



Sustainable Urban Ecosystems and Quality of Life: Achievements in European Countries

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Abstract

Urbanization produces profound transformations of human and natural ecosystems which have not been well understood in terms of both positive and negative impacts. The interrelations between urban planning, health, social, economic and environmental policies have been poorly articulated until recently. Since the 1990s, and in conjunction with policies and programmes implementing sustainable development, several innovative initiatives have been implemented. These include the Aalborg Charter in 1994 leading to the Sustainable Cities and Towns Campaign, the Aarhus Convention in 1998, and the Aalborg Commitments in 1998. These initiatives and achievements are summarized in this paper.

Keywords: Sustainable Urban Ecosystems, Quality of Life, European Countries

Abstrak

Pembandaran menghasilkan transformasi yang mendalam terhadap ekosistem manusia dan alam terjadi yang belum difahami dengan sebaik-baiknya sama ada yang berkait dengan kesan positif mahupun yang negatif. Salingkaitan di antara perancangan bandar, kesihatan, sosial, dasar ekonomi dan persekitaran tidak diartikulasikan dengan sebaik mungkin hinggalah ke saat ini. Sejak 1990-an, dan sejajar dengan hubungannya dengan pelaksanaan dasar dan program pembangunan yang lestari, beberapa inisiatif yang berinovatif telah dilaksanakan. Ini termasuk Piagam Aalborg pada tahun 1994 yang menuju ke Bandar Lestari dan Kempen Bandar, Konvensyen Aarhus pada tahun 1998, dan Komitmen Aalborg pada tahun 1998. Inisiatif-inisiatif dan pencapaian ini diringkaskan di dalam makalah ini.

Katakunci: Ekosistem bandar lestari, Kualiti hidup, Negara-negara Eropah

INTRODUCTION

Urbanization has been an ongoing process in the European region since the mid-19th century. However, different rates and patterns of urban growth and rural depopulation have occurred and are ongoing across the European region as a result of various processes of economic and social development. History shows that urban development and quality of life are closely related to the sustenance or failure of urban ecosystems. Some cities and towns have existed for thousands of years, whereas others were founded, grew and then declined and were abandoned. Lessons could be learned from the historical development of the public health reform movement that began in Great Britain in the mid-19th century following rapid population growth, industrialization, the concentration of poverty in cities and the propagation of infectious diseases (Rosen, 1993). The compound problems of unsanitary housing, lack of a supply of safe water, ineffective disposal of sewage and solid waste and inequality in health were tackled by decentralizing responsibility and authority to municipalities in Britain in 1866. The important role of local public administrations should be remembered at the beginning of the 21st century when lack of funding has challenged or stopped initiatives led by the public sector in many countries (OECD, 1998). Public health interventions should be emphasized, including solid waste disposal, sewerage and water services and affordable health care services. In many countries today, especially those in Eastern and Central Europe, local public administrations lack the human and financial resources to counteract the conditions in cities that adversely affect health and well-being.

In 1994, the Second European Ministerial Conference on Environment and Health was held in Helsinki. At that conference, urban health was attributed a high priority for the first time (Lawrence, 1999). This decision by ministers responsible for the environment and health from 51 European countries reflects and reinforces a growing concern about the health status of residents in urban areas. Until the 1990s, these concerns were generally tackled by national policies and resource allocation. However, this shifted substantially in the 1990s. These national roles and responsibilities were decentralized to local authorities, which have been granted an increasingly important role in defining and implementing policies and programmes to promote health. The contributions of WHO-EURO Healthy Cities project and Local Agenda 21 initiatives in many cities and towns have been significant.

Today, national governments have less influence on housing, urban planning and the local urban economy than they did two decades ago, when most

decisions about urban development were made at the national level (OECD, 1998). Decentralization was common in the 1990s, applying the principle of subsidiarity endorsed by the United Nations Conference on Environment and Development in Rio de Janeiro in 1992. Since then, political and social movements in the European region have included public requests for increased roles and responsibilities at the regional and local levels, for autonomy and sometimes for independence, and for increasing citizen participation.

International Institutional Context

Agenda 21 is the United Nations programme of action for sustainable development in the 21st century (United Nations, 1993). Agenda 21 was adopted as a nonbinding agreement by 178 government representatives at the United Nations Conference on Environment and Development in Rio de Janeiro in June 1992. This programme of action interprets concerns about environmental conditions and people's needs, including their health, within a broad economic and social framework. The first principle of Agenda 21 affirms that "human beings are at the centre of concern for sustainable development. They are entitled to a healthy and productive life in harmony with nature." The same document emphasizes that "the primary health needs of the world's population are integral to the achievement of the goals of sustainable development" (United Nations, 1993).

Since 1992, national policies and programmes that implement Agenda 21 have been complemented by Local Agenda 21 at the city or municipal level. Chapter 28 of Agenda 21 recommends that local governments apply participatory processes with citizens, private enterprises and local organizations to define a Local Agenda 21 that includes action plans that focus on context-specific aspects of municipal planning and management (United Nations, 1993). A number of other initiatives have provided momentum for the implementation of Local Agenda 21. These include the Ecological City project coordinated by the (OECD) Organization for Economic Co-operation and Development.

OECD Ecological City Project

From 1993 to 1995, the OECD Group on Urban Affairs conducted a Project Group on the Ecological City (OECD, 1996). This project analyzed and published national overviews and case studies of innovative integrated policies in the OECD Member States. A fundamental principle used in this project is that "ecological cities are distinguished by the degree to which environmental considerations are incorporated into decision-making in public and private sectors



alike" (OECD, 1996). The final report argues that policies for urban areas including both central business districts and suburban neighbourhoods, should combine and integrate environmental, social and economic objectives. In contrast traditional sector based policies cannot address complex urban problems, such as the multiple impacts of transport on the environment, health and the economy. The global character of urbanization, environmental problems and economic change raise questions about the appropriate level of policy decision-making. This report states that a decentralized strategy is appropriate because the most effective solutions are those tailored to local circumstances and conditions. Nonetheless, national policies are necessary to provide a consistent framework, with legislative and fiscal means and measures that support positive innovation and change.

Urban Focus of World Conferences in the 1990s

During the 1990s, a series of World Conferences were held under the auspices of the United Nations. In 1990 the World Summit on Children was held in New York. This Summit underlined that children comprise more than half of the world's population, and also the poorest communities at greatest risk from the negative impacts of poverty. Children suffer disproportionately from high levels of malnutrition, inadequate sanitation, unsafe drinking water, poor housing conditions, and these all impact on their health.

In 1992, the World Health Organization (WHO) and the Food and Agriculture Organization of the United Nations (FAO) convened an International Conference on Nutrition in Rome. The delegates adopted the World Declaration and Plan of Action for Nutrition. In 1996, the World Food Summit in Rome reiterated and reinforced the goals and strategies of this Plan of Action.

The World Conference on Human Rights was held in Vienna in 1993. The Conference Declaration noted that human settlements are the main context in which human rights are exercised or abused. The Declaration addressed the social dimensions of human rights by condemning extreme poverty, and it urged that any obstacles to the attainment of these rights "in particular the rights of everyone to a standard of living adequate for their health and well-being, including food and medical care, housing and necessary social services".

The International Conference on Population and Development was held in Cairo in 1994. This Conference considered the livelihood of the urban poor and how they could be integrated into the formal economy. The Conference praised the

achievement of local community based organisations and it advocated that these organisations deserved greater recognition as valuable partners with the public and private sectors in the development of human settlements.

The World Summit for Social Development in Copenhagen in 1995 considered the reduction of poverty to be one of its key concerns. The programme of Action noted that "urban poverty is rapidly increasing in pace with overall urbanisation. It is a growing phenomenon in all countries and regions, and often poses special problems, such as overcrowding, contaminated water and bad sanitation, unsafe shelter, crime and additional social problems." (para.21). The policy recommendations of this summit addressed inequalities and equity. They considered several distinct social groups, including the displaced (refugees), the homeless, street children, single mothers, people with disabilities and the elderly, whose needs should be addressed.

The Fourth World Conference on Women was held in Beijing in 1995. This Conference considered gender with respect to numerous subjects including women's equal rights to resources and property such as housing and land, as well as credit and technical assistance. This Conference debated the increasing "feminization" of poverty particularly in urban areas; the underestimation of the incidence and effects of violence against women especially in the domestic domain; and the significant role that women assume in the construction and the maintenance of housing. The declarations and agendas ratified at these international meetings all recognise that the vast scale and complexity of problems in human settlements exceed the capacity and the resources of national and local authorities. This recognition has led to calls for broad-based partnerships between the public sector, private enterprises and civil society.

In 1991, the United Nations Commission on Human Settlements (now UN Habitat) launched a sustainable cities programme. Since 1992 this programme has been used to encourage the implementation of Local Agenda 21 projects. The United Nations Environment Programme (UNEP) and (UN Habitat) have jointly administered the Sustainable Cities Campaign since 1995. The Second United Nations Conference on Human Settlements held in Istanbul in 1996 emphasized the importance of local government initiatives and partnerships (UNCHS, 1996; 2001). The outcome of this Summit was meant to provide a practical vision for sustaining human settlements by taking into account the linkages between rural and urban development, ecological principles, human rights, health and social development, demographic trends and population groups at risk. Two documents were issued at the Conference. The first, the Istanbul



Declaration on Human Settlements defines seven priorities which governments agreed to address including: unsuitable consumption and production patterns, especially in industrialised countries; unsuitable population changes; homelessness; unemployment; lack of basic infrastructure and services; growing insecurity and violence; and increased vulnerability to disasters.

The second document, the Habitat Agenda, was meant to lead to a concerted action at all levels about key issues related to human settlements (UNCHS, 2001). It is noteworthy that most of these issues were also debated at one or more of the international meetings held in the 1990s prior to Habitat II. The key issues are equitable human settlements; poverty eradication; the quality of life provided by the built environment; the fundamental role and function of the family; citizens' rights and responsibilities; partnerships between countries and between sectors in specific societies; solidarity with disadvantaged and vulnerable groups; increased financial resources; and health care and services to improve the quality of life.

Although the Habitat Agenda presents key issues "its coverage more often offers extensive description of the manifestation of these problems than trenchant analysis of their causes and resolute prescription of their solutions" (UNCHS, 2001, p. 51). In the long-term, the value of this document, like all others produced during the 1990s, will be judged by what is implemented.

During the 1990s, many national authorities and local governments formed partnerships with nongovernmental and community-based organizations, as well as private enterprises, to promote the quality of everyday life. These partnerships can achieve their objective only if commitment to the allocation of human and monetary resources for interventions is sustained. Defining these interventions in terms of the specific conditions in urban areas requires systematic data collection and information available to policy-makers and professionals (Lawrence, 1995). These official sources of data and information can be used in tandem with innovative research to disseminate indicators and statistics that monitor trends and improve the understanding of urban health of all groups in civic society (OECD, 1997). This is a difficult yet crucial challenge at the beginning of the 21st century in all countries and cities.

European Context and Challenges

Europe is one of the most urbanized continents in the world. The European Union contains about 32 cities with more than 1 million. London and Paris are the

only two urban agglomerations with populations approaching 10 million (European Environment Agency, 2007). About 80% of the European population lives in towns and cities, making them the cultural, economic and innovative centres of Europe. They function as the generators of local, regional and national economies. They are also the centres of European social and cultural development. In recent decades many cities have undergone what some commentators consider a renaissance. Nevertheless, many of these localities confront serious problems – high unemployment, social and spatial segregation, social exclusion, concerns over their future economy, crime, the general quality of life, negative effects on health and pressure on natural and historical assets. Since the 1980s, several demographic trends in western European countries have affected urban development, the quality of life in cities and the health status of some specific groups (OECD, 1998). First, significant socio-demographic trends have altered the size and composition of households. An increasing number of elderly people live alone, and the number of single-parent households is growing. Both these kinds of households have specific requirements for housing; for example it should be readily accessible to community and health care services as well as urban infrastructure, especially efficient public transport. Second, the structure of the employment market in cities has changed considerably. This includes an increasing number of unskilled and manual workers who cannot find full employment (OECD, 1998). In addition, part-time employment among women has increased. Consequently, a growing share of the workforce receives relatively low wages and work in precarious jobs. Young adults have been affected by these trends, which have contributed to increasing the number of homeless youth and adults in many countries.

Third, governments across European countries have introduced policies to reduce public spending, repay debts and apply new principles of public management to make public authorities more effective (OECD, 1998). Consequently, during the 1990s, many municipal authorities reduced expenditure on housing and urban infrastructure and reduced allowances for welfare, health and community care. Fourth, migration from rural to urban settlements has been a major reason for population growth in European cities. In the 1980s and 1990s, some western European cities experienced an alternating cycle of growth and decline in the form of population concentration followed by decentralization (OECD, 1998). In recent years, this reverse cycle has spread from the larger to the smaller cities and from north-western to south-eastern Europe. Since 1990, migration flows from eastern to western European countries have increased, and some cities including Athens, Rome and Vienna, have accommodated

exceptionally high numbers of refugees and migrants. Immigration on this scale, especially during a period of economic recession, has heavily burdened social, health and welfare services in the host cities as well as the housing and employment markets.

European Initiatives for Sustainable Futures

Since 1990, the European Union has sought to consolidate its actions for environmental protection and reorientation of environment policy to promote sustainable development in cities. These actions are summarized in Table 1. They have important implications for urban ecosystems and quality of life.

An integrated approach was first advocated in the Fourth Environmental Action Programme of between 1988 and 1992. This led the European Commission

(1990) to publish the Green paper on the urban environment which argues for an important shift in thinking about the urban environment in Europe, because it advocates a holistic view of urban problems and policy integration to solve them. The Expert Group on the Urban Environment, founded in 1991, developed the European Sustainable Cities Project in 1993, which led to a wider policy discussion in the European Commission with an urban focus (EU Expert Group on the Urban Environment, 1996).

In 1997, the European Commission published towards an urban agenda in the European Union (European Commission, 1997). This established a process of consultation that culminated in November 1998 in the European Urban Forum in Vienna. The urban action plan Sustainable urban development in the European Union: a framework for action was discussed at that

Table 1: Chronology of European Initiatives on Urban Sustainable Development

YEAR	EUROPEAN INITIATIVES ON URBAN SUSTAINABLE DEVELOPMENT
1992	United Nations Conference on Environment and Development Rio Declaration & Agenda 21
1993	WHO European Healthy Cities Network – Phase II European Sustainable Cities Project
1994	First European Conference on Sustainable Cities & Towns, Aalborg, Denmark Aalborg Charter and launch of Sustainable Cities and Towns Campaign
1996	European sustainable cities Lisbon Action Plan of the European Sustainable Cities & Towns Campaign Second United Nations Conference on Human Settlements (Habitat II), Istanbul
1997	Amsterdam Treaty: Sustainable Development a key objective Towards an urban agenda in the European Union
1998	WHO European Healthy Cities Network – Phase III Fifth European Community Framework Programme covering Research, Technological Development and Demonstration activities Sustainable urban development in the European Union: a framework for action Programme of the Fifth European Community Framework Programme
2000	EU Expert Group on the Urban Environment (new programme) Third European Conference on Sustainable Cities & Towns, Hanover; Germany
2001	EU Gothenburg Summit: a renewed strategy with 7 key priorities (2001-2010)
2002	World Summit on Sustainable Development (Rio + 10), Johannesburg
2003	Sixth Environmental Action Programme of the EU EU Environment and Health strategy WHO European Healthy Cities Network – Phase IV
2004	Fourth European Conference on Sustainable Cities and Towns, Aalborg, Denmark: the Aalborg commitments
2005	EU Guiding principles for sustainable development. Thematic Strategy on the Urban Environment – a key action of the Sixth Environmental Action Programme of the EU.
2007	Fifth European Conference on Sustainable Cities and Towns, Seville, Spain.

Forum. This framework is organized under four substantive policy aims: strengthening economic prosperity and employment in towns and cities; promoting equality, social inclusion and regeneration in urban areas; protecting and improving the urban environment: towards local and global sustainability; and contributing to good urban governance and local empowerment.

In 2003, the European Commissioner for the Environment published A European environment and health strategy. (European Commission, 2003). This document demonstrates a commitment to environment and health and foreshadows an action plan for the period 2004–2010 that was launched at the Fourth Ministerial Conference on Environment and Health in Budapest in 2004.

At the European Summit in Gothenburg, Sweden in 2001, a new European strategy included seven targets for the implementation of sustainable development during the decade from 2001 to 2010. These guiding principles concern: combat climate change; ensure sustainable transport; address threats to public health, such as chemicals pollution; unsafe food and infectious diseases; manage natural resources more responsibly and stop biodiversity decline; combat poverty and social exclusion, and meet the challenge of an ageing population.

The Aalborg Charter, 1994

The Aalborg Charter was endorsed at the European Conference on Sustainable Cities and towns held in Aalborg, Denmark in May 1994. This Charter was proposed to implement the mandate defined by chapter 28 of Agenda 21 about the role and responsibility of local authorities in implementing sustainable development. The Conference in 1994 launched the European Sustainable Cities and towns Campaign. The signatories to the Charter agreed to define a Local Agenda 21 for their local authority by the end of 1996 based on the following principles.

European cities and towns are key institutions in implementing changing lifestyles, production, consumption and land-use patterns. They acknowledge that sustainable development cannot be achieved without ensuring sustainable communities.

Notions and principles of sustainability should recognize the carrying capacity of Nature, principles of social justice and equity.

Local strategies towards sustainability can be addressed effectively at the level of local authorities if principles of sustainability are integrated into all policies and programmes.

Creative management processes based on uses of information and dialogue in decision making.

Resolve problems by negotiation beyond the administrative boundaries of the city.

Economic development in cities depends on access to natural capital which should be a source of investments not simply a stock for use.

Social equity should be the goal of providing for basic social needs including health care employment and housing.

Effective land use development and planning should be implemented in new developments as well as during the redevelopment of existing sites

Sustainable urban mobility patterns should be promoted by linking transport policies to environmental and health impacts.

Global climate change should be addressed by reducing significant risks, including the reduction of greenhouse gas emissions, the protection of biomass and the promotion of alternative energy sources.

Toxification of ecosystems is a growing threat to natural and urban ecosystems and human health that should be addressed by preventive measures.

Local self-governance according to the principle of subsidiarity will be applied to develop sustainable ways of living and to design and manage cities.

Intersector collaboration and co-operation between all institutions and actors including citizens will be applied.

Political and technical instruments and tools will be applied for an ecosystem approach to urban management. Such instruments and tools include those for collecting and processing environmental data; environmental planning; regulatory, economic, and communication instruments such as directives, taxes and fees; and means for improving public including citizen participation.

The European Sustainable Cities & Towns Campaign includes municipalities as well as the major European networks of local authorities including Eurocities, Council of European Municipalities and Regions, World Federation of United Cities (FMCU-UTO), Energie-Cités, Climate Alliance, International Council for Local Environmental Initiatives and the World Health Organization Healthy Cities project. In November 2009, more than 2'500 European local governments from 40 European countries have signed the Aalborg Charter which has become one of the best known policy statements for local



sustainable development within and beyond the European region.

The Aarhus Convention, 1998

The United Nations Economic Commission for Europe acted as the Secretariat for the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters which was adopted at the Fourth Ministerial Conference on the Environment for Europe on 25th June 1998 in Aarhus, Denmark. The Aarhus Convention links environmental rights and human rights. It maintains that sustainable development can be achieved only through the involvement of all stakeholders. It also acknowledges that we owe an obligation to future generations, and it links government accountability and environmental protection and it focuses on interactions between the public and public authorities in a democratic context.

The Aarhus Convention grants the public rights and imposes on Parties and public authorities obligations regarding access to information and public participation and access to justice. It is also forging a new process for public participation in the negotiation and implementation of international agreements. The Convention entered into force on 30 October 2001, after relatively rapid progress was made in obtaining ratifications by sixteen of the Signatories.

The Aalborg Commitments, 2004

Ten years after the launching of the European Sustainable Cities and Towns Campaign and the adoption of the Aalborg Charter, the fourth European Conference on Sustainable Cities and Towns was held in Aalborg to strengthen the achievements of the previous decade. The Aalborg Commitments are a set of shared commitments to be jointly implemented by local governments across Europe. The official document has two parts: the general commitment to be signed, and the commitments about suggested targets as inspiration for the target setting process. These ten commitments are concerned with:

- Improving governance with the objective to increase participatory democracy in decision-making processes
- Improving management towards sustainability, by the use of effective management.
- Protecting and ensuring equitable access to natural common resources
- Encouraging sustainable consumption and production by efficient use of resources

- Attributing a strategic role to urban planning and design including environmental, social, economic health and cultural issues for the benefit of all

- Acknowledging the interdependence between transport, health and the environment in policy definition and implementation.
Promoting health and well-being of all citizens

- Supporting the local economy and employment in diverse sectors

- Promoting inclusive and supportive communities

Assuming responsibility for peace, justice, equity, sustainable development and climate protection.

Since the Conference in Aalborg in 2004 not less than 619 local governments have signed up to the Aalborg Commitments. This suggests that the Aalborg Commitments are a useful tool for local governments to address the challenges of sustainable development.

CONCLUSION

This paper indicates that the 1990s was a decade of numerous achievements at both the global and European for the promotion of sustainable development by local authorities. Furthermore, the implementation of sustainable development at the local level has continued throughout this decade in numerous European cities and towns. However, not enough attention has been given to assessing the effectiveness of programmes to promote sustainable development at the local level. If these evaluations are not available, then policy-making and decision-making can be handicapped. More empirical research is required, including collecting time-series data, to evaluate various kinds of policies, programmes and projects. Environmental impact assessment, health impact assessment and cost-benefit analysis can be used in an integrated way to study interventions intended to promote sustainable development at the local level.

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