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## **SOME ASPECTS SUSTAINABLE URBAN DEVELOPMENT: OVERVIEW**

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### **Abstract**

The concept of sustainable development is a relatively new concept that has been introduced in order to overcome the shortcomings of previous models of development. Sustainable development seeks to establish a balance between the various dimensions of development: economic, environmental and social. Nevertheless, despite the high usage of the term, it is necessary to better understand the concept of sustainability in order to facilitate the implementation of this model of development (Štrbac et al, 2012). Taking this in account, this paper provides an overview of the sustainability of urban development as a prerequisite for the creation of a sustainable city. To address this need to be familiar with are urban development, urban environment and social - intellectual norms in society scalable financial and political parameters. It can be argued that every generation has the right to regulate their environment according to their needs and capabilities, however there is a parallel obligation of this generation to its successors, in subsequent generations, leave enriched, but not ruined urban space (Grubić, 2009).

**Keywords:** Urban geography, sustainable urban development, sustainable city, city suitable for living.

### **Introduction considerations**

The village and its surroundings are constantly changing. In the twenty-first century, according to Đerečin (2015), which many authors (Andersen and Engelstoft, 2004; Kotter, 2004; Seferagić, 2005) referred to as century of cities and urbanization, the percentage of the world population of 280.000 inhabitants, and by 2015 the pre - visits that will live in cities by 3.9 billion people. The growing world population is manifested

by changes in the network of settlements caused by globalization. It comes to homogenization and heterogenization space creation of new settlements network, the emergence of new structures - megalopolises, cosmologies, international and global cities, and to the distribution function of the hierarchical type. Thanks to its high natural population growth and migration from rural to urban areas, in many developing countries according to Đerećin (2015) referring to the research (Woods, 2009; Grčić and Sluka, 2006) formed a network of urban agglomeration with the proper hierarchical and functional structure. In such cases, cities have millions role of the nucleus of complex urban systems. In developed countries, the structure of the settlement network is more complete. Forming multi-million city agglomeration followed by reducing the differences between urban and rural areas with a balanced taxonomic structure of city centers by size and functions. In this way, they formed a regional constellation of cities that are characterized by slow demographic growth, a high degree of urbanization, stable network and hierarchical structure of the village.

Numerous scientific studies indicate a strong correlation between the level of urbanization and level of economic development. It is generally considered that the economic growth and development of the primary stimuli of urban growth and urbanization. However, there is a reverse relationship; larger agglomerations generate economies of scale. Thus, numerous scientific studies growth and development support the hypothesis that cities are "engines of growth" and "engines of social recovery"(Euro Cities, 2011; Beall and Fox, 2009). Increased market stability and openness have enhanced the economic role of many cities, drawing attention to the importance of urban functionality. The growth of cities has translated into voluminous investments in real estate and infrastructure, though these investments have been subject to business cycles within countries. The further development of information technologies and the growth of a diverse and complex service sector have helped to set up a new dynamic between cities and the territories they influence. Nonetheless, land-use and urban management policies have not fully seized the opportunity to lead or keep pace with the growth, liberalization and changes in production taking place in the region (Winchester, 2005).

Winchester (2005) referring to the research Jordan (2003) indicates that the combined improvement of urban functionality and habitability conditions for urban residents (both material and intangible factors), particularly for poorer sectors, is a major challenge currently facing urban policy makers that requires an integrated, proactive and systems approach to urban planning and management (Jordan, 2003). Public intervention tends to encompass passive and normative approaches (zoning instruments and plans), strategic planning techniques (community participation, private sector involvement via incentives, definition of priorities), and a wide variety of land use planning instruments not necessarily coordinated together, nor used to induce or promote certain strategic outcomes. A variety of innovations, however, can be observed in different regional experiences. "Therefore, the focus of policy development and growth must place the city as a concrete space where is "happening development". Contemporary globalization processes increase the mobility of goods, people and capital, which increases the growth of global competition, which is why there are new "winners" and the new "losers", both among countries and among cities. This means that the very fact of the existence of town does not mean that development will automatically happen by itself. attractiveness and

attraction of cities in general is great, but among them there are some differences because some cities attractive power and attractiveness while others grow weak" (Čavrak, 2016). Čavrak (2016) according to Wassenberg and Dijken (2011) and Čavrak (2012) indicates that, today we witness the existence of cities whose attractiveness declines rapidly but declined in population and the decline in the number of employees. In this case we are talking about cities that require urban regeneration. There are several reasons why cities become "losers." Very often it is a problem undeveloped, narrow economic structure (usually dominated by a single industry - for example, heavy industry, shipbuilding...), as well as the inability of the rapid changes in technology and slow productivity growth. Often it is a great natural disasters and war, and there are numerous other causes. Because of the need to strengthen development capacity, especially innovative capacity, in the modern world by Čavrak (2012) are happens metropolisation intensive process. An increasing number of citizens coming to metropolitan regions or cities directly to the metropolis, and in this area are located higher and better development potential. This is primarily related to a larger amount of available knowledge about the fact of the existence of higher education institutions and universities, institutes and various development agencies.

In these areas there are financial institutions and available capital, there is the ability to apply and use the latest technology which allows for higher productivity and competitiveness. If the emphasis is on the use of technology Čavrak (2016) by Nam and Pardo (2011) points out that you meet the following phrases: digital city, intelligent city, Internet city, information the city. If the emphasis is on people encounter following phrases: creative city, a city that teaches a city with a human face, a city of knowledge. For smart city where the emphasis is on the community we have the phrase smart communities and creative communities. In order to enable further progress towards the human population Vasović and Biočanin (2009) required the adoption and implementation of sustainable development. The basic idea of sustainable development is meeting the needs of the present generation without compromising the possibilities of future generations to meet their own needs. Urban settlements in particular, play a significant role in improving the quality of life by being hubs of economic and cultural activities, but they also need to ensure that these roles are maintained and re-generated through the revitalization of current systems (Keirstead and Leach, 2007).

### **Research Methodology**

Geographic approach in the study of the spatial structure of the city generates the basic principles of systems theory and the concept of sustainable development. The application of systems theory to the study of the spatial structure of the city begins the sixties of the last century, though its elements can be identified and explained in previous theoretical and methodological approaches. In essence the system paradigm is procedural functionalism. Contemporary urban - geographical approach to the study of the spatial structure of the city is based on the hypothesis that the city is a coherent system of spatial - temporal consistency pronounced natural - ecological environment, population and function with clearly developed structure characterized by integrity, competence of complementarily, hierarchical and integrative (Tošić et al, 2008). The city is differentiated space - functional units that serve as poles of convergence and divergence

relationship, and often the transformation and diffusion interaction. Since the processes that form the structure of the city is not static but dynamic in time and space, the city is seen as an active and dynamic territorial system complex and variable structure, which has a spatial - development coherence and structural diversification expressed individuality of functional, social - demographic and morphological characteristics (Tošić et al, 2008). The subject of this article potentiated: sustainable urban development, the role of cities in sustainable development and the city suitable for living.

The whole information volume in this article was obtained through specific methods for the selective research, respecting all its stages from the methodological point of view: identification of the researched issue, research framework delimitation, information collection, data processing, analysis and interpretation drawing up the conclusions. Research also played an important role in the article, which consisted, on one hand, in the identification of and articles on the same subject, and in the processing of some statistic data, on the other hand. Hence, the information sources used can be classified into governmental sources (statistic, ministerial and from research institutes), and into non-governmental sources (independent publications)( Krechetnikov et al, 2016; Bulatović and Rajović,2016).

### **Analysis and Discussion**

Tang and Lee (2016) referring to the research Macmillan Dictionary (\*\*\*) , Champion and Hugo, (2003), International Council for Science (2011), Merriam – Webster (\*\*\*) indicates that urban planning is defined as the planning and designing of buildings, roads, and services in a town. In “urban planning,” we deal with two concepts: “urban environment” and “planning.” Even though the first term is frequently used, it does not mean that it has a universally-agreed-upon definition. In fact, as to what an urban area stands for or what it is comprised of, we still do not have a consensus. In most countries, whether a settlement or population should be classified as rural or urban often depends on its population number, density, physical characteristics, or administrative functions. The International Council for Science proposes a synthesized definition to call urban environment “the natural, built and institutional elements that determine the physical, mental and social health and wellbeing of people who live in cities and towns”. As for “planning,” if used in a city or business context, it usually refers to “the establishment of goals, policies, and procedures for a social or economic unit”.

Kiamba (2012) accent that “developing countries must therefore invest significant amounts of money, energy, and time in order to fully meet the requisite conditions for truly sustainable development—much more than is required simply for short-term, resource -driven developmental success”. Referring to the research Clarke (1995), Kiamba (2012) accent that notes that developing countries continue to grapple with issues such environmental degradation, infrastructural underdevelopment, and the lack of basic social provisions (i.e. clean water or basic healthcare) - all of which are addressed in efforts for sustainable development. Furthermore, the fundamental value of sustainable development, he explains, is tied to the expected revenues associated with the provision of higher quality public goods; cleaner air and water, for example, can produce meaningful financial benefits as they contribute to better public health.

According to Kiamba (2012) pointing to research Williams and Millington (2004) and Meadowcroft (1999) concludes as far as are concerned, weak sustainable development is linked to helping people meet their short-term basic needs, no doubt an important goal but not the only important one. Rather, the government should be the primary provider of basic services and should aim to improve the quality of life of its citizens and, to a lesser extent, to preserve the environment. Through regulations, people's quality of life can be enhanced by improvements to the quality of food and water, of housing and the built environment, and of the natural environment itself. In addition, environmental policies that deal with and seek to prevent environmental degradation can be implemented. There is ample room for policy and regulatory improvement related to maintenance of natural resources in urban areas, mass transportation, waste management, and energy efficiency, among many other issues. A large component of this so-called dual economy is a direct result of rapid urban development and lack of planning.

Cities are not only a reflection of the society within which it is located - they are more a reflection of global society is. Or, as Mumford wrote in 1961 in his book "The city in history": "... slowly we went from being a city that symbolizes the world, to a world which in many practical aspects of becoming a global city" (Đukanović, 1996; Grubić, 2009). In Istanbul in 1996 took second United Nations Conference on Human Settlements – "Habitat II" or "Settlement Summit", which was adopted Action Plan known as the Habitat Agenda, and after this conference the subsequent Conference Istanbul + 5, held in 2001. Two main problems discussed at this summit, i.e. conference was the "housing for all" and "sustainable urban settlements in the urbanized world". Apart from these problems and many others who have been the subject of discussion at this conference, Habitat II emphasized the great importance of the role of cities in achieving sustainable development (Grubić, 2009).

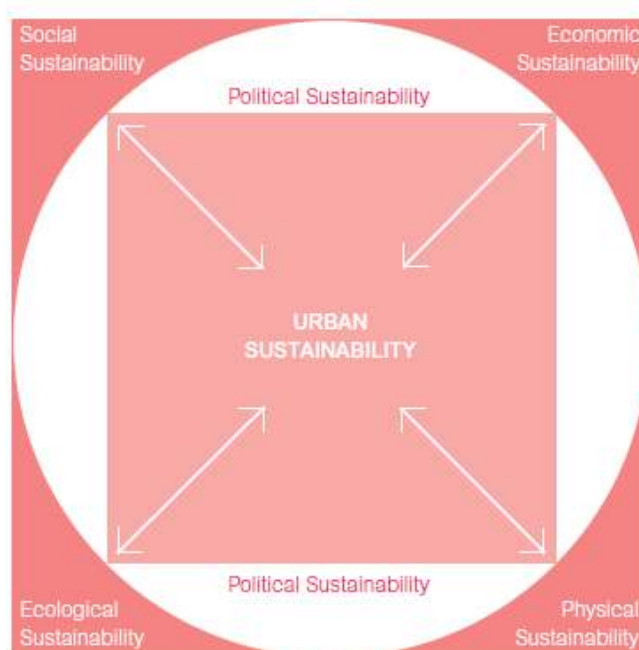


Figure 1. The Five Dimensions of Urban Sustainability (Allen, 2001).

Economic sustainability is understood as the capacity and ability of a practice to be able to put local/regional resources to productive use for the long-term benefit of the

community, without damaging or depleting the natural resource base on which it depends and without increasing the city's ecological footprint. This implies taking into consideration the full impact of the production cycle. Social sustainability refers to the fairness, inclusiveness and cultural adequacy of an intervention to promote equal rights over the natural, physical and economic capital that supports the livelihoods and lives of local communities, with particular emphasis on the poor and traditionally marginalized groups (Allen, 2009). Cultural adequacy means, in this context, the extent to which a practice respects cultural heritage and cultural diversity. Ecological sustainability pertains to the impact of urban production and consumption on the integrity and health of the city region and global carrying capacity. This demands the long term consideration of the relation between the state and dynamics of environmental resources and services and the demands exerted over them. The sustainability of the built environment concerns the capacity of an intervention to enhance the livability of buildings and urban infrastructures for 'all' city dwellers without damaging or disrupting the urban region environment. It also includes a concern for the efficiency of the built environment to support the local economy. Last, but not least, political sustainability is concerned with the quality of governance systems guiding the relationship and actions of different actors among the previous four dimensions. Thereby, it implies the democratization and participation of local civil society in all areas of decision-making (Allen, 2009).

A large urban idea, innovations and visions, and about what a particular region, or urban district of the city are it seems big, important, memorable and innovative, a lot of discussion. According to some authors, the answers are conceptual, such as ensuring environmental sustainability and density of housing, while the other "current" major projects in emerging viewed through the "ability, imagination, variety and vitality". Initiatives that have a role in urban sustainability were first initiatives in the field of environment, followed by economic initiatives, social initiatives and initiatives in culture (Lalošević et al, 2013). The question arises: to what extent micro interventions work effectively to changes in the macro environment for sustainable development? What should go first, smaller pilot projects that inspire broader changes, and possibly water them because they are copied and so eventually help to change the incentives and regulatory regime in the direction of sustainable development? Or first, changes in macro mode, providing fertile ground, which allows the pilot projects happening? There will be no agreement, but it is certain that no city cannot are live only from continuous innovation. Even so, many cities have poorer functioning than you might have, and isolated good examples do not mean that the city as a whole innovative. We need to find new and more innovative methods to rapidly expand the ways in which cities with the best practices work, and that their best practices and adopt those slowest to move forward (Lalošević et al, 2013).

Satterthwaite and Tacoli (2003) accent that "stressed the potential role of small and intermediate are urban centers for rural and regional development. They argue that these settlements increase rural agricultural incomes by acting as centers of demand and market nodes for agricultural produce from the rural region. In addition, they argue that small settlements reduce costs and improve access to a range of public and private services and goods from within and outside their region by acting as centers for the production and distribution of goods and services to their rural region. Also, they could reach these objectives through function as centers for the growth and consolidation of

non-farm activities and employment for rural residents and through the development of small and medium-sized enterprises or through the relocation of branches of large private or public enterprises. Moreover, they argue that this size-category of settlements is effective in attracting rural migrants from the surrounding region through demand for non-farm labour and thereby decreases pressure on larger urban centers”(Abou - Korin, 2014).



Figure 2. The rapid urbanization of cities from year 1800 to 2050 (Ibrahim et al, 2015).

According to the United Nations' (2014) World Urbanization Prospects report of year 2014, more people are living in urban areas than in rural areas, with more than 50% of the world's population residing in urban areas at the end of 2014. In 1950, only 30% of the world's population was urban, while by 2050, 70% of the world's population is expected to be urban as illustrated in Figure 2 (Ibrahim et al, 2015).

According to Alexander and Falk (1974) "a vast literature, old and new, testifies to the crisis of large cities expressed in high ratings on the scales of noise, pollution, crime and some other undesired characteristics. The old metropolitan cities of the industrial countries are becoming less attractive as places of residence and less adaptable to new businesses' requirements. Doxiadis (1965) made a strong statement about the security problems in big cities: For the first time in the human history it is safer to be in the countryside than in the city. In the past the safest place on earth was the centre of the city; now it is the most dangerous both during the day and night. Moreover, population over-concentration in large cities increases commuting, congestion, living costs to excessive levels, and the costs of production of goods. Also, it lowers the quality of urban service provision and creates enormous regional disparity problems (Henderson, 2000)"( Abou - Korin, 2014).

Ladman (2003) according to Rogers (1999) maintains that a sustainable urban form is based on a series of interlinked compact nodes or neighborhoods. These neighborhoods grow around centers of social and commercial activity located at public

transport nodes. Together they make up the compact city, which can then be defined as a network of these neighborhoods, each with its own parks and public spaces and accommodating a diversity of overlapping private and public activities (Figure 3).

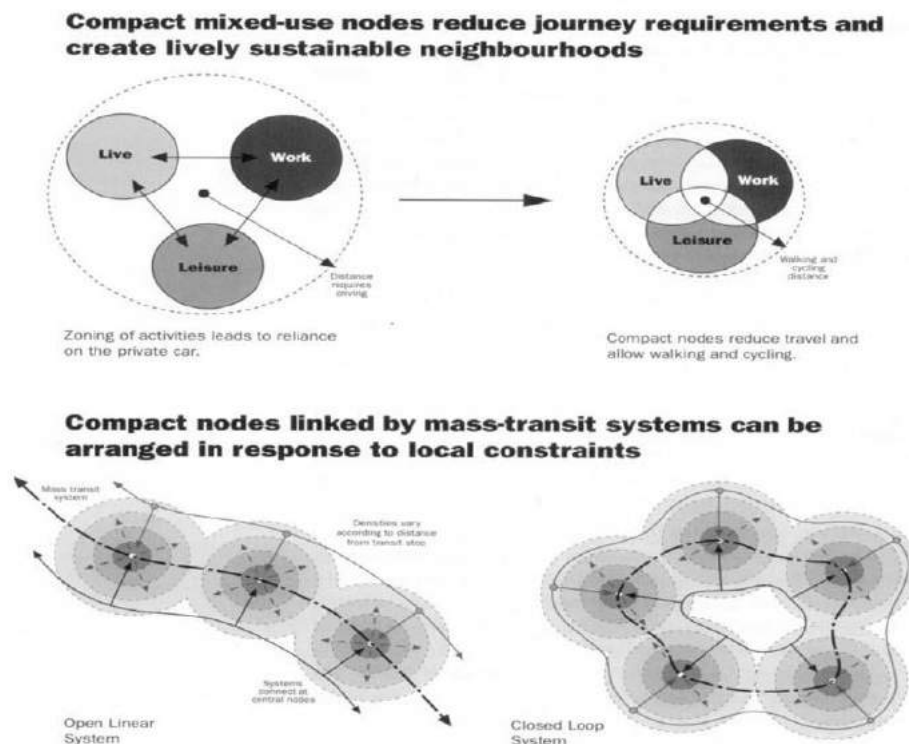


Figure 3. The compact sustainable city as promoted (Ladman, 2003) according to Rogers, 1999).

The supporters of the concept of "urban village, while promoting the reduction of individual travelling within the urban space, "seek also to stimulate an attachment to the place, which seems to be the mirror image of a localism that works for a "rebirth of places", that is to say, for the re-enchantment and the promotion of modes of spatial organization allowing for an intensity of social relations and a re - territorialization of needs ( Homs, 2007).

However, the logic of localism, according to Homs (2007) referring to the research Henry (\*\*\*) and Claude Michéa (\*\*\*) indicates that which is the basis of urban village, should not be interpreted as leading to logic of identity, not even logic of a community identity. The "urban village" does not preclude the permanent links created by an individual in the course of frequenting groups and spaces other than those of the urban village. This is because the different "urban villages" within the city are linked together with a common transport system. The urban village is not there to develop a sense of community withdrawn into itself, or worse, to establish a hierarchical relationship between the community and the individual which would subordinate the latter; it only serves to avoid the "general dissolution of all 'community assets', which are indispensable to the construction of a really human individual life" that is implied by the current policies of urban plan Table 1.



Table 1. Urban quality of life Vs urban planning theories and approaches

	New Urbanism	Smart Growth	Urban Village	Intelligent Urbanism
Environmental	No principles dealing directly with environmental issues.	Preserve open space and critical environment areas. Strengthen and direct development toward existing communities	Sustainability.	Balance with nature. Efficiency. Appropriate technology.
Physical	Mixed land use. Compact neighborhood. Eco-building.	Mixed land use. Adopt compact building patterns and efficient infrastructure design.	Mixed-use and diversity. Increased density. Traditional neighborhood structure.	<i>No principles dealing directly with physical issues.</i>
Mobility	Pedestrian and transit friendly neighborhood. Fine network of interconnecting streets. Hierarchy of streets networks.	Create walk able neighborhood. Provide a variety of transportation choices.	Walk ability. Connectivity. Smart transportation.	Balanced movement.
Social	Provide civic building and public gathering places. Provide a range of parks. Create a range of housing types. Reinforcing a safe and secure environment.	Encourage community and stakeholder collaboration. Create a range of housing opportunities and choices	Mixed housing.	Conviviality. Human scale. Opportunity matrix.
Psychological	Architecture and landscape should be linked to context. Preserve historic areas	Foster distinctive, attractive communities with a sense of place.	Quality architecture and urban design. Quality of life.	Balance with tradition.
Economical	<i>No principles dealing directly with economic issues.</i>	<i>No principles dealing directly with economic issues.</i>	No principles dealing directly with economic issues.	No principles dealing directly with economic issues.
Political	Control evolution	Make development decisions predictable, fair and cost effective.	No principles dealing directly with political issues.	Regional integration. Institutional integrity.

Source: El Din et al (2013).

Relationship between are urban planning theories and the seven dimensions of urban quality of life shown in Table 1. This display represents the point for principles of urban quality of life. It is obvious that there are some gaps, as it is clear for example for the economical dimension. Although these gaps reflect the lack of principles that deal directly with the economical dimension, this does not mean that such urban planning approaches or theories have not considered this dimension, but they address this dimension indirectly as most of those urban planning approaches and theories principles have a direct effect on economical issue (El Din et al, 2013).

According to Weźiak-Białowska (2016) focusing on research: Lynch and Rodwin (1958), Gory et al (1985), Jacobs and Appleyard (1987), Verstock (1996), Smith et al (1997), Clifton et al (2008), Banai and Rapino (2009), Insch and Florek (2010), Ballas and Dorling (2013), Brunelle (2013), Zenker and Rütter (2014) stand out yes are cities often regarded as bundles of services provided to citizens. The needs and wants of citizens correspond to both social and economic city operation. The former focuses on cooperation and interaction between citizens and their satisfaction. The latter emphasizes the industrial and functional dimensions of economic specialization, which, from the citizen's perspective, implies the availability of work. These needs are reflected by vision in city planning and urban design manifestos, designed to improve people's life quality. Following major theoretical approaches to urban design and planning, quality of urban community and urban quality of life, there are several distinct aspects arising at multiple scales (e.g., regional, metropolitan, sub-metropolitan, and neighborhood) that should be addressed by urban planners to render a city live able. By Smith et al (1997), Clifton et al (2008), Banai and Rapino (2009) “these are: physical features such as size and location of urban block, buildings, streets, pedestrian ways, open space vegetation and featured areas; accessibility understood as convenient access to retail shops, parking spaces, schools, sport facilities, cultural facilities and labour market live ability perceived in terms of survival, i.e., related to access to healthcare, personal health and health of the environment and to safety understood as lack of danger and sense of assurance; communication comprising telecommunication technologies and transportation; character reflected by sense of place and time, stability, warmth and aesthetics and personal freedom comprising freedom of expression, privacy and affordability but also allowing control” (Weźiak - Białowska, 2016).

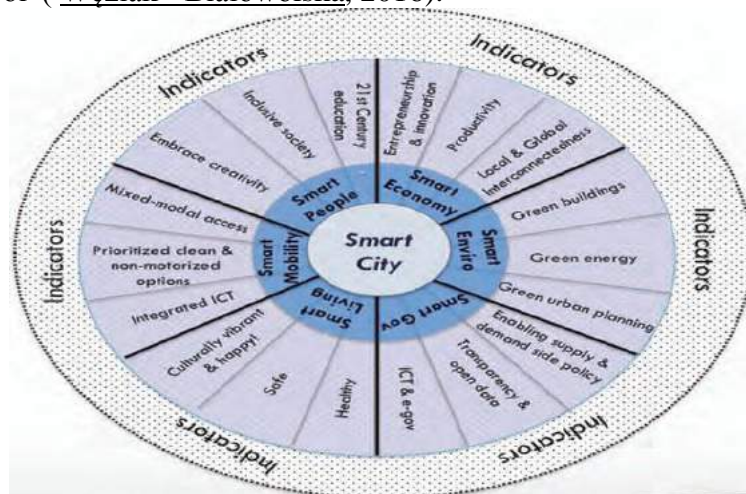


Figure 4. Lap smart city Čavrak(2016) according to Cohen (2015).

The concept of smart city often narrows to use and the smart use of information and communication technologies. The wider the concept of smart city includes much more components and concerns of an integrated approach to improving the efficiency of urban functions, quality of life (see Rajović and Bulatović, 2016) and growth of the local economy. This concept therefore encompasses very different areas and activities: industry and production of goods and services, education, participation and citizen participation, technical infrastructure, a variety of "soft factors"... (see Čavrak, 2016). The aspect of the vision of a sustainable city refers to the participatory city. The basic idea of this vision of the city is based on the creation of partnerships and the necessary partnerships. Harmonization of the various interests of the business sector, environmental protection and community development requires the creation of partnerships. The traditional role of services, which are offered by the government, social organizations, private sector, trade unions, religious communities, local communities and families, rapidly changing due to major financial constraints, constitutional provisions, legal changes, reduction of resources, environmental requirements, globalization of the economy, market liberalization, variable values, new social norms, as well as the demographic pressures on cities (Grubić, 2009).

Cities crystallize hopes for a better tomorrow, which will be much less like yesterday. They establish brown, green and grey agendas to meet the three-fold challenge of globalization, sustainability and cohesion. However, environmental problems and social shock waves cannot be absorbed in many cities. Unemployment scars their face. New forms of poverty (like "fuel poverty") are both a cause and an effect of declining social cohesion. Globalization offers cities the opportunity to become world players, but may also trigger processes of change which cannot be influenced by local communities. Shifts may be swift and lethal (Mega, 1999). Change is inevitable. The challenge is how best to manage change in order to achieve the best European future. Cities are the only places where decision-makers, entrepreneurs, workers and citizens congregate, at a point beyond which synergetic effects become more important than the accumulative ones. The potential, due to their scale and diversity, has to be reinforced; the participation of all is leading to the optimization of the "disorderly order of human interaction" (Mega, 1999).

A journey into innovations might be an odyssey to tomorrow-land, in search of best practices and paradigm shifts. Each city is unique, but models are universal. Common frames for the implementation of shared principles are needed, and the development of indicators, as a new measure of progress, is an outstanding example. Europe should mean a search for excellence. Cities have promoted open democracies. The art and science of co-governing cities with all actors requires institutional innovations based on solidarity and citizenship. Cities become schools and laboratories to move from government to governance. Noble public spaces can serve as places to promote unique cultures, exercise citizenship and "negotiate" democracy (Mega, 1999).

As a result of all of these problems Grubić (2009) referring to the study Milutinović (2004) concludes that local communities decide for a partnership approach to providing services. Services are increasingly provided through: consumer associations, trade unions, community organizations, regional and national governments and even international organizations for the development and financial assistance. Only when the parties concerned agree to develop and implement a common strategy, it is certain that the services to be sustainable.

“In most cases, modern cities have to organize themselves in an effective and efficient way in order to cope with both regional and global competition. This means essentially that modern cities may be conceived of as ‘self-organizing innovative complexes’ (SIC) that are subject to the conditions of systems dynamics. The generic features of such urban or metropolitan SIC are: a reliance on creativity, innovativeness and leadership competitive advantages to be created by R&D, productivity and competitiveness as critical success factors, a market orientation determined by product heterogeneity and monopolistic competition, a development path marked by evolutionary complexity and behavioural learning principles “ (Nijkamp, 2008).

Despite the multidimensional complexity of modern cities in their struggle for progress and sustainability, we may distinguish a limited set of systematic factors that exert a decisive impact of the XXQ performance of these SIC. These factors which call essentially for an urban systems economics perspective are summarized in Figure 3 in a so-called Pentagon model ( see Nijkamp, 2008).

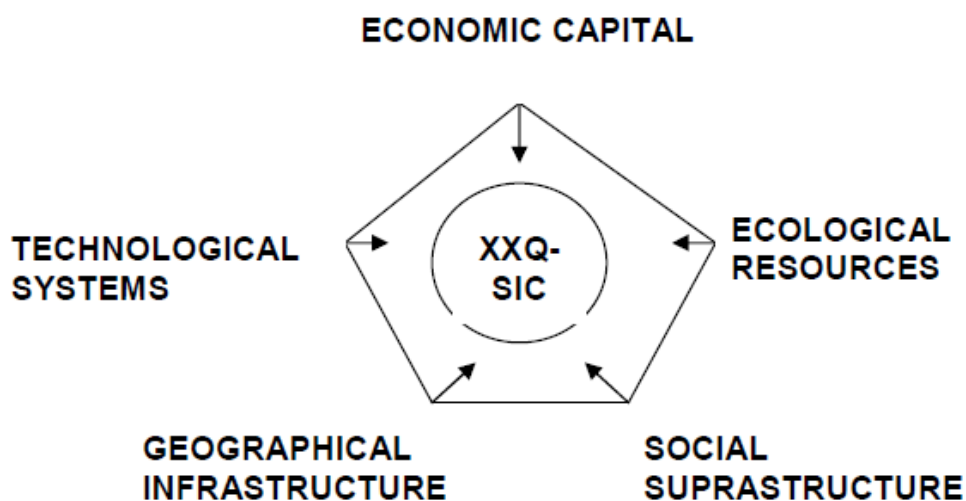


Figure 5. A Pentagon model of XXQ forces for SIC (Nijkamp, 2008).

Cities (urban places) are important not because they are unique engines of economic growth, but because it is increasingly in urban places that people live and that economic activity takes place. Making urban places as efficient and as live able as possible are necessary public policy objectives. I want the city I live in to be safe, have clean air, pleasant parks and a vibrant cultural life (Polèse, 2005).

### Conclusion considerations

Sustainable city is a city that works in such a way that all its citizens are able to meet their own needs, and that doing so does not endanger the state of natural systems and living conditions of other people, as in the present, and the future (Girardet, 1999). The United Nations Association of Serbia (2012) indicates that half of humanity, that is 3.5 billion people now live in cities; by 2030 almost 60% of the world's population will live in urban areas; 95% expansion of urban areas coming decades will be in developing countries; 828 million people today live in poor neighborhoods and this number is

constantly increasing; cities in the world comprise only 2 % of the land on the planet, but they account for 60 – 80 % of energy consumption and 75 % of carbon dioxide emissions; rapid urbanization puts pressure on freshwater resources, sanitation, environment and public health; high population density in cities contributes to reducing consumption of resources and energy through efficiency and technological innovation.

Aguilar and de Fuentes (2007) extraordinary conclude:” today, the city is characterized by a complex and diverse urban reality, with serious social and environmental problems that include extensive low-income settlements, large sections of the population with inadequate access to housing and basic urban infrastructure (especially water and sewerage)... The city is now characterized by a range of problems, including large scale in-migration, land invasion, a high proportion of the workforce relying on the informal economy for their livelihoods, a high cost of living, urban segregation and fragmentation, marked by socio-economic disparities (also environmental), lack of environmental awareness among developers and constructions companies, the privatization of urban services and weak public administrations”.

Therefore, it is essential that planning, development and use of space based on the following principles: sustainable development through an integrated approach to planning; balanced territorial development; rational land use by encouraging rate of urban and rural renewal and reconstruction; rational and sustainable utilization of non-renewable resources and the optimal use of renewable resources; protection and sustainable use of natural resources and immovable cultural assets; prevention of technical and technological accidents, fire and explosion, protection against natural disasters, eliminating the causes that cause climate change; spatial planning and development for defense purposes; compliance with European regulations and standards in the field of spatial planning; promotion and use of information technologies that contribute to improved efficiency and effectiveness of public administration in the business of construction; public participation; preserving the customs and traditions; preserving the specificities of the landscape; horizontal and vertical coordination ([www.kragujevac.rs](http://www.kragujevac.rs)).

Sustainable development is the harmonization of economic, social and environmental aspects of development, the rational use of non-renewable and providing conditions for greater use of renewable resources, present and future generations to meet their needs and improve the quality of life. Horizontal coordination implies linking with adjacent territories during planning, in order to resolve common functions and interests, as well as the networking and participation of all stakeholders in the spatial development of the public and civil sector and citizens. Vertical coordination implies the establishment of links between all levels of spatial and urban planning and spatial development, from national to regional and on to the local level, as well as information, cooperation and coordination between local initiatives, plans and projects with regional and national plans and actions. Sustainable city means - responsible city, a city suitable for living and participatory city ([www.kragujevac.rs](http://www.kragujevac.rs)).

Directions to be followed towards sustainable urban development are: compact form of the city, the efficient use of land; less automobile use, better accessibility; efficient use of resources, less pollution and waste: restoring natural systems; satisfactory living conditions and everyday environments; healthy relationships in society; sustainable economy; participation and involvement of the community and the preservation of local

culture and local specificities (Wheeler, 1998; Wheeler, 2002). The objectives to be achieved sustainable urban development related to: infrastructure that contributes to environmentally sustainable use of resources; waste reduction and proper waste management; energy-efficient transport; compact forms of land use; integrated transport planning and land use; assessment and monitoring of the local environment; cooperation with citizens' associations in the implementation of environmental programs; reducing the economic and social polarization; integration of marginalized social groups in activities aimed at sustainability (Gilbert et al, 2013).

Key challenges according to Riffat et al (2016) together with Australian Government Department of Infrastructure and Transport (2011), Australian Sustainable Built Environmental Council (2013), and Moir et al (2014) underline that for future cities will be productivity, sustainability, livability and good governance as summarized in Table 2.

Table 2. Challenges for future cities and desired objectives-principles to overcome these challenges

Challenges	Objectives	Principles
Productivity	o Improve labour and capital productivity	<u>Efficiency</u>
	o Integrate land use and infrastructure	
	o Improve the efficiency of urban infrastructure	
Sustainability	o Protect and sustain our nature land built environments	<u>Value for money</u>
	o Reduce greenhouse gas emissions and improve air quality	<u>Innovation</u>
	o Manage our resources sustainably	<u>Adaptability</u>
Liveability	o Increase resilience to climate change, emergency events and natural hazards	<u>Resilience</u>
	o Facilitate the supply of appropriate mixed income housing	<u>Equity</u>
	o Support affordable living choices	<u>Affordability</u>
	o Improve accessibility and reduce dependency on private vehicles	<u>Subsidiarity</u>
Good Governance	o Support community wellbeing	<u>Integration</u>
	o Improve the planning and management of our cities	<u>Engagement</u>
	o Streamline administrative processes	
	o Evaluate progress	

Challenges for future cities and desired objectives-principles to overcome these challenges to stand (marked with red color) for Table 2. Challenges for future cities and desired objectives-principles to overcome these challenges(Riffat et al,2016).

Current thinking about future cities is more wide ranging and diffuses than ever. Although research, planning and speculation about the future of cities is not new, today's context is distinctive. At least four macro trends are visible: the surpassing of 50% urbanization globally; the expansion of cities into metropolitan areas and regions; the seriousness of environmental and climate change challenges; and the shift in the centre of gravity of the global economy combined with population mobility. Together, these factors are focusing minds and attention on the future much more clearly (Moir et al, 2014).

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