COMMITTEE ON HUMAN SETTLEMENTS

Distr.
GENERAL

Ninth Conference on Urban
　and Regional Research

HBP/SEM.53/5
30 January 2002

Leeds (United Kingdom), 9-12 June 2002

Original: ENGLISH

Theme II

IMPROVING URBAN PERFORMANCE: URBAN STRUCTURE AND ECOSYSTEMS

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1.　　　Built form influences the sustainability and liveability of urban areas. A well-designed, coordinated and effectively functioning urban structure and a healthy urban ecology can deliver a sustainable and liveable city. The dynamics of urban structure, the relationships between the different structural components, culture, lifestyles, resource and waste flows influence the future sustainability and liveability of urban areas.

2.　　　Several solutions have been proposed in national policies and planning guidelines to achieve a more sustainable and liveable urban development. The main aim of theme II is to relate experience and research to the "compact city" paradigm, by addressing (a) development trends and (b) experience and outcomes in achieving a more sustainable and liveable city. The paper presents some of the conflicts arising between demands for more urban space and policies aiming at a better environment within the city whilst increasing densities and reducing the need for transport. Questions are raised in each chapter on the various aspects of urban performance.

I.　　　TRENDS AND PROBLEMS IN URBAN STRUCTURE AND ECOSYSTEMS

3.　　　A historical evolution, influenced by geographical structures and political and cultural environments, shaped urban structures in the 20th century. In Europe this meant a compact urban structure, with clearly defined boundaries, with a complex but hierarchized internal organization, favourable to the development of community life.

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4.   All urban structures – especially the larger ones – have accumulated imbalances and internal strains over time. These have been triggered by the differing dynamics of the urban structure's components, by the interrelation between these components and infrastructure, and by the relationship between the urban area and its surrounding region.

5.   This evolution and the resulting conflict between modern and post-modern development have been discussed extensively in academic literature and forums. When the elements of the built environment are no longer seen simply as urban forms, but as areas and sites of connection between social, political, environmental and human factors, then important lines of research and inquiry are opened up.

A.   From city centres to polycentric urban structures

6.   For most of the 20th century, the dynamics of the urban structure reflected the slow shift from *city centres* that were occupied by housing and retail premises to central business districts, with offices and specialized services. In modern urban structures, city cores epitomized the traditional values of civilization and the role of the private business sector with its specific functions (commercial, financial, information and highly specialized retail).

7.   Post-modern urban development exerted a considerable pressure to reorganize central areas. In the aftermath of intra-urban decentralization (of people and jobs), centrality was invested with new meaning as places of innovation, of image-creating mega-projects. Central city cores gained additional vitality as areas of high-quality urban life, through gentrification and international business. The development and proliferation of new types of pseudo-public spaces (theme parks, conference centres and orchestrated built forms) created new centralities in a *polycentric urban structure* and contributed to the fragmentation of urban structures. Although these enriched the plethora of physical forms, the urban structure burst at its traditional seams, engendering spatial segregation, a new pluralism and eclecticism of urban forms, in a precarious dynamic balance.[1]

8.   Although on a smaller scale, especially in small and medium-size towns, urban regeneration concentrated also on the regeneration of traditional neighbourhoods and on the creation of "places of everyday centrality".[2]

B.   Housing patterns

9.   One of the major changes in urban structures over recent decades was induced by the considerable progress in *housing conditions*. The construction of new residential suburbs of large apartment blocks has been a characteristic feature of welfare states. Based on the rationalist theories of the functionalist school of town planning and mass-production building systems, large residential suburbs have been, for decades, a major issue of housing policies both in Western and in Eastern Europe.

10.   Over recent decades consumer affluence and demographic changes resulted in two main tendencies in the ECE countries: (i) a considerable increase in the construction of single-family dwellings and other low-rise housing; and (ii) growing demand for smaller units close to urban services in densely populated inner cities by a growing number of elderly and single-person

households. Suburban and ex-urban housing developments mean increased land consumption, the loss of valuable natural sites and increased transport. The high cost of infrastructure that they entail has to be largely subsidized, to the financial detriment of the city.

11.   New housing consumption patterns, with a mix of type, size and quality, are also emerging in centrally located areas, for middle- and upper-income households.

12.   In Central and Eastern Europe, residential apartment blocks present a particular challenge to a physical, social and environmental reconstruction that would provide a better quality of life. Large housing estates built on the outskirts of cities are deteriorating rapidly. At present an adverse selection is taking place: people with higher incomes are moving, either to the inner city or to new suburban single-family houses; low-income families are staying, or more are moving in, reinforcing the vicious circle of social exclusion.[3]

13.   In all countries this residential mosaic is part of a dynamic process, with very important implications for traditional urban structures, streetscapes, green spaces, community life, infrastructure provision and management. It also raises questions as to the affordability of inner-city housing developments for lower-income families.[4] There is very little empirical evidence concerning the impact of inner-city revitalization, in terms of market cost-effectiveness versus a greater variety of housing options for the various sections of society, improved services, and access to public and private-sector employment. Researchers, planners and politicians should address a series of questions:

- *What are the political, social and fiscal barriers to successful inner-city regeneration?*
- *How can an economically diversified population be retained in the city, with a view to ensuring its social and fiscal vitality, while providing improved services for all?*
- *Countries in Central and Eastern Europe are facing a growing urban sprawl. Is there a way for countries in transition to avoid urban sprawl and uncontrolled expansion?*
- *To what extent can we improve the choice and affordability of housing options for inner-city residents?*

C.   Urban public space

14.   Concern for **urban public space** has gained momentum in recent decades, in the process of rethinking urban form as the expression of a compact, complexly organized structure. Based on the achievements of modernism (especially those related to healthy living conditions), public urban space within the new urban form should be considered a complex, hierarchized network that structures and shapes urban form: streets, squares, parks, semi-public and semi-private spaces, etc.

15.   By its dual role – of determining and decoding the structure of urban form and of creating the framework for and accommodating community life - public urban space has a prominent role in shaping contemporary cities. The restructuring of Barcelona in the 1980s, widely considered a success, focused strongly on public urban space, as a depositary of fundamental social and cultural values, of the civic memory of communities.[5]

16.   Re-investment in urban public space with its complex dimensions and hierarchized structure has been at the core of several successful regeneration projects in European cities. They

underpin the model of a compact city, with a certain degree of diversification in its structure, as opposed to the uncontrolled neutral developments at the peripheries and outside the city limits.[6]

17.   Yet, the post-modern development of urban form has led to a fragmentation and a blurred, reductionist representation of public spaces, where there is *no longer any correspondence between architectural forms and social and political messages,*[7] such as in shopping malls and theme parks, inner public spaces, strip developments, gated communities, defensible spaces, etc.

18.   Inner-city green spaces are crucial for the quality of life and for closing ecocycles in urban areas. More spaces for parks and other public green areas can be set aside in urban structures by a conscious mix of space-saving housing types (e.g. apartment buildings and row houses). Green-belt planning policies have largely influenced the physical structure of cities over the past century (especially in the United Kingdom, Norway). Yet, in the long run, it has proved difficult to protect green areas in cities against urban expansion, so we have a disruption of the green corridors connecting green urban areas to outer-city natural areas. Hence, preservation of the green structures within the cities is as important a concern as that of remodelling urban form. It is especially vital for cities in countries in transition, where green spaces are under strong pressure, due to a certain degree of planning deregulation.

19.   Green-space policies are also crucial for the restructuring of suburbs and, especially, of the large residential estates of the 1970s.[8]

20.   ✒   *What is the role of public spaces in creating new centralities?*
•   *How can better use be made of the potential offered by public spaces (squares, parks, streetscapes, pedestrian areas, green spaces, etc.) to encourage and support social and civic interaction?*
•   *What is the role of urban planning and urban management in dealing with the "reductionist and defensive" visions of public space?*

D.   Environmental impact of urban development

21.   The environmental impact of urban development was recognized several decades ago, but despite all the good intentions current urban development is not sustainable. A sustainable and liveable environment depends on the wide range of *technical and social infrastructure* in cities. The high cost of infrastructure and its long-term character require special attention when assessing its benefits in terms of sustainability and liveability.

22.   Increasing urban sprawl has impacted on transport behaviour, creating longer travel distances and an increasing need for transport, largely met by the use of the private car. Over recent decades, in all cities, transport and traffic management has been a key factor in coping with the increasing rate of car ownership. Numerous transport policies have been promoted with a view to improving transport infrastructure in urban areas. They have included innovative transport management systems (Flanders), a wide use of the separation of traffic flows (pedestrian, public, non-motorized, transit), restrictions on access to specific areas, control of parking, etc. In the 1990s attention was focused on the relation between the urban pattern and transport, and the use of land-use planning to reduce the need for transport through provision of a

better mix and accessibility of land uses, at higher densities. However, local solutions could not compensate larger-scale, regional trends, namely the excessive consumption of land and the environmental damage caused by rapidly expanding interregional and trans-European traffic flows.

23.   In Eastern Europe, the rapid growth in the ownership of private cars and the changes in the location of various functions require new and innovative approaches to transport and traffic management in cities based on best available practice.

24.   Water supply and sewage systems in traditional urban structures have to bear the high cost of renewal and maintenance, which often exceed the cost of new infrastructure in undeveloped land. This is a particularly critical issue in countries in transition, where scarce public funds have to support obsolete utility networks (some over 100 years old, as in a number of Romanian cities). The extension and upgrading of water and sewage infrastructure are, therefore, a high priority for the coming years in cities in countries in transition.

25.   This provides opportunities for the use of new techniques, including those using urban ecosystems for the treatment of sewage. The techniques are relatively new, and experience of their use is only just starting to be collated.

26.   Problems related to waste disposal and treatment are both specific and complex. The choice of measures used in this sector has direct environmental consequences and is also directly affected by economic and consumer policies. Current upward trends in waste generation are a general feature of all urban areas. In countries in transition opening up to market forces, the dramatic increase in household waste is due to the large quantities of packaging materials, particularly plastic wastes, and also the pressures from tourism. The increasing number of small and medium-size enterprises – though individually sound – when taken together pose a serious threat to local environments.[9] Recycling and reuse options are still in their infancy in most cities. The choice of waste management options (prevention, recycling and reuse, the optimization of final disposal methods) should rely on in-depth analysis of the relationships between business operations, lifestyles and population densities.

27.   There are many open questions for investigation and research:
- *How successful have attempts to change transport patterns in traditional urban structures been?*
- *What are the successful techniques for large-scale basic infrastructure management in traditional urban areas and what can be done to improve the quality of services?*
- *How can private investment be attracted to support scarce public funds?*

E.   Urban values and density

28.   "Turning back to the city" is likely to put a higher emphasis on ***urban values***. In addition to lower energy costs and lower consumption of urban land, it is assumed that well-designed urban public spaces, mixed land uses and the development of multifunctional areas will add lasting value to the urban structure.

29.   Economic globalization, post-industrial development and growing competition set the context for reshaping the image of the city against de-industrialization. The challenge of dealing with the industrial past, of finding a new role for old industrial areas, requires the proactive use of new approaches, applying techniques and methods originally developed by the private sector.[10] Developments on brownfield land have been particularly successful in cities undergoing regeneration, transforming derelict land into multifunctional, quality-oriented urban areas (e.g. London Docklands, renewal in some Finnish cities, Bicocca Area in Milan). However, in some cases the scale of abandonment or underuse of developed land, utilities and infrastructure poses severe challenges to the viability of these developments.[11]

30.   Continuing suburbanization has decreased overall physical density, while the trend towards the regeneration of brownfield sites and reversion to traditional patterns has increased densities in inner-city areas. The concept of **density** held an important role in planning throughout the 20th century, serving as justification for successive urban policies. It was in constant - though evolving – use, being in turn an indicator, a tool for analysis, and a planning instrument.

31.   On the one hand, and from a long-term perspective, it would seem obvious that inner-city areas built to accommodate larger populations at higher densities in the past will need to be redesigned on a scale more consistent with present population and contemporary behavioural patterns and lifestyles. This does not necessarily require suburbanization, but a greater flexibility in adjusting the densities, building types and characteristics of the urban area to a particular context[12]. On the other hand, the impact of housing and development costs, the unintended and unforeseen consequences of inner-city renewal (gentrification, displacement) and the push-and-pull factors which influence preferences for different lifestyles have not yet been systematically investigated and tested.[13]

32.   If suburbanisation was "the escape from the city", we have yet to investigate its reverse, "the rediscovery of the city", and the effects of increased density on the *urban character,* provided by streetscapes, pedestrian areas, green spaces, a variety of public spaces, mixed housing types and land uses.

33.   🕭 *To what extent has innovative urban design proved successful in creating a more diverse, attractive and liveable urban environment?*
- *What is the impact of different inner-city developments on density?*
- *Will an increase in density lead to an increase in services and a reduction in travel, or are differences between urban districts more related to lifestyle?*

II.   EXPERIENCE AND OUTCOMES IN ACHIEVING A MORE SUSTAINABLE AND LIVEABLE CITY

34.   There are many links between physical urban structure, lifestyles, the use of resources and the urban natural environment. But the links are complex and often contradictory. Knowledge about the impact, possibilities and problems of urban development strategies such as the "compact city" strategy is essential in order to achieve more sustainable and liveable cities for the future. The compact city strategy is based on certain key assumptions related to the issues of:

- Urban form and transport
- Self-contained urban districts and social sustainability
- Urban regeneration and brownfield development
- Cultural heritage and identity
- Urban patterns and ecosystems

A.   Urban form and the need for transport

35.   Studying the compact city strategy, which is aimed at concentrating development within urban areas, many researchers have noted its contradictory nature.[14] The dominant argument for the strategy is related to energy conservation and emissions reduction. Research has demonstrated a close correlation between high urban density and low energy use for transport,[15] and between high urban density and compact urban form and low energy consumption for space heating. A more compact urban form supports efficient district-heating systems, while multi-storey housing has a lower energy consumption per square metre for heating than detached single-family housing.[16]

36.   Gordon and Richardson (1990) pointed out that the variation in petrol consumption in the cities studied by Newman and Kenworthy was due mainly to differences in lifestyle and travel behaviour.[17] Others have mentioned that more compact city development causes increased traffic congestion, which leads to greater air pollution in urban areas.

37.   One may argue that a compact city strategy could have regional benefits but also local drawbacks. In terms of transport it may have an impact on traffic patterns at regional level, but may also lead to congestion at the local level. There is still a need for more research to shed light on this subject.

38.   Research has suggested that some sort of balanced centralization would possibly be the most sustainable urban pattern. But how does this address the problem of commuting in functional urban regions? Commuting, often cross-commuting between the different regional urban centres, is increasing in most regions. Many new towns and urban districts were planned to be self-contained, but have generated complex employment and commuting patterns. Several contemporary urban initiatives have integrated new offices and housing developments in central urban locations. By creating more local jobs they aimed to decrease commuting and improve local employment for social reasons. Transport initiatives such as "park and ride" try to solve the problem of increased commuting by private car by improving parking provision at public transport nodes on urban peripheries so as to provide the choice of a mixed solution of car and public transport.

39.   🗣 *How might more compact urban forms change transport patterns?*
- *What evidence is there to support the link between high urban densities and lower energy consumption?*
- *How does an urban pattern of balanced centralization change urban transport patterns? What effect will this have on commuting and transport mode?*
- *What examples are there of "car-free cities" and other innovative solutions (such as "park and ride")?*

B.   Self-contained urban districts and social sustainability

40.   The European Commission, in its Green Paper on the urban environment, has argued that a more compact city will create **a more liveable urban environment** and that urban concentration will foster a society which is more socially and culturally diverse and provide a livelier, safer and more socially equitable environment.[18] Counter arguments could be that higher densities lead to more crime, noise and pollution, and that the compact city concept is not welcomed by individuals due to their perceptions of overcrowding and loss of privacy.[19] Thus, it is questionable whether a more compact urban environment will be seen as sustainable and desirable from a local point of view.[20]

41.   The compact city ideal partly relates to the idea that it is possible to create more self-contained urban communities by a finer-grained mix of use and increasing densities, and that increasing densities will engender more community activity and better services in urban districts. Some research has investigated the link between density and social services, but the question still remains whether increasing densities in existing areas would have the expected positive benefits.[21]

42.   It has been argued that a more compact city would provide a better basis for social sustainability. The argument is based on the observation that suburbanization has created social segregation in many urban areas. This segregation has been seen as the source of many negative societal consequences, such as a lack of tolerance of the differences in society. There is little evidence that it is possible to reverse this social segregation through a more compact urban form, and that "living closer together" will help people understand each other better.

43.   In general the wider social impacts of more centralized urban development have not been thoroughly discussed. Smyth (1996) argued that a compact city policy would possibly have the same social impacts as some urban renewal projects: the disadvantaged would suffer more from the resulting high land prices and this would aggravate social segregation.[22] But there are very few research projects linking this issue to the compact city paradigm, and little empirical knowledge highlighting the actual social consequences of a compact city strategy.

44.   🕮   *Is it possible to create self-contained urban districts in contemporary urban societies, where people change jobs more often?*
   •   What effects do different densities have on community life?
   •   To what extent do residents rely on local facilities, and how does this relate to the social group?
   •   To what extent are differences between urban districts related to the lifestyles of communities?

C.   Urban regeneration and brownfield development

45.   The experience of cities and regions undergoing regeneration is particularly important for the new democracies in the emerging markets of Central and Eastern part Europe, which have a large number of decaying industrial areas, inherited from the period of accelerated industrialization. Meanwhile, investment is exerting considerable pressure for the development of **greenfield land** to provide sites for industry and large shopping centres. One of the major

challenges confronting many cities, is to strike the right balance between regenerating inner-city industrial sites addressing the underuse of urban land in old abandoned sites, and securing ecological benefits from new private business initiatives in suburban areas. Research, supported by examples of good practice, is needed to highlight the pros and cons.

46.   In all ECE countries urban areas are moving towards a post-industrial development pattern. While there is increasing urban sprawl, there is also a potential for development inside the urban fabric. Vacant urban land and derelict areas are a challenge for planners in all countries but they also offer an opportunity for regeneration and a potential for the densification of urban areas.

47.   It is possible to find many similarities between European cities and the different urban districts in the cities. Integrating new facilities, jobs, etc. has been a feature of many projects. Yet, as urban structures and problems related to urban districts are also context-dependent, goals and solutions have to be related to the specific context that they apply to. There are examples of the integration of green areas in brownfield developments, as a way of increasing land value and urban quality (the zone d'aménagement concerté projects in France). More empirical evidence is needed to assess the contexts in which increased densities may have positive or negative impacts. Moreover, improvements in terms of sustainability and liveability are still to be assessed.

48.   The intended impact of mixed use is to create more self-contained urban districts. Industrial development is largely in the service sector and such industries do not have any major direct environmental impact on their local environment. But they may have secondary impacts, such as local traffic implications, new forms of local architecture, etc.

49.   🔊 *What role do traditional urban structures have in creating quality regeneration?*
- *How can the various barriers to successful brownfield projects be overcome?*
- *What does the experience of urban projects with mixed use reveal? What conflicts have been experienced?*
- *What conflicts arise between different forms of urban land use?*

D.   Cultural heritage and identity

50.   An underpinning element of contemporary research is the view that the sustainable development of a city depends upon its history. Urban forms are the result of accumulated experience and repositories of layers of history that can be drawn on for planning change. [23] The concept of urban landscapes, developed from the concept of urban morphology, encompasses the vast variety of urban components, from monuments, to symbolic places, to places of collective memory, to streetscapes, to parks and green spaces. By mixing space and time, they are imprinted in the visual memory, emphasizing the structuring elements of the city. [24]

51.   Emphasis is put on urban places as spaces where community life is supposed to take place. These places are directly linked to the concept of **identity**, moving away from the former reductionist/functionalist approach (which defined space as la nd for construction, for amenities, for accommodating car traffic or pedestrians, etc.). Urban identity is profoundly marked by the practices of communities, as they evolved throughout history. Imprinted in the built forms, it influences the behaviour of a community for generations. "*For the concept of identity to be*

successfully inserted in the design and planning processes ... it has to be supported by the common perception and the large recognition, by all actors, of the practices and images linked to various spaces in the city" (Pierre von Miess).

52.   The concept of landscapes in cities is not counter to urban regeneration; it simply represents a particular approach which may be better suited to dealing with urban heritage under threat from investment pressure. Research developed so far represents an endeavour to achieve a synthesis between urban typology and morphology, and the historical reading of urban structure. In fact, introducing the temporal factor into the city expands investigation from individual buildings to sites and areas.[25]

53.   It has been suggested that, in a cultural perspective, urban regeneration and urban development should take into account the specific histories and particular geographies of cities, linking factors such as:
- An enlarged spatial context of heritage, from architectural objects to ensembles, to parts of cities, or entire settlements with their surrounding areas;
- An extended temporal reading of the structure, beyond the isolated consideration of single monuments;
- The inclusion of various aspects of development: city, site and location; its impact on the natural heritage; the economic potential of the cultural heritage; sustainability of the development, etc.

54.   It is expected that cultural landscapes in cities can counter the lack of investment in traditional urban areas and the premature writing off of the existing built environment.[26] Possible solutions may be "read" from the existing landscape, but they must be assessed to ensure that they are appropriate to new problems.[27] However, such a comprehensive approach requires the involvement of public authorities and strong administrative decisions to secure sites for upgrading. It could also require new tools.

55.   The challenge of preserving urban identity becomes even more important if the urban fabric is to become more compact. Increasing densities may very well be in conflict with the cultural heritage in many urban areas. The strong economic interests at stake in many urban redevelopment projects may exacerbate this. And finally, it is not obvious what urban value and identity imply for all stakeholders. Essential questions related to enhancing the identity of cities and preserving their cultural heritage throughout this process are:
- *What relationship should exist between new developments and existing urban landscapes? How do we incorporate new projects, especially large ones, into existing urban forms?*
- *How can the image of the city be improved while preserving cultural landscapes and enhancing identity?*
- *How can private investment criteria be balanced with the need to preserve the cultural heritage?*
- *How are multicultural societies reflected in urban forms?*
- *How can equity and ethics be translated into the aesthetic values of the urban environment?*
- *What planning tools and strategies can be used to achieve this?*

E. Urban pattern and ecosystems

56.   From a regional point of view the loss of greenfield land to development in recent decades has been a problem for farming, but also for **biodiversity**. Continued urban sprawl will lead to a further loss of greenfield land, and often of valuable agricultural land. The Council for the Protection of Rural England has been one of the major proponents of this position, which is also supported by researchers involved in biodiversity issues. They have stressed that, from a biodiversity point of view, large green areas outside the city are more valuable than many small green spots within the urban area.[28] On the other hand, others have suggested that the gardens of suburbia are the most biologically diverse areas.

57.   However, it has been claimed that there is a contradiction between a compact city and a green city.[29] The European Commission, in its document "Green Paper on the Urban Environment",[30] advocates more compact urban development and at the same time calls for urban greening. Environmental organizations such as Friends of the Earth have done the same thing, though the latter have recognized the conflict that exists between more compact urban development and achieving a green city. The importance of green space in the city has been related not only to its recreational value[31] but also to ecological needs.[32] Furthermore, Rådberg (1995) stressed the need for green areas or space for recycling waste in urban areas.[33]

58.   The compact city paradigm is based on the idea that the economies of scale from concentrating infrastructure in large units give greatest efficiency in the supply of water, energy, transport, etc. to an urban area. In contrast the ideal of the open green city relies on the local production of renewable energies, local food production and treatment of water, waste, etc. Some studies have suggested that renewable energy production and several new eco-solutions for handling waste and water in local housing development require low densities. But is this always the case? Is this conflict based on perceptions of the differences between two urban development strategies, or is it based in the realities of the implementation of these new technologies?

59.   If we are to minimize urban flows of resources several strategies will probably have to be used. Many strategies have a regional perspective (large technical infrastructure), but local strategies will also be needed for handling waste, water treatment, etc. There is some experience with local recycling projects in the Nordic countries. This is a challenge not only for planning but also for design. Such local initiatives demand space and thus careful and sensitive design to incorporate them in the local fabric. They imply assessing local potentials in relation to local green areas. They may be in conflict with a compact city strategy, and thus need to be seen in relation to existing infrastructure and planning, and wider sustainable development objectives.

60.   🕭   *Can ecocycles be closed at a local level?*
  * *Is there a conflict between densifying the urban fabric and securing green areas?*
  * *What are the impacts of densification on the urban ecosystem?*
  * *How can we ensure green spaces in urban development projects?*
  * *How can local urban ecology initiatives be integrated in urban structure and how do these initiatives work with urban infrastructure?*
  * *What are the relationships between densities, urban structure and the space needed for such initiatives?*

III. OVERARCHING ISSUES FOR URBAN SUSTAINABILITY

61.　　The **compact city paradigm** has been at the core of many national strategies and local policy initiatives. It has been seen as the solution to the extensive use of undeveloped land, to the high-energy consumption of large-scale transport infrastructures, to the loss of valuable natural sites, and to the lack of investment in inner-city areas.

62.　　There is an ongoing debate among planners and architects about the enhanced role of planning and design in a comprehensive approach to creating a better environment within the city and lessening the environmental impact of human settlements on their surroundings. Yet, there is awareness that "pretty buildings do not solve social problems."[34] The set of tools for improving the environment and the quality of life include a mix of architecture, planning and public policy.

63.　　Moreover, urban structures are context-dependent, presenting variations related to size, natural and geographical setting and cultural traditions. It is within this context that goals and priorities have to be defined for any model of urban development.

64.　　To halt urban sprawl is an essential task for planning. A wide range of arguments support this: reducing land consumption, minimizing the need for transport, supporting existing inner-city business districts, etc. Though policy makers in many countries have recognized these arguments, there is concern about the practicalities of preventing urban sprawl. Strong planning legislation and consensus among actors within the planning framework is needed to implement this policy. However, if it is to succeed, societal development must support it.

65.　　Suburbanization has been a relentless process for over 50 years. The process has raised increasing controversy over densities and the preferences of the inhabitants. The latest developments in the housing market seem to support more housing in central locations in some countries. There seem to be moves towards the inner districts and towards the outer urban fringe at the same time.

66.　　Providing more empirical evidence and process information has to precede remediation strategies. Research should bring together the **economic, social and cultural context, urban planning practices, land-use policies, public finance and private investment policies.**

67.　　The basic questions remain:
- *In satisfying the need for more urban space, what are the viable alternatives to urban sprawl?*
- *Is the compact city strategy more likely to deliver a sustainable and liveable city?*
- *Which directions of research should be extended and what new lines of inquiry should be opened up to improve urban development strategies?*
- *What are the respective roles of various actors in the process?*

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