



UNIVERSITY OF BERGEN

Department of Administration and Organization Theory

**INSTITUTIONAL AND POLITICAL CONSTRAINTS TO PLANNING SUSTAINABLE
SETTLEMENTS IN SUBURBAN MUNICIPALITIES
CASE OF TALLINN, ESTONIA**



Anna Julegina

**Thesis submitted in the partial fulfillment for the award of
Master of Philosophy in Public Administration**

September 2007

**THIS THESIS IS DEDICATED TO
MY BELOVED PARENTS, GALINA AND YURI,
WHO HAVE BEEN SUPPORTIVE AND ENCOURAGING
IN ALL MY INITIATIVES**

ACKNOWLEDGEMENTS

First and foremost, I wish to express my deep and sincere gratitude to the person who inspired me to continue my academic studies and made it possible for me to come to Norway for a master study program, Professor Arild Holt-Jensen at the Geography Institute, the University of Bergen. Thank you, Arild, for your fatherly support and solicitude throughout the whole master study process! Thank you for always being there for me and encouraging in periods of frustration. Thank you also for agreeing to be my co-supervisor for this dissertation, for long academic debates and your advices that significantly contributed to the geographical side of this thesis.

I direct my genuine appreciation to my main supervisor, Professor Harald Sætren at the Department of Administration and Organization Theory, the University of Bergen. Thank you, Harald, for inspiring me for fruitful work, directing me, and providing valuable academic guidance and evaluation! Thank you for always being positive, encouraging, and believing in me! After each meeting with you I became much happier and more self-confident in my ability to successfully finish this research. Your critical comments and structured advices have greatly improved the quality of this dissertation.

Additionally, I owe gratitude to Associate Professor Jamil Ishtiaq and Ph.D. students Atle Nyhagen, Thomas Buabeng, Gerald Karyeija who got involved into my study through a series of research proposal seminars and dissertation seminars. Thank you for detailed reading and insight into my work, for your advices and comments on theoretical, methodological and structural issues in this research. Academic discussions on these seminars provided an indispensable contribution to completion of this thesis.

I also want to thank those people who spent time and energy to read different parts of my thesis and commented upon them. My gratitude goes to Anneli Kährrik, Ahto Oja, Garri Raagmaa.

My dear friends in Norway and in Estonia, Stefan, Susanne, Lina, Brando, Daniel, Dmitri, Laur, Olga, Ania, David and many others, cheered me up and brightened my daily life. Besides, they shared my academic concerns and inspired me to move forward. Special gratitude goes to Brando and Daniel for your real interest and effort to read my paper, for your comments and suggestions.

And of course, my family, beloved parents and grandparents, my beloved cousins, without your love, care, mental support and practical help I would be deprived in this hard way to the master award.

*Anna Julegina
September 2007*

ABSTRACT

*This thesis addresses the recent phenomenon of **urban sprawl** in Tallinn, the capital city of Estonia, and tries to find its institutional and political reasons. Urban sprawl is seen as a type of suburbanization which lacks sustainability. Therefore, **the purpose of this study** is to explore the EU-formulated **sustainable spatial development** policy implementation by local authorities in Tallinn suburbs and to understand why an implementation gap exists. **The two main research questions** are: (1) To what extent does spatial planning related to housing development in suburban municipalities follow the principles of sustainable development? (2) What factors do influence the policy implementation by local governments?*

*The **case study strategy** is selected with Tallinn conurbation as a single case and four selected suburban municipalities as separate units of analysis. In order to identify the tentative factors that affect implementation of the EU policy, the **model of policy implementation** developed by Van Meter and Van Horn (1975) is applied. It frames the analysis of causal links between the dependent and independent variables. The dependent variable is defined as the extent of sustainability in local spatial development policies. The independent variables are those local political and institutional factors that may vary across municipalities. They are divided into two groups: (1) factors pertaining to local government itself, and (2) factors pertaining to local government's horizontal communication in spatial planning. The two hypothesis set out in the thesis relate to the independent variables. Besides this, the study also considers such general factors as policy content, its vertical communication, and the national institutional and socio-political framework.*

The research shows that there is a variation among local authorities in terms of how much their spatial development policies contribute to achievement of the sustainable development goals. The findings demonstrate that none of the investigated factors separately may contribute to implementation of the policy, but only a particular constellation of them. Most important factors appeared to be consensus among politicians, knowledgeable and enthusiastic leadership, and most necessarily, good disposition to the policy among local politicians and officials. Financial resources may play for or against sustainability depending on a combination of other factors. Also good horizontal communication of local authority with civic society, business actors and other public institutions increases sustainability. The important finding is that the nature of the policy and the national framework in Estonia considerably complicate policy implementation.

CONTENTS

ACKNOWLEDGEMENTS	III
ABSTRACT	IV
LIST OF ABBREVIATIONS	VII
LIST OF TABLES	VIII
LIST OF FIGURES	VIII
1. INTRODUCTION AND SUBSTANCE OF THE STUDY	1
1.1. INTRODUCTION	1
1.2. THEME AND RESEARCH PROBLEM	1
1.3. PURPOSE OF THE STUDY AND RESEARCH QUESTIONS	3
1.4. OVERVIEW OF METHODOLOGY	5
1.5. OVERVIEW OF THEORY	6
1.6. SIGNIFICANCE OF RESEARCH	7
1.7. COMPOSITION OF THESIS	7
2. THE EUROPEAN UNION POLICY ON SUSTAINABLE DEVELOPMENT	9
2.1. SUSTAINABLE DEVELOPMENT POLICY	9
2.2. EU SUSTAINABLE DEVELOPMENT POLICY IMPLICATION IN URBAN/SPATIAL PLANNING	10
2.2.1. <i>Spatial planning</i>	10
2.2.2. <i>EU sustainable urban/spatial development policy</i>	12
2.2.3. <i>EU Policy instruments</i>	13
2.3. ACADEMIC VIEW ON URBAN SUSTAINABILITY – POLICY ELABORATION	14
2.4. IMPLEMENTATION CHALLENGES	15
2.5. CONCLUSION	17
3. THEORY AND CONCEPTUAL MODEL	18
3.1. JUSTIFICATION FOR THE THEORETICAL APPROACH	18
3.2. DEPENDENT VARIABLES	22
3.3. INDEPENDENT VARIABLES	24
3.3.1. <i>Factors pertaining to local government</i>	25
3.3.2. <i>Horizontal communication of local government</i>	30
3.4. GENERAL INFLUENTIAL FACTORS	32
3.4.1. <i>Policy content</i>	32
3.4.2. <i>Vertical communication of policy to implementers</i>	35
3.4.3. <i>National institutional and socio-political conditions</i>	36
3.5. CONCLUSION	37
4. METHODOLOGICAL FRAMEWORK	39
4.1. CASE STUDY AS A RESEARCH STRATEGY	39
4.2. APPROACH TO THE STUDY	40
4.3. SOURCES OF EVIDENCE AND METHODS OF DATA COLLECTION	41
4.3.1. <i>Participants’ perception and interviews</i>	41
4.3.2. <i>Documentary data</i>	46
4.3.3. <i>Observation – a supplementary source of evidence</i>	48
4.4. ROLE OF THEORY	48
4.5. COMPARATIVE STUDY	49
4.6. METHODOLOGICAL LIMITATIONS	50
5. NATIONAL CONTEXT	52
5.1. SHORT HISTORY AND RECENT SOCIO-ECONOMIC TRENDS	52
5.2. ADMINISTRATIVE SYSTEM	53
5.3. PLANNING SYSTEM	56
5.4. IMPACT OF THE NATIONAL FRAMEWORK ON LOCAL SUSTAINABILITY-RAISING	60

5.5. CONCLUSION	64
6. SPATIAL DEVELOPMENT IN TALLINN CONURBATION.....	65
6.1. TALLINN CONURBATION DEFINITION	65
6.2. SOCIO-ECONOMIC TRENDS IN POST-SOCIALIST PERIOD INFLUENCING DEVELOPMENT OF TALLINN CONURBATION.....	67
6.3. URBAN SPRAWL IN TALLINN CONURBATION	69
6.3.1. <i>Housing development pattern in Tallinn conurbation</i>	69
6.3.2. <i>Outcomes of urban sprawl</i>	73
6.4. CONCLUSION	76
7. MUNICIPALITIES UNDER GROWTH PRESSURE: IS SUBURBANIZATION SUSTAINABLE?	77
7.1. DESCRIPTION OF SELECTED MUNICIPALITIES.....	77
7.1.1. <i>Geographic characteristics</i>	77
7.1.2. <i>Migration and development</i>	79
7.1.3. <i>Settlement structure and its change</i>	82
7.2. PRESENT SPATIAL DEVELOPMENT POLICIES	84
7.2.1. <i>Broad policy goals</i>	84
7.2.2. <i>Planning documents and principles</i>	88
7.3. ANALYSIS OF HOUSING DEVELOPMENT IN TERMS OF SUSTAINABILITY CRITERIA.....	93
7.4. SUMMARY	105
8. INSTITUTIONAL AND POLITICAL FACTORS AFFECTING POLICY IMPLEMENTATION	107
8.1. FACTORS PERTAINING TO LOCAL GOVERNMENT	107
8.1.1. <i>Political resources</i>	108
8.1.2. <i>Organizational resources</i>	112
8.1.3. <i>Disposition to sustainable development</i>	117
8.1.4. <i>Influence of officials on political decisions</i>	119
8.1.5. <i>Financial resources</i>	120
8.2. HORIZONTAL COMMUNICATION OF LOCAL GOVERNMENT	124
8.2.1. <i>Public participation in local spatial planning</i>	124
8.2.2. <i>Communication of local authorities and real estate developers</i>	128
8.2.3. <i>Communication of local authorities and other public institutions</i>	133
8.3. LOCAL GOVERNMENTS' PERCEPTION OF THEIR ABILITY TO STEER DEVELOPMENT.....	137
8.4. CONCLUSIONS ON INDEPENDENT VARIABLES.....	139
9. DISCUSSION AND CONCLUSIONS.....	141
9.1. EXTENT OF POLICY IMPLEMENTATION – DEPENDENT VARIABLE	141
9.2. GENERAL FACTORS INFLUENCING POLICY IMPLEMENTATION	144
9.3. INFLUENCE OF INDEPENDENT VARIABLES ON POLICY IMPLEMENTATION	145
9.3.1. <i>Factors pertaining to local government</i>	146
9.3.2. <i>Horizontal communication of local government</i>	149
9.4. GENERAL CONCLUSIONS – INTERPLAY OF FACTORS	151
9.5. LAST COMMENTS ON THEORY APPLICABILITY	153
REFERENCES	155
ESTONIAN LEGAL ACTS	161
WEBSITES	161
ESTONIAN PLANNING-RELATED DOCUMENTS	163
ANNEXES.....	165

LIST OF ABBREVIATIONS

CG (plural: CGs)	County Government
EC	European Community
ELB	Estonian Land Board
ESDP	European Spatial Development Perspective
EU	European Union
HPTC	Harju Public Transport Center
LG (plural: LGs)	Local Government
MoE	Ministry of Environment (in Estonia)
MoI	Ministry of the Interior (in Estonia)
NGO (plural NGOs)	Non-Governmental Organization
NIMBY	“Not In My Back-Yard”
PPP	Public-Private Partnership
SEIT	Stockholm Environment Institute Tallinn office
SD	Sustainable Development
SDS	Sustainable Development Strategy
SOE	Statistical Office of Estonia
TUGI	Tartu University Geography Institute
UHCM	Union of Harju County Municipalities

LIST OF TABLES

Table 1.1	Research questions.....	5
Table 3.1	Sustainability criteria in spatial planning of housing.....	23
Table 4.1	Categories of respondents.....	45
Table 5.1	Institutional actors involved in development of physical plans	59
Table 7.1	Facts about the four selected municipalities.....	78
Table 7.2	Master plans in the four municipalities and their legal status.....	89
Table 7.3	Principles of spatial planning in sparsely and densely inhabited areas.....	90
Table 7.4	The number and the share of population living in more dense urban settlements.....	96
Table 7.5	Summary of main features local policies in relation to sustainable development.....	105
Table 8.1	Number of members and standing committees in municipal council.....	108

LIST OF FIGURES

Front page	New settlements on the border of Harku and Tallinn (author's photo).....	i
Figure 3.1	The politico-administrative levels in urban/spatial development policy-making.....	21
Figure 3.2	Schematic illustration of the first independent variable of this study.....	30
Figure 3.3	Conceptual model of this study.....	38
Figure 4.1	Impact of research questions and available methods on the choice of a methodological approach.....	41
Figure 5.1	Counties in Estonia.....	54
Figure 5.2	Schematic illustration of the institutional structure of LG.....	55
Figure 5.3	Organization of the public sector in Estonia.....	56
Figure 6.1	Patterns of housing development in Tallinn conurbation and the four selected municipalities.....	66
Figure 6.2	Number of new residential buildings in suburban municipalities of Tallinn conurbation by January 2006.....	71
Figure 6.3	Share of new suburbanites in Tallinn conurbation having job, attending school and kindergarten within the same municipality they live, in Tallinn and in other municipalities.....	72
Figure 6.4	Spatial distribution of new suburban settlements around Tallinn in relation to bus stops.....	72
Figure 7.1	Growth of population and built-up land areas in the four municipalities.....	79
Figure 7.2	Share of new suburbanites in the four municipalities having job, attending school and kindergarten within the municipality they live.....	102
Figure 8.1	Various income sources covering expenses in municipal budgets in 2006.....	121
Figure 8.2	Municipal budgets in 2006 in absolute numbers and per resident.....	123
Figure 8.3	Schematic illustration of institutional capacity of LGs.....	139
Figure 8.4	Comparative estimation of dimensions of institutional capacity and dialogue of LGs.....	140
Figure 9.1	The extent of sustainability in spatial planning and the local factors that influence it.....	151
Figure 9.2	Conceptual model of this study.....	154

1. INTRODUCTION AND SUBSTANCE OF THE STUDY

1.1. INTRODUCTION

This dissertation examines causal links between the phenomenon of urban sprawl and challenges faced by local authorities¹ in ensuring sustainable urban development. The analysis is based on the empirical evidence from suburban municipalities² of the capital city of Estonia, Tallinn. The main focus of investigation is placed on institutional and political factors that might influence the quality of spatial planning on the part of local authorities.

1.2. THEME AND RESEARCH PROBLEM

An issue of a great concern for the European Community (hereinafter EC) is the way European cities are changing nowadays. In many cities the change in land use is characterized by a spread of urban structures to formerly agricultural areas, which takes place in a sporadic and scattered way (EEA, 2006:5). Such urban development is labeled ‘urban sprawl’.

Notwithstanding diverse national historic contexts, the patterns of spatial development and problems related to the growth of cities are more or less the same in western and eastern European states (see EEA, 2006). However, in post-socialist states urban sprawl became apparent much later than in developed capitalist countries. There is an expectation that new member states of the EU that had experienced little or no sprawl in the past may be exposed to it in the next decades with even more intensive rates (EEA, 2006:28). Post-socialist states have particular traits that facilitate intensification of urban sprawl, such as: a) sudden and fast economic development after the collapse of the Soviet system, furthered by an active inflow of foreign investment capital and the rapid growth of tourism (see Ahas and Silm, 2006:61), and b) availability of vast undeveloped areas as a legacy from the Soviet planning (EEA, 2006).

¹ The term *local government* (LG) or *local authority* in this thesis refers to a public institution encompassing municipal council (an elected representative body headed by the chairman), municipal government (an executive body headed by the mayor) and municipal administration comprising staff in departments and the office (see chapter 5 section 5.2).

² The term *municipality* in this thesis refers to a geographical area, which comprises one administrative unit and which is a jurisdiction area for one local government.

In Estonia the establishment of market economy and a very liberal planning system in the beginning of 1990s created preconditions for urban sprawl, which accelerated over time. In the capital city area, Tallinn conurbation³, it even managed to catch up with the extent of urban sprawl in some western European cities. Being born and raised in Tallinn, I have been witnessing a major change in the city's shape and in the spatial distribution of the city's population especially in the last five years. For example, whereas within Tallinn borders the housing stock had increased through new construction by 3% during the three year period 2004-2006, in suburban municipalities of Tallinn on average such growth composed 7% and in some of them separately it reached 20-30% (Estonian Construction Works Register website). The rapid suburbanization in Tallinn is claimed to be similar to a pattern of urban development in western European states after the II World War (Ahas and Silm, 2006:61). It is already recognised that Tallinn conurbation reaches more than 50 kilometres from its core and intrudes with its fragmented clusters of housing into traditional rural milieus (Roose, 2006:6). At the same time, the total population in Tallinn and its hinterland had been slightly decreasing during 2000-2005 – a period when housing construction in Tallinn suburbs rapidly intensified (SOE website). The correlation between the population growth and the growth of build-up areas is one of the indicators that help to differentiate urban sprawl from other forms of suburbanization. “Sprawl is often thought to be occurring when land development in an area outpaces the population growth” (ANS, 2000:3).

Here it is important to emphasize a distinction between the terms ‘suburbanization’ and ‘urban sprawl’. Suburbanization is a general term for any kind of outward growth of cities normally accompanied by the growth of its population. Under suburbanization the form of a city may remain compact, or take a shape of a multi-nuclei network of settlements of a size sufficient to provide social services and jobs for their residents. In case of urban sprawl we deal with a particular pattern of urban development in hinterland of cities, which is usually associated with liberal market conditions, little planning and fragmentation of local authorities (see Downs, 1998:8, Carruters, 2003: 477). Urban sprawl is described as “the physical pattern of low-density expansion of large urban areas [...] into the surrounding agricultural areas. [...] Development is patchy, scattered and strung out, with a tendency to discontinuity because it leapfrogs over some areas, leaving

³ The term *Tallinn conurbation* in this thesis refers to the metropolitan area of Tallinn, comprising the city of Tallinn as an administrative unit and the closest to it rural municipalities and towns, with high share of working population employed in Tallinn (see figure 6.1 page 66). Tallinn has population of ca 400'000 and together with its hinterlands it hosts ca 500'000 people (SOE website). For more detailed definition of Tallinn conurbation see section 6.1.

agricultural enclaves. Its three major forms are low-density continuous development, ribbon development and leap-frog sprawl.” (Goodall, 1987:491).

In the academic discourse urban sprawl has broadly acquired a negative meaning. Among the negative outcomes of urban sprawl the most discussed ones are high car-dependency of suburbanites, consequent traffic congestion and car-related air pollution; greenfield⁴ elimination; inability to provide adequate infrastructure in suburbs due to needed high investment on behalf of local governments (Downs, 1998; Noorkõiv and Sepp, 2005; Miller, 2004). Urban sprawl is also believed to cause socio-spatial differentiation⁵ of population (Ahas and Leetmaa, 2005a; Miller, 2004) accommodating more affluent people in suburbs and poorer layers of population in blocks-of-flats within city borders (Knox and Pinch, 2006:99-100). As a result of socio-spatial segregation great financial disparities across municipalities emerge thus reinforcing inequality of living environments (ibid).

1.3. PURPOSE OF THE STUDY AND RESEARCH QUESTIONS

The research idea originated from the wish to understand why *urban sprawl* (this study focuses only on its one part – *housing development*) is taking place in Tallinn conurbation. It is recognized that there is a wide range of driving forces for urban sprawl. Among them there are: individual housing preferences, demographic trends, cultural traditions, price of land, increased mobility of people, improved transport and road connection, fragmentation of local powers, cities’ weak urban policy resulting in unattractiveness of urban areas etc (see EEA, 2006:17). In order to explain urban sprawl, I have decided to restrict the range of factors to be explored only to *institutional and political* ones, on which the quality of spatial development may depend. In this sense, the influences of macro socio-economic conditions and trends are left outside my empirical investigation. Such choice is dictated by my specialization in the political and organisational science disciplines and, in particular, the public administration field of study. The latter penetrates the realm of politics and organisations mainly through the public policy implementation perspective. Thus, being underpinned by my theoretical background I assume that political and

⁴ Greenfield land is a term used to describe a piece of undeveloped land, either currently used for agriculture or just left for nature (Wikipedia Encyclopedia website).

⁵ Socio-spatial differentiation refers to the uneven distribution of urban population when people with specific characteristics (such as age, level of income, culture, family structure, level of education etc) tend to reside close to each other thus forming homogenous and distinctive neighbourhoods (Knox and Pinch, 2006: 330).

institutional aspects related to spatial planning have an immense impact on the extent of urban sprawl.

All over the world, dozens of anti-sprawl policies and movements, such as Smart Growth and New Urbanism, emerged in response to sprawl (Bruegmann, 2005). “Overall, evidence suggests that where unplanned, decentralized development dominates, sprawl will occur in a mechanistic way. Conversely, where growth around the periphery of the city is coordinated by strong urban policy, more compact forms of urban development can be secured” (EEA, 2006:7). Sustainable development (hereinafter also cited as SD) concept, which initially was designed to address mainly global environmental issues, became one of those antitheses helping to fight urban sprawl. “Sustainable development is development that delivers basic environmental, social and economic services to all residents of a community without threatening the viability of natural, built and social systems upon which the delivery of those systems depends” (ICLEI, 1996:4). Therefore, urban sprawl, given its multiple negative impacts, is seen as a pattern of unsustainable urban development which is driven by market forces rather than steered according long-term comprehensive strategies.

As a result of recent changes in the politico-administrative system in many democratic states⁶ spatial planning is to a large extent within the competency of local governments (hereinafter LGs). Traditionally being weak in the era of strong central government (see Hall and Pfeiffer, 2000:173), now local authorities became largely autonomous in local affairs, such as planning of land use, housing, schools, technical infrastructure, nature protection and so on. The recent phenomenon coined as ‘empowered local governance’ heralded a new era in local politics in post-socialist states (Stenning, 2004:88). “Localities are forced to adopt proactive economic strategies and to become political actors on their own right, which can no longer rely on central state subsidy ...” (ibid:88). Consequently, what policies LGs adopt and how they implement those policies defines the type of spatial development within their jurisdiction. “Local government is the primary ‘mover’ for local-level policies towards sustainable development” (Evans et al, 2005:107).

⁶ Main changes are characterized by the displacement of central power: 1) upwards to international level (international soft laws and conventions), 2) downwards to sub-national level (provision of particular public services has become a responsibility of regional and local authorities), 3) outwards to non-state social and business actors (citizen participation, public-private partnerships, contracting-out of public services) (Pierre and Peters, 2000: 77).

For Estonia the closest politico-administrative level, from where the call for increased local sustainability emanates is the European Union (hereinafter cited as EU). Even though, the EU-formulated sustainable development policy in urban/spatial planning is generally non-binding, one might expect the Estonian state and local governments to implement it. The evidence of urban sprawl, however, tells about a lack of sustainability in spatial development and, thus, about the existence of the implementation gap.

The purpose of this study is to explore the EU-formulated sustainable urban/spatial⁷ development policy implementation by local authorities in Tallinn suburbs and to understand *why the implementation gap exists* there. Within spatial development field I delimit my investigation only to the allocation of new bigger housing projects in suburbs.

Main research questions and sub-questions:	Subject of investigation:
1. To what extent does spatial planning related to housing development in the selected suburban municipalities of Tallinn follow the principles of sustainable development?	Local spatial development policy
2. What factors do influence the policy implementation by local governments? <ul style="list-style-type: none"> a. How do the national conditions influence the sustainability-raising in local spatial planning? b. How do characteristics of local governments (institutional capacity and disposition to SD policy) influence the sustainability-raising in local spatial planning? c. How does local governments' communication with local residents, business sector and other public institutions influence the sustainability-raising in local spatial planning? 	National legal and institutional framework Local institutional and political context

Table 1.1: Research questions

1.4. OVERVIEW OF METHODOLOGY

To pursue the purpose of this research, the *case study strategy* is selected with Tallinn conurbation being a single case. This case is seen as a rather typical case in a wide array of sprawling cities in the post-socialist states. The case study strategy allows involving more than one unit of analysis, thus producing a more complex, ‘embedded’ research design (Yin, 2003: 42-46). As sprawling of the city takes place in its suburban municipalities, I decided to investigate the problem from the

⁷ I use the concept of spatial development for rural/suburban municipalities.

perspective of local governments in suburban municipalities⁸ of Tallinn, which thus constitute *units of analysis*. Due to the limited resources, only four suburban municipalities were selected for the empirical part of the study and Tallinn city itself was not included in it. A comparative approach is utilized in order to map causal links between the extent of sustainability in local spatial planning and factors that influence it. The evidence aggregated from the sub-units of analysis is supposed to provide literal and/or theoretical replications and to enable making comprehensive conclusions on institutional and political reasons for urban sprawl in a post-socialist context.

Most of evidence is of a qualitative nature, derived from (1) semi-structured interviews with persons involved in the planning process, and (2) spatial planning documents. Some background data is of a quantitative nature covering population change, migration, housing construction, detailed planning volumes in Tallinn conurbation and, if available, separately for each selected municipality.

1.5. OVERVIEW OF THEORY

The approach to this research is framed by the *public policy implementation theory*, in the light of which Estonian local governments are seen as implementing agencies for the policy emanating from the EU level. While designing a conceptual model of this study I was inspired to a large extent by the model of policy implementation process of Van Meter and Van Horn (1975), which was partly adjusted and supplemented by a number of other theoretical views. The model of Van Meter and Van Horn proposed possible causal linkages between the performance of implementing agencies (dependent variable) and various factors that might influence it (independent variables). The *dependent variable* of this study is the extent of sustainability in local spatial development policy, specifically, in housing development. The *independent variables* are those factors pertaining to local governments that might hamper or enable them to increase sustainability. Additionally, the influence of national conditions is discussed as a context for policy implementation.

⁸ According to the administrative division in Estonia those municipalities are called 'rural municipalities', however, owing to the massive and fast real estate development there they can no longer be considered as 'rural'. Therefore, hereinafter the municipalities considered in this study will be called 'suburban'.

1.6. SIGNIFICANCE OF RESEARCH

In Estonia the phenomenon of urban sprawl is being increasingly addressed in public discourses and by the local researchers' community, mostly comprising geographers (see Tammaru, 2002; Noorkõiv and Sepp, 2005; Ahas & Leetmaa, 2005b; Leetmaa, 2005; Ahas et al, 2006; Poom, 2006; Ideon, 2006; Kährik & Tammaru, forthcoming). They describe the patterns of internal migration of population in Estonia, demographical characteristics of migrants, types of new housing, level of commuting, the level of ecological footprint⁹ of new suburbanites and also socio-economic causes of urban sprawl. However, there is a need to understand how institutional and political factors may influence spatial development as well. Although, some publications contain speculations about the role of local authorities and of the national legal framework, they lack an empirical proof for this (see for example Noorkõiv and Sepp, 2005; Ojari, 2002).

This study tries to interpret reflections of various actors continuously involved in spatial planning and development. Through an analysis of this socially constructed data combined together with formal planning documents, I intent to make an overview of institutional and political reasons of Tallinn urban sprawl. Therefore, this research will hopefully provide a view of what changes in institutional and political aspects may improve sustainability of urban development. Referring to the external validity of this study I assume that its findings may be generalized to causes of urban sprawl in other post-socialist countries that adopted capitalist economy and liberal ideology.

1.7. COMPOSITION OF THESIS

This master thesis consists of two parts. **Part I** pertains to the research characteristics (theoretical and methodological issues, literature review). **Part II** pertains to the investigated case (i.e. contextual and empirical analysis and conclusions). After providing a short overview of the research problem, the research purpose and questions in this chapter, I find it important to dedicate the second chapter to the EU sustainable development policy in urban/spatial planning. Chapter 3 reviews utilized theories, provides operationalization of study variables and a conceptual model of the study. Chapter 4 describes methodological approaches and methods used in the research, and

⁹ 'Ecological footprint' is a term used to indicate environmental sustainability. It describes how much natural resources (energy, physical land, water etc) an individual uses in comparison to the environmental space available for this individual. 'Ecological footprint' is measured in conventional hectares per an individual and per year, so that one conventional hectare corresponds to one hectare of land with a world's average biological production (Poom, 2006).

also their methodological limitations. At this point the second part of the thesis starts. Chapter 5 introduces national conditions and peculiarities of the administrative and planning system in Estonia from both sides – as stated in the laws and as perceived by interviewees. Chapter 6 defines Tallinn conurbation and provides a description of socio-economic trends and spatial development there. The analysis of sustainability of local spatial planning in the four municipalities is presented in chapter 7. This chapter discloses the first research question. Chapter 8 answers the second research question and is divided into three parts: (1) characteristics of LGs, (2) communication of LGs with other actors, (3) LGs' perceptions of their capacity to steer spatial development. Chapter 9 summarizes reflections on causal links between the extent of sustainability and institutional and political factors revealed through the empirical research.

2. THE EUROPEAN UNION POLICY ON SUSTAINABLE DEVELOPMENT

This chapter provides an overview of the European Union policy on sustainable development and, in particular, its implication within field of urban/spatial development. The main objectives of the policy presented here will serve as a basis for defining benchmarks, against which the extent of sustainability in development and planning of new housing areas in Tallinn suburban municipalities will be assessed. The chapter also considers the concept of spatial planning as a process through which the sustainability principles can be addressed and urban sprawl may be prevented or diminished.

2.1. SUSTAINABLE DEVELOPMENT POLICY

In the middle of the 20th century the academic community became conscious about the global climate change and misuse of natural resources; about loss of bio-diversity and increasing waste volumes; about extreme poverty in some areas whereas affluence concentrated in other; about social discrimination based on gender, race, nationality, and many other world-wide problems. A sense of necessity emerged to develop unique principles guiding development of villages, cities, regions, nation-states and the whole international society to eliminate these problems. Within such debate a new concept of *sustainable development* was introduced by the World Commission on Environment and Development in its report “Our Common Future”¹⁰ in 1987. The main idea of SD as stated in the report is: “Humanity has the ability to make development sustainable – to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987: 8). The concept of sustainable development is very complex, multidimensional and interdisciplinary. It must encapsulate objectives pertaining to *social, environmental and economic sustainability* (Støa, 2005), and find the most effective ways to balance them. It also has implications in a variety of sectors and its implementation takes place at all levels of governance.

As this case study concerns Estonia, then the EU level of formulating SD policy seems to be the most relevant to consider. At the EU level sustainable development had been first formally recognized as an overarching objective of EU policies in 1997 by the Amsterdam Treaty

¹⁰ This document is well-known as the Brundtland Report.

(EUROPA website: <http://ec.europa.eu/environment/eussd>). In 2001 the EU launched the first Sustainable Development Strategy (hereinafter SDS) (see CEC, 2001) which stated the main objectives and principles of development and called for “a new approach to policy-making that ensures the EU's economic, social and environmental policies mutually reinforce each other” (ibid). It was renewed in June 2006 for the enlarged EU¹¹ (see CEC, 2006a, CEC 2006b). Based on those documents one may identify seven broad priority objectives: 1) limit *climate change* and increase the use of *clean energy*, 2) address threats to *public health* (food safety, infectious diseases and resistance to antibiotics), 3) manage *natural resources* more responsibly, 4) combat *poverty and social exclusion*, 5) *sustainable consumption and production*, 6) improve the *transport system and land use management* (reduce road transport, reduce economic disparities among rural and urban communities), 7) address impacts of an *ageing society* - from an “ageing” society to a “longevity society” (CEC, 2001 and CEC, 2006a).

SDS (CEC, 2006a) also provides a list of the main principles (see annex 1) that should be kept in mind while formulating all types of policies within the EU at all levels of governance. The SDS is a very broad document and is criticized – also by national governments – for being too vague, lacking a real operational definition and for not containing sufficiently specific objectives, targets and deadlines (CEC, 2005:3). From stated above it is clear that the EU sustainable development policy goes far beyond just urban/spatial development realm, however in this thesis I intend to cover only those aspects of the policy that are connected to urban/spatial planning and that help to curb and prevent urban sprawl.

2.2. EU SUSTAINABLE DEVELOPMENT POLICY IMPLICATION IN URBAN/SPATIAL PLANNING

2.2.1. Spatial planning

“Spatial planning refers to the methods used largely by the public sector to influence the future distribution of activities in space” (EC, 1997). It gives a geographic expression to the intended development of housing structure, technical infrastructure, a network of social services, industry, agriculture, recreational areas, nature reservoirs etc. Urban planning comprises the same techniques as spatial planning, but at the scale of a city/town or a conurbation.

¹¹ The EU enlargement in May 2004 resulted in ten states joining the EU, and Estonia was among them.

The contemporary understanding of spatial planning at the European level was first formally pronounced on the European Conference of Ministers for Regional Planning¹² in May 1983 and included into the European Regional/Spatial Planning Charter. As it is stated in the charter spatial planning is “at the same time a scientific discipline, an administrative technique and a policy developed as an inter-disciplinary and comprehensive approach directed towards a balanced regional development and the physical organization of space according to an overall strategy” (CEMAT, 1983). Most of the principles stated in this document greatly coincide with the principles of sustainable development applied in the land use sphere¹³. The later European documents on spatial planning, for example the Green Paper on Urban Environment (CEC, 1990) and the European Spatial Development Perspective (hereinafter ESDP) (EC, 1999) explicitly emphasize importance of incorporation of the sustainability principles into planning processes in cities and regions.

Consequently, the European contemporary understanding of spatial planning implies the infusion of the principles of sustainability into more traditional planning approaches. It introduces a holistic and proactive approach through which a long-term strategy on spatial development of a locality is created as a result of interplay of physical land use planning with various sector policies (local and national) concerning environment, housing, trade, social welfare, taxation, industry, transport, agriculture, forestry etc. Spatial planning aims to “co-ordinate the spatial impacts of other sector policies, to achieve a more even distribution of economic development between regions than would otherwise be created by market forces, and to regulate the conversion of land and property uses” (EC, 1997). Spatial planning is also a process, in which inhabitants of the planned area can and are encouraged to take part, in order to promote their interests in formation of a spatial development policy.

The term ‘spatial development policy’ which will be frequently addressed in this thesis refers to the product of spatial planning in a particular jurisdiction area. In the selected municipalities spatial development policies are articulated in formal planning documents such as municipality master plans, development strategies, building regulations and also reflected in day-to-day decision-making on the part of local politicians and officers. As this case study concerns urban

¹² known under French abbreviation CEMAT

¹³ even though the term ‘sustainable development’ had not been in use yet

sprawl, i.e. extension of urban structures to suburban (former rural) municipalities, then spatial planning within each of those municipalities may be considered as a part of urban planning at the scale of the whole conurbation.

2.2.2. EU sustainable urban/spatial development policy

With an implication in urban/spatial planning, sustainable development is addressed in a number of the EU policy documents and EU-funded initiatives (listed in annex 2). Some of them are exclusively devoted to urban and regional issues, whereas others address a more broad range of sectoral policies and indirectly relate to urban/spatial planning. For this research one of the most relevant policy papers is the ESDP, which sets a framework for spatial development at a wide scale covering the territory of the EU. It states three overall goals: (1) economic and social cohesion, (2) conservation and management of natural resources and cultural heritage, and (3) a more balanced competitiveness of the European territory (EC, 1999:10). The ESDP emphasizes a necessity for a *balanced and polycentric urban system* covering the whole territory of the EU (ibid) and states that this is more efficient, more sustainable and more equitable than either mono-centric urban systems or dispersed small settlements (EEA, 2006:39). The ESDP stresses a necessity of better accessibility in metropolitan regions with the aim to reduce the expansion of towns and cities, resulting in the lower dependency on the private car and more reliance on public transport and cycling (EC, 1999:23). The ESDP also promotes reduction of uncontrolled and excessive settlement pressure on natural areas, particularly in coastal regions (ibid).

Whereas the ESDP has a broad perspective covering both urban and rural areas in Europe and even giving much attention to new forms of the urban-rural relationship, “Sustainable Urban Development in the European Union: a Framework for Action” (CEC, 1998) – another important policy document – focuses on purely urban issues. It identifies four overall objectives for sustainable development in European cities/towns: (1) strengthening economic prosperity and employment in urban areas; (2) promoting equity, social inclusion and regeneration of urban areas; (3) protecting and improving the urban environment (better management of energy, waste, transport, air quality, water, noise, contaminated land); (4) contributing to good urban governance and local empowerment. The latter objective explicitly highlights the need for ‘awareness raising, exchange of experience and capacity building for sustainable urban development’ (ibid: 20).

2.2.3. EU Policy instruments

“The EU has a limited competence over the measures that can contribute to local authorities’ implementation of sustainable urban development” (IEEP, 2005). Proceeding from Howlett and Ramesh’s (2003:88-116) typology of policy instruments, in this policy field the EU employs mainly information-based and treasure-based instruments. EU documents and initiatives in this field are legally non-binding for the EU member-states. For example, the ESDP (EC, 1999:11) states explicitly that each country can “take it forward according to the extent it wishes to take account of European spatial development aspects in its national policies”. Objectives of EU documents and initiatives are to familiarize national and local governments and public with the main principles that are desirable to adhere to in spatial and urban planning, to contribute to creation of cooperation networks and to fund relevant projects and research. Thus, those policy instruments raise the awareness, enable the exchange of knowledge and best practice between localities, and enhance contacts among individuals active in urban regeneration and sustainable urban development.

The European Environment Agency assert that EU international obligations define a clear responsibility and a mandate to take an active lead in the development of new initiatives to cover the environmental and socio-economic impacts of urban sprawl (EEA, 2006:36). Also the international obligations of the EU (as the Kyoto Protocol) and the environmental policy of the EU had led to a number of directives requiring from the member-states certain achievements in air, energy, waste, water, noise efficiency. Besides this, the Directive on Environment Impact Assessment (2003) for projects and the Directive on Strategic Environmental Assessment (2004) for plans and programmes are the two main tools of the EU policy requiring an analysis of impacts of proposed development (EUROPA: http://ec.europa.eu/environment/land_use/index_en.htm). Those policy instruments fit into a category of authority-based instruments according to Howlett and Ramesh’s typology (2003) and require adjustments in national and local urban/spatial policies and policy-making approaches.

Even though, the overall goals and principles of sustainable urban development are set out, many local authorities and also national governments face difficulties with implementing them. It is recognized that there is a need for more concretization and advice on the implication of the SD

principles in land use planning (EUROPA website). The generality of the stated goals gave an impetus for the global academic community to search for a vision of a sustainable city and neighbourhood, which would be more easily applicable by urban planners and politicians.

2.3. ACADEMIC VIEW ON URBAN SUSTAINABILITY – POLICY ELABORATION

Hall and Pfeiffer (2000:16-35) present a comprehensive conceptualization of an ideal sustainable city/town, which agrees with the EU policy goals and provides a better understanding of them. Here I summarize it as follows:

- work and wealth (availability of all types of jobs and more equal distribution of wealth),
- social coherence and solidarity (prevent and combat social and political exclusion),
- decent affordable housing for all (all layers of population have access to housing with at least minimal services, which satisfy every-day needs),
- stable ecosystems (in case of developing cities, find ways to combat poverty in order to enable them to reduce pollution and pressure on nature; in case of more affluent cities, combat behavior triggered by ignorance and private self-interests),
- resource-conserving mobility (reduce private car use, promote public transport, which will be perceived as superior by an affluent public),
- the livable city (availability of attractive places that offer animation, sociability and are within an easy reach of shops, services and transport),
- empowering the citizenry (resolve a conflict between pro-development and anti-development interests; promote participation in local politics and expand people's involvement to overcome NIMBY ('not in my backyard') attitude).

Looking at this list of sustainability criteria we understand that this is rather an idealistic picture, and even utopia in some aspects. The absolute maximum attainment of these criteria simultaneously is probably not realistic in contemporary cities. But it is clear that all cities in order to be sustainable have to strive towards a possible maximum attainment of these goals.

From the land use planning perspective, such broad vision of the urban system triggers questions about urban structure, and form and size of settlements in it, which would ensure sustainability. In this respect the academic community has not still arrived at a unique and unambiguous view. In relation to urban structure, the debate can be limited to the issue of urban centralization (see Frey,

1999: 23-35) with the ‘compact city’ model¹⁴ on one side and the ‘green city’ model¹⁵ on the other side of the continuum of centralization. The concept of ‘decentralized concentration’ is the point where the two extremes could meet: “a multi-nucleated city or even city region in which uses ... are dispersed into a number of smaller centres forming the nuclei of urban districts or towns or ‘villages’” (ibid: 27). Presumably, the latter view fits into an idea of a balanced and polycentric urban system proposed by the ESDP.

From the perspective of form and size of a settlement, Calthorpe’s (1993 cited in Barton, 2000:12) definition of ‘a sustainable neighbourhood’ under conditions of spreading settlements to wider areas around bigger urban centers seems of much relevance for this study: “The alternative to sprawl is simple and timely: neighbourhoods of housing, parks and schools placed within walking distance of shops, civic services, jobs and transit – a modern version of the traditional town. The convenience of the car and opportunity to walk or use transit can be blended in an environment with local access for all the daily needs of a diverse community. It is a strategy which could preserve open space, support transit, reduce auto traffic, and create affordable neighbourhoods.” Each of such neighbourhoods (let it be a district in a city, a self-standing village or town) should be connected to others by well-developed public transport systems and be compact and distant from valuable natural areas. Each of them should have possible maximum self-sufficiency what results in less dependency of its inhabitants and processes taking place there on other places. However, as all places are unique and differ from each other owing to their topography, history, climate and socio-economic conditions (Frey, 1999: 26), it is unreasonable to develop a single model of a sustainable city at the international and even regional level. Each locality has to find its own way to sustainability (Aalborg Charter, 1994: 2).

2.4. IMPLEMENTATION CHALLENGES

Sustainable development policy advises new planning approaches and routine procedures.

¹⁴ The ‘compact city’ form may be achieved as a result of higher population densities and mixed use within the city. Among positive outcomes of such solution there are convenient and affordable public transport; lower car-dependency that decreases air-pollution, noise and risk of injury in car accidents; social mix within neighbourhoods; rejuvenation of existing urban areas leading to the countryside preservation and the escape of urban decay; due to shorter distances walking and cycling as the most energy-efficient way of accessing local facilities (Frey, 1999).

¹⁵ The green city model “suggests a spread-out, low-density city ... consisting of series of small, compact town-size settlements with easy access to natural areas and space for natural processes” (WD Urban Design, 2003, in Tosics, 2004:69).

“With regard to the important role of local and regional levels in delivering sustainable development and building up social capital, it is the overall aim to build sustainable communities in urban and rural areas where citizens live and work and jointly create a high quality of life. Approaches like Local Agenda 21 and other processes with broad public participation must be further strengthened and promoted.” (CEU, 2006:25). Thus, urban/spatial development policy should reflect an agreement on the part of all interested local actors in the development pattern of the locality (MoI, 2006). In order to achieve sustainability “each local authority should enter into a dialogue with its citizens, local organizations and private enterprises” (UNCED, 1992: 273, § 28.3). Politicians and academics increasingly refer to ‘good governance’¹⁶ as a premise of successful sustainable development (see Evans et al, 2005: 13-14; Hall and Pfeiffer, 2000: 164; CEC, 1998).

Moreover, the sustainable development rhetoric requires a holistic approach in urban/spatial planning: it should not be mere physical planning any more, but a complex integration and interplay of the urban/spatial development policy and sectoral policies. Incorporation of environmental considerations into urban planning is considered as crucial (CEC, 1990: 41). The importance of policy integration in urban planning at all levels of governance and between various policy sectors is stressed by many EU policy documents. For instance, the Thematic Strategy on the Urban Environment (CEC, 2006a; CEC, 2006b) aims to contribute to the spread of ‘best knowledge’ among local authorities on how to shift from *traditional policy-making approaches*, when “officials in different departments develop policies with little contact to other policies”, toward *integrated approaches* (like Local Agenda 21 or similar initiatives). The latter involve establishment of a clear vision and adoption of a high-level strategic approach to urban management, when links between different policies are analyzed to ensure that any policy does not have adverse impact on other policies (CEC, 2006b:6). Sustainable urban development implies reconciliation of often controversial objectives – economic growth and competitiveness, satisfaction of social needs, and environmental protection (Lambert and Oatley, 2002: 131). As a result, governments have to make difficult trade-offs, giving priorities to some aspects over the other, whereas the former should not be diminished to zero (Hall and Pfeiffer, 2000: 37-9, 169).

¹⁶ The concept of ‘governance’ is discussed in chapter 3 section 3.3.2.

Thus, local governments are in a new situation when they have to involve a variety of local actors into the debate on how their locality has to develop, and to ensure its sustainable development by considering all local interests and professional knowledge. Their role is to be an arbitrator, who has to reconcile: a) all (often conflicting) local interests, and b) controversial objectives of planning (social, environmental and economic) to achieve sustainability.

Central governments had got also new challenges imposed by sustainable development policy. “Successful urban strategies will be possible only if national and local governments work in close cooperation, if central governments define more clearly the most efficient distribution of functions between the different levels of government... and if political activities follow a common framework” (Hall and Pfeiffer, 2000: 163). The task of the state is also to provide a legal setting and an arena, where state and non-state actors can negotiate and cooperate in order to define local goals and priorities.

Besides all, sustainable development in order to succeed requires a change in residents’ habits, attitudes, and values (Evans et al, 2005: 25). People have to recognize potential threats of particular lifestyles and to give up some of comfort they are used to.

2.5. CONCLUSION

This chapter adduced the main goals of the EU policy on sustainable development in the urban/spatial planning field. The goals may be seen as *substantive* and *procedural*. The former refer to a structure and a form of a city that are meant to be sustainable, enabling satisfaction of human needs of city’s inhabitants, now and in the future, and not imposing negative effects on other localities and their populations. The latter goals indicate the means and processes through which sustainable development of a locality can be achieved such as good governance and integrated approaches in policy-making. This research focuses more on implementation of the substantive goals of the policy that is likely to prevent or diminish urban sprawl. Following these goals the vision of a sustainable city and neighbourhood was specified based on the academic literature. The further operationalization and identification of criteria of urban sustainability in the context of Tallinn suburbs will be provided in the next chapter within discussion on the dependent variables of the conceptual model of this research.

3. THEORY AND CONCEPTUAL MODEL

The purpose of this study, as stated previously, is to explain the implementation gap between the EU-formulated sustainable development policy goals and the actual spatial development in the Tallinn suburban belt. Hence, I intend to explore the extent of sustainability in local spatial development policy in each selected municipality and to analyze how much it is dependent on the local institutional and political factors which may potentially influence the extent of sustainability in spatial planning. In order to identify such factors, some theories and concepts are reviewed and partly applied. The main among them is the policy implementation model presented by Van Meter and Van Horn (1975), which is supplemented by some theoretical reflections on the policy content in relation to its implementation, and national context impacts on policy implementation, and the concepts of institutional capacity, governance, partnerships and organizational learning. Additionally, I refer to the concept of multi-level governance in the beginning of the theoretical discussion, since it helps to deal with a rather *atypical* public policy-making process, different from the one assumed by Van Meter and Van Horn. In the end of this chapter a conceptual model of this study is constructed, which shows tentative causal links between selected independent and dependent variables.

3.1. JUSTIFICATION FOR THE THEORETICAL APPROACH

Theory is a framework of structuring the reality, a simplified model of it, which facilitates its analysis. Theory “instructs a researcher to look at phenomena in particular ways” (Silverman, 2001: 4). In order to explain why Estonian municipalities experience unsustainable patterns of spatial development (namely urban sprawl) I decided to frame this research by the public policy implementation theory. However, in the beginning I was confused by the fact that Estonian local governments are not obliged, in general, to incorporate sustainable development principles into spatial planning (besides some particular obligations emanating from EU directives). If this happens, it is rather a voluntary process. Thus, one may ask why to study implementation of policy by agencies which actually are not obliged to implement it. The answer rests on the shift in the perception of public policy-making process, which is discussed below.

What is public policy?

According to Jenkins (1978) public policy is “a set of interrelated decisions taken by a political actor or group of actors concerning the selection of goals and the means of achieving them within a specified situation where those decisions should, in principle, be within the power of those actors to achieve”. From this definition it is clear that decision-makers have the power to ensure and to control implementation of a formed policy, most likely through appointing implementing agencies, allocating funding for implementation, defining rules, procedures and penalties etc. Thus, this reflects a typical situation in a state where policies are defined centrally and their implementation is delegated to particular institutions according to the hierarchy of a politico-administrative system. Pierre and Peters (2000:81) name such polity as a ‘state-centric’ one, when the state is seen as an undisputed locus of power. In such polity the central government is strong and intergovernmental relations are characterized by ‘command and control’ (ibid: 132).

What is public policy implementation?

Public policy-making can be simplified by disaggregating it into a series of stages comprising ‘a policy cycle’ (Howlett and Ramesh, 2003:11). The model of a policy cycle presented by Howlett and Ramesh (2003:13) consists of the following stages: agenda-setting, formulation, decision-making, implementation and evaluation, where the last stage, according to the authors, may comprise policy learning or policy termination. Howlett and Ramesh (2003:185) define public policy implementation as a stage of policy cycle, where “policy decisions are translated into actions”.

Earlier theories on policy implementation (for example, Pressman and Wildavski, 1973; Van Meter and Van Horn, 1975) are based on a taken-for-granted premise that policy-makers, those who actually make decisions and define a course of action, are distant from those who implement the decisions in order to achieve desired outcomes. In most theories it is also stated explicitly that policy is distant from and imposed on implementers, who are assigned particular tasks for achieving policy goals. But, it is worth to add that in reality policy implementation, depending on the policy nature and setting, may be an extremely complex and interactive process, where many actors of various politico-administrative levels are involved.

Multi-level governance and a new view on public policy process

In the light of politico-administrative changes in Europe during the last decades, the conventional definition of public policy and its process should be reviewed. The main change is emergence and consolidation of multi-level governance, where the supra-national and sub-national levels have become significant in the policy formation process. In the course of such developments, cities and regions have gained “more effective autonomy at the expense of the state” (Pierre and Peters, 2000:17). Political scientists (Jachtenfuchs, 1995; Smith, 1997; Hix, 1998 – all cited in Peters and Pierre, 2001:131) characterize this recent phenomenon by “negotiated, non-hierarchical exchanges between institutions at the transnational, national, regional and local levels”. Peters and Pierre (2001:132) supplement this view by calling attention to the emergence of “a vertical ‘layering’ of governance processes at these different levels”.

As a result of such vertical ‘layering’ of governance, sectoral policies can be viewed as ‘nested policies’, since they are produced at several levels with a different extent of precision/generality of stated goals and achievement means, and a varying extent of obligation for sub-levels to conform. However, it should be noted that, as Jordan (2001:195) maintains in his analysis of the EU governance, the policy process is not identical across all sectors: in some of them, EU operates like a quasi-federal state, while in others decisions are reached after intergovernmental bargaining. As Hill and Hupe (2005:128) put it, in the latter type of policy process (co)-formation of the policy takes place at a variety of politico-administrative levels (layers).

Under the conditions of multi-level governance the policy cycle is more fluent and changing, where at every stage of the cycle institutions of various politico-administrative levels may be involved accompanied also by different non-governmental actors. Consequently, it cannot be once and forever defined at which levels particular stages of a policy cycle take place. Besides that, even though, it is common to perceive the institutional levels as vertically ordered, institutions at one level can enter into exchanges with institutions at any other level, also bypassing the intermediary levels (Peters and Pierre, 2001:132-133). In some cases, if policy is formulated at the supra-national level, policy-makers do not have enough authority to coerce nation-states and sub-national governments to implement the policy and have to leave the decision to adhere to such a

policy to lower-level governments. Under such conditions “the nature of the exchange is characterized more by dialogue and negotiation than command and control” (ibid: 133).

EU sustainable development policy through the multi-level governance perspective

The current research fits into a quite limited range of studies on implementation of “policies where the initial formation activities are outside the nation state” (Hill and Hupe, 2005:127). For Estonian municipalities, policy on SD in urban/spatial planning may be articulated at, at least, three politico-administrative levels – supra-national, national and local (see figure 3.1).

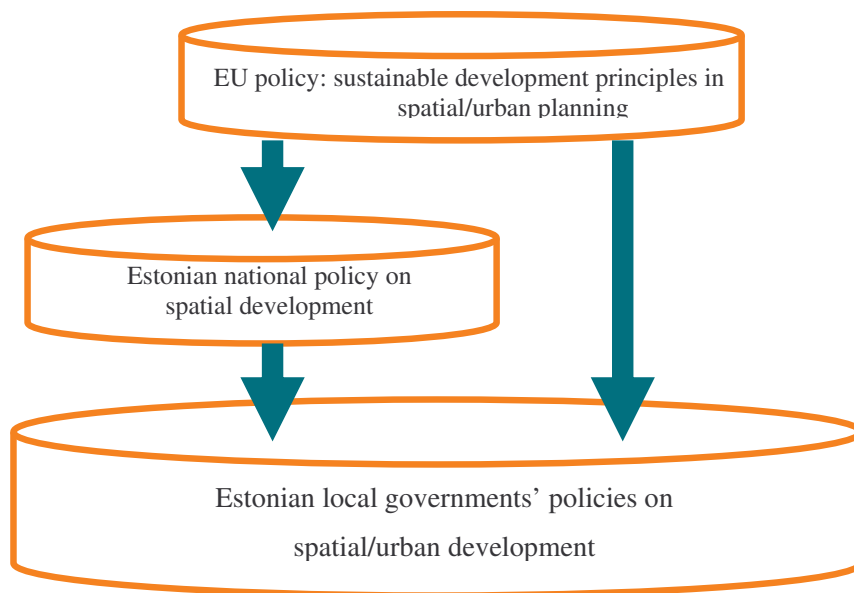


Figure 3.1: The politico-administrative levels in urban/spatial development policy-making

The supra-national policy formation takes place at the EU level. It defines the founding principles of urban/spatial development, which should influence the national policies in the member-states, and the former, in their turn, influence sub-national policies. Additionally, as it is intrinsic to multi-level governance, the supra-national policy may also directly influence local policies bypassing the intermediary national level. In promotion of sustainable development, the EU designs policy tools addressed directly to local governments that in some cases may even be more efficient and beneficial for local governments than those EU tools that aim to affect the national policy first. Marks (1992: 217, in Jordan, 2001) notes “Once policy networks linking sub-national governments to the EC [European Community] have been created, there is no certainty that they

can be dominated by national government. Local authorities are well aware that their interests diverge from those of the government”. Pierre and Peters (2000:84-85) put the case of sustainable development into a category of “international governance which aims at sub-national political change without much control or interference by the nation state”.

The biggest ambiguity in multi-level governance is to understand where policy formation/adoption ends and where policy implementation begins. As Hill and Hupe (2005:127) claim, what is called ‘implementation’ under such conditions actually could be seen as ‘policy formation’. National and local levels in Estonia are arena for both processes - policy formation and implementation simultaneously. To state it more precisely, while implementing policy produced at a higher politico-administrative level, lower-level government makes policy for its jurisdiction area. In the framework of this study these two processes, which are meant to be separate and subsequent processes in most implementation theories, are overlapping and may involve the same actors.

A part of this study is to explore local governments’ current spatial development policies and to assess how much they correspond to the principles of the EU policy. The next section deals with identification of benchmarks for such assessment.

3.2. DEPENDENT VARIABLES

Dependent variables are “the outcomes or results of the influence of the independent variables” (Creswell, 2003: 94). The dependent variable is the phenomenon or event, which the study tries to explain. The dependent variable in this research is the extent of sustainability in spatial planning of new housing areas in the selected municipalities. *Here sustainability means that locations of new housing areas in suburban municipalities would bring about minimal or no negative effects to the whole conurbation at present and in future, and would provide good living conditions for their inhabitants.*

Based on the EU policy on sustainable urban development, the aims of local governments in planning *sustainable settlements* in Tallinn suburban municipalities should be:

- 1) environmental aspect – reduce car use; reduce greenfield use for construction; avoid negative impacts of new developments on natural environment;

- 2) social aspect – ensure daily necessary services and recreation areas within walking distance from new housing estates; provide good accessibility to new housing areas;
- 3) economic aspect – avoid unreasonable public investment in provision of physical and social infrastructure in strategically wrong places, avoid longer travels of residents.

Inferring from the named goals scattered and fragmented housing developments should be avoided. The settlements of reasonable size, formed mostly through adjoining new housing to the existing settlements and/or increasing their density will contribute to the attainment of these goals. Such settlements enable mixed land use containing housing, public services, shopping, and jobs in proximity, thus providing a comfortable and pleasant living environment for residents, minimizing car use and additional investment into provision of public services.

The operationalization of sustainability presented in table 3.1 will guide my analysis of local spatial development policies.

Location of new housing projects in relation to:	Maximum sustainability	No sustainability
1) Existing settlement structure	New housing projects are located within existing settlements, and/or as a logical extension and expansion of them	Selection of places depends fully on private developers: leapfrog and fragmented housing clusters
2) Existing social infrastructure ¹⁷	New settlements are built in places where necessary social infrastructure already exists; in case of the population growth new infrastructure construction goes in parallel or prior to housing construction	New settlements contain only housing; social services may be reached only by using transport
3) Accessibility: roads and public transport	New settlements have good vehicle, cycling and pedestrian road access; sufficient and convenient public transport connects them to the neighboring settlements and bigger urban centers	Only vehicle road access; public transport is either absent or insufficient; no pedestrian and cycling roads connecting housing to nearest services.
4) Jobs availability in the vicinity	New settlements are not far from some local businesses and industry – at least some jobs are available for local residents	All residents of new settlements have to commute to bigger urban centers
5) Interrelation between new housing areas and nature	New settlements are located in areas where their harm to the natural resources and ecosystems is minimal; using brownfield land ¹⁸ for rejuvenation; solutions for technical infrastructure do not harm environment; environment offers good recreation possibilities for locals	No environmental impact analyses are made; new housing projects may require extensive cutting-down of forest; new housing sewage solutions badly pollute natural resources etc

Table 3.1: Sustainability criteria in spatial planning of housing

¹⁷ **Social infrastructure** is understood here as an institutional structure that provides people with necessary services and facilitates people’s social and economic interactions. Among social infrastructural units there are educational and health care institutions, local authority institutions, sports facilities, shops, banks, libraries, restaurants, bars, theaters and so on.

¹⁸ Brownfield land is a term used for an area that has previously been used for industrial, commercial or other purposes, but at present is abandoned and idled, and has potential to be redeveloped (Wikipedia website).

It is clear that the reality is never 'black or white', and patterns of new housing development in each municipality may contain 'less' or 'more' sustainability depending on localities and on housing projects. Also in terms of different sustainability criteria, even within the same project the extent of sustainability may be 'less' or 'more'. However, this operationalization is very important as it clearly identifies features of ideally sustainable settlements. However, sustainability cannot be assessed in terms of each criterion separately, as sustainability implies the most favorable combination of those criteria.

3.3. INDEPENDENT VARIABLES

My empirical analysis is framed by Van Meter and Van Horn's (1975) model of policy implementation process, most importantly, by the existence of causal links between the success in policy implementation and various factors that may influence implementation. As it is noted by Van Meter and Van Horn (1975: 448 referring to Dolbeare, 1974) policy implementation studies usually try to answer the question: "Why did it happen this way?" The tentative reasons for urban sprawl in Tallinn conurbation are considered as independent variables of the study as they are believed to influence outcomes.

Van Meter and Van Horn maintain that the following variables "shape the linkage between policy and performance" of implementing agencies:

- 1) features related to the policy itself divided into two groups of variables: a) objectives and standards and b) policy resources
- 2) inter-organizational communication and enforcement activities
- 3) characteristics of implementing agencies
- 4) disposition of implementers to policy
- 5) economic, social, and political conditions.

The authors emphasize the importance of particular relationships between the variables themselves, some of which will be discussed later on. Some of the variables identified by Van Meter and Van Horn (1975) are not so relevant for the situation of multi-level governance and some of them are intrinsic only to the USA political system and will be adjusted to the context of this study.

As we see, the model requires an investigation of a wide scope, which is not possible in this study. Therefore, in order to delimit the scope, I chose to focus on implementing agencies – their characteristics, their communication with other prominent actors in spatial planning and disposition of their staff and politicians to the policy. These factors are enriched by other theoretical perspectives, focused on specific issues. The remaining factors in the model are also recognized as very important; however, they rather provide a background for performance of implementing agencies. Considerations about the influence of the policy content and transfer are discussed further in this chapter. The socio-economic conditions in the country and the Tallinn region, as a setting within which implementation takes place, are presented in chapter 5 and partly in chapter 6. National socio-political conditions are analyzed in chapter 8 together with the analysis of independent variables. Thus, independent variables are only those factors that relate to the local politico-administrative level and may vary across municipalities.

In policy implementation study, while identifying major factors that might influence policy implementation, it is very important to distinguish between different types of policies. The sustainable development policy itself suggests the significance of *good governance*, *public-private partnerships*, *institutional capacity-building*, *organizational learning* as the prerequisites to the achievement of urban sustainability. Therefore, the universalistic model of public policy implementation proposed by Van Meter and Van Horn is supplemented in this study by the concepts cited above.

Being guided by the above mentioned theory, I identified two independent variables of this study: (1) factors pertaining to an implementing agency, i.e. local government, and (2) horizontal communication of local government connected to spatial planning. The theories, concepts and their application are discussed in detail below.

3.3.1. Factors pertaining to local government

This independent variable utilizes the theoretical perspectives on:

- institutional capacity
- ‘characteristics of implementing agencies’ and ‘disposition of implementers to policy’ from the model of Van Meter and Van Horn
- organizational learning

Institutional capacity is a concept, which may be interpreted in different ways depending on the research topic, and in literature a similar phenomenon is also referred to as ‘institutional capital’, ‘capacity-building’ or ‘strategic capacity’. This concept is emphasized as being very important in literature examining sustainable development and urban policy implementation at the local level. Capacity-building is considered as a principal ‘means of implementation’ of the SD principles (Evans et al, 2005: 28). Lambert and Oatley (2002: 127) talk about strategic capacity of localities, which is “a particularly important issue in relation to strategic, sub-regional spatial planning in areas under growth pressure, where there is often intense controversy about urban growth and its accommodation”.

The institutional capacity is considered by Evans et al (2005: 5) as a key element in government and defined as the *organizational, knowledge and leadership resources* of local governments. Knowledge resources are seen by Magalhaes et al (2002: 54-59) not as stable asset, but rather as an interactive development of knowledge and its transfer to all stakeholders of a domain. The necessity of common understanding of reality, shared ways of thinking and acting among stakeholders enhance institutional capacity (ibid).

Very broadly Evans et al (2005: 21) defines institutional capital as “internal patterns of behavior and ways of working, as well as the collective values, knowledge and relationships that exist in any organized group of society”. “Institutional capital should assist local government in responding to new circumstances and mobilizing resources” (ibid: 29).

Healey (in Lambert and Oatley, 2002: 126) argues that institutional capacity of a locality depends on the quality of local political cultures. Thus, LGs with high institutional capacity have “well-integrated, well connected and well informed” political culture and “can mobilize readily to capture opportunities and enhance local conditions” (ibid).

Institutional capacity of local government for sustainability-raising may encapsulate such features as *organizational stability, long-term leadership, commitment and support to enact changes in decision-making, collaboration, sufficient allocation of resources* etc (Anderberg, Well and Ruotsalainen, 2005: 2).

Financial resources are not noted by most writers as a constituent part of institutional capacity. I think, however, it is very relevant for the capability of an institution to sustain under external pressures and to achieve intended goals. Financial capacity plays an important role in enhancement and mobilization of knowledge and relational resources. For example, having high financial capacity an institution may employ and attract a sufficient number of experts with high level of professionalism and skills. In the Van Meter and Van Horn's (1975: 465) model financial resources are mentioned within policy content itself: the resources, which policy-makers had allocated for implementers with the purpose of achieving the policy goals. In the case when policy cycle takes place under multi-level governance, financial resources of local governments are more important defining the capability of local government to ensure sustainable spatial planning.

I consider institutional capacity of LG not as a stable state of affairs, but as a set of features of LG that are constantly modified to a large extent as a result of learning. In this setting learning implies a change not only in routines and inner rules in LG, but also in goals and principles of various policies formulated and adopted at the local government level. The latter type of learning can be referred to as 'policy learning', implying attempts "to improve or enhance policy-making based on the assessment of past experiences" (Etheredge and Short, 1983, and Sabatier, 1988 in Howlett and Ramesh, 2003:220). Positive result of learning may bring about innovative ideas that help to overcome previous mistakes and, thus, to enhance the local government's institutional capacity for sustainability-raising.

Organizational learning may be *based on direct experience*, when an organization gradually adapts those routines, which lead to favorable outcomes, and discards those, which brought failure (Levitt and March, 1988:321). Within this type of learning, the authors distinguish trial-and-error experimentation and organizational search for better routines within a pool of alternatives (ibid). The second type of organizational learning is *learning from the experience of others*, where diffusion of experience may take place through coercive, mimetic and normative mechanisms (ibid:330). Mimetic mechanism, implying contacts of members of different organizations (i.e. use of consultants or move of personnel) and normative mechanism, involving formal and informal educational institutions, publications, experts, are two mechanisms most relevant for spread of knowledge among local governments on how to strive for sustainability. The need for networks for exchange of best practice and knowledge is emphasized by sustainable development policy itself.

Cities need innovative learning, so as to use the best practice of other cities for their own purposes and possibilities (Hall and Pfeiffer, 2000:173).

Van Meter and Van Horn summarize characteristics of implementing agencies, considered as influential by many students of bureaucratic politics. The major attention is paid to the distinction between formal and informal features of an implementing agency. Here are the characteristics of an implementing agency noted in the model:

- The competence and size of an agency's staff;
- The degree of hierarchical control of subunit decisions and processes within an agency;
- Agency's political resources (e.g. support among legislators and executives);
- The vitality of an agency;
- The degree of open communications within an agency;
- Agency's formal and informal linkages with the 'policy-making' body.

Within the variable 'the disposition of implementers' Van Meter and Van Horn identify three elements of the implementers' response, which "may affect their ability and willingness to carry out the policy: their cognition (comprehension, understanding) of the policy, direction of their response toward it (acceptance, neutrality, rejection), and the intensity of that response" (1975: 472). In the model of Van Meter and Van Horn the variable 'the disposition of implementers' is placed separately from other variables probably in order to emphasize the dependence of implementers' disposition on other variables. Each variable may influence either cognition, direction of the response or intensity of the response. For example, the amount of resources allocated for the policy implementation may influence the direction of the response of implementers and its intensity. Similarly, the policy content may also influence the disposition of implementers. For instance, while seeing the complexity of SD principles and understanding that the local government's capacity to fulfill them is not enough, the officials may decide to accept only those goals which seem to be feasible under existing conditions. Thus, they may partly reject the policy or reduce the intensity of the follow-up attitude. Disposition of implementers also depends on characteristics of an implementing agency. In the context of this study disposition of local political elite to the policy may depend on the existence of vested interests and proper knowledge on the issue. Thus, disposition of implementers depends on the way policy and its underpinning problems are made clear and communicated to an implementing agency.

Proceeding from the theoretical discussion above applied to this study, institutional capacity of local government is defined as *a capacity of local government, basing on its political, organizational and financial resources to promote economically, socially and environmentally balanced development of a municipality.*

In the empirical analysis of institutional capacity of selected local governments I will pay attention to the following issues:

Political resources:

- Common understanding of a problem and consensus among local politicians on a vision for spatial development in a municipality
- Commitment of politicians to serve the public good of the municipality as a whole
- Openness towards innovative thinking, ability to adjust routines and policy goals in order to serve public interests.

Organizational resources:

- Stable and dedicated leadership promoting sustainable development
- Level of expertise and size of staff
- The extent of influence of experts on decision-making in planning
- Commitment of local officials to serve the public good of the municipality as a whole
- Involvement of independent consultants
- Institutional design of local government: standing and ad hoc committees, institutionalized inner rules and procedures.

Financial resources:

- Sufficiency and stability of financial resources of a local government

Disposition of implementers towards the policy:

- Good knowledge of sustainable development principles
- Support for sustainable development principles among politicians and officials.

The figure 3.2 delineates a simplified illustration of the independent variable.

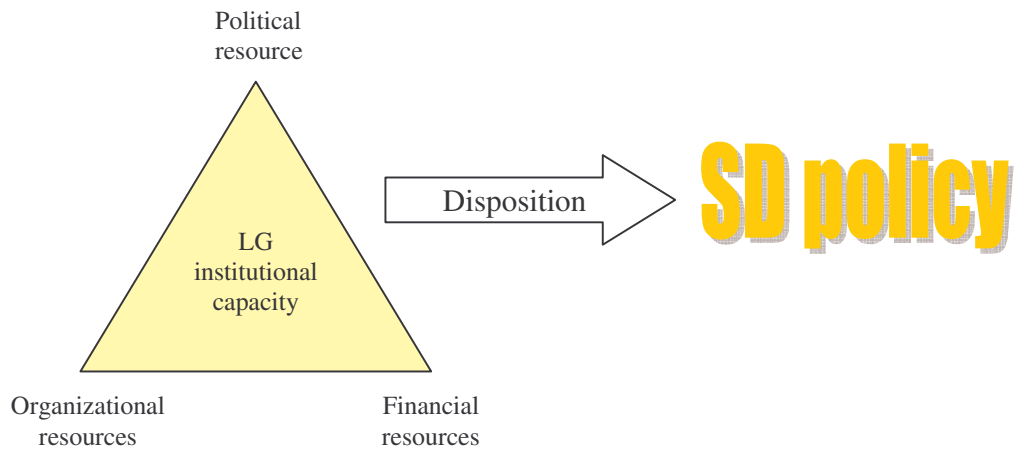


Figure 3.2: Schematic illustration of the first independent variable of this study

Hypothesis no 1: Local government has more chances to promote sustainable development in urban/spatial planning if it has high institutional capacity, comprehensive understanding of and a positive attitude to sustainable development principles.

3.3.2. Horizontal communication of local government

Under this independent variable I discuss horizontal relationships of local governments with other actors who may be involved into shaping local spatial development policies. The intention is to utilize the *local governance* concept in order to frame the horizontal communication of LGs. In the European understanding ‘new governance’ means *increasing involvement of society in the process of governing* (Pierre and Peters, 2000:7). ‘Good governance’ is seen as an integrated effort on the part of local government and other public agencies, civil society and the private sector (Hall and Pfeiffer, 2000:164). “Governance ... is the sphere of public debate, partnership, interaction, dialogue and conflict entered into by local citizens and organizations and by local government” (Evans et al, 2005:3). In the course of the transition from ‘government’ to ‘governance’ the shift in the policy process is evident: public sector institutions encourage citizen engagement in the policy deliberation process, increase reliance on consultants and think tanks, and enable broad public to present their views on policy through, for example, websites (Pierre and Peters, 2000:23). Good local governance is believed to keep often controversial objectives of sustainable development in balance (Hall and Pfeiffer, 2000:164).

Referring to the Van Meter and Van Horn's model (1975:465-470) the variable 'inter-organizational communication' is relevant for this discussion. However, Van Meter and Van Horn (1975:465-470) perceive inter-organizational communication rather as a *vertical* communication between institutions where some of them are seen as superiors (higher authorities) and other as subordinates (implementers). The model does not concern inter-organizational communication, which is horizontal in its nature, i.e. "collaboration between organizations that are in no sense in hierarchical accountability relations" (Hill and Hupe, 2005:133). In my opinion, horizontal communication is not less important than vertical one in case of implementation of SD policy under multi-level governance. In this study vertical inter-organizational communication refers to the policy communication from the EU level to the local level and was presented in chapter 2 in the description of EU policy instruments and is discussed further in this chapter together with the policy content in section 3.4.1 and 3.4.2.

Horizontal communication rules out such occasions when one of parties can dictate and the other has to comply. In horizontal communication activities of parties rather depend on their interests and their ability to promote those interests. This study considers horizontal communication of local governments with:

- The public sector: county government (hereinafter also CG)¹⁹, neighboring LGs
- The private sector: real estate developers²⁰
- The third sector: residents and resident non-governmental organizations (hereinafter NGOs).

The aim is to disclose how such actors influence the sustainability in spatial planning, i.e. whether they hamper or facilitate LGs in sustainability-raising processes. As it was recognized by Fritz Scharpf (1978:347 in Hill and Hupe, 2005:59), a pioneer in the network analysis, "Policy formulation and policy implementation are inevitably the result of interactions among a plurality of separate actors with separate interests, goals and strategies". It is important to see how these

¹⁹ From the perspective of a hierarchy of the politico-administrative system, the connection between county governments and local governments is seen as vertically ordered, however in reality their communication has features rather peculiar to organizations being in a horizontal relation. Even though, county government is a higher-level institution, comprising several local governments within its jurisdiction, there is no straight line of command between those two levels. Therefore, I consider their communication as a horizontal one.

²⁰ The term *real estate developers* (or *developers*) in this thesis is used to refer to all private actors – individuals and institutions – that initiate a planning process with the aim to construct housing or any other type of real estate. They can be both private landowners and actors developing real estate on behalf of landowners.

actors interact, what interests they pursue, what capacity they have to influence decision-making of local government.

The *partnership* concept is used here in order to reflect on LGs' communication with the private sector actors. As it was noted, partnerships are important part of governance. "As a principle of sustainable development, cooperation and partnership is one of the most vital tools that can be used because it may increase the institutional capacity" (Anderberg, Well and Ruotsalainen, 2005: 3). Malm and Gustavsson (2000, in Martinson, 2006:60) see *partnership as a result-oriented long-term cooperation, where commitments of parties are defined by mutual formal agreements*. The authors emphasize *joint goals* stemming from parties' vested interests and *mutual dependency* to reach these goals (ibid). So, the intention is to see if LGs are involved into public-private partnerships and whether this contributes to increased sustainability in spatial development.

Hypothesis no 2: The more local government tries to involve various interested actors in spatial development policy elaboration and implementation and to reconcile their interests, the more sustainable the outcome of planning is likely to be.

3.4. GENERAL INFLUENTIAL FACTORS

This section delineates the main factors that may potentially influence the independent variables. I recognize their importance, however, I have chosen to concentrate only on policy implementation at the local level. So, in the empirical analysis local political and institutional factors will be paid main attention to, whereas general influential factors (policy content, communication and national conditions) will serve as a background for understanding the independent variables.

3.4.1. Policy content

In the theoretical perspective of Van Meter and Van Horn (1975:458-462) the main message is that policy implementation depends on the nature of policy. Their classification of policies is based on: **a)** how much *change* policy presupposes (in both policy ideology and institutional arrangement) and **b)** to what extent there is *goal consensus* among participants of implementation process. However, it is essential to complement their view with other theoretical views on policy content. For example, the typology of public policies proposed by Wilson (1973, in Gustavsson, 1980) employs as a criterion the incidence of costs and benefits policy implementation implies: costs and

benefits may be widely distributed or narrowly concentrated in society²¹. In addition to the distribution of costs and benefits Thomas and Grindle (1990) bring forward the time when costs and benefits become apparent (long-term, short-term), which in their view also determines the response to the policy on the part of those who contribute to implementation. Grindle (1980: 8-10), when discussing policy implementation in Third World countries, raises an issue of 'implementability' of policies, referring to such factors as dispersion of benefits, degree of behavior change, geographic and organizational dispersion of implementers, clarity in policy goals and their unambiguous perception by implementers.

Intended initial goals of policy may be seen as benefits it should bring about, as every public policy usually aims to solve a particular problem in society. Van Meter and Van Horn (1975: 464) maintain that policy broad goals should be elaborated into more precise objectives and standards that are considered as benchmarks for assessment of the policy implementation. Those specific objectives and standards define dependent variables of a policy implementation study. However, their measurability varies from case to case. As the authors state, sometimes it is very difficult to identify and measure performance, because policy objectives may be very broad, complex and far-reaching. The goals of sustainable development are exactly of this type. They serve broad public interests of present and future. The intended results of sustainable development (such as improved environmental situation, eradication of poverty) are long-term and much dispersed, and besides this they may be easily contested (are outcomes really caused by sustainable development?). In the opinion of a representative of a think tank organization²² (hereinafter cited as think tank SEIT) (respondent code TT, see annex 4.1²³), the complication for implementation is that the long-term aims of SD concern many sectors, and short-term implementation steps are insufficiently defined. The aims exist, but how they should be achieved is unclear in the policy.

Costs of policy may be those concessions that some actors in society have to accept in order the policy benefits to be achieved. Thus, if policy in order to achieve its goals implies a change in

²¹ The well-known Lowi's (1966, 1972 in Howlett and Ramesh, 2003: 89) typology of public policies differentiates between weakly or strongly sanctioned policies and generally or individually targeted policies. Sustainable urban development policy, according to this typology, may be named as 'constituent' policy, i.e. generally targeted and weakly sanctioned.

²² Stockholm Environment Institute Tallinn office (SEIT) promoting sustainable development in Estonia.

²³ Hereinafter references to respondents will be provided with just a code which is specified in annex 4.1.

human habits, ideology and routine practice, they are considered as costs that the target group²⁴ of the policy has to bear. The larger and more diverse target group is, the more difficult it is to affect its behavior in a desired fashion (Howlett and Ramesh, 2003:192).

The target group of SD policy may be divided into two categories: (1) institutions of the public sector, and (2) civic and business actors (general public and real estate developers). For the first it means that they have to reconsider their role in spatial planning and to apply new planning approaches; for the second – they have to reconsider their values, lifestyles and preferences. As it was stated in chapter 2, now local governments have to involve a variety of actors in spatial planning and to reconcile their views and needs. Besides this, they have to integrate various sector policies and consider their impacts on each other. Such role and approaches are new and hard to implement without proper knowledge and practice; they impose a big challenge for local governments. Costs of properly implemented SD policy would include as well much stricter rules for real estate development, when each initiated project would be thoroughly assessed for its environmental, social and economic impacts, new public-private partnerships would emerge, imposing new obligations on private developers (which are likely to be opposed by them). Also, all individuals would be influenced by new environmental thinking to change their habits, preferences, such as choosing new housing in a settlement where daily public services are available without a need to use a car.

In case of sustainable development both costs and benefits are broadly dispersed, but costs are apparent immediately when policy implementation starts, whereas benefits are of a long-term nature. Evans et al (2005: 25) notes that sustainable development imposes costs on society that are called ‘exchange of values’ and gives in exchange ‘diffuse collective benefits’. Such change is not possible unless the goals and reasons for such goals are well explained to the actors. “Citizens, as well as politicians, must be ‘trained’ or educated to adopt the changes in lifestyle and behavior that sustainable development requires” (ibid).

To conclude it can be said that the nature of SD policy – its dispersed and far-reaching benefits and the extent of change in the established practice and behavior it requires – complicates policy implementation.

²⁴ A ‘target group’ of policy comprises those individuals and institutions whose behavior or ways of functioning are meant to be changed in order the policy to succeed.

3.4.2. Vertical communication of policy to implementers

The goal of inter-organizational communication and enforcement activities in Van Meter and Van Horn's point of view is to communicate objectives and standards of policy from policy-makers to implementing agencies. They emphasize accuracy of such communication and consistency (uniformity) between different information sources as being the vital factors that influence implementation. The authors distinguish between two ways policy objectives are communicated from higher level officials to lower level ones: (a) 'command and control' relations between policy-makers and implementers, (b) relations among members of different organizations or among federal, state and local officials, when "there is no hierarchy of officials in a single line of command" (Schultze, 1969 in Van Meter and Van Horn, 1975). In the latter case the means of enforcement are restricted to two techniques: technical advice and assistance, and the use of economic incentives and sanctions (ibid:467).

As it was discussed in section 3.1 the situation explored in this research differs from a traditional view of a polity; some parallels may be drawn with the federal system. In case of multi-level governance and especially non-statutory policy field (such as sustainable development in urban/spatial planning), local governments are free to decide to what extent and how they incorporate SD principles into their policies. Thus, international policy-makers cannot coerce and control implementing agencies. From the EU level the information on the policy is communicated through various non-coercive tools containing a big range of non-binding documents, international initiatives and funds. But, as sustainable development is meant to enter many sectoral policies, in the sectors where the EU has more authority to influence nation-states the SD principles are required to be incorporated into national laws, which in their turn directly coerce local governments to conform (for example, in Estonia the Environmental Impact Assessment and Environmental Management System Act, 2005). Such practice refers to the ways the Estonian state can communicate the EU policy to the local level. Besides legal acts the state may transfer policy goals through its various institutions, organized seminars, conferences, trainings. Also, it may support think tanks that specialize in this field and provide research-based knowledge to local governments, thus enhancing their enlightenment. Based on an interview (TT, see annex 4.1), I can say that there is only one think tank in Estonia in this field, and it does not get any financial support from the state.

3.4.3. National institutional and socio-political conditions

One very important aspect of this study is the nature of the political system and ideology in the country where policy implementation takes place. This aspect corresponds to the variable ‘political, economic and social conditions’ in the Van Meter and Van Horn’s model (1975) of policy implementation. However, it appears to be underplayed by the authors as they almost do not discuss it. Under this variable they mention public opinion, which may be connected to dominating ideologies in society. Ideology, norms of behavior and communication of institutions and individuals may hamper or contribute to the sustainability-raising process. The remaining factors cited by the authors under this variable are not much relevant for this study.

National political and economic conditions are given more attention by Thomas and Grindle (1990) in analyzing implementation of reforms in developing countries. They stress importance of analyzing the political and economic environment where the policy change takes place in order to anticipate how that environment might react upon changes the policy brings about. Even though, the authors’ main message is that the decision-making process on a policy reform should be interactive, the issue of the political regime and societal attitudes are considered crucially important. There is a parallel to draw between implementation of reforms imposed on developing countries by donor organizations and implementation of the EU policy by Estonian local authorities. In both cases policy emanates from outside the polity where it is meant to be implemented. The difference here is that the EU policy on sustainable development in spatial planning is non-statutory, thus leaving local decision-makers to decide whether and to what extent they embark on a change in their policies. Thomas and Grindle (ibid: 1170) state that very often donors decide on a reform without a proper analysis of the local political and social order and then “divorce themselves from its implementation”. As a result, the policy success or failure is rather accidental depending on whether the policy is suited to the local context and thus whether it caused massive opposition or not. “Reactions may vary from minor, to those that bring into question the implementation of the new policy, to those that can even threaten the existence of a regime” (ibid: 1170).

The situation in this study is that the EU policy is designed uniformly both for old EU member-states (i.e. mature democracies) and for new member-states, containing Eastern European

countries, recently called as ‘transition economies’ (see Bradshaw and Stenning, 2004). Transition economies are defined as those states that previously were centrally planned and then embarked on a set of reforms to create market economies (ibid:1). Besides economic restructuring, they face a challenge of building a new political and social system and reshape their identity on the global arena and international communication (ibid). In my opinion, now it is already improper to refer to those states as ‘transition economies’, since relevant reforms are already implemented at large. States are rather learning how to operate under a new regime and are gradually getting stabilized. However, these states are still much different from mature democracies in Europe, sharing specific problems that are unthinkable in old and stable democratic systems. Turbulent development, legal instability, ambiguity and imperfection of laws, the lack of experience, trial-and-error approaches, brave and risky solutions in all spheres of development and human conduct are observable. Therefore, the national conditions under which Estonian municipalities are meant to implement the EU policy differ a lot from those in old EU member-states.

This topic is disclosed in chapter 5, which is divided into two parts: (1) description of the national institutional and socio-economic framework for spatial planning, (2) reflections of interviewees on how much the national framework (legislation, prevailing social norms and political behavior) is contributive to more sustainable spatial planning on the part of local authorities.

3.5. CONCLUSION

A conceptual model for this research (see figure 3.3) synthesizes the discussion presented in this chapter. It illustrates an approach to this research, where all variables – independent and dependent – are presented within a framework of interrelation.

The policy content and its vertical communication are considered as an input for the local level implementation (this issue is covered in chapter 2 and in section 3.4 of the current chapter). The second box of the model refers to the local politico-administrative level and illustrates the most important variables pertaining to it – institutional capacity of local government, disposition of local politicians and officials to policy, horizontal inter-organizational communication – thus disclosing how the main actors that are active at this level and their interrelation may influence sustainability (this is analyzed in chapter 8). The external factors pertain to the conditions under which local implementation takes place: national conditions discussed in chapter 5, and regional conditions

described in chapter 6. The dependent variables of the study – an extent to which principles of sustainability are taken into account in local spatial planning – are presented as an output in the model (analyzed in chapter 7).

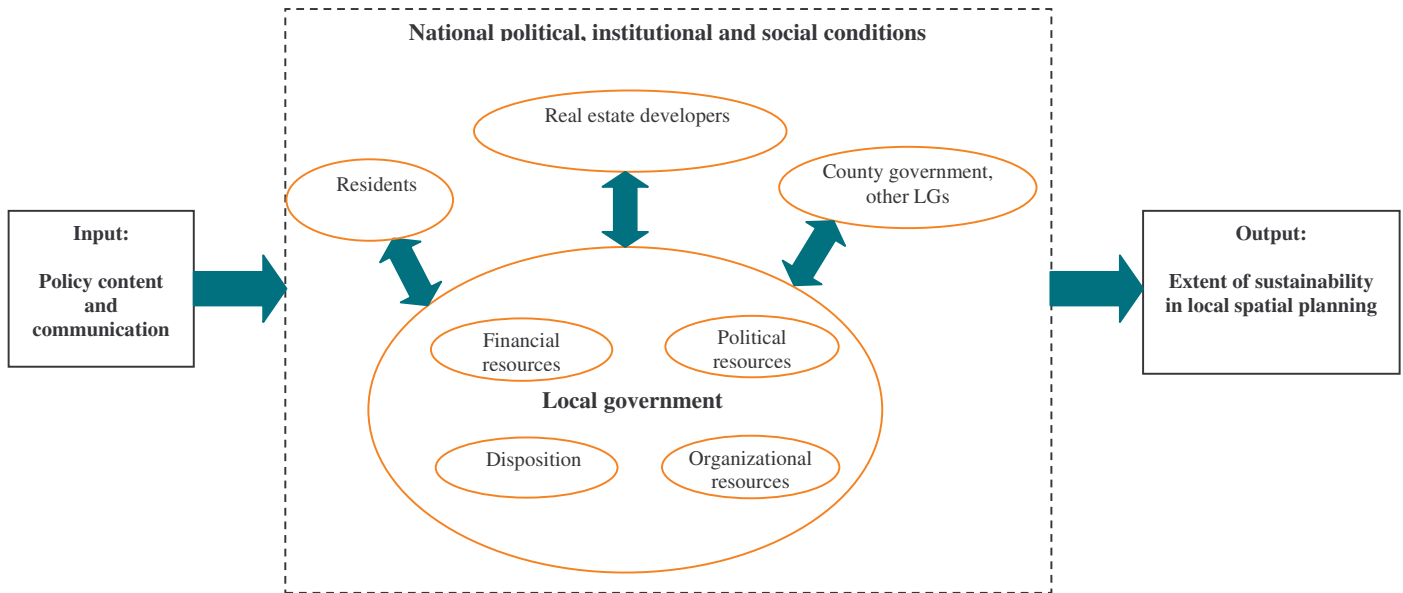


Figure 3.3: Conceptual model of this study

4. METHODOLOGICAL FRAMEWORK

This chapter provides information on methodology applied in the study. Methodology, according to Silverman (2001:4), refers to the choices a researcher makes about cases of study and methods of data collection and analysis. Thus, selected methodology defines *how* a researcher intends to study a phenomenon in question. Methodology, as it is noted by Silverman (2001:4), “cannot be true or false, only more or less useful”.

4.1. CASE STUDY AS A RESEARCH STRATEGY

This research is a single case study with several units of analysis. The case study is usually a preferred strategy when “‘how’ and ‘why’ questions are being asked about a contemporary set of events, over which the investigator has little or no control” (Yin, 2003:9). As claimed by Yin (ibid: 3) case studies may have the exploratory, descriptive and explanatory nature.

In order to explore and explain the phenomenon of urban sprawl in the post-socialist context I have chosen Tallinn conurbation²⁵ as a single case which is believed to be *a typical case* among other post-socialist sprawling cities. One of the reasons for choosing Tallinn conurbation is my familiarity with it. The second equally important reason in the research on urban sprawl is that Tallinn is the most prominent example of urban sprawl in my homeland, Estonia.

Yin (ibid:24) states that each unit of analysis has to be selected so, that it would enable a researcher to answer the research questions. In order to explain the emergence of urban sprawl in Tallinn conurbation I focus on the level of local governments in suburban municipalities. Therefore, the research takes a form of an *‘embedded’ case study design* (see Yin, 2003:42-46), where selected suburban municipalities are separate units of analysis and constituent parts of the case.

Due to the limits of time and resources it was not possible to investigate each suburban municipality of Tallinn. Therefore, only four municipalities were selected as units of analysis. The sample of suburban municipalities was purposely chosen so that it would cover most growing municipalities around Tallinn and, at the same time, provide a maximal variation in: (1) patterns of

²⁵ See a detailed definition of Tallinn conurbation in chapter 6 section 6.1.

spatial development, (2) planning approaches, and (3) attractiveness of a municipality for housing construction (depending on its geographic location and features)²⁶. A detailed description of the municipalities is presented in chapter 7 section 7.1.

Yin (2003: 24-26) warns that it is very important to set up the boundaries of a case: which actors are considered as a part of the case and which time frame the study covers. Here the case comprises only those events that are related to the territory of each selected municipality and those actors who are extensively involved in local spatial planning in those municipalities – local government, real estate developers, local residents and county government. The study looks at the state of affairs valid in the data collection period July 2006 – January 2007.

The main strength of the case study strategy is that it can be based on any mix of qualitative and quantitative evidence and allows employing a wide range of data collection and analysis methods (Yin, 2003). The next step is to identify which research approach is best to employ for this study.

4.2. APPROACH TO THE STUDY

Research approaches can be divided into three categories according to their character: quantitative, qualitative and mixed (Creswell, 2003). Choice of an approach is usually underpinned by researcher's *philosophical assumptions* about 'what knowledge is' and 'how it is formed'. My philosophical assumptions can be referred to as pragmatism (among other schools of thought about philosophical assumptions: post-positivism, constructivism, advocacy (ibid, 2003: 6-12)). Pragmatists believe that knowledge can be acquired only through experience, and it is a product of evolution: those ideas, which do not facilitate a successful action, we discard, and those, which do, we keep (see Hammersley, 1990: 42-5). For pragmatists a research problem is the most important and they try to employ all suitable methods to derive best understanding about the problem (Creswell, 2003: 11-2). Consequently they tend to choose the mixed method approach.

The nature of a research problem is also crucially important for choosing an approach to a study. "Certain types of social research problems call for specific approaches" (ibid: 21). A researcher has to think about what methods would match the research problem best. This study is of both

²⁶ The advice on selection of municipalities satisfying those criteria was given by the key-informant from Harju county government (respondent CH1).

descriptive and explanatory nature. It intends *to describe* how much SD principles are reflected in local spatial development policies in Tallinn suburban municipalities, i.e. to what extent policies favor or restrain urban sprawl. At the same time the research aims *to explain* why sustainable or unsustainable patterns of spatial development take place in those municipalities.

Figure 4.1 illustrates my logic of selection of a methodological approach based on identification of sources of evidence and appropriate methods, which are feasible and effective in order to answer the research questions.

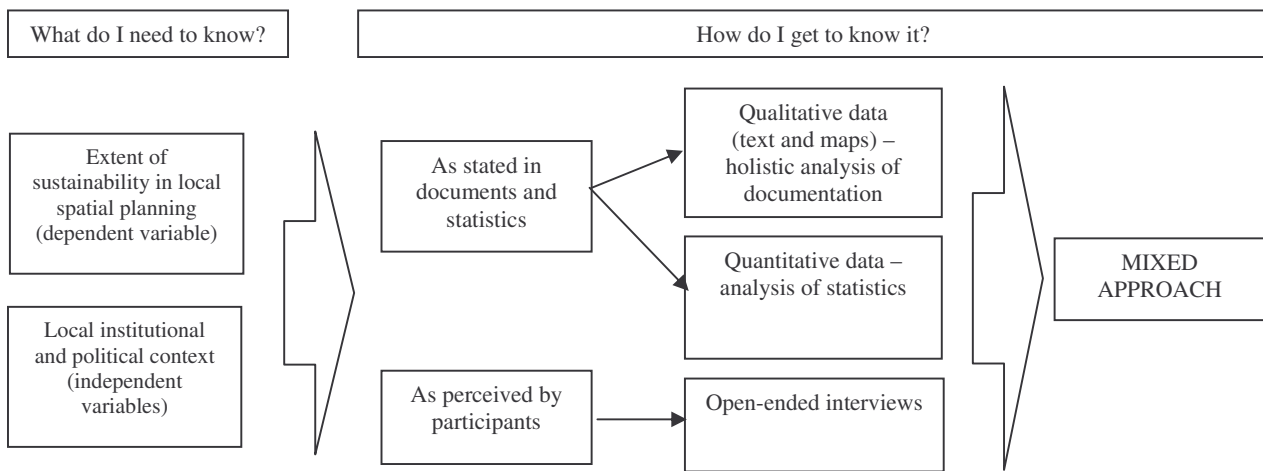


Figure 4.1: Impact of research questions and available methods on the choice of a methodological approach

4.3. SOURCES OF EVIDENCE AND METHODS OF DATA COLLECTION

Being underpinned by pragmatic philosophical assumptions I wanted to comprehend the phenomenon acquiring the information from multiple sources. Those can be divided into two groups: (1) evidence as perceived by participants, (2) evidence as stated in documents. Those two views on the evidence complement each other and in some parts are convergent thus increasing the reliability of the research.

4.3.1. Participants’ perception and interviews

For the investigation of participants’ perceptions I have chosen open-ended semi-structured interviews which took a form of ‘guided conversations’ (Yin, 2003: 89). They correspond to the description by Rubin and Rubin (1995 in Yin, 2003: 89): although a researcher pursues a consistent line of inquiry, the actual stream of questions is likely to be fluid rather than rigid. Such

method of data collection suited better than conducting a quantitative survey, due to a number of reasons:

- 1) The number of respondents could not be high in such study because in each local government the number of those persons who may have a considerable impact on decisions is limited. Besides this, most representatives of LG have different fields of expertise, which means that their responses rather complement each other than replicate or repute each other on the same issues.
- 2) Interviews in the form of ‘guided conversations’ were beneficial since in the beginning I had scarce knowledge on the issue. As Creswell (2003:181) states qualitative methods are most suitable when questions a researcher poses for him/herself (“what information needs to be collected and why”) are not completely pre-defined and can change in the initial stages of the research. Respondents answering on open-ended questions could raise some important issues that I did not intend to cover initially. Therefore, semi-structured interviews allowed a great extend of flexibility and considerably extended the scope of my knowledge.
- 3) It is believed that in policy research “the complexity of the ‘problem’ is often best addressed by in-depth qualitative analysis” (Blackmore, 2004: 100). “Large-scale quantitative data sets tend to view individuals as ‘averages’ or as exhibiting ideal type behaviors and cannot always be contextualized in terms of particular locations or communities” (Lauder et al., 2004 in Blackmore, 2004: 100). Qualitative approach enabled to correlate the main findings about the phenomenon with its context.
- 4) Qualitative research takes place in a natural setting (Creswell, 2003: 181). For the purpose of taking interviews I was invited to the working site of a respondent. I had the possibility to observe the sites and people working there. Respondents were able to use maps while talking about their visions of planning new settlements or describing characteristics of different localities. It helped me to develop a more holistic picture of the physical structure of municipalities.
- 5) Personal interviews enabled me to have control over who were my interviewees, thus preventing a distortion of the comparison across the units of analysis. In each municipality there

were the same categories of respondents (see further). As it is noted by Creswell (2003:185) for a qualitative researcher it is very important to purposefully select respondents who will best help to understand the problem.

- 6) Personal interviews allow for an interaction between respondents and a researcher. This helps to avoid misunderstanding and misinterpretation: both sides have a possibility to ask to clarify questions or statements if they seem ambiguous (Bryman, 1989: 43). Also observation of behavior of interviewees while answering is important, which shows whether a person hesitates, feels nervous or is confident.

However, there were also some problems related to such a qualitative approach:

- 1) Inferences from the interviews contain a high level of subjectivity; they are biased by the respondents' dispositions and my overall impression of the interviews. In order to overcome such weakness of this method I tried to corroborate findings by other sources of evidence: (1) documents, (2) interviews with other actors who were expected to have different interests and positions in this domain, for example, county government and developers as opposed to local government.
- 2) The information acquired is socially constructed by interviewees and thus, may reveal not the most authentic truth about how things really are. The findings of this study depend very much on how selected interviewees perceive the situation. Especially, the restrictive factor is that I interviewed only few persons from each LG. The interpretation becomes dependent on which people happened to be my informants: to what extent LG respondents were optimistic, self-critic, if they really revealed all the truth. Therefore, when reading this thesis a reader should keep in mind that conclusions are based on personal opinions of respondents interpreted by me.
- 3) The commonplace weakness of interviews is reflexivity (Yin, 2003: 86). When talking on issues concerning their (institutions' they represented) role in planning, some of respondents had a tendency to talk about what 'should be' or what is expected from them rather than their own experiences. This trend was especially evident when covering political issues. That is why I had to ask more specific questions in some instances, which I think helped to delve more true answers.

- 4) In a conversation people may, due to thinking process, interrupt their sentences and start other somehow continuing the theme. Such practice may distort the meaning of what a respondent actually wanted to say and thus lead to misinterpretation.
- 5) One of the limitations of a qualitative research is that it does not readily permit replication (Bryman, 1989). Comparing the units of analysis is difficult and subjective, as evidence is not enumerated but presented in a complex and holistic description. Respondents provided a thick description of evidence, where various aspects are tightly interrelated and difficult to analyze separately. Therefore, the analysis of aspects is done in their particular constellation. If a quantitative survey had been conducted instead, it would have been easier to compare the municipalities as evidence would have been presented based on a certain set of criteria. However, such approach usually neglects the context and covers only a limited number of issues.

Interviews, compared to other sources of evidence such as documentation, observation, artifacts etc, are very useful as they are purposefully focused on the research problem and questions (see Yin, 2003: 86).

Respondents and interview guides

The data was collected from seven categories of respondents (see table 4.1, and for a list of respondents see annex 4.1), dispersed across four types of institutions: (1) local governments in selected municipalities, comprising municipal government, municipal council and specialists, (2) Harju County Government²⁷, (3) private sector (real estate developers), (4) think tank SEIT. All four types of institutions are crucially important for this study as they provide first-hand knowledge on the formation of local spatial development policies and/or the context in which policies are developed. Seven different interview guides corresponding to the categories of respondents are presented in annexes 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8.

²⁷ Tallinn conurbation is situated within Harju County (for more information on county government see chapter 5 section 5.2).

The interviewees from the public institutions were selected based on information (description of job tasks for each official) provided on the web-page of each institution. Contact persons in real estate companies were advised by local governments' officials.

Categories of respondents	
General / common for all cases	Separate for each case
Harju County Government 'key informant'	Municipal government members
Harju County Government second informant	Municipal council members
Think tank SEIT representative	Specialists in local government
	Real estate developers having experience with local governments

Table 4.1: Categories of respondents

As a starting point of interview data collection, *Harju County Government* was chosen with my first interviewee (respondent HC1, see annex 4.1) being an official responsible for spatial development in Harju County. There were two reasons why the empirical data collection started from this institution. First, I needed to get a confirmation on urban sprawl of Tallinn as an actual problem, from a qualified and neutral specialist in the county government. Secondly, the county government representative was able to provide advice on what municipalities to choose for this study in order to observe the difference in approaches in spatial planning. Thus, this respondent acted as a 'key informant'²⁸. The second person in Harju County Government (HC2) was interviewed after I had made interviews in the municipalities. He clarified some legal aspects concerning the collaboration between CG and LGs and broader legal issues inherent to the planning system in Estonia.

In *local governments* I interviewed members of municipal government, members of municipal council and specialists. From each municipal government interviewees were either mayors or deputy mayors with competency in spatial planning. Similarly, among municipal council members my intention was to select either a chairman of council or a chairman of a standing committee related to spatial planning. Members of government and council deal with more general issues in planning such as elaboration of development strategies and master plans, which constitute the formal local policy for spatial development. Interviews with these respondents also revealed their personal attitudes towards the principles of sustainability, the level of their knowledge of those

²⁸ Yin (2003: 90) notes that if a respondent provides a researcher with not only insights into a phenomenon in question but also makes suggestions about how to proceed in the research and what sources of evidence may be useful, then this person may be referred to as a 'key informant'.

principles, their attitude to the state's position in spatial planning, their attitude to the county government, and a perception of its role in spatial planning and other issues. These respondents also advised about what local documents I had to review in order to understand the main principles of spatial planning and development in a municipality. Besides questions covering general aspects of spatial development policy, I needed information on specific cases, specific spheres (public transport, environment) and working routines in order to make inferences about local government's planning approaches. For this purpose interviews were conducted also with relevant specialists.

Additionally, it was important to consider the disposition of *real estate developers*, who have already cooperated with the selected local governments while planning their projects. It was essential to understand how they see their role in spatial development in the conurbation, how they perceive their and other actors' obligations, how they evaluate institutional capacity of local governments etc.

A representative of the *think tank organization* (TT) confirmed and complemented my knowledge on the role of the state and private consultancy companies in promoting sustainable development.

In total 20 interviews were conducted ranging in length from one to two hours. All interviews were recorded on audio tape and conducted in the Estonian language. The interviews took place in two time periods: July-September 2006 and January 2007.

4.3.2. Documentary data

In this research it is unthinkable to rely only on the interviews. The task of studying an international policy implementation at the local level requires a lot of work with enormous amount of documents. All documents reviewed in this research comprise two main groups: those which provide substance/content, and those which provide context.

The first group containing substantive documents reflects local spatial development policies of selected municipalities, such as master plans, municipality development strategies, additional thematic plans, building regulations etc. This group of documents provides an insight into formal approaches in planning and visions for planning new settlements. The EU policy documents promoting sustainable development in the field of urban/spatial planning are also considered as

substantive documents (see annex 2). Additionally, I reviewed documents on sustainable development at the global scale such as the Brundtland Report, Agenda 21, and publications on sustainable urban development that form a basis for defining sustainable settlement structure in suburban setting.

When reviewing formal policy documents in each municipality I recognized that those are, as a rule, prepared by private consulting companies, who design maps and text according to what LGs communicated to them. But, I felt that there existed a stereotyped view of what ideas should be incorporated into master plans, development strategies, thematic plans etc. It is obvious that some ideas stated in policy documents are rather imposed by knowledgeable consultants than recognized as important by LGs themselves. Such situation may lead to poor implementation of the policy by LGs. Fortunately interviews gave opportunity to corroborate the policy content stated in formal documents. That is why in the analysis I attached more importance especially to those policy aspects which were also confirmed in the course of interviewing.

Policy documents comprise rich and multilateral information presented in text and maps. Therefore, the analysis of local policies should be done in a holistic way for each municipality. A holistic analysis is intrinsic to the qualitative research (Creswell, 2003:182). It provides a *thick* description based on almost unlimited number of properties in their concrete constellation (see Galtung 1990:108).

The second group of documents provides an understanding of the context for the phenomenon in question. In order to analyze how each of the selected municipalities had been developing during the last decade, data on the population change, migration, volume of housing construction etc was used. In order to understand the economic capacity of a municipality, municipal budgets were analyzed with the main interest in sufficiency and stability of the municipal own income. Most of this data was numeric.

Additionally, publications describing the situation in Tallinn conurbation were reviewed. They provided information on the general pattern of new housing development in Tallinn hinterlands in recent years. Also official documents and publications concerning national spatial development policy, planning system and administrative system provide a broader context for the research problem (see chapter 5).

4.3.3. Observation – a supplementary source of evidence

Observational evidence is often used to provide additional information about the topic (Yin, 2003: 93). In research on urban sprawl the observation of new settlements in each municipality gave the possibility to form an initial impression about spatial development in each municipality and to be more informed while conducting interviews. First of all, I have reviewed recent publications on new housing developments in Tallinn suburbs and using maps identified their locations. When visiting the sites I took photos of new settlements and made notes. Nevertheless, the built estates may be the result of planning policies of several years ago, they are still very useful for understanding the main pattern of policies. Such observation reveals the point of departure for present policy formulation and provides also a historic background to the research problem. Observation corroborated the evidence gathered from the main sources.

4.4. ROLE OF THEORY

As it is seen from the discussion above, quantitative data in this study was used only for supplementing the evidence collected and presented in a qualitative way (interviews and policy documents). Therefore, the use of theory in this case study fits within the qualitative tradition.

Case study, not depending on whether it pursues to develop a new theory or to test an existing one, has to be underpinned by existing theory on a topic in order to guide data collection and analysis (Yin, 2003: 28-33). It is desirable in case study that tentative theory is developed already before the data collection (ibid: 29), however, the initial theory may change during the data collection period. The whole qualitative research encompasses cycling back and forward from theory to evidence and then back to theory reformulation (Creswell, 2003: 182-3). Therefore, a researcher usually switches over between at least two modes of inference – *deduction and induction*²⁹. Induction implies inferring universally applicable conclusions from observation of a limited number of phenomena or events. “It involves drawing conclusions about all from knowledge about a few, without leaving the empirical level” (Danermark, 2002: 77). “Deductive logic is employed to test whether conclusions we draw in an argument (theory) follow in a logically valid manner from the premises given to support the conclusion” (ibid: 75-76).

²⁹ Besides induction and deduction critical realists emphasize also abduction and retroduction (for more discussion see Danermark, 2002)

In this study initial compiling of interview guides was informed by theories on policy implementation, institutional capacity, organizational learning and new governance. Thus these theories helped to identify important themes I had to cover in interviews.

It is usual that a researcher doing a qualitative study develops a hypothesis not in the beginning of the study but during the data collection and analysis process (Silverman, 2001: 4, Creswell, 2003: 182). Just after getting more understanding about the problem of the study and its context, it is possible to uncover a hypothesis with application of relevant theories and their adjustment. Based on a deeper analysis of the collected data “unlike theories, hypotheses can and should be tested” (Silverman, 2001: 4). Thus a new theory, based on the conclusions of a research underpinned by pre-existing theories, may be developed. Yin (2003:32-33) asserts that case studies expand and generalize theories. This is called *analytic generalization*: findings of case studies are generalizable to theoretical propositions, but not to populations and universes (ibid).

4.5. COMPARATIVE STUDY

This research intends to compare evidence from the four selected municipalities in order to uncover causal links between local political and institutional context and the extent of sustainability in local spatial planning. Due to the fact that evidence in this study is presented in a qualitative way (holistic description of each unit of analysis), it is reasonable to use the logic of *case-oriented comparison*. “Qualitative researchers tend to look at cases as wholes, and they compare whole cases with each other. While cases may be analyzed in terms of variables, cases are viewed as configurations – as combinations of characteristics. Comparison in qualitative tradition thus involves comparing configurations” (Ragin, 1987: 3).

When studying social phenomena the situation cannot be controlled experimentally (Bechhofer and Paterson, 2000: 11). As claimed by some theoreticians (for example Smelser, 1976 and Armer, 1973 both cited in Ragin, 1987: 2), both comparative and non-comparative studies aim “to explain social phenomena by establishing controls over the certain conditions and causes of variation”. In a comparative study factors external or common for comparable units of analysis are artificially controlled, as they cannot cause a variation in the evidence across units of analysis. For example, in this research the socio-economic situation in the county and other external factors form a

general context which is the same for all selected municipalities. Therefore, a variation in patterns of spatial planning can be caused only by factors inherent to local governments.

Case-oriented comparison makes analytic generalization more reliable (see Yin, 2003: 10, 53-4). Analytic generalization is made when a researcher finds confirmation of his previously developed theory (causal links) by empirical cases in a form of literal and/or theoretical replication. Generalization is made to a rich theoretical framework which defines conditions under which a particular phenomenon is expected to be found (*literal replication*) and conditions when it is not expected to take place (*theoretical replication*) (Yin, 2003: 47-55). For example, if local government has sufficient and competent human resources, it is more likely that development of new settlements will be more sustainable. Consequently, all municipalities for which this statement is true will display literal replications. And if local governments with poor human resources will show less sustainability in planning, they will reveal theoretical replications.

Explaining basically the same logic Ragin (1987: 36-42) employs *Mill's method of agreement* (which is an analog to literal replication) and *Mill's indirect method of difference* (which corresponds to theoretical replication). As Ragin (ibid: 35) puts it, one of the main goals of case-oriented comparison is “to produce limited generalizations concerning the causes of theoretically defined categories of empirical phenomena common to a set of cases”. “The case-oriented approach uses theory to aid historical interpretation and to guide the identification of important causal factors” (ibid: 55). The comparative multiple-case strategy employs both deduction and induction (ibid: 45). In the former, initial theory serves as a guide in examination of causally relevant similarities and differences across cases; in the latter a researcher identifies, based on empirical cases, which of the relevant similarities and differences are proven to be operative (ibid).

The comparison across units of analysis is essential because, if literal or theoretical replication takes place, it reinforces the external validity of the research, and namely it proves that theoretical propositions (hypotheses) do really have sense.

4.6. METHODOLOGICAL LIMITATIONS

- The choice of the dependent variable in this study was quite problematic. Initially I considered the housing structure in suburban municipalities as a dependent variable, thus being an outcome

of implementation of the EU sustainable development policy and local spatial development policies. So I hypothesized that independent variables – local institutional and political factors (local context) – had caused such pattern of housing development. However, in the beginning of the field work period I realized the inconsistency between the present local context and the observable reality (newly built settlements). The reality is actually an outcome of the planning process at least 2-3 years ago. Since that time, the local context in the municipalities has changed to some degree³⁰ causing also changes in their policies. To solve this methodological inconsistency I have decided to consider *sustainability in present local spatial development policies* as the dependent variable, thus being dependent on the present local context. As implementation of present policies will become observable in some years expressed in new construction of real estate, an assessment of sustainability of spatial development in the municipalities is *probabilistic*. In my assessment it is expected that the more sustainability is emphasized in formal policies and confirmed by local officials and politicians, the more it is probable that spatial development in a municipality will be sustainable.

- Such commonplace limitations as the lack of time and resources were the reasons why I have not used a survey additionally to interviews which would be too much work for a single researcher in a restricted time span.
- In a more qualitative study, findings usually contain some sort of speculation. The reason for this is that findings of a research inevitably contain a mark of researcher's subjective views, previous experience and knowledge. In order to overcome this weakness I have employed multiple data collection methods and supplemented qualitative evidence with quantitative data.
- Statistical data on population in the municipalities occurred to be partly inadequate. The data from different sources diverged to some extent. Additionally, due to the fact that registration of the place of residence is not obligatory in Estonia, a considerable share of new suburbanites (more than ¼) does not register their new place of residence (Ahas and Silm, 2006). This distorts the statistics on the population growth in suburban municipalities.

³⁰ Local elections in autumn 2005 had caused a change of local power and in some cases replacement of administrative staff as well.

5. NATIONAL CONTEXT

In order to explore in detail particular factors that form the present pattern of urban/spatial development in Estonia and in Tallinn suburbs, in particular, one might need to have background knowledge on recent political and structural changes, the administrative and planning systems in the country. These issues are discussed in this chapter. Additionally, the last section of the chapter unravels views of Estonian local authorities' and Harju County Government representatives (empirical data from interviews) on the national institutional and socio-politic framework related to spatial planning.

5.1. SHORT HISTORY AND RECENT SOCIO-ECONOMIC TRENDS

Estonia is a small country located in North-Eastern Europe, sharing a border in the East with Russia and in the South with Latvia. In the North, over the Finnish Gulf of the Baltic Sea it borders with Finland. The territory of the country is ca 45'000 square kilometers and its population made up 1.34 million inhabitants on the 1st of January 2006 (SOE website). The ethnic composition of the population bears a sign of the Soviet legacy: the share of ethnic Estonians is 68.5 % and Russians, making-up a big minority group, 25.7 % of the total population of Estonia (SOE website).

For centuries Estonia had successively been under the rule of Danes, Germans, Swedes and Russians. As late as the beginning of the 20th century, in 1918, Estonia proclaimed itself an independent and democratic republic and had to fight two more years of the Liberation War to secure its borders. However, the independence period lasted for only two decades. After the Second World War, Estonia was forcefully incorporated into the Soviet Union. The decades of the Soviet rule brought about a massive immigration of Russian population into Estonia to satisfy the growing labour demand for newly established factories, power-stations and mines, serving the Soviet Union's economy.

Along with the collapse of the Soviet Union, Estonia proclaimed restoration of its independence in August 1991. After the establishment of *parliamentary democracy*, Estonian government had started the transition to *market economy* by introducing radical reforms in all fields. The short history of 15-year independence may be divided into two phases. The first, the beginning and mid

1990s, was characterized by a quite painful transition from one political and economic order to a completely new one. During this period a new politico-administrative system and a new legislative base were formed, the property ownership rights system changed, extensive restructuring of industry took place. Such abrupt political and structural changes caused and were accompanied by an economic crisis. The unemployment rate had been growing during the 1990s and reached its maximum of 13.6 % in 2000. The economic and political instability had negatively influenced demographic processes: caused a continuous decline of the birth rate and a growth of the death rate (see annex 5 figure 5.1). As a result of out-migration of Russian-speaking population in 1990s and a negative natural increase, the population in Estonia dropped by 14 % (220'000 persons) in the period from 1989 till 2006 (SOE website).

The second phase of development, starting from the end of 1990s and up to the present time (2007), is characterized by a rapid economic growth. Since 2000 the annual growth rate of gross domestic product has been escalating remarkably and reached 10.7 % in 2005 (see annex 5 figure 5.2). Similarly, since 2000 the employment situation started to improve and in 2006 the annual unemployment rate achieved its lowest value of 5.9 % since the beginning of 1990s (SOE website). The average income in Estonia has been steadily growing with the average growth rate of ca 11% during 2000-2006, and in 2006 the average salary growth experienced a great advance of 16% (SOE website). The preconditions for international support that contribute to further economic growth and security were created by Estonia's joining to the European Union and the North-Atlantic Treaty Organization in 2004.

5.2. ADMINISTRATIVE SYSTEM

After being centrally ruled during several decades, Estonia has adopted a much decentralized one-tier local government system. Administratively, Estonia is divided into 15 counties (see figure 5.1) and 227 local government units, comprising 194 rural municipalities and 33 towns/cities with municipal status (MoI, 2005). The Estonian local government system is characterized by a huge disparity in the size of local government units: the biggest one is Tallinn with 400'000 residents and the smallest – Ruhnu rural municipality with 67 residents (SOE website). At the same time, all local governments have to perform exactly the same functions and obligations imposed by the law.



Figure 5.1: Counties in Estonia. Source: [www.atlasgeo.net/fotw/misc/ee\(.gif](http://www.atlasgeo.net/fotw/misc/ee(.gif)

According to the Constitution of the Republic of Estonia (1992), *local governments are not directly subordinate to either central or county government*, and duties may be imposed on local governments only pursuant to law or by an agreement with local government. Local governments are autonomous in resolving and regulating all local issues (ibid). Local government's obligation is to organize in its jurisdiction area social aid and services (elderly care, work with youth), housing and facilities management, water and sewage systems, waste management, territorial planning, municipal public transport, maintenance of municipal roads (Local Government Organization Act, 1993). Local government has to provide upkeep of all social institutions in its jurisdiction area, such as schools, libraries, museums, hospitals, sports halls, cultural centers and so on (ibid). At the same time, some public services may be contracted out to the private sector (Constitution of the Republic of Estonia, 1992).

In terms of the internal organization of local authority, it comprises: **(a)** municipal council – the representative assembly of LG, elected by residents of a municipality for a term of four years; **(b)** municipal government – the collegial executive body appointed to office for a period of authorities of the municipal council; **(c)** administration, comprising the office and various departments (MoI, 2005:12-14). The council elects the mayor of municipality (head of the municipal government) and on his/her proposal approves the government, which may comprise deputy mayors and specialists from the administrative apparatus. Generally, the institutional structure of LG in Estonia may be illustrated as presented in figure 5.2.

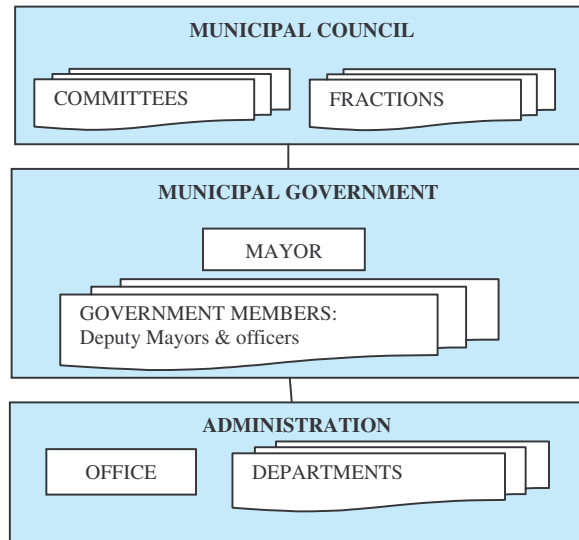


Figure 5.2: Schematic illustration of the institutional structure of LG

Local governments have budgets independent from the state budget. They may use following means to finance their expenditures: **a)** taxes (income tax, land tax, local taxes), **b)** locally generated income fees and proceeds from municipal property and economic activity, **c)** allocations, grants from the state budget, **d)** loans (MoI, 2005:16). Nationally, the major source of municipal income is derived from the state personal income tax. Since 2007 11.9% of taxable personal income goes to a person’s domiciliary LG budget³¹. The state land tax is fully paid into local budgets and local governments can determine the land tax rate within limits given by law (ibid). Local governments have the power to impose and levy local taxes and user charges in accordance with law (ibid). The second largest source of municipal income is subsidies from the state budget through the *state equalization fund*, the purpose of which is “to balance excessive differences among the income bases of different local authorities and to provide also the weakest municipalities with a possibility to render adequate public services to its inhabitants” (ibid). In 2005 in Tallinn conurbation the share of own revenues in municipal budgets constituted 81%, whereas in the country on average this share was only 65% (MoF website)

County governments are the agencies of the central government which are financed from the state budget (Government of the Republic Act, 1995). County governor ensures implementation of central government policies at the regional level. County governments are responsible for control

³¹ In 2005 the share of income tax revenue on average in Estonian municipalities made up 43% of total municipal income, and in Tallinn conurbation 60% (MoF website).

the legality of local governments' activity and the performance of state functions assigned to local governments by law or an administration contract (MoI, 2005:23). "A county governor has no authority to stop or declare void any measures taken by local governments; he [or she] can only suggest that the local authority takes the necessary measures to comply with the law. If the municipality does not change the act in order to comply with the law, the county governor has to appeal to court. In cases set by law, the county governor has the right to file a petition with the Legal Chancellor or make a report to the State Audit Office" (ibid:23). A visual illustration of the Estonian politico-administrative system is presented in figure 5.3.



Figure 5.3: Organization of the public sector in Estonia. Source: MoI, 2005

5.3. PLANNING SYSTEM

The transfer from centrally planned economy to market economy had a great impact on the planning system in Estonia. Spatial development under the state socialism was totally controlled by the state, due to strong central planning and state ownership of land and means of production (Smith, 1994, in Kährnik, 2006:15). Construction of social infrastructure and a great share of housing and its financing was done by the state. The Soviet planning system sought to optimise the whole settlement structure. For example, new housing was built in proximity to jobs to minimize travel (Raagmaa and Kroon, 2005:10). Also in planning social infrastructure the main objective was to "respond to the consumers' needs in the best way and minimize construction and operational costs simultaneously" (Volkov 1969, in Raagmaa and Kroon, 2005:10). Through the direct provision of housing the state sought to ensure relatively egalitarian living conditions for all (Smith 1996, in Kährnik, 2006:23).

After the restoration of Estonian independence, preconditions for transfer to free market economy and establishment of the real estate market were created by the ownership and land reforms. The new structure of ownership rights for immovable property had been introduced through processes of 'privatization' and 'restitution'³². As a result, by January 2006, 96 % of all housing stock in Estonia was in private ownership (SOE website).

After establishing radical changes in the whole property ownership system the beginning of 1990s represented a vacuum in the legal regulation in land use planning and real estate development. The first related legal act, Planning and Building Act, was enforced in summer 1995. By 2003 it was replaced by two separate legal acts – Planning Act and Building Act. The new Planning Act (2002) emphasizes a social role of planning and public leadership in especially controversial issues (Ruoppila, 2006:23). Each plan is seen as a public agreement on how a particular area should develop in future, which implies active involvement of society into the planning process³³ (MoI, 2006).

While developing Estonian planning law, the planning practice and enforcement activities of other countries with similar planning culture were taken into account (MoI, 2006), more precisely, Estonian planning law was inspired by Nordic planning laws (Raagmaa and Kroon, 2005:19). As Estonian Property Act (1993) was copied, however, from the German law, Estonian planning and property laws in reality contradict each other in many aspects (Raagmaa and Kroon, 2005:19). As a result, LGs are placed in a difficult situation: on one hand, they are obliged to ensure a balanced sustainable development on their territory; on the other hand, the property law very often overprotects interests of private property owners, thus limiting the possibilities of local governments to protect public interests through particular planning solutions.

The Planning Act (2002) provides for four types of land use plans in Estonia: national spatial plan, county plan, master (comprehensive) plan, and detailed plan. The **national spatial plan** shows the

³² **Privatization** – transfer of state or municipal property in the course of ownership reform for a charge or without charge into the ownership of other persons (Republic of Estonia Principles of Ownership Reform Act, 1991). In the housing sector most of dwellings were transferred into the ownership of sitting tenants. **Restitution** – the return of or compensation for property to the persons/their heirs who owned it, before it was unlawfully expropriated (connected to nationalization, collectivization, unlawful repression of an owner) during the period between 16 June 1940 and 1 June 1981 (Republic of Estonia Principles of Ownership Reform Act, 1991)

³³ Each county plan, master plan and in special cases detailed plan, has to be publicly exposed and relative authority has to organize public discussions during the plan preparation process (Planning Act, 2002).

general vision for spatial development of the territory of the state in a long-term perspective. **County plan** provides a general strategy of spatial development of the territory of a county, defining the main principles of land use within a county, the conditions for development of settlement structure and location of major infrastructure units. **Master plan** establishes principles for spatial development of a municipality and defines the main principles of land and water use for each particular area within a municipality. It shows the 'skeleton' of a municipality (MoI, 2005) and gives an assessment of its social, environmental, economic and cultural impacts (Planning Act, 2002). Master plan serves as a basis for detailed plans, or for land use and building provisions in areas where detailed planning is not mandatory. In order to provide sufficient planning precision some additional master plans may be developed for, for example, towns or city districts; or conversely, may cover territories of several municipalities if there is a mutual agreement between the local governments concerned (Planning Act, 2002). Both county and master plans may be supplemented and specified by **thematic plans** (as, for instance, "Social infrastructure in Harju County") that usually address a particular developmental issue at the county or municipal scale. **Detailed plan's** objective is to provide detailed land use and building provisions and restrictions for a relatively small area: divide the area into land plots, determine type of buildings, architecture style, greenery, characteristics of streets and so on. Preparation of detailed plans is *obligatory* for division of areas into land plots and new construction in regions with *dense settlement* (cities, towns, and clearly delimited built-up parts of boroughs and villages). In other regions (with *sparse settlement*) detailed plans are not necessary; and land use and building provisions and restrictions may be established by master plans (Planning Act, 2002: §3).

The planning system, from one point of view, is hierarchical: a more precise plan of a smaller area should fit into principles of a more general plan of a larger area including the considered small area (MoI, 2006). From another point of view, it is flexible and interactive: a more precise plan may, if accepted by relevant authorities, change a more general plan, ensuring responsiveness of planning to changing external conditions. The last feature of the system is sometimes criticized, as it enables local governments to change easily master plans by detailed plans, thus promoting fleeting interests of small groups at the cost of public interests. However, if this opportunity did not exist, the system would be rigid (ibid).

Table 5.1 shows institutional actors involved into planning processes at all levels. Considering that the national plan and county plans are very vague, spatial development actually follows master and detailed plans. The latter ones, as it is shown in the table, are within responsibility of local governments. Thus, it is evident that local governments have a crucial role to play in forming the outcomes of land use planning.

	National spatial plan	County plan	Master plan	Detailed plan
Initiation of a plan by ...	Central government	County governor or central government	Local government	Local government
Administering preparation of a plan by ...	Ministry of the Interior	County governor	Local government	Local government or contracted person interested in plan
A plan is prepared in cooperation with ... ³⁴	Ministries, county governors and local governments' associations	Local governments in the county, county governors of neighboring counties, ministries	Neighboring local governments, the county governor, property owners, residents and other interested actors	Property owners in the planning area, residents, other interested actors; and owners/possessors of utility networks
Concordance of a draft plan with ...	Ministries, county governors and local governments' associations	Neighboring counties' governors and local governments of the county	Neighboring local governments and county environmental services	Relevant state authorities in case of areas under protection
Supervision of a draft plan by ...	-	Ministry of the Interior	County governor	County governor in case a plan doesn't correspond to master plan or cause public dispute
Adoption of a plan by ...	Central government	County governor	Local government	Local government

Table 5.1: Institutional actors involved in development of physical plans (according to Planning Act, 2002)

The institutional procedures of local governments in urban/spatial planning comprise development of socio-economic development strategies, master plans and detailed plans, approval of construction regulations, issuance of construction permits and building usage permits, and supervision over construction activity (Constitution of the Republic of Estonia, 1992; Planning Act, 2002). Municipal socio-economic development strategies identify the main long- and short-term development goals and achievement means, form the basis for a municipal budget and cannot be in contradiction with respective master plans and sector policies (Local Government Organization Act, 1993). Development strategy should cover a period of at least three years (ibid).

However, the evidence by the time this study was conducted showed that many local governments did not succeed in carrying out proper spatial planning process: for example, the first development

³⁴ If an environmental impact strategic assessment is meant to be done together with a plan of any type, the relevant expert should be involved into planning process (Planning Act, 2002, §16).

plans in some municipalities were claimed to be more statistical compendiums rather than real strategies for future activities, or another example is that even those local governments that managed to develop proper planning documents did not actually put them into practice (Raagmaa, forthcoming). The roots of such weak planning capacity of local governments are partly hidden in the recent history of the country. Local governments had no self-governing practice during the decades of the Soviet rule, when they were just implementing agencies for central policies (ibid). The administrative decentralization and the grant of high autonomy to the local level in the post-Soviet period imposed a lot of obligations on local governments, some of which appeared uneasy to fulfill given the lack of relevant experience.

The state non-interventionist public policies in urban/spatial development have been and still are dominant in post-Soviet Estonia. The role of the public sector has proved to be minimal, being limited to the establishment of the institutional and legal framework for individuals' behavior on the real estate market and for development of new real estate (Ruoppila, 2002). The annual share of residential construction by the public sector has not been higher than 10% since 1993 (SOE website).

5.4. IMPACT OF THE NATIONAL FRAMEWORK ON LOCAL SUSTAINABILITY-RAISING

This section represents a discussion on the national framework comprising the political system, legislation, prevailing ideology and norms in the Estonian society as seen by the respondents. The intention is to analyze how such framework affects the ability of local authorities to steer spatial development in a sustainable manner. Does the state through its tools (like legal acts, institutions and agencies) enable or constrain local governments in ensuring sustainable spatial development?

According to Hall and Pfeiffer (2000:314), local government capable to make strategic decisions on development, which would be defined in cooperation with all other actors, also needs "a clear urban policy framework". This means that national legislature and institutions should support a clear set of goals and means for achieving them, which facilitates LGs in strategic planning. The evidence from various European municipalities corroborates such a view: "Once a country has legislated about a strategy of development, LGs, NGOs, and civil society interests may be more likely to become engaged in working towards national goals" (Evans et al, 2005:86). Therefore, the existence of national legislation and funded programmes promoting sustainability-raising in

local planning is an important factor. Besides this, it is crucially necessary that such formal framework is supported by all actors who are involved in planning. Therefore, the existence of stable goals and visions of development shared by individuals in state institutions, private companies and the public help local authorities in sustainability-raising processes.

Unfortunately, the empirical data shows that the Estonian national conditions are considered by the majority of respondents as the most impeding factor for strategic and comprehensive steering of spatial development. The instability and inconsistency of the national legal system and arbitrary behavior of officials in various state agencies and institutions were mentioned by respondents representing LGs, think tank SEIT, county government and developers. This theme cropped up many times in interviews, being supplemented by rich examples. The following summarize main points on the national conditions that influence the sustainability-raising process at the local level:

- The Estonian legal acts are changing very fast complicating strategic planning processes on the part of LGs. Constantly emerging new requirements postpone adopting of new master plans. National laws in the sphere of planning were named as ‘dilute’, leaving many gaps in the regulation of, especially, detailed planning (H2). These aspects display immaturity of the legal system. A young state such as Estonia, which also has recently overcome a dramatic transformation from one political and economic order to another, naturally faces a difficulty of establishing a new legal base. Here the influence of EU policies is also essential, as new EU directives, which are obligatory for member-states, require changes in national laws (H1).
- The laws are claimed to favor private property-owners, whose rights are highly protected, but obligations are miserable. As a result, public interests are undervalued as compared to private interests. The legal system created an unfair situation related to responsibilities/obligations and the distribution of benefits, especially in municipalities under the growth pressure. Namely, under conditions of free market, massive and fast development of housing in suburbs of major cities creates concentration of new immense expenses within suburban LGs, whereas private developers are enabled to earn disproportionably high revenues compared to the extent of their effort and obligations. LGs need a new legal regulation that can balance responsibilities and benefits of each party (R1).

- Absence of clear sustainable urban development policy at the national level and absence of a legislative base, which would encourage or even oblige LGs to initiate a process for increasing sustainability in spatial planning, have a crucially negative impact on sustainability-raising. As a result, attempts of local governments to steer spatial development with regard to the sustainable development principles are purely voluntary initiatives. Moreover, they as many respondents noted do not get any financial support from the state. To compare with other states, for example, in the UK the New Labor government required LGs to create and implement Local Agenda 21 strategies by the defined deadlines (see Jonas et al, 2004:156). As found out in one recent European-wide research, “the national legislation and policy priorities are key drivers in the sustainable development field, and although local governments may pursue innovative and adventurous policies in this field without central government support, it is clearly the case that such approaches will be easier when this support is present” (Evans et al, 2005:109). Estonia declares its commitment to sustainable development, which is expressed in the Estonian sustainable development strategy “Säästev Eesti 21” and its spatial implications in the Estonian National Spatial Plan (MoE, 2000). Though, specific and clear principles of urban/spatial planning are not defined at the national level (TT, S3).
- There is no unified set of beliefs and views about future development of Estonia among state institutions and agencies. Each of them acts in its own sphere mostly independently from others. Such circumstances confuse LGs in proceeding with specific plans, which have to be concerted by various state agencies.
- The behavior of bureaucrats in state institutions may contradict formal goals of those institutions. For example, the rules for development and various restrictions are formally defined, but the practice shows a range of deviations from them, presented as exceptional cases of development (HC1). For example, here is one of comments I got: “*I think decisions of the county environmental services group are very subjective, depending on the state of mind of decision-makers. Seems they do not adhere to any strategy, but sometimes follow political orders. All depends on what political party you join*” (R1). In such cases LGs are incapable to protect the public good, when state agencies provide permissions to exceptional developments, which in general should not be allowed. At the same time formally all documents are correct. This point can be referred to the issue of existence of a set of institutionalized values and

norms of human conduct in the society and, especially, within the public sector. For example, a relevant empirical research in UK emphasizes the importance of the public service ethos (comprising accountability, integrity, a wide view of the public interest, altruistic motivation and loyalty), which “provides a shared appreciative system across a diverse range of organizational and professional boundaries” (Pratchett and Wingfield, 1996, in Bolton and Leach, 2002:8-9). In Estonia such system of social norms, which would strengthen the political and bureaucratic responsibility and commitment, has not institutionalized yet.

- As a result of the land reform, the distribution of landownership does not favor positions of local authorities to have major influence on the pattern of spatial development (CH1). Municipalities own a very small share of land, only 0.5% in Estonia and 1.35% in Harju County (ELB website). At the same time 65% of land in Estonia is in private ownership, and the remaining 34.5% belong to the state (ibid). Surprisingly, the state and some municipalities still sell land to private actors.
- An inconsistency and instability of state interests is also observable. For example, intended locations of state industrial mines may overlap with the core area of a greenery network as drawn in county plan (H1) or an intended location of the railway for goods transit crosses settlements (R1). Such inconsistencies place LGs again in a difficult situation to ensure sustainable development of municipalities. LGs are quite weak to influence central government’s decisions on allocation of industrial sites, state infrastructural units. I got many reflections of interviewees on the conflict of interests between local governments and the state. For instance, the state sells such land to private actors, which in principle cannot be developed for real estate, such as coastal protection areas or valuable forest land (H1). So on the one hand, the state has a strategy of protecting such areas, and on the other hand, by transferring such land into private ownership it triggers initiation of real estate development projects there.
- Van Meter and Van Horn (1975) raise the issue of public opinion as being one of the context factors for the policy implementation process. The recent dramatic changes in the Estonian history, establishment of a young state and still turbulent economic development create high uncertainty in all spheres of human conduct. Therefore, public attitudes do not consider long-term perspectives. People are preoccupied with present-day issues and maximization of own

utility as fast as possible and as long as external conditions allow. This is one of the impeding factors for sustainability-raising processes, as public authorities cannot put forward sustainable development without active support and participation of society.

- Almost non-existent environmental awareness-raising of population aggravates personal utility maximization aspirations. This is again one of the points where the post-Soviet states differ from more mature European states. The European-wide empirical study confirmed that the importance of national authorities in raising awareness and providing training on sustainable development in Eastern Europe is perceived by local authorities as 2-3 times lower than in other European regions (Evans et al, 2005:87-88). The practice shows that quite educated society is capable to adjust its ways of behaviour if the need for such a change is sufficiently explained (Ahas and Silm, 2006:67). In Estonia even if some people would potentially care about environmental impacts, at present they do not care due to unawareness about adverse outcomes if their habitual behavior.

5.5. CONCLUSION

This chapter revealed the external conditions under which all local governments in Estonia operate. As we have seen, such conditions do not facilitate local authorities in sustainability-raising processes in spatial planning. The legal framework related to spatial development is too liberal prioritizing private business and initiatives rather than public interests. Laws and institutional norms are still very dynamic, uncertain and fragmented. Thus, the abrupt changes that took place in Estonia after restoration of its independence and institutionalization of a new order created good preconditions for emergence of urban sprawl in Estonian cities. This trend took its most intensive form in the capital city, Tallinn. From the next chapter the discussion focuses on the case of this research, Tallinn conurbation.

6. SPATIAL DEVELOPMENT IN TALLINN CONURBATION

This chapter provides a holistic view of local conditions and trends connected to housing development in Tallinn conurbation, especially its suburban areas. First, I define Tallinn conurbation, as seen in this thesis, and describe socio-economic trends within the region that may influence spatial development. Then I portray the general pattern of suburbanization and outline its apparent and prospective impacts.

6.1. TALLINN CONURBATION DEFINITION

Tallinn, the capital of Estonia, is the biggest city in Estonia with population of ca 400'000 people (Estonians 55 %, Russians 37 %) (SOE website). It is located in Northern Estonia by the coast of the Baltic Sea. The total area of Tallinn within its administrative borders is 158 square kilometers. Tallinn occupies the central place in Estonian economy, politics and culture. "The city is home to about half of all Estonian companies, which are responsible for ca 50-60% of GDP and nearly ¾ of total business profit" (Tallinn website). Moreover, taking into consideration also suburban area of Tallinn, significance of the capital city on the national level is even higher.

In publications on suburbanization of Tallinn, the terms 'Tallinn metropolitan area', 'Tallinn conurbation', 'Tallinn region', 'Greater Tallinn' are used to refer to a region comprising Tallinn city (as administrative unit) and its surrounding area, which is greatly influenced by the city and is interrelated with it due to human activity, so that the whole region functions as an 'organic entity'. This means that the city and its neighboring towns and rural areas are dependent on each other: the people living in one part of the region consume services, have job and/or make business in other parts. However, there is no commonly accepted view of how far this region extends; the distinct geographic borders of such region are not defined.

In most analytic publications it is common to refer to the Tallinn metropolitan area as the whole Harju County. However, from my point of view, more remote municipalities in the county have less functional connection with Tallinn city and in studies on urban sprawl, should be considered rather as hinterland of the conurbation than an integral part of it.

In this study when referring to this region, I use the term ‘Tallinn conurbation’ and geographically delimit it as comprising Tallinn city and all administrative units (rural municipalities and towns) that: a) are located very close to Tallinn forming a ‘suburban belt’, b) have a share of commuters to Tallinn of more than 40% of working population³⁵. In this case *Tallinn conurbation consists of eleven local government units: Tallinn city, two satellite towns – Mardu (commuters - 49%) and Saue (60%) – and eight rural municipalities – Viimsi (65%), Saue (63%), Rae (62%), Harku (57%), Kiili (56%), Saku (55%), Jõelähtme (49%) and Raasiku (42%)* (the statistics on commuting rates from Leetmaa, 2005:185). Tallinn conurbation is illustrated in figure 6.1.

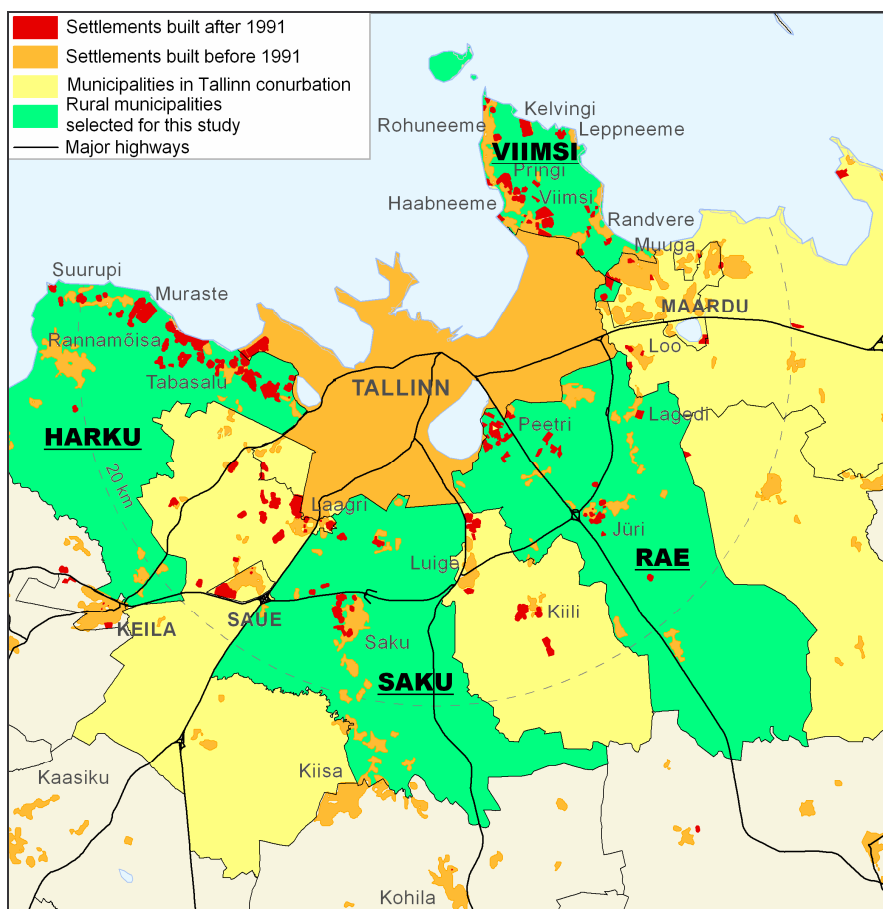


Figure 6.1: Patterns of housing development in Tallinn conurbation and the four selected municipalities.
Source: modification of the map from Ahas and Silm, 2006

³⁵ The data on commuting was available only of the year 2000, and it is obvious that now the number of commuters had grown significantly given the recent trend of suburbanization.

The population of Tallinn conurbation (based on the definition above) is ca 470'000 as of 1st of January 2006, thus it is ca 90 % of the whole population of the Harju County³⁶ and ca 35 % of the population of Estonia (SOE website). In Estonia the proportion of population residing in the capital city is one of the highest among the EU member states (Servinski, Karjus, Rõigas, 2005).

Despite the fact that Tallinn conurbation functions to a large extent as a unified 'organic entity', there is no administrative body with jurisdiction covering the whole area. Each of municipalities is governed by a separate and autonomous local authority.

6.2. SOCIO-ECONOMIC TRENDS IN POST-SOCIALIST PERIOD INFLUENCING DEVELOPMENT OF TALLINN CONURBATION

In the 1990s, caused by the restructuring of economy and the collapse of the Russian export market, a significant drop in job provision was most painfully felt by the rural population in Estonia (see Raagmaa and Kroon, 2005). The economic imbalance among regions created preconditions for growing migration of population from remote rural areas to the major urban centers. Three regions were most prominent in terms of rate of immigration: the capital city area in the north, the Tartu city area in the south-east and industrial cities in the north-east of Estonia (Kulu and Billari, 2004: 682).

The formal statistics of the two censuses in 1989 and 2000 in Estonia show, however, that during the period between them the share of population of rural municipalities (comprising also boroughs within them) slightly increased (from 30% to 33%) and the share of cities' population diminished (from 70% to 67%) (SOE website). The stagnation or slight decrease of cities' population is an outcome of complex processes of migration and natural reproduction: out-migration of Russian-speaking population from Estonia³⁷ and negative natural increase were to some extent compensated by immigration of rural population into the cities. Besides this, a recent trend of suburbanization contributed to a decrease of cities' population. Thus, a shift in the distribution of rural population had occurred: whereas most remote municipalities decreased significantly in population, rural municipalities close to bigger urban centers gained new residents (ibid).

³⁶ The population of Harju County is 521'000 people by the 1st of January 2006 (SOE website).

³⁷ Non-Estonians were concentrated to major urban areas (90% of them lived in cities), whereas Estonian population was more spread throughout the country. Thus the out-migration of Russians from Estonia had freed considerable housing space in Estonian cities (Kährrik and Tammaru, 2006: 2).

The capitalist economy brought about profound changes in the socio-economic situation. Economically quite homogenous society in socialist era had become extensively stratified. Income disparities between the wealthiest and the poorest strata in Estonia are among the widest of the EU member states (Kährik, 2006:32). Leetma (2005) analyzing the internal migration of the population in Estonia between two censuses 1989 and 2000, has found that suburbanization was socio-economic status sensitive, when each strata (predominantly the lowest and the highest status strata suburbanized) had distinct reasons for move and destination preferences. The new housing development in suburbs in 1990s was connected with suburbanites of only higher socio-economic status.

Under capitalism with minimal public sector intervention the way spatial development takes place is dependent on housing preferences of people who look for *new* housing and are able to afford it. Since quite young people constitute the dominating purchasing power for new housing in Estonia, the present pattern of suburbanization is quite explainable³⁸. At this age people usually have small children, which is a significant factor defining their choice of housing. The findings of a survey (see Ahas and Silm, 2006:26) conducted in spring 2006 among new Tallinn suburbanites show the dominating reasons for moving to suburbs are: the wish to live in a detached house, to have a plot of land, and to raise children in more child-friendly environment. Besides this, air pollution, noise and low safety of urban environment had considerably stimulated people to move to suburbs.

People who finally got favourable conditions for obtaining a 'home of their dream' are not preoccupied with thinking of what consequences society will eventually face if this trend takes a massive character. As noted by Bruegmann (2006: 17) when society reaches a certain level of affluence and people have some choice in how they live, urban sprawl is a preferred settlement pattern. Lack of environmental awareness of the public, inability or unwillingness to analyse, short-sighted attitudes further the expansion of urban sprawl.

The new capitalist economy with liberal ideology and the economic crisis of the beginning of 1990s transforming into the economic boom in 2000s allowed private capital to take the leading position in housing provision. Real estate developers understanding growing demand for new

³⁸ According to the recent survey (Ahas et al, 2006), the age of suburbanites in Tallinn hinterland is very young: the dominant group was of age 35-39 in 1990s and of age 25-29 in 2000s.

housing in suburbs and being supported by cheaper land prices there increased the number of new housing projects in suburban municipalities.

This situation is exacerbated by the competitive attitudes of rural municipalities to attract more affluent tax-payers by the means of simplifying the rules for development (Kährik and Tammaru, 2006: 5). As a result, the real estate developers' pressure rises even more as they consider formal procedures related to planning in rural municipalities to be much easier than within Tallinn (respondent DR). This again increases the probability that new developments will reflect individualistic preferences of private actors rather than a long-term comprehensive vision of spatial development.

6.3. URBAN SPRAWL IN TALLINN CONURBATION

6.3.1. Housing development pattern in Tallinn conurbation

The share of new housing construction in Tallinn conurbation has been growing since the mid of 1990s and in the last five years stabilized at a disproportionately high level, 65-70% of housing construction in the country (Estonian Construction Works Register website), compared to other regions in the country (see annex 6 figure 6.1). At the same time, the rise of housing construction volumes was accompanied by stagnation of the population size in the whole conurbation (see annex 6 figure 6.2).

71 % of all presently existing housing stock in Estonia was built during the period from 1945 till 1991 (SOE website), when Estonia was under the Soviet rule. That is why the Soviet legacy still remains so significant in the morphology of Estonian cities and rural municipalities. Even though, the urban growth of Tallinn during the Soviet decades took place on free land adjacent to the pre-Soviet urban structures, the form of the city was kept compact (Ruoppila, 2006: 7-8). The development of new housing in the hinterland of the city followed the location of work places – in satellite towns where some industrial enterprises were established (Leetmaa, 2005: 188) and close to state and collective farms (Raagmaa and Kroon, 2005: 10). This fact explains how fragmented clusters of apartment houses emerged in the absolutely rural environment in most Estonian rural municipalities. No unplanned expansion of the city to the country-side was allowed. Even summer cottage regions that were built by cooperatives established by people in 1960s-1980s (see Leetmaa,

2002) were planned by public authorities. Due to such historic background urban sprawl is a relatively new phenomenon in Estonian cities.

Interestingly, quite remarkable differences between suburbanisation in Tallinn conurbation in 1990s and in 2000s were found (see Kährik and Tammaru, 2006), which seem to be in accord with the changing socio-economic situation in the country. During the 1990s more than 20'000 Tallinn residents moved to the city suburbs (Leetmaa, 2005). Tallinn residents of lower social status predominantly moved to already existing housing stock – apartment houses in satellite towns and former state/collective farms, and to reconstructed summer cottages, while people of higher social status generally moved into detached houses in newly developed settlements in suburbs (ibid). In the first decade in post-socialist Estonia only few, most wealthy people, were able to buy new housing due to very high housing loan interest rates and the overall unstable economic situation. That is why suburbanites moving to new housing made up only ¼ of all suburbanites (ibid). At that time, the housing type and location – predominantly one-family houses in Tallinn suburbs – were a matter of prestige (Kährik and Tammaru, 2006).

While in the 1990s, migrants moving to the existing housing stock made up a significant share of suburbanites in Tallinn conurbation, in the beginning of the 21st century, on the contrary, suburbanization took place mainly due to booming construction of new housing (Ahas and Leetmaa, 2005b). The housing construction rapidly intensified since 2003 (see annex 6 figure 6.1 and figure 6.2) being propelled by a continuous and profound decrease of the housing loan interest rates³⁹. Besides favourable loan conditions, a rise of welfare of population and an escalating spread of car use were the driving forces for suburbanisation in 2000s. These conditions increased opportunities for also middle-class population (especially young educated people) to enter the housing market.

Although, construction of one-family housing in suburbs is dominant, real estate developers, in order to satisfy the demand of wide layers of population, started to offer new apartment housing in suburbs during the last five years (Ahas et al, 2006). Ahas and Leetmaa (2005b) described the suburbanization of Tallinn as follows: “Since single family homes remain beyond the means of many people potentially moving to the suburbs, more and more row houses and apartment

³⁹ Housing loan interest rates had been falling from ca 15 % in 1997 to ca 4 % in 2005 (SOE website).

buildings have been planned outside city limits”. The authors state that there is ‘a clear overplanning’ referring probably to a situation when the volume of planning for housing is much higher than the capacity and necessity to construct all housing that is being planned. In 2005 Harju County Government warned all Harju County municipalities that their planning activity did not correspond to the reality. It stated that if all adopted by the end of 2003 detailed plans in Harju County would be implemented, it would indicate the growth of Harju County population by 80%, which is absolutely unrealistic (Harju County Government letter no 2.1-13/903, 11.02.2005).

Physical features of new suburban housing areas

Three quarters of all planned new housing areas in Harju County (Tallinn city excluded) during the period from 1995 till 2004 are located in only six municipalities out of total 24 municipalities in Harju County (without Tallinn city) (Hendrikson & Ko, 2004). These most popular municipalities – Viimsi, Harku, Saku, Kiili, Rae, and Maardu town – are contiguous to Tallinn and have favorable location. The main pattern of allocation of new residential areas is either by the sea coast or along highways going from Tallinn outwards, especially by their intersections with the Tallinn orbital highway. The data on already constructed housing projects shows that construction of new housing had experienced a very sharp increase in 2000s (Ahas et al, 2006) and the pattern of its location resembles the planning data (described above): most extensive housing construction takes place in Viimsi, Harku, Saue, Rae, Kiili and Saku rural municipalities (see figure 6.1 on page 66 and figure 6.2).

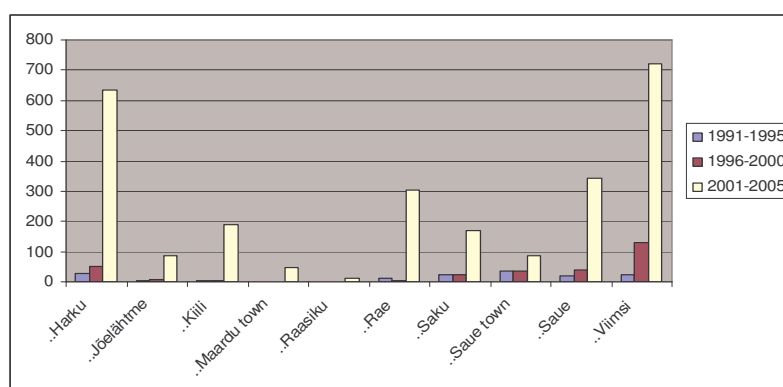


Figure 6.2: Number of new residential buildings in suburban municipalities of Tallinn conurbation by January 2006. **Source:** based on data from Ahas and Silm, 2006

The following short description of housing development is heavily based on findings of the TUGI

research⁴⁰ presented by Ahas and Silm (2006). Approximately $\frac{3}{4}$ of new constructed settlements are located on the distance of 10-20 km from Tallinn city center. The research findings also show that the pattern of housing construction in Tallinn hinterland is changing over time. Settlements built in 2000s are more compact and closer to Tallinn than housing constructed in 1990s (ibid).

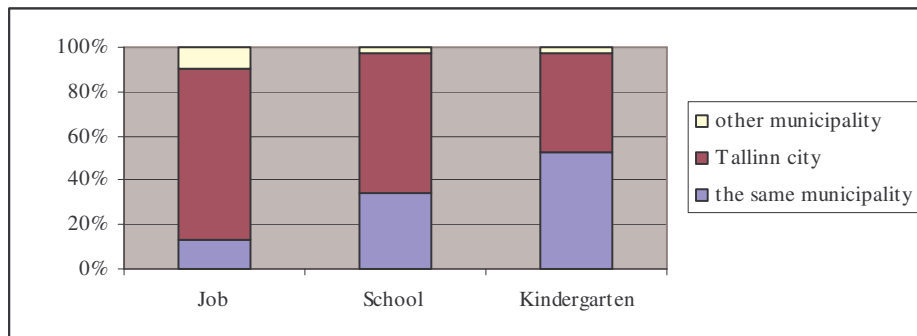


Figure 6.3: Share of new suburbanites (respondents in survey) in Tallinn conurbation having job, attending school and kindergarten within the same municipality they live, in Tallinn and in other municipalities.
Source: based on survey data from Ahas and Silm, 2006:32

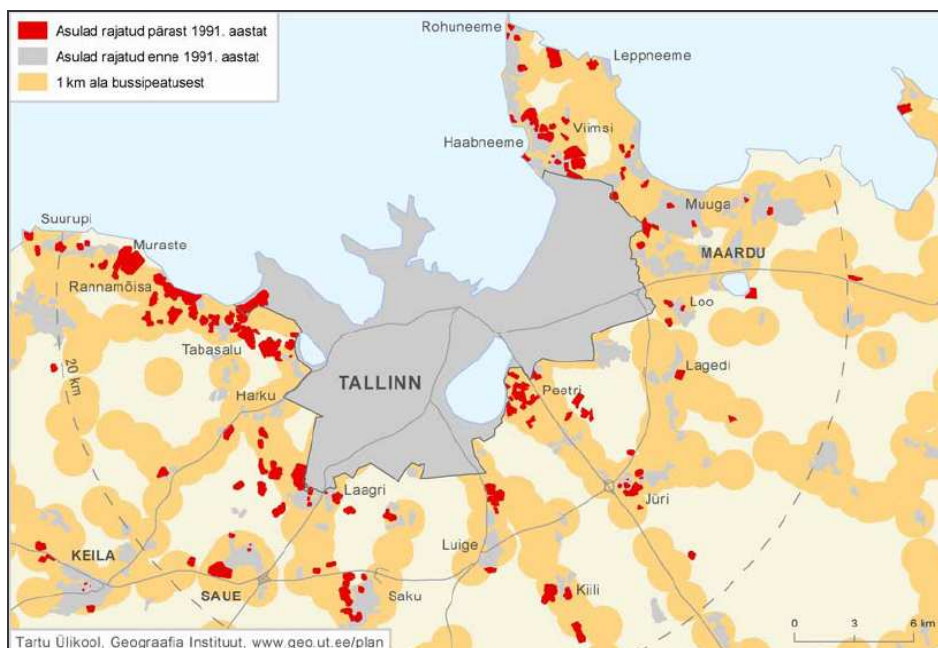


Figure 6.4: Spatial distribution of new suburban settlements around Tallinn in relation to **bus stops**. A circle with 1-km radius around bus stops is used to show settlements within 1 km distance from bus stop.
Source: Ahas and Silm, 2006

Still, the main problem connected to the new pattern of housing development in Tallinn hinterland is not the length of distances, but the fact that new housing is dispersed resulting in fragmented

⁴⁰ The research conducted by the Tartu University Geography Institute (**TUGI research**) in 2006 analyzed new settlements in Tallinn suburbs constructed during the years 1991-2006. The TUGI research sample incorporated not all new housing, but only housing projects with more than three dwellings.

small neighbourhoods: ¼ of new housing areas are totally disconnected from any other settlements. This makes it unreasonable to establish social services and jobs locally and requires irrationally high costs for public transport and techno infrastructure construction. Almost a half of new suburban settlements are solely one-family housing areas, the majority of which have no social infrastructure⁴¹ nearby. As a result of such conditions, the level of commuting connected to job, school and kindergarten among new suburbanites is quite high (see figure 6.3).

Types of public transport in Tallinn hinterland comprise bus, train and electric train. The railway location is the most beneficial for residents of Saku and Saue municipalities, but trains are quite rear. Public bus lines pass major highways, and almost no bus comes to local roads in areas in-between state highways (Hendrikson and Ko, 2004:22). However, as we can see from figure 6.4, public bus stops are within reach by foot for residents of most new suburban settlements. Despite this fact, only 5% of new suburbanites use public transport regularly (Ahas and Silm, 2006).

To conclude, spatial planning of housing in the suburbs of Tallinn creates a situation when suburbanites' functional areas are not overlapping: (a) housing-sleeping districts in rural municipalities, (b) work place mainly in Tallinn, and (c) service consumption areas more dispersed in the conurbation. The overall urban structure does not follow a pattern of a multi-nuclei urban network, which would consist of considerably self-sufficient settlements connected by good public transport and cycling/walking roads. Although, the amount of scattered housing or neighbourhoods is not as high as in many European cities (see EEA, 2006), the share of such irrational type of housing development is considerable at the Estonian scale, given its small national population.

6.3.2. Outcomes of urban sprawl

On the whole, urban sprawl leads to a vast range of negative externalities, which are contrary to the sustainability principles. Negative externalities of urban development imply that a particular activity of actors on the urban development scene generates benefits concentrated within narrow groups of actors, whereas 'costs' are spread to broader populations (Evans, 2004: 14-20).

One group of **beneficiaries** of such urban development is real estate developers who purchase relatively cheap land in rural areas close to cities for development. This allows them to provide

⁴¹ See definition of social infrastructure on page 23.

cheaper dwellings to the real estate market, minimizing their risks and maximizing revenues. Another group of beneficiaries are residents who get new and spacious dwellings in natural environment⁴². Besides improved living conditions, suburbanites' connection to nature has increased in everyday life (Ahas and Silm, 2006). However, **negative outcomes of urban sprawl** are much broader and influence directly the whole population of a conurbation and indirectly the quality of life and environmental conditions at the larger scale.

Traffic congestion on the main highways approaching Tallinn, caused by commuting, is tangible. Multiple and longer commuter trips generate car-related air pollution and increase in the greenhouse gas production⁴³, thus contributing to the climate change (EEA, 2006:35).

Sprawling cities consume more energy. Transportation-related costs in densely populated towns with strong public transport make up to 5% of GDP, whereas in sprawling cities with a dominance of car use it is more than 12% (CEC, 2006:38). Additionally, considerably larger living space of suburban dwellings than in cities requires more energy to heat and illuminate them. The average *ecological footprint* (see definition on page 7) of a new suburbanite in Tallinn conurbation, that was calculated based on the travel-related and the domestic consumption of energy and the size of land under house, constituted 1.9 conventional hectares annually, whereas in the world there is 1.8 conventional hectares per person (Poom, 2006: 46) The transportation energy accounts for 58% of ecological footprint of a Tallinn suburbanite, and the domestic energy for 40% (ibid).

Real estate developments taking place in suburban areas of Tallinn use predominantly greenfield land (see definition on page 3), thus eliminating natural free space around the city, reducing woodland and cultivated land areas (Noorkõiv and Sepp, 2005: 27), creating fragmentation of natural areas and thus disrupting migration corridors for wildlife species (EEA, 2006: 31). This also means that intensive human activity increasingly intrudes closer to natural protected areas, “imposing stress on ecosystems and species through noise and air pollution” (ibid).

⁴² However, in the long-term perspective their benefit is quite questionable. The advantage of having home in city hinterlands may occur superficial, hiding a range of unforeseen problems, novel for a city resident.

⁴³ Transportation through the emission of carbon dioxide is one of the major contributors to the anthropogenic production of the greenhouse gases. Its share was estimated globally as 14% in the year 2000, being on the third place after power stations (21.3 %) and industry (16.8 %) (GWA website)

New housing developments in countryside create a necessity for additional technical and social infrastructure (EEA, 2006: 36). Due to the decrease of population within the administrative borders of Tallinn the existing social infrastructure in some cases is underused. Instead of more efficient use of the existing facilities, public sector is obliged to invest in construction of new infrastructure following fragmented development of residential areas in suburbs.

There is one feature of urban sprawl particular for the Estonian context, namely, the risk that many developments will remain partly uncompleted (R3). In the course of the land reform a number of individuals have unexpectedly become landowners, most of whom wanted to get fast profit out of their land. New developments started to crop up massively on former farmlands, but not all of them are completed according to their initial design. In many of them construction of roads is not finished, water quality is bad, sewage solution pollutes environment, greenery is not developed etc (R3) (see annex 6 figure 6.3). Such hastily developed housing districts in suburbs may become undesirable over time due to a low quality of living environment (R3).

Urban sprawl leads also to socio-spatial segregation of population. In Tallinn conurbation it has not reached a problematic scope yet. The majority still lives in apartment blocks built in the Soviet time, where historically a mix of residents of various statuses used to be. Nevertheless, the distinct characteristics of new inhabitants of suburban areas around Tallinn are evident in terms of the income level, age, family structure, ethnicity and the education level. The demographic homogeneity of new suburbanites raises an extensive need for particular services in suburban neighbourhoods (especially kindergartens and schools due to high share of children), whereas completely another combination of services could be needed in some decades due to simultaneous aging of population.

Urban sprawl has also other negative social impacts, such as social isolation of less mobile groups of society, especially children and elderly people (Troy, 1996 in Miller, 2004:259; CEC, 2006:38) and intrusion of urban lifestyles into the traditional rural life, when “privacy of earlier constructed residential areas” is reduced and identity of place is troubled (Noorkõiv & Sepp, 2005: 27).

6.4. CONCLUSION

This chapter provided a general overview of the phenomenon of urban sprawl in Tallinn conurbation. By now the reader is aware of the national institutional and political framework, and socio-economic drivers, physical features and outcomes of urban sprawl. However, the extent of urban sprawl may vary across suburban municipalities because it greatly depends on spatial development policies of local authorities. How Tallinn suburban municipalities try to ensure sustainable spatial development under the conditions described above will be analyzed in the next chapters on the examples of four suburban municipalities of Tallinn.

7. MUNICIPALITIES UNDER GROWTH PRESSURE: IS SUBURBANIZATION SUSTAINABLE?

This chapter aims at assessing how much the urban sustainability principles are adhered to in development of new residential areas in four suburban municipalities of Tallinn – Saku, Viimsi, Rae and Harku. Therefore, here I analyze the extent of implementation of the EU policy on sustainable urban development by the local authorities.

First, I shortly describe the four selected rural municipalities with the emphasis on prior development of housing there. Secondly, I summarize main points of present spatial development policy of each municipality and delineate major common principles of planning related to housing development. Thirdly, in analyzing development and planning of new housing areas I synthesize evidence from the four municipalities by drawing general common trends and emphasizing differences. The analysis is guided by the operationalized *dependent variables* of this study presented in chapter 3 section 3.2.

7.1. DESCRIPTION OF SELECTED MUNICIPALITIES

7.1.1. Geographic characteristics

In order to understand processes of spatial planning in municipalities, it is very important to consider geographical characteristics of municipalities. Geographical location and configuration define whether a municipal territory has a seacoast line, extensive and valuable woodland, and whether a territory is crossed by state highways and/or railway connection of Tallinn and other important urban centers. The more spectacular landscapes, rehabilitation areas and easy access a municipality provides, the more attractive it is for housing development. This defines how much pressure real estate developers exert on a local government. Consequently, geographical features define conditions under which a local government has to operate.

The rural municipalities selected for this study (see table 7.1) are among the most rapidly growing rural municipalities in Estonia. Their development is strongly influenced by the proximity to the capital city (see figure 6.1 on page 66). All processes that take place in each of them should be understood as a part of the overall functioning of Tallinn conurbation.

Name	HARKU	RAE	VIIMSI	SAKU
Area	158 km ²	207 km ²	73 km ² (26 km ² - islands)	171 km ²
Population (July 2006)	ca 9'200	ca 8'800	ca 12'900	ca 8'200
Density (residents/km ²)	58	43	177	48
Population growth Jan 2004 - July 2006	26%	12%	28%	9%
Location	along seacoast	in-land	Peninsula, islands	in-land
Administrative division into settlements	Borough (<i>alevik</i>) ⁴⁴	2	4	2
	Village (<i>küla</i>) ⁴⁵	21	27	15

Table 7.1: Facts about the four selected municipalities. Source: www.harku.ee, www.rae.ee, www.viimsi.ee, www.sakuvald.ee and Andmevara AS data

The immediate proximity to the capital city, the long coast line and variable nature make Viimsi and Harku⁴⁶ the most attractive locations for development of new housing and business premises. Viimsi municipality occupies the territory of Viimsi peninsula to the east from Tallinn and nine islands with the total area of 73 sq km. Almost all Viimsi population is concentrated at the peninsula. Harku municipality is located to the west from Tallinn and has twice the territory of Viimsi making up 158 sq km. The other two municipalities – Saku and Rae – spread inland from the Tallinn border to the south and the south-east respectively and have bigger territories than the coastal municipalities (see table 7.1). Both of them have somehow elongated form and are crossed lengthwise by radial highways, connecting Tallinn with cities in southern Estonia, and crosswise by the Tallinn orbital highway. Besides this, Saku has the advantage of favorable location of state railway with stops in bigger settlements in Saku. In Rae northern part there is also state railway connecting its few settlements with Tallinn. Harku has also crossing highways going from Tallinn

⁴⁴ **Borough** (Estonian: *Alevik*) – in Estonian context is a small rural town as defined by the administrative division of each municipality. Settlements of this type *do not have self-governing status* and are usually local service centers in rural municipalities. Their population may vary from couple hundreds to several thousands. Usually they have a dense settlement structure and contain some Soviet-time apartment houses (see Albre, 2005:15).

⁴⁵ **Village** (Estonian: *Küla*) – in Estonian context is usually smaller than a village in the European terms. It is a small settlement in rural areas as defined by the administrative division of each municipality. Population of Estonian villages varies in a very broad range from 400 to less than 10 permanent residents. Most bigger villages (with more than 250 residents) also contain Soviet-time apartment houses, whereas smaller villages do not (see Albre, 2005:15).

⁴⁶ Due to the fact that each municipality has an urban settlement with the same name as the name of a municipality, I need to clarify my use of those names. Hereinafter, the names *Viimsi*, *Harku*, *Rae* and *Saku* as such will be used for referring only to municipalities. If I talk about a settlement with the same name, I clarify it like, for example, *Rae küla* or *Viimsi alevik*.

to other municipalities. Viimsi's peculiarity, in contrast, is that it does not connect to any other municipalities; the highway coming from Tallinn has a dead-end there.

7.1.2. Migration and development

After liberalization of the real estate market Viimsi became the most popular rural municipality for those who wanted to have a house in the suburbs of Tallinn. In 1989 Viimsi had the smallest population out of the four municipalities, but already by 2000 it excelled all of them and continued very rapid increase (see figure 7.1). Viimsi acquired a reputation of prestigious living environment. The massive demand for housing in Harku became apparent later than in Viimsi. This is reflected in its relatively modest population growth in 1990s which accelerated later. In 1989 the number of permanent residents in Harku was a bit higher than in Viimsi and a bit lower than in Saku and Rae, whereas by 2006 population in Harku had increased by 52%, being outpaced only by Viimsi with 138% (see figure 7.1). The number of residents in Rae and Saku was also steadily growing. Saku experienced more intensive increase in 1990s.

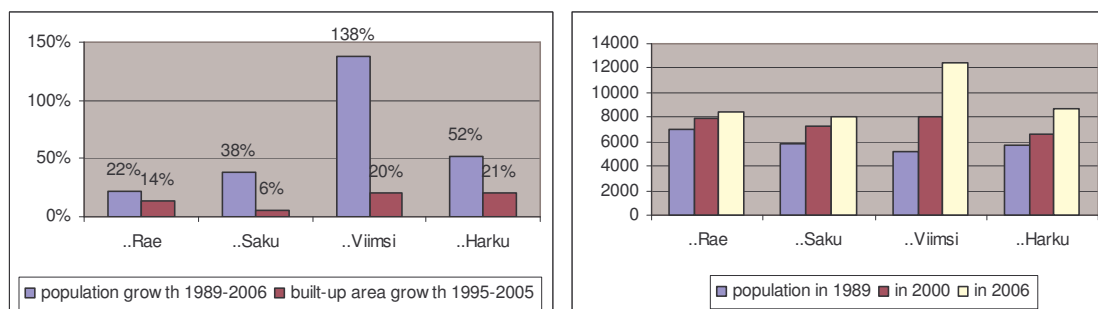


Figure 7.1: Growth of population and built-up land areas (for housing, industry, business etc) in the four municipalities. **Source:** population data – SOE website and LGs; construction data – Ideon, 2006.

Saku had the most modest construction activity. In the period from 1995 till 2005 the area under buildings (including housing, business, industry) in Saku increased by 6% compared to 14% in Rae, 20% in Harku and 21% in Viimsi (see 'built-up areas growth' in figure 7.1) (Ideon, 2006:65). Saku and Viimsi have the biggest gap between the increase of areas used for new construction and the growth of population, i.e. population was growing faster than construction volumes. This indicates that the share of suburbanites moving into the existing housing stock in these municipalities was quite considerable. This interpretation is reinforced by the fact that in 1990s population in both municipalities grew more than in Rae and Harku. It was the time when generally ¾ of new suburbanites settled in the existing housing stock in Tallinn hinterland (as was

mentioned in the previous chapter). Additionally, in Saku and Viimsi the continuous reconstruction of summer cottages for year-round use contributed to the population growth (S1; Viimsi doc.2:14)⁴⁷. Figure 7.1 shows that Harku had almost the same increase in built-up areas as Viimsi. The change in population, however, was not so extensive. This indicates that in Harku the population growth was mostly connected with new construction, where the share of apartment housing presumably was low. However, summer cottages' reconstruction was also considerable in Harku. In Rae the increase of built-up areas in 1995-2005 in relation to the population growth was the highest compared to other municipalities. This fact can be explained by more intensive development of industrial and business premises in Rae that do not directly cause arrival of new residents. For example, during 2002-2004 only 60% of all issued building and usage permits in Rae were connected with housing (Rae doc.2:28). The second explanation could be that new residents are mainly coming to new housing, not so much to the existing older settlements or summer cottages. Also construction of apartment houses, which brings considerable population, but consumes less land, was scarce in Rae until 2005.

The Saku LG prognosis is that, if all detailed plans are realized, the population of the municipality will grow to 21'000, i.e. 2.5 times more than at present (S1, S3). This is mainly a result of the spatial development policy of the previous council and government of Saku who favored the growth (S1, S3, HC1). The present chairwoman of Saku council stated: *"The previous council initiated and adopted a lot of various detailed plans (predominantly housing) without much consideration where construction would take place and what consequences it would bring"* (S3). Since the last local elections the LG makes considerable efforts to restrict an explosive growth of population (S1, S3).

Interestingly, in the beginning of 1990s in Viimsi the pressure from the real estate market was not high, and Viimsi LG was interested in attracting new affluent residents to the municipality (V3). Over time the municipality achieved its goals. Even more, it reached a point when further planning for construction and connected to it population growth would cause overexploitation of the natural resources and a great burden imposed by the man-made environment on the natural one. As it was commented by the chief of the regional planning office in Harju County Government, Viimsi is

⁴⁷ Hereinafter I refer to Estonian planning documents as, for example, 'Rae doc.1', for the reference list to Estonian planning documents see page 163.

already overpopulated (HC1). There is a problem to provide enough drinking water to all inhabitants (HC1). The prognosis of the population change, based on the planning documents, suggests that by the year 2020 the number of residents in Viimsi may grow up to 30'000 (Viimsi doc.4). The pressure from the private sector for real estate development is still extremely high. The deputy mayor of Viimsi commented: *“Every month we receive 5-6 applications for detailed plans that presume a change of a master plan. This usually means that a developer intends to construct housing on the land which is defined as woodland or agricultural land according to our master plan”* (V1).

In Rae planning and construction activity has suddenly become very high especially in the last years (R1, R2) and the prognosis of the population increase by the 2025 suggests the arrival of ca 17'000 new residents in case all detailed plans are realized (Rae doc.2:11). Like other municipalities Rae LG states that previous power-holders in Rae allowed massive development of housing. Most housing projects changed the master plan, i.e. planning did not follow any long-term strategy. Very big mistakes were made that need to be solved now (R1). Here is one example:

Already ten years ago the county plan included the state vision of the future railway for transportation of dangerous goods that was supposed to cross Rae in mainly uninhabited area between the Tallinn border and the Tallinn orbital highway. But during the last decade detailed plans for housing construction had been initiated and adopted in the area surrounding the prospective railway (just leaving the protection zone of 200 m intact). Rae LG as well as Harju CG allowed development there. As a result, now constructing the railway according to the plan is problematic, as it will cross densely populated areas. The present Rae government and council propose to shift railway location further from Tallinn. However, it is clear that this implies big changes in the county plan and master plans of neighboring municipalities. Why were new dense settlements allowed in the area, where transportation of dangerous goods is planned? One fact is obvious: there was a high demand on the housing market for this location. (Based on interviews with HC1, HC2, R1, R3).

According to the mayor of Rae, the northern part of the municipality between the Tallinn border and the Tallinn orbital highway inevitably turns into quite densely populated area with mainly housing, and closer to the highway some industries and businesses. *“It does not depend on municipal interests, as 75% of this area is already covered by detailed plans and we had to take it into account when making the new master plan* (R1).

Since 2002 the number of new residents moving to Harku was steadily increasing and varied in the span 800-1200 per year (data from Harku LG population registry). A respondent from Harju CG commented on Harku development as follows: “*Very much arbitrary and uncoordinated activity takes place in Harku. In general only real estate developers and private constructors dictate special development there*” (HC1). The Harku LG architect’s viewpoint is: “*Development pressure had raised so suddenly here that municipal government had not enough time to react to it by increasing the planning capacity*” (H3). The deputy mayor of Harku LG admits that development during the last decade was turbulent in Harku (H1). Giving a hint on the high pressure for housing development in Harku coastal areas he stated: “*Harku municipality is between Tallinn city and Paldiski city and these two cities grow together. There is no force which could stop this*” (H1). Even if up to now the built environment does not prove such statement completely (see figure 6.1 page 66), the initiated and enforced plans really suggest massive housing construction in the area in the nearest future.

7.1.3. Settlement structure and its change

The present settlement structure in all selected municipalities is conditioned by agriculture, industry, housing and infrastructure development during the Soviet time. Each municipality has 2-4 boroughs developed out of Soviet-time state or collective farms and/or summer cottage districts. State/collective farms were typically accompanied by low-rise apartment and detached houses, social infrastructure units and production plants. Summer cottage districts were built in 1960s-1980s, and during last two decades a considerable share of them is being reconstructed into one-family houses for year-round use. Approximately half the population in each municipality lives in small villages, the number of which varies from 15 to 27. Whereas in the coastal municipalities population is concentrated along the sea coast, in inland municipalities the distribution of population is more conditioned by highways and particularly in Saku by the railway.

At present Saku municipality embraces two boroughs – *Saku alevik* and *Kiisa alevik* with population of ca 4’700 (which is more than ½ of the municipal population) and ca 600 inhabitants respectively – and twenty quite small villages (see annex 7 figure 7.1). *Saku alevik* is the administrative center of the municipality and a poly-functional urban center with various public and private services and jobs. The highest inflow of new residents in Saku municipality takes place

in *Saku alevik* and villages around it (Saku doc.1). So, population is quite concentrated in central part of the municipality and this trend seems to be maintained.

In Viimsi municipality a half of the population resides in two closely located boroughs near the Tallinn border – *Viimsi alevik* (ca 2340) and *Haabneeme alevik* (ca 3160) – which are gradually fusing together. *Viimsi alevik* is the administrative center of the municipality. The rest of the population is spread across 14 villages located mostly by the sea coast on both sides of the peninsula leaving the inland areas for greenery⁴⁸ (see annex 7 figure 7.2). The pattern of new development can be generally characterized as an extension of the existing coastal settlements to the internal parts of the peninsula (see annex 7 figure 7.3) (see also Noorkõiv and Sepp, 2005:26).

Rae municipality is administratively divided into 4 boroughs and 27 villages (see annex 7 figure 7.4). *Jüri alevik* located in the central part of the municipality is the administrative center of Rae and has ca 2'800 inhabitants. 70 % of Rae population is concentrated to its 4 towns and *Peetri küla* (which is located just by the Tallinn border and used to be a bare field a decade ago) (see annex 7 figure 7.5). The rest is spread around the territory, but most new settlements are located along the Tallinn-Tartu highway. A huge share of new-comers is expected in the villages bordering with Tallinn and having access to the Tallinn-Tartu highway, namely *Peetri*, *Järveküla* and *Rae küla* (Rae doc.2:11). The changes in the settlement structure and in the distribution of population in Rae are very uneven in regional terms: the fast and extensive growth of housing construction and population in the northern part of the municipality (*Peetri küla* region) is accompanied by the decrease of population in older settlements in the south (R3). Thus, some existing settlements with developed infrastructure become unpopular and need an infusion of new life in order to be sustained (R3). In this sense Rae differs from other municipalities.

Harku municipality has 2 boroughs and 19 villages. *Tabasalu alevik* (borough) is the biggest settlement and administrative center of the municipality with population of 3000 inhabitants. It is located by the sea coast and crossed by the highway connecting it with Tallinn. All other settlements are much smaller. The biggest of them is *Muraste küla*, population of which grew from 175 inhabitants in 2000 to 900 in 2007. This village is the best example of fast inflow of new residents to the coastal areas in Harku. The third biggest settlement and the second settlement with

⁴⁸ Additionally to this, one village is located on the Naissaar Island.

the status of borough is *Harku alevik* with 600 residents located by Harku Lake and the Tallinn border. In Harku the population seems to be more spread around, forming a number of rather small settlements, which by the sea coast are growing together and forming an urban line, whereas in inland areas they are much smaller and more fragmented (see annex 7 figure 7.6).

7.2. PRESENT SPATIAL DEVELOPMENT POLICIES

The present settlement structure, development trends and consequences should be the basis for policy goals in spatial development in each of the municipalities. It is of major interest to see if there are differences among the four LGs in their present policy goals.

7.2.1. Broad policy goals

Saku municipality: The main course in the spatial development policy in Saku has been changed since the last elections in autumn 2005. The new goals and principles of Saku municipality spatial development policy were defined by the summer 2006 and a new master plan is being prepared now. The vision supported by the majority of Saku residents is to establish a stable development with a slow growth of population and to preserve the quiet and green semi-rural atmosphere (S1, S3). Housing construction is delimited mainly to satisfy the demand of present residents of Saku, for example, young local people starting own families (S3).

Saku LG's intention is not to stop real estate development but to restrict and steer it, to allow construction in the locations, where it would be most sustainable and would not bring about harmful effects on the environment (S1). Thus, the necessity of incorporation of the sustainable development principles into spatial development policy, especially preservation and further development of natural and cultural diversity, in Saku municipality is emphasized (Saku doc.2). The LG tries to regulate the inflow of new residents to the municipality to match the financial capacity for establishment of necessary public services and the possibility of a smooth integration of newcomers into the existing population (ibid). LG is well aware of possible adverse impacts of urban sprawl and tries to curb it with various measures. Those include avoidance of development of mono-functional settlements and creation and preservation of publicly used spaces (Saku doc.1). The strategy for housing development aims to densify existing settlements, to widen their borders in a way that their shape is round and compact, and at the same time to follow development stages

(S1). Saku LG promotes public participation and integrative approaches in planning, ensuring analysis of potential impacts of planned activities on each other.

Viimsi municipality: Viimsi LG after purposefully attracting new development to the municipality during 1990s and beginning of 2000s has recently recognized that further development without strict control and steering would jeopardize not only the availability of social and technical infrastructure, but also the condition of nature. As the continental territory of the municipality is restricted to a quite small peninsula, its natural resources are limited and there is a need to ensure a proper balance between man-made and natural environment (V1). A respondent from Harju CG confirmed: *“Recently Viimsi started to restrict new construction and the access for new-comers and closed some areas for development. They have learned from their mistakes”* (HC1).

A survey among Viimsi residents showed that the majority object against construction of new apartment houses in the municipality and a further considerable increase of population (Viimsi doc.5). The new Viimsi spatial development policy corresponds to the wish of population. It aims to ensure a balanced settlement structure in the municipality through preventing massive development of apartment housing and housing construction nearby highways, avoiding the growth of mono-functional settlements and uncompleted real estate projects (Viimsi doc.2). Viimsi policy stresses the need for infusion of the sustainable development principles into spatial planning and avoiding rise of competitiveness of the municipality at the expense of future generations. At present spatial development policy in Viimsi is directed to ensure comprehensive and complete development of areas already covered by detailed plans and to decrease the burden on natural environment. The policy emphasizes the importance to improve and complete a network of vehicle, cycling and pedestrian roads and primary service centers throughout the municipality. One of the main objectives is to promote public transport usage among residents. Viimsi LG intends to create one dominating poly-functional urban center in the municipality – in the triangular of settlements of Viimsi, Haabneeme and Miiduranna – with provision of rich cultural life and a variety of public and private services (Viimsi doc.2). Besides this, in recent time Viimsi LG pays attention to environmental protection, landscape ecology and harmonious integration of man-made environment into natural one.

Rae municipality: Rae still supports its further growth in terms of new housing and business. However, the policy has changed to some extent. It seems that policy-makers became more conscious about what was happening and what outcomes it might have in the future. In the words of the chairman of Rae Council: *“Now the policy has a framework; we are clearer in our strategies on many issues (waste, water supply etc), many new regulations are introduced”* (R3). Based on its experience, the LG already recognizes problems that may be connected with unregulated fast development, but still wish the inflow of new taxpayers. That is why the strategy reflects the wish to find a balance between new development and preservation. The mayor’s position is clearly connected to thinking about municipal finances: *“If we let more construction of housing, we get more taxpayers. But if new real estate development is explosive, the first result is additional expenses for municipality; financial benefits will appear much later”* (R1).

The new master plan of Rae (not valid yet) delineates main principles for directing development of housing, industry, tourism, and nature preservation. As the LG is welcoming an inflow of population, the northern part of the municipality between the Tallinn border and the Tallinn orbital highway is reserved for further development to form a garden-city type dense settlement area (Rae doc.4:19). The vision is to create the main center of this area in *Peetri küla* providing primary public services (ibid). New housing construction is also expected in the region of the administrative center of Rae, *Jüri alevik*, in the central part of the municipality. *Jüri alevik* is expected to strengthen its poly-functional position through a concentration of jobs, housing and various services. The preservation of nature and agriculture, and creation of recreational areas is planned mainly in the southern part of the municipality, where there are predominantly sparse settlement areas. Development of industrial and business areas is planned along state highways in the north-east. Such vision for future development greatly corresponds to the demand on the real estate market. In Rae main criteria defining the interest of developers for a location are: 1).proximity to Tallinn, 2) easy access to highways (especially leading to Tallinn) and 3).cheaper land (DR). Thus, Rae LG wants to use the municipality’s geographical advantage to contribute to its economic growth, and compensate domination of man-made environment in the north by the preservation of nature in the south.

Harku municipality: *“The real estate development in the municipality had been spontaneous during the last decade, but now we start to steer the process”* (H2). Harku LG supports a further

growth of the population of Harku and housing development. It is emphasized, however, that the growth should not happen at the expense of wellbeing of people already living there (Local newspaper “Harku valla teataja” nr 1 (188) Jan 2007). Similarly to Rae, Harku LG wants to reconcile the further extensive growth of population with provision of good quality social, technical infrastructure for its population and preservation of natural environment. The temptation to built up as much as the real estate market demands is big, and differently from Viimsi municipality, Harku has much more space, which may be turned into built environment without major impact on the overall condition of nature. Rather, Harku LG officials are concerned with the state industrial interests for mining in the Harku territory (H1). By now, Harku LG has not yet come to the final decision on a vision of future development of the municipality. Lately three versions of the new master plan of Harku were developed that support: (A) *extensive* further development of dense housing structures for which 18 sq km of land are reserved, (B) *moderate* development of housing, following the historical pattern of the settlement structure in the municipality, (C) *minimum* development of housing connected to existing settlement structure, which would mean preservation of nature and rural cultural milieus (Harku doc.3:5). Among the aims for spatial development in Harku municipality are: to restrict development pressure in coastal areas, to ensure development of *Tabasalu alevik* as the main urban center in Harku, and to define and preserve main greenery areas (Harku doc.3).

The vision for development is not selected yet, one fact is, though, unquestionable: Harku council and government support new housing construction. This is clear from the recent and present planning activity, and it is also explicitly stated in the Harku municipality development strategy (Harku doc.1). But it is also observable that Harku LG makes steps to improve technical and social infrastructure. The strategies on development of water and sewage systems and a school network suggest that problems in the municipality are recognized and are dealt with. Also such initiatives as the Apametsa master plan show that there are attempts to steer development according to a long-term comprehensive strategy:

Harku LG initiated a separate master plan for the Apametsa region (just by the Tallinn border) of 400 hectares with the purpose to make a long-term and comprehensive spatial vision for developing this huge area as a dense settlement (Harku doc.2). Even though the area is divided into several land-ownerships, the master plan, prepared in cooperation of all interested parties, provides for common well-planned technical infrastructure, social services, unified inner road system, and greenery for public use. In the words of the LG architect: “*The settlement will*

contain apartment, row and one-family houses, accommodating 13'500 residents. This place is more logical for such development compared to other projects in Harku, as across the highway Tallinn city is also building apartment houses'' (H3).

Such broad policy goals can be achieved only if they are elaborated in more specific planning principles and formally incorporated in local policy documents.

7.2.2. Planning documents and principles

The documents at the local government level, stating principles applied in spatial planning, comprise: **(a)** municipal socio-economic development strategy, **(b)** master plans, **(c)** construction regulation decree, and **(d)** sector development strategies (i.e. water and sewage system, waste management).

Master plans aggregate and elaborate principles and rules stated in all development documents concerning a particular municipality and give them a spatial dimension. They are also a major tool for LGs for spatial development policy implementation. Due to these facts, they are considered as a major information source for this study in addition to conducted interviews. Master plan can be: **a)** the main spatial plan for the whole municipality, and a spatial plan for any territory that needs a special consideration (i.e. a town, a village, a coastal zone), and **b)** a thematic plan devoted to a particular issue which needs specification to the principles stated in the main master plan. Therefore, one municipality may have several master plans.

The valid master plans in Saku, Rae and Harku municipalities from 1993, 1992 and 1996 respectively are much outdated. That is why in recent years many detailed plans apply for changes in master plans. That means a more complicated and longer planning process with more involvement of Harju CG and municipal council. This fact pushes LGs to finish and enforce new master plans as soon as possible. New master plans are, in principle, prepared in these municipalities, but they are in process of the environmental impact strategic assessment, which is needed in order to enforce a plan. As I understood from interviews, Rae and Saku already now try to proceed in detailed planning from the new master plans (that can be called *semi-official plans*), but Harku LG tries to adhere in 90% of their planning activity to their master plan of 1996 (R1, R2, H1, S1).

As it is seen from table 7.2, Viimsi LG has the most updated valid master plans and the highest amount of them, which demonstrates its relatively high capacity for long-term comprehensive planning. It should be noted that by 2000, when Viimsi main master plan was enforced, the planning principles and requirements were not so elaborated and strict in Estonia, as they are now. For example, the concept of greenery network was not salient in Estonia at all at that time. The need to incorporate new principles into spatial policy in Viimsi explains why the LG initiated several thematic plans. In other municipalities LGs try to incorporate new principles into their new master plans that are being developed now.

	Master plans for the whole municipality or its major part	Status of plans
Saku	Saku Municipality master plan I phase Saku Municipality master plan II phase (till year 2020)	Valid, enforced in 1993 Initiated in 1999
Viimsi	Viimsi municipality continental part master plan Thematic plan “ <i>General construction conditions in Viimsi municipality. Housing development principles</i> ” Thematic plan “ <i>Valued milieu areas and greenery network</i> ” Thematic plan “ <i>Child-friendly Viimsi</i> ” Thematic plan “ <i>Road network in Viimsi municipality; roadways and pathways</i> ”	Valid, enforced in 2000 Valid, enforced in 2005 Initiated in 2004 Initiated in 2006 Initiated in 2006
Rae	Rae municipality master plan I phase Rae municipality master plan II phase	Valid, enforced in 1992 Initiated in 2002
Harku	Harku municipality master plan I phase Harku municipality master plan II phase (till year 2012)	Valid, enforced in 1996 Initiated in 2001

Table 7.2: Master plans in the four municipalities and their legal status

It is clear, that the more planning rules are elaborated, made explicit and legitimized, the easier it is for LGs to steer the development according to the defined strategy. Existence of valid master plans covering various aspects of development helps LGs not only to confront private pressure for whatever development, but also to avoid high-handed behavior of politicians triggered by their vested interests (H1).

As a great share of new real estate development takes place through the private sector initiative, the task of LGs, in order to steer spatial development, is to establish ‘rules of the game’, which are followed by all actors involved in real estate development. In each municipality the principles of real estate development are explicitly differentiated into two categories: 1) for areas with *dense settlement pattern*, 2) for areas with *sparse settlement pattern* (see table 7.3). Such distinction is needed in order to direct development of real estate to certain areas, whereas ensuring reservation of other areas for woodland preservation, agriculture, natural resources extraction etc.

	Sparse settlement	Dense settlement
Saku	<ul style="list-style-type: none"> Up to 3 one-family houses in the radius of 100 meters or minimal land plot for 1 one- or two-family house is 20'000 m² No apartment houses Temporary restrictions until new master plan is enforced: minimal land plot for 1 house is 20'000 m², but in forest it is 80'000 m² 	<ul style="list-style-type: none"> Land plot size for 1 one- or two-family house is 1'500-2'400 m², getting bigger from settlement center to its fringe Low-rise (up to 3 floors) but dense housing Within existing dense settlements (not in parks) and adjacent to them in order to make a shape of a settlement round Within or adjacent to those villages whose residents wish new development
Viimsi	<ul style="list-style-type: none"> Minimal land plot for 1 one-family house is 15'000 m² In some locations there is a 'buffer zone' between a dense settlement and natural areas with land plot size of 3'300 m² for one-family house No apartment houses 	<ul style="list-style-type: none"> In dense settlements there are two types of zones with minimal land plot sizes of 1'200 and 1'500 m² for 1 one-family house Apartment houses are allowed only in towns of Viimsi and Haabneeme with maximum 5 floors
Rae	<ul style="list-style-type: none"> Minimal land plot for 1 one-family house is 7'000 m² If area overlaps with greenery network or valuable milieu area, a minimal plot is 10'000 m² 	<ul style="list-style-type: none"> Minimal land plot size is 1'200 m² No specification for apartment houses locations
Harku	<ul style="list-style-type: none"> At least 100 meters between one-family houses or minimal land plot for 1 one-family house is 20'000 m² No apartment houses 	<ul style="list-style-type: none"> In boroughs (<i>alevik</i>) minimal land plot size is 1'500 m² for 1 one-family house In villages (<i>küla</i>) minimal land plot size is 2'000 m² for 1 one-family house and 3'000 m² for 1 duplex house Apartment houses are allowed only in 5 bigger settlements

Table 7.3: Principles of spatial planning in sparsely and densely inhabited areas (based on new master plans of municipalities, building regulations and interviews). **NB:** at the time of investigation new master plans of Rae, Saku and Harku are not completely finished, so the content may change to some extent by the time of their enforcement.

In sparsely populated areas LGs cannot forbid construction of houses totally (which in the Estonian context can be seen as a violation of human rights), unless the area has a special natural or cultural value and is under protection. In all municipalities the restrictions for housing construction are expressed in *the allowed minimal size of a land plot* for a one- or two-family house. In sparsely inhabited areas such land plots are required to be large (see table 7.3) and owners do not have a right to restrict the public access there besides a much smaller area around a house. Such rules usually discourage people to buy land in areas with sparse settlement for construction of one detached house as the land price and land tax expenses would be high (V3). Developers are also not motivated, as their intention is usually to divide the land into as many one-house plots as possible, which ensures higher profits (H1). Thus, such measure does not allow man-made elements to dominate in natural areas and leaves much space for wild plants and animals, at the same time ensuring the right of individuals to choose an isolated from civilization lifestyle. The pattern of housing location in sparsely populated areas cannot be seen as a sign of urban sprawl, as it has not a massive character. The larger a required minimal size of land plots is in areas with sparse settlement, the more nature is preserved there and, thus, the more sustainable

spatial development is. In this sense Rae municipality differs from others with the minimal allowed land plot size being two or three times smaller than in other considered municipalities.

In order to assess sustainability of housing development, I focus on principles of spatial planning, or more precisely, principles for location of new housing, in *densely populated areas*. These are the areas where massive housing construction may take place, thus resulting in urban sprawl.

In general, densely populated areas (including also prospective ones) contain areas with following types of land use: housing, business, industry, summer cottage districts. Some municipalities have additional land use types characterized as dense settlement areas. For example, new master plans of Harku and Rae introduce ‘urban center land’, which means a combination of various purposes of land use within a delimited area in order to create a concentration of all necessary services, jobs and entertainment opportunities in newly appearing bigger settlements. Such settlements will prospectively become new dominators in the urban structure in the municipality.

Main trends of housing development and principles of planning in relation to the sustainability criteria are discussed in the next section. Here I shortly mention more general principles of steering housing development and specific measures used by LGs.

In all municipalities new policies emphasize the need to avoid development of new mono-functional housing districts.

The new spatial development policy of Saku municipality states explicitly that preferable locations for new housing areas are close to public transport, the existing road network, public and private services providers. The vicinity to techno systems⁴⁹ is a very important argument, as connection of a new housing area to them should not impose irrationally high public costs. Saku LG is, to my knowledge, the only municipality in Estonia that introduces a new and very important measure to ensure sustainable development of urban structures: extension of housing development according to defined *stages* (S1). This means that besides defining prospective areas for housing, the new master plan defines the time period when each particular area may be developed in the future, following the principle that areas close to existing settlements are developed first, and only after this, following areas may be developed (S1). Such a measure helps to avoid fragmentation of

⁴⁹ Techno systems comprise water supply and sewage systems, electricity, central heating, cable TV etc.

urban structure and to ensure development of a network of compact settlements. Another rule in Saku is: the further housing is from a settlement center, the lower houses should be and the bigger land plots should be in order to ensure a smooth transition from the densely populated man-made environment to the purely natural environment.

In Viimsi in steering development of the settlement structure the LG takes into account: (1) the existing technical and social infrastructure and its further development possibilities, (2) the capability to ensure safe living environment (protection from noise, clean air and water, availability of public space). Recently Viimsi had a *temporary ban* on initiation of detailed plans that proposed to change the master plan. Such decision made in March 2005 indicated an urgent need for a stabilization period when the LG could update social and technical infrastructure (which was lagging behind the population growth) and to define principles of nature protection (Viimsi doc.7). Now Viimsi policy does not support initiation of detailed plans that suggest a change in Viimsi master plans without prior provision of social and technical infrastructure for the planned housing area. Viimsi LG has set a number of requirements to the architectural solutions and rules considering danger of flooding, radon emission and preservation of trees in case of development in woodland areas.

Rae municipality new policy does not emphasize the need for development of compact settlements. According to the mayor of Rae LG and the chairman of Rae council, it is not important where a new housing district is planned as long as there are provided techno systems and roads by the developer and it is not in the nature protection area (R1, R3). *“If a developer builds infrastructure by the time we issue usage permits, then it does not matter where he builds – either in the middle of a forest or just by the edge of any village”* (R1). But still in general, as the mayor pointed out, new housing is developed on the edge of existing settlements. However it is not excluded that new housing districts also appear further than one kilometer from any other settlement leaving undeveloped fields in-between (R1). As to business development, LG tries to plan enterprises providing services, retail and offices within or nearby some bigger settlements in order to improve variety of jobs and services there.

Harku municipality, similarly to Rae, does not seem to have well-elaborated rules for housing structure development that would contribute to a decrease of car-dependency. The idea of compact

settlements with the provision of local primary services is not present there. The LG first allows extensive and fragmented housing development and then tries to solve problems of inadequate social services, accessibility, overloaded roads etc. A respondent from Harku LG stated: *“The master plan defines the prospective dense settlement areas. Development of these areas in reality depends on two factors: (1) the will of landowners – what and how fast they want to build there, (2) the availability of technical infrastructure in locality”* (H2). This indicates that the LG leaves development to be driven by private sector initiatives. The only restriction on location of housing is defined by land use zones, which according to the new master plan are large and do not have a multi-nuclei settlement pattern. However, an example of the Apametsa region (as mentioned above) shows that planning approaches become more thoughtful. The LG defined stages of development in this area, which means that housing development projects will start from one side and go region by region in a logical sequence in order to avoid fragmentation of neighbourhoods (H3).

On my question if LGs try to attract developers to particular locations, which would be strategically most desirable for new housing construction, respondents in Rae, Viimsi and Harku explained that there was no need for any attraction as developers’ initiative was very high any way. A member of Saku government had a somewhat different answer:

The present strategy of Saku is to form compact settlements. So, construction of housing districts even one kilometer away from existing settlements is not allowed. In case of applications for housing construction in inappropriate locations Saku government advises developers to buy land in a proper place (S1).

7.3. ANALYSIS OF HOUSING DEVELOPMENT IN TERMS OF SUSTAINABILITY CRITERIA⁵⁰

This section reveals the patterns of housing development in each municipality recently and at present and the endeavors of LGs to steer it. The evidence is synthesized covering all municipalities. Some specific examples are used to illustrate the trends and in some cases to show the deviation from them.

⁵⁰ As this is a very compressed analysis combining multiple sources of evidence, I find it very inconvenient to provide all references within the text. That is why all planning documents used for this analysis are listed on pages 163-164, but any other literature and the respondents are sited in relevant places in the text.

The analysis covers the following aspects (see operationalization of the dependent variable in chapter 3 section 3.2) of *new housing areas*⁵¹:

1. location of new housing areas in relation to the existing settlement structure,
2. social infrastructure availability in new housing areas and its provision,
3. accessibility – public transport quality; vehicle, pedestrian and cycling roads,
4. availability of jobs near new housing areas,
5. dialectics of natural and man-made environment.

By now in all selected suburban municipalities **the pattern of new housing allocation** has two trends. Firstly, some new housing districts are located within or immediately adjacent to the existing older settlements, thus reinforcing the pattern of a network of compact urban centers and contributing to the raise of settlements' self-sufficiency. Secondly, new developments located separately from other settlements are also observable to a varying extent in different municipalities, forming a dispersed and fragmented distribution of small-sized and mostly single-land use settlements. Figure 6.1 (page 66), illustrating the pattern of Soviet-time and post-Soviet housing construction, suggests that in Harku and Rae municipalities the second type of housing allocation dominates so far.

The new master plans of Harku (even the minimum version “C”) and of Rae introduce big changes into the existing settlement structure. Besides extensive enlargement of older settlements, they create new urban dominators (large dense settlements) in the municipality. So, to some extent they change the emphases in the overall land use system within the municipality: those settlements that dominated before are becoming less important in relation to others, because of the appearance of new dominating urban clusters in the places where small populations used to be (like for example, *Peetri küla* in Rae and *Muraste küla* in Harku). My impression is confirmed by a Harku specialist: “*During the last 15 years housing locations in Harku have been changed completely*” (H2). The overall pattern of new housing allocation in Harku is expressed in occupying mainly natural areas along the sea coast. In Rae a considerable area of former grassland by the Tallinn border is being transformed into a densely populated one. As it is being developed by separate private actors at different times without any comprehensive planning crossing the borders of separate projects, it results in a fragmented and incoherent settlement structure without schools, kindergartens, shops

⁵¹ By new housing areas in this thesis I refer to bigger housing projects that have been recently built, are being built now, are being planned now and are supposed to be built in the nearest future in case of the initiative from the private sector (i.e. land reserved for housing in master plans).

and any other services. The positive aspect is that public transport can be easily organized there as all developments are located quite close to the highway.

In general, in the master plans of Harku (especially in the maximum version “A”) and Rae the reserved areas for housing are very large. Even though the increase of built-up areas in 1995-2005 showed the highest increase in Viimsi (see figure 7.1), Rae and Harku will most likely surpass even Viimsi in the extension of new housing areas if the demand on the real estate market will remain high. This is due to the fact that Viimsi LG enforced new measures to restrict the population growth, but Rae and Harku still support it.

In Viimsi and Saku the former urban dominants preserve their importance (*Viimsi-Haabneeme-Miiduranna* urban triangular and *Saku alevik*) where most new housing construction takes place. In parallel to this also smaller settlements are developed. In general, in these two municipalities new housing is mainly constructed as an extension of the existing settlements. But still in Viimsi the population growth was so high, that even not changing the dominators, new settlements of considerable size appeared in the areas which were hardly populated earlier.

The present Saku government and council, compared to other investigated municipalities, are the strictest in delimiting and steering new developments. However, new master plan of Saku municipality also has new fragmented areas reserved for housing, sustainability of which is questionable. This is due to detailed plans enforced by the former Saku council. For example, in the words of a member of Saku government:

“Lokuti küla is now almost empty field: around 10-20 houses. It used to be a state farm. The detailed plan foresees additional 300 land plots for one-family houses there. The village is just by the Viljandi highway, which is jammed with traffic even now, before new residents had come. Public transport is bad there. And the railway is far away. All conditions do not correspond to our present vision of housing allocation. Unfortunately, this detailed plan had been enforced two years ago by the former municipal council – we cannot cancel it now” (S1).

In all municipalities relatively big regions of Soviet-time summer cottages are increasingly transformed into year-round housing. Even though such trend brings about quite densely populated clusters of housing and does not consume new natural areas, it is associated with such problems as inappropriateness of existing solutions for water supply and sewage and a lack of social services.

Table 7.4 shows the extent of the concentration of population to bigger settlements across the municipalities. The first criterion indicates the share of population living in boroughs where technical infrastructure and social services are relatively well-developed. The second one indicates the extent of concentration of population as opposed to dispersion; it contains also new bigger urban clusters where infrastructure and public transport are usually poor. In case of enlargement of boroughs, new residents are more advantaged in terms of accessibility of services, quality of techno systems, and availability of public transport than residents in new fragmented settlements. That is why the tasks of LGs are much dependent on where and how much new housing they have allowed and plan to allow. Locations of new housing areas and their aggregated size define the need for extension and/or enlargement of capacity of the existing technical and social infrastructure, and public transport.

	Harku	Rae	Viimsi	Saku
1) Only boroughs (<i>alevikud</i>)	Total 3'600 38%	Total 5'100 58%	Total 5'500 45%	Total 4'670 65 %
2) Boroughs and bigger villages ⁵² (with more than 500 inhabitants)	Total 4'500 48%	Total 6'300 71%	Total 8'760 72%	Total 4'670 65%

Table 7.4: The number and the share of population living in more dense urban settlements. Source: www.harku.ee, www.rae.ee, www.viimsi.ee, www.sakuvald.ee

Due to homogenous demographic characteristics of suburbanites all municipalities have shortage of **kindergarten** places. At present the number of kindergartens varies from 3 to 7 in the four municipalities, and LGs do not manage to provide this service as fast as the demand is growing. As the deputy mayor of Harku noted: “During last three years we have built three kindergartens (370 new places), but we need more as this is not enough for our growing population. There are 200 kids in queue.” (H1). All LGs try to initiate partnerships with private developers for planning, construction of techno systems and /or a kindergarten building itself. Private sector initiatives to establish private kindergartens are also welcomed. But LGs see the risk that due to age-homogeneity of new residents built kindergartens will become empty over time. Due to this, for example, Rae LG plans to build two new kindergartens, which can be enlarged in several years if the need will grow and be transformed easily into elderly homes in the future if the number of children will dramatically drop (R1). Unfortunately, in those municipalities where population is highly dispersed even primary social services cannot be provided within walking distance from all

⁵² Those bigger villages are new urban clusters which are growing from small traditionally rural settlements. Initially neither proper infrastructure nor public transport existed there.

homes. As the mayor of Rae pointed out: “*Definitely each village will not have a separate kindergarten*” (R1).

The situation with **schools** varies among municipalities. While Viimsi and Harku have an urgent need to establish new school places, Saku and Rae schools have higher capacity than the present demand. Saku LG is pleased with the situation and considers the availability of school places as an important argument in limiting the inflow of new residents to Saku (S1). In Rae the situation is somehow special. Due to the fact that development of Rae municipality is unbalanced in the regional terms, in some places existing schools hardly sustain due to the lack of pupils (which means less state funding), whereas in other locations (like *Peetri küla*) a school does not exist but is much needed. In response to such conditions Rae LG decided to reorganize the school system.

In all municipalities a considerable share of local kids attends Tallinn schools. The reasons for this are not only lack of school places, but also dissatisfaction with the local quality of education and studying conditions, absence of a variety of specialization (like musical, mathematics, ballet, art schools, also schools for children with special needs and Russian-speaking children) (R1, S1). Rural municipalities cannot establish all types of schools to satisfy various needs of their, still not numerous, population (S1).

As there are only 3-4 general education schools in each municipality, all LGs organize school busses to bring kids to local schools. For those pupils, who attend schools outside the municipality, LGs refund public transport fares. Viimsi municipality had gone further than others in this respect:

As much as 700 children living in Viimsi attend Tallinn schools. This fact aggravated already extremely bad traffic situation on the Tallinn-Viimsi road. In order to mitigate the situation, in February 2007 Viimsi LG in cooperation with Tallinn launched a pilot project for free school buses for Viimsi children bringing them to Tallinn schools and back (Viimsi website).

LGs recognize the need for development of balanced social infrastructure that satisfies the needs of all age groups (youth clubs, elderly houses, retail etc). However, in more remote housing areas the public services are usually absent, and their availability depends on social infrastructure in closest urban centers. The more there are small mono-functional settlements, the highest share of population is forced to travel by car in order to get some services. In Harku, for example, only 38% of population lives in boroughs (see table 7.4), which means that the rest of residents live in

originally smaller settlements where social services are very poor or not provided at all. For example:

Muraste küla is a rapidly growing village by the sea coast and highway with population approaching 1000 inhabitants. Even though its population had exceeded the population of *Harku alevik* (formally borough with ca 600 inhabitants), there is no shop, school, kindergarten or whatever else social infrastructure units. The closest place where it is possible to buy beverages and snacks is fuel station 3 kilometers away along the highway without any parallel pedestrian way. The closest developed social infrastructure is in *Tabasalu alevik*, which is 7 kilometers away. Besides this, “*in Muraste region public transport is so bad: you cannot live there without a private car*” (H2). (based on my observation that was also confirmed by H2, H3)

In Rae 58% of population live in boroughs where primary services are provided. But the fastest growing village, *Peetri küla* (more than 1000 inhabitants), does not have social infrastructure at all. As commented by the developer of a housing project there:

“Following the suggestion of Rae LG, we made a detailed plan for a kindergarten, a primary school and a swimming pool on the state-owned land close to our district, but in the end the state did not give this land to the municipality. So now the village does not have kindergarten, school, pool, shops, cafés... All new suburbanites still continue their life in the city besides having a sleeping place in suburbs” (DR).

The major trend in public services provision is that, if LGs do not direct new developments to the existing relatively big settlements, they have to provide additional services in new places. This requires a lot of investments and time; that is why public services are underdeveloped in most new housing areas.

The situation is worsened by the fact that residents of all those scattered settlements do not have sufficient and convenient **public transport** and thus are forced to use cars not only for commuting to job, but also to get daily services. Generally suburban municipalities do not have internal public transport systems, organized by LGs (except school buses). So, residents of suburbs can use quite rare buses and/or trains that serve bigger regions and cross suburban municipalities. In this respect, settlements located nearby the railway and highways benefit. In contrast to all others, Viimsi municipality has an internal public bus system (see annex 7 figure 7.7), which connects the majority of settlements with each other and with *Viimsi alevik*. In autumn 2005 in cooperation with the Harju Public Transport Center (hereinafter HPTC)⁵³ and Tallinn city, Viimsi LG had

⁵³ See more information on the HPTC on page 136.

introduced a common bus system with Tallinn based on zoning (Lootsman, 2006:2). It enables passengers of Viimsi buses to switch to Tallinn buses without buying an additional ticket. Also, the timetables of Tallinn buses and Viimsi internal buses are adjusted to each other (H2). As a result, after one year the number of passengers has grown by 30% (ibid). This shows that Viimsi LG really tries to reduce car dependence of its residents and promotes public transport. How successful it will be in the end is not clear by now. A big impeding factor is high congestion on all highways leading to Tallinn and the absence of a separate bus lane, so busses are in general very slow and do not follow the schedule (R1, R3, H2).

All investigated municipalities have commercial microbus lines. This is the best option to connect scattered small settlements with Tallinn. As the mayor of Rae noted: *“We have many commercial bus lines in the municipality. If a new settlement is built in the middle of forest and roads are constructed then we can organize public transportation there through private companies.”* (R1). Developers are, however, not as much optimistic about such solution, as they are convinced that very often it is not profitable for transport companies (DS, DR). According to the opinion of many respondents, people who move to suburbs have to have at least one car and have to count on higher expenses and extreme inconvenience connected with transportation.

Saku is the only municipality which does not have state-subsidized bus lines (S1, S2). As a result local residents have a choice of minibuses (which are comfortable and frequent in rush hours, but expensive, rare in the evenings and sometimes too full to fit all potential passengers) and state trains (which are cheaper but much rarer⁵⁴) (S1, S2). Saku LG recognizes a great potential of a beneficial location of the railway with stops at the most major settlements in Saku and due to its environmental friendliness the LG intends to promote its use. Therefore, there is a plan to organize and subsidize local bus lines that would connect settlements, which are located further from the railway, to train stops; the LG also plans to establish a bicycle and car parking and a ski rental by the station in *Saku alevik* (S1, S2).

The situation with public transport in Harku was described as follows: *“In general the public transport system is in the same condition as it was 15 years ago, which corresponded to the needs of that time, but definitely not of the present time.”* (H2). Now Harku LG plans to admit also

⁵⁴ In this direction there are 6-10 passenger trains per day (Hendrikson & Ko, 2004: 20)

general public to school buses, thus enabling local residents to move to some extent by public bus within the municipality (H2).

Additionally, all four municipalities are interested in cooperation with Tallinn city in order to prolong Tallinn bus lines to some settlements in suburbs. In this respect, to my knowledge, Viimsi and Harku have already succeeded.

A common issue for all four municipalities (especially Viimsi, Rae and Harku) is that new booming development increases the load on **highways and local roads**, which is followed by the need for more maintenance (R1; H2; Viimsi doc.2). The existence of vehicle roads providing access to new settlements in all municipalities is not a problem, as in all municipalities obligation to construct roads within a developed housing district and connecting it to the road network is transferred to developers in recent years. The question is rather the quality of those roads that mainly depends on the completion stage of a settlement and developers' sense of responsibility. In all selected municipalities settlements with various quality roads (asphalt or gravel cover) may be found. The construction of cycling and pedestrian roads is emphasized as a priority and already partly realized in Viimsi and Saku. The chairman of the land and planning committee in Viimsi Council told: *"Pedestrian and cycling roads are one of our priorities. We see that already constructed cycling roads are used very intensively by people on bicycles, roller skates, and pedestrian roads by walking people"* (V3). In 2006 Saku constructed a portion of ca 15 km of cycling and pedestrian roads (S3). Rae and Harku new master plans delineate the major skeleton of cycling road network throughout the municipality.

Suburban municipalities in general are not purely 'sleeping districts', there is a quite considerable number of **jobs**. However, those jobs are not any more connected to fishery or agriculture as it used to be historically. In Viimsi during 2000-2004 the number of enterprises doubled (Viimsi doc.6). A member of Viimsi council stated: *"Previously abandoned plants were transformed into housing sites, but now our strategy is to redevelop them for new industrial purposes"* (V3). Industrial areas are concentrated nearby ports in the southern part of Viimsi peninsula, as well as in some other places across the peninsula (Viimsi doc.6:83). Several settlements in Viimsi are located within the potential zone of influence of environmentally dangerous enterprises, especially

in Muuga and Miiduranna ports⁵⁵ (see annex 7 figure 7.8) vicinity (Noorkõiv and Sepp, 2005:27). In case of serious accident those areas may become abandoned and degraded (ibid). For new housing construction the LG has recently defined minimal distances from various industrial areas (Viimsi doc.2). Viimsi council is split into two parts on the issue whether jobs should be located close to housing or totally separately (V3).

Saku LG understands the importance of availability of jobs nearby bigger settlements. Job places are mainly concentrated in *Saku alevik* and in the Tännassilma Technopark (S3). The strategy is that when new industry comes into an area, it should not be far from a settlement and be connected to other settlements by public transport. Industrial/business areas have to be separated from housing areas by park stripes but should be connected by footways (S1). The LG promotes environmentally friendly industry in Saku.

Rae LG is welcoming new enterprises, for which considerable areas are reserved along highways in the new master plan. Especially the LG intends to promote locations for business and industry in now unpopular older settlements with developed infrastructure, hoping that in the future employers can be followed by housing construction for employees (R3). In contrast, the Harku Council chairman stated: “*We do not purposefully attract new enterprises to our municipality, but they come any way*” (H4). The aim is to preserve and promote Harku as a good living place for people who may work in neighboring cities, mainly Tallinn and Keila (H4). The deputy mayor of Harku maintained that the LG intends to avoid situations when industry and housing overlap. However, due to historic development this is the case, for example, in *Tabasalu alevik* (H1).

Despite the fact that suburban municipalities have a considerable amount of jobs, the share of new suburbanites who work within their municipalities is generally very low (see figure 7.2). Commuting for job takes place in both directions – from suburban settlements to Tallinn and from Tallinn to enterprises located within suburban municipalities. The reasons for this are numerous, among which there are the high mobility of people (growing car-ownership), a mismatch between job specification and qualification of local population (S3) and preservation of the same employment after moving to suburbs (58% of new suburbanites had not changed job after moving (see Ahas and Silm, 2006:33)). Thus, the availability of jobs within settlements does not

⁵⁵ Muuga Port is the biggest cargo port in Estonia.

necessarily lead to a situation where most people live and work in the same settlements. This is probably one of the most difficult aspects that spatial planning cannot solve under free market economy. My conclusion is in line with the findings of a recent research in UK based on empirical data from 1'152 rural and urban settlements with up to 6'000 inhabitants (see Breheny, 2004: 11-35). The research showed that 'homes-jobs' balance in settlements does not necessarily lead to *self-containment*⁵⁶ of those settlements. High self-containment, in the author's understanding, refers to a high share of population of a settlement working locally, which in the end leads to fewer and shorter commuter trips.

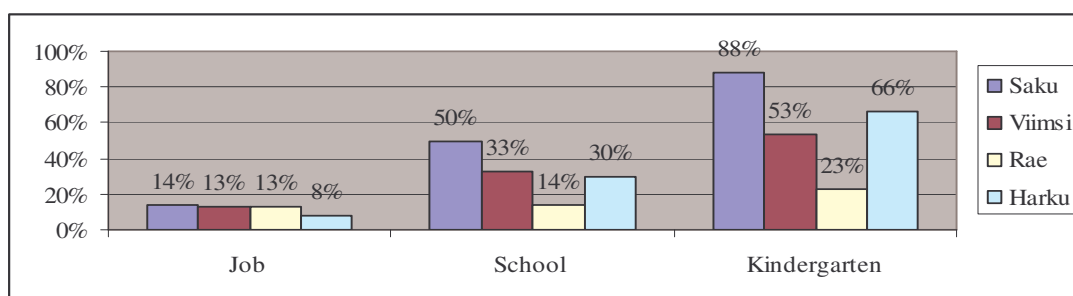


Figure 7.2: Share of new suburbanites (respondents in survey) in the four municipalities having job, attending school and kindergarten within the municipality they live. **Note:** these percentages are most probably much higher for traditional population of each municipality. **Source:** based on TUGI survey, Ahas and Silm, 2006:32

In this thesis self-sufficiency of suburban settlements is one of the criteria of sustainability. The higher the settlement's self-sufficiency, the less its residents are dependent on other localities in their every day life, i.e. they do not need to drive over longer distances in order to reach services, leisure facilities and jobs. TUGI research data shows that the share of new suburbanites working, attending school and kindergarten within the same municipality where they live is the highest in Saku among the municipalities selected for this study (see figure 7.2). Attendance of schools and kindergartens close to people's homes is clearly the lowest in Rae. Commuting for jobs is a bit higher in Harku than in the other municipalities. The presumable explanation for such patterns is that in Saku a relatively high share of housing is located quite close to the social infrastructure and job places, which are more accessible and more sufficient than in other municipalities. Thus, new settlements in Saku seem to be more self-sufficient out of all selected municipalities, which means less and shorter commuter trips.

⁵⁶ In this thesis a similar concept may be called also self-sufficiency of a settlement.

One important aspect in analyzing sustainability of suburbanization is the **dialectics between natural environment and man-made environment**⁵⁷. So, it is important to understand how new housing areas influence the nature and how the surrounding nature influences the living environment in those housing areas. The EU policy suggests that preservation of valuable greenery, avoidance of species extinction and ensuring healthy ecosystems should guide spatial development, besides achievement of the economic growth and good social environment. The architect in Harku LG revealed: “*Each new settlement that is built in natural area seriously harms natural habitat and biome. If I would adhere to very ‘green’ views, I would not be able to work here*” (H3).

In all considered municipalities there are considerable woodlands that are gradually decreasing due to booming real estate development. Especially, in the last decade this was happening in Viimsi and Harku. In Rae, even though new developments take large areas, they are mostly located on the former farming fields, and in Saku in general new developments do not consume much greenfield. Preservation of forests is formally stated as one of main objectives in all four municipalities (H1, R2, S1, V3). In some of them there are former Soviet military areas that are now transformed into housing districts, even though they are located in forest and completely separated from the rest urban structure (for example, *Kelvingi küla* in Viimsi, which grew in population from 55 inhabitants in 2000 to 360 in 2005). Such fragmented settlements are too small to sustain any social services, besides kindergarten, and to provide frequent public transport. This of course induces extensive car use and air pollution. From another point of view, such development follows the EU principles to use brownfield areas for new construction.

One of the main tools of LGs to prevent possible adverse impacts of housing development on nature is a well-defined greenery network and principles of land use within it. In 2004 Viimsi LG has initiated a thematic plan for elaboration of the greenery network and valuable milieu areas on Viimsi peninsula (Viimsi doc.3). The plan delineates four core greenery areas with the total area of 1078 ha (which is ca 1/5 of the Viimsi peninsula area), surrounded by at least 100 meters of a support area. The cores are connected to each other by green corridors for animals' tracks. Such network is surrounded by at least 100 meters of a buffer area. According to the plan, construction of buildings and asphalted roads in the core areas, support areas and corridors is forbidden. It was

⁵⁷ the latter in this thesis comprising just housing districts

explained by the deputy mayor that *“The thematic plan provides a gradation of greenery areas from very valued ones to less valued ones. It defines greenery areas which have to be totally preserved (V1). Viimsi thematic plan states that henceforth the selection of locations for new residential areas and infrastructure should be conditioned by the greenery network (Viimsi doc.3: 21). In other municipalities the greenery network is more broadly delineated by new master plans (which are not valid yet). In designing the greenery network all LGs followed a more generalized sketch of it provided by the county thematic plan.*

Besides this, the obligation of the environmental impact assessment, emanating from the EU directive and Estonian law, ensures that chosen options of projects’ characteristics and locations will have the least adverse impact on environment. Such assessment is done mainly for bigger projects that most likely will affect the environment.

In general, due to increased consumption the municipalities experience problems connected with the limited drinking water resources, which in addition are not properly protected from pollution. The scarcity of drinking water resources is emphasized in Viimsi as an important restricting factor for further housing development (Viimsi doc.2: 17). Due to uncontrolled turbulent development of housing during the last decade, in the municipalities most new settlements were built without connection to a central water supply and sewage system. The situation is the worst in case of local solutions for sewage disposal (sometimes without proper cleaning) which pollute natural environment and especially ground water resources. For example:

The fact that Rae is located just by the Ülemiste Lake, where Tallinn gets drinking water, requires high environmental safety in the region around. Unfortunately, just this region has the most booming housing construction with uncentralized sewage disposal solutions. Allowing more and more new housing there seriously endangers the quality of water in the lake (Rae doc.3).

In addition, summer cottage districts do not have central water supply and sewage systems. Now the LGs are in process of planning and constructing central water and sewage systems, which will provide good quality service to all settlements and will not pollute nature (Rae doc.3). Until those are constructed and all settlements are connected to them, as a temporary solution some LGs (for example, Rae and Saku) organize transit of wastewater from local collectors to the cleaning station

in Tallinn where appropriate cleaning is ensured (R1, Saku doc.1:17). Now while planning new housing areas LGs try to ensure the connection to the central water and sewage systems.

The other element in the natural and man-made environment dialectics is the role of nature in the living environment quality in suburban settlements. According the survey, more than a half of Viimsi population regularly uses local natural areas in spare time (Viimsi doc.5:17). Such pattern may be presumably generalized to all suburban municipalities. In all municipalities there are special regulations stating how big public greenery space should be planned within each bigger housing project. Additionally, Rae LG tries to incorporate natural environment into daily lives of residents by planning recreation areas within or close to settlements. It is also desirable to build groups of few small houses in recreation areas in order to bring day-round human activity there.

7.4. SUMMARY

Here I summarize the assessment of housing development policies in the municipalities against the goals implied by the EU sustainable urban development policy (see chapter 3 section 3.2). The evidence uncovered in this study is very rich and qualitative. Therefore it is impossible to make an assessment of each sustainability criteria separately, but only in their combination.

From the discussion in this chapter it is clear that spatial development policies in all selected municipalities are constantly changing, and the common trend is that LGs increasingly elaborate planning principles and refine planning tools. However, there are also considerable differences across the LGs. The main features of spatial development policies connected to housing development in investigated LGs are summarized in table 7.5.

Saku	<ul style="list-style-type: none"> • Clear vision of a multi-nuclei network of self-sufficient settlements • Inflow of new residents circumscribed by available resources for infrastructure provision • High concentration of population to the main urban settlement with better infrastructure • Most settlements by railway stops; use of the railway promoted • Cycling and pedestrian roads prioritized • Planning job places and housing nearby, but separated by greenery • Few fragmented settlements as a result of former local policy 	Such spatial development features contribute to SD
-------------	--	--

Viimsi	<ul style="list-style-type: none"> • The present situation – overpopulation of the peninsula • Restriction of further housing development; apartment houses only in bigger settlements • Improvement of technical and social infrastructure for already developed districts • Local public transport system; connection to the Tallinn transport system • Defined valuable greenery areas, which are closed for any construction • Cycling and pedestrian roads prioritized • Favor new business and industry, which brings more jobs for locals • Some fragmented settlements as a result of former local policy 	The initial situation is problematic, but present policy tries to improve quality of already existing settlements and avoid same mistakes in further planning
Rae	<ul style="list-style-type: none"> • Large areas reserved for new housing • Support inflow of new residents and housing construction • Create new dominating settlements on former fields • Allow new fragmented settlements • Originally high concentration to boroughs with better infrastructure • Improvement of technical and social infrastructure for already developed districts • Favor new business and industry, good effect for remote settlements • Greenery protected in the south 	Policy tries to deal with existing problems, but still creates them with present planning. It triggers the need for new infrastructure in new bigger settlements
Harku	<ul style="list-style-type: none"> • Large areas reserved for new housing, close to valuable nature, seacoast • Support inflow of new residents and housing construction • Create new dominating settlements on former fields • Allow new fragmented settlements • Improvement of technical and social infrastructure for already developed districts • Do not attract new business and industry • Originally settlements dispersed along seacoast • Conflict between greenery protection and development of housing and mining 	Policy tries to deal with existing problems, but still creates them with present planning. It triggers more commuting for jobs, the need for new infrastructure

Table 7.5: Summary of main features local policies in relation to sustainable development

My best assessment may be expressed in the following ranking of the municipalities in terms of sustainability, starting from the most sustainable: 1) Saku, 2) Viimsi, 3) Rae, and 4) Harku. Why all selected suburban municipalities having much in common, are still so different in adhering to the sustainable urban development principles is the theme of discussion in the next chapter.

8. INSTITUTIONAL AND POLITICAL FACTORS AFFECTING POLICY IMPLEMENTATION

This chapter represents an analytical discussion on those local institutional and political factors that might affect implementation of the sustainable development policy by Estonian local governments. First, an analysis of institutional capacity of local authorities and their disposition to the policy is presented. Secondly, I examine how horizontal communication of local governments with general public, private and public institutions affects the quality of local planning. Finally, I summarize perceptions of local authorities about their ability to steer local development in concert with the sustainability principles.

8.1. FACTORS PERTAINING TO LOCAL GOVERNMENT

The institutional capacity of local government is the main concept analyzed here, which emanates from the theoretical discussion in chapter 3. In the framework of this study, the **institutional capacity** means the capacity of a local authority, as an institution, to ensure sustainability of spatial development within the municipality and, thus, to prevent or reduce urban sprawl under given external conditions. Very broadly institutional capacity comprises three main components: political, organizational and financial resources of local government. Besides these factors describing local authority in general, here it is necessary to analyze **disposition of implementers** (persons working in LG) towards sustainable development policy.

The analysis of the empirical data from the four municipalities is synthesized and guided by the first independent variable of this study (see chapter 3 section 3.3).

When analyzing institutional capacity of local government for sustainable spatial planning it is important to consider two parallel processes: **(a)** elaboration of spatial development policy (expressed in master plans, development strategies, building regulation), and **(b)** dealing with everyday issues in planning (such as coordination of detailed planning processes, issuance of initial planning tasks, and building and usage permits etc). The second type of activities still has a tremendous effect on the pattern of development, as municipalities generally execute a large share of detailed plans that change the valid master plans.

8.1.1. Political resources

Municipal council has a rather crucial influence on shaping spatial development in the municipality. Whereas policy of spatial development may be formulated with an extensive involvement of a variety of actors, ultimate decisions on the key aspects of the policy are made exclusively by council members. Besides this, when presently valid master plans do not correspond to the current situation, municipal council has to be involved also in daily planning. In other words, decisions on initiation and enforcement of all detailed plans that intend to change the master plan have to be made by the council.

Municipal council in the investigated LGs comprises from 17 to 19 members and from 5 to 10 standing committees (see table 8.1). The actual work of the council takes place in standing and ad hoc committees, and fractions. One or few standing committees in the council deal with spatial planning and real estate development issues. The chairman of a committee has to be a member of municipal council, and he/she forms a committee. Besides council members, committees may comprise members of municipal government, specialists from the LG and also individuals from outside the LG who have relevant knowledge (V1, V2). Still, only council members have the right to make decisions, whereas the rest committee members can express their opinions, pass relevant knowledge and try to persuade decision-makers to make certain decisions.

	Saku	Viimsi	Rae	Harku
No of council members	17	19	19	19
No of standing committees	8	10	5	6

Table 8.1: Number of members and standing committees in municipal council. *Source:* www.harku.ee, www.rae.ee, www.viimsi.ee, www.sakuvald.ee

In the literature on sustainable urban development it is commonly believed that consensus among decision-makers, shared values and beliefs that favor sustainable development, contribute to higher institutional capacity of LG for sustainability-raising (see, for example, Evans et al, 2005). In the course of interviewing I understood that a complete consensus among local politicians on development issues is not possible. However, if the majority of council members agree on the main goals of development of their municipality, there are sound grounds to expect that their aspirations favor the public good. The opposite case, when council is divided into several groups supporting various views, indicates that each of them is rather preoccupied with interests of a relatively small group of actors, i.e. a particular electorate of those politicians. Of course, behavior of politicians is dependent on attitudes that prevail within their constituency. Therefore, the more

local residents agree in views on the future of their locality, the easier it is for local council to achieve consensus, since politicians' personal aim is simply to appeal to sufficient electorate in order to preserve authority.

In this respect, Saku municipality seems to be a notable one among others. Respondents from Saku LG assured that the local population, Saku council and officials of Saku LG – all had a clear vision for spatial development in the municipality (S1, S3). The majority in council agrees that real estate development in Saku should be regulated with consideration of the sustainability principles (S1). Saku council is composed by highly educated people in various fields who show commitment and enthusiasm (S3). Moreover, some Saku council members are employed in state institutions. As a result, the council in Saku may be considered as better qualified and more dedicated to public interests than in other municipalities. The chairwoman of Saku council noted: *“In some municipalities the mayor defines policies, which the council has to adopt. In Saku the municipal council defines a course of action and the municipal government implements it”* (S3).

In Rae municipality, consensus on the development vision of the municipality is also apparent among council members; however, it has taken the opposite direction as compared to Saku LG. The chairman of the council commented: *“The majority of Rae council supports further development in the municipality and the further growth in population and business activity”* (R3). The mayor of the municipality asserted that previously political conflicts happened because some officials and politicians used to have personal interests in real estate development. Thus, some unsustainable projects were allowed as a result of political negotiations, or rather so called political games within the LG (R1). *“During the last two and a half years there were no conflicts, we try to develop Rae in a determined direction. Now we try not to serve anybody's personal interests but public interests of the municipality.”* (R1).

My impression from interviews is that in Harku and Viimsi spatial development is, or at least was until recently, formed as a result of a political game, where local politicians through making alliances might promote their interests in real estate development. For example, a member of Viimsi council pointed out: *“It may happen that some council members turn to others with some proposal. But at present I do not see any Viimsi council member who is directly involved in real estate business”* (V3). This suggests that previously Viimsi council included people with particular

interests in real estate development who promoted own preferences. Also Viimsi deputy mayor asserted that since politicians represent somebody's interests, they very often have contrasting standpoints, and it is difficult to find a compromise (V1). In Viimsi and Harku respondents mentioned that developers, after getting refusal from municipal government, very often turned to council members to push through their projects and in some cases they succeeded (V1, H1). The view of a Harku deputy mayor is that *"the result of planning is the result of position game"* (H1). Above mentioned reflections indicate that generally in Harku and Viimsi politicians are more influenced by private interests than public ones.

As we see, consensus issue is very much connected to the issue of opportunism among council members. A representative of think tank SEIT also confirmed that in the Estonian context we cannot exclude situations when political decisions are dictated by vested interests of politicians (TT). In such cases it is hard to achieve a consensus among politicians. Decisions taken as a result of bargaining satisfy interests of small groups and thus are unlikely to be sustainable. Of course, according to the law, a member of council should not be allowed to discussion and decision-making on the issue, in which she/he may have conflict of interests (Local Government Organization Act, 1993, § 17). However, it is quite doubtful if this rule is followed in practice. The comments of respondents on this issue are as following:

- In Rae: *"May be some members make decisions based on own interests, but this gives only one vote. There is a need for making alliances, but all Rae council members have various background and different types of occupation. It is unlikely that a considerable group would pursue the same goal if it is not publicly right one."* (R3).
- In Saku: *"I never had reasons to hesitate that any Saku council member had made a decision based on vested interests and made a personal benefit out of it"* (S3).
- In Viimsi: *"The council is a quite strange composition of individuals who are representatives of various interest groups – landowners, real estate developers etc. They promote their viewpoints, which are often underpinned with vested interests. It is a big illusion that they represent interests of villages' residents"* (V1).
- In Harku: *"Those, who become council members, do it mostly due to personal interests, not for the sake of public interests of municipality. It is very difficult to define the border between politicians' behavior guided by personal interests versus guided by public interests"* (H1).

One real estate developer declared, *“There is definitely no corruption in Saku LG, whereas some signs of it are observable in Harku and used to be in Viimsi few years ago”* (DS). Another developer, commenting on Viimsi LG institutional capacity, mentioned essential politicization of LG activity (DV). Yet another developer stated that political considerations influence planning in Harku very much, as planning rules are not uniformly applied for everybody (DH). For example, in certain areas apartment housing construction is not allowed, but some developers get such permission, whereas others do not (DH). All these reflections of developers corroborate my impression from the interviews with people working in LGs.

The overall conclusion from the opinions above is that the pattern of spatial development in each municipality is to a large extent a reflection of personal qualities of local political decision-makers – their political responsibility, ideology, occupation and knowledge. As long as council members are directly involved in real estate development business, their political activity is likely to promote their own interests. For such purpose politicians make alliances, and through bargaining with others, push through their priorities. Though, it is apparent from respondents’ reflections and also present planning approaches that such practice tends to remain in the recent past giving way to more politically correct behavior of local politicians. However, such changes take place to a various extent depending on the municipality. Harku and Viimsi seem to be more politicized when political decisions are underpinned by rather vested interests than public ones. Fragmentation on opinions in Harku and Viimsi council may be partly explained by politicians’ involvement in real estate business. Saku, mainly due to the great support for sustainable development among the public and council members, appears to work in favor of the public good more than other municipalities. In Rae politicians seem to promote public interests as well, as council members achieved the consensus while having various occupations not connected to real estate development.

The more I arrive to the confirmation to the words of Moe *“Politics is fundamentally about the exercise of public authority and the struggle to gain control over it”* (Moe, 1990:221), the more I believe that sustainability is not achievable without high expertise and leadership supporting sustainable development.

8.1.2. Organizational resources

Leadership

Members of municipal government (executives), especially the mayor, are also very powerful actors within an institution of local government. Municipal executives seem to play an important role in defining strategic principles and development directions. Based on their visions specialists prepare more elaborated policy proposal documents, which later have to be accepted, amended or rejected by the council.

Members of municipal government, while being an important source of expertise, can also be called semi-political personalities. They are in the office for the time of the authority of a particular council and are selected for a position according to the compatibility of their views with the council ones. They also have tight connections to council members and participate in the work of council committees. Candidacy for the mayor may be submitted by any person, who may or may not be a municipal council member. And the mayor should not necessarily be a resident of the municipality. The latter rule is said to be totally wrong, as the mayor may lack local knowledge and internal motivation to care about the future of the locality (S3).

In all municipalities it seems that municipal government members whose area of competency is connected to spatial planning are, in general, experienced and knowledgeable persons who have been working there over longer time. Thus, it is possible to infer that LGs have *stable leadership*. A representative of think tank SEIT has an opinion that dedicated leaders have a tremendous role in sustainability-raising: “*SD is most promoted in LGs where there are active people who are interested in SD, value it, and search for new knowledge, because they have internal motivation.*” (TT). Thus, their influence on sustainability of planning is defined by their perceptions of the SD principles and the effort they make to promote those principles.

My observation is that only Saku LG has an active leader with very good knowledge on sustainable development connected to spatial planning and simultaneously high internal motivation to promote his views. This leader is a member of the municipal government, who I interviewed. His professionalism and enthusiasm was also mentioned by other interviewees as a driving force for sustainability-raising in Saku (S3, TT, HC1). Other investigated municipalities also have strong

leaders in spatial planning among government members. The chairman of Rae council asserted that *“the mayor of Rae municipality tends to be very authoritative”* (R3). Also a developer having experience with Rae LG said that in the initial stage of their housing project, they communicated only directly with the mayor (DR). My interview with the mayor also left an impression that this person tried to keep everything under control and did really care about the municipality. Harku LG has a team of leaders who have been working there for ten years and therefore are experienced and knowledgeable persons (H3, H4). The chairman of Harku council was absolutely content with their work (H4). In Viimsi leaders seem also to be very strong and knowledgeable. This is confirmed by the fact that, despite not so committed local political environment, the LG managed to develop sufficient amount of highly elaborated policy documents regulating spatial planning (see table 7.2 page 89). However, leaders in Viimsi obviously need to make a considerable effort to influence political decisions.

This shows that additionally to characteristics of a leader, the result of his/her work also depends on the receptivity of municipal council. For example, as a Viimsi council member avowed: *“If I would start talking about sustainable development issues in the council, I am not sure that people would listen to me. Now we have more urgent problems to solve. I believe that gradually our society will develop to such a point that the SD principles will guide people’s behavior, but now we are not mature enough”* (V3).

My general impression is that differently from Saku LG, the rest municipalities lack either leaders’ motivation or knowledge on SD in order to confront often contradicting political aspirations and to persuade council members to prioritize sustainability.

Specialists-staffers

For the purpose of this study I was interested in staff working only in LG departments dealing with such issues as planning, construction, and land management. In general, respondents from local authorities were not satisfied either with the level of staff professionalism or with the amount of staff. Both issues are connected to a large extent to the financial capacity of LG. However, there are also other related problems. For example, in Viimsi, as claimed by respondents, there are enough specialists (thus enough resources to employ as many officials as needed), but the management is not content with their level of professionalism. According to a deputy mayor in

Viimsi, demands for better quality of planning raise very fast, and some officials just do not manage to catch up with this (V1). At the same time, as claimed by several respondents it is very hard to hire professional planners. Firstly, LGs cannot compete with private companies in the rate of salary they offer for well-qualified planners (S1, V1, R1). For example, recently the main architect of Saku left the LG for a job in a private company. *“Unfortunately, even the highest limit we can propose for the main architect is lower than a salary rate for architects in private companies”* (S1). And the mayor of Rae asserted: *“If we do not increase salaries soon, then we are not administratively capable any more, because specialists would just leave. Now municipalities entice specialists very actively from each other”* (R1). Secondly, in Estonia the planning practice is very weak as planners are usually self-educated people coming from other spheres of specialization (V1). Thirdly, the amount of potential LG employees is even more restricted by the fact that LGs prefer to employ local people or those who have some local knowledge, otherwise it takes a lot of time to get their work effective (H4). Moreover, it was mentioned that it is not very easy to replace unsuitable specialists, as the law protects permanent employees (H4).

Harku and Rae differ from Viimsi LG as they are understaffed in the field of planning and construction, but managers and politicians are content with the level of knowledge and skills of local government specialists. The lack of personnel is caused, to a large extent, by suddenly and remarkably increasing planning activity. LGs appeared to be incapable to find new appropriate specialists so fast due to the reasons named above. At the time of my investigation, especially Harku LG was in a great need in more specialists in planning (H1, H2, H3). Having high volumes of construction, it had among other municipalities the lowest number of employees in this field. The architect revealed that her enormous work load did not allow focusing enough on each project (H3). It was also a reason why in Harku the architect was forced to do just administrative work, having no time for any strategic planning (H1, H2). The same situation was observable in Rae, where 75% of real estate development was done merely through detailed plans, which changed the valid master plan (R1, R2). Specialists did not have time to stop routine work and to deal with long-term comprehensive strategies; instead they solved everyday problems with short-term approaches (R3).

Theoretically similar practice in organizations is referred to by March and Simon (1958: 185) as ‘Gresham’s Law’ stating that daily routine drives out planning. It is connected to the issues of the

proximity of deadlines and the clarity in goals of activity. Thus, more urgent and technically clear procedures, such as coordination of detailed plans, issuance of building permits, are prioritized by planners leaving behind more complicated and uncertain activities connected to preparing master plans and strategies that have no strict deadlines. But the number of staff is so low compared to the amount of work that even daily routines are not completed in time. Rae mayor complained: *“Our problem is that we often break deadlines in planning just because we have not enough planners. Just recently the main architect had been severely injured in an accident and cannot work any more. And it is a real problem to substitute her. Now our deputy mayor deals with strategic planning, albeit his specialty is not architecture”* (R1).

On the situation with staff in Saku LG I got contradictory reflections. Respondents working in the LG did not complain about insufficiency of staff, besides the necessity to find a new main architect to substitute the one who was leaving (S1). Moreover, in the view of the council chairwoman the LG had too large staff: *“I think there are too many employees in Saku LG. If some officials do not have enough tasks for a working day, they start disturbing and distracting the mind of others.”* (S3). She raised an issue of optimization of staff and emphasized importance of enthusiasm among officials. *“We need more enthusiastic persons who know their responsibilities and borders, besides their professionalism. We have couple of such persons occupying high positions, but we need just four-five more”* (S3). A developer’s opinion, on the contrary, was that Saku officials were overloaded with work (DS), thus indicating on the insufficiency of staff.

Developers that had projects in Saku, Rae and Harku stated that the most annoying feature of LGs work was a very long process of documentation review by the local authorities (DS, DR, DH). All recognised that it was caused by the heavy workload of LG specialists. From the perspective of developers, each new development application creates frustration among planners. Developers found out that *“increasing development activity brings about a lot of work to LG officials, but the salary remains the same”* (DR).

A negative aspect related to staff is a quite high personnel turnover rate in LGs. But it should be noted that this concerns mostly lower-level specialists, whereas leadership (members of government, chiefs of departments) tend to stay within the local government institution for a longer time. Generally, during the time of my investigation (summer 2006 – spring 2007) LGs

increased the number of employees, but also some of employees were replaced by new ones. As appears to be the case in Saku, every new council intended to change staff (DS, S3). In such cases when staff is frequently changed, the efficiency of work drops. Usually it takes at least one year for new personnel to acquire local knowledge and to get totally involved in the work process (DS, H3, H4).

To conclude in none of the investigated LGs the situation with staff is ideal. Rae and Harku suffer from lack of planners, which hamper them to deal with strategic planning. Saku has a frequent change of staff and planners also seem to be overloaded (in a developer's view). Viimsi has enough staff, but wants to increase its professionalism.

The fact that Harku, Rae and Saku municipalities still lack enforced updated master plans may be partly caused by the shortage of planning specialists. However, there must be also other reasons, most probably related to political will and leadership. It occurs that lower-level planning officials are not greatly involved into elaboration of spatial development policies and plans, but more in their implementation. Instead of them, external experts carry out their technical tasks in preparing policy documents.

Outsourcing

The commonplace practice in local planning is that LGs are not able to prepare neither policy documents nor detailed plans on their own. In both processes LGs act as coordinators, whereas the technical preparation of plans is contracted out. In preparation of master plans, thematic plans, and various development strategies LGs rely on the *private consultancy companies*. At the same time, LGs' various officials, especially government members, are extensively involved in the planning process (V1, V2). Representatives of LG mediate between municipal council and a consultancy company on identification of local needs and elaboration of main goals and principles, which form the core of each plan. A think tank SEIT representative gave a general comment on such practice: "*Consultancy companies just have a template of a master plan, a development strategy etc, and with some amendments apply it for all clients (municipalities). Thus, local peculiarity is not reflected in strategic planning documents*" (TT).

Organization of the technical preparation of detailed plans is usually devolved to private actors interested in plans, i.e. developers. This is explained by the fact that LGs lack human resources and due to limited budget are not capable to employ as many specialists as it would be needed in order to perform all planning procedures themselves. Also financing of detailed plans' preparation is done by interested parties. The role of LG in detailed planning is to coordinate the process, to control plan's correspondence to master plans and laws, to organize public reviews and discussions, to pass necessary documents to county government and other state institutions.

Most LG representatives recognized that outsourcing of plans' preparation limits even more the capacity of LG to steer the development. Private actors preparing plans lack local knowledge, pursue own interests and are not motivated to promote the public good. Especially devolution of detailed planning to developers was claimed to contribute to the disregard of the public interests in a municipality (H1, V1, V2).

But there is also a positive aspect connected to preparation of policy documents by external specialists. Through this process they transfer professional knowledge and provide innovative ideas to local authorities. The most important aspect is that they introduce the SD principles to LGs. To draw parallels to the theory, such practice may be described as a *mimetic mechanism for organization learning*.

8.1.3. Disposition to sustainable development

As advised by Van Meter and Van Horn (1975), the disposition of implementers to the policy should be analyzed in relation to its three components: cognition, direction of response and its intensity. As it occurs in this study, cognition of the sustainable development principles seems to play a major role, because without knowledge on the policy (this was not so rear case) no question may arise about direction and intensity of a response.

The interview data shows that in studied municipalities, in general, the level of knowledge on sustainable development is the highest among municipal government members, followed by employed specialists. At the same time, politicians' knowledge depends very much on their personal occupation. Thus, council members with higher education and active in spheres somehow related to sustainable development tend to know more about the policy. For example, the

chairwoman of Saku council, being a chief of the taxation policy department in the Ministry of Finance, seemed to have good knowledge on sustainable development and recognized its importance in spatial development policy in Saku (S3). In contrast, the chairman of the land and planning committee of Viimsi council, who has technical vocational education and is an entrepreneur in the information technology sphere, admitted that he had no knowledge about sustainable development at all (V3).

In relation to cognition, the main trend is that respondents tend to misconceive the concept of sustainable development. They associate it mainly with immediately apparent environmental issues, forgetting social and economic dimensions of the concept. As a result, it comes to contradict the founding principle of SD policy, i.e. to treat economic, environmental, and social aspects of development in parallel and to assess their mutual impacts. Seeing merely environmental protection as a goal of sustainable development may, indeed, contribute to sustainability-raising to some extent, however, it may also be misleading. Very often, on the question about sustainable development, interviewees mentioned forest preservation, proper sewage solutions and environmentally-friendly industry, but little effort was made to connect it to spatial planning, i.e. comprehensive and strategic planning of the settlement structure.

For example, the chairman of the land and planning committee of Viimsi council stated: *“We already have quite dense settlement in certain areas and just some fields are left undeveloped. I think they could be completely built-up for housing with bigger land plots”* (V3). The deputy mayor of Rae municipality noted: *“We do not allow developing anything on the forest land. For housing development we use mostly treeless fields and copse areas. According to an expert estimation, it is low-value woodland, which could be liquidated and changed into inhabited land. Our new master plan, thus, reserves much more land for housing than it was planned in the presently valid master plan”* (R2). Consuming vast areas, even though they are not valuable woodland areas, for sparse settlement does not mean that such development is sustainable. LGs mistakenly presume that if they do not allow small land plots for one-family houses they contribute to the protection of nature. However, they ignore or fail to recognize that the more settlements are dispersed the more reliance on cars increases, the more additional investments are needed for new social infrastructure. Only in Saku municipality did respondents mention

considerations about the ecological footprint of new residents and a necessity of compact settlements with all primary services within them.

Besides perception of SD, it is important to see how much implementers prioritize SD over other issues. The deputy mayor of Viimsi told: *“The sustainability principles are promoted and pushed forward by specialists in committees. Probably few politicians take the same stand. It would be naive to think that all council members adhere to the SD principles in their work”* (V1).

Partly due to non-statutory character of the EU policy, a peculiar situation concerning policy communication to the implementing agencies is created. The knowledge on the SD principles does not necessarily come from the official documentation at the EU level. In many cases respondents' views on development goals do concur with the EU sustainable development policy goals, however, they rather emanate from personal experience and common sense. For example, it is recognized by some officials, who might not be familiar with the EU policy documents, that social services have to be provided close to housing and that a cycling road network should connect settlements.

The respondents agree that sustainable development is something good that sets the ideals, towards which LGs have to strive; but most respondents have a rather rough idea about it. *“The concept of sustainable development is not unambiguously defined. Individuals' perception of it varies”* (H2).

8.1.4. Influence of officials on political decisions

Effective communication between LG officials and politicians is very important for sustainability-raising in spatial planning. As I have shown above, LG officials are the major source of expertise within LG, whereas politicians do not necessarily know the SD principles and sometimes are more motivated to promote contradicting interests. Therefore, how much sustainability issues are considered by the council depends on how much officials manage to inform and persuade council members in the importance of SD.

As it was noted before, in all four LGs members of municipal government have tight connections to council members. Due to the fact that they occupy high positions within local government and are as a rule connected to LG over a long time, their views might anticipate a considerable respect among politicians. However, the extent of their influence still depends on some factors. On the

question of interaction between officials and politicians and the influence of the former on decisions of the latter, I got following reflections:

- How much council members adhere to the advice of experts is a question of how effectively experts manage to make themselves heard (V1). Thus, personal skills of experts play a significant role – to provide convincing argumentation, to be initiative, enthusiastic, trustworthy (S3, V1).
- The interaction between officials and politicians is a ‘game of positions’ (V1), where both parties mutually influence each other’s views (V3).
- The issue of consensus between officials and politicians in principle should not be raised at all, as municipal council makes decisions based on information prepared by officials, and officials have to implement them, not depending on their own views and disposition (S3).
- Officials follow the formal policy even if they do not consider it right. They rather make proposals to change something. Such proposals are later discussed by the council (R3).
- Officials play the role of applicants and information carriers when they participate in council committees and fractions discussions (V2).
- It is no secret that experts are salaried persons. It is a challenge for them to provide reasonable argumentation against strategically wrong political decisions, while not explicitly criticizing them (V1).

Opinions of respondents did not show much variation across LGs. Obviously, the influence of leaders on political decisions may be stronger or weaker depending on a particular case.

8.1.5. Financial resources

Financial capacity of LG is one of the crucial factors for ensuring sustainable development of a municipality. A Harju CG officer noted that, “*if LGs do not have sufficient financial resources, they sometimes make such decisions, which in the long-term perspective are wrong, but which help LGs to survive at present*” (HC1). Financial problems of LGs are very often the basis for their eagerness to promote housing development and attract more new (affluent) residents. The faster they want to get new tax-payers, the less it is probable that new housing development would be based on strategic comprehensive planning. Thus, the will to increase personal income tax revenue into the municipal budget is likely to result in unsustainable patterns of spatial development.

This study considers municipalities, which at present are among the few wealthiest rural municipalities in Estonia. These municipalities do not get state subsidies to the municipal budget from the *state equalization fund* (see definition on page 55) due to sufficient own income (MoF website; R1, S1, V1, H1). This is mainly caused by the immediate proximity to Tallinn that explains the high income level of residents⁵⁸. For example, in 2005 the personal income of Viimsi residents was the highest in Estonia, about 165% of the country average (Lootsman, 2006). As a result, the personal income tax is an important and stable source of income to the municipal budget. However, it also varies across the four LGs. In Viimsi it makes up more than ¾ of the budget and together with the land tax composes more than 90% of the budget (see figure 8.1). In Harku and Saku the personal income tax and land tax revenues amount to ca 60% of municipal expenses. Rae relies on the personal income tax and land tax much less than others; this income source covers only 36% of all expenses.

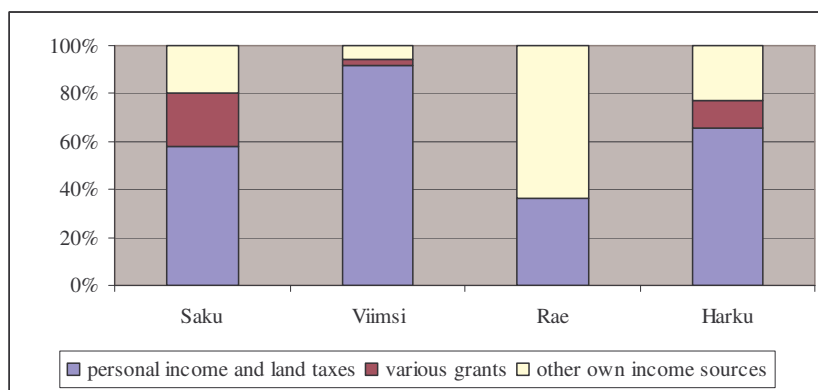


Figure 8.1: Various income sources covering expenses in municipal budgets in 2006. **Source:** Data is based on municipal budgets presented on websites of LGs.

Despite the fact that all selected municipalities are rich compared to the Estonian standards, interviewees in Rae, Saku and Harku complained about insufficient financial resources, which hamper them to employ enough highly-qualified specialists and to provide good quality services for the growing population. They claimed that a peculiar and problematic financial situation in municipalities under the growth pressure is caused by poor legal regulation and need a solution at the state or county level. *“Union of Harju County Local Governments turned to the central government with a proposal either to change the law or to find a financial base for construction of*

⁵⁸ The regression analysis of personal income tax in Estonia shows that the strongest correlation exists between collected income tax per resident and the distance of an administrative unit center from Tallinn: each next kilometer of the distance from Tallinn decreases collected income tax by 12.6 EEK (ca 0.8 EUR) per person (<http://portaal.ell.ee/2168>).

new kindergartens and schools. This problem is peculiar just for Harju County and surrounding areas of other major cities” (R1). In contrast, Viimsi respondents expressed contentment with LG’s financial situation (V1, V2). As the deputy mayor pointed out: “Viimsi financial capacity is at a very high level at the moment. We have made up an additional budget based on the unexpected municipal income from personal income tax of residents” (V1).

Harku and Rae LG actively attract new residents by allowing extensive housing development, believing that such tactic will enhance the municipal budget over time. At the same time, at present they suffer from insufficient resources to provide all necessary infrastructure and services to those new residents. According to an analysis made by Saku LG, municipal investment expenses connected with each new resident reached the break-even point in ca 15 years if developers took 50% of expenses for construction of new kindergartens and schools (S1). This means that during the first 15 years an additional financial burden is being imposed on the people already living in the municipality (S1).

Rae has found a temporal solution to cover most investment needs through selling municipal land. Even though, in the long run such approach is not sustainable, it helps the LG to deal with financial difficulties now. Amazingly, in Rae the land sale amounts to 50% of the annual income to the municipal budget in last years⁵⁹. As Rae mayor pointed out, Rae was lucky to get more land into municipal ownership in the course of the land reform (R1), therefore the LG can sell land along highways that might be developed for business (R3). Thanks to the fact that Rae gets a considerable income from land sales, its budget in absolute numbers is relatively high, and the municipal income per resident is the highest among all other municipalities (see figure 8.2). What should be emphasized is that almost all land sale revenues are used for investment in infrastructure, not for the running costs. However, it is understandable that such solution is temporary. This fact explains why respondents in Rae were not content with the situation.

Harku LG gets the personal income tax and land tax revenues 1.5 times more than Rae, but municipal property sales are not a significant income source in the Harku budget. Harku municipal income in absolute numbers is on the third place after Viimsi and Rae, but income per resident is relatively high (see figure 8.2).

⁵⁹ Municipal land sales are almost non-existent in the rest selected municipalities.

From figure 8.2 we can see that the financial situation in Saku is the worst. But differently from Harku and Rae, Saku LG considers the scarcity of its financial resources as a delimiting factor for further housing development and the population growth. Thus, the LG relies mostly on the capacity of the existing social infrastructure (S1).

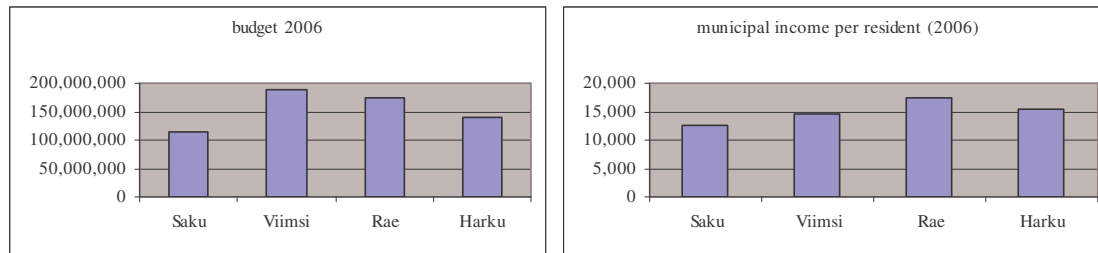


Figure 8.2: Municipal budgets in 2006 in absolute numbers (EEK) and per resident (EEK). **Source:** Data is based on municipal budgets presented on websites of LGs.

As figure 8.1 shows, especially Saku and Harku use various grants and subsidies from ministries in order to cover some municipal expenses. At the same time, Rae does not get any external financial support at all. On the question if the state supports the LG financially for increasing sustainability, the chairman of the council replied: “*Rae LG manages very well without any state support; and we do not even hope for state help*” (R3).

The conclusion is that the more municipal expenses local authority can cover by tax revenues, the more certainty it has about its future finances, as tax revenues are stable and quite predictable source of income. Therefore, LGs’ aspirations are to increase tax revenues.

Even though, Viimsi had a bit lower income per resident than Rae and Harku in 2006, I assess its financial capacity as the best out of all four municipalities. The main reason for this is that a very high share of municipal income is composed by stable tax revenues. Nevertheless, Rae has the highest municipal income per capita (based on data for 2006) this income is the most unstable, as it comes predominantly from temporary sources such as sale of municipal property. It is questionable how Rae will finance establishment of needed infrastructure for all those new massive but fragmented settlements that the LG allows to plan. The same question can crop up in Harku, however, it could be in a bit better position since there the share of stable income is higher. Saku, in spite of the lowest budget compared to the rest municipalities, does not perceive it as a crisis. The LG’s solution is to plan development according to its financial capacity, therefore trying to avoid unreasonable investments for its present and coming residents.

8.2. HORIZONTAL COMMUNICATION OF LOCAL GOVERNMENT

The sustainable development policy emphasizes the importance of public participation and open governance processes as a premise for sustainability-raising. “The fundamental driver for sustainable development must be democratic debate – decisions reached through open discussion, consensus based on shared goals and trust” (Christie and Warburton, 2001:154). With this the authors refer to the importance of participatory democracy that can inspire greater engagement of civil society in policy-making (ibid). In this section I discuss how much present such processes are in the investigated municipalities and how they can affect sustainability in spatial development. The focus is placed on patterns of local authorities’ communication with societal, business and public sector actors who may have particular interests and tasks related to spatial development.

8.2.1. Public participation in local spatial planning

To analyze the influence of civil society on sustainability of spatial development policy it is necessary to consider how much and in what cases the public can participate in formulation of the policy and its implementation. Therefore, here I look at the established practice in the four municipalities on public participation in master plan preparation and detailed planning processes.

Participation de jure

As the Planning Act (2002) prescribes, the possibilities for the public engagement and relevant processes are as following in Estonia. Local government, being a coordinator of the planning process, has to involve various interested parties, such as landowners, local residents, relevant public institutions, in preparation of each plan. In the course of master plan preparation local governments organize public discussions to *introduce* initial planning viewpoints, sketches and potential impacts of a plan. In case of detailed plans, public discussions may be organized if local government finds it necessary. Later on when a plan is accepted by local government (but not enforced yet) it should be displayed for the public review⁶⁰. For master plans it lasts during four weeks, for detailed plans two weeks. During this time all interested parties can submit written proposals and protests, to which LG has to reply and to inform those parties about subsequent

⁶⁰ *Public display* of a plan is mandatory in order to ensure the involvement of all interested persons and the timely provision of information to such persons and to enable such persons to defend their interests in the process of planning (Planning Act, 2002, §3).

public discussion on the issue. In such discussions a variety of interested actors interact furthering their proposals and protests. Local authority has a legitimate power to make the ultimate decision based on reconciling reasonable proposals with each other and with the SD principles.

Participation de facto

Reflections of most interviewees suggest that the public is quite passive in Estonia (as compared to western and northern European countries) when it comes to participation in public policy-making. However, as present laws allow people to express their opinions about particular plans, the recent trend, evident in all municipalities, is an increase of protests against new housing developments (detailed plans) in the vicinity. Additionally to this, for example, experience in Rae municipality shows that most comments received from people in relation to elaboration of a new master plan directly concerned their land, namely possibilities to start development there (R3). Thus, it should be admitted that so called 'not in my back-yard' (NIMBY) attitude and personal utility-maximization are almost the only motivators for public engagement in planning processes. Still, the character of NIMBY-participation may vary in terms of compliance with the SD principles. The most notable example of how people were fighting for more sustainable development in a municipality concerns Viimsi peninsula. In 2004 ca 1700 Viimsi residents signed a petition to Viimsi local government to stop further housing development in forests of the peninsula and to take them under protection. But more common practice is, however, that smaller and concentrated groups, underpinned by NIMBY attitudes, may seriously threaten the public good. Again an example from Viimsi can illustrate this: "*Construction of a pedestrian road leading to the beach was opposed by a group of owners of the property located nearby. Due to such protest the road was not built, and all other residents who potentially might have used the road are disadvantaged*" (V1).

In recent time a new practice for resident empowerment, encouraged by the Estonian law (Local Government Organization Act, 1993), is being developed in many Estonian rural municipalities. Namely, many villages elect a *village elder* or even establish a local *non-governmental organization* (NGO) in order to represent village interests in any kind of relations and to manage village development according to locals' wishes. Therefore, elders are entitled to organize local meetings, to solve local problems, to inform locals on planned developments in the vicinity, to

prepare village development strategies and to mediate between village residents and local authority. Such system is highly valued by LGs, as it simplifies the information exchange between public authority and citizens (S1, V1, R1). Respondents from Saku and Rae LGs notified that in general village elders are quite active in representing interests of their villages in policy-making processes (S3, R1, R3). “*Village NGOs and elders can definitely influence spatial development in the municipality*” (R1). In Viimsi just ca one quarter of village elders were cited as active who effectively distribute information, establish local community centers, outdoor public space, organize local public events etc (V1, V2). On the question of public participation in Harku respondents did not mention either village elders’ or resident NGOs’ importance.

There cannot be much variation across municipalities on activity of the public. What is more important and may vary across LGs is the extent to which each LG is interested in extended public participation in policy-making and, therefore, how LG enables it, enhances it and motivates for it.

Local governments’ endeavors to enhance public participation

All investigated LGs follow requirements emanating from the law to enable the public to participate in plans’ preparation. This means that LGs try to take into consideration all comments, proposals and protests from the population expressed during plans’ public display. Basically, in practice it is so that those detailed plans that are reasonably protested by a considerable group, are not allowed by local authorities. In case of master plans, already developed solutions for spatial development are presented to people, and questions concerning their content replied. In order to try to bring a change in a master plan, residents have to submit written proposals. Unfortunately, such type of public involvement is hard to name as real ‘participation’ in local policy formulation. In case of detailed planning it is rather delayed reflections on the policy content already in its implementation stage. In case of master planning it is a possibility for one-time comment, not more! A real public participation in policy-making, as it was also confirmed by a think tank representative dealing with sustainable development (TT), is when local authorities encourage people to express their opinions on every step, aim, idea, solution etc from the very beginning of planning principles formation. Given so passive society as in the post-Soviet states, LGs should explain the public why participation is desirable and how it can take place. In Estonia if some local

governments try to encourage the public for more exhaustive participation, this emanates only from the LG's genuine wish to do so.

The investigated LGs appeared to have different approaches for enhancement of public participation. Harku and Rae respondents did not mention special (not prescribed by the law) endeavors of LG to motivate and involve public in spatial development policy-making. In contrast to them, Saku LG places a considerable emphasis on extensive public involvement in policy formulation. In order to define main goals of spatial development of the municipality and main principles of spatial planning Saku LG organized a survey among residents. It was published in the local newspaper and was also available in village centers, local libraries and on the LG website. Even though, the public response was low, only 2.4% of the population, it gave some idea about residents' views. Moreover, Saku LG organized public seminars, discussions and round tables in the course of developing the master plan. The LG encourages residents to establish village NGOs with representatives and to participate in planning principles formation. *"We asked every village NGO to discuss in detail our master plan draft on their own and to give us suggestions and comments. If residents have agreed on their own about how they see the future of their area, then it is much easier for us to make decisions"* (S1). Participants of public discussions and seminars managed to achieve consensus supported by 80-90%. In the opinion of a Saku government member, after the consensus on spatial development principles has been achieved, designing a master plan is just a technical task (S1). Additionally to this, while planning the central urban settlement in Saku, the LG have personally invited to round table discussions individuals considered as local leaders and representatives of bigger enterprises for participation in elaboration of the planning principles (S3). Saku LG's will to encourage civil society participation is also expressed in their financial support for local third sector organizations. Namely, Saku council decided to direct 1 % of the municipal income to support local NGOs and resident initiatives (S3).

Viimsi LG support for public involvement is not as active as in Saku, but better than in Harku or Rae. In the course of elaboration of a new development strategy the LG ordered to conduct a survey (see Viimsi doc.5) among residents to reveal their satisfaction with the living environment and problems that have to be solved. The LG also supports the activity of village elders through a financial compensation for travels and stationery (V1, V2). Viimsi master plan proposes to

establish a system of payment for village elders in order to make the communication between the LG and residents more efficient.

8.2.2. Communication of local authorities and real estate developers

Conflict of interests and mutual dependency

Under conditions of liberal market economy and scarce public sector intervention, private actors are the main driving force for real estate development. Therefore, real estate developers' attitudes and aspirations have a major effect of the pattern of development.

The conflict between public and private interests in spatial development is apparent. On one hand, the main task of local government is to protect public interests of residents of the whole municipality and also to take into consideration public interests of a greater scale, represented by, for example, neighboring municipalities and county government.

On another hand, development of former agricultural land for housing or business purposes became a preferred way of private actors to make the most profitable use of the land they have got in the land reform. Their main goal is to maximize revenues while minimizing investment needs for each project. Very often locations where landowners apply for real estate development are occasional and scattered (H2, S1, HC1), which may bring about negative environmental, social and economic effects for the public. That is why sometimes proposed locations and projects are not accepted by LGs. After receiving a negative response developers try to reverse the decision of LG by all legal and illegal methods. Those comprise: (a) adjusting the proposed project according to the requirements (H3, DS), (b) looking for 'good contacts' in local council (V1, H1), (c) trying to attract high-level politicians on their side (H1), (d) appealing the decision in the court (V1, H2) etc. Consequently, the result of planning becomes dependent on a 'game of positions', where various interests and powers are represented (H1, V1). This sometimes leads to situations when projects that in principle should not be allowed get initiated and adopted. Here I would like to draw the attention to the fact that more politicized approaches are mentioned by respondents in Harku and Viimsi municipalities, while none of respondents in Saku and Rae believe that this is possible in their LGs at present.

Despite such conflicts, both sides – local authorities and developers – also have *a common more general interest*, i.e. to promote real estate development in the municipality, though for each party it stems from its vested interests. While the developer’s aim is to get high profit from a particular project, the aspirations of local authorities emanate from their interest to get new tax payers, thus enhancing the municipal budget. Consequently, both parties agree that development should take place, but how, where and to what extent – are the controversial issues.

Both parties are also *mutually dependent* in order to reach their goals. The dependency of developers on local government is obvious, as no project can be realized without authoritative involvement. Also local authorities, having no capacity for developing housing themselves, but wanting to increase their populations, depend on the private initiative.

A positive trend is that the share of developers who care more about the quality of their projects is slowly growing. “*Bigger real estate companies understand that in order to preserve their reputation they have to consider also public and social aspects in their projects*” (HC1). Even though such developers’ position is dictated solely by their economic calculations, its contribution is essential for overall sustainability-raising. They try to analyze locations for development and suitability of their projects before initiating those projects.

Public-private partnership or forced cooperation

According to the law, local authorities have an obligation to provide technical and social infrastructure for all housing estates within their jurisdiction (Local Government Organization Act, 1993). But under the conditions of turbulent housing development in suburban municipalities LGs become financially and organizationally incapable to fulfill such obligations for all new projects (V2). Therefore, LGs’ interest is to pass as many obligations as possible to developers. For such purposes local governments can use their legitimate authority and manipulate developers’ behavior.

In order to make private endeavors to match with public interests, LGs have to strive to a compromise-oriented cooperation with private actors. In this theme it is very interesting to follow not so long but rapidly changing history of that cooperation. Previously each new development was welcomed by LGs who could not even foresee problems connected with it. LGs naively

believed that developers would organize everything in order to make the property they sell consummate. In the initial stage of planning, developers promised to construct the connection to techno systems for housing they developed⁶¹. However, later entrepreneurs usually evaded such responsibilities (if we can call them ‘responsibilities’) (H2). There were no legitimate grounds to demand fulfillment of developers’ promises because neither national laws, nor municipal policy documents, nor formal agreements provided for them. Through learning on own mistakes, couple years ago many municipalities started to sign contracts with developers about sharing responsibilities for technical infrastructure construction. In case of non-fulfillment on the part of developers, this gave an opportunity for LGs to get needed money through the court. But even these precautions did not always help. Some real estate companies avoided expenses by declaring themselves bankrupt after they sold their property (CH1, H2). Some local authorities reacted with new measures. For example, Harku and Saku LG besides contracts secure themselves with a financial guarantee from developers or a deposit on a notary account until all obligations are fulfilled by real estate companies (H1, S1).

Thus, some years ago such practice when developers cheated local authorities, and the latter were unprofessional enough to let themselves to be cheated, was common. Recently this is getting replaced by more institutionalized ways of cooperation in housing development supported by formal and informal local rules. Generally, it is restricted to two fields: (1) provision of technical infrastructure for real estate developed by private actors, and (2) provision of social services for new residents brought by new housing projects. The extent of cooperation varies across the investigated municipalities.

In all municipalities the responsibility for technical infrastructure provision is totally or partly devolved to developers. This may include not only techno systems and roads within a housing district, but also outside it, for example, road connection to the existing road network. This is how representatives of LGs comment on this issue:

- In Rae: *“Usually we sign a contract with a developer about delivering the obligation to construct technical infrastructure to a developer. As such contracts are not always fulfilled by developers, we developed an*

⁶¹ Several years ago nobody thought about social infrastructure in new housing districts, even not local government (DH, DV).

additional measure: we started to issue building permits only after all technical infrastructure is constructed by a developer if this was our mutual agreement” (R2).

- In Harku: *“The system that we have developed for bigger housing projects is as following: a developer builds technical infrastructure for a new housing area and LG compensates those expenses to the developer during the next 5 years. Every year LG pays 30% of additional municipal income generated by personal income tax of those new residents who moved to housing constructed by this developer” (H1).*
- In Viimsi: *“Before a detailed plan is adopted we sign a contract with a developer defining obligations of both sides in terms of construction of technical infrastructure and may be also playgrounds, kindergartens” (V1).*
- In Saku: *“We sign agreements with developers of bigger housing projects obliging them to take the responsibility for construction and financing of technical infrastructure for their projects and even outside the project area” (S1).*

Provision of social infrastructure in new districts is more problematic, as in this sphere LGs feel more insecure to impose relevant obligations on developers. And real estate companies are more reluctant to take such responsibilities compared to the ones in technical infrastructure, where benefits are more directly apparent to clients. Most of developers justify their ignorant behavior by the demand on the housing market. *“If potential clients do not think about availability of social services in a neighborhood where they buy a dwelling, then developers do not consider it necessary to think about this either” (DH).*

The common practice is that LGs require from developers of bigger housing projects to plan open public space (like parks, streets, playgrounds) and may be kindergarten within developed districts. In some cases when developers are willing to contribute to development of social services more, they can also take a responsibility to construct such facilities. Thus, the extent of contribution depends on developers’ wish to create sustainable settlements. Respondents from Harku, Rae and Viimsi LGs stated that local authority can require from a developer *to plan* a kindergarten or any other public space within the housing district, but LG cannot force a developer *to build* it (H3, R1, V3). Saku LG seems to be more self-confident in attracting the private sector to contribute to establishment of social services. *“We ask developers to bear a half of expenses on construction of new schools, kindergartens, and other public services. Those additional expenses are actually included into the price of dwelling, thus, new residents bear those expenses. The prices for immovable property are so high in Tallinn suburbs, that an addition of such expenses to the price*

is almost not noticeable” (S1). Saku LG had already rejected some detailed plans when developers did not agree to bear 50% of such expenses (S1).

Such cooperation between local government and private business sector can be seen as public-private partnership (hereinafter PPP), as both sides have a joint general goal (to promote development) and are mutually dependent to achieve this goal, and both take certain obligations defined in a formal agreement. Whose interests are served more in the partnership is circumscribed by the power-relation between the parties. As a Saku government member pointed out: *“Achievement of a compromise between local government and a developer is a kind of negotiation and bargaining like in business”* (S1). If a goal to ensure sustainable living environment outweigh an interest to get new taxpayers, LG appears to be less dependent on private entrepreneurs, the balance of the power-relation shifts. Such position was apparent in Saku LG. In this case LG feels more self-confident to make certain requirements for developers as a condition of acceptance of their projects. This is how LG may ‘force’ developers to balance profit-maximization aspirations with concerns about environmental and social impacts of their projects. Therefore, PPP may promote creation of more sustainable settlements.

Real estate developers witness difficulties faced by local authorities, but their dispositions vary. Some are ready to contribute to provision of social infrastructure that will be used by residents of the housing they develop (DR, DH). Others remain indifferent to troubles of LGs stating that provision of social services is not their task, but an obligation of public authorities (DS). In any case, all developers perceive cooperation with LGs as a coercive engagement. Very often when talking about their contribution to technical and social infrastructure developers used a phrase “LG forced us to do this”. Even though, it is perceived by developers as ‘a forced cooperation’, they agree to take certain responsibilities in exchange for opened possibilities to achieve their own goals. None of them comprehend that developers’ contributions could be considered as fair and correct given the circumstances; and the main reason for this, as I see it, is that such private sector contributions are not legitimized in the Estonian national context.

Over time LGs have learnt that given such reluctant and ignorant attitudes among developers local authorities have to find grounds to legitimize PPP. Therefore they start to incorporate the rules for cooperation into policy documents. For example, the necessity of contracts between LG and

developers on sharing responsibilities in the provision of infrastructure is cited in Viimsi new thematic plan (enforced in 2005) and Harku new building regulation. Also new master plan of Saku municipality (not valid yet) provides for such contracts covering not only technical but also social infrastructure stating that such necessity depends on the financial capacity of the LG.

8.2.3. Communication of local authorities and other public institutions

This section focuses on the horizontal dimension of communication between LGs and other public institutions, particularly, county government and other local governments. This topic is analyzed separately from the more general themes pertaining to the state system (described in chapter 5) due to my intension to emphasize the influence of mainly *voluntary aspects* of such communication on sustainability of local planning.

Communication with county government

County government deals with development issues for the whole territory of the county. The role of CG in spatial planning is to ensure implementation of national policies at the regional level, to represent state interests in spatial planning, and to ensure the legality of LGs' activity.

County government can influence spatial development in municipalities directly and indirectly. The *direct influence* comprises two procedures: (1) development of county plans and strategies for development, (2) supervision of all master plans and in certain cases detailed plans⁶² prepared by local governments. Supervision is a control of a plan ensuring that it follows laws, norms and superior plans for the area in question. If some mistakes are revealed, the county governor rejects the plan and submits recommendations on amendments (HC2). If a plan follows laws and superior plans, CG has no authority to make any requirements, but only suggestions. It is still unclear to what extent CG officials may advise local authorities in the course of supervision on how to increase sustainability of plans. As a Harju CG representative revealed this depends on a personality of the county governor (HC1). At present the county governor discourages CG officials to give suggestions on plans, whereas the previous governor considered it important in order to improve the quality of planning on the part of LGs (HC1). So, CG officials repeatedly advised LGs

⁶² Detailed plans are supervised by county government only in three cases: a) a detailed plan proposes to change a master plan, b) a detailed plan concerns an area which is not covered by a master plan, and c) a detailed plan has an unresolved public contestation (Planning Act, 2002).

to consider possibilities to include pedestrian roads, playgrounds, street lightening, and public greenery places into detailed plans for new housing projects (HC1). A CG representative noted, *“After such practice during several years some LGs started to adhere to CG advices”* (HC1). This is one of the ways how CG may contribute to sustainability-raising in local spatial planning.

From the perspective of respondents in LGs, county plans are considered as very important, though they are claimed to be too general (H1) and the state interests expressed in them to be changing without consideration of the actual development in municipalities (R1, H1). The opinion of respondents in Rae is that CG rigidly sticks to the laws instead of trying to help to solve real problems of municipalities (R1, R2, R3). *“County government could pass municipal proposals and interests to the state, not merely rigidly stand at state strategies and perform supervision over municipal activity. Sometimes we leave supervision prescriptions unfulfilled”* (R1). In the opinion of a CG representative, even though some Rae interests contradict the state ones, the LG is oriented to cooperation with state institutions in order to find a compromise (CH2).

Harku communication with Harju CG is the most painful out of all investigated municipalities. Harku have not found a common understanding with Harju CG on many controversial planning issues (such as location of state mines and highways). This is seen by Harku respondents as one of the reasons for a postponement of the new master plan completion (H1, H2). In the opinion of a CG representative, the ambiguity of state intensions should not hamper master plan preparation: *“LG has to proceed with plan preparation and present it to CG, who will invite representatives from relevant state institutions for a discussion. There is also possibility to adopt a master plan leaving certain disputable areas out. It is unreasonable to leave the whole municipality without an up-to-date master plan due to conflicts concerning only some localities”* (HC2).

Reflections of Viimsi LG representatives indicated that cooperation of Viimsi LG and Harju CG is normal, following the requirements of laws. A very positive opinion was expressed by a Saku government member: *“Saku LG has very good relations with Harju CG. We try to support their endeavors to consider the county as a whole in planning. A municipality scale is quite small to plan bigger infrastructure objects. County is big enough to plan strategically the zones for housing, industry etc, i.e. to steer spatial development”* (S1).

The *indirect influence* of CG on the planning process in local authorities takes place through awareness-raising initiatives for LG officials. This comprises organizing seminars and training courses for officials of local authorities, initiating research, participating in it and distributing the findings among local authorities. In the words of a CG representative: “CG organized a lot of teaching seminars and courses, invited specialists from other European countries to talk about their practice, and specialists from the Estonian Ministry of Environment to explain EU directives” (HC1). It is also very important that both CG and LG cooperate while formulating their policies. This appears to be the case in Saku LG, which tries to participate in CG work on development of county plans and strategies, and invited a CG representative for seminars on development of planning principles of Saku municipality (S1). Also a recent conference on Viimsi balanced development, where the Harju County Governor was among speakers, showed that Viimsi LG collaborated tightly with the CG. But the reflection of the mayor of Rae was not so positive: “Sometimes CG arranges tuition seminars but merely in land and social issues. We had sent several petitions for help in legal issues, but had not got any help” (R1).

The fact that CG has no authority to coordinate local authorities’ activities undermines integration of local policies at the regional level. Under such institutional conditions it is very important that both parties – LG and CG – are interested in cooperation. Tight voluntary communication with CG helps local authorities to look at their activity from the regional perspective and to comprehend development trends covering the whole county. Also teaching organized by county government contributes to organizational learning of local governments, which enhances chances for raising sustainability of development. In this respect, Saku and Viimsi due to their good connections with CG benefit more than Harku and Rae.

Communication with neighboring municipalities

In many respects local governments function independently in spatial planning. However the law encourages their cooperation: they can form regional associations, provide public services and develop masterplans jointly based on mutual agreements (Local Government Organization Act, 1993; Planning Act, 2002). In reality the collaboration of municipalities is considered to be insufficient (Ahas & Leetmaa, 2005). From time to time all LGs collaborate with immediately neighboring municipalities in provision of technical infrastructure, such as development of

common water and sewage systems, organization of public transport. In the latter issue suburban municipalities cooperate mainly with Tallinn city in order to ease commuting effects. LGs try to find out how and in which aspects they can collaborate. On the question whether Rae LG collaborates with other LGs in the area the mayor of Rae stated: *“We have thought about issues in which we might need collaboration and we had not found any issue besides public transport”* (R1). But gradually LGs come to understanding that cooperation among municipalities in Tallinn conurbation is necessary. Recently Tallinn city initiated regular meetings for local authorities of the Tallinn region, where LGs try to find joint issues and common projects (R1).

In each county a regional association of local authorities may be formed (MoI, 2005:2). All four municipalities are members of the Union of Harju County Municipalities (hereinafter UHCM). Even though it may be seen as the second regional administration additionally to county government, its role is totally different. If county government is a representative of the state, the UHCM is a representative of the local politico-administrative level. As commented by the chairman of Harku council: *“There are a lot of joint projects. UHCM also facilitates applications for state and EU financial support”* (H4). A chairwoman of Saku council stated: *“The UHCM has regular meetings every month, but I think they are needed not more than once per quarter. Usually the agenda for meetings is quite insignificant”* (S3).

As public transport within the conurbation is one of the most painful issues, a special institution, the Harju Public Transport Center (HPTC), was established in 2005 to organize the whole system of public transport within the county. The HPTC is mostly financed by the state, but LGs also have to pay member fees (H2). Rae respondents expressed discontent with the work of this center. *“We would rather organize public transportation ourselves through private companies, than pay contributions to the HPTC. It has some monopoly features, since it gives permissions for opening new bus lines. It is slow and inflexible”* (R1). Harku LG representatives hope that this center will really improve the situation in nearest future. As it was described before, Viimsi has already benefited from the cooperation with the HPTC, as the first project of the center concerned the connection between Viimsi and Tallinn.

It is almost impossible to observe any variation across municipalities in LGs' cooperation with each other. It is obvious that all municipalities are learning to cooperate, as their joint initiatives

are in the initial stage still. LGs are in search for common problems and joint solutions, but some of them still believe that in most aspects of development they do not need to collaboration. Such attitudes are especially present in Rae LG.

8.3. LOCAL GOVERNMENTS' PERCEPTION OF THEIR ABILITY TO STEER DEVELOPMENT

All respondents agree that LGs in Estonia are placed in a very difficult situation. On the one hand, the direct task of LGs is to ensure satisfaction of local public needs and sustainable development of municipalities. On the other hand, LGs are under intense development pressure, sometimes supported by state-level political vested interests and by the liberal law, which protects private property rights too much as compared to public interests. It is obvious that these two sides of reality are in conflict.

On the question whether spatial development in the municipality was under control of LG, responses varied among interviewees even from the same municipality. My general observation is that politicians in all municipalities feel that the public sector is rather able to control development. On the contrary, opinions of semi-political figures varied widely across municipalities:

- In Rae: *“Practice shows that all that has been developed until now was planned merely through detailed plans; in such case LG is really incapable to steer development. I believe that once we enforce our new master plan, it will become easy to steer spatial development”* (R1).
- In Harku: *“Unfortunately, spatial development is not totally controlled by LG. We try hard to steer it, but we are not always able. We are blamed a lot...but, at least we do not allow completely wrong developments”* (H1).
- In Saku: *“Development in the municipality is absolutely under control of LG. I know that some people claim that laws in Estonia are imperfect, that they do not provide enough power for LGs. I am sure the question is in the will of LG. The planning law does not restrain LGs to enforce such plans, which they want to enforce as long as state interests are ensured”* (S1).
- In Viimsi: *“Spatial development is a game of positions. The suburbanization process in Viimsi is and has been definitely under control of the municipal council. But the municipal government, being merely an implementing body, does not have total control over urban development”* (V1).

When analyzing interviewees' reflections, it is crucial to understand what benchmarks people keep in mind when they assess the extent of control of development. Ideally, the total control of spatial

development by LG would mean that the general public interests are protected. However, when politicians state that they feel they have control over development, the main question is to understand whose interests they represent. How big is this group? Does it comprise the whole population of the municipality? Or does it comprise population of one village? Or may be just a smaller community of local entrepreneurs, who may also be owners of real estate companies? In the last case, politicians' views on development would most probably contradict to general public interests. It is important to recognize who the electorate of certain politicians is. As it was stated by couple respondents, the border between representative democracy and corruption in local politics is too subtle (V1, H1). When a politician tells that development is controlled he/she means that development corresponds to the interests of a group he/she represents in municipal council.

Conversely, opinions of semi-political figures and specialists are likely to be more connected to thinking about the public good. Their opinions emanate from the professional knowledge; besides this, officials do not need to appeal to a particular electorate. So, they can be more objective in their views on policy goals and compare them to what is happening in reality.

The practice when a developer contests in the court LG's decision to deny a proposed development is well-known in Estonia. Reflections of respondents on this issue can tell much about LG's institutional capacity as well. For instance, Harku LG officer asserted:

"Nevertheless, municipality has the right to deny initiation of a detailed plan, the practice shows that landowners appeal to the court and win cases. The court practice is weird. As a result, scattered settlements emerge in bare fields, where no social infrastructure exists" (H2).

A member of Saku government comments on this issue as following:

"We have good advocates – this is no problem! Moreover, initiation and adoption of detailed plans depends only on the will of local government. Time stages of development defined by a master plan greatly reinforce LG's position in avoiding fragmented housing districts" (S1).

The conclusion is that each LG denial for applied development should be very well grounded, and the more rules for development are elaborated by master plans, the more legitimate grounds LG has to confront private pressure.

From the discussion above we see that Saku LG stands out among other municipalities being very optimistic about its capacity to make development sustainable. But at the same time, it is also important to remember that, even though all investigated municipalities have high volumes of development, the pressure for it still varies across municipalities. Among others, Saku municipality seems to have lower demand on the real estate market and, therefore, the conditions under which LG has to act are not as harsh and not as rapidly changing as in other municipalities. This might be one of the reasons why respondents in Saku felt that the LG had a strong position against the private sector pressure. In words of a Saku government member, “*There is no such pressure of developers which we could not resist. If there is a strong will, an agreement can be achieved*” (S1). Moreover, I have grounds to suppose that coastal areas (in Viimsi and Harku), due to their high attractiveness, are desirable by more powerful actors. The latter, in case of LG denial, are ready to apply various non-legitimate methods to push their projects through (as it was noted above). Thus, the great amount of planning applications and politicized approaches to exert pressure on local authorities challenge LGs’ capacity to protect the public good. “The more demanding the circumstances an organization faces, the harder it will be for it to achieve its objectives” (Davies and Ferlie, 1982).

8.4. CONCLUSIONS ON INDEPENDENT VARIABLES

My best estimation of institutional capacity of LGs for sustainability-raising in spatial planning is schematically illustrated in 3-dimensional model (figure 8.3). Each dimension is assessed according to its contribution to the increase of sustainability.

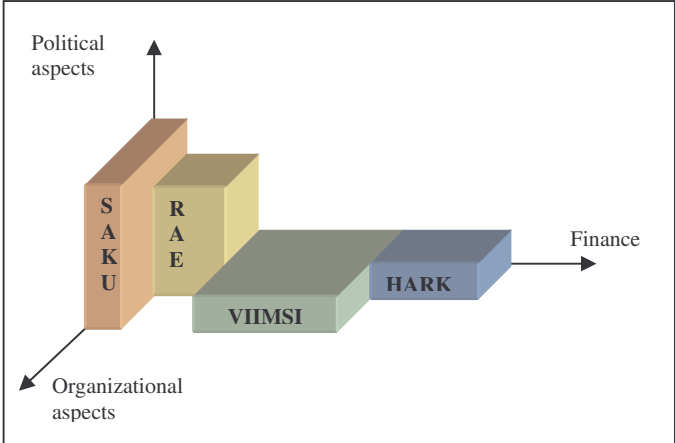


Figure 8.3: Schematic illustration of institutional capacity of LGs

For a comparative purpose the model is based only those aspects that varied across municipalities:

- **Political aspects** – extent of political support for SD and agreement over it;
- **Organizational aspects** – enthusiasm and knowledge of leaders, who support SD; professionalism and sufficiency of staff;
- **Financial aspects** – sufficiency and stability of own municipal income.

At the same time, those aspects discussed in this chapter which appeared to be similar in all municipalities are also very important for sustainability-raising, but they would not change the proportions in the model. The main point about institutional capacity is that its three dimensions are mutually dependent and may reinforce or undermine each other under particular conditions.

The overall scoring of LGs on main aspects in both independent variables – institutional capacity and horizontal communication of local authorities with other actors – is illustrated in figure 8.4, which summarizes the whole discussion in this chapter in a visual way.

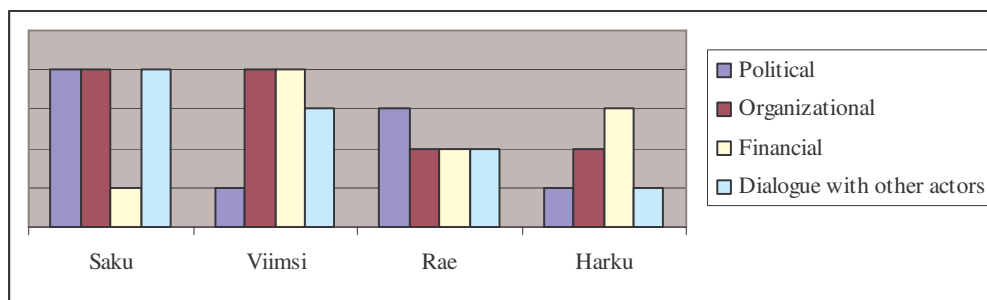


Figure 8.4: Comparative estimation of dimensions of institutional capacity and dialogue of LGs

This chapter provided a comprehensive description of independent variables of this study and some tentative inferences on the character of their affect on the extent of sustainability in spatial development policies. The final conclusions on causal links between the independent and dependent variables, as well as influences of general factors are discussed in the next chapter.

9. DISCUSSION AND CONCLUSIONS

Urban sprawl can be seen as a type of suburbanization which lacks sustainability. The purpose of this study is to explore the EU-formulated sustainable spatial development policy implementation by local authorities in Tallinn suburbs and to understand why an implementation gap exists. In the investigation I intended: (1) to assess sustainability in spatial planning (connected to housing areas development) in the four selected suburban municipalities of Tallinn; (2) to identify factors that constrain local authorities in promoting sustainability in their spatial planning.

A framework for this study is provided by the policy implementation theory. The model of policy implementation proposed by Van Meter and Van Horn (1975) seemed to suit this research purpose best. It helped to draw the tentative causal links between the dependent and independent variables. For description of independent variables I included concepts of institutional capacity, local governance, partnerships, and organizational learning. The main factors influencing policy implementation in this study are: (1) Factors pertaining to local government, (2) Horizontal communication of local government, (3) Policy content, (4) Vertical policy communication, (5) National institutional and socio-political conditions. The first two aspects constitute the major focus of this research and are considered as the *independent variables*. The last three aspects are discussed as a general context for policy implementation. The extent of sustainability in local spatial development policies is defined as the *dependent variable*

9.1. EXTENT OF POLICY IMPLEMENTATION – DEPENDENT VARIABLE

This section provides a summary on the dependent variable of this study and answers the first research question: *To what extent does spatial planning related to housing development in the selected suburban municipalities of Tallinn follow the principles of sustainable development?*

Spatial development, particularly development of the settlement structure, in Tallinn conurbation is still far from being sustainable. The features and adverse outcomes of urban sprawl are becoming increasingly apparent (as described in chapter 6). In the four suburban municipalities selected for this study development of housing does not follow the principles of sustainable development as well. Not so long time ago in all municipalities, spatial development policies could be characterized by the absence of any steering of real estate development, which reflected the

private developers' will, profit-orientation and disregard of public interests. LGs were guided by the thirst for potential financial benefits connected to the immigration of well-off people rather than strategic planning for sustainable development. Adverse effects of these policies are apparent now, such as insufficiency and low quality of local services, underdeveloped public transport, and high reliance on car use.

However, the local policies are changing in the right direction, i.e. principles of local spatial planning are becoming more elaborated and more corresponding to SD policy. Such changes are not only the result of changing external conditions, but more importantly, the result of LGs' *learning* from their own and others' experience. In all investigated municipalities policy learning was evident, expressed in new goals (example: more attention to nature protection), planning tools (example: defined greenery network), planning procedural approaches (example: PPP). All such improvements contribute to more sustainable development of municipalities.

Benchmarks for sustainability assessment

The overall goals of the EU sustainable development policy in spatial planning were described and supplemented by theoretical elaborations in chapter 2 and section 3.2. To state it very shortly and simply, a more sustainable settlement structure would discourage extensive car use, minimize use of greenfield and minimize irrational expenses for infrastructure construction. This can be achieved if housing areas are located closer to existing social services and jobs, and are connected to each other by convenient public transport, cycling and pedestrian roads.

Summary of local policies in relation to sustainability

Viimsi, being a victim of its own mistakes in 1990s (overpopulation), has succeeded very well in upgrading the planning quality in recent years. Viimsi policy can be seen as *reactive and proactive simultaneously*. On the one hand, it tries to correct mistakes made by prior poor strategic planning, on the other, it also develops new approaches for further spatial planning in order to prevent such mistakes in the future. The main goal of Viimsi policy is to sustain the municipality's popularity and success, which means to preserve attractive living environment. In order to sustain natural resources Viimsi has chosen to restrict the population growth through avoiding building of apartment houses and strict protection of valuable natural areas. Also such steps as promotion of

public transport, constructing cycling and walking ways and developing rich social life in its main urban center discourage car use to some extent. Areas for new housing development are in many cases adjacent to the existing settlements or within them.

Saku LG recently adopted a rather *proactive* pattern of policy-making in spatial planning. One of its advantages compared to the other selected municipalities is that development of housing under free market conditions has not been so extensive. Therefore it could not essentially change the settlement pattern developed in the Soviet time, which contained several compact settlements by railway stops. Saku LG has a clear vision of future spatial development and regulates the growth of housing development based on the thorough analysis of its possible impacts and LG's capacities. Thus, Saku policy promotes a settlement structure as a multi-nuclei network, where settlements are preferably located by the railway and are on the way to rising self-sufficiency. My best judgement is that Saku policy contributes to sustainable development goals, in general, better than the other LGs. However, as this policy is still very young in Saku, it is too early to talk about how it works in reality. It just provides the basis for presuming that further development in Saku will be more sustainable.

Harku and Rae allowing massive housing development in the last decade in the absence of up-to-date master plans reached a situation when new large housing areas suffer from a lack of local social services, inappropriate technical infrastructure and insufficient public transport. Both LGs still promote the further growth of population and housing development within large prospective housing areas and allow new housing projects in areas with no social infrastructure. Therefore, the urban structure is being considerably changed there triggering the need to adjust all other spheres of development. So, the LGs are forced to start dealing with the above mentioned problems. Planning new kindergartens and schools, developing new routes for buses are the responses of the LGs to demands of residents of new districts. I perceive their planning policy as *reactive*, because the policies 'react' to the emerging problems caused by the former policy and there is no serious attempt to prevent emergence of such problems in the future with more strategic spatial planning.

Despite great similarities in aspirations of Rae and Harku LGs there are some differences. (1) Rae attracts new employers to the municipality, which is especially important in those areas that have already infrastructure but need 'an inflow of new life'. Harku LG does not aim at attracting new

employers for local population. (2).Rae has originally more compact distribution of population, i.e. 58% of population living in boroughs compared to just 38% in Harku. This percentage shows the share of population that has less need to drive to other settlements for social services and jobs and that has better technical infrastructure. (3) Rae has a clear intension to preserve large natural areas in the southern part of the municipality, thus balancing man-made environment in the north with natural one in the south. Harku natural areas are disturbed either by new housing construction or by state industrial purposes (mining). In the light of such differences I infer that Rae has more beneficial conditions for creating sustainable spatial development than Harku.

To sum up it shortly, the present proactive policy of Saku seems to be the most sustainable of the four selected municipalities. The present policy of Viimsi while being reactive and proactive simultaneously, also tries to follow SD principles. However, its point of departure is much worse. Policies of Harku and Rae are clearly reactive, i.e. focused on solving existing problems, and the type of housing development they allow is rather unsustainable. As available evidence suggests, Harku has the most arbitrary pattern of housing development, which results in the lowest sustainability out of the four municipalities.

9.2. GENERAL FACTORS INFLUENCING POLICY IMPLEMENTATION

The first part of this section reflects on influence of policy characteristics on its implementation. The second part summarizes findings concerning the research question **2.a**: *How do the national conditions influence the sustainability-raising in local spatial planning?*

Difficulties in implementing sustainable development policy in spatial planning are quite predictable given *the complexity and broadness of its goals, its dispersed and far-reaching benefits and immediately apparent costs* (as discussed in section 3.4,1). Most local authorities, also throughout the world, try to find practical implications of SD policy in spatial planning, i.e. they try to develop a particular urban form and structure that would suit the local context and contribute to the achievement of SD goals. The fact that SD policy has three dimensions (environmental, social and economic) and implications in various sectors makes it even more difficult to implement. The policy also requires changing the traditional approaches in spatial planning with emphasis on cross-sector and integrated approaches and more extensive involvement of societal and business actors in policy formulation. Estonian local authorities are in the process of learning

and search for those spatial planning principles that would contribute to successful implementation of SD policy.

In this sense, local governments in more mature European democracies are in a more advantaged situation, since SD became an important issue there much earlier than in the post-socialist states. This study revealed that *the institutional national context is a very important factor influencing SD policy implementation at the local level*. According to impressions of respondents, in Estonia implication of SD goals in spatial planning is badly articulated in legal acts and national policy documents. The legal acts concerning spatial planning are constantly changing and private ownership rights have such a strong position that they often win over public interests. Moreover, the situation endemic to the post-socialist states, when the old institutionalized order was broken and the new one is not completely established yet, favors arbitrary behavior of politicians and officials in all public institutions. State interests and powers are fragmented and lack collaboration. That is why state agencies fail to form unified statements about future development goals. Additionally, highly dynamic socio-economic conditions reinforce instability of the environment where Estonian local governments have to operate. All these national factors hamper local sustainability-raising processes.

The discussion above shows that the general conditions pertaining to the nature of SD policy and the Estonian national context do not facilitate implementation of the policy by local authorities. However, as we have seen, there are also quite considerable differences in the extent of sustainability of planning across the selected municipalities. This fact indicates that besides general conditions there are also local factors that influence policy implementation.

9.3. INFLUENCE OF INDEPENDENT VARIABLES ON POLICY IMPLEMENTATION

This section provides major findings on the research questions **2.b**: *How do characteristics of local governments influence the sustainability-raising in local spatial planning?* and **2.c**: *How does local governments' communication with local residents, business sector and other public institutions influence the sustainability-raising in local spatial planning?*

9.3.1. Factors pertaining to local government

Factors pertaining to LG were considered as the first independent variable, which comprised **institutional capacity of LG** for sustainability-raising in local spatial planning. I identified three dimensions of this concept: political, organizational and financial. The consideration of implementers' disposition to SD policy (which is policy cognition, direction of response and intensity of this response, as defined by Van Meter and Van Horn, 1975) was running throughout the analysis of all three dimensions.

Within the **political dimension** of institutional capacity the main attention is paid to the *extent of consensus or agreement* among local politicians on future development of the municipality. It became obvious that if politicians' opinions were fragmented, they were rather underpinned by politicians' vested interests or interests of small groups. This contradicts totally the core principle of SD, i.e. to ensure development that serves most general interests of the public at present and in the future. The evidence showed that Viimsi and Harku council had some fragmentation of opinions, and that some politicians there served personal interests rather than public ones. In the opposite case, when council manages to form a unified vision on spatial development, most council members are more concerned about the public good. In Saku and Rae council members achieved a considerable consensus on the vision of development. At the same time, Saku and Rae show how consensus depending on implementers' disposition can lead to completely opposite results. In Saku the majority agrees that development should be moderate following SD principles, whereas in Rae the majority of politicians support the rapid growth of population, which in reality is connected to little strategic planning. Rae politicians believe that such solution will help to improve financial capacity of the municipality, however, as we have seen, it led to less sustainable planning solutions. The reason for this is not a negative attitude to SD policy, but rather a lack of knowledge on it (i.e. policy cognition). This shows how disposition to policy may distort an initially positive aspect of capacity for policy implementation. Therefore, the main conclusion on the political dimension is that consensus on a development vision and political commitment to public interests contribute to sustainability-raising only in case politicians' disposition to the policy favors it.

The main aspect in the **organizational dimension** of institutional capacity is proved to be *leadership*. In each local authority members of municipal council form stable and knowledgeable leadership, but its capacities vary. The presence of a dedicated and enthusiastic leader with good knowledge on the SD principles is definitely observable in Saku LG in the person of a member of the municipal government. This leader can raise awareness on SD policy among colleagues, local politicians and population, and can also persuade politicians to adhere to it. In Rae and Harku leaders seem to have much lower knowledge on SD policy and/or not sufficient internal motivation to promote it. In Viimsi leadership is strong and knowledgeable, which gradually managed to develop high capacity for confronting local politicians' arbitrary decisions. However, the problem in Viimsi is that elaborated policy for spatial planning emerged too late, when the municipality was already overpopulated. Correlating the findings about the extent of sustainability and this factor, the conclusion is that a dedicated leader with good knowledge on the SD principles is extremely crucial for sustainability-raising at the local level. And we see again that disposition to SD policy, here particularly cognition of it, is decisive. Evidence showed that even a good leader can fail to promote sustainable development of settlement structure, if he/she lacks knowledge on operationalization of SD goals and their implication in spatial planning. This is how, for example, in Rae, even though LG has politicians dedicated to public interests, scattered low-density settlements are planned without attempts to prevent their effects on natural environment, on living conditions of their residents and on later irrational investments in infrastructure.

The second issue in the organizational dimension is *sufficiency and professionalism of staff*, i.e. planners. Even though, respondents complained that a lack of planners and a high personnel turnover rate reduced the efficiency of LG performance, it appeared that these factors did not heavily undermine the capacity of LG to incorporate SD principles into local spatial development policies. As we saw, Saku policy corresponded best to SD goals, whereas Saku LG had high turnover of staff and to some extent needed more personnel. The reason for this might be that regular planners do not deal so much with formulation of local policies but with their implementation. The most influential figures in policy formation occurred to be municipal government members mediating between local politicians and external planning specialists, who actually prepared policy documents. The influence of the latter has two sides. On one hand, consultancy companies were blamed to apply standard approaches and solutions for all

municipalities. On the other hand, external specialists definitely are valuable source of professional knowledge and SD principles, which contributes to organizational learning of LGs.

Due to the fact that LG officials in all municipalities were much more aware of SD principles, it occurred to be very important that *LG officials communicate this knowledge to politicians and manage to influence political decisions* to some extent. In this sense receptivity of council to expert proposals reinforces chances of increased sustainability in spatial planning. Saku council occurred to be more receptive to SD principles promoted by the leader, probably due to high share of educated people in the council, whose personal opinions were in line with SD. This example shows how two dimensions – political and organizational – work together and the result is dependent on their combination.

A very interesting finding concerns the **financial dimension** of institutional capacity. It is true that high financial capacity facilitates LGs in developing living environment of a good quality. This is definitely the case in Viimsi. However, it appeared that high financial capacity was not a necessary prerequisite of sustainability in local planning. Such conclusion is based on evidence from Saku municipality, where spatial development policy aims at a very sustainable settlement structure, whereas financial resources of Saku are the worst out of all investigated municipalities. At the same time, the study showed that the lack of municipal resources may also have a very negative impact on spatial planning. For example, Rae LG's own income was to a large extent achieved through sale of municipal property, which meant low stability of income. This fact motivated the LG to aim at the increase of stable municipal revenue (personal income taxes) and, thus, triggered massive and fast housing construction. In such case strategic planning recedes and development follows fragmented projects, as it actually happened in Rae in $\frac{3}{4}$ of all planning activity. The attitude to the financial scarcity is more crucial than the scarcity itself. Whereas Saku has chosen to use this drawback as a limitation for inflow of new residents, Rae has chosen a completely different path. This again demonstrates that disposition to SD policy may divert the initially expected effect of a certain dimension of institutional capacity.

Thus, one finding that ran throughout the discussion on all dimensions is that **disposition of implementers to the policy** may change the direction of influence of any dimension of institutional capacity on policy implementation.

9.3.2. Horizontal communication of local government

LG communication with local population: The empirical evidence showed that in the Estonian society people are still not used to participate actively in public policy-making and the greater motivator for participation is so called NIMBY attitude. Local authorities are also learning to establish a dialogue with civil society. This study confirms the findings of the European-wide research on sustainable cities stating that local governance effectiveness in Estonia is circumscribed by the Soviet legacy and that “local government is not yet practiced in how to communicate with its population” (Evans et al, 2005:75). Even though, all investigated LGs follow formal requirements for public engagement, the attempts to motivate and enable people to participate in policy formulation were observable only in Saku and to a lesser extent in Viimsi. The main effect of public participation in policy formulation is that it enables local authorities to plan spatial development according to wishes of local population. This increases satisfaction with living environment and place identity feeling among local residents. Moreover, increased public participation helps LGs to reconcile various interests and prevent serious conflicts. Therefore, increased public empowerment has the most direct positive effect on the social dimension of sustainable development.

LG communication with real estate developers: It is clear that, even though the private initiative is the main driver of development, without steering by local authorities it is likely to have adverse effects on living environment in the whole conurbation. Therefore, cooperation between LGs and developers is necessary in order to improve the quality of settlements being developed. All investigated LGs have embarked on some sort of PPP with real estate development companies. Whereas Harku, Rae and Viimsi rely on developers’ contributions mainly in technical infrastructure provision and in incorporation of public interests into plans developers prepare, Saku additionally to this also requires the private sector to participate in social infrastructure establishment. This shows that Saku is not so interested in the quantity of housing developments, but in their quality. This means that the LG is selective in what projects it allows. Such massive housing construction as it takes place in Rae and Harku without local social services is not thinkable in Saku. At the same time, the quality-orientation means lower income to the municipal budget, whereas in Harku, Rae and Viimsi the preconditions for its steady growth are created (increase of tax-payers). Of course, over time Rae and Harku under the pressure of population will

develop infrastructure in more compact new settlements where it is absent now; at the same time, more fragmented low-density neighbourhoods will probably remain without public services. But the main point here is that allowing constructing of housing first and thinking about developing infrastructure there several years later is not socially justifiable and cost-efficient.

The conclusion is that more selective LGs, prioritizing quality over quantity in development, are capable to base majority of housing projects on compromise-oriented PPP with developers. This ensures that housing projects are developed in parallel to infrastructure development even if LG lacks sufficient own resources for this. And in Estonian context with very liberal laws, it is essential that the local rules for real estate development and possibilities/necessity of PPP are made explicit and well-defined in local policy documents.

LG communication with County government and other local governments: Due to the extensive autonomy of local governments, county government has in many respects no authority to ensure implementation of integrated (cross-municipal) strategies for a balanced development in the whole conurbation. County government may contribute to rise of sustainability in spatial development in two ways. One is through county plans and strategies, which set frames for municipal master plans but provide some space for their elaboration and adjustment by LGs. County documents give a comprehensive vision of development covering the whole Tallinn conurbation area, which is a prerequisite of sustainable development. This part of CG influence has a rather institutional character. The second type of influence of CG has a voluntary character depending on the wish of CG and LGs. Namely, county government through various types of communication can raise awareness among LGs on sustainability issues and on their connection to the reality. The attitude and experiences of LGs varied in this respect. Harku and Rae have conflicts with Harju CG and are quite negatively disposed to it. However, Rae seems to be more ready for a dialogue and compromises than Harku. Saku and Viimsi, on the contrary, have good connections with CG officials and cooperate in policy formulation processes. In communication with each other LGs are still learning. New joint institutionalized initiatives show that LGs' cooperation is gradually increasing, however, local authorities' activities are still very much fragmented.

9.4. GENERAL CONCLUSIONS – INTERPLAY OF FACTORS

Combining the findings on dependent and independent variables figure 8.4 (page 140) is complemented here (see figure 9.1). It illustrates the correlation of the scoring of local influential factors and the extent of SD policy implementation. It is important to note that the assessment is done in relative terms, i.e. each aspect in a particular municipality is assessed in comparison to the value of this aspect in other municipalities. For example, ‘very good’ sustainability in Saku means that it is just better than in any other investigated municipality.

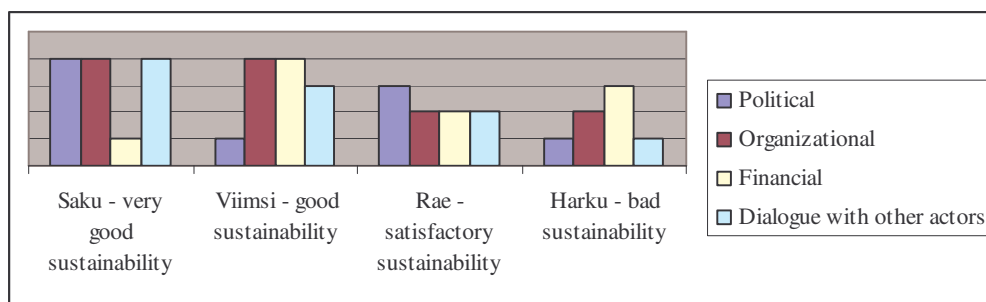


Figure 9.1: The extent of sustainability in spatial planning and the local factors that influence it

The analysis of factors showed that none of the influential factors taken separately can explain the quality of spatial development. What really defines the extent of sustainability is a certain constellation of factors, since they are mutually dependent and corroborative. Most importantly, knowledgeable and enthusiastic leaders, dedicated council receptive to knowledge-based proposals of officials can contribute to more sustainable approaches in spatial planning. Financial resources may play for or against SD depending on a combination of other factors. Good financial capacity may improve even more the capacity of LG for sustainability-raising, but it may also lead to unsustainable solutions in case of poor knowledge and/or serving political vested interests. Conversely, scarce finances do not necessarily undermine capacity of LG for sustainable development. Sustainability-raising may not be affected by scarce finances, if LG disposes them rationally and uses them as a basis for planning various spheres of development. the latter implies that good knowledge and dedicated and receptive political attitudes are in place.

Initially, every dimension of institutional capacity was given equal weight. The final conclusions show, however, that the financial dimension has less importance than the other two but may reinforce their influence. Therefore, it rather is a supplementary factor.

Communication of LGs with various actors and institutions has never the same effect on sustainability of spatial development. The effect always depends on the interests of an actor or group of actors and their ability to push their interests through. The more such interests comply with the public interest, the more it is probable that the result will be more sustainable. It is a crucial task of local authorities to include all interested parties into discussions, to weigh interests of all parties and try to reconcile them with each other and with more general interests of society. The more municipalities develop public-private partnerships in order to establish technical and social infrastructure serving residents of new housing estates, the more they raise the quality of new settlements and diminish car-dependency. This also helps to direct scarce financial resources of municipalities to other priority needs. Also those municipalities that are interested in cooperation with county government and other municipalities have more chances to make their policies in concert with parallel policies on a larger scale. This helps to avoid overlapping of public services and to ensure more efficient use of financial resources to achieve better results. This research shows that Saku LG that promotes extensive public participation and PPP and has also tight connections with CG, has developed most sustainable principles of spatial planning (see figure 9.1). At the same time, Harku LG that proved to be the least interested in residents' involvement and has succeeded in creation of good collaboration neither with developers nor with CG, developed the least sustainable planning principles. Rae and Viimsi municipalities occurred to be somewhere between these two extremes.

The discussion and conclusions presented above confirm both hypotheses set out in this thesis: ***Hypothesis 1:*** Local government has more chances to promote sustainable development in spatial planning if it has high institutional capacity, comprehensive understanding of and a positive attitude to sustainable development principles. ***Hypothesis 2:*** The more local government tries to involve various interested actors in spatial development policy elaboration and implementation and to reconcile their interests, the more sustainable the outcome of planning is likely to be.

Another interesting finding goes beyond independent variables and shows how more general factors affect those variables. A sober look at the reality suggests that the whole situation in housing development in Estonia, especially in municipalities under the growth pressure, is absolutely unfair. This issue is tightly connected to results of the land reform and the present legal system. The present distribution of landownership and the legal rules of development, prescribing

‘who does what’, placed local authorities in an extremely difficult position. Developers, on the contrary, are facilitated to get disproportionately high benefits out of development activity on their land. In most cases this undermines public interests. First, narrow profit-orientation hampers developers to create sustainable settlements, as thinking of developers never goes beyond the limits of their projects. Therefore, considerations of broad adverse impacts of projects are ignored. Secondly, LGs get additional financial and organizational burden with each new big housing project. This actually means that residents of a municipality have to pay through their taxes for sometimes irrational infrastructure establishment. Such a situation created as a result of major changes in institutional and political order may be called ‘a system failure’ and it needs correction at the national level. By now, however, LGs in order to ensure sustainable development have to make corrections at the local level. This research shows that LGs with very high institutional capacity are able to ensure sustainability in spatial development by producing highly elaborated policy documents that set strict rules uniformly applied for all actors. Besides this, LGs try to rectify the system failure by imposing particular types of partnership on the private sector. Thus, such local policies try to fill the gaps left in the national laws and institutional arrangement.

Finally it should also be stated that my findings are corroborated not only by a number of long interviews, but through a number of official documents. Nevertheless, I need to express humility on my conclusions: subjectivity is impossible to avoid. Clear opinions and strong personalities among interviewees may particularly influence conclusions. It is also quite clear that a young democracy as Estonian is in a constant and dynamic learning process. Even after I finished my investigation new plans and rules on spatial planning are being introduced in the four municipalities. This means that my conclusions are not definitive but just reflect the situation at the time of investigation.

9.5. LAST COMMENTS ON THEORY APPLICABILITY

Now turning back to the conceptual model of this research (also presented here in figure 9.2), I want to point out that all factors illustrated there occurred to be very relevant in order to understand the implementation gap at the local level. The model of Van Meter and Van Horn (1975) influenced to a large extent composing of the conceptual model of this study, however, it

did not help to unravel some very important aspects. Two major adjustments were needed to make the model suit this research purposes:

- 1) To emphasize impacts of the *national context* on policy implementation. This issue is almost ignored by Van Meter and Van Horn. Therefore, I turned to the theoretical perspectives of Thomas and Grindle (1990) in order to address this aspect more thoroughly.
- 2) Implementation depends on a policy type. Van Meter and Van Horn do refer to the amount of change policy requires, but the theoretical views on *policy content* of Wilson (1973, in Gustavsson, 1980), Thomas and Grindle (1990), Grindle (1980) appeared to be more useful to analyze features of the policy and their effects on policy implementation. Also Van Meter and Van Horn underplay the importance of *horizontal communication* in policy implementation. Depending on the type of policy horizontal communication may become a crucial factor. This is the case with SD policy, which explicitly positions local governance as a prerequisite of achievement of SD goals.

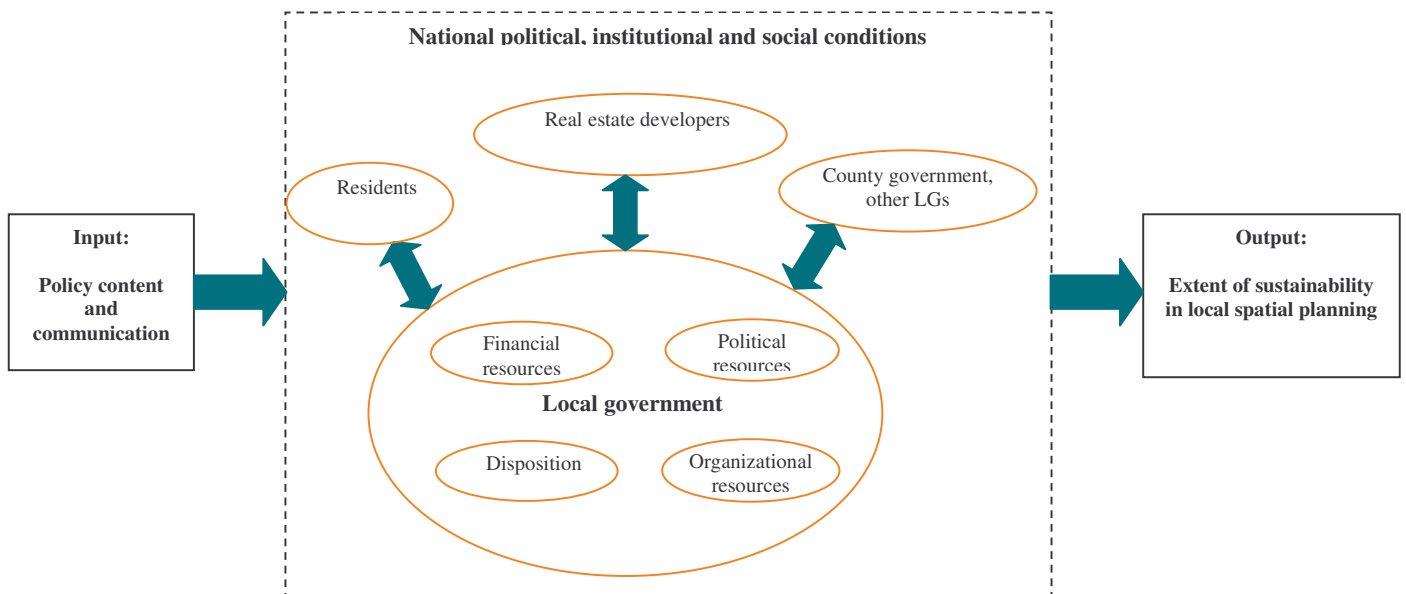


Figure 9.2: Conceptual model of this study

The model of Van Meter and Van Horn was useful as a framework, but proved not to accommodate some features that occurred to be crucial in a post-communist society and some particular features of the policy. This indicates that their model has a ‘regional bias’ and represents limitations in its applicability in various national contexts and for various policy types.

REFERENCES

Aalborg Charter (1994) Charter of European Cities & Towns towards Sustainability, approved by the participants at the European Conference on Sustainable Cities & Towns in Aalborg, Denmark on 27 May 1994

Ahas, R. and Leetmaa, K. (2005a) "Uusurbanismi ja kompaklinna kontseptsioonid säästva linnaplaneerimise lähtekohana" ("Concepts of Urbanism and a Compact City as a Basis for Sustainable Urban Development"). *Publicationes Instituti Geographici Universitatis Tartuensis* 99. Estonia, Tartu: Tartu Ülikooli geograafia instituut. pp 15–23

Ahas, R. and Leetmaa, K. (2005b) "The Urbanization of Tallinn". *Maja* 3/2005. Online: <http://www.solness.ee/majaeng/index.php?gid=44&id=596>

Ahas, R. and Silm, S. (2006) *Tallinna tagamaa uusasumite elanike ajalis-ruumiline analüüs (Analysis of space-time movement of residents of Tallinn hinterland new settlements)* unpublished report to Tallinn City Planning Department based on research by Tartu University Geography Institute, 2006

Ahas, R. et al (2006) "The Locations of New Settlements in Tallinn Metropolitan Area" in: Roose A. (ed) *Keskkonnasäästlik planeerimine ja ehitus 2 (Sustainable Spatial Planning and 2)*. *Publicationes Instituti Geographici Universitatis Tartuensis* 100. Estonia, Tartu: Tartu Ülikooli geograafia instituut,

Albre, N. (2005) *Nõukogudeaja (1944-1991) jäljed Eesti külas: kortermajade leviku ja asustuse analüüs. (Soviet time (1944-1991) footprints in Estonian village: an analysis of the spread of apartment houses and settlement)* Master thesis in human geography. Estonia, Tartu-Pärnu: Tartu University Geography Institute. Online: www.utlib.ee/ekollekt/diss/mag/2006/b17982005/albre.pdf

Anderberg, S., van Well, L and Ruotsalainen, A. (2005) *Sustainable Development - Lessons from Medium Sized Cities the Baltic Sea Region*. Danish Centre for Forest, Landscape and Planning, KVL. - 6 p. - ISBN: 87-7903-230-3.

(ANS) Academy of Natural Sciences (2000) "Loosing Ground? Part 1: The Dimensions of Urban Sprawl" in: *Know Your Environment. Publication of Environmental Associates Philadelphia*. US: Academy of Natural Sciences

Barton, H. (2000) "Conflicting Perceptions of Neighbourhood" in: Barton, H. (ed) *Sustainable Communities: The Potential for Eco-Neighbourhoods*. UK, London: Earthscan Publications. pp 3-18

Bechhofer, F. and Paterson, L. (2000) *Principles of Research Design in the Social Sciences*. UK, London: Routledge

Blackmore, J. (2004) "Researching Policy" in: Lewin, C. (ed) *Research Methods in the Social Sciences*. London: Sage Publications. pp 97-101

Bolton, N. and Leach, S. (2002) "Strategic Planning in Local Government: A Study of Organisational Impact and Effectiveness". *Local Government Studies*, Vol. 28, no.4. UK, London: Frank Cass. pp.1-21

Bradshaw, M. and Stenning, A. (eds) (2004) *East Central Europe and the Former Soviet Union: The Post-Socialist States*. UK, Harlow: Pearson Education Ltd

Breheny, M. (2004) "Sustainable Settlements and Jobs-Housing Balance" in: Richardson, H.W. and Bae C.C. (eds) *Urban Sprawl in Western Europe and the United States*. Aldershot: Ashgate Publishing, pp 11-35

Bruegmann, R. (2005) *Sprawl: A Compact History*. UK, London: The University of Chicago Press

Bryman, A. (1989) *Research Methods and Organizational Studies*. Contemporary social research series: 20. UK, London : Unwin Hyman

Carruthers, J.I. (2003) Growth at the fringe: The influence of political fragmentation in United States metropolitan areas. *Papers in Regional Science* 82, pp 475-499

(CEC) Commission of the European Communities (1990) Communication from the Commission to the Council and Parliament "Green Paper on Urban Environment". Brussels, 27 June 1990

(CEC) Commission of the European Communities (1998) Communication from the Commission "Sustainable Urban Development in the European Union: a Framework for Action". Brussels, 1998

(CEC) Commission of the European Communities (2001) Communication from the Commission "A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development" (Commission's proposal to the Gothenburg European Council). Brussels, 15 May 2001

(CEC) Commission of the European Communities (2005) Commission Staff Working Document. Annex to "The 2005 Review of the EU Sustainable Development Strategy: Stocktaking of Progress". Brussels, 9 Feb. 2005

(CEC) Commission of the European Communities (2006a) Communication from the Commission to the Council and the European Parliament on Thematic Strategy on the Urban Environment. Brussels, 11 Jan. 2006

(CEC) Commission of the European Communities (2006b) Commission staff working document. Annex to the Communication from the Commission to the Council and the European Parliament on Thematic Strategy on the Urban Environment: Impact Assessment. Brussels, 11 Jan. 2006

(CEMAT) European Conference of Ministers for Regional Planning (1983) Resolution no 2: European Regional/Spatial Planning Charter. Torremolinos (Spain) 19-20 May 1983

(CEU) Council of the European Union (2006) Renewed Sustainable Development Strategy. Brussels, 9 June 2006

Christie, I. and Warburton, D. (2001) *From Here to Sustainability: Politics of the Real World*. Earthscan

Creswell, J.W. (2003) *Research design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, CA: Sage

Danermark, B. (2002) *Explaining Society: Critical Realism in the Social Sciences*. Routledge.

Davies, B. and Ferlie, E. (1982) "Efficiency promoting innovation in social care: social service departments and the elderly", *Policy & Politics*, Vol. 10, no 2: pp 181–203

Downs, A. (1998) "How America's Cities are Growing: The Big Picture". *Brookings Review*, fall 1998, pp 9-12. On-line: www.brookings.edu/press/review/fa98/downs.pdf

(EC) European Commission (1997) *Compendium of European Spatial Planning Systems*. Online: <http://www.espon.org.uk/spatialplanning.htm>

(EC) European Commission (1999) *European Spatial Development Perspective: Towards Balanced and Sustainable Development of the Territory of the European Union*. Brussels, May 1999

(EEA) European Environment Agency (2006) *Urban sprawl in Europe: The ignored challenge*, Report No 10/2006, ISSN 1725-9177, Luxembourg: Office for Official Publications of the European Communities, 2006

Evans, A. (2004) *Economics and Land Use Planning*. UK: Blackwell Publishing Ltd

Evans, B. et al (2005) *Governing Sustainable Cities*. London: Earthscan Publications

Frey, H. (1999) *Designing the City: Towards a More Sustainable Urban Form*. London: E & FN Spon (Routledge)

Galtung, J. (1990) "Theory Formation in Social Research: A Plea for Pluralism" in: Øyen, E. (ed) *Comparative Methodology*. UK, London: Sage. pp 96-112

Goodall, B. (1987) *Dictionary of Human Geography*. London: Penguin Group

Grindle, M. (1980) "Policy Content and Context in Implementation" in: Grindle, M. (ed) *Politics and Policy Implementation in the Third World*. Princeton, New Jersey: Princeton University Press. pp 3-39.

Gustavsson, S. (1980) "Types of Policy and Types of Politics" *Scandinavian Political Studies* 3 (2) (123-143)

Hall P. and Pfeiffer U. (2000) *Urban Future 21: A Global Agenda for Twenty-First Century Cities*. UK, London: E & FN Spon

Hammersley, M. (1990) *Dilemma of Qualitative Method: Herbert Blumer and the Chicago Tradition*. USA, Florence: Routledge.

Hendrikson & Ko OÜ (2004) *Harjumaa uuselamuehituse ja uute elamualade juurdepääsu analüüs (The analysis of new housing construction and the access to the new housing areas in Harju County)*. Estonia, Tartu: Hendrikson & Ko OÜ on request of Harju County Government. On-line: <http://rg.harju.ee/failid/areng112.pdf>

Hill, M. and Hupe, P. (2005) *Implementing Public Policy: Governance in Theory and Practice*. London: Sage Publications

Howlett M. & Ramesh M. (2003) *Studying Public Policy: Policy Cycles and Policy Subsystems*. Canada: Oxford University Press

ICLEI (1996) *The Local Agenda Planning Guide*. Toronto: ICLEI

Ideon, A. (2006) *Eeslinnastumisest Tallinna linnastus: Hoonestusalade laienemine aastatel 1995-2005 (Suburbanization in Tallinn Conurbation: extension of construction areas in 1995-2005)*, Master thesis. Estonia: Tartu University, TUGI

(IEEP) Institute for European Environmental Policy (2005) “Mid-term assessment of the community framework for cooperation to promote sustainable urban development”, Final report, August 2005

Jenkins W.I. (1978) *Policy Analysis: A Political and Organizational Perspective*. UK, London: Martin Robertson

Jonas, A.E.G., While, A. and Gibbs, D.C. (2004) “State modernization and local strategic selectivity after Local Agenda 21: evidence from three northern English localities”, *Policy & Politics*, vol 32, no 2: 151-168

Jordan, A. (2001) “The European Union: An evolving system of multi-level governance ... or government”, *Policy & Politics*, vol 29, no 2: 193-208

Knox, P. and Pinch, S. (2006) *Urban Social Geography*. UK, London: Pearson Education

Kulu and Billari (2004) “Multilevel Analysis of Internal Migration in a Transitional Country: The Case of Estonia”. *Regional Studies*, Vol. 38.6, pp. 679–696, August 2004

Kährik, A. (2006) *Socio-spatial residential segregation in post-socialist cities: the case of Tallinn, Estonia*. The Doctoral Thesis. Estonia, Tartu: Tartu University Press

Kährik, A. and Tammaru, T. (forthcoming) “Suburbanisation and residential differentiation in the Tallinn metropolitan area”. *Urban Studies*.

Lambert, Ch. and Oatley, N. (2002) “Governance, Institutional Capacity and Planning for Growth” in: Cars, G., Healey, P., Madanipour, A., Magalhaes, C. (eds) *Urban Governance, Institutional Capacity and Social Milieux*. pp 125-141. Aldershot: Ashgate

Leetmaa, K. (2002) *Suvilapiirkonnad Tallinna regioonis (“Summerhouse areas in the Tallinn region”)*. Estonia, Tallinn: Harjumaavalitsus. On-line: <http://www.harju.ee/failid/areng002.pdf>

- Leetmaa, K. (2005) "Eeslinnastumine Tallinna Regioonis" ("Suburbanization in Tallinn Region") in: Kulu, H. & Tammaru, T. (eds) *Asustus ja Ränne Eestis: Uurimusi Ann Marksoo 75. Sünnipäevaks*. Estonia, Tartu: Tartu University Press
- Levitt, B. and March, J. G. (1988) "Organizational learning". *Annual Review of Sociology*, Vol. 14, 1988, pp. 319-340
- Lootsman, V. (2006) "Viimsi vald Harjumaa arengus" ("Viimsi rural municipality in Harju County development"). Speech at the Viimsi Development Conference 18.12.2006.
- Magalhaes, C., Healey, P., Madanipour, A. (2002) "Assessing Institutional Capacity for City Centre Regeneration: Newcastle's Grainger Town" in: Cars, G., Healey, P., Madanipour, A., Magalhaes, C. (eds) *Urban Governance, Institutional Capacity and Social Milieux*. pp 45-62. UK, Aldershot: Ashgate
- March, J.G. and Simon, H.A. (1958) *Organisations*. Graduate School of Industrial Administration, Carnegie Institute of Technology. New York.
- Martinson, L. (2005) *Mutual Benefit: Rethinking Social Inclusion*. Doctoral thesis, Sweden, Stockholm: Royal Institute of Technology
- Miller, D. (2004) "Local Innovations and Controlling Sprawl: Experiences with Several Approaches in the Seattle Urban Region" in: Richardson, H.W. and Bae C.C. (eds) *Urban Sprawl in Western Europe and the United States*. UK, Aldershot: Ashgate Publishing
- Moe, T.M. (1990) Political Institutions: The Neglected Side of the Story. *Journal of Law, Economics, and Organization*, Vol. 6, Special Issue: (Papers from the Organization of Political Institutions Conference, April 1990) pp 213-253
- (MoI) Ministry of the Interior (2005) *Local Government in Estonia*. Estonia, Tallinn: Ministry of the Interior.
- (MoI) Ministry of the Interior (2006) "Ruumiline Planeerimine" ("Spatial Planning"), Estonia. Online: www.sisemin.gov.ee/atp/failid/planeerimisalane_tegevus.rtf
- Noorkõiv, R. and Sepp, V. (2005) "On the sprawl of Tallinn into Viimsi rural municipality: challenges of suburbanization to a local government in the neighborhood of the capital city" in: *Cities and Rural Municipalities in Figures*. Estonia, Tallinn: Statistical Office of Estonia, pp 23-33
- Ojari, T (2002) "Viimsi-eri: Keskuse muutumised ajas" (Changes of Viimsi center). *Maja*, 4/2002. Online: http://www.arhitektuur.ee/maja/arhiiv/2002_4/eesti/viimsi.html
- Peters, B.G. and Pierre, J. (2001) Developments in intergovernmental relations: towards multi-level governance. *Policy & Politics*, vol 29 no 2: 131-5
- Pierre, J. and Peters, B.G. (2000) *Governance, Politics and the State*. UK, London: Macmillan Press

Poom, A. (2006) "The ecological footprint of the inhabitants of the new residential areas in Tallinn metropolitan area" in: Roose A. (ed) *Keskkonnasäästlik planeerimine ja ehitus 2 (Sustainable Spatial Planning and Construction 2)*. *Publicationes Instituti Geographici Universitatis Tartuensis 100*. Estonia, Tartu: Tartu Ülikooli geograafia instituut, pp 46-49

Pressman, J. and Wildavsky, A. (1973) *Implementation: How great expectations in Washington are dashed in Oakland*, Berkeley, CA: University of California Press.

Raagmaa, G. (forthcoming) "Planning Theories and Development Practices: Past dependencies contra new ideology. Impact of Planning for Sustainability of Housing" in: Holt-Jensen A. (ed) *Nordic-Baltic housing – new dimensions and dynamics*

Raagmaa, G. and Kroon, K. (2005) "The future of collective farms' built social infrastructure: Choosing between central place and network theories", *Geografiska Annaler*, Series B: Human Geography 87 (3), 205-224

Ragin, Ch.C. (1987) *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies*. UK, London: University of California Press

Roose, A. (2006) "Introduction to Urbanisation and the Built Environment" in: Roose A. (ed) *Keskkonnasäästlik planeerimine ja ehitus 2 (Sustainable Spatial Planning and Construction 2)*. *Publicationes Instituti Geographici Universitatis Tartuensis 100*. Estonia, Tartu: Tartu Ülikooli geograafia instituut, pp 6-9

Ruoppila, S. (2002) "Elamute arendusprojektid: paiknemine ja tingimused Tallinnas" (Location and Conditions of Residential Real Estate Development in Tallinn 1995-2002), *Maja*, 4/2002. Online: http://www.arhitektuur.ee/maja/arhiiv/2002_4/eesti/sampo.html

Ruoppila, S. (2006) *Residential Differentiation, Housing Policy and Urban Planning in the Transformation from State Socialism to a Market Economy: The Case of Tallinn*. Doctoral dissertation. Finland, Helsinki: Helsinki University of Technology, Center of Urban and Regional Studies Publications

Servinski, M., Karjus, A., Rõigas, A. (2005) "Distribution of population in Estonia" in: *Cities and Rural Municipalities in Figures*. Tallinn: Statistical Office of Estonia

Silverman, D. (2001). *Interpreting qualitative data: Methods for interpreting talk, text and interaction*. UK, London: Sage

(SOE) Statistical Office of Estonia (2002) *Eesti Regionaalareng 1995-2000 (Estonian Regional development 1995-2000)*. Estonia, Tallinn: Statistical Office of Estonia & Ministry of the Interior

Stenning, A. (2004) "Urban Change and the Localities" in: Bradshaw, M. and Stenning, A. (eds) (2004) *East Central Europe and the Former Soviet Union: The Post-Socialist States*. UK, Harlow: Pearson Education Ltd

Støa, E. (2005) "Housing in the Sustainable City". Keynote speech held at the ENHR conference in Reykjavik, June 2005. Unpublished document.

Tammaru, T. (2002) Tallinna linnastu rahvastiprognosis (Tallinn Metropolitan Area Population Prognosis). Estonia, Tallinn: Harju Maavalitsus. <http://www.harju.ee/failid/areng001.pdf>

Thomas, J.W. and Grindle, M.S. (1990) "After the decision: Implementing policy reforms in developing countries", *World Development*, Vol.18, No.8, pp. 1163-1181

Tosics, I. (2004) "European Urban Development: Sustainability and the Role of Housing", *Journal of Housing and the Built Environment*, Vol.19, No.1, pp. 67-90(24)

(UNCED) United Nations Conference on Environment and Development (1992) *Agenda 21*, Report of the United Nations Conference on Environment and Development, Rio de Janeiro

Van Meter, D. and Van Horn, C. (1975) "The Policy Implementation Process: A conceptual framework" in: *Administration and Society*. Vol.6 No.4, February 1975

(WCED) World Commission on Environment and Development (1987) *Our Common Future* (The Brundtland Report). UK, Oxford: Oxford University Press

Yin, R.K. (2003) *Case study research: Design and methods*. Thousand Oaks, CA: Sage

ESTONIAN LEGAL ACTS

www.legaltext.ee

(CRE) Constitution of the Republic of Estonia (1992)

Environmental Impact Assessment and Environmental Management System Act (2005)

Government of the Republic Act (1995)

Local Government Organization Act (1993)

Planning Act (2002)

Republic of Estonia Principles of Ownership Reform Act (1991)

WEBSITES

Estonian Construction Works Register website (2007) <http://www.ehr.ee>

(ELB) Estonian Land Board website (2007)
http://www.maaamet.ee/index.php?lang_id=1&page_id=147&menu_id=2

Encarta Dictionary (2007) <http://encarta.msn.com/encnet/features/dictionary/dictionaryhome.aspx>

EUROPA - the portal site of the European Union (2007)
http://ec.europa.eu/environment/land_use/index_en.htm

(GWA) Global Warming Art website (2007)
http://www.globalwarmingart.com/wiki/Greenhouse_Gases_Gallery

Harku Municipality website (2007) <http://www.harku.ee>

(MoF) Ministry of Finance (2007) <http://www.fin.ee>

Rae Municipality website (2007) <http://www.rae.ee>

Saku Municipality website (2007) <http://www.sakuvald.ee>

(SOE) Statistical Office of Estonia website (2007) <http://www.stat.ee>

Tallinn website (2006) <http://www.tallinn.ee>

(UNSDSD website) United Nations, Division for Sustainable Development website (2006)
<http://www.un.org/esa/desa/aboutus/dsd.html>

Union of Harju County Municipalities website (2007) <http://www.hol.ee/index.php>

Viimsi Municipality website (2007) <http://www.viimsi.ee>

Wikipedia Encyclopedia website (2007) <http://en.wikipedia.org>

[http://www.atlasgeo.net/fotw/misc/ee\(.gif](http://www.atlasgeo.net/fotw/misc/ee(.gif)

http://ec.europa.eu/environment/land_use/index_en.htm

ESTONIAN PLANNING-RELATED DOCUMENTS

National level

1. (MoE) Ministry of Environment (2000) Üleriigiline planeering "Eesti 2010" (Estonian National Spatial Plan). Tallinn

Harju County

- doc 1. Harju County Government letter no 2.1-13/903 from 11.02.2005
- doc 2. Harju County Plan (1999)
- doc 3. Harju County thematic plan "Environmental conditions steering settlement and land-use" (Asustust ja maakasutust suunavad keskkonnatingimused) adopted 11.03.2003
- doc 4. Harju County thematic plan "Harju County social infrastructure" (Maakonna sotsiaalne infrastruktuur) initiated 31 January 2005, in process

Harku Municipality

- doc 1. AF-ESTEAM (2002) Harku valla arengukava aastateks 2002-2012 (Harku Municipality development strategy 2002-2012)
- doc 2. Hendrikson & Ko (2002-2004) Harku valla Apametsa piirkonna üldplaneering (Harku Municipality Apametsa Region master plan). Tabasalu-Tallinn
- doc 3. Hendrikson & Ko (2006) Harku valla üldplaneeringu keskkonnamõju strateegilise hindamise programm (Harku Municipality master plan environmental impact assessment program). Tartu-Tabasalu
- doc 4. Harku council (2006) Ehitusmäärus nr 23 from 30.11.2006 (Harku Municipality Building regulation). Tabasalu

Saku Municipality

- doc 1. Maaplaneeringud (in preparation) Saku valla üldplaneering (Saku Municipality master plan)
- doc 2. Saku Council Decision of no.66 (8.06.2006) Saku valla üldplaneeringu lähteseisukohad (Planning principles for master plan of the Saku municipality)

Viimsi Municipality

- doc 1. Entec (2000) Viimsi valla mandriosa üldplaneering (Viimsi Municipality continental part master plan)

- doc 2. Entec (2005) Viimsi valla üldiste ehitustingimuste määramine. Elamuehituse põhimõtted. Viimsi valla mandriosa teemaplaneering (Thematic plan “General construction conditions in Viimsi municipality. Housing development principles”)
- doc 3. Entec (in preparation) Miljööväärtuslikud alad ja rohevõrgustik. Viimsi valla mandriosa teemaplaneering (Thematic plan “Valued milieu areas and greenery network”)
- doc 4. Geomeedia (2003) Viimsi valla rahvastikuprognosis 2020 (Viimsi Rural Municipality population prognosis by 2020). Tartu
- doc 5. Geomeedia (2005) Viimsi valla elukeskkonna uuring (Research on Living Environment in Viimsi Rural Municipality). Tartu. Online:
www.viimsivald.ee/failid/Viimsi_valla_elukeskkonna_uuring.pdf
- doc 6. Geomeedia (2006) Viimsi valla arengukava (Viimsi Municipality development strategy). Viimsi
- doc 7. Viimsi Council Ordinance no 12 (8.03.2005) Elamuehituse laienemise piiramine (Restriction of the housing construction extension)

Rae Municipality

- doc 1. HARED (in preparation) Rae valla haridusasutuste võrgu arengukava aastateks 2004-2010 (Rae Municipality development strategy of educational institutions network for 2004-2010). Jüri-Tallinn: MTÜ Koolitus- ja konsultatsioonikeskus HARED
- doc 2. Geomeedia (2005a) Rae valla arengukava aastani 2015 (Rae Municipality development strategy till 2015). Tallinn
- doc 3. Projektkeskus (2005) Rae valla asulate veevarustuse ja kanalisatsiooni arengukava (Development strategy for water supply and sewage systems in Rae Municipality settlements)
- doc 4. Urban Mark and Hendrikson & Ko (in preparation) Rae Valla üldplaneering aastani 2015. Planeerimisettepanek seletuskiri. (Rae Municipality Master Plan till 2015). Jüri-Tallinn
- doc 5. E-Konsult (2004) Rae valla keskkonnastrateegia (Rae Municipality environmental strategy). Tallinn

ANNEXES

ANNEX 1

SUSTAINABLE DEVELOPMENT STRATEGY OF THE EU (JUNE 2006)

Source: <http://register.consilium.europa.eu/pdf/en/06/st10/st10117.en06.pdf>

KEY OBJECTIVES

1) ENVIRONMENTAL PROTECTION

Safeguard the earth's capacity to support life in all its diversity, respect the limits of the planet's natural resources and ensure a high level of protection and improvement of the quality of the environment. Prevent and reduce environmental pollution and promote sustainable consumption and production to break the link between economic growth and environmental degradation.

2) SOCIAL EQUITY AND COHESION

Promote a democratic, socially inclusive, cohesive, healthy, safe and just society with respect for fundamental rights and cultural diversity that creates equal opportunities and combats discrimination in all its forms.

3) ECONOMIC PROSPERITY

Promote a prosperous, innovative, knowledge-rich, competitive and eco-efficient economy which provides high living standards and full and high-quality employment throughout the European Union.

4) MEETING OUR INTERNATIONAL RESPONSIBILITIES

Encourage the establishment and defend the stability of democratic institutions across the world, based on peace, security and freedom. Actively promote sustainable development worldwide and ensure that the European Union's internal and external policies are consistent with global sustainable development and its international commitments.

POLICY GUIDING PRINCIPLES

1) PROMOTION AND PROTECTION OF FUNDAMENTAL RIGHTS

Place human beings at the centre of the European Union's policies, by promoting fundamental rights, by combating all forms of discrimination and contributing to the reduction of poverty and the elimination of social exclusion worldwide.

2) SOLIDARITY WITHIN AND BETWEEN GENERATIONS

Address the needs of current generations without compromising the ability of future generations to meet their needs in the European Union and elsewhere.

3) OPEN AND DEMOCRATIC SOCIETY

Guarantee citizens' rights of access to information and ensure access to justice. Develop adequate consultation and participatory channels for all interested parties and associations.

4) INVOLVEMENT OF CITIZENS

Enhance the participation of citizens in decision-making. Promote education and public awareness of sustainable development. Inform citizens about their impact on the environment and their options for making more sustainable choices.

5) INVOLVEMENT OF BUSINESSES AND SOCIAL PARTNERS

Enhance the social dialogue, corporate social responsibility and private-public partnerships to foster cooperation and common responsibilities to achieve sustainable consumption and production.

6) POLICY COHERENCE AND GOVERNANCE

Promote coherence between all European Union policies and coherence between local, regional, national and global actions in order to enhance their contribution to sustainable development.

7) POLICY INTEGRATION

Promote integration of economic, social and environmental considerations so that they are coherent and mutually reinforce each other by making full use of instruments for better regulation, such as balanced impact assessment and stakeholder consultations.

8) USE BEST AVAILABLE KNOWLEDGE

Ensure that policies are developed, assessed and implemented on the basis of the best available knowledge and that they are economically sound and cost-effective.

9) PRECAUTIONARY PRINCIPLE

Where there is scientific uncertainty, implement evaluation procedures and take appropriate preventive action in order to avoid damage to human health or to the environment.

10) MAKE POLLUTERS PAY

Ensure that prices reflect the real costs to society of consumption and production activities and that polluters pay for the damage they cause to human health and the environment.

ANNEX 2

Main EU documents and initiatives promoting urban sustainability:

- **1994** – European Sustainable Cities and Towns Campaign promotes sustainable development at the local level and supports European local authorities in developing and implementing appropriate policies and actions through Local Agenda 21 and by strengthening partnership, mutual support and exchange of experiences.
- **1997** – Treaty of Amsterdam explicitly sets sustainable development as the overarching EU objective, calls for policy integration and combating social exclusion.
- **1997** – Commission Communication ‘Towards an Urban Agenda in the European Union’ (COM(1997)197) expressed an intention to examine EU policies in terms of their urban impact and launched a wide discussion on urban policies.
- **1997** – Kyoto Protocol for reduction and limitation of green-house related emissions.
- **1998** – Commission Communication ‘Sustainable urban development in the European Union: a framework for action’ (COM(1998)605) sets the priority areas of objectives guiding urban development.
- **1998 – 2002** – the 5th Framework Programme for Research, Technological Development and Demonstration Activities of the EU sets out a number of thematic programs relevant for urban policies, including the Key Action “The City of Tomorrow and Cultural Heritage”.
- **1999** – European Spatial Development Perspective sets a framework for spatial development at a wide scale covering the territory of the EU.
- **2001** (renewed in **2006**) – Commission Communication ‘A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development’ proposed the main objectives and policy measures to tackle unsustainable trends, emphasized an integrated and interactive approach to policy-making and introduced impact assessment procedures as an instrument for this.
- **2001** - Decision 1411/2001 established the Cooperation Framework to provide financial and technical support to networks of local authorities organized in at least four member states of the EU. The objective of the framework was to encourage the exchange and implementation of good practice in relation to: a) the implementation of EU environmental legislation at the local level; b) sustainable urban development; c) Local Agenda 21.
- **2002** – Sixth Environmental Action Programme (6EAP) updated the EU’s objectives in terms of environment; one of the programme’s aims was to ‘encourage sustainable urban development’.
- **2004** – Commission Communication ‘Towards a thematic strategy on the urban environment – a key mechanism for the implementation of the 6EAP’.
- **2006** – Commission Communication ‘Thematic Strategy on the Urban Environment’ aims to contribute to a better implementation of the existing EU environment policies at the local level by supporting and encouraging local authorities to adopt a more integrated approach to urban management.
- The EU also supports international networks working on sustainable urban development such as Eurocities, Council of European Municipalities and Regions (CEMR) and International Council for Local Environmental Initiatives (ICLEI)

ANNEX 4.1

List of respondents:

Code	Institution and field of occupation of respondent
	Harju County Government
HC1	Planning department deputy executive, a chief of regional development office
HC2	Planning department deputy executive, a chief of planning supervision office
	Viimsi rural municipality
V1	Deputy mayor of the municipality (spatial planning, construction, environmental and cultural heritage)
V2	Coordinator of the planning process
V3	Chairman of the land and planning committee in the municipal council
	Rae rural municipality
R1	Mayor of the municipality (governing, strategic planning of development of the municipality)
R2	Deputy mayor of the municipality (construction, environment, land management, public transport)
R3	Chairman of the municipal council; member of the environmental protection committee
	Saku rural municipality
S1	Member of the municipal government (strategic planning of spatial development)
S2	Economics manager (real estate management, public transport, administrative management)
S3	Chairman of the municipal council
	Harku rural municipality
H1	Deputy mayor of the municipality (spatial planning, architecture, construction supervision, land management, environmental protection, cultural heritage etc); previously mayor of the municipality
H2	Chief of economics and facility management department; previously the governor of the Harju County
H3	Architect
H4	Chairman of the municipal council
	Real estate developers
DR	Real estate development company (experience in Rae Municipality)
DH	Real estate development company (experience in Harku Municipality)
DV	Real estate development company (experience in Viimsi Municipality)
DS	Private person as a real estate developer (experience in Saku Municipality)
	Stockholm Environment Institute Tallinn office (think tank on sustainable development in Estonia)
TT	Project manager (sustainable development, environmental policy, law)

ANNEX 4.2

Questionnaire for members of municipal government:

- 1) What are the interests/preferences of the municipality?
- 2) How would you characterize the present policy of the development of living environment in the municipality?
 - “all private initiatives for real estate developed and constructions are good for the municipality and the local government should support them”
 - “the local government should allow only those development projects, which correspond to the present and future interests of the society, and not only to individualistic interests of a small group”
- 3) When the valid master plan was adopted? In what stage of preparation is the new one?
- 4) Are sustainable development principles considered to be important by the council in local spatial planning?
- 5) Are they really applied in local spatial planning (preparation of master plans, strategies)?
- 6) Do you feel that spatial development in the municipality is under control of the local government and follows the formal policy and agrees with public interests?

- 7) How much important are the national spatial plan and county plans in local spatial planning?
- 8) How much is the local government able to steer development under the existing conditions: responsibilities imposed on local governments by law and real estate developers' pressure and the demand on the housing market?
- 9) Do you think that the legal system in Estonia should be changed in order to improve the ability of public institutions to steer the development?
- 10) Are there major conflicts between the municipal government and the municipal council?
- 11) What constrains do you face in implementing your formal policy besides the named ones?
- 12) How do you estimate the human resources of the local government? Is there a need for more specialists?
- 13) How do you estimate the financial resources of the local government?
- 14) How do you estimate the institutional capacity of the local government?
- 15) Do you think that public and private interests are in conflict?
- 16) How would you describe the relationship of the local government with Harju County Government? Do you collaborate? Is there something that has to be changed?
- 17) Do you collaborate with other local governments? In what issues?
- 18) How much different interest groups (residents, developers, NGOs) influence local spatial planning?
- 19) Have the local government defined priority locations for new housing development?
- 20) Does the local government support development of housing priority areas according to the long-term development strategy? If there is no such practice, do you believe that it would help to steer development according to the strategy?

Additional questions:

- What are your obligations in this position?
- How long have you been working in this position?
- How old are you?
- What education do you have?
- What was your previous professional experience?

ANNEX 4.3

Questionnaire for members of municipal council:

- 1) How long are you a member of the municipal council?
- 2) To what committee do you belong and how long have you been its member?
- 3) Does your municipality have a Local Agenda 21?
- 4) Is there consensus between council members and local government officials over the vision of spatial development in the municipality?
- 5) Is there consensus among council members themselves?
- 6) How much, in your opinion, can members of the municipal government and specialists influence decisions of the municipal council in spatial planning?
- 7) How often do council members take decisions based on rather their vested interests than public interests (if they do so)?
- 8) Are the sustainable development principles considered to be important by the council in local spatial planning?
- 9) What is the your (council's) vision for locating new housing projects in the municipality:
 - **In relation to the existing settlements:** far away from them, or within them, or as a logical extension of them?
 - **In relation of the existing social infrastructure:** is it important that all bigger new neighbourhoods are build in places where necessary social infrastructure already exists, or if not

does local government allow new housing projects only in case there is possibility (financial, organizational) to establish needed social services?

- **In relation to access:** is it ensured that all new neighbourhoods have good road access (driving, cycling and pedestrian), sufficiency and convenience of public transport?
 - **In relation of jobs availability:** is it important that all new neighbourhoods have at least some job opportunities close to them?
 - **In relation to nature:** is it important that new housing projects would not be located in locations where they may harm valuable natural resources (environmental impact assessment)?
- 10) How do you estimate human resources of the local government and its institutional capacity?
 - 11) How much important do you consider the role of Harju County Government in development of municipal policies on spatial planning?
 - 12) Do you believe that the public sector is able to steer spatial development in the municipality?
 - 13) Do you think that local spatial development policy in the municipality had changed over the last 5 years?
 - 14) Does the state stimulate and support local governments to adhere to the sustainable development principles and promote them locally?
 - 15) Are you (as a representative of the local government) aware of and probably somehow involved in some of the international initiatives, networks promoting sustainable development?

Additional questions:

- How old are you?
- What education do you have?
- What is your occupation besides local politics?

ANNEX 4.4

Questionnaire for specialists in municipal administration:

On public transport:

- 1) How do you assess public transportation within the municipality and in connection with Tallinn?
- 2) How the public transport is financed?
- 3) What measures do you employ or intend to employ in order to facilitate and promote the use of public transport instead of private car?
- 4) What type of public transport do you prioritize?
- 5) Are there private bus lines in the municipality?
- 6) Do you have plans for opening new bus lines?

On architectural and environmental issues:

- 1) Does the local government take the initiative in order to start the development of housing in particular areas? examples
- 2) Who decides about initiation of new housing projects?
- 3) How often and in what cases the master plan is changed by detailed plans? Please describe the process.
- 4) How to you describe the local government's relationship with real estate developers? Do you have more prominent partners among them? Describe your cooperation with them.
- 5) Do you have conflicts with real estate developers? If yes, how do you overcome them?
- 6) Do you make an environment impact assessment for each bigger development project?

- 7) Were there cases when the local government did not allow initiating a proposed development project due to its irrelevance to the local spatial policy (in terms of location or architectural solution)?

Additional questions:

- What are your obligations in this position?
- How long have you been working in this position?
- How old are you?
- What education do you have?
- What was your previous professional experience?

ANNEX 4.5

Questionnaire for real estate developers:

With each developer the questions focused on one considerably big housing project that was developed by the developer in the suburban municipality.

- 1) Why have you chosen this location for your housing project?
- 2) How did you obtain this land – purchase (from a private owner?) or restitution?
- 3) Have you clarified from the local government about development perspectives of this land before you purchased it?
- 4) Have you done a preliminary analysis on availability of social infrastructure and potential environmental impacts of the development?
- 5) Please describe organization of the planning process with main focus on your communication with the public institutions.
- 6) How much time does the project planning process take starting from the first application and sketch submitting to the local government and finishing with the detailed plan adoption?
- 7) How did the local government react to your proposal to initiate a detailed plan for such project?
- 8) Have the local government made proposals to change the project?
- 9) Did your project mean that land use had to be changed in the master plan?
- 10) Did you have meetings and discussions on the project with the municipal government and specialists?
- 11) Do you know local government committees that were involved into the planning process?
- 12) Were there conflicts between you and the local government? How were they solved?
- 13) Have the local government proposed you to participate in the development of needed social infrastructure for new residents that your project was expected to bring to the municipality?
- 14) What constrains have you faced in realization of your project?
- 15) Was the detailed plan initiation decision made by the municipal council or government?
- 16) How do you estimate the role of real estate developers in spatial development?
- 17) Do you have other housing developments in Tallinn vicinity?
- 18) Have you ever applied to court if local government rejected initiation of a detailed plan for your project?

ANNEX 4.6

Questionnaire for the ‘key informant’ in Harju County Government (HC1):

After presenting the purpose of my research I asked:

- 1) What Tallinn suburban municipalities would you advise me to study in order to make an interesting comparison?

- 2) With what local governments do you have good collaboration in spatial planning issues?
- 3) What local governments had achieved good results in application of sustainable development in planning?
- 4) In what cases / how can Harju CG influence the course of planning of new housing areas?
- 5) What is CG supervision over plans?
- 6) How can CG influence local spatial planning besides official supervision?
- 7) Do you consider sustainable development principles important in development of housing structure?
- 8) How do you estimate the role of Harju County Government in suburbanization process?
- 9) What role does the national spatial plan have in local planning?
- 10) Can county government intervene into the planning process of a detailed plan, which is not a subject to the supervision by county governor according to the Planning Act⁶³?
- 11) How do you estimate the role of real estate developers in spatial development?
- 12) Do you think that Tallinn suburbanization is similar to ‘American urban sprawl’?
- 13) In your opinion, what are those factors that influence the quality of local spatial planning?
- 14) What documents do you advice me to review for my study?

Additional questions:

- What are your obligations in this position?
- How long have you been working in this position?
- How old are you?
- What education do you have?
- What was your previous professional experience?

ANNEX 4.7

Questionnaire for the second informant in Harju County Government (HC2):

- 1) What are decisive arguments when county government makes a decision about a detailed plan, which is the subject for supervision by county governor?
- 2) Is there established a special committee for that purpose?
- 3) What happens if county government does not confirm a detailed plan in the course of supervision? How often does it happen?
- 4) How does county government get an overview of what development is taking place in municipalities? The adopted detailed plans are sent in the land cadastre – is it sufficient?
- 5) What legal acts provide for the cases when detailed plan initiation and adoption is decided by municipal government or municipal council?
- 6) I have heard about such precedents: a real estate developer applied to court, when local government had not initiated the detailed plan according to the real estate developer’s wish. Who had won such cases?
- 7) In Rae Municipality there a state railway is planned (according to the county plan), however close to its location there are new settlements, which will be disturbed if the railway will be constructed and start to operate. Now Rae government wishes to relocate the railway line. What do you think about this case? Did the detailed plans of those new settlements come to Harju County Government for supervision? What was your disposition? What will happen with the planned railway?
- 8) What are the reasons, in your opinion, for delay in the adoption of the new master plan of Harku?
- 9) Harku government is anxious about the state plans to construct the highway (Tabasalu-Juulikuu) and to activate a sand-pit in the state forest in Harku municipality, because these objects would

⁶³ There are special cases defined by the Planning Act (2002) when detailed plans have to be supervised by the county governor.

harm new settlements. What is the state disposition? Were these objects initially in the Harju County plan?

- 10) If the state decides to activate the sand-pit, are then municipal council and government unable to influence the decision?
- 11) How do you estimate the role of real estate developers in spatial development?
- 12) How do you estimate the role of Harju County Government in suburbanization process?

Additional questions:

- What are your obligations in this position?
- How long have you been working in this position?
- How old are you?
- What education do you have?
- What was your previous professional experience?

ANNEX 4.8

Questionnaire for the think tank organization (SEIT) representative:

- 1) How do the EU policy documents that promote sustainable development in spatial planning influence the Estonian spatial development policy?
- 2) How much does the Estonian state follow them in comparison to other states?
- 3) What formal documents reflect the state spatial development policy?
- 4) Does the policy on urban development exist in Estonia? In what documents?
- 5) Does the state stimulate and support local governments to adhere to the sustainable development principles and promote them locally?
- 6) What Estonian state-level documents strongly influence (force) local governments to adhere to the principles of sustainable development in local planning?
- 7) In your opinion, is it the EU or the Estonian state that influences local governments in promotion of sustainable development more?
- 8) How do you assess achievements of local governments in Estonia in this field?
- 9) Does the state support and promote relevant research and pilot projects on sustainable development?
- 10) Are there other think tanks on this theme besides SEIT in Estonia?
- 11) Does the state support SEIT? How?
- 12) What do you think about the role of private consultancy companies on specializing in spatial planning and also sustainable development?

Additional questions:

- What are your research interests/fields?
- How long have you been working in SEIT?
- How old are you?
- What education do you have?
- What was your previous professional experience?

ANNEX 5

Figure 5.1: The number of life births and deaths and natural increase in Estonia in 1970-2005. *Source: SOE*

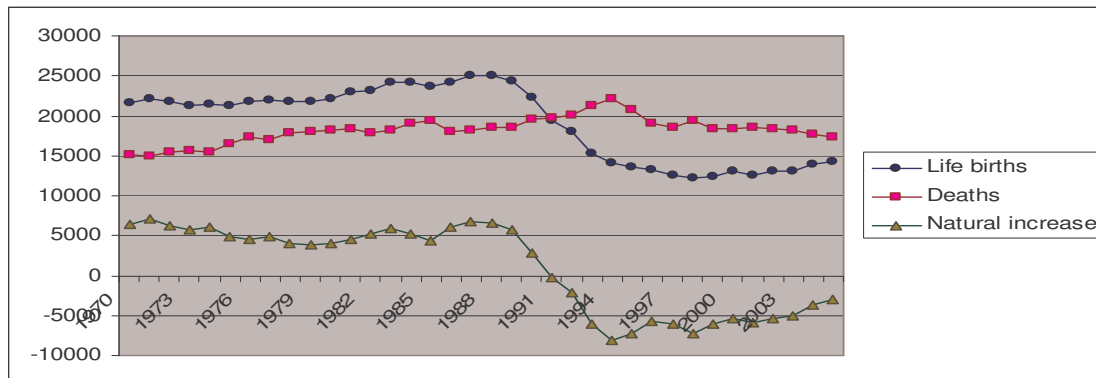
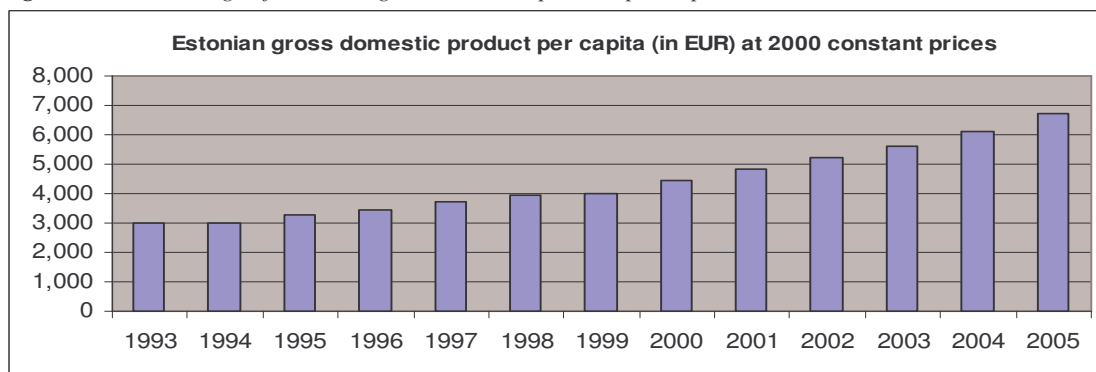


Figure 5.2: The change of Estonian gross domestic product per capita in 1993- 2005. *Source: SOE*



ANNEX 6

Figure 6.1: New housing construction in Estonia in the period from 1993 till 2006 with the share of housing construction in the Tallinn city and in Tallinn suburban area (Harju County without Tallinn). *Source: SOE*

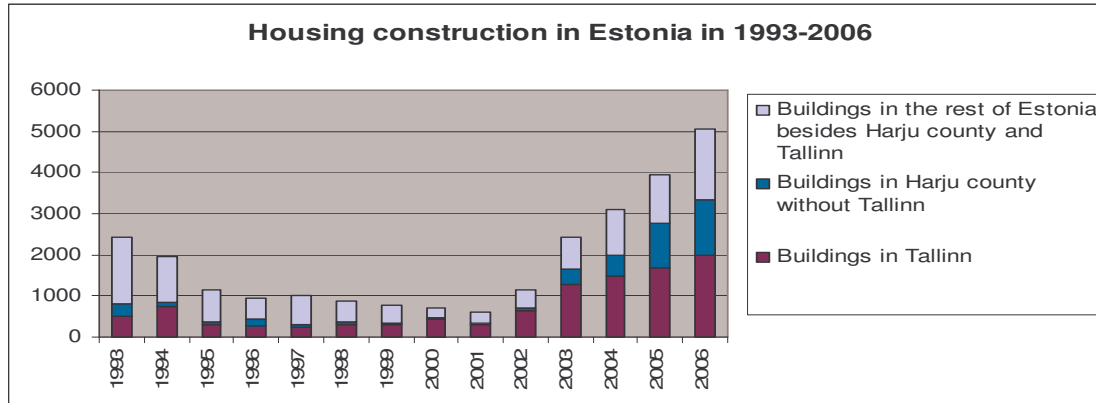


Figure 6.2: New housing construction in Harju County in the period from 1993 till 2005 compared to the change of population of the Tallinn city and Harju County during this period. *Source: SOE*

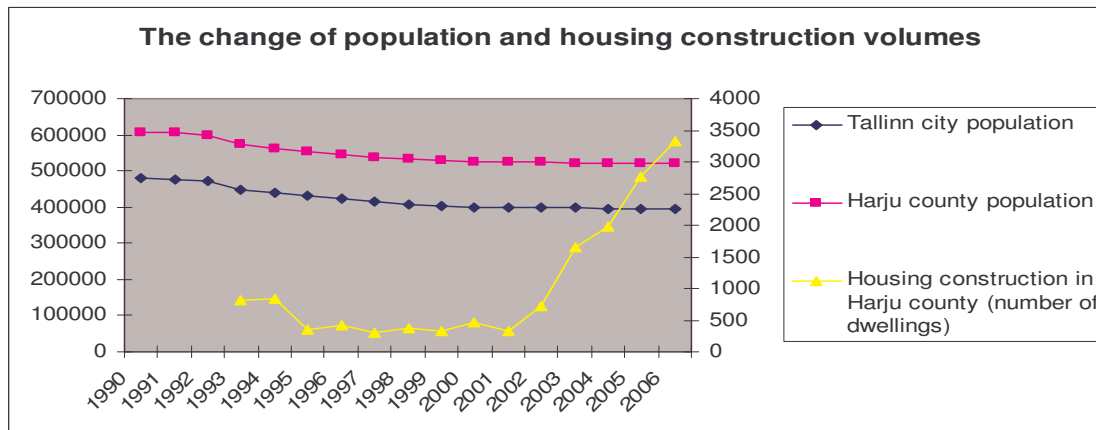


Figure 6.3: Partly unfinished new settlement in Viimsi municipality (author's photo)



ANNEX 7

Figure 7.1: Saku Municipality division into villages (küla) and boroughs (alevik) Source: www.sakuvald.ee



Figure 7.2: Viimsi Municipality division into villages (küla) and boroughs (alevik) Source: Entec, 2005

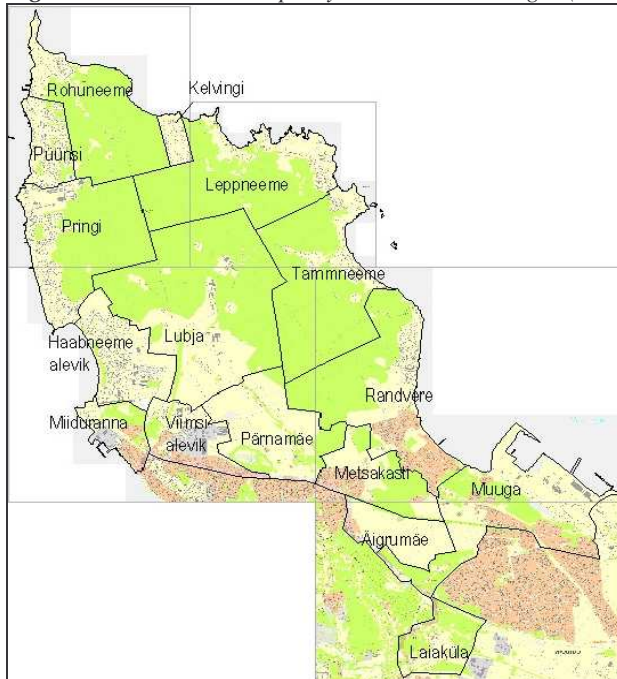


Figure 7.3: New settlement in Viimsi municipality. *Source:* from presentation of H.Oravas on Viimsi development conference in Dec.2006



Figure 7.4: Rae Municipality division into villages (külla) and boroughs (alevik) *Source:* www.rae.ee



Figure 7.5: New settlements in Rae municipality on former fields (author's photo)



Figure 7.6: Scattered small housing clusters in Harku municipality (author's photo)



Figure 7.7: Public bus routes and density of population on the Viimsi peninsula. Source: Geomeedia, 2006

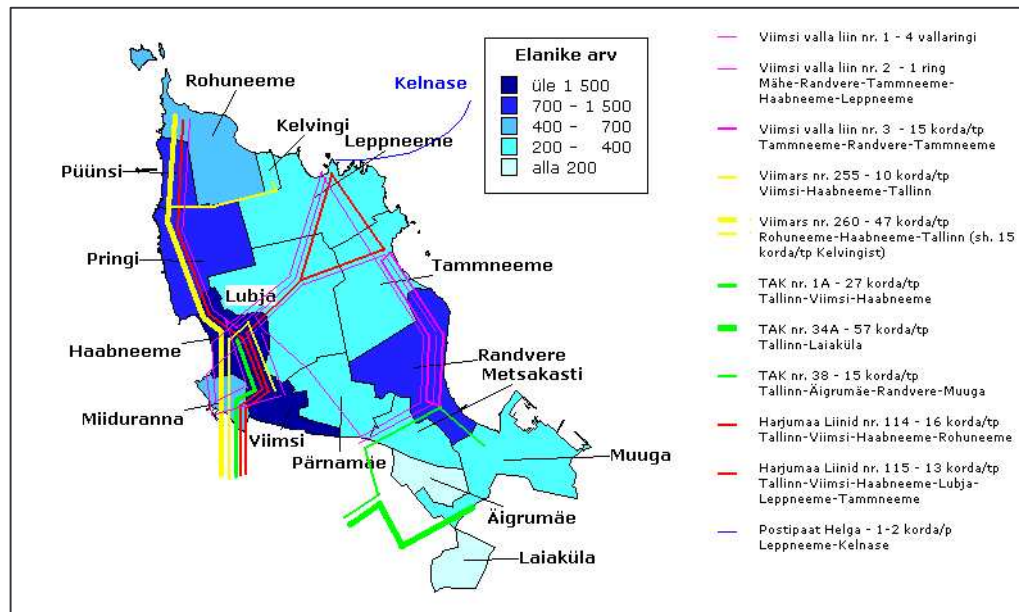


Figure 7.8: Roads and ports in the Viimsi peninsula. Source: Geomeedia, 2006

