

Rural markets and space dynamics in urban Sudan, the case of Suq Hilaat Kuku in Khartoum North

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Abstract:

This research objects to show transformations of structure and functions of Suq Hilaat Kuku, which was a rural market coincided with the rural economy of western limit of the Butana plain, as due to space dynamics. The research adopted the analytical approach and used expert-observation, interviewing, and firsthand experience of the author's living there for more than two decades, and GIS analysis of relevant maps as sources of data. The Suq has transformed from mere a small rural market to an urban- rural market with the dominance of the urban services and emergence of new axes to its close geographic neighborhood coincided with space to accommodate rapid residential growth, demand for urban services, and wide agricultural investment. Area development will make continual challenges to Suq Hilaat Kuku where strategies and policies of market area planning are required. There should be a response to the worldwide trends to conserve some parts of such historic rural markets per se while keeping it working within modern urban markets.

Key words: rural economy, geographic nodes, geographic dynamism, spatial influences, urbanization

مستخلص:

يهدف هذا البحث لعرض التغيرات التي طرأت على بنية ووظائف سوق حلة كوكو والذي كان سوقاً ريفياً مرتبطاً بالاقتصاد الريفي للطرف الغربي لسهل البطانة، وذلك بسبب الديناميكية المكانية «ديناميكا الحيز». تبنى البحث المنهج التحليلي واستخدم الملاحظة - القائمة على الخبرة، والمقابلات، والخبرة المباشرة للباحث من العيش في المنطقة لمدة تفوق العقدين من الزمان، بجانب تحليل المرئيات الفضائية باستخدام نظم المعلومات الجغرافية كمصادر للمعلومات. لقد تحول هذا السوق من مجرد سوق ريفي صغير إلى سوق حضري- ريفي مع غلبة الخدمات الحضرية وبروز محاور جديدة نحو جواره الجغرافي القريب مرتبطاً بالحيز المكاني لاستيعاب النمو السكاني المتسارع، والطلب على الخدمات الحضرية، والاستثمار الزراعي العريض. سيعمل النمو المناطقي على خلق تحديات مستمرة لسوق حلة كوكو مما يتطلب الاستراتيجيات والخطط المناسبة لذلك. كما يجب وجود استجابة للتوجهات العالمية للحفاظ على بعض أجزاء من مثل هذه الأسواق الريفية التاريخية كما هي وفي نفس الوقت الحفاظ عليها عاملة ضمن الأسواق الحضرية الحديثة. كلمات مفتاحية: اقتصاد ريفي، حلقات جغرافية، دينامية جغرافية، تأثيرات مجالية، التحضر.

Rural markets are centers for trade and commerce activities. They widely spread in different geographical settings where in some countries they have been conserved and protected as a national heritage. Such types of markets are keeping doing their roles in rural Africa regardless of onsets of urbanization. A rural market is a geographic place where rural goods, products and commodities are sold and bought. Their internal structure is simple where specialization by type is obvious. They are placed on rural main cross roads that are easily accessed by local transportation modes or by animals. In many geographic situations, rural markets form a set of connected rural networks that work collectively to serve villagers and big residential centers in their neighborhoods either daily, ones or twice a week or more. Rural people mobility to such markets is bounded by their household needs or by commercial incentives of return.

Rural markets are centre- places and could be considered as growth poles with their own market areas and therefore, could serve for diffusion of information for rural population and a place where further economic change could be initiated in rural areas. Rural development is likely to have a useful effect on the whole economy because rural -based growth is accompanied by improvements in income distribution,

reduction in income inequality and inevitably involves increased investment in human capital of the poor, can empower governments to reform distortionary taxes and thus increase overall efficiency in the economy (Mwabu et al. 2004). In Africa, food assembly markets are a key part of the institutional framework in which efficient and effective food marketing channels can develop (Dijkstra, 1996). According to Agboola (2022) marketplace as a place of cultural inheritance, social field for users, aesthetically oriented zone and a third place, are forming an integral component for the future rural neighborhood planning and development.

The majority of rural markets in Khartoum state have experienced transformation to become urbanized market areas due to space dynamics coincided with urban population growth and demand for urban goods, however, some of them are still keeping on their old functions serving villagers in their immediate vicinities. These had made of some of these rural markets focal marketplaces and important nodal points for trade and commerce exchange that inevitably influenced enhanced rural economy. Suq Hilaat Kuku which is an old rural market and was a part of a network of rural markets in the Butana plain has experienced these transformations in last decade that worth to be investigated.

This research objects to trace changes of structure and functions of Suq Hilaat Kuku, which was a rural market coincided with the rural economy of western limit of the Butana plain, as due to space dynamics. The sources of data included; field visits during January and February 2021 where Suq Hilaat Kuku was divided into four geographic sections, in each section one head person was selected conditionally being worked there for more than two decades and has practiced trade works and commerce activities, and are able to highlight transformations occurred in that Suq. This was further supported by direct expert-observation and firsthand experience of the author's living there for more than two decades. Arc map 10.5 was used to produce detailed maps for location and some other purposes required by the research based on Google maps 2020.

till 1898 when its market area was extended to include Aziz Kufuri's plantation when the British government gave him a concession on the muddy plain covering the area northwards of Suq Hilaat Kuku to contain the open space of some old villages scattered on the western edge of the Butana plain. To the east of Kufuri's plantation the British also founded a veterinary hospital to protect and cure the animal wealth of the Butana plain and also a small factory was established to produce milk which was known as "Alban Kuku". This was followed by opening of lands for fodder production where a pump station was built on the Blue Nile. Both of Kufuri plantation and "Alban Kuku" are used to produce and distribute fresh milk to residents in urban Khartoum and Khartoum North towns. These have added an economic value to Suq Hilaat Kuku as it served the huge numbers of laborers working in these two establishments. Southwards of Suq Hilaat Kuku existed a large and open space for animal grazing and rainfed-agriculture. By so, Suq Hilaat Kuku formed a small geographic point within a wider open space of a dual economy of traditional and modern agriculture and animal keeping (Figure 2).

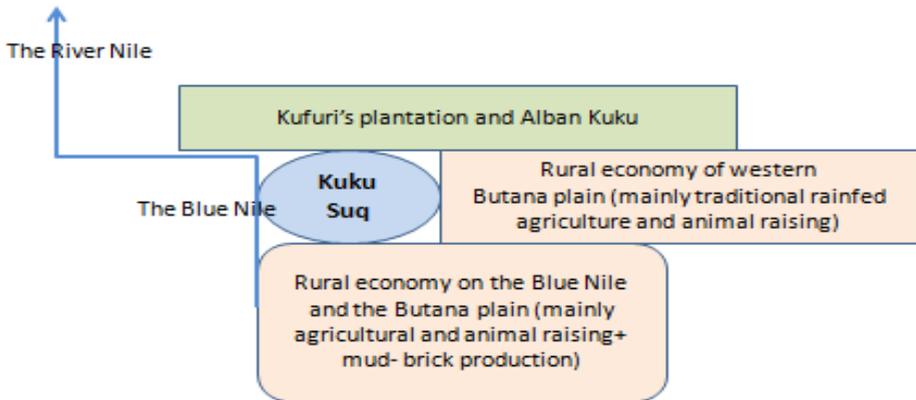


Figure 2: The market area of Suq Hilaat Kuku as a rural market
 Division of old Suq Hilaat Kuku took some sort of specialization (Figure 3) to serve the rural economy of its vicinity. The western part was specialized for the preparation of milled fodder produced from the remains of cotton seeds and Dura. It was also specialized for the maintenance of Lorries particularly Ford and Bedford brands. Tractors maintenance was also found in this part of the Suq prior to its transfer to the new extension in the northern part of it. There were also some veterinary pharmacies serving for animal raisers in the eastern part. In the central point there were sellers of vegetables and fruits, butchers, and shops of spices. The internal market conditions

of Suq Hilaat Kuku were somehow remained per se restricted to provide rural goods to a certain type of consumers where some of them were mainly sellers-and buyers.

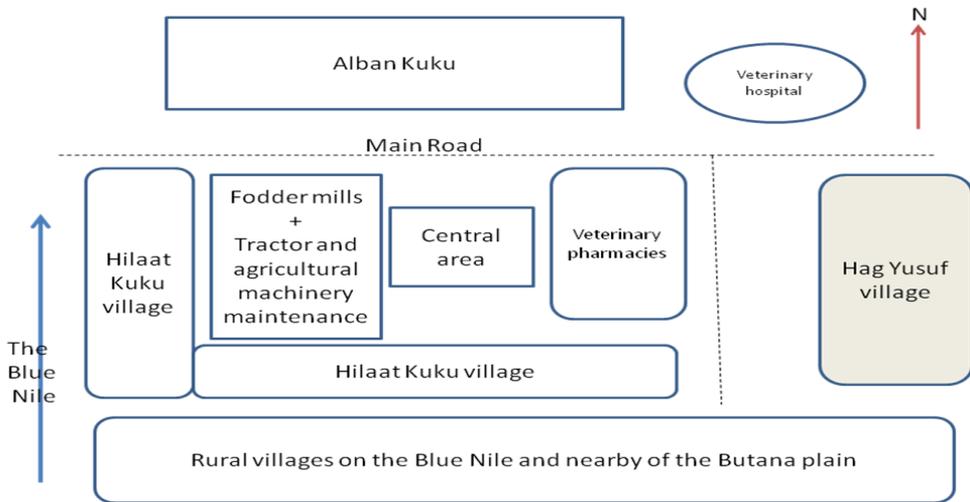


Figure 3: Area division of Suq Hilaat Kuku as a rural market
2- Space dynamic of Suq Hilaat Kuku during sixties and seventieth of the 20th century

The rural landscape of Suq Hilaat Kuku experienced modern urban residential plans in mid-1960s when the new planned extension of Hag Yusuf was allocated to some citizens living in Khartoum North town and elsewhere. These new residential areas were located eastwards for Suq Hilaat Kuku by a distance of nearly four Kilometers. There was a space between them which was occupied by the old Hag Yusuf village. This was part of a process where most of the urban population growth in Sudan has been absorbed through residential densification “sub-letting in existing districts” and through “illegal” occupation of sites on the edge of towns (Post, 1994). Also, at early seventies the surroundings of the old village of Hag Yusuf became a lodge for the immigrants and citizens who illegally occupied the lands which was a part of a process of the growth of squatter settlements which have come to form a tight ring around Sudan’s capital cities (El Bushra et al., 1995). They were either inner-city slum areas which are either engulfed or annexed by urban expansion; and squatter settlements that built on illegally occupied by newcomers (Eltayeb, 2003); or later, outer slums which are areas planned by the authorities and distributed to landless. These types of squatter settlements have come to dominate the landscape of the Suq Hilaat Kuku which has changed to take the form of rural-urban interface, contrary to the former

entirely rural landscape.



Figure 4: Space dynamic of Suq Hilaat Kuku during sixties and seventieth
Source: GIS analysis based on Google maps 2020

The internal structure and division of Suq Hilaat Kuku by the end of eighties of the past century remained more rural than being urban (Figure 4). It kept doing its rural –bound services to its geographic neighborhood of the Butana. There were, of course, some new changes accompanied residential transformations, such the expansion of car and tractors related services, retail sale commodities, area extension of the Suq eastwards and southwards with few multi-storey buildings. The old villages of the Butana plain kept their mutual commercial relations with Suq Hilaat Kuku where one could observe the coming of old buses full with people and traditional commodities brought to be sold and buy some households needs by their money returns. It was observed the coming of considerable numbers of customers who generated money income to this Suq to develop to a predominantly urban market.

3- Recent urbanization in east Nile locality and influence on Suq Hilaat Kuku

East Nile locality witnessed an observed residential development during the period 2005-2019, following the opening of Munshia Bridge in 2005 that linked Khartoum town with east Nile locality. The eastern part of Khartoum town represents a recent “urban growth pole” in Khartoum town. Excessive increase in land rent in Khartoum east drove many peoples to seek for alternatives among which, and preferably due to geographic proximity and affordable land prices and rents, was the east Nile residential areas which are part of the skeletal plan for development and promotion of Greater Khartoum for the period 1991-2000 over

an area of 8000 hectares for development, where 4700 hectares were allocated to residential areas to enroll growth up to the year 2000 (Banaga, 1994). The plan basically proposed the development of urban centers neighboring the already existing occupied areas to enroll population activities and services provided that being connected by transportation networks. Some residential areas developed rapidly around and close to Suq Hilaat Kuku such as Huda; Gadisia; older residential areas of Hajj Yusuf and Hilat Kuku, “Hai” Gama’a, Hai Nasr; and Munshia east, and very recently Blue Nile Hai. Along the Ring Road connecting Gaily Oil Refinery with Munshia Bridge many residential areas were developed such as Tilal; Wadi Akhdar “Green Valley”, IDD Babiker, and also along Al-Ailafoun High Way connecting with Soba Bridge. Many service centers including central markets; car maintenance works; private clinics, banks branches, oil service stations, schools; and some University colleges. Another influence on the geographic domain of Suq Hilaat Kuku has come from competition for rural lands for agricultural purposes. Huge private and Arab agricultural investment schemes made of the east Nile locality a “regional growth pole” in Khartoum State. This has contributed in the development of market areas Suq Kuku where its geographic domain extended via transportation networks connecting remote residential areas with central places in East Nile locality and other areas in Khartoum state (Alredaisy, 2011).

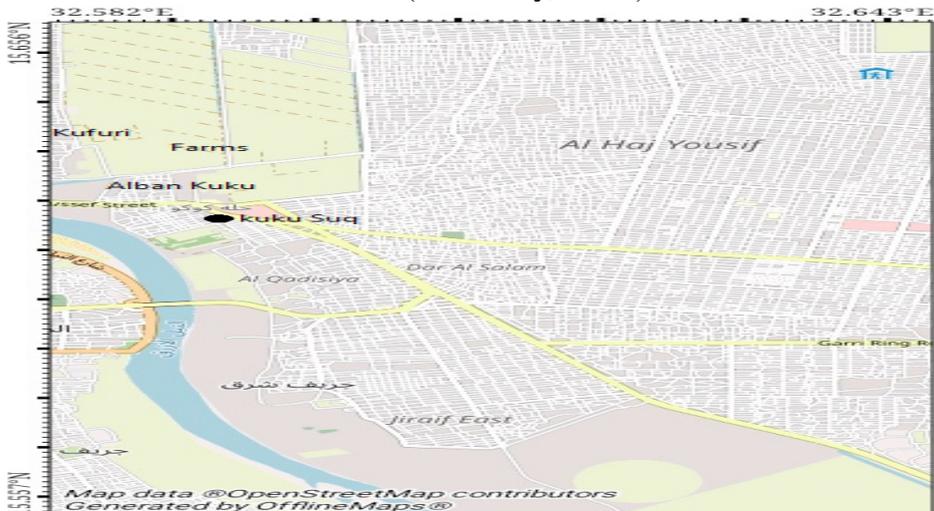


Figure 5: Urban residential growth around Suq Hilaat Kuku in early 21st century

Source: GIS analysis based on Google maps 2020

4- Suq Hilaat Kuku : an urban-rural market within an urban- rural economy

These external market conditions came to influence Suq Hilaat Kuku which made of a nodal point for transportation and to extend new commercial and trade axes in its geographic neighborhoods to accommodate with new conditions.

The influence of rapid and wide residential development of the area of east Nile made of Suq Hilaat Kuku a nodal point for transport network which was accompanied by building and extension of asphalt roads. Growth and provision of urban services such as oil stations, banks, and police stations, building materials, telephone sales, fruit and vegetables has added a juncture for urban economy in Kuku market. A reversed transportation axes has initiated from the central and last transportation stations are linking residential areas in Kuku's neighborhoods with Khartoum and Omdurman towns and the central station of Khartoum north town (Figure 6). All long transportation lines initiating from the central stations in Khartoum, Omdurman, and Khartoum north to serve the areas of Hag Yusuf and the areas further east, and the areas extending parallel to the Blue Nile southwards, pass by Suq Hilaat Kuku. Also, many internal short transportation lines has initiated from Suq Hilaat Kuku to serve all these areas. These transportation lines converge and diverge in Suq Hilaat Kuku nodal point. This made ease of accessibility to Suq Hilaat Kuku by costumers to generate more money income to contribute in further expansion in provisioning of urban services.

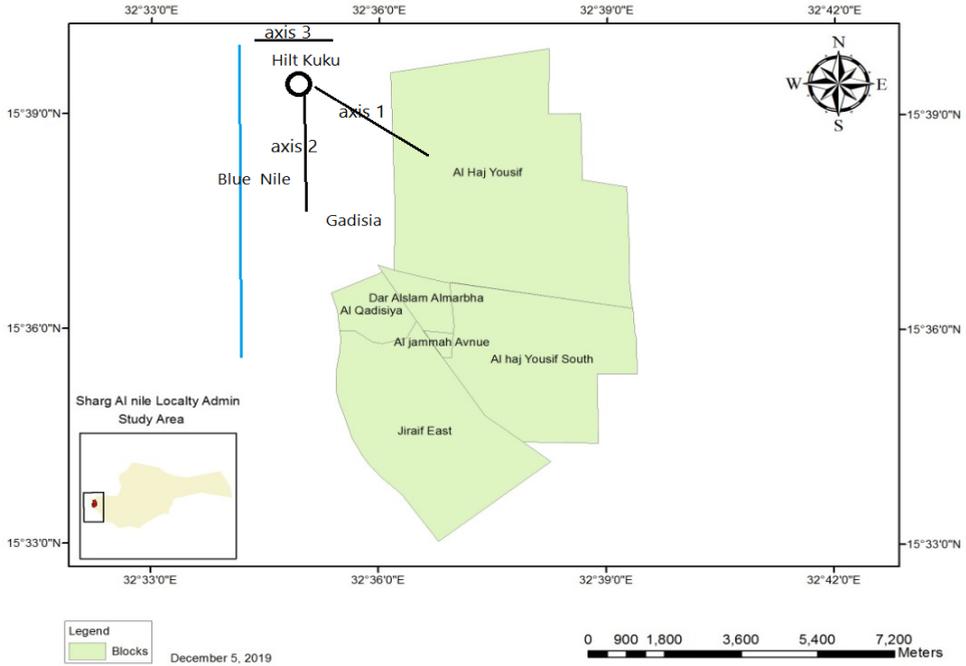


Figure 6: Suq Hilaat Kuku as a nodal point within the transportation network in Greater Khartoum

The rapid development of Suq Hilaat Kuku influenced its neighborhood through translocation of commercial and trade activities along divergent axes where three major commercial axes could be distinguished (Figure 7) including:

- a- An eastwards axis along with the Hag Yusuf Street (axis 1).
- b- A southwards axis following Al-ailafoun Street (axis 2).
- c- A northwards axis facing Suq Hilaat Kuku (axis 3).

Figure 7: Axes of spatial expansion of Suq Hilaat Kuku

Source: GIS analysis based on Google maps 2020

Along these three axes commercial and trade activities were allocated with the inclusion of some new services that were not there before. These activities took place on the outer skirts of the neighboring residential areas to Suq Hilaat Kuku including Dar-Elsalam El- Magharba, Gadiesia, Hag Yusuf, east extension of Hilaat Kuku village (El- Doha). These axes were far expanded to reach some markets located on these main streets. Axis 1 extends up to Suq Wihda, axis 2 up to the new central market of the East Nile locality (Figure 8), while axis 3 includes the immediate northern extension of the Suq itself and some parts of the

residential area. Agricultural investment in east Nile locality imposed some pressure to meet with needs for tractors and vehicles maintenance which was basically concentrated in the new emerging axis 3. This area accepted a fame that exceeded the limits of the locality to el- Geizra and Nile River States where many farmers usually access. In this axis also Kuku Zoo was established and the Faculty of veterinary sciences of the University of Sudan for Science and Technology.



Figure 8: East Nile New Central market
Photo credit: Samir Alredaisy (December 2021)

In these three extensions modern shopping centers, banks, car service and maintenance workshops, clinics, and schools are centered. The estimated length of axis 1 and 2 is five kilometers suggesting the domain of Suq Hilaat Kuku is somehow strong enough to change its geographic neighborhood. The appearance of these modern services in these neighborhoods suggests for further transformations on these residential areas, particularly the residential area of Dar-Elsalam El- Magharba which is originally a squatter settlement. The commercial influence of Suq Hilaat Kuku on the outer skirt of this residential area raised its land rent which made a pathway for multi-storey buildings and upgrading to a closer standard of modern planned first class residential areas. The modernization of commercial activities from only the traditional ones is more seen along these three axes compared to Suq Hilaat Kuku itself. This suggests for the commensuration for market demand of recent urbanization in east Nile locality.

Discussion:

Suq Hilaat Kuku was a small rural market fits with the classification of rural markets and the organization of traders and their circulation patterns which is elucidated as a mechanism of agricultural change and innovation diffusion, resulting in changing economic opportunities at intra- and inter-local and regional scales (Lado, 1988). Here, the presence of dealings expenses naturally leads market participants to enter in long-term trading relationships which form business networks that shape market outcomes (Fafchamps, 2001). It was also clear that, non-agricultural activities play a crucial role in providing simple consumer goods and services to the rural households such as those living in the western limit of the Butana plain where Suq Hilaat Kuku was located. One can also state that, this Suq was a nodal trade centre within that plain and one can further argue that, it has fallen into disregard as an instrument of spatial policy similar to other rural markets in developing countries as indicated by Harry (no date). Similarly, it can be stated that, Suq Hilaat Kuku faced challenges of rural financial intermediation of shortcomings and systemic weaknesses of rural financial markets, urban biased policies and poorly designed interventions not based on the realities of rural markets as stated by Coetzee (1998) similar to other rural markets in Africa.

During its earlier stage of development Suq Hilaat Kuku has its own Labor market which was well established to run this Suq and which was based on its immediate and remote geographic space of the rural villages of the western limit of the Butana plain. This is contrary to the conventional impressions that labor markets do not exist in villages of the semi-arid tropics. Of course, wages vary considerably, and are not uniform across workers or villages or the agricultural season (Saleem, 1987). The factors of age, sex, and category of origin and category of destination appear to have influence on the pattern of Sudanese labor mobility (Ahmed et al., 1979) as could be stated for Suq Hilaat Kuku since there was labor mobility of the villagers who come to sell and buy goods as it was an integral part of the network of rural markets in that wide geographic area.

Suq Hilaat Kuku has experienced space dynamics since the mid of the sixties of the past century and in early 21st century in the wider East Nile locality. This has transformed Suq Hilaat Kuku from mere a rural market to a complex of an urban market. This is an expression of wide-scale geographic changes in urban settings of Sudan due to population

increase and urban trends of demand for housing. Since East Nile is a part of Khartoum State it has shared the component of that population increase and demand for housing. The population of Khartoum State doubled 140 times during the period 1905-2000, and while the number of population doubled by 12 times at the national level it doubled here by 50 times (El Bushra et al., 2005). The occupied area doubled 250 times during that period (El Bushra et al., 2005), particularly by the begging of 70th of the past century by influxes of migrations where it was “until 1970s dominated by pull factors – economic growth, while from 1970s onwards pull factors-drought and conflict with high level of displacement prevailed where the majority of urban poor seeking better livelihoods opportunities, security and services” (Pantuliano et al., 2011). Net migration increased from 0.2 million in 1983 to 0.5 million in 1993, and then to 1.8 million in 2008 (Abdel Ati, 2012), which have over pressed on the already existed high population density of 169/km² for whole the State (National Council for Population, 2002).

This population increase in Khartoum State is accompanied by the demand for land for either housing purposes or urban services which were very essential in transforming Suq Hilaat Kuku to an urban market complex. This conforms to the 20th century where the phenomenon of urban spread out had illustrated urban land use fragmentation where in many cases new uses, such as agriculture or residential functions were introduced in the area. In addition, many natural areas were divided as a result of the construction of new roads and housing needs (Marjan et al, 2002). The government in Sudan has allocated plots of land for many urban residents to build a house in many of new residential areas in East Nile locality such as Hai El-Nasr, El-Faiha, and El-Huda, for example. This policy refers back to the British rule in Sudan which has disrupted the traditions of self-reliance and resulted in them being replaced by the notion of government as the provider of services including housing and the development of self-help groups, initially in squatter settlements is the microcosm of this larger process (Haywood, 1986). Later, housing has been viewed as consumer goods which must be given a very low priority in development issues and this view undermined the contribution of the housing sector to economic development (Matovu, 2000).

In addition, the new developments of squatter settlement are another component of population increase in east Nile locality. The rapid growth of squatter in the immediate vicinity of Suq Hilaat Kuku and far areas contain the United Nations estimates which suggested that

nearly one billion people live in slums worldwide representing 1/6th of the planet's population and is expected to double by 2030 (Beardsley et al., 2008), where one in seven people on the planet are expected to reside in urban informal settlements by 2030 (Corburn et al., 2017) and "If no action is taken, the number of slum dwellers worldwide is projected to rise over the next 30 years to about 2 billion" (Dasgupta et al., 2009). These developments account for 71.9% of the population in Sub-Saharan Africa (Dasgupta et al., 2009), and comprise some 30-70% of the housing stock in many cities and towns in developing countries, and their scale is attributed to the inadequacies of housing finance systems and land development, along with the pressing demographic growth and mass poverty (Pugh, 2000). These squatter developments imposed further demand for urban services by way of market centers such as Suq Hilaat Kuku.

Within these formal and informal residential settings the provisioning of services in the east Nile locality included hospitals, central markets, banks, petrol-stations, and building of new asphalt streets which connected the different areas together to get through the Munshia- Bridge to the modern world of east Khartoum town where famous areas of El-Riyadh, El- Taief, El- Munshia, El- Safa, and Burri are there. Al-Riyadh neighborhood was planned and developed in 1972 with large plots (875-600 m²), wide crossing roads and balanced environment. Recently the area shifted to more compact urban form of high density, it is transformed towards mixed-use integrated development with more intensive use of land and less-residential use (Awad, 2019). Evidently, the increasing economic importance eastern Khartoum town as a location for modern urban residence and services have significantly influenced its neighboring residential area of Burri, a third class residential area, for example, by raising its land rent which ultimately encouraged some residents to sell their houses and move to east Nile locality which in turn influenced Suq Hilaat Kuku to cope with increasing demand for modern urban services through internal transformation and development of new commercial axes. These new commercial axes formed corridors of development that geographically extended far to form concentrations of new urban services.

Although agricultural and green lands and unused areas decreased continuously from 1972 to 2001 in Greater Khartoum (Khartoum State), where urban growth percentage was 300.47% in the period of 1972 to 2001 and the percentage of agricultural and green land decreasing was 83.59% with respect to the year of 1972 as a baseline (Ahmed, 2009),

rapid growth of residential areas in East Nile locality was accompanied by huge private agricultural investment schemes which made of the east Nile locality a “regional growth pole” in Khartoum State.

Urban development trends in Sudan also included the establishment of new industrial areas, food security projects through licensing of private agricultural schemes. These development trends took place at a larger scale in east Nile locality. Their repercussions are the increase of population and demand for services which made a challenge for Suq Hilaat Kuku rural market for either to survive or to perish. This Suq has successfully developed to meet commercial demand of both its rural and urban population and further became a geographic node of domain for translocation of commercial activities through emerging commercial axes in nearby residential areas. This indicates to the changing of the significance of the location in accordance with modern urban needs that enabled Suq Hilaat Kuku to expand in these neighboring residential areas. It also enabled for the development of many new market areas have such as Suk Kuku and East Nile central market, for example, where their domains extended southwards and eastwards along the main roads passing by to connect via transportation networks with towns of Khartoum and Khartoum north and Omdurman and the remote residential areas of the locality with central places in the locality and other parts of Khartoum state (Alredaisy, 2011). Along the Ring Road and Al-Ailafoun Highway many residential areas were developed and similarly, many service centers including central markets, car maintenance works; private clinics, banks branches, oil service stations, schools; and some University colleges (Alredaisy, 2020).

It is also important to consider changes occurred in the Butana plain whose economy is basically based on livestock keeping and trade which influenced by drought and rainfall variability in the last decades. This has affected Suq Hilaat Kuku where livestock trade is integral part of its rural economy. it is expected that shortfall in that side has taken place as was supported by the available information which suggested that the numbers, quality, sources and destination areas of livestock are affected by increasing demand, decreasing availability of vegetation, and unreliable water supply in semi arid areas (Trilsbach, et al. 1986). Although Suq Hilaat Kuku has become more urbanized than a rural one, it is still supplying rural services to the villagers in the locality. It still is conserving its old function as rural market within a wide network of rural markets that includes Suq Abu-Delaig in the far northeast, Suq

Hassan Wad Haissouna in the far north, and Suqs of Al-ailfoun and Soba in the far south. This network of rural markets used to work collectively in a mutual nature to serve the old rural economy of western limit of Butana plain. They are still keeping their old roles similar to many rural markets in Africa although some of them were somehow became more urbanized, however, lesser compared to Suq Hilaat Kuku.

Conclusions

This research tried to outline transformations happened to Suq Hilaat Kuku which was basically a rural market located on the edge of the western limit of the Butana plain. The main results suggest for:

- 1- Space dynamics have several implications on transformation of Suq Hilaat Kuku from mere a rural market to an urban market.
- 2- These dynamics were close and open space dynamics.
- 3- Close dynamics depicted transformations happened inside the Suq itself, and concerned with expansions in its older existed divisions or appearance of new specialized divisions of services.
- 4- Open dynamics manifested transformations bounded with outsider space to this Suq and connected with population growth in its geographic neighborhood due to residential growth, demand for urban services, and agricultural investment in East Nile locality.

Area development will make continual challenges to Suq Hilaat Kuku where strategies and policies of market area planning are required. The Butana Integrated Rural Development Project is premised on the assertion that, in the Butana region, livestock production and marketing constitute the means to build up the assets of poorer smallholders, increase women's economic role, and improve household food security and living conditions (IFAD, 2019). This could contribute in making of Suq Hilaat Kuku an specialized market in purely rural products to compete with older famous markets in Khartoum State such as Suq Omdurman. It is also expected that, Suq Hilaat Kuku will benefit from economic returns of this project as gained by rural household for further good purchasing power, exchange of goods, and capital transfer and exchange within its domain and outer. In addition, there should be a response to the worldwide trends to conserve some parts of historic rural markets such as Suq Hilaat Kuku per se while keeping it working within modern urban markets.

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