

**State of the Art 2011**

# Sustainable Urban Development in Sweden





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# Foreword

Formas, the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning, has, on the Swedish Government's behalf, conducted a proactive survey of research in the field of sustainable urban development. This was undertaken in close collaboration with the other authorities entrusted with the remit, namely the National Board of Housing, Building and Planning, the National Heritage Board and the Swedish Museum of Architecture. The remit was to shed light on the social and cultural dimensions of sustainable urban development and its links with neighbouring research fields. The research overview was compiled, on Formas' behalf, by Consultant Lena From in the autumn of 2010.

The overview takes as its jumping-off point another research overview, *State of the Art: Sustainable Urban Development in Sweden*, which Formas commissioned from the same Consultant in 2004.\* The purpose, then as now, was to present a picture of Sweden's research landscape on the subject of sustainable urban development, but also a picture of the terms of research and what the research community and practitioners concerned regarded as urgent research needs. An additional purpose has been to learn from and follow up the findings presented in the 2004 report and by doing so to highlight the changes occurring in the field since then. As a result of the present overview concentrating on the social and cultural dimensions of sustainable urban development, the present overview has expanded into partly new fields of research, thereby shedding light on urban issues and the structural complexity of urban development.

This overview or state-of-the-art report is being submitted to the Swedish Government as an appendix to the final report on our remit, *Slutrapport av regeringsuppdraget till miljö- och kulturmyndigheter om samverkan för att främja en hållbar stadsutveckling (Ku2009/1620/KV)*, in the hope that it will prompt further discussion concerning future research and the terms of research into sustainable urban development.

Stockholm, 28th February 2011

**Rolf Annerberg**



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Director General  
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\*) *State of the Art: Sustainable Urban Development in Sweden* (Stockholm 2005) p. 70.

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# Sustainable urban development – research needs for the future

This report sets out to answer three questions. What are the biggest requirements for future research into sustainable urban development? What makes them the biggest requirements? How can these requirements be met in the short and long term?

The answers are based on input data compiled by Formas in collaboration with the National Board of Housing, Building and Planning, the National Heritage Board and the Swedish Museum of Architecture and are related to the research needs made clear in 2004 through the Formas report *State of the Art: Sustainable Urban Development in Sweden*<sup>1</sup>. In this way the research fields considered most urgent by the research community today can be viewed in relation to needs as perceived about ten years ago and the research which has been started since then. The latter, once the findings have been made clear, may come to influence the research requirements of the future.

A presentation and summary of the input material is followed by a summary of the research requirements deemed most pressing today, and the reasons for their being so regarded, together with suggestions as to how existing research needs can be provided for in the short and long term. The chapter ends with a summary.

## **Input material**

In keeping with the Government's remit, the overview commissioned by Formas for the present survey gives priority to social and cultural aspects in the field of sustainable urban development. The input material comprises printed publications, unpublished but specially commissioned source texts and notes from conferences and seminars shedding light on the

<sup>1</sup> *Sustainable Urban Development in Sweden – State of the Art*, Formas Report 3:2005, Stockholm 2005.

state of research from a variety of angles. Current viewpoints in these connections have been presented by both researchers and practitioners.

### Published and unpublished sources

The following published sources have been of special importance in preparing this state-of-the-art review:

- The Formas report *Den uthålliga staden – en kunskapsöversikt över ett sexårigt forsknings- och utvecklingsprogram*<sup>2</sup>. That report presents the outcome of work in five multidisciplinary research environments relating to sustainable urban development. The sustainability aspects of the projects are viewed in relation, for example, to urban structures, local adjustment processes, the potential of municipal planning, and social acceptance, meaning people's willingness to change their lifestyle for the sake of sustainable urban development. The conclusions presented include the importance of a holistic approach: addressing the environmental, the economic and the social aspects of urban development one by one is not enough: everything centres on the interaction between these dimensions, the wholeness. The contextual dependence of the sustainability concept is similarly highlighted: the sustainable option is something which has to be clarified locally in each individual situation.<sup>3</sup>
- The report by the National Board of Housing, Building and Planning, *Socialt hållbar stadsutveckling – en kunskapsöversikt*, especially App. 1, entitled (in Swedish) "Housing segregation – causes and mechanisms; A review of current research" (hereinafter referred to as the Boverket report).<sup>4</sup> That report focuses on the socio-economic aspects of sustainable urban development and among other things includes a thorough review of policy initiatives hitherto for counteracting ethnic and social segregation in the housing sector. The current situation is described and important gaps in our knowledge mapped in the concise but thorough state-of-the-art report on segregation research in Sweden, included in the appendix together with international vistas.

<sup>2</sup> Lindgren, Katarina: *Den uthålliga staden – en kunskapsöversikt över ett sexårigt forsknings- och utvecklingsprogram*, Formas Rapport 1:2007, Stockholm 2007.

<sup>3</sup> Lindgren, pp. 9f.

<sup>4</sup> *Socialt hållbar stadsutveckling – en kunskapsöversikt*, Boverket, dnr: 2011-4094/2009, Karlskrona 2010. *Socialt hållbar stadsutveckling*, Bilaga 1: Lilja, Elisabeth & Perner, Mats: Boendesegregation – orsaker och mekanismer, Karlskrona 2010.

Knowledge gaps to which attention is drawn include the lack of research-based knowledge concerning the link between segregation and the physical design of the urban space, as well as the virtual absence in Sweden of research into the deeper motives affecting relocation and choice of home, whereas migratory movements themselves, on the other hand, are relatively well described.<sup>5</sup>

- *The suburb – 40 years of initiatives and development (in Swedish)*, in the series of publication digests issued by the Arkus research foundation.<sup>6</sup> That report is an in-depth presentation of two phases in the development and transformation of the Swedish suburb: the period between 1960 and 1990, when most of the in-migrants came from the Swedish countryside and Sweden's northerly neighbours, and the period from 1990 to the present day, during which, for various reasons, certain suburbs have come to be wholly dominated by a homogeneous white middle class while others have been emptied of ethnic Swedes and instead come to be dominated by refugees and immigrants from a geographically global catchment area. Here, as in the Boverket report, the conclusion reached is that segregation has persisted in spite of extensive, politically controlled community initiatives, and attention is drawn to gaps in our knowledge concerning the connection between segregation and urban space.<sup>7</sup> Research-based knowledge concerning the social implications of suburban change, e.g. as a result of demolitions, is practically non-existent.<sup>8</sup>
- The evaluation *Mobilising Swedish Social Science Research on Sustainability – an Evaluation of Swedish Social Science Research on Sustainability* (MSSS), produced jointly by the Swedish Energy Agency, Mistra (the Foundation for Strategic Environmental Research), the Environmental Protection Agency, Riksbankens Jubileumsfond (an independent foundation with the goal of promoting and supporting research in the Humanities and Social Sciences), the Swedish Research Council and Formas.<sup>9</sup>

<sup>5</sup> *Socialt hållbar stadsutveckling* p. 10, Lilja & Perner, pp. 5–6, 11.

<sup>6</sup> Olsson, Sören & Törnquist, Anders: *Förorten insatser och utveckling under 40 år*, Stockholm 2009.

<sup>7</sup> Lilja & Perner, p. 44.

<sup>8</sup> Olsson & Törnquist pp. 6–7, 32–33. The Boverket report quotes the urban centre renewals of the 1960s and 1970s as cases in point. Lilja & Perner p. 41.

<sup>9</sup> *Mobilising Swedish Social Science Research on Sustainability – an Evaluation of Swedish Social Science Research on Sustainability*, R3:2010, Stockholm 2010 (MSSS).

The evaluation of Swedish social science research took place under the supervision of an international panel of experts. The report maps the functional and dysfunctional aspects of existing conditions, with special emphasis on sustainability research and its funding prospects. In particular, the report stresses that the paradigm of natural sciences governs the allocation of research funding and that this has a bearing on the kind of research that can be pursued. The same is remarked concerning the fact of politics, not the research community – both in Sweden and in Europe generally – deciding the agenda for which research is deemed necessary.<sup>10</sup>

### Bespoke texts

Source texts, unpublished but of importance in the report's preparation and specially commissioned for the purpose, have been written by active researchers who in various ways are working with sustainable urban development. Future research needs are articulated in the texts by specialist expertise in the fields of systems ecology, sociology, ethnology, archaeology, museology, green space management, the history of science and technology, urban development and architecture.<sup>11</sup> Two

<sup>10</sup> MSSS, pp. 31ff.

<sup>11</sup> A number of researchers were commissioned by Formas to codify current research needs with a view to sustainable urban development and with reference to their own specialist qualifications, namely: Sara Borgström, systems ecologist, Stockholm university; Anders Gullberg, sociologist, Stockholm University and Professor in the History of Science and Technology, Royal Institute of Technology; Björn Magnusson Staaf, archaeologist and museologist, Lund University; Birgitta Svensson, ethnologist, Stockholm University, and Nordiska museet (the Museum of Cultural History). In addition, researchers and practitioners on the drafting committee for Formas' announcement of *Samordnad Stadsutveckling* (2010) tendered, in the course of their drafting work, strategic viewpoints concerning the announcement as such and concerning the quality of the applications, relating these to their specialist knowledge in the field: Åsa Dahlin, architect, National Heritage Board; Märten Dunér, architect, the National Board of Housing, Building and Planning and the Blekinge Institute of Technology; Kerstin Gustafsson, Director of Public Works, City of Malmö; Cecil C. Konijnendijk, Center for Forest, Landscape and Planning, Copenhagen University, Denmark; Michael Landzelius, Department of Conservation, Gothenburg University; Audun Sandberg, sociologist, Bodø University College, Norway, and Arvid Strand, Transportekonomisk Institut, Norway. Their partly divergent views notwithstanding, their texts will hereinafter be footnoted as the Evaluation panel. For the announcement, see: *Samordnad stadsutveckling – en förutsättning för hållbarhet*. Forskningsrådet Formas, Energimyndigheten, Naturvårdsverket, Riksantikvarieämbetet, och Vägverket/Banverket (Trafikverket) gemensamma utlysning av medel för forsknings- och utvecklingsprojekt 2010. [http://www.formas.se/formas\\_templates/Page\\_\\_\\_\\_5688.aspx](http://www.formas.se/formas_templates/Page____5688.aspx), accessible 17th January 2011.

of the researcher texts also include state-of-the-art conspectuses concerning, respectively, social and cultural aspects of sustainable urban development and Swedish urban ecology research.<sup>12</sup>

## Other input material

*Hållbar stadsutveckling – en kritisk analys av forskningsbehoven* (“Sustainable urban development – a critical analysis of research needs”) provided the theme for a whole-day discussion at a seminar on 4th May 2010 at the Swedish Museum of Architecture, Stockholm. The notes from those discussions are therefore a vital part of the input data, as is the discussion paper compiled in preparation for the seminar.<sup>13</sup>

For the 2010 Vadstena Forum, a number of researchers and specialist writers were invited to describe the sustainable city in their several perspectives. Those texts provided a general frame of reference and in part served as material for comparison regarding the general state of the art.<sup>14</sup> The same goes for the notes from the group discussions which took place as part of the two-day conference *Forum för miljöforskning* (“Forum for environmental research”) 2010.<sup>15</sup>

“The Architectural Research Programme of the Swedish Association of Architects” has been an important source for analysing current research needs, and a memorandum, “Overview of sustainable urban development in Sweden,

<sup>12</sup> Svensson, Birgitta: *UTKAST till Kunskapsöversikt över forskningen och forskningsbehovet kring sociala och kulturella aspekter av hållbar stadsutveckling*, 15th October 2010; Borgström, Sara: *Kunskapsammanställning: Svensk forskning inom Urban Ekologi* 2010, 13th November 2010.

<sup>13</sup> Johansson, Anders Johansson & Mattsson, Helena, Testbedstudio Architects: *Förberedande rapport för Formas forskningsstrategi för hållbar stadsutveckling: Översiktlig sammanställning och analys av kunskapsläget och kunskapsbehoven*, 17th May 2010. This report is based on over 20 writings and reports in the field of sustainable urban development. It leans particularly heavily on the following three publications: From 2004; Nolmark, Henrik: *Re-thinking Sustainable Urban Development in an Era of Globalisation, Resource Constraints and Climate Change; The Mistra Difference*, November 2007, and *Urban development – Nordic strengths and challenges under the heading of a new global agenda*, NordForsk Policy Briefs 2007-3, Oslo 2007.

<sup>14</sup> The texts are published in Graninger, Göran & Knuthammar, Christer (editors): *Makten över rummet: Tankar om den hållbara staden*, Linköping 2010, <http://liu.diva-portal.org/smash/record.jsf?pid=diva2:369824>, accessible 29th January 2011.

<sup>15</sup> *Forum för miljöforskning 2010* – a conference on sustainable cities arranged by the Governmental Committee for Sustainable Cities, Formas, the Swedish Environmental Protection Agency and the Foundation for Strategic Environmental Research, Uppsala 9th–10th February 2010.



1998-2008”, compiled by the same organisation, has provided a general frame of reference.<sup>16</sup>

Formas’ and VINNOVA’s (Swedish Governmental Agency for Innovation Systems) “Research strategy for environmental technology” furnished comparative data for broadening the Swedish perspectives. Environmental technology is there defined as comprising “products, systems, processes and services presenting clear environmental advantages in relation to existing or alternative solutions, viewed in a lifecycle perspective.”<sup>17</sup>

NordForsk’s (an organisation under the Nordic Council of Ministers for Nordic research and co-operation) *Urban development – Nordic strengths and challenges under the heading of a new global agenda* was used to obtain a Nordic context.<sup>18</sup>

<sup>16</sup> *Sveriges Arkitekters program för arkitekturforskning*, Stockholm 2010, accessible 17th January 2010 at <http://www.arkitekt.se/s33605/f5971>; Sällström, Pehr Mikael: *Översikt hållbar stadsutveckling i Sverige 1998–2008*, PM 090129, Sveriges Arkitekter (the Swedish Association of Architects).

<sup>17</sup> *Forskningsstrategi för miljöteknik; Redovisning av regeringsuppdrag till Formas och VINNOVA*, Rapport 3:2008, Stockholm 2008, p. 20.

<sup>18</sup> *Urban development – Nordic strengths and challenges under the heading of a new global agenda*, NordForsk Policy Briefs 2007-3, Oslo 2007.



# Future research needs – an introduction

Formas' *State of the Art – Sustainable Urban Development in Sweden* (2005) defined a number of gaps in our knowledge, of which the following were judged greatest: lack of a holistic view and deficient problematisation of the sustainability concept, resulting in an obfuscation of hierarchies and power relations, e.g. between economic, ecological, social and cultural sustainability, and between town and country.

Attention was also drawn to the need for long-termism, the necessity of making it possible to plug the knowledge gaps in intradisciplinary research, and the need for interdisciplinary research and for research projects involving both theorists and practitioners. Finally the importance was underscored of implementing knowledge and research concerning the mechanisms of knowledge transfer.<sup>19</sup>

The focus of attention at that time was on research into sustainable urban development in a wide perspective. The input material for the present state-of-the-art report, focusing on social and cultural sustainability, equivocally confirms the persistence, and in certain cases the aggravation, of the knowledge gaps defined previously.

The input material has been compiled for the specific purpose of clarifying the present knowledge gaps in sustainable urban research, with special reference to social and cultural sustainability aspects. Accordingly, the advances achieved between 2004 and 2010 – a very short time span for research in social sciences and the humanities – will not be presented here, but a number of significant changes will be briefly passed in review.

The research field of socially sustainable urban development has been strengthened.<sup>20</sup> Among other things, research into

<sup>19</sup> From, pp. 46–49.

<sup>20</sup> Evaluation panel, *MSSS* pp. 15, 20, BS 19, Gullberg, Anders: *Hållbar stadsutveckling – underlag till Formas arbete med regeringsuppdraget till miljö och kulturmyndigheter*, 2010-08-30, p. 5.

processes of change, power relations and conflicts of interest has been intensified.<sup>21</sup> Sweden now has cross-disciplinary research environments for socially sustainable urban development in Uppsala/Gävle, Stockholm, Malmö, Örebro and Göteborg. Research in individual subjects within this field also takes place elsewhere, e.g. in Linköping.<sup>22</sup> Concrete applied research has been at the centre of attention so far during this intensification phase and has been important, but the research community takes the view that it now needs to be supplemented, partly by further basic research, so as to give sustainable urban development research projects a larger and wider corpus of material to build on, and also by a more reflective approach within the in-depth research now being conducted within the field of sustainable urban development.<sup>23</sup> A great deal of research still disregards the social and political complexity of urban living. If research does not problematise, for example, the way in which gender, class and ethnicity divide the city, it will merely confirm the prevailing social order.<sup>24</sup>

Research has been started into certain cultural aspects of the sustainability concept, e.g. at the Centre for Municipality Studies in Linköping, which is addressing cultural infrastructure.<sup>25</sup> But this research is an exception. The input material shows cultural science research with a sustainability perspective to be essentially lacking and more or less a blank space on the map of research.

The biggest change is observable in research focusing on climate and energy issues, ecosystem services and environmental economics, and it is here that funding support has grown fastest in the past ten years. The research environments at the Stockholm Resilience Center, Stockholm University, and the Graduate School for Energy in the Royal Institute of Technology (KTH) Department of Energy Technology, Stockholm, are partly to be viewed in the light of this increased commitment, which in funding terms has been a good deal greater than for other research fields relating to sustainability. Both are today regarded by international expertise as exemplary in their deliberately interdisciplinary approach.<sup>26</sup> The

<sup>21</sup> Svensson, p. 7.

<sup>22</sup> Svensson, p. 2.

<sup>23</sup> Listerborn, Carina: *Formas; Identifierade forskningsområden som behöver stärkas*, 14th June 2010.

<sup>24</sup> Svensson, p. 3.

<sup>25</sup> Svensson, p. 7.

<sup>26</sup> *MSSS*, p. 24.

Stockholm Resilience Center, founded in 2007, researches, for example, the ecological potential of golf courses and social networks in relation to the initiation and management of urban green spaces. Several projects in the KTH School of Architecture have developed methods for measuring and planning the city's green spaces. These include, for example, sociotope mapping, which means characterising the city's green spaces by means of user surveys, according to how they are used. The way in which urban nature contributes to residents' health is today a rapidly expanding research field. A number of research sites in Sweden are at present rehabilitation gardens for studying the importance of nature and nurture in connection with recovery from stress reactions, as well as the respective outdoor environments of children and seniors.<sup>27</sup>

Whatever the approach or emphasis, there is consensus among researchers that the most fundamental conceptual issues in the field of sustainable urban development as a whole are still awaiting investigation:

- What do we mean by “sustainability”?
- What do we mean by “city”?

Just as these questions in a research perspective have to be addressed locally and *ad hoc* so as not to lose their bearing, so the question of which research needs are greatest has to be narrowed down and concretised for each individual discipline. International and Swedish researchers are with one voice calling for a greater global awareness in the formulation of research projects by Swedish researchers. Within the Swedish research community there is at the same time a massive consensus on the need for more researched knowledge of conditions in Sweden in order for Swedish examples to be relevantly relatable to a wider, global context, both by Swedish and international research and by policy-making and the practitioners who are to use research findings and translate them into practice.

<sup>27</sup> Borgström, pp. 7f.



# The sustainability concept – a matter of definition

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

This oft-quoted conclusion from the Bruntland Report (1987) established the concept of “sustainable development”, which in turn underlies the concept of “sustainable urban development”.<sup>28</sup> As a political thought model it is often illustrated by means of three pillars – for economic, ecological and social sustainability. All three pillars are equally vital for the viability of the sustainable society or, by implication, the sustainable city.<sup>29</sup>

Both the Swedish and the international research communities have perceived the rhetorical usefulness of these concepts in politics, partly as a means of mobilising people. Similarly, there is agreement on their uselessness to research unless they are narrowed down locally and with reference to each individual situation.<sup>30</sup>

The six-year-long, broad-based research project entitled (in Swedish) The Sustainable City, which ended in 2007, also confirms the necessity of contextualising the sustainability concepts.<sup>31</sup> Failing this, they are liable to be reduced to mere value terms, of limited service to either researchers, practitioners or decision-makers.<sup>32</sup>

This lack of contextualisation can help to account for the persistent over-exposure, in ongoing development, of global,

<sup>28</sup> Officially, *Our Common Future*, published by the United Nations World Commission on Environment and Development (WCED) in 1987.

<sup>29</sup> From, pp. 7, 9.

<sup>30</sup> Evaluation panel, Gullberg p. 4, Johansson & Mattsson, pp. 30f, Lindgren p. 32, Listerborn, MSSS p. 35, Svensson pp.16f, Urban Development... pp. 46f.

<sup>31</sup> Lindgren pp. 9–11, 13, 21, 67f.

<sup>32</sup> Evaluation panel.

regional and local resources, in spite of both legislation and policy documents the world over having to a great extent assimilated the sustainability mentality. The progress made, for example, with regard to more efficient resource utilisation has hitherto been neutralised by a consumption growth of equal if not greater magnitude.<sup>33</sup>

### **Holistic view called for**

The cementation by political sustainability concepts of various organisational structures, e.g. for ecological, social and technical sustainability, nowadays often makes them so enduring that they do more to impede than underpin (urban) development.<sup>34</sup> Retaining these sustainability concepts or endeavouring to formulate special new ones for the various dimensions does not improve analyses of the nature of sustainable urban development.<sup>35</sup> A holistic view is needed. It is

<sup>33</sup> Gullberg, p. 4.

<sup>34</sup> Lindgren, p. 17.

<sup>35</sup> Gullberg, p. 9.



not enough for the environmental, economic, social and cultural aspects of urban development to be separately treated, because everything turns on the interaction between these dimensions.<sup>36</sup>

The power aspect, then, is relevant. The capacity for taking a holistic view when striking balances and taking decisions, is a matter of sifting out and observing, from among a host of interests and perspectives, what is best for all concerned. Ultimately, these balances are always struck against the background of certain interests, assessments and orders of priority, with issues either achieving impact or being left aside, and so it is important to visualise the grounds for the decisions made, e.g. on land use and physical planning, and by the same token to visualise the more or less conscious orders of priority established, for example, in municipal policy and planning.<sup>37</sup>

<sup>36</sup> Lindgren, pp. 9ff, 13, 21, 67f.

<sup>37</sup> Lindgren, p. 46.





# Social sustainability

The National Board of Housing, Building and Planning defines socially sustainable planning as both a process and a state. In the long-term it involves processes shaping the social conditions of future generations. As a state it is concerned with the implications for social and economic life today.<sup>38</sup>

It is through the activities and processes which are always going on in the city that sustainability problems are created, and it is by changing them that the problems can be solved. The city, then, can be thought of, not merely as a collection of buildings, people and infrastructures, but as a complicated bundle of processes.<sup>39</sup>

In its report the Board focuses on segregation research, noting that there now exists a great deal of research describing, above all, how and why ethnic segregation in Sweden has come about. On the other hand, knowledge is still lacking as to why segregation has persisted. There are European studies showing that this is not exclusively a Swedish problem.<sup>40</sup> A shift of perspective, however, is becoming discernible, away from general statistical descriptions, which basically imply an outsider perspective, in favour of studies which also attach importance to actual experience of the surroundings, i.e. more of an insider perspective. A shift of focus from segregation to integration, i.e. different ways of creating social and physical opportunities for people to meet together and feel a part of city life, no matter where they live, has also taken place. For example, in that nowadays discussions occur and plans are made with a view to integrating inner and outer city and for establishing links between previously separate townships.

<sup>38</sup> *Socialt hållbar utveckling – en kunskapsöversikt*, Boverket 2010, p. 21.

<sup>39</sup> Gullberg p. 16.

<sup>40</sup> Lilja & Perner p. 10, Olsson p. 15, *Socialt hållbar utveckling...* pp. 10, 14, 67.

## White flight – gentrification research neglected in Sweden

Segregation research today speaks of “white flight”. Out-migration of the Swedish middle class has meant more for ethnic segregation than the in-migration of underprivileged ethnic minorities into the large-scale housing areas of the 60s and 70s. So it is the migration patterns of the majority population and the housing choices of the well-resourced that are the locomotive of housing segregation, not the other way round.<sup>41</sup> This is seldom mentioned in public debate, which has come to equate segregation with certain areas where the majority of residents are people in lower income brackets and from other countries.

The fact of a population shift having occurred between outer and inner city, whereby rich and poor have changed places with each other, is today a relatively extensive research field internationally, but in Sweden the phenomenon has hardly been researched at all. Fields remaining to be further elucidated include, not least, the gentrification of city centres.<sup>42</sup>

International research today speaks of an emergent new phase of gentrification. This “super-gentrification”, as the expression goes, can be described as an intensified gentrification following in the wake of globalisation. Briefly, it means a new élite of “financifiers” with global connections moving into districts and neighbourhoods that have already been gentrified.<sup>43</sup> The potential implications of this for ethnic, social, economic and gender segregation have yet to be studied in a Swedish perspective. A project investigating the formation of an urban élite could probably supply answers to several questions on this point. The urban élite is at the centre of the market and has the power to influence the development of businesses, goods and services. In a society characterised by complexity and fast-moving changes, the élite serve as translators of codes to the middle class. A project identifying the cultural competencies needed for participation in the global networks whose nodes are located in meta-cities and small cities like Stockholm could tell us how social sustainability is engendered.<sup>44</sup>

<sup>41</sup> *Socialt hållbar utveckling...* p. 10, Lilja & Perner p. 20.

<sup>42</sup> Lilja & Perner pp. 37, 43.

<sup>43</sup> Lilja & Perner pp. 38f.

<sup>44</sup> Svensson, pp. 21f.

The social sustainability research now existing in Sweden touches mainly on the country's biggest cities and suburbs, and in particular the "specially disadvantaged" suburbs which have been the object of major government commitments in various forms. Research into the conditions prevailing in smaller towns and communities in Sweden has hitherto been neglected. Similarly, research into different forms of gentrification process, in both large and small towns, is for the most part lacking.<sup>45</sup>

### **User participation and civic perspective: more methods needed**

Fields addressed by research into the "specially disadvantaged" suburbs of big cities, places which in principle have been considered full of problems ever since they were built, include the changed role of the municipal housing utilities. Here research has been able to show that local anchorage and user participation at early stages of changes of various kinds can have a crucial bearing on the sustainability of the outcome. Motivation and perseverance will increase if residents themselves have a hand in the decision-making. Conversion of refuse management to a higher level of recycling and courtyard refurbishments on Million Homes Programme estates are two cases in point.<sup>46</sup> There is a general awareness in Sweden today that one has to start with local conditions and make use of residents' knowledge in order for change to be workable in a longer perspective, something which international researchers hold forth as an asset.<sup>47</sup> At the same time it is argued that a bottom-up perspective and user participation can be tricky things to handle. Which user groups ought really to be given a hearing? How is civic participation affected by the transition from government to governance? How does the privatisation of various community functions affect the transparency of different processes? There are statistics concerning citizens' employment, health and incomes and occasions when different groups apply for association grants or serve on association committees, but nothing is known concerning less formal, but probably quite strong, organisation, about relations between women and men or about relations between different groups of the population.<sup>48</sup> This deficiency, then, has been noted in the course of Swedish research. At the same time, researchers examining the funding

<sup>45</sup> Johansson & Mattsson, pp. 23, 44.

<sup>46</sup> Lindgren p. 21, Olsson & Törnquist pp. 9, 29.

<sup>47</sup> Evaluation panel, Olsson & Törnquist, *Socialt hållbar utveckling...*

<sup>48</sup> Olsson & Törnquist, pp. 47f.

applications in connection with Formas' call for applications entitled (in Swedish) *Samordnad stadsutveckling – en förutsättning för hållbarhet* (Co-ordinated urban development – a prerequisite for sustainability) note that surprisingly few applications highlight the issue of the structural aspects which should always be applied to the question of sustainability.<sup>49</sup>

In order to visualise power relations, and thereby safeguard the democracy aspect, research into socially sustainable urban development must incorporate a critical appraisal of the implications of planning and development with regard to social norms and power relations, and socially produced justice. Cultural diversity cannot be studied solely in terms of ethnic diversity. The social contexts, implicit norms and codes of behaviour must also be taken into account. Ideas of deliberative democracy can provide a basis for learning about sustainable urban development, and methods for this kind of discourse should therefore be developed further.<sup>50</sup>

### **Perspectives for the future**

The research field of sustainable urban development ought, then, to be further developed and its approaches broadened. Both international and national research confirm that everyday environments are the least researched. Neglected perspectives include the following.

- *Gender and gender power perspectives.* How is life in the city stratified by gender? When, for example, attempts are made to bring about organisational meeting points in the suburb, gender appears to be a given divider, with men by themselves and women by themselves. We do not know whether this merely reflects cultures with stricter segregation of the sexes or whether there are other conditioning factors involved.
- *The generation perspective.* What bearing does age have on social participation and on access to a socially sustainable urban life?
- *The marginalisation perspective.* What happens if we start with the city's various physical environments and explore them from below? Is there a total alienation in the city

<sup>49</sup> Evaluation panel.

<sup>50</sup> Lindgren p. 41, Svensson p. 8.

– people who are not included at all in planning contexts? How are mobility and homelessness investigated in urban planning? Which urban spaces are formed by groups which do not comply with the norms (voluntary deviants, criminals, activists) and what do they look like? And conversely, which processes are conducive to the successful creation of sustainable identity?<sup>51</sup>

Meanwhile it is essential not to lose the advances made by segregation research in recent years, not least in the field of ethnic segregation, but instead to build further on the knowledge which has now been accumulated.

<sup>51</sup> Olsson & Törnquist p. 49, Svensson pp. 18f.



# Cultural sustainability

Cultural science perspectives are essentially lacking in Swedish sustainability research today. There has been no specific public commitment to research into culturally sustainable urban development.

Nor has the research community spontaneously highlighted the nature of cultural sustainability for analysis and reflective discussion to a sufficient degree. The fact of this being a deficiency is being pointed out, not least, by international researchers.<sup>52</sup>

Due to the question of what cultural sustainability can be not having been sufficiently explored, we are also unable to say what a cultural-scientific analysis of the sustainability concept could contribute to sustainability research. The few persons declaring an interest in this question in the input material consider it to be a research field in its own right.<sup>53</sup> In this connection it is worth noting that, in the latest research funding applications to Formas, architectural research as a concept has vanished entirely.<sup>54</sup> In the input material, the Swedish Association of Architects is alone in highlighting aesthetic sustainability aspects, such as the importance of design for the formation of identity and people's sense of belonging.<sup>55</sup> The aesthetic sustainability concept, meaning the implications for people's identity formation and self-esteem, and accordingly for man as a civilised being, of being able to experience and oneself practise art and culture, is bypassed completely.

<sup>52</sup> Evaluation panel, Gullberg p. 6, Svensson pp. 16, 19.

<sup>53</sup> Evaluation panel, Svensson et al.

<sup>54</sup> Evaluation panel.

<sup>55</sup> Sällström p. 4.

## **Culture: the cement by which people are united**

Culture is commonly described as the cement uniting people. Something which creates both a sense of belonging and nearness, exclusion and distance, and at the same time can be described as man's way of achieving an existential balance. Culture, then, has to be sustained in order for that balance to be preserved.<sup>56</sup> Socio-cultural sustainability is also referred to as the *sine qua non* of preserving, developing and renewing democratic societies.<sup>57</sup>

Where the culturally sustainable urban environment is concerned, the cultural environment as man's historical imprints on the city needs to be studied more closely. How do those imprints inform our identity? How do they inform the outside world's perception of the place? How do the surviving urban structures included in the cultural heritage affect the environmental situation in our cities? Does the exposure of various interesting heritage objects lead to increased, environmentally burdensome travel or does it, on the contrary, supplant remoter destinations? Very little research is being done at present into the role of history in urban landscapes, and less still into the role of tradition in thoughts on urban planning. Here the archaeological perspective should also be incorporated, so as to achieve wider, deeper and more long-term perspectives.<sup>58</sup>

As regards processes co-creating and re-creating man's cultural identity, research is needed into the course which they may possibly follow. One researcher propounds the following argument for this need: "Cultural values are above all about human values. Democracy is one of our finest cultural legacies. To preserve it, and to enable people to resist marginalisation and subordination, democracy must all the time be created anew and re-formulated."<sup>59</sup>

## **Heritage research an unused resource**

The heritage research that is being done today concentrates on three different kinds of history: monumental, antiquarian and critical. Monumental history can be instanced with

<sup>56</sup> Svensson p. 23.

<sup>57</sup> Nolmark p. 18.

<sup>58</sup> Svensson pp. 16, 23

<sup>59</sup> Svensson p. 24.

the World Heritage Sites. Registers of archaeological remains and historic settlements are an example of antiquarian history. The problematisation of these two kinds of history is critical history and can be instanced with the National Heritage Board research project entitled (in Swedish) *The history of care – asylums and institutions as cultural heritage*. Both antiquarian and critical history are characterised by an active awareness of the importance of how the image of history affects understanding of the present. In heritage conservation, nature is also regarded as a cultural product. In connection with landscape change, for example, it is important that consideration also be paid to historical decipherability which can provide a deeper understanding of the connection between past and present. Knowledge of this kind is regarded in heritage research as an unused resource today. Knowledge as to why these resources are not being used is almost entirely lacking.<sup>60</sup>

<sup>60</sup> Magnusson Staaf, Björn: *Framtid med bärkraft – kulturarv i samhällsbygge*, 2010-12-10 pp. 1–2, 5–6, 8, Svensson p. 25.



# Socio-cultural sustainability – physical environment: researchable connections

Present-day segregation has a distinctly spatial dimension connected with the urban space, and yet the importance of urban space for segregation is seldom observed in research.<sup>61</sup>

There is no research to lean on either regarding the housing environment of the underprivileged suburbs. There is hardly any research-based knowledge at all concerning the social implications of suburban change through demolitions. Similarly, research-based knowledge is lacking concerning the potential consequences of ill-considered infill planning. Research-based knowledge concerning the effects of factors in the physical environment on social life is inadequate, and we have the same paucity of research findings on possible connections between the physical environment and people's migratory choices. In a word, our knowledge of the connections between man and the built environment remains woefully deficient.<sup>62</sup>

## **“Takings for granted” with no factual foundation**

There are a number of “takings for granted” which have yet to be verified by research. For example, there is the notion of neighbourhood effects existing, i.e. the assumption that a geographic concentration of poverty impacts adversely on people's prospects in life. This assumption has been transmitted to and used in politics and is often also taken for granted by the research community, which on this point should pause for self-appraisal: there are few instances of empirical research successfully isolating and quantifying the true

<sup>61</sup> Johansson & Mattsson pp. 14, 42, Lilja & Perner p. 5, Magnusson Staaf pp. 4f, *Socialt hållbar utveckling...* p. 14, Svensson pp. 18, 20.

<sup>62</sup> Arnstberg, Karl-Olov och Bergström, Inger: *Bostaden i staden; Europa planerar för stadsboende och stadsliv*, Stockholm 2010, p. 14, Forum för miljöforskning 2010 (conference notes), Lilja & Perner pp. 5, 11, 13, Magnusson Staaf p. 5, Olsson & Törnquist p. 33, *Socialt hållbar stadsutveckling...* p. 10.

existence of such effects. Dutch research, conducted with the same *priori* starting point, has yielded the answer that housing quality and the degree of social exclusion are for the most part not interrelated. It remains to be seen how far the Dutch findings are transmissible to Swedish conditions.<sup>63</sup>

Another thing commonly taken for granted is that the public space plays a significant role in the communication and maintenance of democratic values.<sup>64</sup> Here too, the view is commonly held that public places are on the retreat, in deference to private interests.<sup>65</sup> Whether or not this is the case has yet to be verified by research. If the public space concept is broadened so as also to include the virtual spaces and is viewed as relational spaces in which people can relate their physical and social spaces to global conditions, other perspectives crop up which also have yet to be researched.

### **Comparative studies needed**

No comparative studies of suburbs in different places in the city and country are available for use in the research which does exist. Similarly, there is a great shortage of long-term studies in which researchers have monitored a suburb over a long period of time in order to understand the long-term consequences of changes and inputs. Nearly all existing research about public spaces concerns places in the centre. What do public spaces on the periphery look like? In addition, present-day urban research is heavily dominated by research into conditions in the larger towns and cities. How relevant are these findings to Swedish conditions elsewhere? Thus research into small and medium-sized towns has been neglected, not least as regards shrinking towns afflicted with depopulation. How, for example, does one plan for a “tenable retreat”? In this connection it is worth repeating the deficiency previously made clear, and still persisting, as regards knowledge of the form or forms of urban community best capable of underpinning sustainable urban development, especially regarding such issues as density/sparseness and the connection between the form of the city, lifestyles and ecology. What is a city today? How is it filled with meaning? More research is needed here into both these alternatives, into the way in which different urban forms allow themselves to be composed into cities, and into the question of which

<sup>63</sup> Lilja & Pemer pp. 6, 11, 26f, 31, 44.

<sup>64</sup> Svensson p. 10.

<sup>65</sup> Johansson & Mattsson p. 15.

intermediate or new forms might be good solutions and, if so, why.<sup>66</sup> In this connection, architectural researchers have highlighted the importance of the holistic approach traditionally prevailing in the architect's profession: the balancing together of beauty (*venustas*), strength (*firmitas*) and usefulness (*utilitas*) into a fully integrated whole. Today, in their opinion, we have a lopsided emphasis on either form or function, while technical preconditions are hardly analysed at all.<sup>67</sup> Here again, then, it is emphasised that no one perspective can take absolute precedence over the others if a sustainable city is to be attainable.

### **Renovation and facilities management: the Million Homes Programme as a challenge for the future**

Research underscores the importance of active facilities management. Several researchers see here a major challenge for the future, not least as regards the impending renovation of the suburban high rise housing areas from the 70s. For one thing, the biggest environmental gains are to be derived from management of the existing city, and for another there is an opportunity here of developing new forms of user participation and civic dialogue at early stages. As has already been remarked, research has shown meeting citizens at early stages to be a successful method. True, segregation has persisted, but many deprived areas have in the long term become better places to live in, above all because their management has been improved and expanded.<sup>68</sup>

Research into new construction technology where efforts have also been made to draw on experience from both earlier, traditional building and 20th century construction methods, can yield knowledge of relevance for new production.<sup>69</sup> A study can be made of the connection between ecological sustainability and social and cultural resilience, a neglected research field today.<sup>70</sup>

<sup>66</sup> From p. 48, Forum för miljöforskning 2010, Johansson & Mattsson pp. 19, 42, Nolmark, Henrik: *Re-thinking Sustainable Urban Development in an Era of Globalisation, Resource Constraints and Climate Change; The Mistra Difference*, 2007 p. 4, Olsson & Törnquist p. 15, Svensson pp. 8, 10.

<sup>67</sup> Evaluation panel.

<sup>68</sup> Evaluation panel, Gullberg p. 25, Olsson & Törnquist p. 10, *Socialt hållbar utveckling...* pp. 10, 63.

<sup>69</sup> Magnusson Staaf p. 4.

<sup>70</sup> Nolmark p. 5.

Here there is also a possibility of verifying – or refuting – through research the conviction very often found among incorporated non-profit housing utilities, namely that measures to promote socially sustainable development in under-resourced housing areas are also profitable in the long term in a commercial perspective. Empirical evidence on this point is lacking at present.<sup>71</sup>

### **The need for multidisciplinary research**

Facilities management issues, according to the researchers, should be handled on an intersectoral basis, involving as they do both socio-cultural sustainability issues and ecological and technical/economic sustainability.<sup>72</sup> Research into repairs and restoration meeting both conservation and construction technology requirements can yield knowledge which in the long term may lead to more economical resource management in construction.<sup>73</sup>

Ecological restoration in urban landscapes is growing increasingly common, but research into ways of creating new, synthetic but workable urban ecosystems remains badly neglected in Sweden. Similarly, there is a lack of knowledge concerning the ecology underlying different ecosystem services. These are topics particularly worth researching against the background of present-day research treating the city as an ecosystem. Urban nature produces many ecosystem services which are of direct benefit to the city and are often free of charge, such as air purification, noise reduction and opportunities for recreation, i.e. factors with an important bearing on people's social and cultural lives. No one today knows what biodiversity is needed in order for an ecosystem to function. Given that sustainable development is among other things concerned with ensuring the long-term production of ecosystem services, further knowledge is needed on this point. Another neglected research field concerns the link between people's wellbeing and urban growing, which is a big topic internationally but not in Sweden.<sup>74</sup>

<sup>71</sup> *Socialt hållbar utveckling...* p. 13.

<sup>72</sup> Evaluation panel.

<sup>73</sup> Magnusson Staaf p. 4.

<sup>74</sup> Evaluation panel, Borgström pp. 2, 10, Nolmark pp. 4, 17.

## **Unquestioned link between built environment and living conditions**

Summing up, social qualities today are often uncritically associated with particular settlement environments. The urban space tends to be understood as something external by which people are affected, while it is forgotten that man, by acting in and appropriating the built environment, is also its co-creator. This results in the “problem-ridden suburb” being defined as the starting point for planning solely in an outsider perspective, disregarding the knowledge of the suburb possessed by the people who live there, e.g. concerning human qualities in the urban environment. The built environment is liable to be blamed for problems which have social causes.<sup>75</sup>

Urban form, i.e. possible spatial relations between different functions and activities in the urban region on different levels of scale, is therefore a necessary ingredient of analyses of the preconditions of the sustainable city and of how different processes in the city can be changed.<sup>76</sup>

More research is needed here into the interweaving of the physical environment with the narratives, not necessarily positive, associated with an area and shared by local residents, and into the social ties existing between people in the place. The place is created by the people using it in a reciprocal interplay with the place itself.<sup>77</sup>

<sup>75</sup> Lilja & Pemer p. 14.

<sup>76</sup> Borgström p. 10, Gullberg p. 18, Johansson & Mattsson p. 42, Lindgren p. 18, Lilja & Pemer p. 24, Svensson p. 9.

<sup>77</sup> Svensson pp. 9f.



# Financial and structural changes

The transition from government to governance has affected the nature of life in town and country. Since the 1980s Sweden has been going through a process of privatisation whereby operations which used to be privately owned are successively being transferred to private ownership and the rental properties of non-profit housing utilities are being turned into tenant-owner housing.

Many public operations have been restructured and are now being run as national, regional or municipal companies. Research is lacking at present concerning the positive or negative effects these changes have had and will have in the long term on socio-cultural sustainability.

## **From government to governance**

Many researchers claim that the new way of running the city by governance is creating a democratic deficit.<sup>78</sup> Political influence on the urban development process is one example. Despite municipalities being formally responsible for and empowered to decide detailed development plans, the initiative today often rests with the developer. When detailed planning work is about to begin, it is often restricted and adapted to the project in hand, e.g. with regard to the type of housing and services. Even if the municipality actively draws up plans for deliberate urban development, asserting the municipality's own interests in the implementation phase can be difficult. Municipal land ownership, formally speaking, is the strongest controlling instrument. At the same time, there is a negotiating situation involved in between parties, and the strength of the municipality hinges to a great extent on the demand existing for developable land.<sup>79</sup>

<sup>78</sup> From pp. 32ff, 48.

<sup>79</sup> *Socialt hållbar utveckling* ... pp. 12f.



### PPP: Public-Private Partnerships

The National Board of Housing, Building and Planning warns that democratic deficits are liable to occur in PPP (public-private partnership) projects, i.e. processes of change of one kind or another based on collaboration between public and private interests. This partnership must not supplant representative democracy, e.g. by excluding certain groups or reducing project transparency.<sup>80</sup> This tension between joint planning through official and unofficial networks between business enterprise, NGOs and the public sector and, on the other hand, the need for transparent, public and democratic decision-making has also been remarked on in a wider Nordic perspective.<sup>81</sup>

The incorporation of non-profit housing utilities and the growing prevalence of networks (governance) and/or partnerships has given the non-profit housing utilities a new role. This can lead to the building up of parallel organisations and to important decisions being made behind closed doors in boardrooms instead of by politicians in open session. Researchers also warn of the risks of tenants becoming excessively dependent on the company when it is involved in housing and leisure as well as employment.<sup>82</sup>

<sup>80</sup> *Socialt hållbar utveckling ...* p. 65.

<sup>81</sup> *Urban development – Nordic strengths and challenges under the heading of a new global agenda*, NordForsk Policy Briefs 2007-3, Oslo 2007, p. 48.

<sup>82</sup> Olsson & Törnquist pp. 45, 50f.



### **Politicians and officials: relations subject to negotiation**

In all the above mentioned instances, individually based, interest-related networks are created between municipality, business enterprise and interest organisations, with the local government officials at the hub of things. All in all, these changes have entailed a renegotiation of the formerly given allocation of roles between politicians formulating policy and value-free officials objectively giving effect to the politicians' decisions. Research has confirmed that a change is needed in order to safeguard democratic influence in the decision-making processes. On the other hand there is still not enough research concerning which new forms of organisation are needed and what future allocations of roles between politicians and officials could look like. The research project entitled (in Swedish) *The sustainable city* has established that successful interaction between politicians and officials is characterised by an open, questing process, unlike that which characterises the majority of boards and committees in local government today.<sup>83</sup> The same point is made by practitioners in specific urban transformation projects.<sup>84</sup> Urban ecologists describe how better opportunities are created for them through a democratic, transparent organisation with clear working routines which include respect for and responsiveness to several different kinds of knowledge. Work is harder in hidebound, sectorally divided organisations which accept the marginalisation of both knowledge and players.<sup>85</sup>

<sup>83</sup> Nolmark p. 4, Lindgren pp. 10ff.

<sup>84</sup> Sällström p. 38.

<sup>85</sup> Lindgren p. 48.



# Financial, structural and hierarchic obstacles

Financial, structural and hierarchic obstacles to research about more sustainable urban development exist both within the research field itself and when it comes to translating research findings into practice.

Some obstacles have been indicated both by researchers and by practitioners, e.g. the need for an interchange of information, common meeting points (both formal and informal) and a greater number of intersectoral projects undertaken by researchers and practitioners in partnership. Both parties refer to the obstacles as also being present in financial and administrative structures, though their manifestations vary depending on which they are applied to research or practice.

## **Obstacles specific to research**

The biggest of the deficiencies unanimously mentioned by the research community is the lack of possibilities for funding primary research. The input material reveals a veritable pining for more opportunities for research triggered primarily by the researcher's own curiosity and interest. In primary as in applied research, a systematic, methodical search is made for knowledge and new ideas, but in the case of primary research there is no predetermined application in sight. Here, then, there can be a difference between the research that the research community wants to highlight as being specially important and the research that the funding agencies are authorised by their remit to initiate and bankroll.

The research-specific shortcomings referred to also include the shortage of basic knowledge, i.e. pure facts, for ongoing research, one concrete instance being the ignorance, pointed to earlier in this report, of conditions in small and medium-sized Swedish towns, which could provide a basis of comparison, e.g. for the segregation research existing with regard to Sweden's bigger towns and cities.

One also finds frustration on the part of social science and humanities researchers over the prerogative of formulation enjoyed by the natural and economic sciences. These are seen as having a privilege of interpretation, both within the community and the political sphere and in the research community as a whole, which in turn is seen as adversely affecting development opportunities for the research field of sustainable urban development focusing particularly on social and cultural sustainability.

This state of affairs has not been verified research-wise, but is a perceived truth in large parts of the research community.

### **The paradigm of the natural sciences**

Natural science is often based on quantitative, objectively quantifiable facts, whereas judgements in the social sciences are often based on qualitative, less quantifiable values, e.g. historic significance, formation of cultural meaning, power relations and social conflicts.<sup>86</sup>

While the natural sciences have the prerogative of formulation, as manifested for example by the science journalism of the leading national dailies, the social sciences risk being unconsciously subordinated to the nature science paradigm. A growth of public funding, therefore, will not necessarily spell the formulation of a larger number of innovative projects.<sup>87</sup> The input material does not express the view that social science and humanities are deliberately subordinated to the natural science paradigm, but it does intimate that this is such an internalised truth in society that the perspective is often applied unconsciously and without reflection.

Several contributors also state that a number of research fields, architecture research among them, have found themselves having to take a back seat following the amalgamation of formerly separate research councils. The National Board of Housing, Building and Planning notes in its report that funding allocations for socially oriented urban planning research have dwindled to a fraction of what they were prior to the research funding amalgamation under Formas in 2001.<sup>88</sup>

<sup>86</sup> Listerborn, *MSSS* pp. 28, 33 Svensson p. 11, *Sveriges Arkitekters program...* p 1.

<sup>87</sup> *Sveriges Arkitekters program...* p. 3, *MSSS* p. 28.

<sup>88</sup> Lilja & Perner p. 45.

## The economics research paradigm

If the social sciences in general feel subordinated to the natural sciences, hierarchy also prevails within the social sciences themselves. Here, economics research is given priority over other approaches. The economics research paradigm dominates political understanding of social science research, which is viewed as a problem, partly because the approaches employed in economics research often differ from those of other social science and humanities research.<sup>89</sup> The Swedish Association of Architects finds in this connection that, following the above mentioned amalgamation of governmental funding agencies, architecture research has been subordinated, not only to the natural sciences but to social sciences as well. Architecture research is judged mainly in terms of its relevance to practice, not as a research field also worth developing theoretically in its own right.<sup>90</sup> It is worth noting in this connection that the research applications submitted by the architectural sphere for assessment in Formas call for applications entitled (in Swedish) *Samordnad stadsutveckling* (Co-ordinated Urban Development) were found both to be of an unacceptably low scientific calibre and to be difficult for non-architects to understand.<sup>91</sup> One reason may be lack of knowledge concerning the architects' own working method, research-by-design, which is equated with artistic exploration. But research issues, methods and findings must still be scientifically tenable when subjected to interdisciplinary scientific assessment. More research is therefore needed into the nature of research-by-design, as well as into the question of whether, and if so in what way, it can further the development of the sustainable city.<sup>92</sup>

## Different priorities among research councils and universities respectively

The Swedish Government today supports research through funding allocations to various research councils and through allocations to higher education establishments.

<sup>89</sup> MSSS p. 32.

<sup>90</sup> *Sveriges Arkitekters program...* pp. 1f, 11.

<sup>91</sup> Evaluation panel. Only one member of the panel firmly dissents from this view.

<sup>92</sup> Evaluation panel, Johansson & Mattsson p. 14, *Sveriges Arkitekters program...* p. 1. Anders Gullberg, one of Sweden's leading researchers in the field of urban research, is the only researcher contributor to the input material stating the view that the importance of architecture for sustainable development appears considerably overstated. "At all events, the great importance of architectural and design-related issues should not be taken for granted but ought rather to be made a subject of analysis and empirical studies." Gullberg, p. 19.

The research councils provide funding support to research through open calls for applications, targeted calls and sometimes also various forms of supporting strong research environments, e.g. to university-affiliated graduate schools. But the application acceptance ratio is often as little as 10 per cent, i.e. only one application in ten results in the grant of a funding allocation.

University research has faculty funding at its disposal, but the possibilities of conducting research within the framework of various academic posts are found by many PhD university staff members to be extremely limited, the time available for their own research having dwindled concurrently with a growth of their teaching and administrative duties. Besides, universities have very few tenure track appointments on offer, with the result that, even though funding can also be applied for from various private research foundations, many middle-aged and potentially productive researchers today have difficulty in obtaining funding for projects of their own.

The prospects of researchers in the social sciences and humanities making careers for themselves in private enterprise are judged extremely limited. The long throughput times for producing applicable knowledge mean, in practice, that society alone is judged to possess enough resources for assuming the necessary long-term responsibility for knowledge production.<sup>93</sup>

The longing for greater primary – alias *free* – research opportunities has to be understood in the light of the structural conditions which have now been mentioned.

### **Short funding periods**

The shortage of fundamental, basic knowledge in the field of sustainable urban development means long run-ups for the research projects which are awarded funding. Three-year research funding allocations are considered in this perspective too short-termist for obtaining relevant findings. The input material unanimously points to the time aspect as necessary to all research, but also underscores the importance of long-term support being given special priority for research in its initial stages. This includes such research fields as urban research and sustainable urban development, where periods of at least five and sometimes ten years are judged absolutely

<sup>93</sup> Johansson & Mattsson p. 30, *MSSS* pp. 29, 41–42, *Sveriges Arkitekters program...* pp. 2f.

necessary in order for new knowledge to be generated and sustainable research environments built up. It takes time to identify the most relevant topic to be researched, to build up interdisciplinary partnerships and to set up interdisciplinary research environments. Funding availability is all the more vital now that ambitions of this kind are no longer academically credential. The time aspect also applies to mindset. A more long-term perspective often changes the view taken concerning what is efficient, optimum and relevant.<sup>94</sup>

### **Politically influenced research**

Under the influence of political interest in the segregation issue, connected with particularly disadvantaged suburbs, research in the 80s and 90s shifted from the academic to the city policy investigatory arena. The “sampling methods” used to compile supporting documentation for the various policy initiatives precluded analysis of the outcomes with reference to such issues as the importance of the neighbourhood and the built environment. Consequently, research into segregation and the built environment became increasingly depleted. Today the connection is of such long standing that established researchers see a risk of young researchers associating social-scientific sustainability research with commissioned research – research commissioned by national authorities and business enterprise – to such a degree that they will be disinclined to seek a future in that research field. Certain researchers even find the primary purpose of official research commissions and assessments by groups of experts to be that of ensuring that the research funded will satisfy the political agenda.<sup>95</sup>

The Swedish Association of Architects judged the urban planning sector to be dominated by such a long tradition of governmental control that it no longer knows how to assume responsibility for its own knowledge supply and development work.<sup>96</sup>

### **Funding-adapted projects**

These notions, whether they be true or false, entail today a risk of self-censorship in the research community. Some researchers desist entirely from applying for funding grants because they

<sup>94</sup> Evaluation panel, Johansson & Mattsson pp. 35, 42, Lindgren p. 59, MSSS pp. 38f, *Socialt hållbar stadsutveckling* p. 12.

<sup>95</sup> Evaluation panel, Borgström p. 2, Lilja & Perner p. 6, MSSS pp. 28, 32, 41, Olsson & Törnquist p. 12.

<sup>96</sup> *Sveriges Arkitekters program...* p. 8.

feel they have no chance of competing unless they fall in with political requirements. Only one text in the input material for this report states in so many words that demand from national authorities and NGOs has often elicited new overviews of knowledge and with them new knowledge of positive benefit to research, e.g. concerning the sustainable city.<sup>97</sup> Others, on the contrary, refer to official control as an impediment. These viewpoints should be read partly as plaidoyers in an ongoing polemic between research councils and the research community on the subject of future funding systems. Nevertheless, existing conditions have implications both for research and for the community at large. In assessments made by, among others, international experts retained by Formas, it is remarked that many Swedish research applications with reference to sustainable urban development employ a dual strategy in the hope of improving their funding prospects. They have the impression of problems being formulated solely because the researchers know them to be of interest to the funding authority or authorities approached. This threatens to impoverish research. The focus of the researchers' attention is shifted away from what is relevant in the project and the quality of applications is diluted.<sup>98</sup>

### **A question of credibility**

Summing up, policy and national authorities have or risk incurring here a credibility problem in relation to the research community, a problem which ought to be analysed. Conversely, the research community's partly deficient confidence in the research funding agencies should be studied, to ascertain the extent to which it is based on facts or prejudice. The mutual lack of trust which must be said to exist today is probably in itself an impediment to research into the sustainable city, both research focusing specially on cultural and social sustainability and research of a more general nature. The input material for this report intimates that, under the conditions now prevailing, interesting proposals for research projects are not even being formulated.<sup>99</sup>

### **Practice-related impediments**

As has already been made clear, hierarchic, financial and structural conflicts exist within and between both individual

<sup>97</sup> Borgström p. 3.

<sup>98</sup> Evaluation panel, *MSSS* p. 31.

<sup>99</sup> Evaluation panel.

and different research fields. These conflicts are mirrored by municipal and national government administrative practice, e.g. when research findings on sustainable urban development are to be implemented.

### **The paradigm of technical and economic sustainability**

The question has been mooted as to whether it is at all possible to reshape the market economy so as to make it conducive to sustainable development. So too have issues concerning ways in which far-reaching restrictions on the market economy could be tenably combined with the view of democracy prevailing in Sweden, which the research community, as shown earlier, has judged favourable to the development of the sustainable city. Research has confirmed that municipal enterprise policy is permeated by traditional thinking in terms of growth and development. Any commitments to sustainable development are in line with so-called ecological modernisation, meaning that economic and ecological/technical measures are considered sufficient means of achieving a sustainable society. Environmental values, for example, become visible above all when they can be expressed in economic terms, and ethical aspects of long-termism are subordinated to short-term, economic values.<sup>100</sup>

Municipal policy-making practice, moreover, often concentrates on issues and transactions of an “acute” nature or on matters needing to be dealt with during the current term of office. This does not favour sustainability issues. The political agenda is often brought to the researchers’ knowledge by the media, but the politicians are less frequently apprised of the research agenda, the long-termism and reasoned, nuanced explanations of which may have difficulty in reaching the politicians through the media barrage. When policy-making, as happens, is triggered by popular opinion achieving media impact, this becomes a weakness.<sup>101</sup>

### **Sectoral division impedes the holistic view**

The research community sees a major problem in the strong sectoral division often characterising professional and administrative structures, e.g. at municipal level. Decisions requiring a holistic approach have to be taken in many different quarters and by many different people in positions of responsibility. In this way, sustainability issues are fragmented.

<sup>100</sup> From p. 8, Gullberg p. 9, Lindgren pp. 11, 31f.

<sup>101</sup> Lindgren p. 47, *MSSS* p. 43, *Sveriges Arkitekters program...* p. 3.

Environmental representatives often see other municipal officials obstructing change, whereas politicians take a more positive approach concerning, for example, the integration of environmental issues. Communication between environmental officials and, for example, planners is very often perceived as a charade.<sup>102</sup>

The National Board of Housing, Building and Planning further highlights the situation of conflict which can prevail between politics at national and local level, asking whether there is really scope for attaching reasonable weight to pressing municipal issues of social sustainability in relation to national interests. An example from Göteborg, where a footpath and cycle track aimed at linking the city together across the Göta River clashed with the interests of ferry traffic, shows one case where this was not possible.<sup>103</sup>

### **The cockpit of the planning process**

The importance of user participation at early stages of the process of change has already been highlighted. This is also a central parameter because non-academics have limited possibilities of participating and exerting influence on their own terms, an issue which needs to be analysed further.<sup>104</sup>

The civic perspective, however, has to some extent been researched, unlike other aspects of the planning process which have not been analysed in a power and conflict perspective, e.g. the conflict between environmental and planning legislation, land for public places and joint utilities, and the manoeuvrings often occurring under the auspices of the Planning and Building Act – manoeuvrings which practitioners in public administration are well aware of but very often are powerless to do anything about. Thus the consequences of planning activities have been analysed, at the same time as research is lacking on the subject of the activities themselves. A new focus is needed here, on profession

<sup>102</sup> Lindgren pp. 11, 44.

<sup>103</sup> *Socialt hållbar utveckling...* pp. 13, 69. The input material mainly analyses conditions prevailing in municipal, regional and national government, viewed in relation to various user categories, and the effects which they will or may have on the sustainable city. The material does not state what research, if any, is in progress concerning the impact of the private market and business enterprise on sustainable urban development and socio-cultural aspects in the short and long term.

<sup>104</sup> *MSSS* p. 29.

and action in connection with urban development, and not just on the consequential problems.<sup>105</sup>

### **Impediments common to research and practice**

As stated earlier, the need for information interchange, common meeting points both formal and informal and a greater number of intersectoral projects undertaken jointly by researchers and practitioners are indicated as the impediments to sustainable urban development experienced by researchers and practitioners alike.

### **Few opportunities for intersectoral co-operation**

The research project entitled (in Swedish) *The sustainable city* is one of those which have arrived at the conclusion that the lack of intersectoral partnerships is one of the biggest impediments to sustainable urban development.<sup>106</sup> Intersectoral, integrated partnerships and interdisciplinary research projects, if possible with a combination of researchers and practitioners, are referred to here, and in many other quarters, as a high priority.<sup>107</sup> A research project of this kind could take the form of environmental initiatives attempting to involve the general public and with ongoing participation by researchers studying the process and suggesting changes as it progresses.<sup>108</sup> The architectural and planning environments ought as a whole to be engaged for projects having the same interdisciplinary relevance as is now to be seen in the “ecological sciences”.<sup>109</sup> At the same time, certain researchers are now starting to question the intrinsic value of interdisciplinary research, demanding proof of urban planning research truly being more successful if it is made interdisciplinary. Is there evidence of the outcomes being any better?<sup>110</sup>

Here again, terms need to be more closely defined in order to be serviceable. The meaning of “integrated projects” must be specified with reference to each individual situation. When speaking of integrated research one must, for example,

<sup>105</sup> Evaluation panel.

<sup>106</sup> Lindgren, p. 11.

<sup>107</sup> Forum för miljöforskning 2010, Johansson & Mattsson pp. 32f, Magnusson Staaf p. 8, MSSS p. 29, Svensson p. 27, *Forskningsstrategi för miljöteknik...* pp. 45, 48.

<sup>108</sup> Gullberg p. 24.

<sup>109</sup> Evaluation panel.

<sup>110</sup> Evaluation panel, Johansson & Mattsson p. 43.

distinguish between intersectoral research and practical intersectoral projects of which research can be a part. Projects involving researchers and practitioners do not automatically result in research being integrated.<sup>111</sup> Methods need to be developed here for achieving better overall results.

### **Lack of meeting points**

The need for more contexts, formal and informal, in which researchers and practitioners can meet on a more everyday basis in concrete projects and for cross-disciplinary and interdisciplinary research groups to develop has also been highlighted in this connection. In this respect the administrative authorities have made further headway than the universities, where very little importance is still being attached to developing such environments.<sup>112</sup> The meeting points which administrative authorities and research councils have arranged for researcher and practitioners include, for example, seminars and symposia under the aegis of the Delegation for Sustainable Cities and the Forum for Environmental Research, the latter being arranged by the Delegation for Sustainable Cities, Formas, Mistra and the Environmental Protection Agency. The forum has since 2008 been arranging annual seminars focusing from various angles on the sustainable city.<sup>113</sup> The temporary meeting points arranged by the universities for researchers and practitioners have included the Academy for Urban Planning and Design at the KTH (Royal Institute of Technology, Stockholm) School of Architecture.<sup>114</sup> But the need underscored in the input material is for meeting points of a more long-term nature in concretely structured projects, albeit temporary.

### **Communication and knowledge transmission found wanting**

If cross-disciplinary projects involving researchers and practitioners do not materialise, a growing risk is anticipated of the research community turning in on itself, neither seeing

<sup>111</sup> Johansson & Mattsson p. 26.

<sup>112</sup> Johansson & Mattsson p. 43, *MSSS* p. 50.

<sup>113</sup> Water (2008), Non-toxic environment (2009), The city (2010), Food (2011). See also Forum för miljöforskning "Dokumentation tidigare konferenser" (documentation in Swedish from previous conferences): <http://www.trippus.se/eventus/info/infopage.asp?MenuID=21107&c=55567855676150492F39636F513054397965434E7548506E47555531507835632F5878555664526C61636B374F4F5969547035322B46537254437564542F517A>, accessible 2011-01-30.

<sup>114</sup> "Stadsbyggnadsakademin", KTH: <http://www.kth.se/abe/samhalle/stadsbyggnadsakademin>, accessible 30th January 2011.

nor understanding how its research can challenge and benefit practitioners, political decision-makers, NGOs and businesses, nor perceiving the risk of its self-imposed isolation alienating potential research funding agencies. On the practitioner side, there is a correspondingly increased risk of new knowledge in support of sustainable urban development not getting through and starting to be implemented, and of methods continuing to be used which are no longer relevant. One complication here is the difficulty of translating the different professional languages between the various disciplines.<sup>115</sup>

There is a great and neglected need here for research into the workings of communication and knowledge implementation concerning sustainable urban development and into methods for improving knowledge transfer between researchers both nationally and internationally, between research and practice and between practice and research.<sup>116</sup> The importance of a change of attitude is also mentioned with reference to both research and practice. Researchers should be trained in presentation technique and should regard this as knowledge production in itself, rather than as a dunning down of their own research findings.<sup>117</sup> Swedish research has won both national and international appreciation for its frequent cross-disciplinary focus, and Swedish authorities have earned corresponding appreciation through their consciously cross-disciplinary calls for research funding applications.<sup>118</sup>

What is lacking both in research and in calls for research funding applications is conscious global perspectives, and these are unequivocally called for in the input material from both Swedish and international researchers.<sup>119</sup> A wider perspective is needed so as to achieve proper understanding of the resource perspective but also to gain insights into the markets existing for Swedish sustainability research and environmental technology.<sup>120</sup> Swedish research has frequently observed the risks entailed by the uncritical application to Swedish conditions of findings from studies in other countries. The question of whether findings, for example,

<sup>115</sup> Lindgren p. 45, *MSSS* p. 29, Sällström p. 6.

<sup>116</sup> Borgström p. 10, Forum för miljöforskning 2010, Johansson och Mattsson pp. 30f,43, Nolmark p. 15, *MSSS* pp.42f.

<sup>117</sup> *MSSS* p. 43.

<sup>118</sup> Evaluation panel.

<sup>119</sup> Evaluation panel, Lindgren, Listerborn, *MSSS*.

<sup>120</sup> *Forskningsstrategi för miljöteknik*, p. 48.



from North American research, in which questions concerning resident influence, user participation and various forms of financial partnership have long been pursued with a privatised market as the frame of reference, have grown more relevant as comparative material commensurately with the ongoing structural transformation of society, still remains to be answered.

It seems natural today to try to develop a direct civic participation at local level, whereas the dimension of global justice is hardly in evidence at all. And yet the global perspective is



necessary to an understanding of how Sweden is affected by conditions in the rest of the world and what impact Swedish urban development and urban living have in a wider perspective. As one researcher points out, the term “just sustainability” was minted with a view to combining social justice with economic and ecologically sustainable policy and practice. Quite simply, it is neither fair nor desirable for ecological and economic sustainability to increase at the cost of wider social gaps in the world as a whole.<sup>121</sup>

<sup>121</sup> Gullberg p. 6.



# Summary

This report sets out to answer three questions. What are the biggest requirements for future research into sustainable urban development? What makes them the biggest requirements? How can these requirements be met in the short and long term?

The answers are based on input data compiled by Formas in collaboration with the National Board of Housing, Building and Planning, the National Heritage Board and the Swedish Museum of Architecture and are related to the research needs made clear in 2004 through the Formas report *State of the Art: Sustainable Urban Development in Sweden*. The focus then was on sustainable urban development in a broad perspective. In keeping with the Government remit, attention this time has been concentrated on the social and cultural aspects of the sustainability concept.

## **Who researches sustainable urban development?**

Comparison with the previous state-of-the-art report shows that some progress has been made. The biggest positive change is observable in research focusing on climate and energy issues, ecosystem services and environmental economics, and it is here that funding support has grown fastest in the past ten years. The comparatively young research environments at the Stockholm Resilience Center, founded in 2007 at Stockholm University, and the Graduate School for Energy in the Royal Institute of Technology (KTH) Department of Energy Technology, Stockholm, are today regarded by international expertise as exemplary in their deliberately interdisciplinary approach.

The research field of socially sustainable urban development has been strengthened. Among other things, research into processes of change, power relations and conflicts of interest has been intensified. Sweden now has cross-disciplinary research environments for socially sustainable urban development in Uppsala/Gävle, Stockholm, Malmö, Örebro and Göteborg. Research in individual subjects within this field also takes place elsewhere, e.g. in Linköping.

Finally, research has been started into certain cultural aspects of the sustainability concept, e.g. at the Centre for Municipality Studies in Linköping, which is addressing cultural infrastructure.

### **Future research needs**

Comparison with the research needs mapped in 2004 shows at the same time that the research needs defined on that occasion persist today but that an advancement of knowledge, e.g. in the field of segregation research, has made it possible to define them more closely.

This indicates a great need for research adopting a holistic approach to the nature of sustainable urban development and of research problematising the sustainability concept, i.e. research capable in various ways of visualising hierarchies and power relations, e.g. between economic, ecological, social and cultural sustainability and between town and country. Attention is also drawn to the need for long-termism and the necessity of making it possible to plug the knowledge gaps in intradisciplinary research with interdisciplinary research and providing opportunities for pursuing intradisciplinary research in greater depth. Research projects involving both theorists and practitioners can be of great importance in both spheres. The importance of implementing knowledge and research concerning the mechanisms of knowledge transfer is also underscored.

### **Obstacles to long-term research**

The input material shows the research community to perceive certain financial, structural and hierarchic obstacles at the universities and in research funding. This is partly a matter of appointments and working conditions at the universities. The research councils have limited possibilities, within the framework of their current remits, of removing these obstacles. Researchers in the social sciences and humanities further claim that their fields of study are subordinated to the paradigm of the natural sciences and the economic social sciences.

The research community also stresses the importance of longer funding periods, especially in the field of sustainable urban development, which is now at the build-up stage. The time needed for building up viable cross-disciplinary research environments in which research and practice can also meet together is put at between five and ten years. The cross-disciplinary research environments in the field of ecology and

technology are held forth here as commendable instance of newly formed research environments in this field. The recently launched, Mistra-funded Urban Futures at Chalmers, Göteborg, is one example of a research environment with a big potential in the field of urban development.

### **The need for theoretical approaches**

The knowledge gaps mapped in this compilation are thus concerned with more theoretically oriented research and with research aimed at producing practically applicable findings. Whatever the approach or emphasis, there is consensus among researchers that the most fundamental conceptual issues in the field of sustainable urban development as a whole are still awaiting investigation. What do we mean by “sustainable urban development”? What are the power relations prevailing between research, politics and practice and between citizens in different social categories?

Just as these questions in a research perspective have to be addressed locally and ad hoc so as not to lose their bearing, so the question of which research needs are greatest has to be narrowed down and concretised for each individual discipline and project. Both the Swedish and international research communities can see that concepts like “sustainable urban development” are rhetorically useful in politics. All the same, they unanimously emphasise that, failing contextualisation, the concept is of no use to research. The fact of the poor contextualisation of “sustainable urban development” resulting in its being used by the community at large is viewed here as perhaps a partial explanation for the continued overexposure of global, regional and local resources – despite both legislation and policy documents the world over having, on the whole, adopted the sustainability mindset.

### **Social sustainability research needs**

Segregation research has been the dominant focus of social sustainability research in recent years, resulting among other things in the existence today of good knowledge as to how and why segregation occurs in Sweden’s cities. This in turn has revealed remaining research needs, above all concerning the reasons for segregation persisting and concerning conditions in small and medium-sized Swedish towns. Knowledge of this kind is needed to facilitate comparative studies between towns and cities with differing preconditions. There is also a lack here of studies which have continued over a

considerable period in order to gather knowledge concerning, for example, the impact of depopulation, infill and thinning out on the feasibility of the sustainable city. Gentrification research, which is a self-evident and extensive field of research internationally, hardly exists in Sweden, one result of this being that segregation and gentrification cannot be studied as parts of the same process. It is vital that sustainable urban development be defined in this connection both as a process and as a state. In that perspective the city is no longer thought of merely as a collection of buildings, people and infrastructures, but as a complicated bundle of processes.

### **Cultural sustainability research needs**

Cultural perspectives are almost entirely lacking in Swedish sustainability research today. Thus research into cultural heritage processes and the importance of the cultural perspective for sustainable development is badly neglected. Similarly, there is a lack of research concerning the importance of the aesthetic cultural concept for the sustainable city, i.e. the possibility of experiencing high-quality art and culture in the urban space and oneself exercising art and culture, for people's identity formation and self-esteem and, accordingly, for man as a cultural being.

The failure of the research community to spontaneously and sufficiently highlight the question of what is meant by cultural sustainability is a deficiency pointed out, not least, by international researchers. The latter also draw special attention to the shortcomings of theory and method in architecture, which, in consequence, often has difficulty in holding its own in the race for research funding and cannot contribute fully to the holistic perspective needed in sustainable urban development research.

Due to the question of what cultural sustainability can be not having been sufficiently explored, we are also unable to say what a cultural-scientific analysis of the sustainability concept could contribute to sustainability research. International researchers in particular declare this to be a research field in its own right.

### **Convergent research needs in social and cultural sustainability**

Knowledge of the connections between man and the built environment is judged to be seriously deficient. Little light

has been shed on the importance of the urban space for segregation or on the effects of conscious or unconscious infill or thinning out. Nor is there any research-based knowledge regarding possible connections between the design of urban spaces and people's choices of residential locality. The urban space is often viewed as something external by which people are affected, whereas the perspective of man, by acting in and appropriating the built environment, also being its co-creator, is neglected. Here there are a number of "takings for granted" which have yet to be verified by research. This entails a risk of the design of the built environment today being blamed for problems which have social or other causes.

Several possibilities are put forward concerning broad-based research projects shedding light on the connection between man and the built environment. The problems, possibilities and challenges associated with the impending renovation of Late-Modernist suburban housing estates, referred to in Sweden as the Million Homes Programme, are one example which could serve to spearhead co-operation between different research disciplines, between the research community and practitioners and between Swedish and Nordic national authorities. Many researchers judge that the great environmental benefits are to be gained in the management of the existing built city. New forms of user participation and civic dialogue at early stages could also be developed here. Another example is research concerning the form or forms of city best calculated to support sustainable urban development, especially with regard to the problems of density/sparseness mentioned above. In research of this kind, the perspective of the city as an ecosystem can also be factored in and a premium put on the analysis of ecosystem services. There is a great need, for example, to clarify the biodiversity that is needed in order for an ecosystem to be viable.

### **Changes in the structure of society need to be analysed**

Sweden is passing through a phase of transition from government to governance. Research is called for here concerning the positive or negative effects these changes may have in the long term on the sustainable city viewed in a socio-cultural perspective. Several projects warn of the risk of democratic deficits occurring in PPP (public-private partnership) projects and of such partnerships between public and private interests jeopardising representative democracy. Research

has confirmed that the ongoing social transformation has generated a need to develop new relations between politicians, who by tradition have formulated policy, and officials as the objective executors of the politicians' decisions. This is necessary in order to safeguard democratic influence in decision-making processes. There is a great need today for knowledge as to what these new relations could look like and concerning new forms of organisation public administration. The need is accentuated by research viewing the strong sectoral partition today often characterising professional and administrative structures as a major problem. Quite simply, those structures are too durable. Decisions requiring a holistic vision are having to be made in many different quarters and by many different people in positions of responsibility. In this way, sustainability issues are fragmented, which researchers have found distinctly detrimental to the feasibility of sustainable urban development.

### **Global perspectives called for**

There is widespread agreement in the Swedish research community on the need for more research-based knowledge about conditions in Sweden, partly so that different Swedish instances can be related to each other and partly so that Swedish instances can be relevantly relatable to a wider, global context. At the same time, international and Swedish researchers are calling for greater global awareness on the part of Swedish researchers when formulating their research projects. The overarching approaches which are being called for, not least by international expertise, and which need to be adopted in all research to do with sustainable urban development, also include gender perspectives and generation perspectives. These are necessary in order to illuminate, for example, the prevailing power and gender order and, accordingly, the way in which different conflicts impact, for example, on the urban development process.

In Sweden the civic perspective has been researched to some extent, while other aspects of the planning process remain to be analysed in a power and conflict perspective, e.g. with regard to the relation between environmental and planning legislation, land for public places and joint utilities, and the manoeuvrings often occurring under the auspices of planning and building legislation.

## Conclusions and proposals for change

The Research Council Formas sees research into sustainable urban development as one of several pivotal research fields for the achievement of sustainable urban development overall. The field of sustainable urban development is at present being funded through Formas' open calls for funding applications and has also been a subject of targeted announcements such as the recently concluded *Samordnad stadsutveckling* (Co-ordinated urban development) and *Arkitekturens teori och metod* (Theory and method of architecture), aimed at strengthening neglected fields of research, and announcements for the purpose of supporting particular environments, such as *Forskarskola inom arkitekturforskning* (Graduate school in architecture research). These funding opportunities will remain in existence and their development will continue. In the prolongation of research funding allocations called for by the research community in order to achieve greater long-termism, Formas sees a possible change in its perspective, but any such change must always take into account that longer research periods or major research projects invariably reduce the number of projects that can be funded. Formas considers co-operation between different research funding agencies and other interested parties desirable with a view to strengthening the field of sustainable urban development and do justice to its breadth as well as accommodating its need for interdisciplinary research projects. Co-operation of this kind would probably also improve the possibilities of building up and developing platforms for research communication and meetings between researchers and practitioners.



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