Urban Sustainability, Globalization and Expansion Organization in Middle East

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Abstract

In the Western context, notions of sustainable development often refer to the need to adjust existing economic models in order to maintain better balances between economic growth and social needs, while protecting local ecologies and reducing the negative impact of growth on the global environment. In the developing world, however, sustainable development takes on a rather different meaning. With the agendas of developing nations focused on addressing basic developmental challenges such as economic growth, water scarcity, food security, and health, other environmental and social aspects are considered secondary at best and, for the most part, a luxury that a developing nation cannot afford.

During the past three decades, Major Middle East city-regions have experienced considerable physical, economic and social transformations. Globalization and economic restructuring has resulted in these city-regions receiving the full impact of urbanization pressures. City-regions such as Dubai, Masqat, Beirut, Amman, and Cairo have advocate expansion organization approaches giving particular interest to urban sustainability in an attempt to ease these pressures. These approaches promote efforts to achieve the triple bottom line sustainability by balancing economic and social development, and environmental protection, and putting (more emphasis on compact and optimum development of urban forms). This paper evaluates the Middle East cities and assesses their experiences in managing their urban forms whilst promoting sustainable patterns of urban development. The findings show that sustainable urban development initiatives employing a top down approach has yielded encouraging results in these case study city-regions. However the need for a more concerted effort towards the overall sustainability agenda still remains vital.

Keywords: Sustainable urban development, expansion organization, compact urbanization, city-regions, Middle East

1. Introduction

Sustainable development means improving the quality of life of a population within the capacity of Earth's finite resources. The needs of the present generation must be met, particularly those of the poor, without compromising the ability of future generations to meet their own needs (Sheth and Atul 1995).

This is a dynamic process whereby the decision makers involved in any area plan, implement and then re-examine their ideas and policies over time. In Middle east city-regions such as Dubai, Masqat, Beirut, Amman, and Cairo, the goal of sustainability has been increasingly highlighted over the past few decades as problems and issues arise from unsustainable practices and developments. Technology plays a vital role in creating the goal of sustainability. Arguably it is the misuse of technology that works against this goal.

Since early 1980s, policy-makers have been looking for ways to move city-regions towards more sustainable forms (Sorensen, Marcotullio & Grant, 2004). The continued expansion of city-regions makes sustainability an issue of significant concern because of scarce world resources (Lindsey, 2003). This continued growth, both in population and consumption, is now putting our ability to a test in managing urban regions more sustainable and effective ways.

This paper explores the implementation of expansion organization efforts in the Middle EAST CITIES. The methodology employed in this paper is a thorough policy evaluation. The paper first reviews the concept of urban sustainability, focusing on the nature and trends of urban development, and its consequences. The second section looks at solutions for addressing problems of urban growth by introducing concepts and strategies for promoting urban sustainability through compact urbanization. The final section discusses the implications of expansion organization strategies for the Middle East region.

The process of achieving urban sustainable development is uncharted. We only know that plans should address the economic, environmental and social health of the city and this task can only be accomplished by approaching each of these issues at different scales. For rapidly developing world cities, "sustainability" is becoming an increasingly elusive objective, in part, because of impacts by forces beyond their borders. Urban sustainability

can only be achieved through addressing the economic, environmental and social health of the city. Further, scholars have increasingly recognized that urban areas are not autonomous units, but rather a part of an international development milieu.

2. Linking urban sustainable development to globalization

Unsustainable urban development has a negative impact on human health. African cities already face huge demands with regard to human health and urban sustainability, and global environmental change will increase these challenges, making it even more imperative that human health and urban sustainability are simultaneously addressed in locally appropriate ways. Key areas of intersection include increased temperatures, drought, flooding, the decreased ability of ecosystems to provide health-enhancing services (clean air, water and soil) and increasing urban food insecurity. There are a range of strategies that can be used to improve urban resilience and sustainability while simultaneously improving human health.

As Grossman and Kurger (1999a) and Haughton (1999b) suggests, among the visions of urban sustainability there are at least four competing perspectives including, in his terms: (1) "free market;" (2) "re-designed;" (3) "self-reliant;" and, (4) "fair shares" cities models. The visions of self-sufficient cities within ecologically defined regions or green cities efficiently planned for local transportation, residence, industrial and commercial activities turn their back on current predictions that, for example, by "2025 the whole world will be one urban network".

Two other visions of sustainable urban development described by Haughton attempt to include global and local forces into a model for the future. These visions reject attempts to divorce cities from their broader development context. Thus, growth is not only important for increasing the general wealth of society, as it trickles down to lower classes, it is a necessary component of increased environmental protection. Grossman and Kurger (1995), suggested that economic growth was ultimately good for the environment as countries grow out of environmental problems. Conclusions suggested that growth is required for environmental and social improvement.

This environmental theory has since been refined to suggest that different types of pollution increase and decrease during different stages of development. For example, in low-income communities, poverty related and sanitary issues are of most importance, but quickly decrease with increasing income. At the same time, industrialization brings manufacturing-related pollution (later to decrease with expanding wealth and increased interest in the environment). Finally in developed countries, despite investment in pollution-related infrastructure, consumption-related pollution levels increase.

Not only does globalization increasingly impact the social stability of cities, however, it is also increasingly important to environmental conditions. The particular role of globalization to the urban environment has not been included in previous models. In attempt to insert the globalization dimension into research on urban sustainability. That suggests that globalization forces impact the social and environmental performance of urban regions articulated to the regional city system. The regional city system increasingly defines urban economic activities and social trends and therefore can help to distinguish among types and causes of urban environmental and social conditions.

3. Urbanisation, Sustainability, and Expansion Organization

Interest in sustainability and urban development has steadily grown in recent years among. It has become central in planning and managing urban areas in Europe and North America. The various dimensions of urban life – environmental, economic, social and culture – are interwoven and success in urban development. That can only be achieved through an integrated approach.

Measures concerning physical urban renewal must be combined with measures promoting education, economic development, social inclusion and environmental protection. In addition, the development of strong partnerships between local citizens, civil society, the local economy and the various levels of government is a pre-requisite. This has transformed cities in Europe and North America into mega-cities and metropolises. The associated economic development and prosperity experienced by these European and North American cities have prompted Asian cities to emulate these achievements.

There is a strong belief that urbanization is crucial to the process of development, and an inevitable process of creating a modern state (McGhee, 2009). Indeed, the rapid urbanization of Asian cities in general has brought about rising income and living standards to the cities' population. The world development indicators data compiled by the World Bank, for example, shows that developing countries in Middle East have been experiencing a significant growth of their GDP over the last 10 years and their share of the global economy has risen from 13 percent in 1995 to 19 percent in 2005 (World Bank, 2009). However, Asian cities, cities in Middle Eastern particular, are struggling to keep up with the rapid urbanization pressures caused by rapid population

increase and expanding city sizes. These pressures have created what is generally known as urban sprawl, characterized by low density suburban development patterns. Urban sprawl takes three main forms: suburban expansion into the countryside, commercial expansion along arterial roads, and residential sprawl outside existing settlements (Daniels, 1999).

The consequences of sprawl have been viewed differently by planning scholars. Benefits of sprawl include private and social benefits to new residents and the community, for example in terms of housing costs (Kahn, 2001), potential for population growth accommodation ('Brueckner, 2000), and symbol of economic prosperity (Nelson & Duncan, 1995). However, this phenomenon has also been associated with an array of undesirable physical and socioeconomic effects (Nelson & Duncan, 1995; Boyle & Mohamed, 2007). These include: scattered development, excessive commuting and transportation costs, infrastructure and services provision costs, socio-economic segregation through inequitable land and housing markets, increasing consumption of natural open space, and other 'quality of life' problems (Nelson & Duncan, 1995; Carruthers, 2002).

4. Urban Management Strategy Options

City governments introduced a variety of approaches to control sprawl and limit further damage to the limited resources that they have due to the problems associated with rapid urbanization. The term urban management or urban expansion organization has been used interchangeably to reflect these efforts, and a variety of expansion organization techniques have also been introduced to apply expansion organization concepts into practice. The reason for adopting expansion organization approaches in cities was coming from the need to achieve a balanced and sustained urban development. Urban sustainability has long and flourishing roots in Europe and North America, where urban sprawl was first identified. Calls for adoption of sustainable urban development and management were at its height at the Rio Summit in 1992 following the World Commission on Environment and Development report on sustainable development.

Many believe that compact urban development contributes to urban sustainability, which is one of the key aims of expansion organization initiatives (De Roo & Miller, 2000; Assumer, 2006). A number of strategies have been developed and employed to achieve compact urban development (Nelson & Duncan, 1995). Containment based management supported by sustainable urban transport has been one of the most successful compact urbanization strategies (Nelson et al. 2004; Yigitcanlar and Bunker 2009). This strategy attempts to promote the following: compact and contagious urban development patterns with easy access to public services; travel-self containment with reliable public transport options and integrated land use and transport planning, and; preservation of rural and agricultural land and natural resources (Nelson & Duncan, 1995; Duvarci & Yigitcanlar, 2007; Yigitcanlar and Bunker 2009).

Compact urbanization strategies determine the direction of public infrastructure investment, execute development regulation and shape the nature and intensity of development. Containment scales vary between sub-metropolitan (development shaped to take a specific form), unbounded (development within urban service boundary), bounded (development within a designated growth boundary), and natural containment (development restricted by geographical constraints) (Nelson et al., 2004). Around the world many cities implemented a variety of containment techniques that range from urban growth boundary to urban service area, and from land taxation to open space preservation. Successful implementation of containment techniques and experiences from North America and Europe provide invaluable insights to many city-regions seeking sustainable urban development. The implementation of strict development regulations associated with containment techniques enables local authorities to encourage development in existing urban cores and dilapidated inner areas through infill and redevelopment projects, including not only prestigious but also affordable residential development.

5. Sustainability Indicators

The increased environmental agenda has brought about the need to employ indicators as a key mechanism for assessing environmental impacts (Hemphill, 2004) and as policy instruments in the transition toward urban sustainability (Hezri, 2005). There is a common view that sustainability indicators can be meaningful provided they are applied at the appropriate level (Brownhill and Rao, 2002, cited in Hemphill, 2004). Such indicators can be crucial in developing an awareness of urban problems and advocating the need for the achievement of sustainable development (Stanners and Bourdeau, 1995). They can contribute to the assessment of the performance of individual agencies/interventions, and of the overall effectiveness of partnerships to improve economic, social and environmental wellbeing of urban settings.

However, most indicator-based approaches only highlight issues; they do not provide answers as to why differences exist. Key indicators must be supplemented by qualitative and quantitative information on impact and performance from the perspectives of users and beneficiaries. In recent years, the best starting-point for

assessing sustainable practices has been the Bellagio principles developed by the International Institute of Sustainable Development (IISD) (Hemphill, 2004). These principles serve as guidelines for the assessment process, including the choice and design of indicators, their interpretation, and the communication of results, to provide a link between theory and practice.

6. Sustainable Urban Development in Middle East

During the past three decades, cities in Middle East region have undergone massive transformations (Marcotullio, 2004). Major cities experienced vibrant population growth, and major physical and functional urban transformations.

These city-regions received the full impact of urbanization pressures due to the rapid pace of globalization and economic restructuring. In an attempt to ease these pressures, major cities have advocated expansion organization approaches giving particular interest to balanced economic and environmental sustainability and put more emphasis on compact and optimum development of urban forms (Degree, 2005).

In conclusion, within the context of resource constraints, sustainable urban development has been a key factor in the adoption of urban expansion organization initiatives promoting viable use of scarce resources for urban expansion whilst at the same time minimizing uncontrolled urban sprawl. Within this context, the use of a whole range of policies designed to control, guide, or mitigate the effects of urban growth is seen as a practical way to promote compact development (i.e. Nelson & Duncan, 1995). The rapid population growth and urbanization in Middle EAST CITY -regions has indeed placed great pressures on their environments. Whilst a few cities in the region, have adopted some form of urban management policies towards minimizing or alleviating these pressures, many other cities within the region are still without suitable urban expansion organization strategies (i.e. Dubai, Manama, Doha, Bagdad and Damascus). In these cities, higher land consumption, expansive and discontinuous urban development will continue into the future. Local authorities and planners should, therefore, look into the possibilities of implementing sustainable urban growth/development management strategies for their cities. Both case studies investigated in this research display top-down approaches to ensure that planning at the district and local levels is properly guided to achieve state and regional standards and goals. In some cases (Cairo and Amman), urban development is facilitated and governed by statutory planning legislation and flexible planning processes and approaches. This ensures that all development will have some degree of standardization and will occur in harmony with existing development. It seems that from these cases, a top-down approach is a key factor to trigger sustainable urban management practices. However, these top-down approaches need to be balanced with bottom-up, collaborative strategies in order to provide a more transparent and democratic platform for citizen participation in the urban planning and development process.

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