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ENHANCING THE QUALITY OF URBAN LIFE IN URBAN POVERTY AREAS THROUGH A STRATEGY OF INTEGRAL MULTI APPROACHES

Public Spaces as Arena for Change

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Keywords

Quality of urban life, Urban poverty areas, Integral multi approaches, Public spaces;

Abstract

Urban poverty areas (UPA) in the main cities of the emerging and developing countries are representing the product of a chaotic urbanisation process. This process started through the recent decades as a result of the economic reform in many Emerging countries, mainly in Asia, South America, and some cases in Africa such as Egypt and South Africa. Under the umbrella of the term UPA, there are many other terms such as slums, shantytowns and informal urbanism. In this study, the focus is on a special case of UPA which exist in the main cities of the emerging countries and some cases of developing countries. These UPA have some of the slums characteristics, which indicate the low quality of the urban life such as the pollution of the urban environment, the high density of built up area and the lack of social spaces. However, these areas mainly consist of permanent buildings which were built in most cases by the dwellers themselves due to their basic socio-economic needs, also in most of the cases the basic infrastructure are available.

The study hypothesis is discussing the possibility of enhancing the quality of urban life in those UPA through a strategy of integral multi approaches based on the potential opportunities of public spaces. In other words, the key to a successful strategy is “integration”, meaning that all approaches, policies, and projects are considered in relation to one another. This includes the using of new approaches such as green infrastructure (GI) through an integration framework with the other prevalent urban approaches such as participatory, towards innovatively interactive urban communities.

An analytical comparative study was done based on qualitative methods by studying various case studies of UPA in main cities of emerging and developing countries that were upgraded through a strategy of integral multi approaches. These rely on the public spaces as a medium for change, as well the using of quantitative and qualitative methods through actual case studies.

The results represent lessons from practice. Based on actual cases, the cumulative urban experiences through various selected cases of upgrading UPA showed that the success depends on the using of an integral approach (multi-disciplinary) that relies on livable innovative public spaces. The new approaches such as GI cannot stand alone, but the strategies can be efficient by using integral an multi approach strategy. The cases also showed that public spaces in UPA are centers of the daily socio-economic activities, which is why these areas can act as arenas for change, towards better quality of urban life.

1. Introduction

While the main global issue (concerning the urban environment) is sustainability of human urban settlements and to mitigate the impact of the urbanization and the anthropological activities on the environment as the main cause of global warming, the problem of dealing with UPA in developing and emerging countries is still prioritized. This problem is strongly linked to the process of rapid chaotic urbanization, which is the main reason of forming the UPA and what are broadly called Slums in developing and emerging countries. Rapid urbanization, if not well managed, will lead to more informal settlements and poverty (World Bank, 2016).

Indeed, the main cities of the developing and emerging countries are witnessing a rapid chaotic urbanization process, hence these cities are the engines of economic and social growth in their countries. This is why these cities face mass domestic migration and, of course, rapid urban population growth, see figure (1).

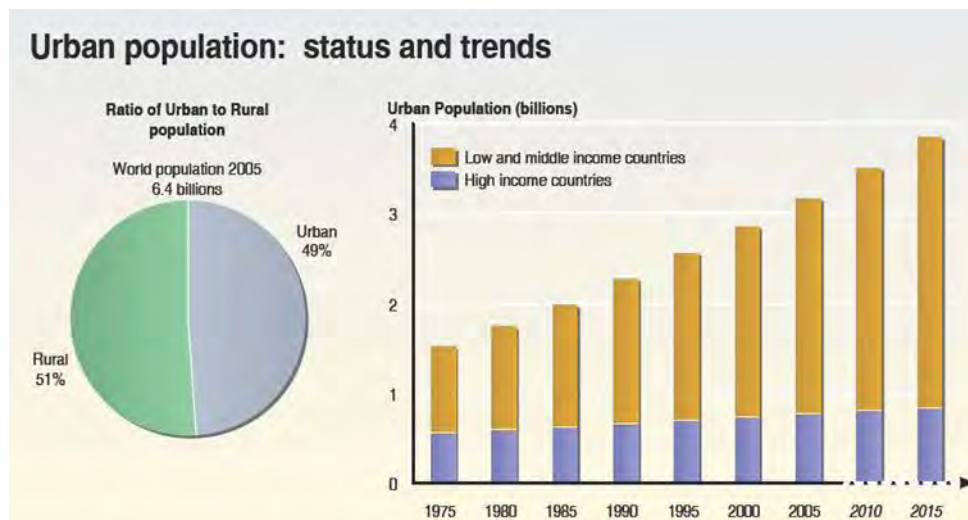


Fig. (1): The rapid growth of urban population in low and middle income countries, which represent the emerging and developing countries.

Source: Food and agriculture organization, according to World Bank 2005

The result of this rapid urbanization process is bad quality of urban life in their cities and the continued formation of more UPAs. According to World Bank, (2005):

"It is projected that the total built-up urban surface area in developing countries will triple between 2000 and 2030: from 200,000 to 600,000 square kilometres. This means that the additional 400,000 square kilometres being constructed during the 30 year period will equal the total urban surface area worldwide as of the year 2000.

Dealing with the urban phenomenon of rapid chaotic urbanization and the formation of UPAs has two folds. The first one is how to halt this phenomenon and the other side of this problem is the issue of this paper, which is how to deal with the existing UPAs in the cities of the developing and emerging countries as an urban problem and under the limited available budgets.

For the purpose of proving the study's hypothesis, there was a need to define the term UPA from an urban perspective and also to clarify the difference between the UPA and other similar terms such as: slums and shantytowns. The study is arguing that there is a possibility to improve and to enhance the quality of urban life in UPA by rethinking the current approaches of dealing and designing of the public spaces. Evidence based practice in UPA upgrading projects shows that public spaces were the arena for change. Although there are several various approaches of dealing with UPAs, these approaches can be classified into two main categories, according to Amis (1995), and Moser (1995): there have been two broad traditions in policy approaches to urban poverty.

These two categories are: Firstly, approaches which have focused on the physical aspects of the UPA, this include the problems of housing, the basic infrastructure supplies, the land tenure, the institutional and management aspects of urban development and other relevant problems. Secondly approaches which have focused on the social and economic aspects of UPA. These include the community socio-economic activities, sustainability issues and the other factors which undermine well-being and quality of urban life (Hardoy, et al., 1992), (Masika, et al., 1997). Obviously, both of the two categories can be considered as adaptive approaches, which aim to improve the situation of existing UPA dwellers and moreover, strengthen their integration into the social and economic fiber of the city. These goals can be achieved through the upgrading of the level of quality of urban life in UPA physically, socially, and economically. In many various cases from Africa, Asia and South America evidence based practice in UPA upgrading projects shows that the adaptive policies through a strategy of integral multi approaches were meaningful strategies that managed to improve the quality of urban life in UPAs, also have proved that public spaces have a key role as they act as active urban spaces which offer the sphere for the physical, social, and economic changes in UPAs towards the enhancement

of the quality of urban life. An analytical comparative study was done based on qualitative methods by studying various selected cases of upgrading UPA in cities of developing and emerging countries which were based on using public spaces as arena for change.

2. UPA, an Overview

UPAs are still spreading in the main cities of the developing and emerging countries. This urban phenomenon is concentrated in Africa, Asia, and South America, there is a nexus between the forming of this urban phenomena and the socio-economic characteristics' in the main cities of emerging and developing countries (MCED), see figure (2).

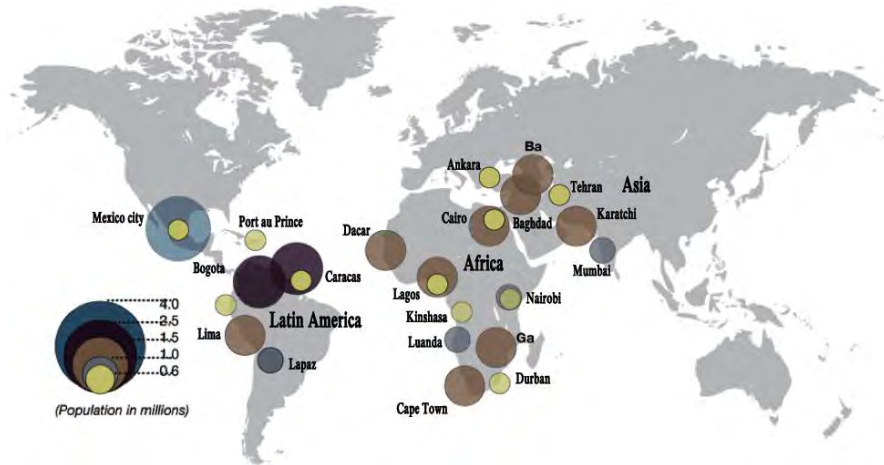


Fig. (2): World's largest contiguous UPA, located in the main cities of emerging and developing countries, in Africa, Asia and Latin America

Source: Mike Davis, 2006, Planet of slums

According to the World Bank (2005), 75 percent of global economic production takes place in cities, in developing countries and particularly in emerging countries. The corresponding share is rapidly increasing. In many developing countries, the urban GDP share has already surpassed 60 percent. Therefore, the urban economic competitiveness is a critical factor in attracting further foreign investments and human capital, which again is necessary to push the improvement of social and physical infrastructure. Meanwhile, this means more numbers of domestic migrants and as a result a rapid chaotic urbanization which leads to the continuation of the process of expanding the existing UPAs and, in some cases, to form new UPAs (Roth, I., 2012), see figure (3).

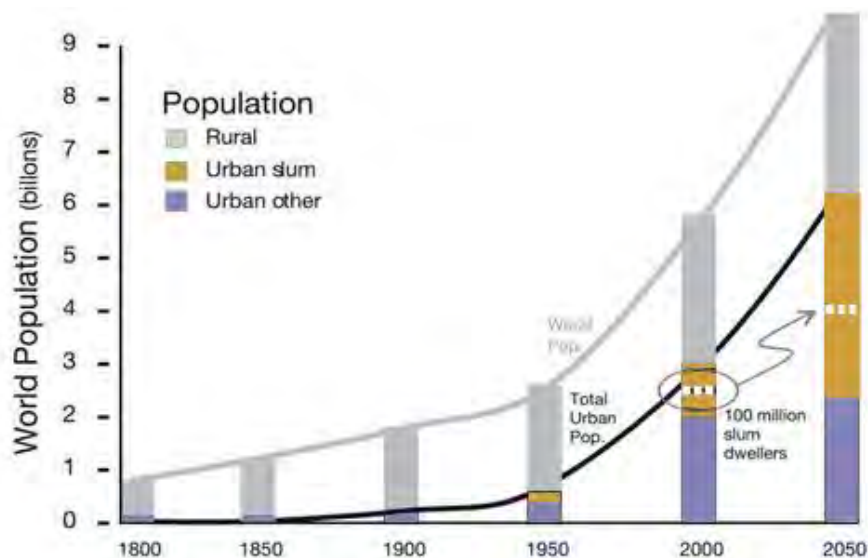


Fig. (3): Dynamics of UPA Formation from 1800 to 2050

Source: UN-HABITAT Annual Report 2005 (UN-HABITAT, 2005, p. 9) edited by Gunther Stoll

The phenomena of UPAs is recognized by the substandard living conditions and incomes along with deficient provision of basic infrastructure and public services. This thought is in line with the World Bank, (2005) description of urban poverty as a multidimensional phenomenon. The urban poor live with many deprivations.

Understanding of urban poverty was and still is linked to deprivations, as lack of physical and social resources, according to the World Bank, (2006): dwellers of UPA have a daily challenge to satisfy their physical and social needs. There is a consensus on the concept of linking urban poverty to deprivations: urban poverty is often characterized by cumulative deprivations—that is, one dimension of poverty is often the cause of or contributor to another dimension (Baharoglu, and Christine, 2000). These cumulative deprivations are illustrated in the urban context into some urban characteristics. The most significant and common urban character is the lack of public spaces. This urban phenomenon is strongly linked to the unaffordability of the poor to own land in cities.

"High prices of land and housing in the urban areas have made land into a lucrative business" (Garcia, 2013).

Obviously, the lack of public spaces in UPAs is a visible urban character in the disparity between UPAs and formal districts of cities.

2.1. The definition of UPA from an urban perspective

There is no consensus on a definition of urban poverty (Masika, et al., 1997). Definitions depend on many disciplinary approaches as urban poverty is a multidimensional phenomenon, this is why there are various definitions from different perspectives. The most prevalent approaches are: economic and anthropological interpretations (Mitlin, 2004). However, in this study the definition of urban poverty is from an urban perspective, it relies on the urban characteristics of UPAs. These include site characteristics which are usually located in marginal sites of cities and sometimes in environmental hazard sites (stemming from the density and hazardous location of settlements and from exposure to multiple pollutants), (Moser, et al. 1996), the state of buildings, streets network, public spaces, the availability of the basic infrastructure, and even the natural elements of the urban environment such as urban trees and vegetation. So simply the term UPA refers to urban living in bad quality of urban life due to the bad urban characteristics of the urban context. In other words, UPAs from an urban perspective, can be defined as: urbanized areas located in marginalized sites of cities, where the dwellers suffer of bad quality of urban life.

2.2. Types of UPAs

The definition of UPAs (that was reached) can be considered as an umbrella for all other terms which refers to poor living in cities and informal urbanization, these include terms such as slum, shantytowns, and some local terms that are used in a specific region of the world such as favela in Latin America, hence it was initial to classify the UPAs into types to avoid any conflicts with other common terms. This classification is based on practical urban experiences extracted from actual cases of dealing with UPAs in Africa, Asia and South America, through the research, reports and studies carried out by diverse associations and institutions such as WB, UN-Habitat and the German technical cooperation (GTZ). UPAs can be classified into two primary categories: Firstly, the formal UPAs, which is out of the scope of this study. Secondly informal UPAs. This primary classification is related to the problem of the land tenure, and other related issues of the legal procedures such as the buildings license. Informal UPA as well can be classified into two types: informal areas of permanent buildings, and informal areas of temporary buildings.

2.2.1. UPA, the type of permanent buildings

This type of UPA is a unique type as it represents a special type of UPAs that consist of permanent residential buildings, which in majority of cases were built of reinforced concrete and bricks. This phenomenon is broadly existing in the main cities of emerging countries and some developing countries which managed to improve its economic conditions. This is why this case can be found in countries such as: Brazil, Colombia, Venezuela, Egypt, see figure (4).



Fig. (4): Examples of informal urbanization of permanent buildings
Source: Google search, edited by Author

2.2.2 UPA, the type of temporary buildings

The informal urbanization of temporary buildings usually consists of shelters and huts. This type of UPA is the most prevalent type, also called shanty town or squatter area, represent the extreme case of slums. The most significant urban character is the bad conditions of the housing, which consists of temporary buildings, usually small huts or shelters made of corrugated sheets and tin plates, plywood, corrugated metal, sheets of plastic, and cardboard boxes

or any remnant materials. Such a type of UPAs is usually found on the periphery of cities, in public parks, or near railroad tracks, rivers, lagoons or the sites of city trash dumps (Potts, 2011), see figure (5).



Fig. (5): Examples of slums and shantytowns (UPA as informal urbanization of temporary buildings).
Source: Google search, edited by Author

2.3. The intended type of UPA that targeted by this study

The intended type of UPA that this study's hypothesis was based on is the type of informal areas that consists of permanent residential buildings. This unique type exists in the main cities of emerging and developing countries (MCED). According to the study hypothesis, there is a possibility to enhance the quality of urban life in those UPAs through a strategy of integral multi approaches, which is based on the potential opportunities of public spaces. This methodology of dealing with UPAs is not suitable to all types of UPA. It is particularly not suitable for the informal areas of temporary buildings such as the shantytowns, which represent the worst case of UPAs as the main goal was to improve the quality of urban life by adding value to the existing permanent buildings of the UPA.

2.4. The urban characteristics of the UPAs of permanent buildings in main cities of emerging and developing countries

The characteristics of the UPAs is an attractive issue for research, however the majority of those studies focused on describing the characteristics of UPAs from social, economic, and anthropological approaches, for example Masika, et al. (1997), Baharoglu, and Christine, (2000), Loughhead, et al. (2001), Mitlin, (2004), Gebre-Egziabher, (2010). In this study the concern is directed towards the urban characteristics.

Actually the urban characteristics of UPAs of permanent buildings can be observed by the using of quantitative methods through aerial images, maps, and field research. The aerial images and maps of some cases of UPAs in MCED showed that the most significant urban characteristics of this type of UPAs are the following:

The urban characteristics of UPAs represent the characteristics of human settlements that was established to meet the basic needs of the human's, the result is urban settlements that neglected the social needs of the residents, the right to have secured public spaces, recreation facilities, and other common social needs, UPAs can be described as household livelihood or survival strategies have both rural and urban components (Satterthwaite, 1995).

The high density of buildings, the lack of the public spaces such as the public parks, plazas, green areas and other public social spaces, see figure (6).

Irregular streets network, that mainly not suitable to the vehicles, in most cases represent an organic network that respect the natural topography of the site, or followed a geometric line that reflects the original agriculture divisions, as the cases of UPAs that was established over former agriculture land, such as many cases in Cairo, Egypt.



Fig. (6): Examples of the urban fabric of UPAs in diverse cases of permanent buildings, show the similarity of the dense fabric and lack of public spaces.
Source: google earth maps edited by Author

3. Public Spaces in UPAs of the Main Cities of Emerging and Developing Countries

Although one of the significant urban characteristics of the UPAs is the lack of the public spaces and in some rare cases the absolute absence of them, but public spaces play a key role in the socio economic daily life in UPAs, so the

question is how the dwellers compensate the lack of the public spaces? While the lack of the public spaces is a significant defect that impact the daily socio-economic life in UPAs, however the dwellers used the street network and any available outdoor spaces as public spaces, they still use the rural strategies in their daily life in urban areas. Baker (1995) illustrates how urban and rural households adopt a range of diversification strategies, by having one foot in rural activities and another in urban, so public spaces in UPA are not the common urban spaces that we know in formal urbanized areas, according to Madanipour (1996):

"The term 'urban space' not merely to refer to the space between buildings, i.e. voids as distinctive from corporeal mass: I have used the term in a broad sense, to encompass all the buildings, objects and spaces in an urban environment, as well as the people, events, and the relationships within them".

3.1. Why the public spaces in UPA are different than those in formal urbanization?

In UPA there is a persistent need to broad the sense towards the intended meaning of the public spaces to include all the available urban spaces between the buildings, there is a deep difference between the urban characteristics of the public spaces in UPA and those in formal urban areas inside cities, see figure (7). The social, economic and environmental circumstances in UPA impacted the public spaces in a negative way through many issues such as the land tenure problem.

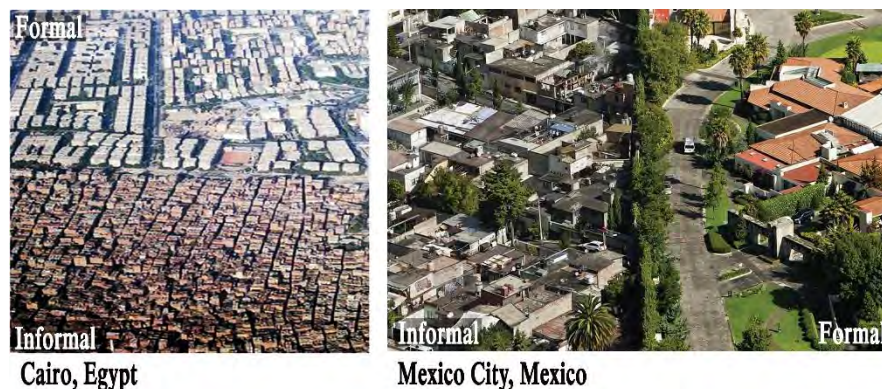


Fig. (7): A comparison between public spaces in formal areas and in informal UPAs in the capital cities of Egypt and Mexico, as cases of emerging countries.
Source: Google search, edited by Author

3.1.1. The social circumstances impact

Public spaces in the UPAs case are less energetic, poverty act as a barrier that impedes the social life in UPAs, the dwellers denied access to outdoor social life, which basically take place in public spaces of the city. Dwellers of UPA face inability which individuals and groups experience. It is manifest in patterns of social relationships in which individuals and groups are denied access to goods, services, activities and resources which are associated with citizenship (ILO, 1996). The success of a specific public space is not solely in the hands of urban design process; it relies also on people adopting, using and managing the space, on other words: people make places, more than places make people (Worpole, and Knox, 2007).

3.1.2. The impact of economic circumstances

The economic circumstances play a key role in forming the urban characteristics of the UPAs, Public spaces characteristics reflect the economic circumstances, as these areas represent the poverty urbanization, where the priority is always to the economic issues and other aspects of urban life, this is leading us to wonder: Do the accepted principles of urban life as they have been developed in the West have any place in the UPAs in MCEd, where the emphasis is less on sustainable development, and more on economic development and survival in a globalizing world? (Moor, and Rowland, 2006), this is why the environmental role of public spaces is not a priority to the dwellers in UPA. Also the economic circumstances have another negative impact on the existence of public spaces, due to the problem of the land tenure, UPAs usually located in marginalized sites of cities as a result of the high prices of the land, and in most cases the dwellers are being faced with the problem of the land tenure.

"Security of tenure also provides further protection against the arbitrary deprivation of property whether that property is housing or land" (UN-HABITAT and OHCHR, 2002).

The problem of the land tenure which plays a key role in forming the phenomenon of the lack of public spaces, these urban settlements were established to meet the basic needs of its dwellers and in particular for housing purpose as a priority and of course to neglect the necessity of having

urban spaces for public use, this is common in most cases of the informal UPAs, and as a result this is why the lack of public spaces in these areas is a significant urban character.

3.2. Public spaces as arena for change towards better quality of urban life

There is a consensus on the important multiple roles of the public spaces as an inevitable urban component of any successful healthy urban community, (Lynch, 1960), (Bacon, 1976), (Madanipour, A., 1996), (Cybriwsky, 1999, and many other authors were in the same point of view concerning the potential power of public spaces on the shaping of urban communities and the achieving of high quality of urban life, according to Chiesura (2014):

"Public spaces have an important role regarding the environmental, economic, social context in the city as well as sources or providers of life quality and sustainability"

In the case of UPAs the multiple roles of public spaces are broadened, as it can act as a free outdoor yard for the poor dwellers, besides its ability to enhance the quality of urban life through its multiple roles, simply a good urban living environment requires good public spaces as was argued by (Darin-Drabkin, 1977). Public spaces in UPA of MCED act the following roles that can enhance the quality of urban life:

- From a social perspective; public spaces are social spaces where the UPA dwellers can socialize without regarding cost, gender, age, ethnicity, sexuality, (dis)ability, social class and so on (Malone, 2002). These social activities make these areas more vitality. Making its dwellers feel proud of their community.
- From an economic perspective: the inclusion of public spaces planning into UPAs upgrading schemes can act as a catalyst for dweller-initiated housing improvements and their livelihood, this policy can improve the housing types in economic way, and to act as an urban space for daily trading, such as street vendors, while the local municipalities are primarily concerned of the upgrading of the basic infrastructure, in most cases upgrading schemes neglect the fact that UPAs are complex, these urban communities need and necessitate comprehensive design that include the public spaces with the planning of physical and social services which will integrate the community into the larger urban fabric
- From an environmental perspective, public spaces in UPA are acting as filters of the air, water and soil pollution, public spaces can be an active tool to enhance the quality of urban life by its environmental roles, according to part I of the charter of European cities and towns towards sustainability, the charter identified the lack of open spaces as one of the main environmental problems, alongside noise, and air pollution from traffic, lack of amenities, and unhealthy housing, particularly affecting the poor neighborhoods (EU, 1994), also in the Leipzig charter on sustainable European cities, signed by the EU ministers responsible for the urban development, creating and ensuring high quality public spaces is one of the key recommendation for maintaining high quality urban environments (EU, 2007). See figure (8).

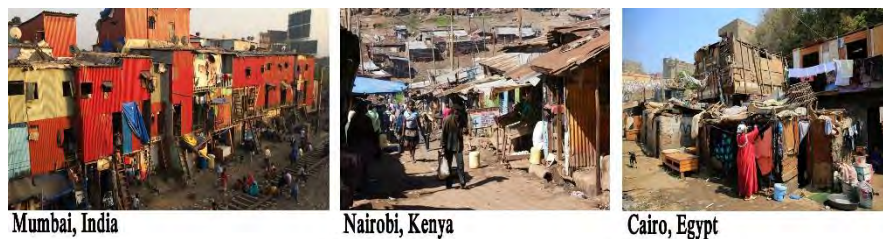


Fig. (8): Diverse examples of public spaces in UPA, show its socio-economic roles of public spaces as arena for the daily urban life activities.

Source: Google search, edited by Author

3.2.1. The need to new supplementary approaches

Using a strategy of integral multi approaches to enhance quality of urban life in UPAs is a complex strategy that not depend on a sole approach, UPA is a multidimensional phenomenon, meanwhile every case has its own criteria, regarding the local circumstances, thus this is why the upgrading strategy should be flexible to meet the variables according to each case, this means that there is a necessity to use new supplementary approaches regarding the circumstances of each case, beside the common accepted approaches, for example the using of green infrastructure (GI) – see appendix (1) as a new supplementary approach with the using of the community participatory as a common approach.

Many various study cases of upgrading UPA showed that the using of a strategy of integrated multi approaches managed to achieve its goals, which in most cases was to enhance the quality of urban life as a main target.

4. Study Cases

The cases were selected to represent cases of UPAs in the MCED that managed to enhance its quality of urban life through an integral multi approaches strategy, where public spaces were the arena for change, towards better quality of urban life. These cases showed clearly the key role that public spaces can act to improve the quality of urban life, through its potential opportunities. An analytical comparative study was done, based on qualitative and quantities methods, to extract lessons from practice.

4.1. Paraisópolis, UPA upgrading case (Center of social work for music), Sao Paolo, Brazil

Paraisópolis is a case of an UPA that consists mainly of permanent buildings, located in Sao Paolo, one of the main cities in Brazil, which considered economically as an emerging country. Paraisópolis began to develop in the 1920s around a hard topography area, and thus way the area suffers of the absence of regular streets network and the basic infrastructure, in 1960s labor and poor migrants began to informally occupy the area. In the 1970s a new zoning law discouraged legal development on the site (due to prohibitive lot sizes), and as a result there was a boom of invasion and chaotic urbanization that form the UPA in Paraisópolis (Urban remediation and civic infrastructure hub, 2012). Despite Paraisópolis central urban location, the marginalized area of Grotão within Paraisópolis is effectively separated from the formal city. Where the informal urbanization forms a very dense fabric, within this isolated zone, increased erosion and dangerous mudslides have designated the site as one of many high risk zones in the city a primarily inaccessible void that occupy a central site to the UPA. (Magalhães, Di Villarosa, 2012), see figure (9).



Fig. (9): Paraisópolis, Grotão, UPA with a very dense urban fabric
Source: Magalhães, and Di Villarosa, 2012

4.1.1. Upgrading of UPA through innovative dynamic public space

The UPA of Paraisópolis has a very dense urban fabric that characterized by the lack of urban spaces and as a result the lack of public spaces. The project fundamentally transforms the empty void in Grotão into a dynamic public space and a productive zone through social design a process of analyzing the local effects of chaotic urban and population growth and improving marginalized UPA through social infrastructure. In addition to stabilizing the challenging topography and to eliminate the risk of erosion and landslides, (Urban remediation and civic infrastructure hub, 2012). The upgrading scheme depends on establishing a social work center for music, that contains various social activities through a new terraced landscape that transforms the central void area into an open public space ‘natural arena’ that encourages diverse community participatory, see figure (10).



Fig. (10): The social work center for music that contains various social activities through a new terraced landscape that transforms the central void area into an innovative open public space ‘natural arena’
Source: Magalhães, and Di Villarosa, 2012

The case scheme followed an integral strategy that treated with the significant defects which negatively impacted the quality of the urban life, through an integral strategy of multi supplementary approaches:

- The principles of urban design and landscape architecture as a design approach to deal with the lack of public spaces and social infrastructures. The scheme treated the isolated marginalized site of the UPA area through

reestablish connections within the isolated urban fabric by intervene the edges of the void to open accessible access, and to establish public transportation infrastructure, the scheme includes a program of replacement housing out from the risk zone at the edge of the void.

- The social approach through the community participation that lead to introduce a variety of social activities within the music center, such as well-designed public spaces, sport facilities.
- The using of GI as a supplementary upgrading approach to deal with the floods risk, and urban agriculture, by reuse the storm water in urban agriculture program that also can generate jobs opportunities for the dwellers, see figure (11)

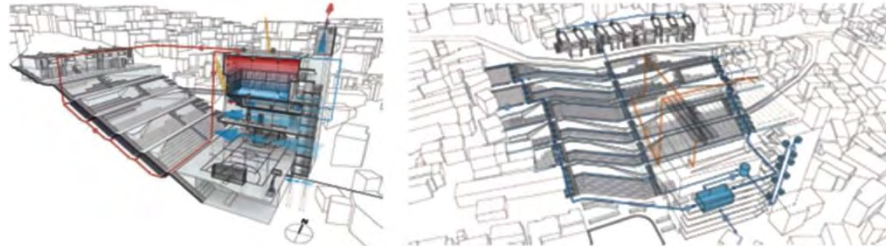


Fig. (11): Sections showing the using of GI principles to deal with storm water
Source: Magalhães, F. and Di Villarosa, F., 2012

According to the design team Magalhães, and Di Villarosa (2012):

"The intervention opens the edges of the void to reestablish connections within the isolated urban fabric and to introduce social programs where they were once categorically neglected. Localized moments of this program, which includes sports facilities, urban agricultural, public space, transportation infrastructure, replacement housing, and the Fábrica de Música (music center), are simultaneously". See figure (12).



Fig. (12): The project managed to deliver an innovative dynamic public space that includes diverse activities besides the music center.

Source: Magalhães, and Di Villarosa, 2012

4.1.2. Assessment of the case

This case represents a good example of enhancing the quality of urban life in an UPA through the potential opportunities of the public spaces, the innovative public spaces within the variety of activities managed to enrich the urban life, towards better quality of life, the project followed an integrated strategy that relied on multi approaches to deal with the multi-dimensional problems of UPA, such as community participatory, principles of landscape architecture and urban design, GI principles, these approaches include common approaches of dealing with UPA such as the community participatory , and some new approaches such as GI, the case proved that the key of a successful upgrading scheme is to use an integrated strategy through suitable multi approaches regarding the case circumstances.

4.2. Al-Darb al-Ahmar case (Al-Azhar Park), Cairo, Egypt

This case is not basically an UPA upgrading case, however it shows clearly the positive impact of public spaces on the quality of urban life in an UPA of Al-Darb al-Ahmar which is a historical area in Cairo, represents the traditional urban fabric of the medieval Islamic Cairo, the area suffers of a dense population and the lack of social services and public spaces (Aslan, 2006).

Al-Darb al-Ahmar is a special case of UPAs, while the dwellers of the area are one of the poorest in Cairo, the area is a home of a set of the wonderful Islamic monuments of the Middle Ages, as well the area was adjacent to mounds of rubbish amassed during more than five centuries, the area has a dense historical urban fabric, lack of open urban spaces and of course as a result the lack of public spaces, however the area is a distinctive urban area, see figure (13) illustrate the area before establishing the park, and the visual nexus between the rubbish dump (the park site) and the historical UPA of Al-Darb al-Ahmar.



Fig. (13): Left, the rubbish dump and the urban context, right, the visual nexus between the rubbish dump and the historical UPA of Al-Darb al-Ahmar.

Source: Al-Azhar Park, Cairo and the Revitalization of Darb Al-Ahmar, 2005

4.2.1. How the establishment of the park enhanced the quality of urban life

The idea was to turn a rubbish dump, into a park (Al-Azhar Park), and to rehabilitate the adjacent historic UPA, see figure (14). The project offers several recreations, cultural, social activities not only to establish a park, but to rehabilitate the area through historic building rehabilitation, archeology activities, improvement of initiatives requiring support the health, education, sanitation, and a system for rubbish collecting and training services of some hand crafts to the dwellers of the adjacent UPA of Al-Darb al-Ahmar.

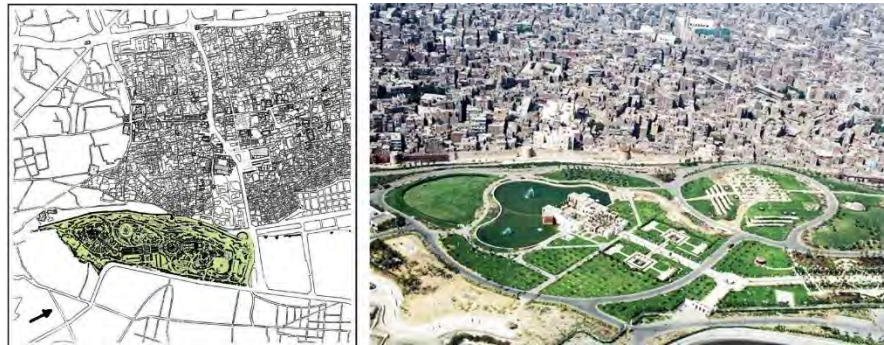


Fig. (14): The significant site of the park in the heart of a historic UPA.

Source: bureau d'études paysage, Sites International, 2000, edited by the author

The park and other facilities of the project was funded by the Historic Cities Support Program (HCSP) of the Aga Khan Trust for Culture(AKTC), an entity of the Aga Khan Development Network (AKDN). The park, developed at a cost in excess of USD \$30 million (Al-Azhar Park, Cairo and the Revitalization of Darb Al-Ahmar, 2005) Al-Darb al-Ahmar as an UPA it was suffering of several defects:

- Lack of the public spaces, and other social, cultural, recreation facilities.
- Lack of the adequate sanitation and rubbish collection services due to their adjacent location to the old city dumpster.
- Lack of health and education facilities.
- And of course like any other UPA, the common urban features such as high density of buildings and population, and limited access to employment opportunities and income, see figure (15) shows the area urban characteristics before the project.



Fig. (14): The urban characteristics of the area before the project, dense urban fabric and lack of public spaces.
Source: Al-Azhar Park, Cairo and the Revitalization of Darb Al-Ahmar, 2005

The aims of the project were not only to turn a dumb into an innovative park, but also to improve the urban life in the adjacent UPA through achieving some targets:

- The development of the park on the same site of the rubbish dump, see figure (15) the park master plan.
- Several quality of life improvement initiatives requiring: area rehabilitation, support the health, education, sanitation, and a system for rubbish collecting.
- Historic buildings rehabilitation, back to 13th and 14th century.
- Archeology involving a 12th-century city's wall (Al-Azhar Park, Cairo and the Revitalization of Darb Al-Ahmar, 2005).

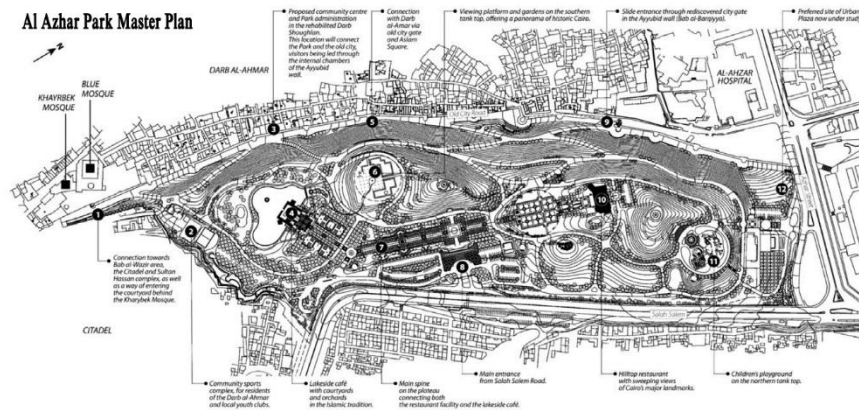


Fig. (15): The project master plan
Source: bureau d'études paysage, Sites International, 2000

This project is an example of using a strategy of integral multi approaches, include diverse approaches that aim to upgrade an UPA through the establishing of an innovative public spaces, the strategy based on using common upgrading and urban design approaches such as the landscape architecture approach, the using of rehabilitation, community participatory, improving the physical condition such as the improving of the existing infrastructure, and the social approach by offering a parallel social program that include a training program for some traditional hand crafts.

The rehabilitation program affected the area on two levels: Firstly the physical aspect, accordingly endangered historical monuments were rehabilitated and restored, see figure (16), Secondly the non-physical aspect, a more sustainable project affecting the dwellers was also introduced to induce socio-economic growth, through small family businesses training program of the traditional handicrafts, including carpentry, tile making, and other small crafts, continued to provide a portion of the local population with a living. Those resources were utilized and amplified by the program (Aslan, 2006).



Fig. (16): Historic building rehabilitation of Al-Darb al-Ahmar
Source: Al-Azhar Park, Cairo and the Revitalization of Darb Al-Ahmar, 2005

4.2.2. Assessment of the case

Well designed public spaces can efficiently enhance the quality of urban life in UPA, Al-Darb al-Ahmar area as an historical UPA area was in initial need to such a public spaces that balance the dense urban fabric, also the other benefits of the rehabilitation program and the restoring of some Islamic monuments.

The dwellers became proud of their area. However, in this case the success was not fully achieved, the park is fenced and connected directly with the urban context, meanwhile the park has many other roles, environmentally, socially and economically, see figure (17).



Fig. (16): The area (before and after) the establishment of the park
Source: Google search, edited by Author

The project represents a practical urban lesson of the using of multi approaches under an integral strategy to achieve various targets that support each other and in harmony way. The integral strategy was based on common upgrading approaches such as rehabilitation of some historic buildings, improving the infrastructure, and the landscape architecture in designing the park. Beside the socio-economic approach through the small family businesses. However, there was a significant defect, which is the need to make the park more connected with the urban context and to be freely accessible to the dwellers, the park looks like an urban island that is isolated from its urban context, since it is a gated park (as a result of lack of the awareness among the area dwellers to conserve the park).

4.3. A brief comparative study of the cases

The two selected cases were in line with the using of strategy of integrated multi approaches, however there were some differences between the cases, see table (1)

Table 1. A Comparison study of the Cases

Cases	Paraisopolis, UPA upgrading case (Center of social work for music), Sao Paolo, Brazil	Al-Darb al-Ahmar case (Al-Azhar Park), Cairo, Egypt
Location and site	Sao Paolo, a main city in Brazil, Paraisópolis located in a central site of the city, however it is separated from the formal city, due to the hard topography of its site.	Cairo the capital city of Egypt, Al-Darb al-Ahmar is a part of the Islamic historical heart, located in its edge and adjacent to the old cemetery of the city.
UPA type	Informal UPA of permanent buildings	Formal UPA in a historical urban fabric
Strategy of enhancing quality of urban life	The scheme followed a strategy of integral multi approaches that based on public spaces as arena for change. The upgrading project aims basically to enhance the quality of urban life.	The strategy depends mainly on the potential opportunities of the public spaces, as the establishing of a unique park was the main target of the project, however, there were multi approaches under integration strategy that aims to enhance the quality of urban life as one of the project's aims.

Used approaches	The scheme followed an integral strategy through, the principles of urban design and landscape architecture as design approach, the social approach through the community participatory and the using of GI as a supplementary upgrading approach to deal with the floods risk, and urban agriculture.	The strategy of the case based on using common upgrading and urban design approaches such as the landscape architecture approach, the rehabilitation, community participatory, improving the physical condition such as the improving of the existing infrastructure, and the social approach.
Assessments	The strategy managed to enhance the quality of urban life, but the UPA still need more initial services such as education and health care facilities.	The project managed to enhance the quality of urban life, however the park is not fully interacting with the urban context.

Source: Author

5. Conclusion, Lessons from Practice

The cumulative urban lessons that extracted from the study cases showed the power of well-designed public spaces as central urban nodes that can enhance the quality of urban life in UPA of MCED, cases clarified how public spaces derived their value through its multiple roles in urban life, particularly in the case of UPA, also public spaces as public property reduce the barriers that usually face the decision maker due to land tenure problems. Thus this is why the focus was on public spaces, as it represents the arena that can impact the whole aspects of urban life in UPA in positive way.

As well cases clarified the benefits of following a strategy of multi-approaches that is not rely on a sole approach, even if there was a main approach there is a need to use supplementary approaches that can deal with the multi-dimensional aspects of UPA. As well the study highlighted the importance of determining the type of UPA, as each type has its own urban architectural characteristics, this is why each type need its suitable approaches through an integrated strategy. The assessment of the cases represents lessons from practice that could be applicable in similar cases:

- The using of public spaces as arena for change towards better quality of urban life in UPA, is effective through an integrated strategy, however the success of this methodology should be through an strategy of integral multi approaches, as well in cases of a specific type of UPA, which is that type of informal areas consist mainly of permanent buildings (usually built of a reinforced concrete skeleton and bricks), this type exist in the main cities of emerging countries and in some cases of developing countries, such as Cairo, Mexico city, and Rio de Janeiro.
- The cases showed that public spaces are vital part of urban life, where the daily socio-economic activities take place, it can boost the social, economic, and environmental circumstance of an UPA, also there is a need to rethink the understanding of public space as just an open landscape space in our cities, the cases showed that public spaces through landscape architecture can delivered multi benefits to its urban community.
- Using of an integrated strategy in dealing with UPA means to use diverse approaches but in integral way, in other words the key to a successful strategy is “integration”, meaning that all approaches, policies, and projects are considered in relation to one another, in addition to the importance to use the suitable approaches to deal with the significant defects regarding the characteristics of each case.
- Finally, the using of new approaches in integration with the common approaches of upgrading UPA, as the main target is to deliver innovative creative public spaces that can enhance the quality of urban life in UPA, for example the using of community participatory as a common approach and GI as a new approach in the case of Paraisópolis. Also the cases showed that a sole approach cannot stand alone, since UPA always have multidimensional defects that need multi-disciplinary approaches.

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Appendices

1. Green Infrastructure (GI): GI in this study from an urban design perspective refers to an urban design approach that can be applied for both redevelopment of existing urban areas and to develop new urban areas, by using a network of urban spaces which include natural and human made elements that supports the ecosystem and socio-economic life in urbanized areas. Actually the study argument is also in line with the current global trend to look for new approaches and strategies for the enhancement of the quality of urban life in our human settlements, the available data extracted from research and practice based on the employment of GI as urban development and upgrading approach showed that this approach usually not being used alone or as a main approach.

This previous definition of GI does not conflict with other common definitions, but on the contrary it complete those definitions that are in line with the University of Melbourne Green Infrastructure Research Group definition: *GI is the network of designed and natural vegetation found in our cities and towns. It includes public parks, recreation areas, remnant vegetation, residential gardens and street trees as well as innovative and emerging new urban greening technologies such as green roofs and green walls, University of Melbourne Green Infrastructure Research Group (Bosomworth et al., 2013)*