



SCALING UP COMPACT CITY DEVELOPMENT STRATEGIES – A SOLUTION TO COPE WITH URBAN SPRAWL IN DEVELOPING COUNTRIES?

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Abstract

Urban population growth is accompanied by a decline in the average densities of the cities. Spatially dispersed urbanization, often referred to as "urban sprawl", is thus one of the features for which the land management community needs to find sustainable solutions.

One idea is fostering compact cities, premised on the principles of efficient land use, urban containment and intensification process. As an example, Munich in Germany is considered exceptionally compact. Given its success, the key question is to which extent such an example of compact city development can be a useful, relevant, significant and manageable concept to handle urban sprawl in for fast urbanizing developing countries? This idea is tested against the context of a very specific and unique case where urban sprawl has been very prominent, namely the West Bank, the northern governorates of the state of Palestine.

Key Words: compact city, hermeneutic methodology, Palestine, urban policy, urban sprawl

1. INTRODUCTION

Whilst urban population has rapidly increased in the last decades, remarkably, the growth of urban population is accompanied by a decline in the average densities of the cities. Consequently, cities' spatial demand is rising dramatically, urging cities to expand excessively in order to accommodate the new residents. Some estimate that by 2030, cities in developing countries are expected to double their population and to triple their land area, which means approximately the conversion of 160 m² of nonurban to urban land by every new resident (Angel, Sheppard, & Civco, 2005, p.1). Given that most of the urban population increase is occurring in countries in transition the demand for space is becoming an acute hurdle in the transition process. Spatially dispersed urbanization, often referred to as "urban sprawl", is taking place increasingly around the globe (Peiser, 2001, p.276; Wilson & Chakraborty, 2013, p.3303). Multiple patterns of urban sprawl have been detected and their characteristics vary from one context to another; hence, several definitions are attributed to urban sprawl. Synthesizing a number of common urban sprawl's definitions and considering the context addressed in this article, urban sprawl is defined as a physical pattern of urban development, which spreads beyond the edge of the city and service area, most often into the surrounding agricultural land; constructed in leap frog manner that is consisting of scattered residential neighbourhoods and commercial strip development; usually characterized by lowdensity, separated land uses, discontinuity, automobile dominance and requires excessive transportation (European Environment Agency, 2006, p.6; Freilich, Sitkowski, & Mennillo, 2010, p.8; Gillham, 2002, p.8; Sierra Club, 1998; Soule, 2006,p.260).

Urban sprawl challenges the sustainable urban development in developed and developing world as well (Bhatta, 2010, p.7). Conventionally, urban sprawl is regarded as an irresponsible and inefficient pattern of development that scatters human settlements and economic activity through the countryside (Soule, 2006), and has been blamed for its social, fiscal and environmental impacts (Couch, Petschel-Held, & Leontidon, 2007; Terzi & Bolen, 2009). Compared to more concentrated patterns of urban development, urban sprawl has been mainly criticized for generating higher rates of pollution and for an increased consumption of land and natural resources. It also has been criticized for causing social segregation and increasing the public expenditures on services and infrastructure. The negative sides of urban sprawl urge the land management community to find sustainable solutions for this phenomenon.

One of those solutions is the idea of fostering compact cities. The notion of the compact city, which is often referred to as the city of short distance, contrasts the car-oriented urban sprawl of many modern cities and can be characterized by combining efficient and multifunctional and multi-nodal transport systems whilst fostering relatively high population densities. The land management challenge thereby is

premised on the principles of efficient land use, urban containment and intensification process, including the provision of concentration of mix uses that concentrate the development and reduce the need for transport-based commuting (Jenks, Burton, & Williams, 1996,p.3). However, the compact city approach is still highly controversial. Debates on its effectiveness and sustainability are still going on.

The compact city approach, which has been initially developed for cities in developing countries such as US, Europe, Japan and Australia started recently to witness promotion in the developing countries (Burgess & Jenks, 2000,p.10). International development organizations advocate the implementation of this solution in the developing countries to manage the severe urbanization related problems that they are currently facing. Increasing literature investigates the adaptation of compact city to developing countries. However, large cities are the focus of investigation. Medium-sized cities, which also present a significant portion of urban settlements in the developing world that also experience the challenge of urban sprawl as well, are overlooked. Enhancing the sustainable development in the developing world necessitates investigating alternative solutions for all types of settlement rather than limiting efforts to large cities. Since compact city solution is currently the major traded approach to mitigate urban sprawl, then it is inevitable to explore its likely role in managing urban sprawl in medium-sized cities as well. This approach has the potential to be used as an initial reference that has to be locally re-conceptualized to match the addressed environment.

Like many other developing countries, urban development in the State of Palestine is confronted by the challenge of urban sprawl. Being an occupied country that is divided into two main regions, mainly Gaza Strip and the West Bank has an impact on the divergence of the spatial characters and the population distribution in the two regions, where the population density in the two regions are 4822 individuals/km² and 493 individuals/km² respectively (PCBS, 2014). Cities in the West Bank can best be described as medium-sized cities, with both high population rates and rapid urbanization. Despite efforts from the government to curb urban sprawl the urban structure of the entire West Bank reflects pockets of urban areas which seem randomly distributed and poorly connected. Despite the small area of the West Bank, around 5655km², it contains 524 urban communities (Palestinian Central Bureau Of Statistics, 2012). The result of this structure is inefficient use of space and overexploitation of the very limited arable land. In addition to the well-documented negative effects of this urban structure, current spatial development strategies also have to face spatial limitations arising from the Israeli-Palestinian conflict. This additional constraint has made current land governance efforts highly dependent on frequent ad hoc functional adaptations, societal compromises and spatial adjustments. In this context, planners and policy makers seek a sensitive urban development strategy that counter urban sprawl and considers the particular circumstances that prevail in the region. This raises the question whether both the philosophy and the

practical guidelines of implementation of compact city development can be useful to address the extreme challenges of the West Bank, for example for the case of Jenin city in the northern part of the West Bank.

The structure of the article is as follows: the first section reviews the concept of the compact city and the multiple theoretical views about the sustainability of the compact city in general. This is complemented by a first assessment why this concept could be relevant to developing countries in particular. Next, the empirical research strategy, a hermeneutic approach relying on an analytical approach derived from theory and practice, is explained. The description of this approach clarifies how the urban development context, changes and potential in a single urban case study Jenin City in Palestine, can be verified. The following section classifies the derived result based on this approach followed by a discussion section. The article concludes with the evaluation to which extent compact city practice may be appropriate for a developing country context, and with a number of practical recommendations for further research.

2. THEORETICAL PERSPECTIVE

2.1. THE NOTION OF THE COMPACT CITY POLICY THEORETICALLY

The compact city is not a new concept. However, the contemporary interest in the compact city dates back to the early 1970s with the book: "Compact City: Plan for a Liveable Urban Environment" (Dantzig & Saaty, 1973). While the rationale of the old compact city was mainly to protect the city, the motivation behind the 'compact' concept in its contemporary manifestation is to ensure more efficient use of the land and natural resources as well as achieving better quality of life (Dantzig & Saaty, 1973,p.224). The concept, which has resurged in the United States found more attention in Europe. This does not imply the ignorance of the concept in its initial resurgence place, but that the essence of the concept has evolved and labelled with other terms, such as the 'Smart Growth'. Since the early 1990s, the Commission of the European Communities has been continuously promoting compact city policies and encouraging its member countries to adopt this approach in their spatial development policies. Nevertheless, compact city policies are continuously blamed for focusing on increasing densities and overlooking the quality of urban life. In this regard, the commission has recently re-emphasized the validity of the compact city strategy, stressing the need to consider the proportion of green areas within the city structure (European Union Expert Group on the Urban Environment, 2004,p.4).

Urban planning literature has extensively reviewed the contemporary compact city. A number of compact city definitions are available, where some of these definitions are based on identifying the characters of the compact city as a spatial form, others are describing the comprehensive process that are included in spatial development policies leading to compact cities. In this article we regard the compact city concept

as a kind of a comprehensive spatial development policy, and not as a kind of an urban form. This choice relates to the UNESCAP (2012) definition, which identifies compact city (policy) as a spatial development policy which seeks for more efficient use of land through a number of planning measures including the promotion of infill and brown-field development, encouraging cluster and vertical development, setting density standards, demarcating urban growth boundaries, ensuring high degree of accessibility to mass transit use, and creating an attractive environment for cycling and walking (UNESCAP, 2012,p.84). In addition to maintaining a balance between encouraging inner city development and limiting urban sprawl, the policy also defines some measures which enhance the living environment.

The acceptable degree of compaction has been also a topic of investigation in relation to compact cities. In reality, contemporary compact city policies are not meant to achieve cities similar to those from the middle-ages, which are intense and have sharp edges (Frey, 1999,p.41). Jenks (2003,p.298) emphasizes that the notion of 'higher densities' has relative meaning that is culturally and contextually determined. Researchers have pointed out that it is neither desirable nor achievable to promote immoderate and exclusive compact city solutions (Jabareen, 2006,p.46; Jenks, Williams, & Burton, 2005,p.298). Among this debate about the extent of urban compaction and suburbanization, Breheny (1992) produces a rational concept called 'decentralized concentration'. Breheny (1992,p.22) believes that firm compact city policies are idealistic and not desirable and that decentralization and suburbanization are inevitable. Consequently, he concluded that the most appropriate development approaches are those working to contain urban growth and regenerate inner cities while retarding the decentralization process (ibid).

Based on the reviewed definitions of the compact city approach, and the discussion of the acceptable level of compaction, this article concludes that the core approach of a compact city solution is based on four major principles:

- 1. Stimulating urban growth within existing urban areas;
- 2. Reduce urban sprawl into the surrounding countryside;
- 3. Enhancing and diversifying the living environment within existing urban areas;
- 4. Providing more sustainable modes of transport.

It is worth mentioning, that some modified concepts of the compact city have been introduced in the urban development discourse, such as the 'green compact city' and 'eco-compact city'. The new concepts assign considerable emphasis on the need to preserve public green spaces and maintaining balance

between the natural environment and the built-up structure. Such terms reflect the awareness that compact cities solutions are more than urban containment tools. Instead, they represent an integrated development policy, whose goals are extended to coincide with those of the sustainable development. The standpoints regarding the contribution of the compact city solutions to the objectives of the sustainable development are equivocal (Burton ,2000,p.1972). While a group of scholars state that compact city solutions have positive contribution to the goals of sustainable development and goes for endorsing them, another group has concerns about the negative impacts of such solutions and are against them. Scholars promoting this approach advocate its ability to reduce the consumption of energy and the correlated vehicle emission; make the provision of amenities and infrastructure economically viable and more accessible; reduce the rate of land consumption in a way that preserve farmland, countryside and natural areas; as well as it positively contribute to the social diversity and to the cultural and economic development (Nabielek, 2012,p.3). At the same time, opponents state the due to increasing densities, compact city solutions may decrease the urban quality, reduce the area of open spaces and congest pollution (Jenks et al., 1996,p.4). Reducing house affordability is another possible impact of a compact city solution that opponents fear (Gordon & Richardson, 1997,p.96).

Neither advocates nor opponents of the solution have concrete evidence to support their positions. In this regard, Jenks & Jones (2009,p.2) conclude that the discussions of the sustainability of the compact city approach is mainly based on beliefs rather than empirical findings. That is to say, a significant share of the arguments for and against the compact city solutions is hypothetical, premised on theoretical assumptions and virtual relations. Considering the complex nature of urban development and the fact that the sustainable development objectives have no clear reference values or indicators make the evaluation of the sustainability of the compact city a subject of dispute as it is unlikely to construct a scientific sound evidence to prove whether or not the compact city approach is holistically sustainable. Frey (1999,p.33) noted that in order to inclusively assess the compact city approach in a real-world context a multi-disciplinary approach is crucial. However, until recently, no such approach has been founded.

In conclusion, it is not possible to affirm absolutely whether or not compact city policies can positively contribute to the objectives of the sustainable development. In addition, it is undeniable that these policies have a number of anticipated side-effects and that they require the fulfilment of certain conditions in order to achieve their multiple objectives. For examples, in areas that suffer from overcrowding, it is unlikely that compact city solutions can contribute to the sustainable development. Yet, there is a certain level of consensus that these policies can provide necessary physical settings for achieving these objectives (Nabielek, 2012,p.3; UN DESA, 2008,p.61). According to Williams (2004,p.4), the success of a certain compact city policy in contributing to the objectives of the sustainable development is determined by two

factors: the characteristics of the context in which it is considered, and the way the approach is managed to minimize its adverse negative effects and maximise its benefits. Hence, it is likely that a good understanding of the context, an integrated policy design that aim at reducing the disadvantages of the policy and support its benefits can reduce the potentials of failure and create more acceptable and sustainable living environment (Mike Jenks, Williams, & Burton, 2005). Based on this discussion, the article concludes a fifth major principle to the previously listed principles of the core approach of compact city solution, namely:

5. Integrating complementary programs to minimise the negative effects of the major policies and reinforce their benefits.

2.2 COMPACT CITY CONCEPT IN PRACTICE

Tracking the implementation of compact city solutions reveals broadness and diversity of the planning measures that are employed to achieve the main principles of the solution. Jenks et al. (2005,p.299) indicate the existence of common measures and practices to promote compact city approaches but they also affirm that the common approaches are not ready and compete solutions for local implementation. Like many other spatial policies, compact city policies consist of generally of a complex of regulatory tools, planning controls and urban management programs and practices; policy documents in the form of directives, plans or guidelines at different spatial levels; as well as fiscal tools including both incentives and disincentives (Mike Jenks et al., 2005b,p.238; OECD, 2012,p.164) So far, regulatory tools and zoning ordinances related to density and mixed-use requirements are the simplest and mostly implemented tools (OECD, 2012,p.120). Taxes, fiscal incentives and sanctions are often imposed to support the enforcement of the regulatory tools and mitigate the side effects of the increased density (ibid). Local planners and policy maker can make use of the raw compact city practices, taking in consideration the need to address the missing link between the general approach and the local conditions (OECD, 2012,p.162). It is understandable that compact city solutions can address urban development process of existing cities and the design of new cities as well. Yet, the focus of this research is limited to existing urban settlements, addressing compact city practices at the local level.

Based on a review of compact city examples, and in line with the previously listed five principles of the compact city approach, the practice of the compact city policies can be divided into two main categories that need to be implemented in parallel. The first category can be described as a set of urban containment policies, which includes the first two principles of the compact city approach. The second category is a set of companying programs and sub-policies to ensure the fulfilment of the multi-objectives of the compact

city policy and minimize its adverse negative effects; this second category includes the last three principles of the compact city approach.

Urban containment strategies are premised on two main approaches. The first approach is setting a boundary line around the urban area, where efforts are carried out to promote development inside this boundary and restrict scale development beyond it (Nelson, 2000). The growth boundary lines are mainly regulatory tools that control development, usually reinforced by fiscal tools to increase their efficiency(OECD, 2012,p.119). The second approach is infill development, which refers to efforts to accommodate further urban development within existing urban and suburban areas through different modes (Wheeler & Beatley, 2004,p.138). Infill development is often called an urban intensification process. A set of physical and socio-economic planning tools are usually integrated in these processes (Burgess, 2000,p.21). The intensification process can be achieved by two major strategies, namely, "development on previously undeveloped urban land" and "redevelopment of existing building or previously developed sites" (Williams, Burton, & Jenks, 2005,p.72). The latter mentioned strategy is a specific form of urban intensification and it reflects what is called redevelopment of brownfield sites or sometimes refill.

Though a certain share of infill development occurs autonomously, realizing a significant level of infill development witnesses a number of barriers and requires facilitation. Wheeler & Beatley (2004) suggested a set of recommendations to promote infill development: ensuring the availability of land, reducing fiscal disincentives of infill development, promotion of infill development by municipalities and local planning authorities and providing the needed infrastructure and amenities, reviewing the existing plans and planning regulations to ensure that they do not contradict the idea of infill development, and working constructively with residents to overcome the social resistance for infill development. Among similar lines, the OECD (2012,p.182) report has indicated that integrating multiple approaches, namely regulatory and fiscal tools enhances the efficiency of urban containment and infill development. For instance, implementing carefully designed taxing instruments can hinder suburbanization and make infill development fiscally competing with urban sprawl. Likewise, generated tax revenues can be employed in enhancing the physical environment in inner-cities or providing some forms of fiscal incentives for infill development (ibid).

In sum, a successful implementation of a compact city policy provides a balance between core policies and secondary sub-policies of urban development (Table 1). Countering urban sprawl and promoting infill development are part of the core polices. Providing that the level of life quality in the existing urban areas is enhanced or maintained within an acceptable level is key to the secondary sub-policy.

Policy Type	Core Principles of Compact City	Approaches
	Solutions	
Major Policy	1. Stimulating urban growth within	Infill development
	existing boundaries	Brownfield development
	2. Reduce urban sprawl into the	Demarcating urban growth boundary
	surrounding	• Green belts
Sub-policy	3. Enhancing and diversifying the living	Mixing land use
	environment within existing urban areas	• Enhancing infrastructure and amenities
		Maintain access to public green space
	4. Providing more sustainable modes of	Providing a suitable environment for
	transport	walking and cycling
		Provide efficient public transport
		system
	5. Integrating complementary programs	Housing programs to ensure housing
	to minimise the negative effects of the	affordability
	major policies and reinforce their	• Enable public participation in planning
	benefits (mainly based on context	process
	determinants)	Construct public-private partnership to
		ensure the provision of needed services
		and quality

Table 1. Principles of compact city policies

For developing country cities in general, and medium-sized cities in particular, overcoming the obstacles that confront infill development, and mitigating the side effects that may arise due to intensive infill development are two challenging issues. It is doubtful whether these institutions can find innovative and affordable means to achieve these two issues.

3. RELEVANCE OF COMPACT CITY POLICIES TO DEVELOPING COUNTRIES

Another debate on compact city policies is about their relevance to developing country cities. The popularity of the concept in developed country cities has attracted many cities in the developing world to opt for this scheme. According to a report prepared by OECD (2012,p.160), a number of developing country cities are 'striving' to implement a sort of compact city policies. Nevertheless, there is great uncertainty about the appropriateness of the approach to efficiently manage the urban context in developing countries. Williams (2004,p.5) was among the few who has stated an absolute

inappropriateness of the implementation of the compact city concept in developing countries. She justifies her position arguing that the degree of compact city approach strongly depends on how well it deals with characteristics of the context and the way by which the approach is managed (ibid, p.4). As developing country cities are characterized by a high rate of urbanization and informal development, and tend to suffer from poor urban management systems and inadequate infrastructure capacity, the extent to which the compact cities approach needs to be stretched in order to align it to local characteristics is most likely too big. Although Williams has built her argument on a rational justification, explaining the determinants of the success of a compact city, her interpretation uses an arbitrary judgment on the conditions of developing country cities. Hence, her standpoint is not adequately justified.

In contrast, a number of scholars have expressed a conditional relevance of compact city to developing countries. For example, Jenks (2000,p.350) states that developing country cities are in need to new approaches to manage urban development more sustainably and that they can make use of some of the diverse compact city practices implemented in the developed countries. However, he affirmed that the selection of the practices needs to be careful and require further adaptation to match the address environment. Burgess (2000) has a similar perspective about the relevance of the compact city policy for developing country cities. However, he refuses to treat all developing country cities alike. Instead, he insists that the relevance of the compact city concept to a certain context is investigated rather than general perceptions (ibid, 2000, p.18). OECD (2012,p163) similarly states that an appropriate adaptation of compact city policies to match the local environment of developing country cities may enable a successful implementation of such policies in the given context. The report also highlights a number of characteristics which distinguish the urban context in developing country cities from those in developed countries. The major differences include: more rapid population growth, higher existing urban densities; inefficient urban planning and management system; limitation of financial resources for urban investment; as well as the challenge of informal settlements (ibid, p.160). Local case studies, addressing the compact city solution in specific contexts in developing countries reveal a range of relative results. For example, in the case of Iranian cities, researchers tried to shed the light on a number of urban dynamics which prevail in developing countries and which necessitate special consideration when considering compact city approaches. These include: limited financial resources, uncontrolled increase in land prices, lack of housing projects ensuring the right of the low-income groups to have affordable housing, and the probability to increase informal development as a result for compaction policies that are unable to mitigate the problem of housing affordability (Ardeshiri & Ardeshiri, 2011). Furthermore, in the Indian urban context, a large variation of income levels among citizens is an additional local distinctive that confront the successful implementation of an inclusive compact city policy, besides the

challenges of limited abilities to invest in urban infrastructure, unaffordable housing and informal development (Kotharkar, Bahadure, & Vyas, 2012).

All in all, there are two types of factors which currently make compact city policies difficult for developing countries:

- 1) Internal factors of the urban management system. These are however factors which can be influenced by improved management.
- 2) External factors. These are factors that are external to the governance system, yet consist of factors which need to be addressed by effective policy.

Table 2 lists both types of factors of compact city policies and assesses the indicators for which one can assess its suitability developing countries.

Type of factors	Suitability criteria for successful compact city policies	Indicators preventing / enabling compact city policies in developing countries
Internal factors (which can	Management and governance of	Degree to which roles are
be influenced by improved	cities is effective	explicit and interaction
management)		between stakeholders is
		conducive
	Urban management system is	Degree to which processes are
	operational and effective	documented, monitored and
		improved
	Degree of formality is high; degree of informality is low	Ratio of formality / informality
	Infrastructure capacity is sufficient	Degree to which infrastructure
	and appropriate	supply matches infrastructure
		demand
	Public urban management system	Rate and ease of change in
	has the ability and flexibility to	personnel, regulations,
	adapt to new policies	implementation processes
External factors (for which new policy is needed)	Rate of urbanization is low	Influx of migrants

New policy alternative are feasible	Ease of policy advocacy,
	nudging

Table 2. Indicators for (un)successful adoption of compact city strategies

4. METHODOLOGY

In order to evaluate the key question, namely to which extent a compact city policy can be an appropriate instrument for a specific urban area in a developing country we opted for a case study and a hermeneutic approach of collecting and interpreting data. Each are further discussed hereunder.

4.1. CASE STUDY

A single case has been the focus of study, namely Jenin city, in the State of Palestine. Jenin presents the administrative centre of Jenin Governorate and located at the northern part of the West Bank, 80 km away from Jerusalem, at latitude 32.28 north, and longitude 35.18 east of Greenwich. The case study area was chosen both for its uniqueness and for its commonality. More accurately, Jenin, which lies within fertile arable land of high value for the whole West Bank area, exhibits urban sprawl. Efforts to mitigate this challenge have been inadequate so far. Consequently, there is a crucial need to find a suitable spatial development policy to limit urban sprawl in the area in order to sustain the urban development process of the city and protect the surrounding agricultural land. The case of Jenin is representative as the phenomenon of urban sprawl also occurs in other medium-sized cities in the northern part of the State of Palestine and in other developing countries. Hence, lessons learned from this case study can be to a certain extent generalized. Part of the data of the case study are derived from a master thesis dealing with urban sprawl in the case study area, titled "Dynamics of Urban Sprawl within a Critical Status of Food Security: the Case of Jenin (Anabtawi, 2011). In addition, it is also premised on an ongoing doctoral research aiming at evaluating the chances and barriers of the compact city approach in the same city.

4.2 METHOD

To evaluate the key research question, a threefold 'hermeneutic' cyclic approach was implemented. In this regard Gummesson, (2000) describes that a proper insight in cases is based on personal experiences (as undocumented knowledge), literature (as documented knowledge), and systematic interpretation (as sense-making and theory-building exercise). Figure 1 displays this graphically.

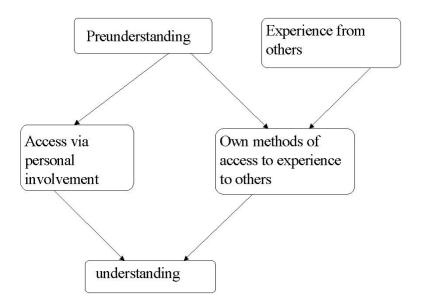


Figure 1. Hermeneutic cycle of understanding and theory building (based on (Gummesson, 2000))

The analytical framework regarding the several aspects of compact city development, Table 1, presents the first step in the research method and part of the preunderstanding of compact cities. The analytical foci and the key principles of compact cites acted as a systematic prompt in selecting, collecting, describing an interpreting data. Based on the previous theoretical review of compact city solutions an analytical framework can be constructed (Table 3), consisting of the core principles and related approaches, and grouped along analytical urban and city development foci and policy types. This framework is used as a reference to systematically investigate the relevance of the compact city solution to the case study context. The analytical foci are used in the systematic presentation of the results and the degree to which current and anticipated urban policy is in line with the core principles of compact cities solutions, and to evaluate to which extent there is scope to shift towards the core principle solutions.

Policy Type	Analytical Foci of Urban	Relation to core principles of Compact City Solutions
	and City development	
Major Policy	Internal city development	1. Stimulating urban growth within existing boundaries
	External city development	2. Reduce urban sprawl into the surrounding
Sub-policy	Manner of land use	3. Enhancing and diversifying the living environment
	planning and control	within existing urban areas
	Mobility and transport	4. Providing more sustainable modes of transport
	Socio-economic	5. Integrating complementary programs to minimise the
	development choices	negative effects of the major policies and reinforce their
		benefits (mainly based on context determinants)

Table 3. Analytical framework to study extent and potential of compact city policies

As the second step, the collection of personal experiences relied on a series of personal memos drawing on historical acquaintance with the case, personal impressions collected during a short fieldwork and via personal contacts, and personal interpretations of the living and working experiences within the context of the case.

Alongside with the collection and interpretation of personal experiences, the collection of experiences from others relied on two fundamental data sources: primary data collected through a household survey addressing 20% of the households at the northern periphery, structured interviews of open-ended questions with key informants from Jenin Municipality, Jenin Department of Local Government, Palestinian Ministry of Planning and Development, field observations. A review of secondary data complemented these, such as a review of published policy documents and maps (in particular the documents "Planning and Regulation Act of Palestinian Cities and Villages", Palestinian National Policies for Physical Development", "The Palestinian Agricultural Law", Study for preparing Jenin's Master Plan 2000"). In addition, the review included tracing the development of the built-up area, since the mid-1990s as the Palestinian National Authority has been established, based on existing maps and a number of ortho-photos.

The third and final step in carrying out this research involved a process systematic interpretation and inference to construct the knowledge needed to answer the question of the relevance of the compact city solution to the case study area. The combination of both types of data collection and interpretation allowed to derive a revised and enriched understanding of how the process of urban development in Jenin are carried out and what the major perceptions of driving forces of urban sprawl are. These are compared with the success indicator for compact city policy adoption. From this comparison an assessment is made on the degree to which adoption is feasible.

5. RESULTS

The results are presented using the analytical foci as key sub-headers.

5.1 INTERNAL CITY DEVELOPMENT

According to the estimations of the Palestinian Central Bureau of Statistics, Jenin is a medium sized Palestinian city that has an area of 21 km², with around 47,305 inhabitants (PCBS, 2015). This means that the city has a gross density of 2238 person/km². Reviewing the statistics of Jenin's population since 1997,

it turned out that the average annual growth rate of the population is around 3.8%, where the current population growth rate in the total area of the West Bank is 2.6% (ibid).

The review of Jenin's urban development process revealed that since the mid-1990s the annual growth rate of the built-up area at Jenin's periphery is higher than the growth rate within the city continuous built-up fabric. It is worth mentioning that the scattered expansion in this research is conditioned to lie at least one kilometre outside the external edge of the continuous built-up fabric. Figure 2 shows a comparison between the annual growth rate of the city continuous built-up area and scattered one. Based on observations and inference, it was possible to understand that development for commercial uses and services has taken places within the core of the city, and that residential development was mainly located at the edges of the city. Map 1 presents the locational distribution of the newly constructed urban development between 1993 and 2010.

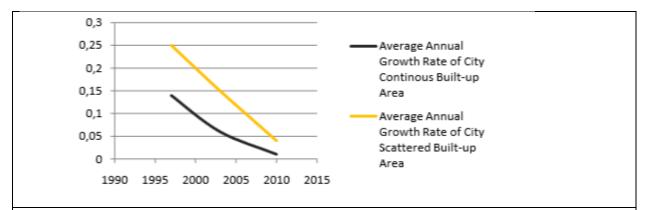
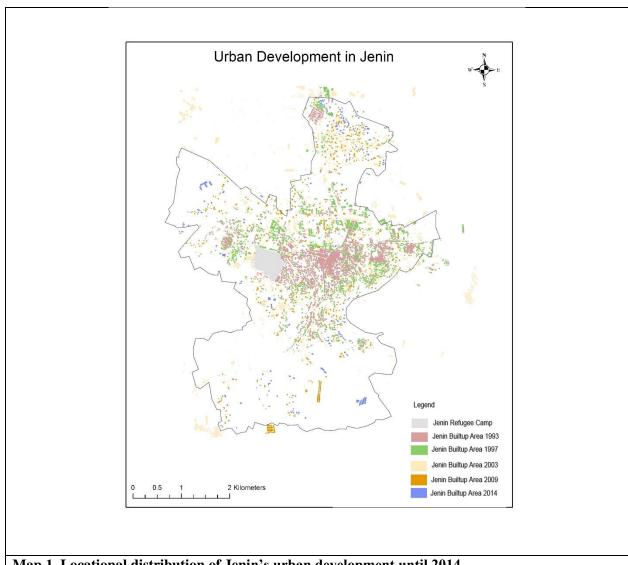


Figure 2. Comparison between the annual growth rate of the city continuous built-up area and scattered built-up area in Jenin between 1995 and 2010



Map 1. Locational distribution of Jenin's urban development until 2014

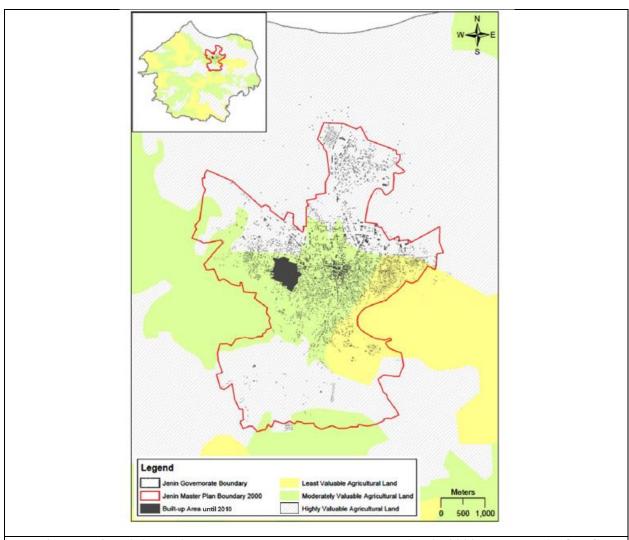
5.2 EXTERNAL CITY DEVELOPMENT

Tracing the urban development in Jenin between 1995 and 2000 showed that this phase has witnessed a boom in urban development. This boom can be explained by the formation of the Palestinian National Authority (PNA) that was accompanied by the return of a group of Palestinians from the Diaspora. The urgent need of those returnees for housing, and the relatively calm and peaceful situation that the region had experienced with signing the peace agreement between Israel and PNA had caused economic prosperity and accelerated urban development. Moreover, the expectations that more returnees would come back and that the peaceful situation would be permanent encouraged many Palestinian investors to invest in real estate. Moreover, this relative prosperous phase and the sudden high demand for land have

caused a sharp increase in land prices, making land at the periphery almost the only affordable option. In addition, the fact that the Palestinian institutions, including those concerned with urban planning and urban management, were newly emerging and were still incapable to function effectively in planning and controlling urban development has allowed for a state of chaos and spontaneous development of urban areas. Due to these circumstances urban sprawl has significantly spread outside the growth boundary, i.e. among the city's periphery, amounting for 17% of the total development in this phase. The northern periphery of the city was the main target for the urban development while the north-western periphery was the secondary one.

In 2000, a trial to limit sprawl phenomenon and to integrate the already constructed houses at the northern periphery was executed by excessively extending Jenin's urban growth boundary. The area of the master plan was tripled, and according to the classification of the Emergency Natural Resources Protection Plan, around 80% of the newly annexed area was mainly categorized as high valuable agricultural land. Map 2 shows the new growth boundary and the classification of agricultural land. The geopolitical limitation, presented in the fact that the least valuable agricultural land in Jenin is located to the east of the city, is under Israeli control as it is classified as territory "C", contributed partially to the fatal error in selecting the locations for new development. Despite Israeli control, it was also possible to assign less valuable agricultural land for new development. The head of the urban planning unit in the ministry of planning, responsible for preparing the Emergency Natural Resources Protection Plan, pointed out that the lack of a legal framework to make the plan binding facilitated the encroachment on the agricultural land and allowed for approving the expansion. The extremely large area assigned for urban development created an extra burden to the malfunctioning municipality who also suffer from scarce financial resources. The municipality has no plans and technical capacities to guide development within this vast medium and has insufficient budgets to provide services and amenities adequately. No priority locations were identified. Maps analyses further shows that urban development started formally to scatter at the edges of the city, but within the growth boundary.

In a trial to figure out the justification of the location of the new annexed area to the master plan and its size, the head of the engineering department in Jenin Municipality has been interviewed, for according to the Jordanian Planning Law of the Cities and Villages, No.79 for the year 1966, which is adopted until today in Palestine, the municipality is the responsible body for carrying out the planning process for its boundary. The head of the engineering department explained that the municipality did not a have planning unit, and that according to the previously mentioned law, the municipality has the right to call for



Map 2. Loss of Jenin's Agricultural Land due to Urban Expansion in 2000 (based on (MOPIC, 1996))

technical assistance from the Regional Planning Committee, which in this case represented by the Ministry of Local Government (MOLG). Unfortunately, Jenin Department of Local Government (JDLG), which acts on behalf of MOLG in Jenin Governorate, is also unqualified for organizing the plan. Consequently, according to custom, Jenin Municipality had to refer to a private consultant to generate its last master plan. However, reviewing the "Study for preparing Jenin's Master Plan 2000" revealed that neither the spatial need has been estimated nor the suitability of the annexed land for new uses has been analysed. It is necessary to state that the process of preparing the master plan was totally separated from the action of enlarging the master plan boundary. An interview with a representative of the MOLG revealed that while the extension of the boundary has been requested and approved in 2000, the early draft of the master plan appeared in 2003 and was only approved in 2010. The representative mentioned

that the ministry has frozen the approval of the extension for one year, waiting for the master plan to be prepared. Nevertheless, the plan could not be completed and the Ministry had to approve the extension to cope with actual situation as the urban development spread at the northern periphery. Simply put, building permissions were granted without a development reference. Undoubtedly, this contributed to the previously started uncoordinated development.

The personal insights combined with the documented evidence suggest that it is neither the need to accommodate rapidly growing population nor the rural urban migration that stands behind the spread of urban sprawl in Jenin. While 73% of the investigated households were previously living in older quarters in the city, only 16% of the same investigated sample have been previously living in villages. Furthermore, the survey results combined with the personal interviews and field observations suggest that a cluster of driving forces work simultaneously and contribute to the ongoing spread of the sprawl phenomenon. The affordability of land prices at the northern periphery and the limited housing options at other locations was a key driving force of urban sprawl. Almost 60% of the surveyed households stated that the affordable price of land at the periphery was one main reason to live there. It is important to mention that 100% of those who disagreed that the affordable prices of land parcels are one reason for choosing to live in the periphery has own land after the annexation of the area to the master plan.

The unsatisfactory level of the physical environment in existing quarters and the community desire to live in areas of higher living quality push the residents to settle at the periphery is another cause. 55% of the surveyed sample considered the living quality at the northern periphery very good and 36% of them considered it good. Likewise, 62% of the sample assured that if they were given a new chance to choose their living place they would select the same location. One could draw on that the topography variation between the different parts of the city and the imbalanced provision of services and infrastructure among the several quarters are other issues provoking sprawl in the northern periphery. Due to the limited budget and the higher costs for providing road network and infrastructure in the mountainous area, the municipality found it more feasible to provide these services within the flat arable land where urban sprawl spreads. The head of the engineering department in the municipality stressed that within the limited budget of the municipality, the main concern is to provide the services for the largest share of citizens no matter in which part of the city they live.

Besides being a space where high or middle class society members can find a place to enjoy a certain level of life away of the crowded city, the periphery area has certain characteristics that make it also a place for the less fortunate members of the society. Not all houses constructed in the area are luxurious ones. Instead, the periphery had also witnessed the construction of moderate houses. That is to say that

the availability of adequate level of infrastructure and services at the urban periphery and the relative ease of commuting between the periphery and the city centre, due to the flat topography and the relatively good-functioning public transport have encouraged the residents to prefer settling at the periphery.

Moreover, the lack of planning knowledge and the limited technical capacities of the local planning authorities has contributed to sprawl. For example integrating excessive areas from the periphery in the master plan has accelerated sprawl and given it legitimacy. Although the municipality and JDLG have the intention to preserve the agricultural land and direct the urban development inward, they do not have the capacity to develop any policy to achieve this intention. Currently it is extremely difficult to manage the ongoing urban sprawl as it is legal.

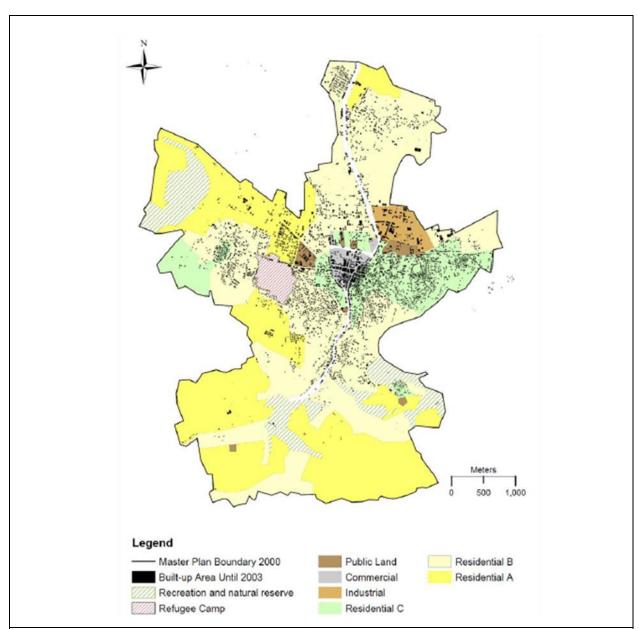
In addition, the week enforcement of the planning and building regulations, which is partially due to the limited capacities of the responsible authorities and that also falls in line with the political will to reduce the restrictions on the Palestinian residents who already suffer from the limitations of occupation, has encouraged sprawl. The fact that residents are aware that no construction will be demolished as a kind of penalty, encourage them to construct houses beyond the urban growth boundary.

It is noteworthy that the ongoing project to prepare the Palestinian National Spatial Planning is taking into account these points, aiming at providing binding plans that contribute positively to the sustainable development in the State of Palestine.

5.3 LAND USE TYPE AND CONTROL

The current Palestinian Planning and Building Act is amended from the Jordanian Planning law No.79 for the year 1966, which is based on the planning law that the British Mandate has adopted in Palestine in 1936. This planning act, which may have been suitable for planning and regulating urban development in the state of Palestine during the British Mandate phase as the area of the country was 4.5 its current area, does not fit the current context characters. The planning act was originally launched in compliance with the British vision aiming at creating low density development among large green structures. The Act is extremely land consumptive mainly regarding the residential land use. The high rate of land consumption is resulting from two factors, the large area of the minimum required lot size and the low rate of the maximum possible built-up area. For example for residential areas category "A" and "B" the minimum plot area is 1000m² and 750 m² and the maximum floor area ratio is 36% and 42% respectively. It is also noticeable that the two categories are widely spread used in Jenin's master plan. Both the head of the engineering department of Jenin Municipality and the representative of the MOLG affirmed the need to

replace the existing planning act to deal with the resulting scarcity of land; however the technical limitations stand against carrying out a process of change. It is important to mention that although the planning act has remained almost the same, the vision of large green structures has been lost. While the city land use plan prepared during the British Mandate has assigned around 24% of the area for natural reserves and 33% of the area for agricultural uses, the current land use plan assigns less than 2% of the area for natural reserves and the agricultural land use has disappeared. Map 3 presents Jenin's actual land use plan.



Map 3. Jenin's actual land use plan prepared in 2003 (based on several maps obtained from the engineering department in Jenin Municipality)

The land use plan reflects the zoning system, where functions are separated. It also reveals that the commercial activities and services are concentrated at the city centre. Based on observations, it turned out that for daily activities, such as going to work, grocery stores, health centres or any other logistics citizens need to use motorised mode of transport or have to walk long distances. Only primary schools are almost distributed on neighbourhood basis, nevertheless, secondary schools and kindergartens are not.

5.4 MOBILITY AND TRANSPORT

It is noticeable that the city lacks a public transport system. Households depend on own vehicles as well as on private taxis, which is widely spread in the city. There are no statistics indicating the percentage of households owning cars. However, in the investigated sample around 78% of the households own a private car. Nevertheless, so often citizens need to walk long distances for daily activities, then it is not possible to cover the needs of all family members with one car as well as it is not affordable to use private taxis several times at daily basis. It is noteworthy that the northern periphery is among the limited areas in the city where preliminary public transport is available, and the first place where this mode of transport has been implemented. The quality of the provided service is poor and the system is not reliable.

Nevertheless, 67% of the households do use this poor transportation system. This statement supports the crucial need for a simple and efficient transport system, mainly within the centralization of services.

5.5 SOCIO-ECONOMIC DEVELOPMENT CHOICES

The study has revealed a scarcity of housing options. While 40% of the surveyed households stated that there were few other housing options as the one they have now at the northern periphery, 60% said there were no other options. Although there was a third choice, namely several possible options, none has opted for this answer. The results were motivating to know the reasons standing behind them. Discussing the issue with a group of citizens turned out that the extremely unaffordable prices of land at other locations and the unattractive quality of life there make it useless to consider these locations real options. The widespread of housing ownership is another interesting finding. The survey has found out that 98% of the houses are hold through ownership whereas less than 2% are leased. This result is in line with the general situation in the West Bank, where official statistics indicate that in 2013, 80% of the households live in owned houses and around 8% live in leased houses(PCBS, 2014). Moreover, 90% of the investigated households live in a single family house and only 10% live in multistory-building. Still these figures cannot represent the situation in core locations in the city. This fact creates an additional challenge to housing sector, and raises more questions about the status of housing affordability in the region. There is a need to promote a pattern of residential urban development that is more economical in terms of space requirements and costs.

6. EXTENT TO WHICH CURRENT DEVELOPMENTS AND ACTIONS CONTRIBUTE TO FURTHER THE COMPACT CITY STRATEGY

The results of the empirical data collection can be evaluated in terms of the question in relation to the key principles of compact city policies, namely: to which extent do current developments and actions contribute to further the compact city strategy. This is an assessment of actual compact city foci as compared to desired compact city principles. These are discussed for each of the key principles.

6.1 STIMULATING URBAN GROWTH WITHIN URBAN AREAS

Within the observed conditions, there is a crucial need to encourage inward development and to define certain nodes where urban development has priority. The scattered pattern of urban development makes it extremely difficult for the municipality and its limited resources to provide infrastructure and services all over the area assigned for urban growth. Likewise, it is also unfeasible to extend urban services and infrastructure in an excessive area. In terms of spatial capacity, the city has significant area of vacant land parcels within existing quarters. In addition, between the core city and the urban periphery gap of undeveloped land has been created. It is also remarkable that there are hardly abandoned sites that have been previously developed and that are not used any more. For most of the city urban structure is relatively new. Hence, the development of brownfield strategy is not an option and inward development need to be investigated mainly in terms of infill development.

The extremely unaffordable land price within the existing urban areas is the ultimate obstacle for the implementation of infill development. The free land market, where the government has absolutely no intervention has enabled land owners exaggerate land prices and made it almost impossible to afford a piece of land within or near the continuous fabric of the city. It is therefore mandatory to look for possible measures to intervene in the land market and regulate the land prices. Fiscal tools and taxations can contribute to regulating the land market. In addition, the existing planning and buildings regulations, which promote low density development, make it also not feasible to construct where the maximum allowed area for building is not adequate to generate the intended benefit. Therefore, it is crucial to revise the planning and building regulation so that they become in more harmony with the objectives of compact city solution.

Another anticipated obstacle is the social resistance against building new houses in certain quarters in the city. The reason for this resistance is the deteriorated living environment and the poor design of most of the existing urban areas. The upgrading of the living environment and the enhancement of the road infrastructure and the urban design can mitigate this resistance. Moreover, the integration of the

community in planning process can also reduce the severity of the social resistance. In addition, the fact that in such a medium-sized city the social variations between the community members are not large, this point can result in a less complex social resistance to infill development. However, within the inefficient planning and management system, and the limited financial resources for urban investment, it is unlikely to succeed in overcoming the previously mentioned obstacles. Hence, a first step towards implementing the compact city solution or any other solution is to enhance the technical capacity of the local planning authorities. Although the discussion is about a developing country, the fulfilment of this condition is not problematic keeping in mind the readiness of a number of international development organizations to carry out such projects. In addition, it is crucial to look for successful experiences in promoting compact cities to draw lessons on how to generate incomes to finance urban development and it is needed investment.

6.2 REDUCE URBAN SPRAWL INTO THE SURROUNDING COUNTRYSIDE

Based on the analysis of the existing pattern of urban development in Jenin, it is clear that urban sprawl in this context is not limited to construction beyond the master plan. It was clear that the excessive increase in the master plan area, where the head of the engineering department of the municipality estimated that the city will not need any further extension until 2050, provided a favourable medium where sprawl can take place legally not in form of informal development. Managing this form of urban sprawl requires a unique urban compaction policy that depends on an adapted set of incentives and disincentives, which is not available under the existing urban management and planning system.

Concerning urban sprawl outside the master plan area, Jenin city has demarcated urban growth boundary, beyond which urban development is theoretically forbidden. Nevertheless, and as stated earlier, the Palestinian agricultural law allows the establishment of certain constructions mainly for serving the agricultural land. Nevertheless, it has been noticed that the law has been misused to construct residential development over agricultural land. In addition, the loose enforcement of development regulations and the tolerance in dealing with infringements of development and building regulations contribute to the spread of urban sprawl beyond the growth boundary. Representative of different planning authorities indicated that this tolerance is the result of political vision aiming not to increase the burdens and limitations in urban development, which are imposed by the Israeli occupation. Although there are no statistics revealing the size of informal development, field observations indicate that it is not significant. In the current situation, as the government and local planning authorities are unable to solve the problem of housing affordability and enhancing the fiscal access to land within existing urban areas, it sounds unreasonable to implement the regulations more strictly; for it will lead to extreme social injustice and

will provoke significant informal development. However, considering the implementation of a comprehensive compact city solution, through which the issue of housing affordability is also addressed, then strict implementation of the rules will be more acceptable. Still there is one more challenge, namely the political will. Politicians hold the belief to distribute Palestinian urban development all over the West Bank as a means to protect the Palestinian land from confiscation and the construction of Israeli settlements. Yet, the Palestinian ministry of planning, through its current work to prepare the National Spatial Plan, tries to change this conviction through several workshops in different contexts, the incorporation of multiple stakeholders in the planning process and the efforts to provide a legal framework to support the binding implementation of this plan, which aims partially at protecting the land and the limited natural resources.

6.3 ENHANCING AND DIVERSIFYING THE LIVING ENVIRONMENT WITHIN EXISTING URBAN AREAS

As it has been stated earlier, the existing infrastructure and the physical urban quality are of low to moderate level. Within the limited financial resources and the scattered urban development enhancing infrastructure and amenities seems to be difficult but not impossible. However, this process is crucial to stimulate other approaches in the compact city solutions first to make infill development attractive and second to prevent further deterioration in the living environment. Finding a comprehensive scheme that coordinate the plans to provide the several required sorts of infrastructure and facilities and deep studies to investigate the possible means to finance these projects contributes to overcoming this challenge.

Maintain an access to public green spaces is another challenge. As the research findings has revealed, the assigned area for natural reserves in the city is less than 2%. In addition, the distribution of these areas is not ideal, as they are located at the edges of the cities and do not contribute to the quality of the city core. Once an intensification process is realized without considering this issue an overcrowding will inevitably result if it is possible to achieve an intensification of the urban context within this unattractive state. This means the implementation of compact city solution require estimating the needed area of open spaces and designing the optimal distribution of these spaces. Since public governments and planning authority do not posses considerable areas of land within the city, it is crucial to revise the laws that allow for confiscation of private land for the public good as well as considering a mechanism for fair compensation for the individuals.

As the city land use plan indicated there is a strict separation between the functions of the several zones as well as concentration of jobs and services at the city centre. This condition contradicts the compact city

principles and hinders the achievement of its multiple objectives. Implementing an efficient compact city policy necessitates reconsidering the land use plan and focusing on the concept of mix land use.

6.4 PROVIDING MORE SUSTAINABLE MODES OF TRANSPORT

Due to the topography, weather, road infrastructure and also social aspects cycling does not seem to be a wide spread mode of daily commuting. However, walking in the context of a medium-sized city like Jenin is likely to play a major role in daily commuting. Even under the current conditions, where pedestrians do not always have a safe side walk or where services are not within proximate area, walking is a major mode of commute a considerable portion of the local community. Enhancing roads infrastructure and providing safe walking environment is expected to enhance the dependence on this mode of movement and contribute to the multiple objectives of the compact city policy.

Although there is a real need for public transportation in the city, the service has been only lately introduced. It is available for limited areas and does not have good reputation yet. Unfortunately, the quality of the provided service is very low and not reliable. For a successful compact city policy, municipality need to have a leading role in introducing a simple and efficient transport system. Public private partnership can help to overcome the financial challenge to introduce this project. The transportation rout can be linked to the planning process and used as an asset in guiding the urban development towards favourable planning locations.

6.5 HOUSING PROGRAMS TO ENSURE HOUSING AFFORDABILITY

Unfortunately the Palestinian government does not have a clear housing policy. Housing programs or projects targeting certain category of the community like teachers, civil servants etc. may be developed irregularly. Housing affordability has been lately a serious issue and solutions for this problem are not suggested. Whether a compact city solution or any other urban development policy is to be implemented the issue of housing affordability need to be considered. Urban sprawl is currently providing a temporary mitigation for this problem. Nevertheless, considering the scarcity of land in the State of Palestine and that urban sprawl is undesired pattern of urban development a sustainable alternative for this problem is required. The fact that public land is limited make the process of finding a solution for this problem more complicated.

7. THE EXTENT TO WHICH AN ACTIVE COMPACT STRATEGY CAN CONTRIBUTE TO THE URBAN DEVELOPMENT IN A DEVELOPING COUNTRY CONTEXT

The potential of compact city for developing countries can be measured through an assessment of actual compact city foci as compared to actual degree of success indicators.

The results on internal city development reveal that the practice of development is strongly inexplicit and ad hoc. Despite the presence of the Palestinian Planning and Building Act and explicit role of the Palestinian authorities, in the execution the authority is strongly limited and hampered due to uncertain decisions of the Israeli authorities and the extra burden in land use planning matter for the municipality. Planning process is lacking a clear vision and urban development is taking place in a spontaneous manner rather than in a coordinated way. Planning authorities take an approach of responding to alterations rather than preparing planning scenarios to avoid such sudden changes. Public participation in the planning process is a matter of formality. Hence there is insufficiently conducive interaction between stakeholders.

Furthermore, the degree to which processes are documented, monitored and improved is limited. At the local level, it is extremely difficult to realize the structure of the planning process. To recognize planning activities that are taking place one has to mine among a number of units in the municipality and JDLG and only with permission. At the regional level, both the ministry of planning and the ministry of local government are making continuous efforts to enhance the urban planning and development process both at the regional and local level. The ministry of planning is preparing the National Spatial Plan to establish the principles of planning in the West Bank and the ministry of local government prepare strategic frameworks to enable municipalities and local communities carry out the planning process within their boundaries efficiently. These efforts at regional level give indications that planning at the local can in short get enhanced. Considering that the Palestinian planning authorities were established only 20 years ago, and recognizing the surrounding critical situation in relation to land, the efficiency of these authorities can be considered limited.

The ratio of formality / informality, there are several calls to get rid of the planning regulations that date back to the British Mandate phase and enacting efficient regulations matching the current circumstances. However, the several technical challenges that face planning authorities and instability in the political and security situations of the country makes generate more urgent tasks that have more priority in implementation. There no clear statements that this task is on the actual agenda of the authorities. Moreover, the insufficient technical capacity at the local level, and the poor vertical coordination among planning authorities create difficulties in changing the implementation of planning processes and urban development policy.

Regarding the infrastructure, the above data suggest that there is great uncertainty about the extent to which the supply of infrastructure matches the demand. Statistics indicate that almost all houses in the

State of Palestine are connected to public electricity network, 94.5% are provided with water sources, and 55.3% connected to public sewerage network (PCBS, 2014). In terms of quality there are no concrete studies. It is important to mention that in several locations in Jenin city, mainly at new quarters, houses are constructed before areas are provided with infrastructure. It is common to provide services on individual basis or for a small group of houses. Regarding road infrastructure, no studies were found. Based on field observation, the quality of the roads is inadequate in terms of the status of paving and the paved area, the availability of sidewalks for pedestrian and lighting. However, it is expected that concentrating urban development at certain locations would enable the municipality to focus infrastructure at certain nodes, instead of distributing its limited efforts over large areas of low density population.

Regarding the ease of change in personnel, regulations, implementation processes it appears difficult to change the personnel working at planning authorities. However, concerned ministries enhance the capacity of its staff as well as they try to higher private consultants and professionals in specific fields for certain time intervals. The main challenge remains at the local level, where architectural and civil engineers are mainly responsible for planning activities.

On the influx of migrants for most Palestinian cities in the West Bank, rural urban migration does not present a challenge to urban development. Knowing that in 2014 in the West Bank the percentage of the urban population was urban 73.9% and the rural population 16.7% (PCBS, 2014), justifies the mentioned statement. Mainly Ramallah suffers high pressure due to the influx of migrants from urban and rural settlements in the West Bank.

Regarding the ease of policy advocacy, the preparation of the National Spatial Plan, which was launched in February 2011 and aims at formulating a scheme for optimizing the use of land, may facilitate the promotion of a compact city policy. This plan attempts to enhance the planning perceptions and processes. The preparation process faces difficulties and objections; however there are serious efforts to enable a successful preparation and an efficient binding implementation. This plan can pave the way for promoting a compact city policy in the context of Palestinian cities. Published information about the project details are limited and there is a need for further field research in this context to determine the consistency between the principles of the compact city and this plan.

8. CONCLUSION

The novelty of this article lies primarily in testing old concepts in new type of environment. Although the limitation of this research may be that Jenin City may be regarded as a very idiosyncratic case, the

circumstances of urbanization are similar to other cities. Overall, it can be concluded that the hermeneutic approach has been useful to examine this specific case and research question. The core research question is to which extent compact city practice may be appropriate for a developing country context. The findings and experiences in Jenin City can answers this questions partly.

On the one hand, the compact city strategy proves to provide a comprehensive framework to develop a new urban policy. This has not been tested in most developing countries where urbanization is rapid. On the other hand, the reality of institutional structures and current planning practices such as in Jenin may still hamper effective implementation.

Recommendations for further research for Jenin city and Palestine are that further longitudinal data collection and evaluation of scenario choices is still necessary to achieve a better picture of long-term developments and potential developments. In order to further develop the appropriateness of the compact city concepts it has to be said that the terms compact can be further detailed: constrained compact (as in the case of Palestine) versus unconstrained compact (as in other cases).

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