

**THE SOCIAL URBAN SPACES SYSTEM
AS A TOOL TO SUSTAIN MARKETS IN LOW-INCOME COMMUNITIES
Case Study of El-Khamis Market in Cairo, Egypt**

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Abstract

In Cairo communities, it's noted that there's no concern for the Social Urban Spaces in the low-income communities markets. They do not even exist at all in the design program of the market in spite of their importance in achieving social sustainability. The problem of the research can be summarized in the design of the low-income community markets to achieve the largest quantity of the sale and purchase units, without recognizing the market value for the community as Social Urban Spaces that are important for the achievement of social sustainability. The research aims at understanding and analyzing the low-income communities markets in terms of types, components, areas and activities, and then deducting the system of Social Urban Spaces through relating them to the market areas as a tool for achieving the social sustainability in the low-income communities markets.

Keywords

Social Sustainability- Social Urban Spaces - Market in Low-Income Communities - Farmer's Market - El-Khamis Market in Cairo.

1 INTRODUCTION

1.1. Low-income Community Markets (Concepts, objectives and importance)

Markets in low-income communities are considered a major component of the community life that combines together all the community's real life needs, and an effective means for the local communities for addressing and promoting the social and economic development [1]. They also represent a form of Social Urban Open Spaces. They form an important part of the common social places for the public. They even go beyond that to be a space for hiking, entertainment and achievement of the common social and cultural life in such communities [2]. The market in low-income communities is a place for selling and purchasing goods that enable citizens to fulfill their needs at reasonable prices. A market may be specialized in a specific good that distinguishes it from other markets [3]. The market in Egypt is held on a certain day of the week (seasonal) such as Friday, Tuesday or Thursday Market, or throughout the week (permanent), and it takes the form of a large area, either open or roofed [4].

It is also a place that is owned by the municipality, where fresh food products in open stalls are sold, it also includes some other products and crafts. Markets are also amongst the best loved places in the world [5]. Allison Brown's definition is of particular usefulness: "farmer's markets are generally periodic markets in fixed locations where farm products are sold by farmers themselves"[6].

Other products and food products are also sold in these markets which are considered to be more than just products sales outlets as they function as restaurants and groceries. Most of the markets develop with time such as the number of vendors, and products decrease and increase in line with seasons. Accordingly, a market is considered to be a place for economic exchange and social interaction where people interact variably and formulate concepts for themselves as one group [7].

The following are some of the objectives of the low-income communities markets which reflect the issues of social justice as well as environmental sustainability [1]:

- Assistance in fulfilling the needs for the provision of food products and the food security to the community.
- Providing a source of local and culturally convenient products.
- Bringing farmers and the urban areas' consumers together in order to provide opportunities of social-economic development for both groups.
- Creating places for social and cultural gatherings in districts, and using markets as a motive for the development of local communities and other promotion strategies.

Low- income communities markets are distinguished from other types of retailers' activities by the following characteristics: [5]

- They have public objectives: such as providing retail opportunities for small companies, maintaining farmlands and utilizing places as active public places.
- The market's location provides public spaces that are needed by the community and that attract large groups of people, and is regarded as the heart and soul of the community where social activities take place.
- Market's ownership and elements are local, independent and run by their owners, and hence adds the local flavor and unique nature to the market experience.

There are three benefits of the low-income communities markets [8]:

- a. They create a vibrant social space, where people tend to interact with each other and participate. Such interaction increases people's awareness of the social, economic and environmental issues of the community.
- b. Motivating local economic opportunities for those who have difficulties in obtaining resources such as capital of the traditional institutions, such as women, new immigrants and minorities. They also protect small farmers through providing direct marketing opportunities for their products, in addition to the economic benefit that's economically achieved for the consumers as the competition among vendors keeps the prices low. They also create many job opportunities in the local community, in addition to promoting trade in the surrounding community.
- c. They create a sense of community that is instilled with the spirit of the place.

1.2. System of Commercial Activity in Low-income Communities Markets [9]

- **Vendor:** the farmers and local vendors trying to make their livings from their lands and from trading with ordinary people of low-income customers.
- **Consumer:** consumers may be divided into two categories. The first category, (which are the vast majority), are low-income residents of the area, who are nearby the market, with fixed-income and very little portion in their budgets to pay for more food. The second category: are the affluent coming from far, seeking for lower prices to compete with the supermarket [9].
- **Market:** the successful market in the low-income communities tend to be a long-term facility, and to be located very closely to where people live so that they are able to go to the market. Also, the market spaces attract people to group together in one place that is consistent with their culture. Maintaining the market then means maintaining the environment [10]:
- **Goods:** vegetables, fruit, and basically food products, in addition to all the basic needs necessary for home and family life, including new and used goods. They are a mix that reflects the cultural diversity of the community, and they are all characterized by low prices and the appropriateness for the capacities of the community.

1.3. Types of low-income communities markets

A- Types of markets in terms of nature [11]

- Covered Markets: these are covered by some types of structure.

- Market Districts: these are an area of the town or city which is allocated for certain types of markets.
- Market Halls: structures built for markets, or buildings that have been converted to house market.
- Market Associations: associations that link the State with farmer's markets in order to address the issues of health, food, food security, community development and the establishment of companies to expand the number of farmer's markets within the State or region.
- Market Network: networks that help markets to continue in low-income communities.
- Mobile Markets: are mobile vehicles that provide residents with fresh foods.
- Open air Markets: an open space in any area or street where vendors exist.
- Producer-only Market: the product is related to work in farms where it is farmed and sold in its place of sale.
- Communities markets: refer to one type of markets that operate in open spaces for the public and serve local economy.
- Wholesale Market: the market where products are bought from the farmers or producers and then sold in large quantities.

B- Types of markets in terms of structure [4]

- Linear markets: they take the form of a street, some of which allows for vehicles traffic such as Al Azhar Street, and others are allocated for pedestrian only movement only such as Khan El Khalili, Figure (1).
- Manifold Markets: linear markets that are branched from a specific commercial point or an urban space that is characterized by a specific activity (such as the Mosque's space), Figure (2).
- Consolidated markets: a gathering around an urban space where sale and purchase take place within the market, which allows for the pedestrian movement within the market, Figure (3).

Figure (1) Linear Market.

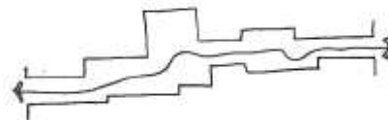


Figure (2) Manifold Markets

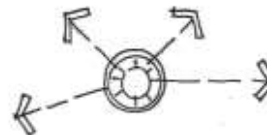
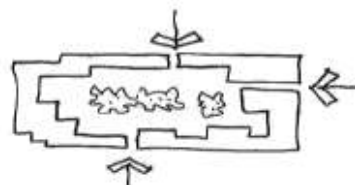


Fig (3) Consolidated markets



Low-income community markets in Egypt are considered to be low-income communities markets that may be covered with some light structures (covered markets) and they can also be in open air (open air markets) that combine farmer's market, with their products and crafts, with all goods that fulfill the real life needs of the residents, in all forms and types.

1.4. Importance of Social Sustainability for Achieving Markets Sustainability in Low-income Communities

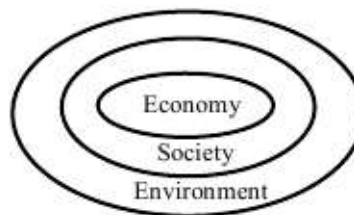
The importance of social sustainability emerges as an effective parameter in the sustainability of local communities, in particular as they play an important role in the establishment of social cohesion and the sense of community, through a group of common values that are deeply rooted in the local communities. The following are amongst the requirements that "social sustainability" is concerned to provide [12]:

- a. Fulfillment of the basic needs of citizens.
- b. Fair distribution of opportunities in community.
- c. The existence of a cheerful atmosphere, where citizens live in harmony and mutual support with each other.
- d. Providing opportunities for individuals through encouraging them to participate in civil operations (official and unofficial).
- e. Promoting cultural and social diversity.

It is noticed that all the previous requirements are necessary to be fulfilled in the community of low-income communities markets where economic activities cannot be separated from social activities in any way. The quality of urban environment represents an important standard for the performance of these two activities as being the inclusive container that combines them together. This concept is affirmed by The Concentric Circles model, fig (4), where the economic dimension is located within the society and the society in turn, exists within the environment [13].

Thus, it is clear that the economic interactions can be modified and changed through changes in social systems such as values, rules, customs, cultures and morals. Finally, all such interactions take place within the environment, as environmental impacts take place because of the economic cost in the light of the community's values and priorities. Figure (4) shows a model that indicates the zenith of our dependence on the natural environment as social and economic beings [14].

Figure (4) The Concentric Circles Model

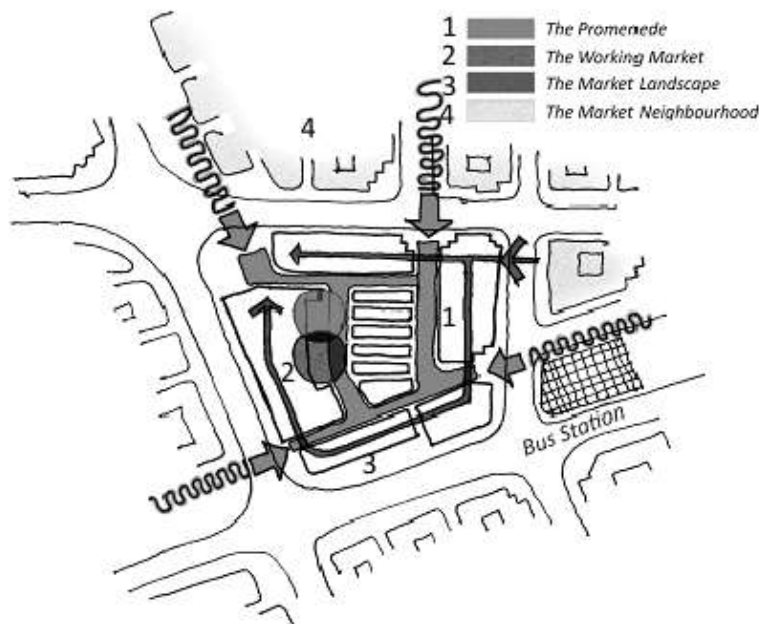


Source: L. Barron, E. Gauntlets, 2002

1.5. The physical Realms of the Low-income Communities Market.

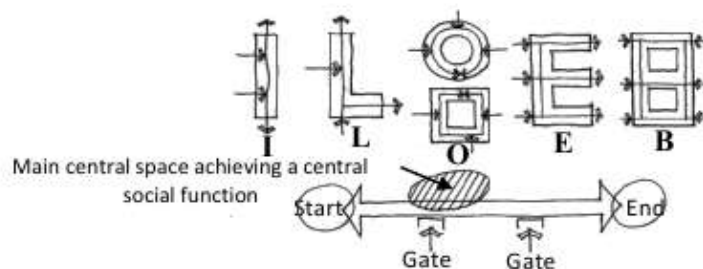
Low-income communities markets consist of four main areas as follows, Figure (5):

- 1- The Promenade.
- 2- The working Market.
- 3- The Market Landscape.
- 4- The Market Neighborhood.

Figure (5). The Physical Realms of the Low-income Market Place

1.5.1. The Promenade

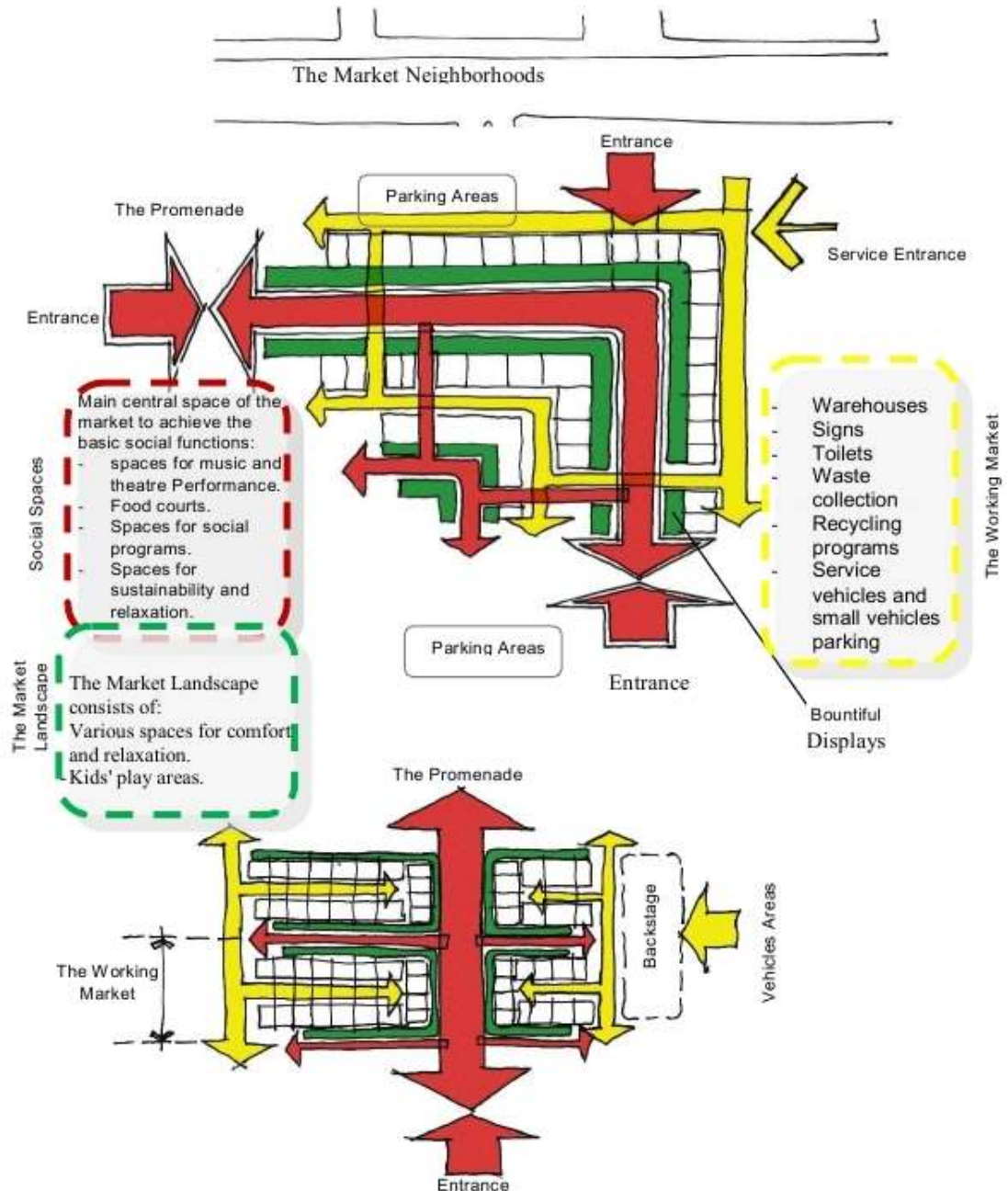
The central axis of the main market movement and the open main space of the market it contains as well as the sequential and transformational spaces for achieving entry and exit and the flow of pedestrians to the market center and walking to view the displayed items and compare prices. The promenade's width ranges from 3.60 to 12 meters and it is surrounded on both sides with various goods. Regarding its structure, it is a linear path in order to unite objectives and orientation and it is preferred not to be too wide so as to facilitate the comparison between goods and for it to still retain its intimate trait [15]. There are some design forms that achieve the longitudinal characteristic of a path such as (I, L, O, E, B). Some marketing managers prefer rotational movement patterns where visitors repeatedly wander around the market, Figure (6). Provision of the main central space for the market shall be taken into consideration for achieving a central social function. Frequent landscape features such as trees, external furniture, lighting units and sequential spaces that boost the dynamic and visual sequencing, in addition to the various tiling that contributes to the sequence of events.

Figure (6) Design forms and the Promenade's components

1.5.2. The Working Market

They include a variety of vending spaces that are often placed on a modular grid (3*3 meters) for plot of lands that are uniformly located around the Promenade. They are linked to backstage areas for loading and unloading and the access of the vehicles and the service entrance. From the front, they are linked to the display and marketing area of the products and goods (Bountiful display), Figure (7).

Figure (7) Distribution systems for the Working Market



The following shall be provided:

- Car parking for the consumers.
- Warehouses for the seats, tables and others – signs allocated for the market and information about the market.
- Functional elements necessary for the working market, such as public toilets, information stalls, waste collection, recycling program, and small vehicles and bicycles' parking.
- Public and entertainment services such as performance spaces for music and theatre, food courts and other social spaces. They are usually at the end of the Promenade, away from the spaces for vegetable and fruit sale.

1.5. 3. Market Landscape

The open space nearby the working units area and the Promenade. It provides opportunities for leisure and relaxation, which are usually not associated with sale and purchase. The successful market is the one which provides a variety of comfortable spaces for comfort and relaxation as well as actively participating in public life, where spaces are subject to all the design principles of urban spaces concerning the supply of the various forms of landscape features, seats and the children's play areas [15].

1.5.4. Market Neighborhood

It is the urban surroundings that represent the urban context of the market. The successful market is the one which interacts with all the components of the urban context in an urban, economic, social and cultural manner, in the following aspects: planning, design, culture of the various integrating community groups, pedestrian walkways, regional transportation systems, public transit overflow parking, available public services, adjacent civil institutions and open spaces and landscapes.

2 CASE STUDY METHOD

This part of the study tackles the specification of the spaces system in the low-income community markets as urban-social spaces. The applied study sought to achieve the following objectives:

- a. Shedding the light on the social activities and interactions as well as the problems associated with the spaces in the low-income community markets resulting from the basic and social needs of the market users with their different patterns including vendors, consumers and the residents of the surrounding area.
- b. Deducting the system of Social Urban Spaces in low-income community market which are associated with the economic activities and social interactions - through connecting them to the main realms of the market which were discussed in the theoretical background (The Promenade, the working Market, the Market Landscape and the Market Neighborhood) in order to clarify the extent of the achievement of social sustainability in these markets. Then, setting a framework and a local model for the social-urban spaces system in markets so as to be a tool for activating the social sustainability in the low-income communities markets.

2.1. Applied Study's Methodology and Phases

In its methodology, the applied study relied on a set of phases that achieve the previous objectives. Therefore El- Khamis Market in El Matariyyah in Cairo/Egypt was chosen as one of the low-income community markets through which the basic and social needs of the market goers can be studied, in addition to focus on social interactions and relationships that take place within the market's spaces, in order to study the relation between the economic and social activities, and the urban spaces promoting and strengthening the market work within the low-income community.

Various methods were used for data collection and analysis as mixed-method research was adopted, using more than one method for data collection and interpretation. In-depth descriptive method was used in urban studies to define the spatial features and the urban context of the market. The qualitative and quantitative method was used in social studies through questionnaires and improvised qualitative interviews with the market users to learn about social activities and interactions as well as the behavioral observation within the market. Finally, the deductive method was used for analyzing the market space and then deducting the social urban spaces system in the market.

2.2. Land and Origin

El- Khamis market is located in El Matariyyah district – Cairo, with an area of 6.7 km². It is of a high population density (approximately 90580 inhabitants/ km²), and it is an old district with important sites such as "Virgin Mary's Tree", the obelisk of King Senusret I " Matariyyah Obelisk" and El Matariyyah Teaching Hospital. "El- Khamis Market" for vegetables, fish and poultry in El Horreya Street, is considered to be one of the oldest and largest markets in Cairo, Figure .(8). El- Khamis Market was established to serve a large segment of migrants who came from the countryside to live in the city, and who settled in El Matariyyah district as a district for low-income people, beside the luxurious Heliopolis district in order to get job and housing opportunities that are appropriate for their economic condition.

Figure (8) El Khamis Market, Matariyyah district



2.3. Reasons for Site Selection

El- Khamis Market is considered one of the oldest low-income communities markets in Cairo. The market combines the fixed Farmer Market as well the weekly market for all other needs. The market's wide expansion and breadth in the streets surrounding the fixed original part of the market, causes several problems for the community around, in addition to the spaces' problems of the market itself. The market attracts a large purchasing power of the low-income class due to the low prices and the large variation in goods, which covers almost all needs of the people.

2.4. Sample Selection

The study was conducted in the time period (2011/2012). Consideration has been given to the expansion of samples so as to cover the vendors and consumers, as well as the residents of the market area, in order to reflect a wide and inclusive scope of the needs of the market users. Sample selections considered the variation of users' patterns (consumers – residents), age groups, gender (male - female), and religion (Muslim – Christian). It also considered the variation of vendors' patterns in terms of their association with the market (full-time vendors – part-time vendors). The samples also varied to include vendors of the most products in the market.

2.5. Tools Used for Data Collection

These included multiple visits, monitoring and observation in different times of the market; meetings and dialogue with the vendors and consumers; photographing the market and surrounding streets; and a questionnaire that was conducted with the vendors, the consumers and the residents of the surrounding area.

3. FIELD STUDY FINDINGS

Findings are subdivided into three main parts:

First: Urban Studies: The Urban Context

Monitoring and analyzing the urban context of El- Khamis Market in order to define the spatial features of the market through the study of the historical development, the urban fabric of the market area as well as the land uses and the buildings heights and conditions, in addition to the movement patterns within the study area.

Second: Design Studies: Activities and Urban Spaces

Study and analysis of the market spaces and the distribution of the internal and external activities existing around the market, as well as the extraction of the problems.

Third: Social Studies

Definition of the necessary and social needs of the market users considering it a Mixed-Life Place, through the qualitative and quantitative study via questionnaire analysis, in order to identify the reason behind the consumers' demand on the market and its benefits to the community, and deducting the required urban-social spaces.

3.1. Urban Context of El-Khamis Market

3.1.1. Historical Development

El Matariyyah originated as an agricultural area that was divided into farmlands through which canals and drains passed, which, after being backfilled, turned into main and side streets. The agricultural land lots gardening boxes turned into residential blocks with their current density through the illegal building on agricultural lands.

The historical development (Figure 9) shows that El Matariyyah Market has not become central and important until after the completion of the final urban structure as the only urban space that remained was the market space and it has become necessary to serve that large community of low-income, it has then become the necessary service and the park at the same time.

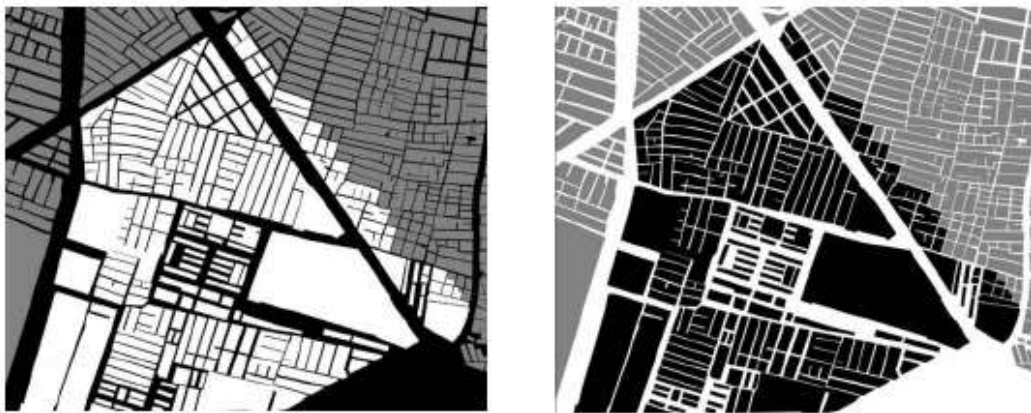
Figure (9) Historical Development of the Urban Context



3.1.2. Urban Fabric

In terms of the street network, the fabric is uniform, enclosing land blocks with elongation. It is the result of the illegal building on the agricultural lands and urban margins. Few features of manifold fabric (the irregular) also appear. Few numbers of main axes are apparent. They are insufficient for the high density which results in these axes getting crowded with people and vehicles almost continuously. The compact urban fabric reflects the high building and population density. It gives indicators for a community that lives in an urban environment with low service and entertainment. Urban spaces are few. One of these is "El Matariyyah Market" which serves the whole of this large segment of residents.

Figure (10) Urban Fabric



3.1.3. Land Uses

Most of the uses are residential-commercial and residential only, and that most of the ground floor area is commercially used as in the form of stores, which makes a large section of the scope of the study an extension of the market. Heterogeneity is noticed in the distribution and the shortage in the educational, health and social public services, green areas, open entertainment and social spaces. There are also no areas that are clearly allocated as garages and car parking.

3.1.4. Buildings Heights and Conditions

The study shows that around 87.86% of the heights ranges from (3-5) floors, and that the buildings conditions range from good to medium in terms of durability and the construction materials, not in terms of the quality of finishing or the character as most of the buildings are of reinforced concrete and they are not finished from the outside and overlook streets with narrow widths that are often up to 3 meters, which indicates that the residents of the area in general are of low-income.

3.1.5. Motor movement and Pedestrian Walkways

There is a clear intermix of the motor movement and the pedestrian movement as the vehicles streets are used as pedestrian walkways as well and there are some

very narrow streets to which the vehicles cannot enter and which were turned into pedestrian-only commercial streets for garments and fabrics. There are no spaces for entertainment parks or yards at all.

People achieve entertainment as an activity through intensive and interrelated interaction during their practice of the necessary life routine and during work in the streets, the markets, the cafés, before the street vendors and even on the sidewalks as places for standing, talking, meeting and social interaction.

3.2. Activities and Urban Spaces

3.2.1 Distribution of areas and goods in the market

The market originated as a market of vegetables, fruit, meat and fish, and this is considered the fixed market and then extended to the surrounding streets for being the most dense and attractive for people coming from and to El-Matariyyah Square. It's noted that vegetables and fruit are being sold in the streets nearby El Matariyyah Square where there is plenty of people passing by the Square and around the Grand Mosque "Al Anwar Al Muhammadiyah".

3.2.2. Areas of Extensions

The areas of extension and breadth are associated with fences of public facilities next to Alakad Primary School, El-Matariyyah Teaching Hospital and around the Grand Mosque where the place is wide so as no clashes with residents or shopkeepers down residential buildings would take place.

3.2.3. Fixed and Changing Areas

The main fixed area is the market triangle itself that is divided from inside and designed to be a market where the young vendors randomly occupied fixed places in front of the market and they do never leave it fearing that other vendors would take it out of them. As for other areas around public facilities, they are subject to removal by the municipality authority from time to time.

3.3.4. Covered and Open Air Areas

Only the main triangle area of the market is covered with metal sheets based on iron columns within large distances allowing for easily walking in the market and this is self-help established under the management of a number of senior vendors in the market.

3.3.4. Problems

Based on the above field study, we can conclude that there are many problems in the Markets in low-income communities represented in the case study of El-Matariyyah Market.

Fig. (11) Activities and Urban Spaces

Retailers outside the market



Arcades & coverage



Market's sub-entrance



Intermix of activities



Fruit vendors



Poultry vendors



Loading & unloading



Traffic jam across the market



Vendors in front of buildings



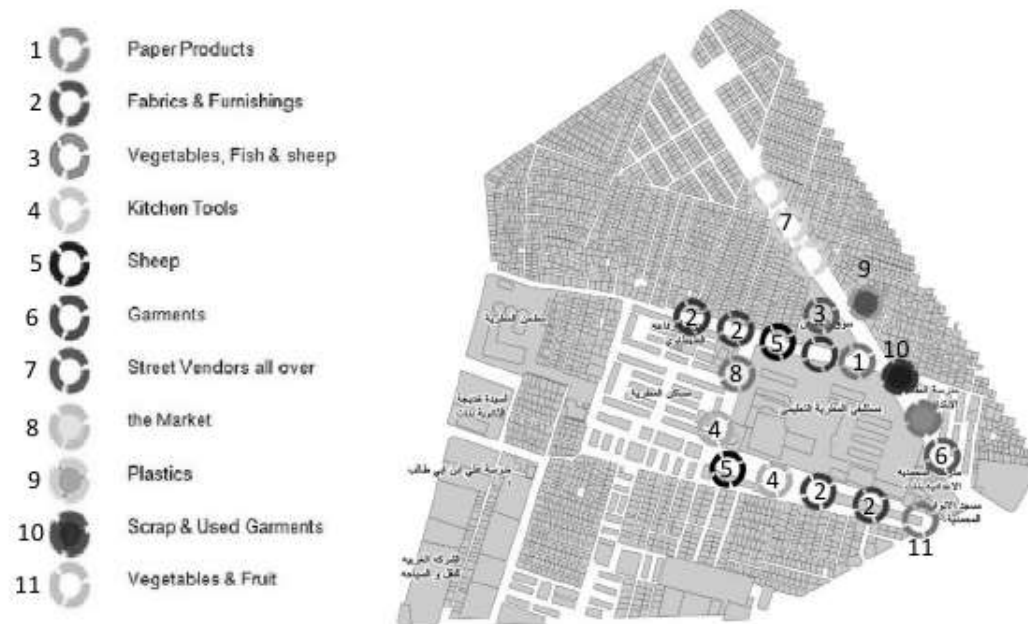
Cloths vendors overcrowding in front of the hospital's gate



Meat vendors



Clothing market

Fig. (13) Market and the Surrounding Area**Figure (12) Commercial Activities****a. Problems of the Market context :**

- Overlapping of so many different uses
- Deterioration of urban and architectural character of the context.
- Increasing rates of population and building density
- Motor traffic interference with pedestrians.
- Lack of official parking lots
- Many traffic jams due to overcrowding, the market and indiscriminate vendors

b. Problems of the Market design:

- The market can't accommodate all such activities which can lead to the spread of street vendors and random extensions densely in the market's surrounding area.
- Lack of adequate emergency services for the market.
- Random movement of pedestrians inside the market due to lack of apparent main and sub-walkways.

- Lack of apparent main and sub-entrances whether from inside or outside the market.
- Lack of garbage collection system, which led to the spread of vendors' wastes, garbage and environmental pollutants.
- Audio, visual and environmental pollution which directly affects the market goers and patients in the nearby El-Matariyyah Teaching Hospital.

3.3.Social Studies

The questionnaires were handed out to a number of (60) persons included all types of vendors, consumers and residents of the area. The questionnaire is of three parts, the 1st part is considered a general background about the sample-group surveyed which help in collecting demographic information on the sample, while the 2nd part is an open-ended questions designed to be general in order to let individuals express their problems and the reason behind coming to El Khamis Market and market's benefits to them and society. The third and final part is close-ended questions, and they're direct for guidance and avoiding ambiguity in order to understand the patterns of vendors and know the needs of consumers. Data and information obtained from the questionnaires were analysed using frequencies and interpretive techniques.

3.3.1. Demographic analysis

A. Gender

The distribution of the questionnaire to the sample was divided among males and females regarding vendors, consumers and residents of the market area. Respondents for both vendors and residents of the area were mostly males, whereas for consumers, respondents were almost equal.

B. Age groups

The dominant age group in the sample is (35 - 49 years), followed by (18 -34 years) which indicates the lack of urban social spaces that fulfil the needs of social groups under 18 years, as well as above 50 years.

3.3.2. Analysis of Open-ended and Closed-ended Questions

The questions of the questionnaire were made as to identify three main points and were as follows:

A. Social Integration

Answers by the sample-group from among consumers were analysed based on the following question, *"Why do you come to El-Khamis market?"* as an open-ended question. *"Products"* is considered to be the main factor for which (60%) of consumers are coming, followed by *"price"* " at (20%), while *"place"* represented (16%) of the sample answers, and finally came *"People"* at (4%).

This reflects that the vast majority of consumers come to the market to get their basic needs of good and various products at low-prices that suit their economic level, while the answers of "place" and "people" reflect that there is a group of people who come to the place either (because it's near their homes and reachable, or for the general atmosphere of the place and its association with the community representing the social class of low-income people). Moreover, the group of "people" come either to meet friends, or due to the diversity of people because of feeling belonging. However, the low ratios of 16% and 4% respectively reflect that the place lacks the social attracting factor due to lack of open spaces of interacting and social activities among people so as their social needs can be fulfilled.

Answers by consumers and residents of the market's area to the question, *"What are the benefits of El Khamis Market to you and the society?"* - as an open-ended question were analysed and results were as follows. The presence of multiple and various "products" was recorded as the one with highest percentage at (32%), and then came "Price" in the second place at (28%), and "place" at a close percentage (22%), while "people" represents (12%) and "local economy" comes the last at (4%). Comparing the above analysis with the analysis of the answers of residents to the close-ended question in regard to *"their tendency to purchase from El-Khamis market"*, and *"whether they accept moving it to another place"*, we find that (95%) of the residents buy their basic needs from El-khamis market, while (80%) of consumers and residents of the area do not want to move the market away from its place. This explains the presence of "the benefit of El-khamis market's place to people due to its closeness to residents' homes, being reachable and considering it a landmark of the area surrounding.

This indicates that social integration can be achieved in El-Khamis market by means of providing "additional (social) spaces" so as the market would be social interaction attracting beside its role as a place to sell products. Previous findings stress the function of the market as a social place where people spend time with each other during purchase and sale.

B. Upward Mobility

How would the market, being a social open space, lead to an economic mobility within low-income communities? Analysing vendors' answers to the closed-ended question; *"What is the duration of your business within El- Khamis market?"* for letting them determine their own patterns whether a casual vendor or serious vendor, we find that (55%) of the sample-group are working full-time, while (45%) of the vendors are working part-time either as a result of involvement in other jobs, or other seasonal markets (Tuesday, Wednesday, or Thursday). Mobile vendors who are working part-time inside the market, sell within the market's open space and sometimes outside it (the same like street vendors). Usually, they don't expect gaining big profit but they achieve other more social goals (for their engagement with people) such as consumers going to them in particular on the days they're working. It's confirmed by some of their answers as; *"engagement with people*

coming to buy," or "I've many customers who know me and come to me ", and those vendors tend to sell in the open- air market where operating costs are low. Unlikely, the full-time vendors mainly depend on the market for making their living and thus, to get a full-time job is closely linked to the market as a "place". Consequently, those people mainly work in well-established markets where the expected profits are greater.

As for analysing the vendors' answer on *"what is the best thing of the market in your opinion?"*, answers were collected and classified into three categories. The most repeated answer among vendors was *"people"* with the highest percentage at 26% according to such group of vendors including answers like *"meeting customers who know me"*, followed by *"economics"* in the second place at 22%, reflecting the role of the market in the economic mobility of the vendors, especially those who are working on full-time basis. *"Place"* was the third at 16% and the answers included: *"market's closeness to the vendor's home"*, *"trading inside the market"* and *"special customers of El-khamis market"*.

It is clear that there is a relation between the market's place as a social space and the economic mobility inside the market. There is a variety of spaces inside the market whether open spaces that encourage mobile vendors or closed ones that encourage permanent vendors, and this affects the relation between vendors and market as a place of interaction among people, and affects the contribution to the monthly income of the vendors.

C. Sustainability of the market

Through analysing the answers of the open-ended question *"what are the problems facing you in the market?"*, the answers of the sample-group - whether vendors, consumers or residents of the area – were different and repeated. Table (1) show problems and required social urban spaces for solving them.

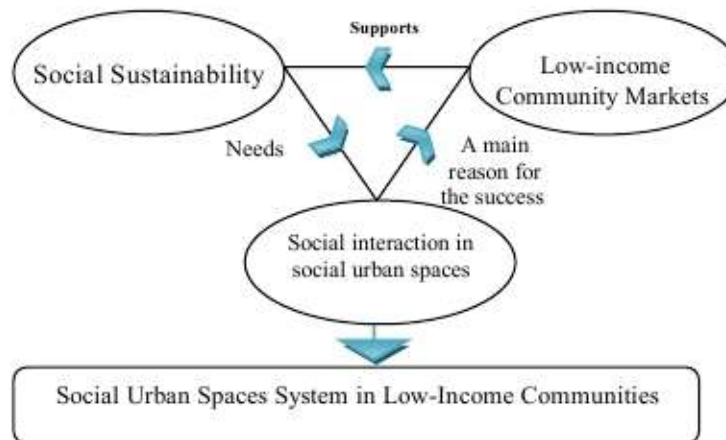
This analysis make it clear that there are relationships between the availability of social urban spaces that meet the needs of market's users, in the current time and in the future, and the sustainability of market's activities and success especially in low-income communities.

4. REQUIRED SOCIAL URBAN SPACES IN LOW-INCOME COMMUNITIES:

There is a correlation between the social and urban sustainability of the market and the presence of social urban spaces, which enable the accommodation of the activities whether necessary, optional or social. The markets of low-income communities are supporting and contributing to the social sustainability that needs a system of various public social urban spaces, which in turn represent a main reason for success of low-income community markets. Figure (13)

Table (1) Problems and Required Social Urban Spaces

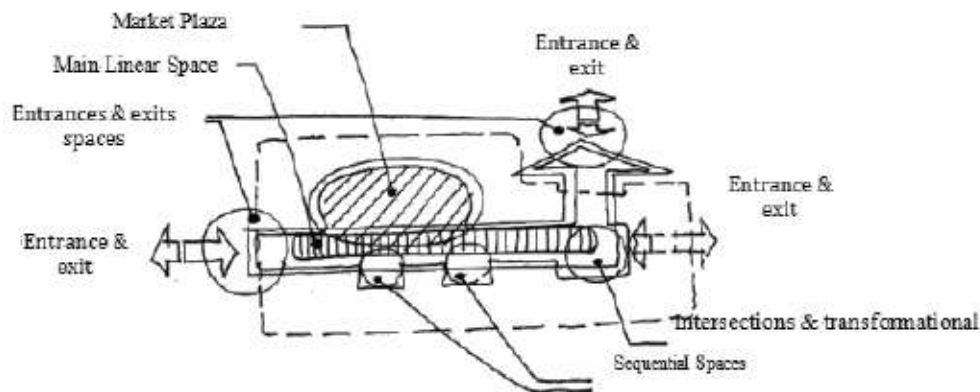
Vendors' problems	Required social urban spaces
Lack of fixed places for each vendor in the market.	- Vendor's space - Open spaces for non-permanent street vendors - Closed spaces for permanent vendors
Lack of regular services for waste collection	- Unloading spaces for waste's collection and recycling
Vehicles and pedestrians roads being overcrowded and closed due to the random spread of some street vendors	- Spaces for vendors' seating
Transport, loading and unloading are difficult due to the lack of spaces.	- Loading & Unloading spaces
Lack of warehouses especially refrigerators for vegetables, meat and fish	- Spaces for products displaying & storage
Lack of daily needed services such as toilets, food sources, spaces for comfort, waiting and prayer areas	- Places for comfort and relaxation - Food court spaces
Inadequate police patrols resulting in robbery and clashes	- Spaces for entrance and exit
Consumers' problems	Required social urban spaces
Heavily overcrowded roads to the market and inside it as a result of the random spread of some vendors on roads	- Pedestrians walkways network + intersections & transformational spaces.
Lack of parking lots near the market.	- Parking lots
Lack of the basic services such as toilets, food sources, spaces for rest, sitting and reorganizing needs.	- Spaces for comfort and relaxation. - Kids play areas - Open spaces for social festivals and programs. - Food court spaces
Lack of security, the spread of robberies and clashes as well as the vendors' bad behaviors	- Provision of secured and specific entrances and exits to the market.
Spread of garbage, pollutants, etc.	- Pleasant gardens.
Vendors' places are not ordered in addition to the lack of a guiding map or guiding panels	- Clear spaces for display for consumers.
Lack of specific places for public transportation	- Public transportation and bus stops.
Surrounding residents problems	Required social urban spaces
- Spread of pollutants of all kinds especially on Thursdays	- Spaces for loading & unloading and waste collection
- Continuous overcrowding	- Pedestrians walkways network, waiting spaces, and public transportation and bus stops.
- Lack of parking lots especially in rush hours	- Waiting spaces
- Lack of security and spread of robberies and clashes	- Providing police checkpoints at the entrances and exits in the active spaces.

Figure (13) System of Social Urban Spaces

This part of the paper draws out the system of social urban spaces in low-income community markets through linking it to the areas mentioned above in part (1.5) above.

4.1. Promenade Spaces

The Promenade is considered the most important spaces of the market on which the market's space system and concept are based in general and when looking into its space content in more details, we can classify it as follows (see Figure 14).

Figure (14) Promenade Space

4.1.1. Main Linear Space

It's the main linear space of promenade around which people are looking at the displayed articles, where people get into interaction with each other so as to create an interacting-social atmosphere through greetings each other, chatting, discussions, problems and ideas in times they're buying and selling. There also may be a negative social interaction through which they just keep watching people and listening to their conversations. The less the walkway width is, the more social interacting atmosphere created.

4.1.2. Entry and Exit Spaces

More relatively wider spaces sometimes enhanced with gates and through which the market areas are initially identified and the walkway is used. Such spaces should be clear and specified whether from inside or outside the market so as not to disperse people's movement in the market.

4.1.3. Sequential Spaces

It's about the provision of provides some kind of variety through the promenade and it can be supported through providing simple outer coverings, tiling, lighting and plantation.

4.1.4. Market Plaza Space

It's a central space for achieving central social functions where gathering itself is considered as an idea of public awareness, comparison between the persons of the same economic and social conditions and sharing one social work, celebrations and festivals that add joy to the market's Spirit.

4.1.5. Intersections and Transformational Spaces

It's the spaces at the junctions, crossings and transformational roads where it's better to be wider so as to accommodate people's gathering, and to be enhanced with some services and providing entrances and exits to the market.

4.2. Working Markets Spaces

4.2.1. Vendor's Space:

It's the vendor's working and movement spaces for dealing with consumers, goods and through which direct social interaction is created with the consumers. It's important to provide easy visibility and accessibility, talking and chatting. Such space is associated to another backstage areas and the main factor here is the easiness of transportation of goods via vehicle access.

4.2.2. Bountiful Display Spaces

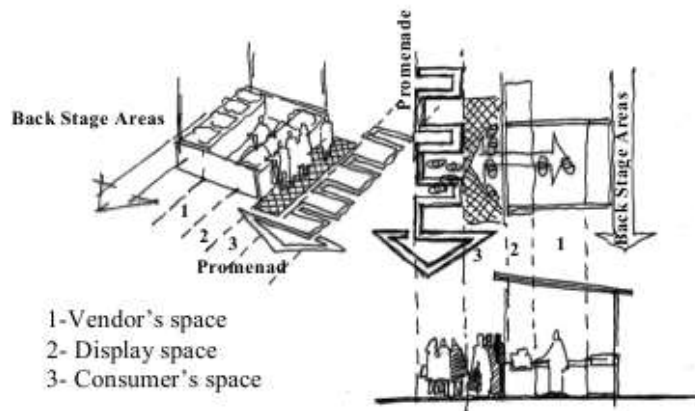
It's considered just as advertisements for the vendor and its width and height shouldn't increase so as not to affect the vendor-consumer social communication for such a social relation is considered an integrated part of the vendor's advertisement & marketing.

4.2.3. Consumer Spaces

It's the space where the consumers deal with the vendor and looks at the displayed articles as well as with consumers and neighbours with each other and with the

residents of the area and thus a variety of social relations are made enriching marketing activities, sale and purchase as well as the market's value in general. Such space may be semi-separated from the promenade or a part of it and this is implemented through some of architectural features and simple details such as various tiling or joints of the floor like flower pots, low barriers or of the ceiling such as panels and changing covers' heights as in Figure (15).

Fig (15) Associated Areas to the Market



4.3. Market Landscape Spaces

4.3.1. Comfort and Relaxation Areas

It can be provided as soon as opportunities are open in the market's spaces and it can also be equipped with a variety of seats or in the form of amphitheatres.

4.3.2. Kids Play Areas

It's important as an area for kids to play in while their families are doing shopping in the market or during their rest.

4.3.3. Natural Gardens

It'll be available in case of providing a suitable area where it'll be possible to provide the market with such planted natural areas that can reduce the severe nature of overcrowding of the market and contributes to providing rest for consumers making the marketing activities an entertainment for families.

4.4. Market Neighborhood Spaces

4.4.1. Pedestrian Walkways Network

It's the pedestrian walkways surrounding the market which should be studied and well-planned as for its shape and materials in order to facilitate the densely movement to fit gathering and standing.

4.4.2. Spaces of pedestrian gathering

It should be provided so as to accommodate such number of people gathering especially at the entrances and exits to the market.

4.4.3. Spaces for Consumers Parking

It'll encourage, when provided, coming to the market from the remote areas.

4.4.4. Transportation Stops

The lack of such spaces or intermixing with pedestrian walkways during traffic jams in addition to pedestrian movement and lack of security.

4.4.5. Loading and Unloading Spaces

It should be provided so that the traffic of trucks may not obstacle pedestrians or peoples' cars especially knowing that such trucks require waiting for long time to completely load or unload goods. Moreover, it's important to provide spaces for collection of garbage and waste in order not to accumulate and occupy the market's surrounding spaces.

Accordingly, we can conclude a framework of the social urban spaces system in low-income community markets as shown on Table (2). This framework shows the main role of such markets in low-income communities as considered social urban spaces for achieving social sustainability. Such framework also emphasizes the importance of social urban spaces which can be implemented at the public policy level with regard to El-Khamis market in particular and other local low-income communities markets in general.

5.CONCLUSIONS AND IMPLICATIONS

Through the analysis of one of the markets of low-income communities (El-Khamis Market in El Matariyyah) we can conclude that markets, in addition to marketing activity, are considered of the most important places for social interaction among people for it lead them to gather with each other and enhance the public life. Interaction and engagement with others, as well as informal conversations are being cited as considered the key factor for market's success in sale and purchase making markets of great remarkable importance and a unique rule as social spaces.

With the recently increased growth of number and popularity of such markets in low-income communities, the system of social urban spaces plays an important and key role enhancing social life.

Markets are an effective tool to revitalize neglected public spaces by achieving social sustainability through social integration and economic mobility within low-income communities in order to be a way of creating mixed-life place.

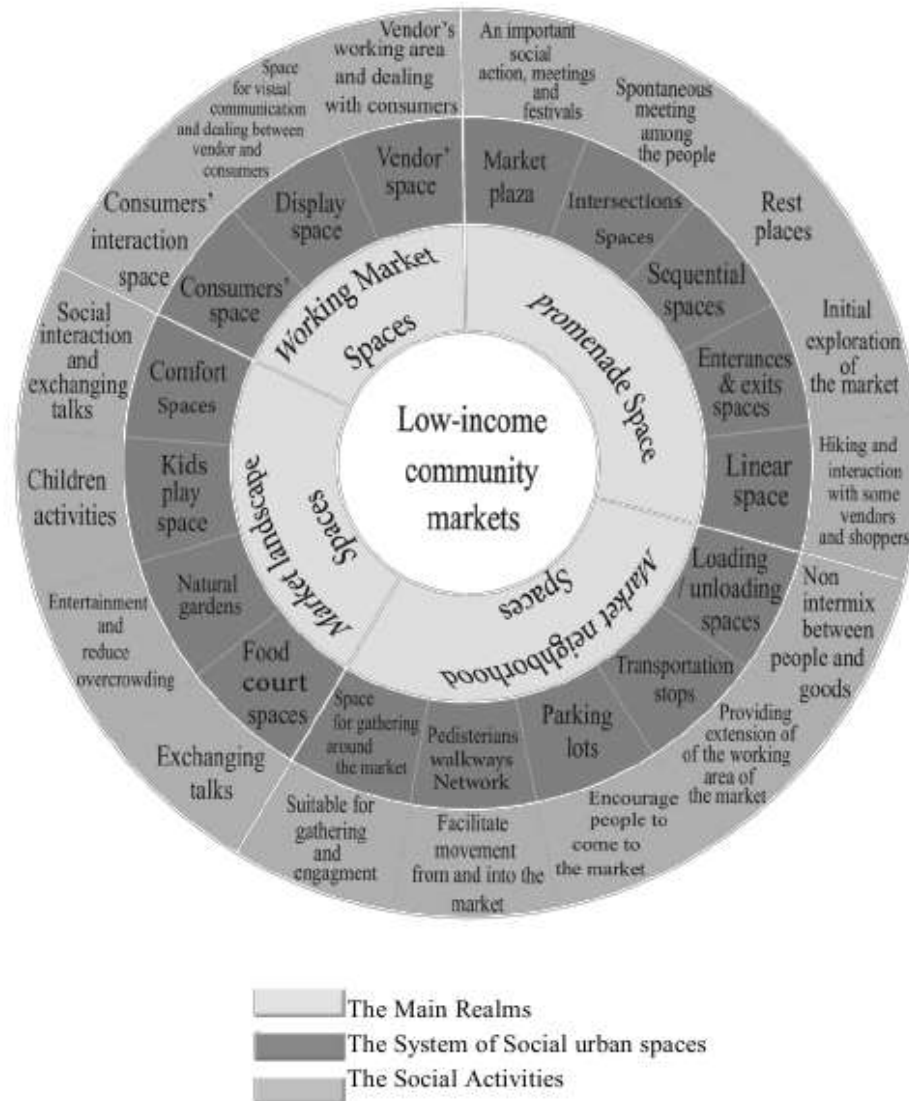
Table (2). Framework for Social Urban Spaces in Low-income Community Markets

Market's Realms	Promenade Space	The Working Markets Spaces	The Market Landscape Spaces	The Market Neighborhood Spaces
Social urban spaces	<ul style="list-style-type: none"> - Main Linear Space - Entry and Exit Spaces - Sequential Spaces - Market Plaza - intersections and trans-formational spaces. 	<ul style="list-style-type: none"> - Vendor's space - Bountiful display space - Consumers' space. 	<ul style="list-style-type: none"> - Comfort & relaxation spaces - Kids play areas - Natural gardens - Food courts spaces. 	<ul style="list-style-type: none"> - Pedestrians walkways network. - Spaces of Pedestrian gathering around the market - Spaces for Car parking lots - Spaces group transportation stops - Loading and unloading spaces.
Activities & Social Interactions	<ul style="list-style-type: none"> - Wondering and interaction between vendors and consumers to provide initial identification of the market places for comfort. - Public Social activities - celebrations - festivals - spontaneous gathering of people. 	<ul style="list-style-type: none"> - Vendor's working space & interaction with his consumers - Space of interaction between vendor and consumers and with each other 	<ul style="list-style-type: none"> - Social interactions & conversations and exchange activities among children. - Wondering and reducing overcrowding for food and conversations 	<ul style="list-style-type: none"> - Facilitate movement from and to the market. - Suitable for gathering and getting to know each other. - Encourage people to come to the market. - Provide cleanliness of the market from outside. - Not to cause intermix between people and goods.

Through the above mentioned findings and the framework concluded from the study of El-Khamis Market, we can conclude a theoretical model of the social urban spaces in the markets of low-income communities depending on the main four areas of the market and the social urban spaces associated with daily-life activities that make the market a successful and sustainable social space. The model identify the system of social urban spaces which urban and architectural designers should take into

consideration while designing the low-income community markets and also it can be used in measuring and evaluating the existing markets. (Figure 16).

Figure (16) Model of the system of social urban spaces in low-income communities



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