in MetroLand” program, replacing the existing Dutch planning system for protecting metropolitan green areas with a market-coordinated spatial order has often been discussed. This section discusses why replacing the existing Dutch institutional system with its *bestemmingsplannen* with a market-coordinated spatial order would not be a fruitful institutional change.

Skaburskis (2003) discussed the idea that pricing policies might be an effective planning tool, since they directly engage developers by making them accept the full costs of a project. For such a market-coordinated spatial order system, researchers could calculate the value of open space, a positive externality which currently plays no role in a developer’s decision to build or not to build. If a developer were forced to pay a certain amount that represents the social value of metropolitan green area for the development of green fields, he would take the societal value of open space into consideration. In this way the balance between built-up area and open space would reflect the demands in society. This institutional arrangement would supposedly respond to the demands in society more effectively and dynamically than the traditional zoning system.

Although this is an inviting idea, in practice, there are some important constraints (Skaburskis, 2003; Korthals Altes, 2008). One of the major practical problems facing such a system is calculating the value of the green assets of a specific piece of land (Korthals Altes, 2008). Within the MetroLand program, at the VU, various attempts were made to do this (Koomen, 2008; Brander & Koetse, 2007). Various types of valuation research provided information about the value people attribute to metropolitan green areas (e.g., Brander & Koetse, 2007), and these amounts can be used to compare how much different areas are appreciated. Still, the sum of these amounts does not represent the height of the externality, the societal value of the openness of a specific piece of open space, and merely charging this sum as a tax would not result in an optimal amount of green.

When investigating such a tax, it was found that if it were introduced, given price elasticity, suppliers would lower their price (Needham, 1998). In that case, such a tax would have an insignificant effect on the number of green

---

field developments. Considering Needham's (1998) findings, it could be more appropriate to base the tax on the amount that would prevent a property developer from developing his land. However, since the aim of the policy is not to prevent all built developments, a decision should be made on the areas where this amount should be high enough to prevent development and the areas where it should be lower. In that case, just as with zoning, a decision still needs to be taken on which areas should be protected and which should not be protected. In view of this, Skaburskis (2003) remarked that the problems in setting explicit prices for development are similar to the implicit trade-offs that underlie most planning decisions.

Besides, if it were possible to calculate such an amount, calculating the exact amount for a specific area each time a developer considered development would put a heavy burden on regulatory authorities; transaction costs might be high. These transaction costs would be even higher if the risks involved were considered. Skaburskis (2003) stated that the main difficulty with explicit pricing policies and with trying to rely totally on market solutions is their uncertain impact. Because of unexpected developments in all kinds of prices, there is a risk that those green areas closest to cities and most valuable for citizens will be built on. Inadequate calculation of the height of the externality and consequently the development tax might result in too many or too few built developments. Additionally, the risk involved and the need to regularly calculate the dynamic tax might lead to high transaction costs.

The risks involved would be especially high if the institutions for "market-coordinated spatial order" replaced the Dutch zoning system, including the *bestemmingsplannen*. The risk of a too high tax or an ineffective low tax makes it less likely that such a system will be introduced. It is also not clear how such a system would fit the Dutch taxation system. Finally, introducing a market-based spatial order which replaces the existing Dutch zoning system would require an institutional change that might involve high transition costs, not in the last place because of the risks involved.

The discussion about "market-coordinated spatial order" illustrates some of the reasons for not changing institutions radically. Replacing Dutch zoning regulations with a system for "market-coordinated spatial order" would be a radical change to the Dutch institutional system; there is too little experience calculating the value of the green amenities, with using this amount as a tax, and with the effect taxation can have on decisions to build or not to build on land. Considering the risks involved, the transition costs that go with the introduction of this system might be too large. Other experiments with collecting contributions from developers for green areas, such as the Bloemendalerpolder case (see Chapter 5) were based on the sophisticated Dutch land development practice. Adapting this approach is more likely to work than the type of market-coordinated spatial order discussed in this section.

---

### 8.2.7 Incremental institutional change: Midden-Delfland Act

The preceding examples might give the impression that institutional change is hardly possible. This is, however, short-sighted. This section discusses the Midden-Delfland Act to illustrate how institutional change can work.

Changes to the institutional system did take place in Midden Delfland. In fact, the Midden-Delfland Act can be seen as an example of a large institutional change. Because the area was recognized as being one of the most threatened metropolitan green areas half a century ago (WWdL, 1958, pp. 66-67, 104), central government decided to apply the National Buffer Zone policy in Midden-Delfland first. The Midden-Delfland Act (of 1977) was a pilot act on which later land consolidation legislation has been based (Zevenbergen, 1998). One of the novelties of the act was that land consolidation institutions dealt with the development of recreation areas and nature conservation instead of only agriculture. The act changed the interaction pattern in the area, thanks to the formation of the Land Consolidation Committee.

On the other hand, the new act was closely connected to the existing context. The Midden-Delfland Act was based on ideas suggested by the municipalities in the area and the province, working through the Midden-Delfland Study Foundation. Besides, the instrument for land consolidation in the act is much like regular land consolidation. The act describes the various stages of the project, intervention tools for managing it, and the rights of owners and other concerned parties. The act prescribed the formation of a Land Consolidation Committee, consisting of leading representatives of the municipalities, the province, the Farmers Union, the Midden-Delfland Countryside Union, the district water board, and the ANWB (the Dutch Automobile Association). Civil servants from the already existing Government Service for Rural Areas (*Dienst Landelijk Gebied/Bureau Beheer Landbouwgronden*: DLG/BBL) administered the project. A public recreation board was established to coordinate maintenance of the recreation areas, with representatives from the central and local governmental authorities that provide the funds. The special land consolidation instrument in the Midden-Delfland Act is an addition to the general land-use planning system, in which the “*bestemmingsplan*,” a binding municipal land-use plan, is the most important element (Thomas et al., 1983; Needham, 2007).

The Midden-Delfland Act can be seen as an example of an institutional change that worked. The act reached most of the goals that had been set (Van Rij et al., 2008). Because the Midden-Delfland Act is quite similar to existing land consolidation legislation and like all acts was made following careful procedures, it was no surprise that interviewees had no complaints about legal certainty. Despite the sometimes underestimated cost of the project, the new act had no major unintended negative outcomes and did not put the working of the legal and economic system at risk. Therefore, in general, the

---

introduction of the Midden-Delfland Act can be seen as an example of how to achieve effective institutional change.

The question can then be asked what contributes to successful institutional change. Although the act imposed some changes to existing institutions, the choice to make the Midden-Delfland Act a pilot act reduced the scope of the risks involved. The Midden-Delfland Act worked because it fit the existing institutional system. For example, the Midden-Delfland Act was quite similar to already existing land consolidation acts and contained many articles about the protection of existing property rights. The national zoning system was not affected by the act. In addition, the institutional framework incorporated existing organizations such as the Nature Conservation Union, the Farmers Union, the district water board (*Hoogheemraadschap*), DLG, and the ANWB. By fitting the existing institutional framework, the new act was able to change patterns of interaction between agents, to increase communication through the Land Consolidation Committee and to cater for options that were valuable for various participants in the coalition, such as, citizens and farmers. In this way, the Midden-Delfland Act showed how institutional change can be accomplished.

### 8.3 Conclusion

Contemporary planning institutions for metropolitan green areas have been criticized as too slow, and radical institutional change has been advocated. In contrast with that, case studies have illustrated how Slow Planning might succeed in protecting and improving metropolitan green areas. Slow Planning is a way of spatial coordination to preserve potentially high dynamic landscapes by reducing dynamics and increasing the time frame of projects. Slow Planning requires a reliable and therefore predictable institutional framework; too radical institutional change can hamper Slow Planning. Other case study examples have illustrated reasons for not changing institutions or changing them incrementally.

The case studies illustrated how Slow Planning can help to protect and improve green areas in a dynamic metropolitan context. The long duration of projects to protect and improve metropolitan green areas can contribute to their preservation. Extending project planning can be seen as a tool to reduce dynamics in highly dynamic metropolitan areas. A combination of sustainable zoning, land ownership and spatial quality are keys to metropolitan countryside preservation. Such a combined policy approach can strengthen the general public's opinion that the green character of an area will be sustained.

The old institutions used for this might provide more certainty than contemporary market-based institutions. In addition, cases studies demonstrated how established planning concepts had more impact on the protection and

---

improvement of green metropolitan areas than new ones. The idea of robust doctrine fits the concept of Slow Planning. Too radical changes to the existing institutional system can involve high transition costs, including the cost of risks. If changes to an institutional framework are made slowly and iteratively, it is more likely that these changes will fit the complex existing institutional context. In terms of path dependency, the existing context determines the possibilities for change.

With the help of insights from institutional economic theory and legal theory, we can explain how institutions work as an institutional system. Because institutions operate within a system, a change to one part of the system influences other parts of the system. Propositions to change institutions radically in order to better reach planning goals can conflict with core principles of the legal system such as the protection of property rights. When discussing these changes, it is important to recognize that insecure ownership rights might threaten the legal and economic system; investments might not be made anymore, and juridical reasoning might become meaningless. This explains why, when working on institutional change, it is important to consider context, especially the legal and economic context.

Recognizing the importance of context for improving institutions for green landscapes in metropolitan areas has consequences. Before advocating changes to institutions, their context needs to be examined. For example, though many planning theorists prefer decentralization, the positive attitude of many Dutch municipalities towards built developments, means that decentralization might threaten metropolitan green areas. To examine such a complex context requires different theories and methods from different disciplines. For example, considering Williamson's level-one institutions, the Dutch planning culture has a tradition of relying on public law tools such as *bestemmingsplannen*. This reduces the chance that market-oriented institutions can be radically introduced to the Dutch institutional system. Likewise, other basic principles such as the protection of property rights reduce possibilities for changes to planning institutions for the sake of public interest. The recognition of the importance of context can also help to explain why there might be a need for recoupling between strategic and operational planning and land development, as discussed in Chapter 7. The likelihood that institutional changes will be successfully implemented increases if new institutions fit a broader institutional and economic context and are closely linked to practice.

---

## 9 Conclusion

This project has addressed the question how various institutions for green landscapes in metropolitan areas work, which problems hamper their working, and how they can be improved. The following sub-questions were formulated as a response to the case studies:

1. What are the major developments in green areas near cities, and how are they related to institutional developments?
2. To what extent can private parties play a role in preserving green areas: the market vs. government dilemma?
3. Are network-oriented institutions or hierarchical institutions more suitable for the protection and improvement of green areas near cities?
4. Why do tensions occur between spatial planning and land development? How does this affect institutions for green landscapes in metropolitan areas?
5. Do the major developments in the landscape and their institutional context require more dynamic planning processes, and are radical institutional changes necessary?

First, this conclusion addresses these questions in relation to each other. Then, it makes some recommendations about how institutions for green landscapes in metropolitan areas can be improved in general and, more specifically, in the Netherlands. During this project, new ideas were elaborated about basing methodology on Transaction Cost Theory, and on selecting theories from the fields of planning, law and economics in general. These methodological implications will be discussed in Section 9.3.

### 9.1 What is going on?

The first aim of this project was to identify influential developments concerning institutions for green landscapes in metropolitan areas. For this purpose, I did not select specific planning concepts, policy documents, or institutions in advance. In line with Grounded Theory, a “from practice to concept” method was chosen rather than a “from concept to practice” approach. Individuals involved in landscape developments were asked what had influenced their decisions in particular and what influences developments in the landscape in general. The factors they mentioned were compared to the information provided by policy documents and legal documents. This section describes the most important developments.

#### 9.1.1 Soft Planning

This “from practice to concept” approach revealed that money flows and legal stipulations play an important role in landscape developments. Spend-

---

ing substantial amounts to purchase land and to perform contract work, and applying appropriate regulations may result in effective protection and improvement of metropolitan green areas. On the other hand, spending small amounts of money, primary on process-costs, and applying non-restrictive policies might lead to uncertain outcomes.

Though the importance of money and legal stipulations sounds self evident, in planning research, much more attention has been paid to concepts than to money flows and legal stipulations. Together with ideas about collaborative planning and the restructuring of the welfare state, at times when cut-backs, decentralization and deregulation are leading, this might result in widely supported plans having little chance to be implemented due to a lack of financial and legal resources. This can lead to what I call Soft Planning, planning with much public support for plans but little achievements in terms of physical developments. In this case, the parties who, made plans collaboratively in a network-oriented planning process are often not the same parties as the ones who are expected to execute these plans and invest in it. If these parties are not influenced by these plans, their actions are not likely to contribute to spatial quality. Considering this, planning processes require some hierarchical elements too. All in all, in order to increase the effect of planning on physical developments, it is important to consider money flows and institutions.

### 9.1.2 Preservation instead of creation

Before discussing money flows and institutions, some contemporary problems in metropolitan green areas need to be explained. One of the problems is that, compared to active changes to the landscape, such as the creation of new nature or recreational areas, preservation has received little policy attention and little funding. There are various reasons for this. First, it is harder for politicians to present their achievements in preservation to the public than it is for them to present actual changes to the landscape. Besides that, the preservation of agricultural land is often regarded as an unimportant policy goal because peoples' valuation of small-scale historic agricultural green areas has not received much attention in studies; these small-scale agricultural landscapes often fall into the general category "agricultural land," which, because statistics works with averages, is less valued than forests or nature. In addition, the threats to agricultural land are not very visible. Despite the idea that land-use plans are sufficient measures to maintain the *status quo*, negative exogenous developments can lead to landscape changes if no measures are taken to preserve it. Abandoning established policy measures that supported landscape preservation might contribute to this development.

For a variety of reasons, land-use plans are not sufficient tools to preserve metropolitan green areas. If agricultural land is owned by a party who aims to build there, this party can put pressure on a municipal government to

---

change the land-use plan. The threat is especially urgent if local governments, in charge of changing land-use plans tend to welcome new commercial and residential developments. As the emphasis is on decentralization, these local parties might receive more room to change their land-use plans and facilitate these developments. One pro-development local government can make irreversible decisions. Besides, landowners can try to force changes in the land-use plans by decreasing spatial quality on their land and asking for a change in the zoning to improve spatial quality through new built developments. If policy makers are more aware that people value small-scale agricultural land, and if they understand the threats to these lands, policy attention might shift from creation to preservation.

### 9.1.3 Recurring costs

During the case studies, I was confronted with general unawareness of the recurring costs of financing and maintaining metropolitan green areas and the consequences for the landscape of increasing costs. People assumed that if no money is spent, the traditional landscape is not maintained and nature will develop by itself. A closer look at the case study areas illustrates how, especially in metropolitan green areas, lack of maintenance might frequently lead to less attractive types of land use.

First of all, metropolitan agricultural land is owned by landowners, who invested in their land and expect a return on their investments. For them, doing nothing and letting their land turn into a nature conservation site is not a profitable option; if agricultural activities are not profitable enough, landowners will seek other ways of earning money, for example by lobbying for changes to the land-use plan, by splitting parcels, or by introducing types of land use which decrease spatial quality such as storing recreational vehicles. The current landownership situation and the value of the land make it less likely that a silent conversion from agricultural land to nature will take place.

To develop nature, it has been proposed that nature conservation unions or the government purchase land. In this case, not only the purchase costs, but also the recurring costs, especially the costs of maintaining the land, need to be considered; due to its proximity to the city, without proper maintenance and surveillance, areas might be used for dumping litter and other criminal activities which might lead to social insecurity. If that happens, the decision to build houses in these areas can easily be made. Besides, if these areas are not maintained, they will be less accessible and therefore of less recreational value to citizens. Examples of nature conservation areas showed how insufficient maintenance, especially mowing, can change the habitat which can affect the preservation of rare species. For these reasons, maintenance is an important topic when considering how institutions for green landscapes in metropolitan areas can be improved.

---

This led me consider the parties that are most likely to bear the costs of maintenance. What is their income and what are their expenditures? Governments, nature conservation unions and private parties, mostly farmers are involved in maintaining larger metropolitan green areas. For the government, maintaining recreational areas by itself is the most expensive option. Giving subsidies to nature conservation unions and private parties, such as farmers is less expensive for the government, because nature conservation unions have additional income from donations and the lottery, and these private parties have an income from agriculture. Because it is unlikely that additional income from donations will increase dramatically, it is unreasonable to expect nature conservation unions would be able to maintain all green areas with the same kind of subsidies that they currently have if all agricultural land would be converted into nature conservation sites. It is therefore important to consider the future of metropolitan farmers.

#### **9.1.4 Future of metropolitan farmers**

In the case study areas, the future of metropolitan farmers was uncertain. Because of the financial problems faced by metropolitan farmers, their long-term maintenance of metropolitan green areas is at risk. The difference between annual interest charges or rents and annual revenues, the so-called “rent-gap” is the central problem. Land prices in metropolitan green areas are high, because people believe development may be permitted in the future. In the meantime, as a consequence of environmental legislation and difficult conditions for agricultural production in small-scale congested landscapes, agricultural revenues are low and consequently the land price which farmers can afford to pay. Because of this rent-gap, farm enlargement and succession becomes prohibitively expensive in metropolitan areas. These problems manifest themselves in the long term and are not very visible in the landscape. Nevertheless, the introduction of messy types of land use, such as the storage of recreational vehicles, and limited investment in maintaining the land can be seen as a sign of these problems. Consequentially, the effects of institutions on the maintenance of the landscape and on land ownership are important research topics.

Because of the weakening economic position of metropolitan farmers, new activities and types of land use have been proposed such as the conversion of farms into houses, and farm-care and recreation services. These services can be provided by farmers or newcomers. Although these new services can provide important extra income for farmers, coupling these new sources of income to the maintenance of the landscape is difficult. The new activities take place at the farmhouses, points in the landscape where money is earned. The maintenance of the surrounding “planes”, the meadows, is still costly. Although attractive planes, the beautiful meadows, are important ingredients

---

for the services provided at the points, in practice, forcing the activities at a point to support the maintenance of a plane is a problem. For example, there is a risk that farmers only provide their recreational services and stop their farming activities. Given this “point and plane-problem,” it is important to pay particular attention to the maintenance of the planes, when considering how to improve institutions for green landscapes in metropolitan areas.

### **9.1.5 Cross-subsidy strategies**

The difficulty of combining costly and profitable types of land-uses is also an important issue if attempts are made to claim property profits for the development and maintenance of regional metropolitan green areas. Such an approach can only be successful if the development of the property can create a “plus value” and if this “plus value” is large enough to buy, develop and maintain the green areas for a long time. However, this is not often the case. Only under special circumstances can this approach work, for example when public parties own land in the area, or when building has long been out of the question. In addition, authoritative and experienced public parties are necessary for the approach to work.

There might be reasons not to apply a cross-subsidy approach. The large number of public and private parties involved can make the process too complex. In many cases, the investments in green areas cannot counterbalance the loss of green areas due to built developments. Conflicts can emerge between the ideals of collaborative planning, such as inclusiveness and transparency, and the closedness that is needed to make an agreement between public and private parties about their contribution to the green areas. In addition, cross-subsidy concepts can have an effect on land prices, and they can be misused to make the public initially enthusiastic about a combination of green and built developments, whereas ultimately only built developments are implemented. Therefore, although cross-subsidy approaches can contribute to improving green areas, before relying on such an approach, it is important to consider their disadvantages and limitations.

### **9.1.6 Model for green area protection and improvement**

Institutions have long been used to influence developments in the metropolitan rural landscape. To improve institutions for green landscapes in metropolitan areas, it is important to consider how these established institutions have worked in the past, and what might happen if they are changed. To provide insight into this, I have developed a model for ways to influence the protection and improvement of metropolitan green areas, based on the case studies. The ways to do this are categorized into supporting spatial quality, zoning and modifying land ownership.

---

Improving spatial quality by implementing physical measures and maintaining the land is not only an end in itself; it is also a means of mobilizing public support. The protection of metropolitan green areas requires this support, especially at times when adjustments to land-use plans are being considered. Physical measures that make areas more suitable for recreation may strengthen public support. When spatial quality is low, protective green land-use plans are more likely to be changed to allow constructions.

Zoning is a classical tool planners use to influence spatial developments. Strategic plans can play a key role in making resources available. Land-use plans can be used to prohibit profitable but, unwanted types of land use such as the construction of dwellings. If the market expects the zoning to be durable, zoning will also keep land prices low. Without such low prices, land will be unaffordable for agricultural purposes, and continued agrarian land use will often be impossible.

The ownership situation is important to protect and improve metropolitan green areas, because it not only affects current land use, but it also influences land use in the future. Once land has been sold to property developers, they might exert pressure on the government to change land-use plans. Because of this, the financial position of the parties who maintain and own the land, in particular farmers, is important if we are to improve institutions for green landscapes in metropolitan areas.

A combination of measures influencing zoning, the land ownership situation, and spatial quality might not only increase people's trust in the success of a policy program, it might also contribute to a more durable outcome. This is because the various ways of influencing the protection and improvement of metropolitan green areas have different time frames. Such a combined approach requires substantial expenditure. In general this requires governmental budgets. The model supports the idea that negative exogenous developments regarding ownership and spatial quality mean that the ration between built-up and green in metropolitan areas is at risk, unless appropriate measures are taken.

### **9.1.7 The restructuring of the welfare state**

The restructuring of the welfare state, with processes of decentralization, privatization and deregulation, is changing established institutions. This might affect the landscape.

Decentralization might influence the reduction of metropolitan green areas in two ways; decentralizing government might allow local governments to change their land-use plans to allow constructions, and decentralizing tasks might mean reduced budgets for these tasks. When local governments favor new built developments, decentralization can reduce the influence of restrictive central policy plans. In addition, small rural municipalities, in particular,

---

might lack the resources (budgets and staff) to protect and improve metropolitan green areas. They are also not in the position to create new legislation to support their task. Furthermore, if tasks, such as the development of green areas, are decentralized, there is the risk that central government will lose its interest for such issues, and there is also the risk that the budgets necessary for these tasks will not be made available to the local governments. Besides, since green areas and areas being developed often lie in different municipalities, it may be difficult to coordinate their efforts and budgets. For these reasons, unbridled decentralization can threaten metropolitan green areas.

The move towards a less dominant government and more privatization have been motivated in two, sometimes conflicting, ways: on the one hand, ideas on collaborative planning argue the public should have a larger say in planning processes; and on the other hand, retrenchment policy argues that money should come from the market rather than from government. Both of these motivations can cause central governments to reduce their budgets for green areas. If this occurs, it is less likely that costly policy programs will be started to acquire land, to implement physical measures, and to reallocate land. The move to privatize reveals one of the problems of Soft Planning: the government withdraws and spatial quality is left in the hands of private parties. If these private parties are property developers, this might open the door for built developments, and if these private parties are ordinary citizens, it is likely that planning decisions will be made to protect and improve green areas. However, it is not likely that financial contribution by these ordinary people will be large enough to replace former governmental budgets for green area protection and improvement. Instead of deregulation, privatization requires regulation to make property developers compensate the loss of spatial quality.

Deregulation can also lead to more built developments; deregulation of restrictive land-use plans might create opportunities for new constructions. When policies are less restrictive and future policies are less certain, land prices in metropolitan green areas might increase and the chances for farmers to own land might be reduced. In this way, deregulation might threaten metropolitan green areas.

### **9.1.8 Slow Planning and incremental institutional change**

In view of today's dynamic society and the current popularity of dynamic market mechanisms, Slow Planning processes have been widely criticized. In contrast to this, the case studies illustrated how a dynamic term such as "vitality" can be used to create possibilities for new built developments and how Slow Planning can help to preserve green areas in a dynamic metropolitan context. Slow Planning is defined as a way of spatial coordination to preserve

---

potentially high dynamic landscapes by reducing dynamics and increasing the time frame of projects. A longer project time frame can contribute to successful protection and improvement of metropolitan green areas. This Slow Planning approach might give the impression that doing nothing is the best way to preserve metropolitan green areas, but this is not necessarily the case. Considering the negative exogenous developments, that were discussed earlier, a Slow Planning approach that aims to protect and improve metropolitan green areas requires adequate institutions. A combination of institutions dealing with durable zoning, land ownership and spatial quality used in a long-term project is a key to metropolitan green area preservation.

The idea of robust doctrine and incremental institutional change fits the concept of Slow Planning. Because institutions operate within an institutional system, too radical changes can involve high transition costs, with potentially costly risks. If radical changes which affect private property rights are made for the sake of spatial quality, one of the core principles of the legal and economic system might be affected too much. This can threaten the general economy and the rule of law; people will not invest if property rights are uncertain. Because institutions are interdependent, it is important to consider context when trying to improve institutions for green landscapes in metropolitan areas. If changes to an institutional framework are made incrementally, it is more likely that these changes will fit the complex existing institutional context.

### **9.1.9 Spatial planning and land development**

It is important to understand the coupling and decoupling of strategic spatial planning, operational spatial planning and land development because it helps to explain why the importance of hierarchical elements in planning and budgets for planning measures might have been underestimated, why the restructuring of the welfare state means that coordination mechanisms need to be reconsidered, and why certain institutional changes are more likely to be implemented successfully.

Spatial planning is said to work by providing information. How do parties base their activities on this information? For many parties, this information can provide useful knowledge on future possibilities. Other reasons to act in accordance with this information differ for strategic spatial planning, operational spatial planning and land development. In the case of strategic spatial planning, the coordinated sector departments base their actions on the information provided by the strategic plans, because they have been involved negotiating these plans, they belong to the same entity and they need these plans to allocate land for their activities. In the case of operational spatial planning, private parties act in accordance with a land-use plan, partly because there is a notion that planning benefits land owners in general, but also

---

because regulation forces them to base their actions on the information provided by the plan. This is particularly relevant when plans restrict profitable built developments. This is even more important in the case of land development institutions, such as with compulsory purchase, where a budget may be required for compensation or persuasion of people to adjust their land use.

Understanding the distinction between strategic spatial planning, operational spatial planning and land development helps to explain why hierarchical elements in planning and budgets for planning measures can be important. On an operational level, since private parties do not always base their actions voluntarily on the information provided by plans, hierarchical elements, such as regulations might be needed to make them take certain actions. In those cases, or when agreements have been made about restricting certain types of land use, budgets might be required to compensate for disproportionate individual burdens.

This also urges us to consider the consequences of the restructuring of the welfare state on coordination mechanisms used in spatial planning. Strategic spatial planning becomes effective by coordinating sector departments. As decentralization, deregulation and privatization, has lessened the ability of these sector departments to implement plans, the traditional motivation for parties to base their activities on the information provided by strategic spatial planning is also lessened. At present, planners are attempting to use different coordination mechanisms, using operational rationalities rather than a strategic rationalities.

On the level of institutional change, attempts have recently been made to combine spatial planning and land development institutions. When this is done, tension may occur between spatial planning rationalities, which use criteria such as spatial quality, and land development rationalities, which use criteria such as efficiency. These two rationalities view the tensions between public interest and private property rights differently. Since land development legislation may directly infringe on certain private property rights disproportionately to the rights of other citizens, it contains many stipulations to protect private property rights against the power of the state. On the other hand, such stipulations are often less dominant in spatial planning, since spatial planning is considered to benefit land owners in general, and these land owners also have to bear burdens from others if there were no spatial planning legislation. In the case of spatial planning, stipulations on compensation frequently only apply when there is a disproportionate burden. Using spatial planning rationalities when trying to change land development institutions might meet difficulties in parliament or in the courts, for example in the case of a conflict with the European Convention on Human Rights that protects property rights. The likeliness that institutional changes will be implemented successfully increases if new institutions fit existing spatial planning and land development rationalities.

---

## 9.2 Recommendations for practice

How can the knowledge gained from this project be used to improve institutions for green landscapes in metropolitan areas? First, this section makes some general suggestions: be careful about replacing old institutional approaches with more fashionable ones, couple strategic and operational spatial planning and land development, combine zoning with physical measures and changes to the land ownership situation. Then, this section makes some recommendations for the Dutch situation in particular: distinguish cultural historic recreational areas, agricultural production areas and mixed areas, and apply different institutions to each area.

### 9.2.1 General recommendations

In theory, the internalization of landscape values can take place in two ways. First, the amount of green areas can be planned, and different strategies can be used to influence the protection and improvement of these green areas. Second, taxing on building on green areas based on peoples' valuation of green areas, the decision whether or not to build on land can theoretically be regulated by market forces. This second approach would imply radical institutional change. Because of the many practical restraints associated with accurate valuation of green areas, as well as the problems associated with radical institutional change such as high transaction and transition costs, such institutional changes are not proposed here. Therefore, only the first way, has been examined further.

This project started with the assumption that it would be efficient to protect and improve certain amounts of green areas. At the start of the project, institutions for improving green areas seemed to be more interesting and more urgent than institutions for protecting existing green areas. However, it rapidly became clear that protecting is the main challenge in metropolitan areas. Therefore, most of the institutions recommended aim at protection.

The protection and improvement of metropolitan green areas involve strategic and operational spatial planning and land development. Though there are good reasons to separate these activities, such as legitimate decision making and improving skills due to specialization, in general, protecting and improving metropolitan green areas requires that (1) operational spatial planners and land developers consider the added value of inspiring visions and plans, and that (2) strategic spatial planners consider the difficulties faced at the operational level. A better coupling can be accomplished by asking: "How does a specific type of plan influence spatial quality? Which parties, institutions and resources are influenced by the plan and why are they influenced?" Since it is fair to presume that parties act in their own interest, when parties pursue developments in accordance with a plan, they must have a reason

for doing so. (1) Plans may provide useful information. (2) Parties can see collaborative plans as their own plan. (3) Parties have a financial (or other) interest in the planned types of land use. (4) Binding regulations or agreements force them to act or not to act in a certain way. (5) Agreements between government departments and their relations make departments act according to plans, and their policy influences private parties. (6) The government implements plans on its own land. Considering these reasons and how they influence peoples' decisions can help when choosing a specific coordination mechanism.

This knowledge can be used to make planning more effective. Since no money can be earned from developing green areas, people will not generally voluntarily choose not to build on their land. The same may hold for local governments, if they have reasons to favor built developments. Therefore, the protection and improvement of metropolitan green areas might require financial and legal measures and the involvement of central government. A combination of physical measures, zoning measures and measures to change the ownership situation might provide a solid basis for green area preservation. Although modern market-oriented institutions might serve certain policy aims, considering the earlier mentioned ingredients for successful green area protection, these institutions might not protect and improve metropolitan green areas as successfully as old institutions, such as restrictive policy and land consolidation. Using landownership by the state to influence spatial quality is another example of a currently unpopular institution that has proven its use for metropolitan green area protection and improvement.

### 9.2.2 Specific recommendations

Although these specific recommendations emphasize the Dutch institutional framework, there are many similar characteristics in other countries, so these recommendations might inspire institutional change elsewhere. More detailed recommendations for the Dutch context can be found in Van Rij and Korthals Altes (2007a and 2007b).

Considering the general recommendations, the question can be asked whether, in order to improve Dutch institutions, contemporary institutions might simply need to be replaced by the traditional Dutch institutions that are currently being abandoned? To a certain extent this might be the case, because traditional ways of supporting farmers through land consolidation can be very helpful to revitalize metropolitan green areas. The Dutch Government Service for Rural Areas' (*Dienst Landelijk Gebied/Bureau Beheer Landbouwgronden*: DLG/BBL) land bank for rural areas, together with land reallocation, land consolidation and leasing out plots to farmers, can help to revitalize metropolitan farmers. Established binding zoning policy can prevent construction and can help to keep land prices low.

Although the value of traditional planning institutions should not be underestimated, the current Dutch context also requires new institutions. Former rural policy aimed at improving conditions for all Dutch farmers. This egalitarian approach needs to be revised for various reasons. First, the social role of agricultural areas varies. Agricultural areas near cities are primarily used for recreation, to enjoy the historic landscape, the rural idyll and nature, whereas more remote agricultural areas are primarily used for agricultural production. Second, subsidizing all Dutch farmers does not fit the general policy goal of reducing government expenditure. Third, EU policy prohibits state aid for agriculture as such. Fourth, green types of land use are not the only claim on metropolitan areas; land is also needed for construction. This urged me to make a distinction between three types of rural areas: (1) cultural-historic recreational areas, (2) mixed areas, and (3) agricultural production areas.

#### **Cultural-historic recreational areas**

The main function of cultural-historic recreational areas is recreation, to give city dwellers the opportunity to enjoy nice green areas. The appearance of these areas is determined by the cultural-historic landscapes, which consist of peat polders with ditches, windmills and attractive cultural-historical villages. Farmers play a crucial role as land owners and maintainers of this landscape. These are the landscapes city dwellers visit on their bikes and show their children. Most of this land is maintained by medium sized dairy farms of about 30 to 60 hectares. The specific landscape provides a habitat for rare species. With its small parcels, high water-levels and small-scale infrastructure, the landscape puts restraints on agricultural production. Because of the proximity of the city, land prices are high. The recreational value, the nature conservation value and the cultural historic value all depend on the farmers maintaining the landscape. Basically, these are the most valued and most threatened rural areas.

#### **Agricultural production areas**

The main aim of agricultural production areas is to provide agricultural products. Because they are in non-metropolitan areas, away from the cities, land prices are based on agricultural production. Farmers using these lands compete in a global economy. In general, the landscape is adjusted to create optimal circumstances for agricultural production, land prices are based on agricultural revenues and farm enlargement continues to take place.

#### **Mixed areas**

The mixed areas combine characteristics of the other areas, though they are less clear in these. Urban influences can be felt with land prices higher than in pure agricultural production areas. The mixed areas are not as attractive as the cultural-historic recreational areas and they therefore attract fewer visitors.

---

---

### Policy for agricultural production areas

Due to their different functions and characteristics, the different types of areas require different policy approaches. In the agricultural production areas, market forces are dominant; farmers organize their business in such a way that they can compete globally. If they are not able to do so, their farm will be bought by other farmers and farm enlargement takes place. The role of the government is rather limited. With respect to spatial planning, a restrictive planning policy may be needed to obstruct urban influences. Besides that, these areas are the object of pure agricultural policy, which is not the subject of this dissertation.

### Policy for cultural-historic recreational areas

Since cultural-historic recreational areas are the most threatened and most valued areas. Their maintenance and preservation requires a distinguished combination of institutions. Because the cultural-historic appearance is one of the core values of these areas, policy for these areas might aim at preservation instead of development. In order to develop these areas' full recreational potential, recreational developments that fit the context might be supported. Because maintenance by farmers is the most efficient way to maintain these landscapes, policy might aim at keeping farmers in the area. Using the model presented in Chapter 2, the following measures can be taken:

- **Zoning:** To make it clear that construction in these areas is out of the question, Slow Planning is required. This means that policy at all levels of government makes it clear that no construction will be allowed in the future, not even using cross-subsidy strategies. If the procedures to change these zones are complicated and time consuming and if they are carefully enforced, they are more likely to be effective. A special act including long-term planning processes and hearings before specific committees could contribute to this.
  - **Landownership:** A land bank that buys land at market prices and leases out land at prices based on agricultural production could help farm-enlargement and farm-succession in these areas. To facilitate these land banks, a pre-emption right might be considered. Land-reallocation might also help to create a durable ownership situation. In addition, a parceling subdivision permit can prevent land being purchased by city dwellers. This can prevent messy types of land use by these city dwellers and support the presence of farmers in the landscape.
  - **Spatial quality:** Peoples' valuation of these areas supports measures to protect these areas. Therefore, it is important that the landscape is accessible and attractive. The government can take measures to make the landscape more accessible. It can require that the attractiveness of the landscape be taken into consideration when decisions are made that might affect the landscape.
-

- Economic position of the guardians of the landscape: To support the guardians of the landscape, whether farmers or nature conservation unions, the government can provide subsidies for nature conservation, cultural-historic preservation, and recreational services. Transaction Cost Theory can be used to make these subsidy strategies more efficient.
- Available government budgets: All these measures require sufficient government budgets. To properly disburse these budgets, distinctions must be made between areas and money only needs to be provided for those areas that are valued most and that need it most. A distinction between areas can also help to explain why state aid for farmers in cultural-historic recreational areas does not conflict with EU state aid policy. Because these farmers face specific restraints due to the landscape characteristics and the urban proximity, reduced ground rents and subsidies do not necessarily imply unfair competition, since the farmers are only compensated for dealing with these restraints and paid for their work as providers of cultural historic recreational areas.

#### **Policy for mixed areas**

Because of their mixed character, policy for mixed areas may vary. Some of these areas will be needed for construction. In other areas, a cross-subsidy approach might be applied to combine an increase of spatial quality in green areas with the development of houses. Other parts of mixed areas will continue to be used for agriculture. In order to make cross-subsidy strategies possible, restrictive land-use plans are needed in these areas too. Especially for these areas, it is particularly important to monitor the working of the new Dutch Land Servicing Act.

#### **Deregulation and decentralization**

As has been explained, decentralization and deregulation can affect institutions for green landscapes in metropolitan areas. The way provinces carry out their new tasks with respect to zoning, subsidies and green area projects will influence changes in the metropolitan landscape to a large extent. To influence municipal *bestemmingsplannen*, provinces might use their power to make ordinances. It is not yet clear whether provinces used this power, and whether they will use this power in the future. It is also not yet clear whether the province will decide to take measures that have an effect on the ownership situation and spatial quality, or whether the decentralized budgets are large enough to do this. One way to obtain an overview of this process would be for central government to monitor the use of institutions by the provinces.

---

## 9.3 Methodological implications

Studying institutions for green landscapes in metropolitan areas required a methodology that could deal both with institutions used in market and government settings, that considered economic aspects and the complex context in which these institutions become effective. At first sight, Transaction Cost Theory seemed appropriate for this. However, after attempting to apply this theory as an institutional design tool, it turned out that this theory did not provide a sufficient basis for a methodology to benchmark institutions for green landscapes in metropolitan areas in detail. Instead, because of the complexity of the research theme and the case study settings, a multi-theory approach was chosen. Ideas from Grounded Theory helped to set up such a multi-theory methodology. This section starts by discussing the application of Transaction Cost Theory as an institutional design tool. Then, it discusses how a methodology can be developed that takes the complexity of the topic as a starting point.

### 9.3.1 Exploring a transaction cost methodology

To try to apply Transaction Cost Theory as a tool-box for institutional design three experimental approaches were taken: (1) the relation of transaction attributes and specific institutional arrangements was investigated; (2) models were made to explain the working of specific institutions, such as land-use plans, in a transaction costs framework, and then these models were used to compare institutions; and (3) the transaction costs of a project were identified using financial reports and estimates made during interviews.

The first approach demonstrated how Transaction Cost Theory and its ideas about the relation between certain transaction attributes and the efficiency of institutions can provide useful information about the role of government in planning in general and about the efficiency of different subsidy strategies in particular. This approach is however only useful when similar transactions are being compared.

The second approach consists of modeling institutions in a transaction cost framework; this provided some interesting insights into transaction cost reasoning in planning theory. The transactions which planning institutions facilitate take place on both a strategic and an operational level. On both levels, planning is thought to become effective through the provision of information. Although this might give the impression that people act in accordance with plans voluntarily, this is often not true on the operational level. To provide legal certainty, land-use plans may be needed to make parties act in accordance with the information that is provided, whereas on a strategic level, more voluntary types of coordination may be effective.

Analyzing transactions on the operational level led to the idea that plan-

---

ning is more than a tool to lower transaction cost between private parties in a market: the aim of planning is also to internalize non-traded externalities, such as the values of metropolitan green areas. It is important to distinguish between these two roles of planning because if planning is only seen as a tool to reduce transaction costs in a market, planning is considered to be in the general interest of all land owners; however, if planning is used to provide non-traded goods to the public too, it helps to understand why this might require binding regulations and budgets for compensation. This also requires more attention for stipulations to protect the property rights of those who are forced to provide these goods.

This distinction is also relevant when discussing how to reduce the costs borne by government, the organizational costs. If planning institutions are used to reduce transaction costs between private parties in a market, it might be efficient to spend government money to reduce these transaction costs. Consequentially, more transactions take place and goods will be allocated more efficiently.

However, if planning is used to internalize non-traded externalities, just as a firm's "make or buy decision", government can decide to take care of the provision of a good by itself. In that case, organizational costs can be seen as transaction costs. It has been advocated that these organizational costs should be reduced just like transaction costs in a market. Downsizing organization costs, however, will lead to downsizing the government, in which case, fewer transactions will take place. To counterbalance this, it has been proposed that transaction benefits should also be considered. Applying such an analysis on a project level can take the form of a cost-benefit analysis that includes organization costs.

The third approach attempted to apply such an analysis by evaluating transaction costs of a project using financial reports and estimates made during interviews, thus comparing organizational costs on a project level. Because the projects studied were too dissimilar, this comparison only resulted in the statement that far more money was spent on the successful green area preservation in Midden-Delfland than was spent in Laag Holland. Because of the complexity of institutional systems, transaction costs could not be compared between specific transactions related to specific institutions.

### 9.3.2 Multi-theory approach

Because of the limited applicability of Transaction Cost Theory as a method, and since it could not provide a benchmark tool for improving institutions for green landscapes in metropolitan areas, and because the idea of poly-rationality demands the use of different criteria such as efficiency, spatial quality and legitimacy, a multi-theory approach was chosen for this project. Ideas from the field of Grounded Theory as described by Glaser (1992) helped to se-

---

lect theories. This meant that the case studies preceded the selection of the theories and that theory and methodology were selected and formulated as a response to the case studies. This resulted in a selection of theories from the fields of law, policy analysis, planning and economics that were able to address the main topics regarding institutions for internalizing landscape values.

This way of selecting theories is especially useful for the set up of research in the fields of planning, law and economics. Because planning institutions operate in complex systems, in which many parties, developments and institutions play a role, there is often a tension between general abstract theories and complex contexts. Theories are often built on the idea that a prediction, or a statement about causal or logical connections can be made under the condition that all other things are equal. In complex systems, such as in the fields of planning, law and economics, such an approach is generally not usable. Because many factors interfere and society judges institutions on many different criteria, this type of research requires a multi-theory framework. The more complex and practical the research subject is, the more theories might be needed. To make this kind of research operational, it is useful, first, to specify the object of research, the cases, and then, to select theories on the basis of the case-study data.

With respect to theory and methodology, this research project showed that it is important that future research couples spatial planning research with research on operational land development and the associated financial and legal issues. A case-based methodology could be helpful to conduct this type of research. This dissertation has also made a step towards embedding legal research in a broader institutional research framework. It has shown how legal theory can be combined with geographic and economic research traditions. However, more research will be needed to make legal theory, which is often hidden in centuries-old traditions, accessible and compatible to other research disciplines such as planning theory.

---



---

# References

Abercrombie, P. (1910). Vienna, **The Town Planning Review**, 1, pp. 220-234, 279-293.

Adams, D. (2005). Commentary and discussion, Taking your institutional choice, **Town Planning Review**, 76 (4), pp. 485-487.

Albrechts, L. (2006). Bridge the Gap: From Spatial Planning to Strategic Projects, **European Planning Studies**, 14 (10), pp. 1487-1500.

Alexander, E.R. (2001a). A transaction-cost theory of land use planning and development control. Toward the institutional analyses of public planning, **Town Planning Review**, 72, pp. 45-75.

Alexander, E.R. (2001b). Governance and transaction costs in planning systems: a conceptual framework for institutional analysis of land-use planning and development control-the case of Israel, **Environment and Planning B: Planning and Design**, 28, pp. 755-776.

Alexander, E.R. (2004). **Planning and institutional transformation: cases and problems in institutional design**, AESOP XVI congress in Grenoble 2004.

Alkema, E.A. (2000). **The concept of property, in particular in the European Convention on Human Rights**, in: J.P. Loof, H. Ploeger & A. van der Steur (Eds.) **The Right to Property**, Maastricht: Shaker Publishing, pp. 17-28.

Alterman, R. (1997). The challenge of farmland preservation, lessons from a six-nation comparison, **Journal of the American planning association**, 63 (2), pp. 220-243.

Alterman, R. (2005). **Should the “plus value” of planning decisions be reaped for the public purse, and how? A cross-national view**, invited lecture at Delft University, 13 December 2005.

Bannon, M. & Cassidy, A. (2000). **Spectra report, sustainability, development and spatial planning, case studies rural 2: areas under metropolitan influence, Synthesis report**. Bristol: Spectra.

Bengston, D.N., Fletcher, J.O. & Nelson, K.C. (2004). Public policies for managing urban growth and protecting open space: policy instruments and lessons learned in the United States, **Landscape and Urban Planning**, 69 (2-3), pp. 271-286.

---

Bervaes, J.C.A.M., Kuindersma, W. & Onderstal, J. (2001). **Rijksbufferzones, verleden, heden en toekomst**, Alterra-rapport 360. Wageningen: Alterra.

Boersma, W.T. & Kuiper, R. (2006). **Verrommeling in beeld Kaartbeelden van storende elementen in het Nederlandse landschap** (Focus on cluttering, Mapping disturbing elements in the Dutch landscape). Bilthoven: Milieu- en Natuurplanbureau.

Boonstra, W.J. (2006). Policies in the Polder: How Institutions Mediate between Norms and Practices of Rural Governance, *Sociologia Ruralis*, 46 (4), pp. 299-317.

Borsboom-van Beurden, J.A.M., Boersma, W.T., Bouwman, A.A., Crommentuijn, L.E.M., Dekkers, J.E.C. & Koomen, E. (2005). **Ruimtelijke Beelden - Visualisatie van een veranderd Nederland in 2030**, RIVM rapport, 550016003. Bilthoven: RIVM.

Brander, L.M. & Koetse, M.J. (2007). **The Value of Urban Open Space: Meta-Analyses of Contingent Valuation and Hedonic Pricing Results**, IVM Working Paper I07-03, Amsterdam: Vrije Universiteit.

Brenner, N. (1999). Globalisation as Reterritorialisation: The Re-scaling of Urban Governance in the European Union, *Urban Studies*, 36, pp. 431-451.

Brody, S.D., Highfield, W.E. & Thornton, S. (2006). Planning at the urban fringe: an examination of the factors influencing nonconforming development patterns in southern Florida, *Environment and Planning B: Planning and Design*, 33, pp. 75-96.

Brusse, W.A., Van Dalen, H. & Wissink, B. (2002). **Stad en land in een nieuwe geografie. Maatschappelijke veranderingen en ruimtelijke dynamiek**. WRR, De Haag: Sdu Uitgevers.

Buchanan, J. (1965). An economic theory of clubs, *Economica*, 32 februari, pp. 1-14.

Buitelaar, E. (2003). **How to co-ordinate changes in land use? A performance analysis of user rights regimes in the Netherlands and England**, paper presented at the AESOP-ACSP congress Leuven 8-12 July 2003.

Buitelaar, E. (2004). A transaction-cost analysis of the land development process, *Urban Studies*, 41 (13), pp. 2539-2553.

---

Buitelaar, E. (2007). **The costs of land use decisions, applying transaction cost economics to planning & development**, dissertation Radboud Universiteit Nijmegen. Oxford: Blackwell Publishing.

Buitelaar, E., Lagendijk, A. & Jacobs, W. (2007). A theory of institutional change: illustrated by Dutch city-provinces and Dutch land policy, *Environment and Planning A*, 39, pp. 891-908.

Carmona, M. & Gallent, N. (2004). Planning and house building: A step change from the bottom up?, *Town Planning Review*, 75, pp. 95-122.

CBS (2006). **StatLine:Landbouwtellingopnationaalniveau**. Voorburg/Heerlen: CBS.

Challen, R. (2000). **Institutions, Transaction Costs and Policy, Institutional Reform for Water Resources**. Cheltenham: Edward Elgar.

Cheshire, P. & Sheppard, S. (2004). Land markets and land market regulation: progress towards understanding, *Regional Science and Urban Economics*, 34, pp. 619-637.

Coase, R.H. (1960). The problem of social cost, *Journal of law and economics*, 3, pp. 1-44.

Cotteleer, G., Luijt, J., Kuhlman, J.W. & Gardebroek K.G. (2007). **Oorzaken van verschillen in grondprijzen, een hedonische prijsanalyse van de agrarische grondmarkt**, Wettelijke Onderzoekstaken Natuur & Milieu rapporten 41. Wageningen: Wageningen Universiteit en Lei.

Crommentuijn, L.E.M., Farjon, J.M.J., Den Dekker, C., & Van der Wulp, N. (2007). **Belevingswaardenmonitor Nota Ruimte 2006, Nulmeting landschap en groen in en om de stad**. Bilthoven: MNP.

Dammers, E. & Keiner, M. (2006). Rural Development in Europe; Trends, Challenges and Prospects for the Future, *disP*, 166 (3), pp. 5-15.

Davy, D. (2007). **Plan it without a condom!**, presented at AESOP congress, Napoli, Italy, 11-14 July 2007. Retrieved from <http://www.aesop2007napoli.it/index-1.html>.

Dawkins, C. J. (2000). Transaction Costs and the Land Use Planning Process, *Journal of Planning Literature*, 14 (4), pp. 507-518.

---

De Bont, C.J.A.M., Helming, J.F.M. & Jager, J.H. (2003). **Hervorming Gemeenschappelijk Landbouwbeleid 2003: gevolgen van de besluiten voor de Nederlandse landbouw**. Den Haag: LEI.

De Bruijn, J.A. & Van der Voort, H.G. (2000). **Publiek-private samenwerking bij wetenschappelijk onderzoek: een kader voor evaluatie**. Zoetermeer.

De Bruijn, J.A. & Ten Heuvelhof, E.F. (2000). **Networks and Decision Making**. Utrecht: Lemma.

De Graaff, B. & Kurstjens, P. (2002). **Werkfilosofie Publiek Private Samenwerking in het landelijk gebied, Functies voor partijen voor partijen**. Utrecht: PPS-bureau landelijk gebied.

De Haan, P., Drupsteen, Th.G., Fernhout, R. (1986). **Bestuursrecht in de sociale rechtstaat, Deel 1, Ontwikkeling, Organisatie, Instrumentarium**. Deventer: Kluwer.

De Haan, P. & Fernhout, R. (1981). **Wetgeving, planning en financiering; Instrumenten van overheidsbeleid**. Deventer: Kluwer.

De Jong, M. (1999). **Institutional Transplantation, How to adopt good transport infrastructure decision-making ideas from other countries?**, dissertation, TU Delft. Delft: Eburon.

Den Drijver-Van Rijckevorsel, J.E.F.M., De Koe, M., Overwater, P.S.A. & Van Rooijen, R.W.M. (2007). **Rapport betreffende de te hanteren waardegrondslag voor de aankoop van agrarische grond voor de realisatie van het project groen-blauwe zone OostvaardersWold d.d. 4 september 2007**, Lelystad: Provincie Flevoland. Retrieved from [http://provincie.flevoland.nl/omgevingsplan/oostvaarderswold\\_2/adviesrapport\\_onderzoek\\_c/Waardegrondslag%20agr.grond%20OVW.pdf](http://provincie.flevoland.nl/omgevingsplan/oostvaarderswold_2/adviesrapport_onderzoek_c/Waardegrondslag%20agr.grond%20OVW.pdf).

De Vries, S. & De Regt, W. (2004). **Het recreatieve belang van regioparken voor de toekomst, confrontatie van de vraag naar en het aanbod van recreatiemogelijkheden voor de regio's Rotterdam en Haaglanden**, Alterra-rapport 958. Wageningen: Alterra.

De Wolff, H.W. (2007). **The new Dutch Land development Act as a tool for value capturing**, ENHR 2007 International Conference 'Sustainable Urban Areas', 25-28 June, Rotterdam.

---

De Wolff, H.W., De Greef, J.H., Korthals Altes, W.K. & Spaans, M. (2004). **Financiering van regionale ontwikkelingen uit de grondexploitatie; eindrapport**. Den Haag: Ministerie van VROM.

De Wolff, H.W., De Greef, J.H., Groetelaers, D.A. & Korthals Altes, W.K. (2006). **Regionaal kostenverhaal bij gebiedsontwikkeling. Een analyse van overgangen binnen praktijkprojecten in het perspectief van de grondexploitatie-wet**. Delft: Onderzoeksinstituut OTB.

De Zeeuw, F. (2007). **De engel uit het marmer, reflecties op gebiedsontwikkeling**. Delft: TU Delft.

Didde, R. (2007). Knabbelen aan Waterland, **Binnenlands Bestuur**, 8 juni, pp. 8-11.

Dienst Regelingen (2006). **Uitvoeringsrapportage 2000-2005 Subsidieregeling Agrarisch Natuurbeheer (SAN) en Subsidieregeling Natuurbeheer (SN), Beleidssignalen**. Den Haag: Dienst Regelingen.

DLG (2006). **Grondprijsmonitor 2005, recente ontwikkelingen in de agrarische grondmarkt**. Utrecht: DLG.

DLG (2007). **Bureau Beheer Landbouwgronden, jaarverslag 2006, Rekening & Verantwoording**. Utrecht: DLG.

Dutch Lower Chamber (1955-1956). (TK 1955-1956, 4233, nr. 3).

Dutch Lower Chamber (1970-1971). (TK 1970-1971, 10914).

Dutch Lower Chamber (1980-1981). (TK 1980-1981, 16492 nr. 2, **Decentralisatienota**).

Dutch Lower Chamber (2004-2005) (TK 2004-2005, 29 435, nr. 154).

Dutch Lower Chamber (2005-2006a). (TK 2005-2006, 818).

Dutch Lower Chamber (2005-2006b). (TK 2005-2006, 27 581, nr. 26).

Dutch Lower Chamber (2005-2006c). (TK 2005-2006, 27 582, nr. 27).

Dutch Lower Chamber (2005-2006d). (TK 2005-2006, 27 582, nr. 52).

---

Dutch Lower Chamber (2005-2006e). (TK 2005-2006, 2060714690 questions Duyvendak).

Dutch Lower Chamber (2006-2007a). (TK 2006-2007, 1764).

Dutch Lower Chamber (2006-2007b). (TK 2006-2007, 29 435, nr. 193, letter from the minister of VROM about the governance philosophy of the New memorandum on spatial planning).

Dutch Lower Chamber (2006-2007c). (TK 2006-2007, 29 435, nr. 195 motie-Duyvendak c.s. over het voorkomen van verdere verrommeling van het landschap).

Dutch Lower Chamber (2006-2007d). (TK, 2006-2007, 31 074, nrs. 1-2).

Dutch Lower Chamber (2007-2008). (TK, 2007-2008, 31 200 XIV, 216, Vaststelling van de begrotingsstaten van het Ministerie van Landbouw, Natuur en Voedselkwaliteit (XIV) voor het jaar 2008, nr. 216 Brief van de minister van Landbouw, natuur en voedselkwaliteit).

Dutch Upper Chamber (2006-2007). (EK, 2006-2007, 30 218, G).

Ecorus (2005). **Niet polderen, maar rekenen! Ontwikkelingsstrategie voor het Groene Hart**, in opdracht van Bouwfonds MAB Ontwikkeling en Nationaal Groenfonds. Amersfoort: Bouwfonds.

Ellenkamp, Y. (2002). **Beleidsinstrumenten ingezet in de Reconstructie Midden-Delfland**, Msc.-thesis. Delft: Geodesy TU Delft.

Emans, B. (2002). **Interviewen: theorie, techniek en training**. Groningen: Stenfert Kroese.

Enserink, B., Koppenjan, J.F.M. & Thissen, W.A.H. (2002). **Analyse van complexe omgevingen, leerboek**. Delft: Delft University Press.

Enting, R. & Ziegelaar, A. (2001). **Recreatieonderzoek Midden-Delfland, Eindrapport**. Leiden: Research voor Beleid.

European Commission (2008). <http://ec.europa.eu/agriculture/stateaid/>.

Everdingen, W.H., Jager, J.H. & Luijt, J. (2005). Lage landbouwinkomens: hoe nu verder?, **De Landeigenaar**, 51 (5), pp. 4-5.

---

- 
- Evers, F.W.R., Beckers, T.A.M. & Winsemius, P. (2003). **Rood voor groen; van filosofie naar resultaat**. Utrecht: Globus/AM Wonen.
- Faludi, A. (1973). **A Reader in Planning Theory**. Oxford, U.K.: Pergamon Press.
- Faludi, A. (1989). Conformance vs. performance: implications for evaluations, **Impact Assessment Bulletin**, 7, pp. 135-151.
- Faludi, A. (1999). Patterns of Doctrinal Development, **Journal of Planning Education and Research**, 18, pp. 333-344.
- Faludi, A. (2000). The performance of spatial planning, **Planning Practice & Research**, 15 (4), pp. 299-318.
- Faludi, A. (2005). **The Netherlands: a culture with soft spot for planning**, in B. Sanyal (Ed.) *Comparative Planning Cultures*, London: Routledge, pp. 285-307.
- Faludi, A. & Van der Valk, A.J. (1994). **Rule and Order: Dutch Planning Doctrine in the Twentieth Century**. Dordrecht: Kluwer Academic Publishers.
- Farjon, J.M.J., Bezemer, V., Blok, S., Goossen, C.M., Nieuwenhuizen, W., De Regt, W.J. & De Vries, S. (2004). **Groene ruimte in de Randstad: een evaluatie van het rijksbeleid voor bufferzones en de Randstadgroenstructuur, achtergronddocument bij Natuurbalans 2004**. Wageningen: Natuurplanbureau.
- Frerichs R. & De Wijs, J. (2001). **Opvattingen en meningen over het Nederlandse platteland**. Amsterdam: NIPO.
- Frouws, J. (1998). The Contested Redefinition of the Countryside. An Analysis of Rural Discourses in The Netherlands, **Sociologia Ruralis**, 38 (1), pp. 54-68.
- Gailing, L. (2005). **Regionalparks, Grundlagen und Instrumente der Freiraumpolitik in Verdichtungsräume**, Blaue Reihe, Dortmunder Beiträge zur Raumplanung 121. Dortmund: Institut für Raumplanung Universität Dortmund.
- Galle, M. (2008). Ruimte voor debat, Nieuwe Wro zet in op achterhaalde sturingsstrategie, **S&RO**, 89 (2), pp. 58-60.
- Gallent, N. & Carmona, M. (2004). Planning for housing: unravelling the frictions in local practice, **Planning Practice and Research**, 19 (2), pp. 123-146.
-

Gallent N. & Shaw, D. (2007). Spatial planning, area action plans and the rural-urban fringe, *Journal of Environmental Planning and Management*, 50 (5), pp. 617-638.

Gebiedsbureau Laag Holland (2007). **Jaarverslag 2006, Nationaal Landschap Laag Holland**. Purmerend: Nationaal Landschap Laag Holland.

Gemeente Midden-Delfland (2005). **Gebiedsvisie Midden-Delfland@2025**. Midden-Delfland: Gemeente Midden-Delfland.

Gemeente Muiden (2005), <http://www.muiden.nl/index.php?simaction=content&mediumid=1&pagid=3&archiefsort=1&fontsize=10&stukid=155>.

Glaser, B.G. (1992). **Basics of grounded theory analysis: emerging vs. forcing**. Mill Valley: Sociology Press.

Golland, A. & Boelhouwer, P. (2002). Speculative housing supply, land and housing markets: a comparison, *Journal of Property Research*, 19 (3), pp. 231-251.

Groenevelt, J. (2004). **Gebiedscontracten: Nieuwe kansen voor particulier natuurbeheer?** Wageningen: Wageningen Universiteit, cited by Van Ark, R.G.H. (2005). Planning, contract en commitment, Naar een relationeel perspectief op gebiedscontracten in de ruimtelijke planning, diss. Wageningen Universiteit. Delft: Eburon.

Groenewegen, J. (2004). **Inzichten uit de institutionele economie, over vraagstukken van organisatie**, MAB, november, pp. 515-523.

Groetelaers, D.A. (2004). **Instrumentarium locatieontwikkeling. Sturingsmogelijkheden voor gemeenten in een veranderde marktsituatie** (Legal provisions to facilitate land development. Local authorities' management opportunities in a changing market situation), dissertation TU Delft. Delft: Delft University Press.

Groetelaers, D.A. (2005). **To be or not to be in control: Changes in Urban Land Development in The Netherlands**, presented at the 2005 ENHR International Housing Conference was held in Reykjavík, Iceland, 29 June - 2 July.

Groetelaers, D.A. & Korthals Altes, W.K. (2004). **Policy instruments in the changing context of Dutch land development**, in: Deakin, M., Dixon Gough, R. & Mansberger, R. (2004). *Methodologies, Models and Instruments for Rural and Urban Land Management*. Aldershot, Hampshire: Ashgate.

---

Groetelaers, D., Ploeger, H. & Van Rij, E. (2005). **Grondbeleid en grondbeleidsinstrumenten in relatie tot doelbereiking Nota Ruimte**, OTB-rapport. Delft: OTB.

Groote, P., Haartsen, T. & Van Soest, F. (2006). Nature in the Netherlands, **Tijdschrift voor Economische en Sociale Geografie**, 97 (3), pp. 314-320.

Guba, E.G. & Lincoln, Y.S. (1989). **Fourth Generation Evaluation**. Newbury Park: Sage.

Hajer, M. & Zonneveld, W. (2000). Spatial Planning in the Network Society. Rethinking the Principles of Planning in the Netherlands, **European Planning Studies**, 8 (3), pp. 337-355.

Hart, H.L.A. (1994). **The Concept of Law**. Oxford, U.K.: Clarendon Press.

Havermans, O. (2008). Uitzichtgarantie bij aankoop van huis biedt verzekerde weidsheid, **Trouw**, 19-03-2008.

Healey, P. (1997). **Collaborative planning: shaping places in fragmented societies**. Londen: Macmillan.

Healey, P. (1998). Building institutional capacity through collaborative approaches to urban planning, **Environment and Planning A**, 30, pp. 1531-1546.

Healey, P. (1999). Institutional analysis, communicative planning, and shaping places, **Journal of planning education and research**, 19 (2), pp. 111-121.

Healey, P. (2003). Collaborative Planning in perspective, **Planning theory**, 2 (2), pp. 101-123.

Healey, P. (2006). Balance of progressive versus regressive potentials, **European Planning Studies**, 3( 3), pp. 299-320.

Healey, P., Cars, G., Madanipour, A. & De Magalhaes, C. (2002). **Transforming governance, institutionalist analysis and institutional capacity**, in: Cars, G., Healey, P., Madanipour, A. & De Magalhaes, C. (Eds.). *Transforming Governance, Institutional Analysis and Institutional Capacity*. Aldershot, Hants: Ashgate, pp 6-28.

Henneberry, J. (2005). Engaging planning with economics, **Town Planning Review**, 76 (4), pp. 493-495.

---

Hulsman, B. (2007). Afslagje hier baantje daar, gesprek met Rijksbouwmeester Mels Crouwel over 'verrommeling' in Nederland, *NRC Handelsblad*, 23 februari 2007.

Hutjes, J.M. & Van Buuren, J.A. (1992). *De gevalsstudie, Strategie van kwalitatief onderzoek*. Meppel: Boom.

Innes, J.E. (1995). Planning theory's emerging paradigm: communicative action and interactive practice, *Journal of Planning Education and Research*, 14, pp.183-189.

Interdepartementaal beleidsonderzoek (2006). *Toekomstvast vastgoed*, Dutch Lower Chamber, TK 2005-2006, Attachment to 30253, nr. 3.

IOFEZ (Interministerial Consultations for Financial and Economic Affairs) (2004). *Policy Budgets and Policy Accountability: Evaluation Lessons from practice*. Retrieved from <http://www.minfin.nl/binaries/minfin/assets/pdf/dossiers/begroting/vbtb-evaluation-2004.pdf>.

Jacobs, M. (2004). *Metropolitan matterscape, powerscape and mindscape*, in: Tress, G., Tress, B., Harms, B., Smeets, P. & Van der Valk, A. (Eds.). *Planning Metropolitan Landscapes, Concepts, Demands, Approaches*, Delta Series 4, Wageningen.

Janssen, J., Pieterse, N. & Van den Broek, L. (2007). *Nationale landschappen beleidsdilemma's in de praktijk*. Rotterdam: NAI Uitgevers, Den Haag: Ruimtelijk Planbureau.

Janssen, R., Goosen, H., Verhoeven, M.L., Verhoeven, J.T.A., Omtzigt, A.Q.A & Maltby, E. (2005). Decision support for integrated wetland management, *Environmental Modelling & Software*, 20, pp. 215-229.

Jessop, B. (1994). *Post-Fordism and the state*, in Amin A. (Ed.) *Post-Fordism: A Reader*. Oxford: Blackwell, pp. 251-279.

Kickert, W. J.M. (1996). Expansion and Diversification of Public Administration in the Post Welfare State: The Case of The Netherlands, *Public Administration Review*, 56 (1), pp. 88-94.

Kim, A.M. (2004). A market without the 'right' property rights: Ho Chi Minh City, Vietnam's newly-emerged private real estate market, *Economics of Transition*, 12 (2), pp. 275-305.

Kistenkas, F. (2005). De rood-groenbalans in de ruimtelijke ordening, **Openbaar Bestuur**, oktober, pp. 17-24.

Kloen, H. & Guldemond, A. (2004). **Financiële middelen en instrumenten voor natuur- en landschapsbeheer. Quickscan ten behoeve van Laag Holland**. Utrecht: CLM Onderzoek en Advies BV.

Koole, S., Wijsman, P., Metselaar, D., De Kleine, M., Drenth T. & Van der Berg, L. (2003). **Boeren in beeld**, project hogeschool INHOLLAND.

Koomen, E. (2008). **Spatial analysis in support of physical planning**, dissertation Vrije Universiteit Amsterdam. Amsterdam: Vrije Universiteit Amsterdam.

Koomen, E., Dekkers, J.E.C. & Van Dijk, T. (2007). Open space preservation in the Netherlands: planning, practice and prospects, **Land Use Policy**, 25 (3), pp. 361-377.

Koomen, E., Dekkers, J.E.C., Koetse, M., Rietveld, P. & Scholten, H.J. (2005a). **Valuation of metropolitan open space; presenting the research framework**, in: Proceedings of the 45th congress of the European Regional Science Association, 45th congress of the European Regional Science Association, Amsterdam, 23-27 August 2005.

Koomen, E., Kuhlman, T., Groen, J. & Bouwman, A. (2005b). Simulating the future of agricultural land use in the Netherlands, **Tijdschrift voor Economische en Sociale Geografie**, 96 (2), pp. 218-224.

Koomen, E. & Van Wilgenburg, R. (2006). **Platteland en Kleine kernen verrassend vitaal; kwalitatieve analyse van de sociaal-economische veranderingen van ruraal Nederland**. In: Schrijnen, P.M. (Ed.), *Nieuwe economie nieuwe ruimte, nieuwe ruimte nieuwe economie; bijdragen aan de PlanDag 2006*, pp. 85-94.

Koontz, T.M. (2003). The farmer, the planner, and the local citizen in the dell: How collaborative groups plan for farmland preservation, **Landscape and Urban Planning**, 66 (1), pp. 19-34.

Koppejan, J.F.M., De Bruin, J.A. & Kickert W.J.M. (Eds.) (1993). **Netwerkmanagement in het openbaar bestuur**. The Hague: VUGA.

Koppejan, J.F.M. (2005). The formation of public-private partnerships: lessons from nine transport infrastructure projects in the Netherlands, **Public Administration**, 83 (1), pp. 135-157.

Korthals Altes, W.K. (1995). *De Nederlandse planningdoctrine in het fin de siècle, voorbereiding en doorwerking van de Vierde nota over de ruimtelijke ordening (Extra)*. Assen: van Gorcum.

Korthals Altes, W. K. (2002). Local Government and the Decentralisation of Urban Regeneration Policies in The Netherlands, *Urban Studies*, 39 (8), pp. 1439-1452.

Korthals Altes, W.K. (2006a). Towards Regional Development Planning in the Netherlands, *Planning, Practice & Research*, 21 (3), pp. 309-321.

Korthals Altes, W.K. (2006b). The single European market and land development, *Planning theory & practice*, 7 (3), pp. 247-266.

Korthals Altes, W.K. (2007). The impact of abolishing social-housing grants on the compact-city policy of Dutch municipalities, *Environment and Planning A*, 39, pp. 1497-1512.

Korthals Altes, W.K. (2008). Taxing land for urban containment: Reflections on a Dutch debate, *Land Use Policy*. Available online 16 May 2008.

Korthals Altes, W.K. & H.E. Van Rij (2005), *Grondmobilitiet*. Utrecht: Innovatie-Netwerk Groene Ruimte en Agrocluster.

Kreukels, A.M.J. (1980). *Planning en Planningproces; een verkenning van sociaal-wetenschappelijke theorievorming op basis van ruimtelijke planning*. Den Haag: VUGA.

Kuhn, M. (2003). Greenbelt and Green Heart: separating and integrating landscapes in European city regions, *Landscape and Urban Planning*, 64, pp. 19-27.

Kuiper, R. & De Regt, W.J. (2007). *Landbouw in de Nationale Landschappen, Perspectief grondgebonden landbouw als drager van het cultuurlandschap*. Bilthoven: MNP.

Lai, L.W. (2005). Neo-institutional economics and planning theory, *Planning theory*, 4 (1), pp. 7-19.

Lai, L.W. (2007). 'The Problem of Social Cost': the Coase theorem and externality explained using simple diagrams and examples to illustrate the role of land use planning in tackling externalities, *Town Planning Review*, 78 (3), p. 335-368.

---

Lambregts, B. & Zonneveld, W. (2004). From Randstad to Deltametropolis: changing attitudes towards the scattered metropolis, *European Planning Studies*, 12, pp. 299-321.

Leenders, I., De Roeck, V., Verkest, J., Desmet, A., Tollenaere, V., Van den Berghe, J., Van Acker, F., & Ansant, P. (2006). *Zakboekje Ruimtelijke Ordening 2006*. Mechelen: Kluwer.

Leinfelder, H. (2006). "Planning" of alternative public space through conversion of rural areas in urbanising contexts, *Case Park Forest Ghent*, paper for the WPSC Conference, WPSC Conference, Mexico, July, 2006.

Leinfelder, H. & VandenAbeelee, P. (2007). *Strategic zoning plan for open space*, presented at 51th IFHP World congress 22-26 September 2007 in Copenhagen.

Lenkeek, F. (2007). *Partijen Bloemendalerpolder slaan handen ineen*, press release Province Noord-Holland 15-02-07.

Leväinen, K.I. & Korthals Altes, W.K. (2005). Public Private Partnership in Land Development Contracts – A Comparative Study in Finland and in the Netherlands, *Nordic Journal of Surveying and Property Research*, 2 (1), pp. 137-148.

Marsden T., (2004). The quest for ecological Modernisation: Re-Spacing Rural Development and Agri-Food Studies, *Sociologia Ruralis*, 44 (2), pp. 129-146.

Maruani, T. & Amit-Cohen, I. (2007). Open space planning models: A review of approaches and methods, *Landscape and Urban Planning*, 81, pp. 1-3.

Metroland (2008). [www.metroland.nl](http://www.metroland.nl).

Midden-Delfland Vereniging (2006). <http://www.middendelflandvereniging.nl/wordpress/2006/10/18/tien-redenen-voor-de-midden-delfland-vereniging-om-het-voorstel-voor-een-woonwijk-aan-de-maaslandse-dam-niet-te-steunen/>.

Miles, M.B. & Huberman, A.M. (1994). *Qualitative Data Analysis*. Thousand Oaks: Sage Publications.

Milieu en Natuur Compendium (2008a). <http://www.milieuennatuurcompendium.nl/indicatoren/nl1320-Vergoedingen-voor-agrarisch-natuurbeheer.html?i=10-57>.

---

Milieu en Natuur Compendium (2008b). <http://www.milieuennatuurcompendium.nl/indicatoren/nl1280-Inkomsten-van-natuurbeschermingsorganisaties.html?i=10-57>.

Ministry LNV (2005). **Departementale Takenanalyse, Van zorgen voor naar zorgen dat**. Den Haag: Ministry LNV.

Ministry LNV (2006). **Natuur en Landschap, op waarde geschat**. Den Haag: Ministry LNV.

Ministry LNV (2008). **letter to the Second Chamber of Parliament of 5 februari 2008 about Nota naar aanleiding van verslag schriftelijk overleg over de Grondprijsmonitor 2006**, DP. 2008/114.

Ministries LNV & VROM (2006). **Handreiking Kwaliteit Landschap -2006- Voor provincies en gemeenten**, Den Haag, Ministeries VROM & LNV.

Ministries OC&W, VROM & LNV (1999). **Nota Belvedere, Beleidsnota over de relatie cultuurhistorie en ruimtelijke inrichting**. Den Haag: VNG uitgeverij.

Ministry VROM (1988). **The Fourth Report on Physical Planning (VINO)**, Den Haag.

Ministry VROM (1990). **Fourth Report on Physical Planning Extra (VINEX)**, Den Haag.

Ministry VROM & Ministry of Finance (2001). **Op grond van nieuw beleid - nota Grondbeleid (memorandum on land policy)**, Den Haag.

Ministries VROM, LNV, VenW, EZ (2004). **Nota Ruimte, Ruimte voor ontwikkeling**, Den Haag.

Ministries VROM, LNV, VenW, EZ & OCW (2006). **Uitvoeringsagenda Ruimte 2006**. Den Haag: Ministeries VROM, LNV, VenW, EZ & OCW.

Ministry V&W (2007). **Randstadurgent**. Den Haag: Ministry V&W.

Ministerie van de Vlaamse Gemeenschap (1997). **Ruimtelijk Structuurplan Vlaanderen**. Brussel: Ministerie van de Vlaamse Gemeenschap.

Ministerie van de Vlaamse Gemeenschap (2005). **Gewestelijk ruimtelijk uitvoeringsplan Afbakening grootstedelijk gebied Gent**. Brussel: Ministerie van de Vlaamse Gemeenschap.

- 
- Mintzberg, H. (1983). **Structures in fives: designing effective organizations**. Hemel Hempstead: Printice Hall.
- Miraftab, F. (2004). Public-private partnerships: the Trojan horse of neoliberal development, **Journal of Planning Education and Research**, 24, pp. 89-101.
- MNP (2007a). **Natuurbalans 2007**. Bilthoven: Milieu- en Natuurplanbureau.
- MNP (2007b). **Van aankoop naar beheer II, ex ante evaluatie omslag natuurbeleid**. Bilthoven: MNP.
- Moe, T. (1984). The New Economics of Organizations, **American Journal of Political Science**, 28 (4), pp. 739-777.
- Molenaar, H.J. (2004). **De Anticiperende Overheid, Een onderzoek naar de praktijkervaringen met 'het (rijks)beleidskader anticiperend handelen in vastgoed'**, afstudeerscriptie TUDelft, [http://www.minfin.nl/binaries/minfin/assets/pdf/old/rvr\\_scriptie.pdf](http://www.minfin.nl/binaries/minfin/assets/pdf/old/rvr_scriptie.pdf).
- Moulaert, F. (2005). Institutional Economics and Planning Theory: A Partnership between Ostriches? **Planning Theory**, 4 (1), pp. 21-32.
- Mulder, H.J.W. (2006). **Kwaliteit is kostbaar Advies financieringsbehoefte Nationale Landschappen 2007-2020**, to: Ministry van LNV from director Dienst Landelijk Gebied
- Mulder, P.T.W. (2005). **Integrale toets Waterland wonen**. Deventer: Witteveen+Bos.
- Nationaal Groenfonds & Bouwfonds Woningbouw (1999). **Van confrontatie naar symbiose. 5 aanbevelingen voor een grotere samenhang tussen rood, groen en blauw**. Hoevelaken, Nationaal Groenfonds.
- Natuurmonumenten (2005). **Meer natuur, minder vanzelfsprekend, jaarverslag 2004**. 's-Graveland: Vereniging Natuurmonumenten.
- Needham, B. (1998). Belasting op grond weinig effect op vraag en aanbod, **Vastgoedmarkt**, 25, pp. 47-49.
- Needham, B. (2000). Spatial planning as a design discipline: a paradigm for Western Europe?, **Environment and Planning B: Planning and Design**, 27, pp. 437-453.
-

Needham, B. (2006). **Planning, Law and Economics, The rules we make for using land**. London: Routledge.

Needham, B. (2007). **Dutch land use planning; Planning and managing land use in the Netherlands, the principles and the practice**, Reeks Planologie nr. 9. Den Haag: Sdu Uitgevers.

Needham, B. & De Kam, G. (2004). Understanding How Land is Exchanged: Co-ordination Mechanisms and Transaction Costs, **Urban Studies**, 41 (10), pp. 2061-2076.

Needham, B. & Faludi, A. (1999). Dutch Growth Management in a Changing Market, **Planning Practice & Research**, 14 (4), pp. 481-491.

Nelson, R.H. (1979) A private property right theory of zoning, **The Urban Lawyer**, 11, pp. 713-732.

Nicholls, S. & Crompton, J.L. (2005a). Impacts of regional parks on property values in Texas, **Journal of Park and Recreation Administration**, 23 (2), pp. 87-108.

Nicholls, S. & Crompton, J.L. (2005b). The impact of greenways on property values: evidence from Austin, Texas, **Journal of Leisure Research**, 37 (3), pp. 321-341.

North, D.C. (1991). Institutions, **Journal of Economic Perspectives**, 5 (1), pp. 97-112.

North, D.C. (1995). **Five Propositions about Institutional Change**. In: Knight J. & Sened, I. (1995). **Explaining Social Institutions**. Ann Arbor: University of Michigan Press, pp. 15-26.

NVB (2005). **Projectontwikkeling in stad en land... "Natuurlijk"**, [www.nvb-bouw.nl](http://www.nvb-bouw.nl).

NYFER (1996). **Het Groene Hart..., dat klopt niet!** Den Haag: Sdu Uitgevers.

Overman, L. (2003). **Honkvast en tevreden, Een sociale verkenning van woonmilieus in Waterland**. Purmerend: PRIMO nh.

Oerlemans, N., Guldemond, J.A. & Visser, A. (2007). **Meerwaarde agrarische natuurverenigingen voor de ecologische effectiviteit van Programma Beheer, Ecologische effectiviteit regelingen natuurbeheer: Achtergrondrapport 3**, Rapport 52, Wettelijke Onderzoekstaken Natuur & Milieu, Wageningen.

Oxley, M. (2004). **Economics, Planning and Housing**. Basingstoke: Palgrave Macmillan.

Pearce, B. (2005). Balancing efficiency in planning with justice, power and culture, **Town Planning Review**, 76 (4), pp. 488-492.

Peck, J. & Tickell, A. (2002). Neoliberalizing Space, **Antipode**, pp. 380-404.

Pigou, A.C. (1932). **The Economics of Welfare**. London: Macmillan.

Ploeger, H.D. & Groetelaers, D.A. (2007). The Importance of the Fundamental Right to Property for the Practice of Planning: An Introduction to the Case Law of the European Court of Human Rights on Article 1, Protocol 1, **European Planning Studies**, 15 (10), pp. 1423-1438.

Polman, N.B.P., Slangen, L.H.G., Van Bavel, M.A.H.J. & Van Bommel, K.H.M. (2005). **Transactiekosten voor de overheid bij natuurbeheer: een analyse van alternatieve institutionele arrangementen binnen de EHS**. Wageningen: Wageningen Universiteit.

Pols, L., Daalhuizen, F., Segeren, A. & Van der Veeken, C. (2005). **Waar de landbouw verdwijnt. Het Nederlandse cultuurland in beweging**. Rotterdam/Den Haag: NAI Uitgevers/RPB.

Priemus, H. (1996). Physical planning policy and public expenditure in the Netherlands, **Netherlands Journal of Housing and the Built Environment**, 11 (2), pp. 151-170.

Priemus, H. (2002a). Public-Private Partnerships for Spatio-economic Investments: A Changing Spatial Planning Approach in the Netherlands, **Planning Practice and Research**, 17 (2), pp. 197-203.

Priemus, H. (2002b). Combining Spatial Investments in Project Envelopes: Current Dutch Debates on Area Development, **Planning Practice and Research**, 17 (4), pp. 455-463.

Priemus, H. (2004). Spatial Memorandum 2004: A Turning Point in the Netherlands' Spatial Development Policy, *Tijdschrift voor Economische en Sociale Geografie*, 95 (5), pp. 578-583.

Priemus, H. & Louw, E. (2002). Recovery of land costs: a land policy instrument missing in the Netherlands?, *European Journal of Housing Policy*, 2, pp. 127-146.

Priemus, H. & Louw, E. (2003). Changes in Dutch land policy: from monopoly towards competition in the building market, *Environment and Planning B: Planning and Design*, 30, pp. 369-378.

Provincie Noord-Holland (2003). *Streekplan Noord-Holland Zuid*. Haarlem: Provincie Noord-Holland.

Provincie Noord-Holland (2004). *Verkenning Bouwen voor Waterland 2020, invulling van het regionaal woningbouwprogramma, voor Waterland vanuit een landschappelijk en cultuurhistorisch perspectief*. Haarlem: Provincie Noord-Holland.

Provincie Noord-Holland (2006a). *Concept-ontwerp, streekplanherziening van het streekplan Noord-Holland Zuid & het ontwikkelingsbeeld Noord-Holland Noord, nationaal landschap, Laag Holland, Behoud door ontwikkeling*. Haarlem: Provincie Noord-Holland.

Provincie Noord-Holland (2006b). *Streekplan Noord-Holland Zuid, Streekplan-uitwerking Waterlands Wonen*. Haarlem: Provincie Noord-Holland.

Provincie Noord-Holland (2006c). *Streekplan Noord-Holland Zuid, Uitwerking Bloemendalerpolder/KNSF-terrein*. Haarlem: Provincie Noord-Holland.

Provincie Noord-Holland (2006d). *Uitvoeringsprogramma Nationaal Landschap Laag Holland 2007-2013 Ten behoeve van de besteding van de Rijksmiddelen voor het doel Nationaal Landschap*. Haarlem: Provincie Noord-Holland.

Provincie Noord-Holland (2006e). *Ontwerp streekplanherziening Nationaal landschap Laag Holland Van het streekplan Noord-Holland Zuid en het Ontwikkelingsbeeld Noord-Holland Noord*. Haarlem: Provincie Noord-Holland.

Provincie Noord-Holland (2007). *Aanvullend beleid op streekplanuitwerking Waterlands wonen in de rijksbufferzone Amsterdam-Purmerend*. Haarlem: Provincie Noord-Holland.

---

---

Provincie Zuid-Holland (2006). Besluiten Landschapsverordening Zuid-Holland GS 7 november 2006.

PPS-bureau landelijk gebied (2002). **Werkfilosofie Publiek Private Samenwerking in het Landelijk gebied**. Utrecht: Ministerie LNV.

Raad landelijk gebied (2006). **Van zorgen naar borgen, naar een bestuurlijke omslag bij LNV**. Amersfoort: Raad landelijk gebied.

Raad landelijk gebied (2008). **De mythologie van onteigening Advies over de inzet van onteigening voor de realisatie van de Ecologische Hoofdstructuur**. Publicatie RLG 08/01 januari 2008. Amersfoort: Raad landelijk gebied.

Raitio, J. (2003). **The Principle of Legal Certainty in EC Law**, Series: Law and Philosophy Library, Vol. 64. New York: Springer.

Recreatieschap & Nipo (2005). **Mini-onderzoek 2005**. Schiedam: Recreatieschap Midden-Delfland.

Reinhard, S. & Silvis, H. (2007). **Investeren in het Nederlandse landschap: hoe te financieren? Notitie op verzoek van LNV t.b.v. het rondetafelgesprek Landschap op 9 mei 2007**. Wageningen: LEI-Wageningen UR.

Rekenkamer (2006). **Ecologische hoofdstructuur**. TK 2006–2007, 30 825, nrs. 1-2.

Ritsema, P. (1987). **Landinrichtingswetgeving, Reconstructiewet Midden-Delfland**, Nederlandse staatswetten. In: Schuurman & Jordens (Eds.), 101. Zwolle: Tjeenk-Willink.

Romero, F.S. (2003). Open space preservation policies: An institutional case study, **Journal of Architecture and Planning-Research**, 20 (2), pp. 146-174.

Røsnes, A.E. (2005). Regulatory Power, Network Tools and Market Behaviour: Transforming Practices in Norway Urban Planning, **Planning Theory & Practice**, 6 (1), pp. 35-51.

Salet, W.G.M. (2002). Evolving Institutions, An International Exploration into Planning and Law, **Journal of Planning Education and Research**, 22, pp. 26-35.

Samuelson, P. (1954). The pure theory of public expenditure, **Review of economics and statistics**, 36, pp. 387-389.

---

Savills, F.P.D. & Evamy, M. (2005). **Does money grow on trees?** Commission for Architecture and the Built Environment.

Schipper, L., De Vuyst, S. & Tiessen, H. (2006). **Evaluatie Nota Ruimte, thema: Functieverandering Buitengebied.** Nijmegen: Royal Haskoning.

Schueler, B.J. & Mellenbergh, R. (2006). **Advies inzake de mogelijkheid tot afschaffing van het zelfrealisatiebeginsel in verband met artikel 1 van het Eerste Protocol van het Europees Verdrag tot bescherming van de Rechten van de Mens en de fundamentele vrijheden (EVRM)**, Een advies uitgevoerd in opdracht van het ministerie van Volkshuisvesting Ruimtelijke Ordening en Milieubeheer. Amsterdam: Universiteit van Amsterdam, Faculteit de Rechtsgeleerdheid, Centrum voor Milieurecht & Leerstoelgroep Staats- en bestuursrecht.

Scott-Morgan, P. (1994). **The Unwritten Rules of the Game; Master Them, Shatter Them and Break Through the Barriers to Organizational Change.** New York: McGraw-Hill.

Scriven, M. (1972). Pros and cons about goal-free evaluation, *Evaluation comment*, **The journal of educational evaluation**, 3 (4), pp. 1-7.

Segeren, A., Needham, B. & Groen, J. (2005). **De markt doorgrond een institutionele analyse van grondmarkten in Nederland.** Rotterdam: NAI Uitgevers, Den Haag: Ruimtelijk Planbureau.

Selnes, T.A. & Kuindersma, W. (2006). **Ruimte voor elkaar. Een essay over decentralisatie in het natuurbeleid**, Rapport 7.06.06. Den Haag: LEI.

Shaw, R. (2002). The International Building Exhibition (IBA) Emscher Park, Germany: A Model for Sustainable Restructuring? **European Planning Studies**, 10 (1), pp. 77-97.

Siraa, H. T., Van der Valk, A.J. & Wissink, W.L. (1995). **Met het oog op de omgeving.** The Hague: SDU.

Skaburskis, A. (2003). Pricing City Form: Development Cost Charges and Simulated Markets, **Planning, Practice & Research**, 8 (2-3), pp. 197-211.

Staatsbosbeheer (2004). **Staatsbosbeheer Offerte 2005.** Driebergen: Staatsbosbeheer.

Stichting onderzoek Midden-Delfland (1967). **Interim-rapport van de stichting onderzoek Midden-Delfland**. Den Haag: Stichting onderzoek Midden-Delfland.

Swanborn, P.G. (1994). **Het ontwerpen van case-studies: enkele keuzen**. Mens en maatschappij, augustus, pp. 322-335.

Taylor-Gooby, P. (Ed.) (2005). **Ideas and Welfare State Reform in Western Europe**. Basingstoke: Palgrave Macmillan.

Thomas, D., Minett, J., Hopkins, S., Hamnett, S., Faludi, A. & Barrell, D. (1983). **Flexibility and Commitment in Planning**. The Hague/Boston/London: Martinus Nijhoff Publishers.

Tress, G., Tress, B., Harms, B., Smeets, P. & Van der Valk, A. (Eds.) (2004). **Planning Metropolitan Landscapes, Concepts, Demands, Approaches**, Delta Series 4, Wageningen.

Vader, J. & Leneman H. (Eds.) (2006). **Dragers landelijk gebied, achtergronddocument bij Natuurbalans 2006**. Wageningen: Wageningen UR.

Van Ark, R.G.H. (2005). **Planning, contract en commitment, Naar een relationeel perspectief op gebiedscontracten in de ruimtelijke planning**, dissertation Wageningen Universiteit. Delft: Eburon.

Van Amersfoort, M., De Bonthé, A. & Jongsma, E. (2006). **Gebiedsontwikkelingsplan "de Bonnen", Evenwicht en draagvlak voor de toekomst van De Bonnen**. Dronten: DLV Groen & Ruimte bv.

Van Bueren, E. & Ten Heuvelhof, E.F. (2005). Improving governance arrangements in support of sustainable cities, **Environment and planning B: Planning and Design**, 32, pp. 47-66.

Van Buuren, P.J.J. (2002). De fundamentele herziening van de Wet op de ruimtelijke ordening, **Tijdschrift voor Bouwrecht**, 2, pp. 109-114.

Van Buuren, P.J.J. (2005). De coördinerende taak van provincies en de nieuwe regels omtrent de ruimtelijke ordening, jaarrede van de voorzitter van de Vereniging voor Bouwrecht, gehouden op 25 november 2004 te Amersfoort, **Tijdschrift voor Bouwrecht**, 24, p. 87.

Van Buuren, P.J.J., Backes, Ch.W. & De Gier, A.A.J. (2002). **Hoofdlijnen ruimtelijk bestuursrecht**. Kluwer: Deventer.

Van Dam, F., Jókövi, M., Van Hoorn, A. & Heins, S. (2003). **Landelijk wonen**. Rotterdam: NAI Uitgevers, Den Haag: Ruimtelijk Planbureau.

Van den Brink, M. & Metze, T. (Eds.) (2006). **Words matter in policy and planning, discourse theory and method in the social sciences**, Netherlands Geographical Studies 344. Utrecht: Koninklijk Nederlands Aardrijkskundig Genootschap, Netherlands Graduate School of Urban and Regional Research.

Van den Hof, J. (2006). **Public private partnership in the Dutch polders**, Nederlandse Geografische Studies. Utrecht,: Labor Grafimedia b.v., 343, pp. 1-250.

Van der Meulen, H.A.B. & Venema, G.S. (2005). **Ontwikkelingen rond de financiering van agrarische bedrijven**, Rapport 2.05.01. Den Haag: LEI.

Van der Ploeg, J.D., Renting, H., Brunori, G., Knickel, K., Mannion, J., Marsden, T., De Roest, K., Sevilla-Guzmán, E. & Ventura, F. (2000). Rural Development: From Practices and Policies towards Theory, *Sociologia Ruralis*, 40 (4), pp. 391-408.

Van der Pot, C.W., Donner, A.M., Prakke, L., De Reede, J.L. & Van Wissen, G.J.M. (1995). **Handboek van het Nederlandse staatsrecht**. Zwolle: Tjeenk Willink.

Van der Valk, A.J. & Faludi, A. (1997). The Green Heart and the dynamics of doctrine, *Netherlands Journal of Housing and the built environment*, 12 (1), pp. 57-75.

Van der Veen, M. & Janssen-Jansen, L. (2006). **Money from the market? Possibilities for TDR-like instruments in the Dutch planning system**, In: Pena, S.F. & Alva, E.S. (Eds.). *Second world planning schools congress - diversity and multiplicity: A new agenda for the world planning community* (pp. 1-22). Mexico: National autonomous university of Mexico.

Van Dijk, T. (2006). How the Hands of Time Mould Planning Instruments: Iterative Adaptation Pushing Limits in Rural Areas, *European Planning Studies*, 14 (10), pp. 1449-1471.

Van Dijk, T. & Van den Brink, A. (2006). **Local responses to large scale city expansion: do Dutch citizens have a say?**, paper for the Global Spaces Local Places Conference, GSLP Conference, London, 5-7 April, 2006.

Van Dusseldorp, H., Jansen, H., Jansen, J. & Neppelenbroek, R. (2007). **Groen of Poen, Waterland opgeofferd aan kortzichtigheid**. Zaandam: Milieufederatie Noord-Holland.

- 
- Van Eeten, M.J.G. (1999). **Dialogues of the deaf**. Delft: Eburon Publishers.
- Van Eeten, M.J.G. & Roe, E.M. (2002). **Ecology, Engineering and Management: Reconciling Ecosystem Rehabilitation and Service Reliability**. Oxford: Oxford University Press.
- Van Egmond, K. (2007). Keihard kiezen voor planologische duidelijkheid, **NVM-Magazine**, 1 (7), pp. 16-18.
- Van Gessel, P.H. (1990). The structure of green areas in the urban agglomeration of the western Netherlands. The Dutch approach: planning a Randstad-groenstructuur, **Landscape and urban planning**, 18, pp. 257-263.
- Van Gunsteren, W.F. (1976). **The quest for control; a critique of the rational-central-rule approach in public affairs**. Lonon: Wiley.
- Van Herzele, A. (2006). A forest for each city and town: Story lines in the policy debate for urban forests in Flanders, **Urban Studies**, 3 (3), pp. 673-696.
- Van Rij, H.E. (2005). **De realiteit van Rood voor Groen**, *Rooilijn*, 38 (8), pp. 379-384.
- Van Rij, H.E. (2006). **Internaliseren van groene waarden in Midden-Delfland**. Gouda: Habiforum.
- Van Rij, H.E. (2007). **Collaborative planning in practice. Collaborative Planning, Public Private Partnerships and Spatial Development Planning for the metropolitan landscape**. Paper presented at the ENHR conference Sustainable Urban Areas, ENHR 2007, Rotterdam, 25-28 June, 2007.
- Van Rij, E., Dekkers, J.E.C. & Koomen, E. (2008). Analysing the success of open space preservation in the Netherlands: the Midden-Delfland case, **Tijdschrift voor Economische en Sociale Geografie**, 99 (1), pp. 115-124.
- Van Rij, H.E. & Korthals Altes, W.K. (2005). **The Protection of Metropolitan green areas, Externalities, Transaction Cost and Institutional Redesign**, AESOP congress in Vienna 2005.
- Van Rij, H.E. & Korthals Altes, W.K. (2007a). **Quickscan grondmarkt en grondinstrument voor Midden-Delfland**. Delft: OTB.
- Van Rij, H.E. & Korthals Altes, W.K. (2007b). **Discussiedocument flankerend ruimtelijk beleid bij een grondinstrument voor Midden-Delfland**. Delft: OTB.
-

Van Rij, H.E. & Korthals Altes, W.K. (2008). The merits of outmoded planning instruments for improving metropolitan green areas: the Midden-Delfland approach, *Planning Theory and Practice*, 9 (3), pp. 345-362.

Van Rij, H.E. & Van Eeten, M.J.G. (2003). Gevangen door de markt, evalueren van de verschuivende beleidsopgave rond de elektronische handtekening, *Beleidswetenschap*, 17 (4), pp. 340-358.

Van Rij, H.E. & Zevenbergen, J.A. (2005). **Towards a new Dutch Land Consolidation Act, better or worse**, paper for the International Land Consolidation Conference, ILLC, Budapest, Hungary, December, 2005. Retrieved from [www.metroland.nl](http://www.metroland.nl).

Van Tets, P. (2007). Natuur is bij kleine boeren veruit in de beste handen, Het meeste geld gaat naar 'nieuwe natuur' van landbouwingenieurs. Weggegooid geld. *Trouw*, 02-06-07.

Van Wijk, H.D., Konijnenbelt, W. & Van Male, R.M. (1997). **Hoofdstukken van administratief recht**. Den Haag: VUGA.

Visscher, G. (1986). Vertraging in het wetgevingsproces?, *Regelmaat*, 2, pp. 47-52.

VNG & SRP (2006). **Paardenhouderij en Ruimtelijke Ordening, Handreiking voor de praktijk**, Retrieved from <http://www.vng.nl/smartsite.dws?id=68658&ch=DEF>.

VROM-raad (2004a). **Gereedschap voor Ruimtelijke Ontwikkelingspolitiek**. Den Haag: VROM-raad.

VROM-raad (2004b). **'Meerwerk'advies over de landbouw en het landelijk gebied in ruimtelijk perspectief**, advies 042. Den Haag: VROM-raad.

Webster, C.J. (2002). Property rights and the public realm: gates, green-belts and gemeinshaft, *Environment and planning B*, 29, pp. 397-412.

Webster, C.J. (2005). The New Institutional Economics and the evolution of modern urban planning, Insights, issues and lessons, *Town Planning Review*, 76 (4), pp. 455-484.

Webster, C.J. (2007). Property rights, public space and urban design, *Town Planning Review*, 78 (1), pp. 81-101.

---

- 
- Webster, C.J. & Lai, L.W. (2003). **Property rights, planning and markets**. Cheltenham: Edward Elgar.
- Williamson, O.E. (1985). **The Economic Institutions of Capitalism**. New York: Free Press.
- Williamson, O.E. (1998). Transaction Cost Economics: How It Works; Where It is Headed, **De Economist**, 146 (1), pp. 23-58.
- Wing (2008). <http://www.wing-wageningen.nl/>.
- Winsemius, P. (1986). **Gast in eigen huis, beschouwingen over milieumanagement**. Alphen a/d Rijn: Samsom.
- Vockestaert (2006). **Aanmeldingsformulier puntensysteem, Groenfonds Midden-Delfland met ingang van 2006**. Midden-Delfland: Vockestaert.
- Wolfson, D.J. (2005). **Transactie als bestuurlijke vernieuwing, op zoek naar samenhang in beleid en uitvoering**. WRR. Amsterdam: Amsterdam University Press.
- WWdL (1958). **De ontwikkeling van het westen des lands**, Werkcommissie Westen des Lands, Rijksdienst voor het Nationale plan. Den Haag: Staatsdrukkerij.
- Yin, R.K. (2003). **Applications of case study research, second edition**, applied Social Research Methods Series, volume 34. Thousand Oaks: Sage Publications.
- Zevenbergen, J.A. (1998). Vernieuwing in de Landinrichting; over herijking en varkens, **Agrarisch Recht**, 58 (7/8), pp. 419-432.
- Zevenbergen, J.A. (2000). **Land Registration, Transaction Costs and the Land Market**, in: Proceedings of the 22th Urban Data Management Symposium Urban and Rural Data Management; Common Problems – common Solutions?' (Land Market Seminar), Delft 11-12 September 2000, VII p. 69-77.
- Zevenbergen, J.A. & Van Rij, H.E. (2005). Het ontwerp Wet inrichting landelijk gebied (Wilg), een eerste verkenning, **Agrarisch recht**, 11, pp. 676-692.
-



## Appendix A Interviewees

Midden-Delfland	
Arnold v. Adrichem (by telephone)	LTO-Noord afdeling Delflands Groen (Farmers Union department Green Delfland)
Arie v.d. Berg	Land consolidation committee, Agricultural Nature Conservation Union "Vockestear," dairy farmer
Marja v. Bijsterveldt-Vliegenthart	Chairman CDA (Christian Democratic Party), Mayor of Schipluiden 1994-2003
Tom de Boer	Nature Conservation Union, advisory committee A4 and surroundings
Saskia Bolten	Municipality Delft, recreational board, Land Consolidation Committee
Leonie Claessen	Glaskracht Nederland (Green house Farmers Union), formerly LTO
Ko Droogers	ANWB (the Dutch Automobile Association), Land consolidation committee
Johan Groot Nibbelink	Dutch Land Registry
Maarten de Haan (by e-mail)	Province Zuid-Holland, Green department
Jan Heijkoop	Farmers Union, advisory committee A4 and surroundings
Cristiaan v.d. Kamp	Alderman Midden-Delfland, recreational board, Land Consolidation Committee, advisory committee A4 and surroundings
Hans Kleij	Province Zuid-Holland, Program manager A4 and surroundings
Hans en Corryne van Leeuwen	Dairy-farmers and owners of "De Paardenstal"
Govert van Oord	Midden-Delfland Union
Dirk Polder	Green service Zuid-Holland
Jaap Pieters	Working Group Green fund

Tineke Ruijgh-v.d. Ploeg	Waterboard Delfland, Land consolidation committee, advisory group Vision for Midden-Delfland, advisory committee A4 and surroundings
Joost Schrijnen	Provincie Zuid-Holland, Department spatial planning and mobility and Professor of Town planning at TU Delft
Jan Spijkerboer	DLG, Dienst Landelijk Gebied (Dutch government service for rural land management), land acquisitions
Kees v.d. Vaart	DLG, Dienst Landelijk Gebied (Dutch government service for rural land management), Land consolidation committee
Ben v.d. Velde	Municipality Vlaardingen, Land consolidation committee, recreational board
Jeroen Vis	Ministerie van landbouw, natuur en voedselkwaliteit, LNV (Ministry of Agriculture, Nature and Food Quality)
J. van der Wel	Land agent in Schipluiden
<b>Bloemendalerpolder</b>	
–	Real estate developer
Nico Jonker	Province Noord-Holland, nature specialist
Henk Helming	Province Noord-Holland, land acquisition specialist
Hans Farjon	Milieu- en Natuurplanbureau, MNP (The Netherlands Environmental Assessment Agency)
Hans Groot	Province Noord-Holland, Project manager green projects
Peter Wichman	DLG, Dienst Landelijk Gebied (Dutch government service for rural land management)
<b>Park Forest Ghent</b>	
Evelyne Goemaere	VLM, the Vlaamse Landmaatschappij (Flemish government agency for rural projects)
Cecile Bauwens	VLM, the Vlaamse Landmaatschappij (Flemish government agency for rural projects)

Paul Vandenabeele	Agentschap voor natuur en bos (Flemish government agency for nature and forestry)
Hans Leinfelder	Ghent University
Philippe Van Wesenbeeck and Lieve Evens	City of Ghent, Spatial planning department
Roel Vanhaeren	Agentschap voor natuur en bos (Flemish government agency for nature and forestry)
<b>Laag Holland</b>	
–	Municipality of Waterland, Spatial planning department
E.P. Buijs	City of Amsterdam, Spatial planning department, ecologist
D. van der Eerden	Province Noord-Holland, Nature, landscape and recreation department
W.J. Kooy	Area bureau Laag Holland
E.G. de Nooijer and C. Beentjes	Ministerie van landbouw, natuur en voedselkwaliteit, LNV Ministry of Agriculture, Nature and Food Quality)
J. Spaans sr.	Former dairy farmer
<b>General</b>	
Frank van de Ven and Jos van Oorschot	Municipality of Oss
Leonard Groen	PPP contract laywer at Ecorys Kolpron and Greenbridge Contract Management
Jeroen Gelinck Willem de Kleijn and Jaap Harreveld	DLG, PPS bureau landelijk gebied Province Zuid-Holland, Green department
Adriën Maas	Province Zuid-Holland, Estate department



---

## Appendix B Dutch text on compensation

“Schade als gevolg van bestemmingsplannen is steeds schade, die veroorzaakt wordt door beperking van de vrijheid van individuele burgers. Met betrekking tot dergelijke schade kan worden gesteld, dat de Overheid niet tot vergoeding gehouden is, indien haar maatregelen niet verder gaan dan het concretiseren van de vrijheidsbeperking, die voortvloeit uit het feit, dat de burger tezamen met anderen op een beperkt territoir in een gemeenschap verenigd leeft. Deze vrijheidsbeperking kan geacht worden alle burgers even zwaar te belasten. Het kan echter voorkomen, dat een maatregel moet worden getroffen, die de vrijheid van een burger zwaarder aantast dan met de algemene sociale situatie in overeenstemming is. Alsdan zal er grond zijn voor tegemoetkoming van schade. In de beslissingen van de Kroon ter zake van uitbreidingsplannen wordt in dergelijke gevallen gesproken van een onevenredig zware belasting.”

(Dutch Lower Chamber, 1955-1956, p. 18; Van Buuren et al., 2002, p. 254)

---



---

## Appendix C Dutch text on dynamics

“Het ruimtelijk beleid voor nieuwe woningbouwlocaties bestond tot nu toe uit het ‘op slot zetten’ van de waardevolle landelijke gebieden met kleine kernen en de noodzakelijke ontwikkelingen concentreren aan grotere kernen in minder waardevolle gebieden. Gebleken is dat door gebrek aan vernieuwing en verjonging de leefbaarheid in de kleine kernen verslechtert en het landschap musealiseert. (p.11) (...)

De nieuwe uitleglocaties moeten bijdragen aan:

1. de leefbaarheid van de kernen;
2. de vitaliteit van het platteland;
3. de identiteit van Waterland voor landschap, cultuurhistorie en natuur.  
(p.22)”

(Provincie Noord-Holland, 2006b)

---



# Improving institutions for green landscapes in metropolitan areas

*Evelien van Rij*

## Summary

This thesis investigates how various institutions for green landscapes in metropolitan areas work, which problems hamper them, and how these institutions can be improved. Themes, theories and methods have been selected as a response to the case studies. The following themes were formulated: landscape and institutional developments, the market or government dilemma, the network or hierarchy dilemma, the relation between spatial planning and land development, and Slow Planning and incremental institutional change. Except from the Flemish Park Forest Ghent project, a reflection case, this research examined the Dutch situation and in particular the land consolidation and contemporary developments in Midden-Delfland, the cross-subsidy approach in the Bloemendalerpolder and the National Landscape Laag Holland.

Chapters 2 and 3 discuss developments in the landscape and the influence of the restructuring of the welfare state. An important topic is the recurring costs for green areas near cities, especially interests or rents and maintenance costs. Since farmers receive an income from farming, maintenance by farmers is attractive for the government. This is threatened by high land prices which are a consequence of people's believe that near cities built developments will be allowed in the future. If farmers have financial problems, their green lands near cities will not automatically turn into nature. Restrictive land-use plans might not be sufficiently able to protect the landscape. If land prices increase, messy types of land-use might emerge, parcels might be subdivided and pressure might be put on the government to allow built developments.

The restructuring of the welfare state, in particular deregulation, decentralization and privatization, might catalyze this. Sector departments are losing power and the influence of strategic spatial planning through these sector departments is decreasing. Deregulation and privatization might give private parties room to build on their land. If municipalities have a tendency to welcome built developments, decentralization might threaten metropolitan green areas. Besides, rising land prices, due to the idea that constructions might be allowed, can affect the landscape. In line with deregulation, decentralization and privatization, established ways of governmental interference in the landscape are being abandoned. These ways aimed at interfering in (1) spatial quality (by making metropolitan green areas attractive to city dwellers who might lobby for their preservation), (2) zoning (by means of land-use plans and appointments for example as National Buffer Zone) and (3) ownership (by land consolidation and land acquisition by the government). Chapter 2 presents a model for green area protection and improvement which explains relations between these terms.

Chapter 4 discusses the limited usability of Transaction Cost Theory for

this type of research. This theory assumes that different institutions have different effects on transaction costs and that these transaction costs should be reduced in order to increase efficiency. Within this research, this theory was useful for making general remarks on the efficiency of institutional approaches and for analyzing agricultural nature conservation subsidy strategies in particular. However, it was not useful for benchmarking and designing institutions for metropolitan green areas in detail; the network of transactions is too complex and the transactions differ too much.

Analyzing transactions that were influenced by binding zoning institutions led to the idea that planning is more than a tool to lower transaction cost between private parties in a market; planning also aims to internalize non-traded externalities, such as the value of metropolitan green areas. Distinguishing these two roles of planning is important, because if planning is only seen as a tool to reduce transaction cost in a market, it will be considered to be in the general benefit of land owners. However, the idea that planning institutions are also used to provide non-traded goods to the public helps to understand why binding regulations and budgets for compensation might be necessary. This also requires attention to protecting the property rights of those who are forced to provide these non-traded goods.

When planning is used to provide non-traded goods, lowering organization costs, transaction costs for coordination within an organization, in this case within the government, will lead to downsizing the government, which in turn will result in fewer transactions. Since this is not necessarily more efficient, transaction benefits and the effects on other transactions need to be considered. Applying such an analysis on a project level can take the form of a cost benefit analysis that includes organization costs. During my case studies, it became clear that, in practice, the network of transactions was too complex to use the examination of the transaction costs, organizational costs, transaction benefits and the effects on other transactions as an institutional design tool.

Chapter 5 discusses the limited possibilities for cross-subsidizing green areas by built developments. Such an approach is only likely to work in specific cases for example if the government owns land, if there is a strong restrictive policy which provides opportunities for a land price increase and if experienced and influential governmental parties are involved in a thoroughly set-up process. Reasons not to apply cross-subsidy strategies are its possible effect on land prices in green areas, damage to the landscape by built developments, the problem of maintenance costs, the unwanted interference of financial motives in planning decisions and the misuse of cross-subsidy terms to clear the way for built developments without investments in green areas. Because of this, it cannot be expected that cross-subsidy strategies can become the way to finance attractive cultural historic recreational areas.

In a reaction on the popularity of network-oriented institutions in plan-

---

ning literature, Chapter 6 discusses the value of a combined use with hierarchical institutions. Because land owners and also municipalities might have a tendency to welcome new built developments and municipalities have limited financial resources and capacity to support green areas, totally relying on decentralized parties can threaten metropolitan green areas. Therefore, binding regulation provided by central government and interference in the land ownership situation by the same government might still be important.

The success of the Dutch planning doctrine, with concepts such as the *Randstad*, the Green Heart and National Buffer Zones, has often been related to strategic spatial planning. Chapter 7 discusses the importance of operational spatial planning and operational land development and the problems that occur if strategic spatial planning concepts are unadjustedly applied at the operational level. According to the Dutch concept of sector and facet, spatial planning decisions should be made on the basis of spatially relevant criteria. Because strategic spatial planning deals with the coordination between sector departments, it does not require as much hierarchical and legally binding coordination mechanisms as the operational level. If the influence of sector departments on the landscape decreases, this type of coordination might become less influential. On an operational level, land owners and their rights are important. For the design of institutions operating on that level, especially land development institutions, financial interests and the safeguarding of private property rights are important issues.

In contrast with the call for more dynamics in planning, Chapter 8 introduces Slow Planning. A reduction of urban dynamics can help to protect and improve metropolitan green areas. This requires the creation of a durable spatial quality, zoning and ownership situation. However, more and more, the government has decided not to apply such an approach. Chapter 8 describes the risks involved in radical institutional change such as a change in doctrine or a replacement of the existing spatial planning system by a tax based-spatial disposition system. Because institutions function within a comprehensive institutional framework built on fundamental institutional principles, such as the protection of private property rights, radical institutional change involves risks. This can threaten the general economy and the authority of law; people will not invest if property rights are insecure.

Chapter 9 relates the various developments with each other and gives recommendations for practice and research. The most important methodological recommendation for research in the field of planning, law and economics is to, because of complexity, use a multi-theory approach and to select methodology and theory on the bases of the case study data. The most important recommendation for practice is to distinguish cultural historic recreational areas from other agricultural areas and to apply a Slow Planning approach in these areas.

---



# Verbeteren van instrumenten voor groene metropolitane gebieden

*Evelien van Rij*

## Samenvatting (Dutch Summary)

Dit proefschrift onderzoekt hoe verschillende instrumenten, zoals regels en beleidsprogramma's, voor groene gebieden aan de rand van de stad werken, met welke problemen deze regels en beleidsprogramma's te maken krijgen en hoe ze verbeterd kunnen worden. Op basis van casestudies zijn theorieën en onderzoeksmethodes geselecteerd en de volgende onderzoeksthema's geformuleerd:

- landschappelijke ontwikkelingen en veranderingen in beleid en regels (H 2/3);
- verhouding publiek-privaat (H 4/5);
- netwerk of hiërarchie (H 6);
- de verhouding tussen ruimtelijke ordening en grondbeleid (H 7);
- Slow Planning en de snelheid van verandering van beleid en regels (H 8).

Behalve de casus Parkbos Gent, die gebruikt is om te reflecteren op de Nederlandse situatie, heb ik ervoor gekozen om de Nederlandse praktijksituatie als vertrekpunt te nemen. Drie casussen heb ik in het bijzonder bestudeerd: de reconstructie en de huidige ontwikkelingen in Midden-Delfland, de "Rood voor Groen"-ontwikkeling in de Bloemendalerpolder, en het nationale landschap Laag Holland.

Hoofdstuk 2 en 3 gaan over veranderingen in het landschap, in relatie tot veranderingen in beleid en regels in het kader van deregulering, decentralisering en privatisering. De jaarlijkse kosten voor groene gebieden aan de rand van de stad, de rente voor investeringen in grond en onderhoudskosten, zijn van groot belang. Gezien de inkomsten uit agrarische productie, is voor de overheid beheer van deze gebieden door boeren financieel aantrekkelijk. Een belangrijk probleem hierbij is de hoge grondprijzen in de buurt van de stad omdat men verwacht dat op termijn bebouwing zal worden toegestaan. Het is niet vanzelfsprekend dat in stedelijke gebieden waar boeren het moeilijk hebben, natuur zal ontstaan; het verbieden van bebouwing in bestemmingplannen kan het landschap onvoldoende beschermen; als grond te duur wordt voor de boer dreigt bijvoorbeeld verrommeling, splitsing van kavels en toename van de druk op de overheid om bebouwing toe te staan.

Deregulering, decentralisering en privatisering kunnen deze ontwikkelingen versnellen omdat bebouwing geld oplevert en Nederlandse gemeenten de neiging hebben om nieuwbouw te verwelkomen. Alleen al het vermoeden dat nieuwbouw mogelijk wordt, kan grondprijzen opdrijven en het landschap bedreigen. Deregulering, decentralisatie en privatisering, ook bij sectordepartementen met een sterke wisselwerking met ruimtelijke ordening zoals landbouw, brengen de traditionele manier van overheidsbescherming van groene gebieden aan de rand van de stad in gevaar. De in Midden-Delfland toegepas-

te aanpak heeft effectief bebouwing tegen gehouden. Deze steunde op drie pijlers:

- ruimtelijke kwaliteit: maak groene gebieden met fysieke maatregelen aantrekkelijk zodat burgers ze willen beschermen;
- ruimtelijke ordening: bescherm gebieden met behulp van bestemmingsplannen en aanwijzingen, bijvoorbeeld als bufferzone;
- grond eigendom: houd gronden uit de handen van ontwikkelaars door ze aan te kopen voor bijvoorbeeld Staatsbosbeheer en houd het agrarisch grondeigendom vitaal door herverkaveling en verpachting van overheidsgrond voor een lage prijs.

Hoofdstuk 2 toont een model voor het beschermen en verbeteren van groene gebieden aan de rand van de stad dat de samenhang tussen deze pijlers beschrijft.

Hoofdstuk 4 bespreekt de beperkte bruikbaarheid van de transactiekosten-theorie voor dit type onderzoek. Deze theorie is gebaseerd op de idee dat lage transactiekosten leiden tot meer efficiëntie. Binnen dit onderzoek bleek deze theorie bruikbaar voor de analyse van instrumenten op hoofdlijnen en voor het vergelijken van diverse manieren om boeren te subsidiëren voor agrarisch natuurbeheer. Zij bleek echter niet bruikbaar te zijn voor een gedetailleerde vergelijking van de efficiëntie van verschillende instrumenten en het ontwerpen van nieuwe instrumenten. Hiervoor was het netwerk van (sub)transacties te complex en waren de transacties te divers.

Door het analyseren van de rol van bestemmingsplannen met behulp van een transactiekostenmodel ontstond de idee dat ruimtelijke ordening niet alleen gebruikt wordt om transactiekosten tussen partijen in de markt omlaag te brengen; bestemmingsplannen worden ook gebruikt om niet verhandelde externaliteiten, zoals de landschappelijke waarden van groene gebieden, te internaliseren. Het is belangrijk om deze twee rollen te onderscheiden. Als ruimtelijke ordening alleen gezien wordt als een instrument om transactiekosten in de markt omlaag te brengen, is dit voordelig voor alle partijen. Als deze instrumenten echter ook tot doel hebben om een breed publiek van niet verhandelde goederen te voorzien, dan wordt duidelijk waarom hierbij regelgeving en budgetten een belangrijke rol spelen en waarom er regels nodig zijn om groene grondeigenaren te verplichten om deze niet verhandelde goederen ter beschikking te stellen en deze eigenaren te beschermen tegen onrechtvaardige inbreuk op het eigendomsrecht.

Als ruimtelijke ordening wordt gebruikt om niet verhandelde goederen ter beschikking te stellen, dan zal het verminderen van organisatiekosten, de transactiekosten voor de coördinatie binnen een organisatie als de overheid, leiden tot rücksichtslose inkrimping van de overheid. Hierdoor zullen er minder transacties plaatsvinden. Omdat dit niet hoeft te leiden tot verbetering van de efficiëntie, zouden ook transactievoordelen en effecten op andere

---

transacties moeten worden onderzocht. Een dergelijke analyse op projectniveau kan de vorm krijgen van een kosten-batenanalyse waarin ook organisatiekosten worden meegenomen. Het onderzochte netwerk van transacties was echter te complex om op deze manier de efficiëntie van verschillende instrumenten te vergelijken en nieuwe instrumenten te ontwerpen.

Hoofdstuk 5 beschrijft de beperkte mogelijkheden voor de verbetering en het behoud van groene gebieden aan de rand van de stad door middel van “Rood voor Groen”-constructies (opbrengsten van nieuwbouw worden geïnvesteerd in groen). Deze constructies kunnen werken in bijzondere gevallen: als de grond in handen is van de overheid, als er een streng restrictief beleid geldt, als er een groot waardeverschil is en als ervaren partijen met gezag de overheid vertegenwoordigen in een zorgvuldig opgezet proces. Redenen om niet voor “Rood voor Groen”-constructies te kiezen zijn stijgende grondprijzen, aantasting van het landschap door bebouwing, onopgeloste problemen met beheerskosten, verwatering tussen ruimtelijk relevante motieven en financiële motieven en misbruik van “Rood voor Groen”-termen om uiteindelijk de weg vrij te maken voor bebouwing zonder investering in groen. Daarom zijn “Rood voor Groen”-constructies eerder geschikt voor minder aantrekkelijke landschappen met een geringe recreatieve functie dan voor cultuurhistorische agrarische metropolitane recreatiegebieden.

Hoewel in planologische discussies netwerkgeoriënteerde planningsinstrumenten populair zijn, beschrijft hoofdstuk 6 de waarde van een combinatie met hiërarchische instrumenten. Omdat Nederlandse gemeenten en grondeigenaren de neiging hebben om te kiezen voor nieuwbouw en gemeenten beperkte financiële middelen en ambtelijke capaciteit hebben, is het voor het behoud en ontwikkeling van groene gebieden aan de rand van de stad belangrijk dat de (centrale) overheid passende regels maakt, middelen ter beschikking stelt en stuurt met behulp van grondeigendom.

Het succes van de Nederlandse planningsdoctrine, met concepten als Randstad, Groene Hart en bufferzone, wordt vaak in verband gebracht met strategische ruimtelijke ordening. Hoofdstuk 7 beschrijft het belang van ruimtelijke ordening en grondbeleid op operationeel niveau en de problemen die kunnen ontstaan als ideeën over strategische ruimtelijke ordening onverkort wordt toegepast op het operationele niveau. Op basis van de sector- en facetgedachte, zou Nederlandse ruimtelijke ordening plaats moeten vinden op basis van ruimtelijk relevante overwegingen. Omdat strategische ruimtelijke ordening zich voor een groot deel bezig houdt met coördinatie tussen overheidsdiensten, zijn hiërarchische juridisch bindende coördinatiemechanismen minder belangrijk dan op het operationele niveau. Als de invloed van sectordepartementen met een sterke wisselwerking met ruimtelijke ordening, zoals landbouw, zwakker wordt, kan deze vorm van coördinatie minder belangrijk worden. Op het operationele niveau heeft men te maken met grondeigenaren en hun rechten. Daarom spelen bij beleid en regels op dat niveau, in het bij-

---

zonder bij het grondbeleid, niet alleen ruimtelijk relevante aspecten maar ook hun (financiële) belangen en rechten een belangrijke rol.

In tegenstelling tot de roep om meer dynamiek in de planologie, introduceert hoofdstuk 8 het begrip Slow Planning. Om groene gebieden aan de rand van de stad te behouden en de gewenste kwaliteiten te ontwikkelen, is het belangrijk om de stedelijke dynamiek te verlagen. Dit vereist een combinatie van fysieke ingrepen, ruimtelijke ordening en maatregelen gericht op de eigendomssituatie. De overheid kiest echter steeds minder voor beleid en regels die hiervoor geschikt zijn zoals herverkaveling en grondaankopen. Hoofdstuk 8 beschrijft ook de risico's verbonden aan radicale verandering van beleid en regelgeving, zoals plotselinge verandering van doctrine of de vervanging van het Nederlandse ruimtelijke ordeningsstelsel door een denkbeeldig systeem dat op belasting gebaseerd is. Omdat beleid en regelgeving onderdeel zijn van een samenhangend institutioneel systeem, gebaseerd op fundamentele institutionele principes zoals de bescherming van het recht van eigendom, gaan radicale veranderingen gepaard met risico's. Dit kan een bedreiging vormen voor de economie en het recht; mensen investeren niet als hun eigendom onzeker is.

Hoofdstuk 9 brengt de verschillende ontwikkelingen met elkaar in verband, doet aanbevelingen voor de beleidspraktijk en het onderzoek. De belangrijkste methodologische aanbeveling voor onderzoek in dit veld is dat de complexiteit van het onderwerp vraagt om een combinatie van verschillende theorieën en methoden en dat deze geselecteerd kunnen worden op basis van het casestudymateriaal. De belangrijkste aanbeveling voor de praktijk is om cultuurhistorische agrarische recreatiegebieden aan de rand van de stad te onderscheiden van overige agrarische gebieden en om in die eerste gebieden een Slow Planning-benadering toe te passen.

# Curriculum Vitae

Evelien van Rij was born at 21 April 1978 in Leiden. After her graduation in 1996 at the Stedelijk Gymnasium Leiden, she started her study Dutch Law at Leiden University, and in 1997, she started a second study Systems Engineering, Policy Analysis & Management at Delft University of Technology. She specialized in administrative law, in particular spatial planning law and the liability of the government. Under supervision of Prof. Mr. Th.G. Drupsteen, she wrote a master thesis on the voting system for water boards and received her master degree in 2000. In 2002, she received a master degree in Systems Engineering, Policy Analysis & Management. Her thesis under the supervision of Prof. mr. dr. E.F. ten Heuvelhof and Dr. M.J.G. van Eeten was about the evaluation of interactive policy programs.



After her studies, Evelien van Rij worked as a lawyer and project-planner at two engineering and consultancy firms Grontmij and Witteveen+Bos. In 2005, she passed the exam of the administrative building law course organized by the Building Law Lawyers Union.

In 2004, Evelien van Rij started her PhD research on institutions for green landscapes in metropolitan areas at the OTB Research Institute of Delft University of Technology, supervised by Prof. dr. W.K. Korthals Altes and Prof. mr. dr. ir. J.A. Zevenbergen. Meanwhile, she conducted contract research on land development institutions and the *Nota Ruimte* for the Ministry of Housing, Spatial Planning and the Environment, on institutions for the Midden-Delfland land market for the *Stichting Promotie Groen Midden-Delfland* and the municipality and on land mobility for the *Innovatienetwerk Groene Ruimte en Agrocluster*. A report of this last research was presented to Cees Veerman, Minister of LNV on 31-08-06. She was one of the organizers of AESOP's Inaugural Symposium of the Planning, Law and Property Rights. She published on the new Dutch act on land consolidation and budgets for green areas (*Wet inrichting landelijk gebied, Wilg*), on built areas cross-subsidizing green areas and on institutions for open space preservation. After her PhD, Evelien van Rij will start to work as an assistant professor in law at the faculty of Technology, Policy and Management of the Delft University of Technology.



---

# Sustainable Urban Areas

1. Beerepoot, Milou, **Renewable energy in energy performance regulations. A challenge for European member states in implementing the Energy Performance Building Directive 2004/202** pages/ISBN 90-407-2534-9 (978-90-407-2534-0)
  2. Boon, Claudia and Minna Sunikka, **Introduction to sustainable urban renewal. CO<sub>2</sub> reduction and the use of performance agreements: experience from The Netherlands** 2004/153 pages/ISBN 90-407-2535-7 (978-90-407-2535-7)
  3. Jonge, Tim de, **Cost effectiveness of sustainable housing investments** 2005/196 pages/ISBN 90-407-2578-0 (978-90-407-2578-4)
  4. Klunder, Gerda, **Sustainable solutions for Dutch housing. Reducing the environmental impact of new and existing houses** 2005/163 pages/ISBN 90-407-2584-5 (978-407-2584-5)
  5. Bots, Pieter, Ellen van Bueren, Ernst ten Heuvelhof and Igor Mayer, **Communicative tools in sustainable urban planning and building** 2005/100 pages/ISBN 90-407-2595-0 (978-90-407-2595-1)
  6. Kleinhans, R.J., **Sociale implicaties van herstructurering en herhuisvesting** 2005/371 pages/ISBN 90-407-2598-5 (978-90-407-2598-2)
  7. Kauko, Tom, **Comparing spatial features of urban housing markets. Recent evidence of submarket formation in metropolitan Helsinki and Amsterdam** 2005/163 pages/ISBN 90-407-2618-3 (978-90-407-2618-7)
  8. Kauko, Tom, **Between East and West. Housing markets, property prices and locational preferences in Budapest from a comparative perspective** 2006/142 pages/ISBN 1-58603-679-3 (978-1-58603-679-9)
  9. Sunikka, Minna Marjaana, **Policies for improving energy efficiency in the European housing stock** 2006/251 pages/ISBN 1-58603-649-1 (978-1-58603-649-2)
  10. Hasselaar, Evert, **Health performance of housing. Indicators and tools** 2006/298 pages/ISBN 1-58603-689-0 (978-1-58603-689-8)
  11. Gruis, Vincent, Henk Visscher and Reinout Kleinhans (eds.), **Sustainable neighbourhood transformation** 2006/158 pages/ISBN 1-58603-718-8 (978-1-58603-718-5)
  12. Trip, Jan Jacob, **What makes a city? Planning for 'quality of place' The case of high-speed train station area redevelopment** 2007/256 pages/ISBN 978-1-58603-716-1
-

- 
13. Meijers, Evert, **Synergy in polycentric urban regions. Complementarity, organising capacity and critical mass**  
2007/182 pages/ISBN 978-1-58603-724-6
  14. Chen, Yawei, **Shanghai Pudong. Urban development in an era of global-local interaction**  
2007/368 pages/ISBN 978-1-58603-747-5
  15. Beerepoot, Milou, **Energy policy instruments and technical change in the residential building sector**  
2007/238 pages/ISBN 978-1-58603-811-3
  16. Guerra Santin, Olivia, **Environmental indicators for building design. Development and application on Mexican dwellings**  
2008/124 pages/ISBN 978-1-58603-894-6
  17. Van Mossel, Johan Hendrik, **The purchasing of maintenance service delivery in the Dutch social housing sector. Optimising commodity strategies for delivering maintenance services to tenants**  
2008/283 pages/ISBN 978-1-58603-877-9
  18. Waterhout, Bas, **The institutionalisation of European spatial planning**  
2008/226 pages/ISBN 978-1-58603-882-3
  19. In preparation
  20. Pal, Anirban, **Planning from the bottom up. Democratic decentralisation in action**  
2008/126 pages/ISBN 978-58603-910-3
  21. Neuteboom, Peter, **On the rationality of borrowers' behaviour. Comparing risk attitudes of homeowners**  
2008/112 pages/ISBN 978-58603-918-9
  22. In preparation
  23. In preparation
  24. Coolen, Henny, **The meaning of dwelling features. Conceptual and methodological issues** (In preparation)
  25. Van Rij, Evelien, **Improving institutions for green landscapes in metropolitan areas**  
2008/226 pages/ISBN 978-58603-944-8

Copies can be ordered at [www.dupress.nl](http://www.dupress.nl).

---



Delft Centre for Sustainable Urban Areas carries out research in the field of the built environment and is one of the multidisciplinary research centres at TU Delft.

The Delft Research Centres bundle TU Delft's excellent research and provide integrated solutions for today's and tomorrow's problems in society. OTB Research Institute for Housing, Urban and Mobility Studies and the Faculties of Architecture, Technology, Policy and Management and Civil Engineering and Geosciences participate in this Delft Research Centre.

**Dutch city dwellers take accessible green areas for granted. They might easily forget that considerable resources and regulations have been applied to protect and improve these areas. This dissertation considers the implications if, in line with the neo-liberalization of the state, this approach changes. A multi-theory approach based on Grounded Theory was developed as a methodological basis to the investigation. The limited applicability of Transaction Cost Theory was also explored. The analysis addresses why in many cases, cross-subsidizing green areas with built developments is not a viable financing solution. It explains why a combination of hierarchical and network-oriented approaches works best in practice. It investigates tensions between strategic spatial planning, operational spatial planning, and operational land development and their consequences for green metropolitan areas. It also explains why 'Slow Planning' can help to preserve dynamic green areas near cities, and why this requires incremental institutional change.**



Nederlandse Organisatie voor Wetenschappelijk Onderzoek

ISBN 978-1-58603-944-8



9 781586 039448

DELFT UNIVERSITY PRESS IS AN IMPRINT OF IOS PRESS

