

How Planning Can be Wizard to Solve Third World Cities Problems?

How to Use the Magic of Planning to Solve Greater Khartoum Problems?

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1. Introduction

Greater Khartoum City which established at the end of nineteen century has been growth in rapid sequence, especially in the latest three decades. This paper aim to recognize the physical structure of Khartoum and the growth of the city which happen due to political and economic problems. After that, this paper lay down the planning approaches which produced to manage the urbanization problem that happen among the migrations movement. Finally, this paper try to observe the expected advantage from implementing the final structure development plan of Khartoum if the local planning authorities take into consideration the actual role of planners in the planning process.

2. Greater Khartoum City

Khartoum city established as an outpost of the Egyptian army and a regional trading post in 1821, due to the obvious advantage of its situation at the confluence of the Blue Nile and the White Nile.

2.1. Physical structure of Khartoum

Khartoum consists of three cities, including Khartoum, Omdurman, and Khartoum Bahri. Each of these cities has its own character, function, and power. Therefore, as (Sara Pantuliano, 2011) state;

"...The city is a patchwork of wealth and poverty, demographic density and sprawl and robust atrophied infrastructure. It is, in short, a microcosm of the contradictions that mark Sudan as whole..."



Figure 1: Contrast Images of Greater Khartoum City

The Figure below shown the main structure feature of Greater Khartoum which are; Khartoum city on the southern part of the Blue Nile, which is the administrative and

commercial hub, Omdurman to the west of the White Nile is the historical and traditional part of the city since Mahdist set their capital in at 1886, and Khartoum Bahri on the north part of the Blue Nile which is the industrial center. This contrast is what the planners should take into consideration in Khartoum development process, so that each city should keep its unique pattern and function, and the resultant component is linked, and make homogenous Khartoum.



Figure 2: Physical Structure of Khartoum. Source, (Google, 2012)

2.2. Rapid growth of Khartoum

To explain the phases of growth it should be mentioned that Sudan is amongst the least urbanized countries in the world and this urbanization mass is concentrated in Greater Khartoum city (Hamid, 1996). Khartoum's population after the Independence grew from 250,000p. to an estimate of 3.3 million p. in 1990. At 2005 the official estimates put the capital's population to 4.5 million p., though unofficial estimates quote more than 7 million p. The latest census in 2008 found that Khartoum's population has fallen to 5,271,321 million. (Sara Pantuliano, 2011). Figure 3 shows the percentage of Sudan total population which is concentrated in Khartoum.

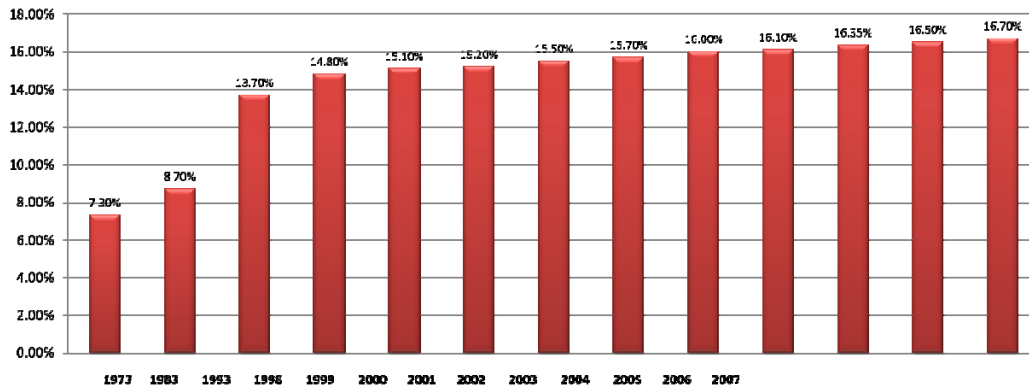


Figure 3: Khartoum Population as % of total population. Source, (MEFIT, 2009)

Moreover, the Growth of Khartoum went through three Phases; (1) The nuclear period from 1989 to 1914 with the re-conquest of the Sudan by Kitchener. In this period William McLean laid down the first contemporary planning pattern for Greater Khartoum. (2) The formative period from 1914-1939, when the growth consisted mainly in the filling of the gaps of build up areas. (3) The explosive period, which is continues to date. The Figure below shows the growth of the city during different phases (Hamdan, 1980).

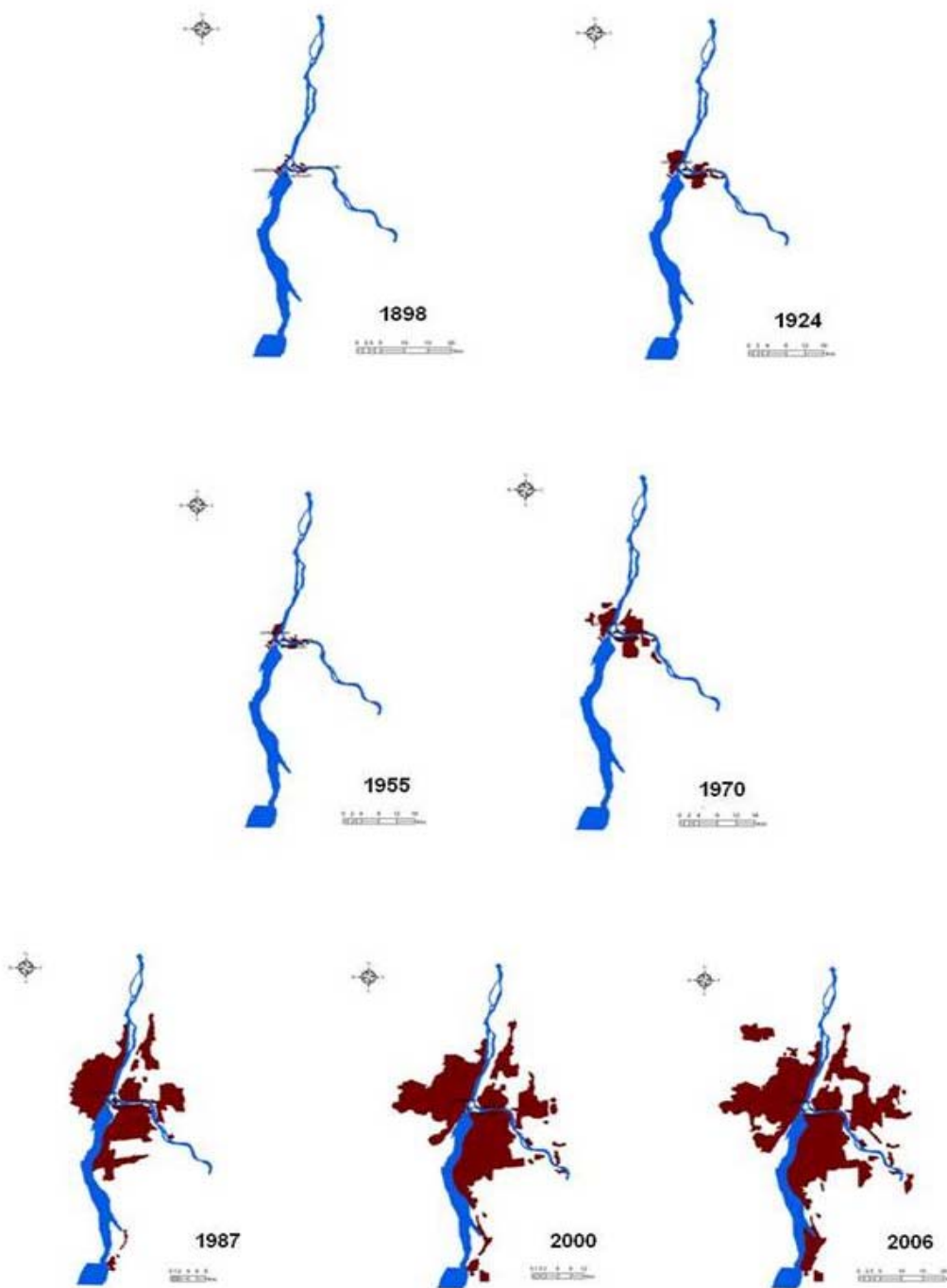


Figure 4: Khartoum Urbanization Growth. Source, (Remote Sensing, 2012)

The history of the city growth showed that the nucleus of each of the three cities organized along the water front; then gradually grew away from it. Growth has been concentric, with Tuti Island nearly the center. However, this growth has not been symmetrical, but selective, proceeding actively along certain lines, more slowly along others. This has progressively aggravated the disorientation, physical distance, and severance between the three towns. (Hamdan, 1980).

The factor behind this rapid expansion was due to migration to Khartoum center in different period, those rural householders came to Khartoum seeking economic opportunities like job wages difference, and productive resources. As well as, educational and healthcare services which is concentrated in Khartoum (Hamid, 1996) the political and administrative capital of Sudan from more than 200 years ago, where the headquarters of diplomatic organizations and management consultancies are found, as well as the largest industrial, commercial, and agricultural centers. Moreover, it is the core of all means of transportation, telecommunication, social, and recreational activities in the whole country. That caused by many forces shown in the Figure below.

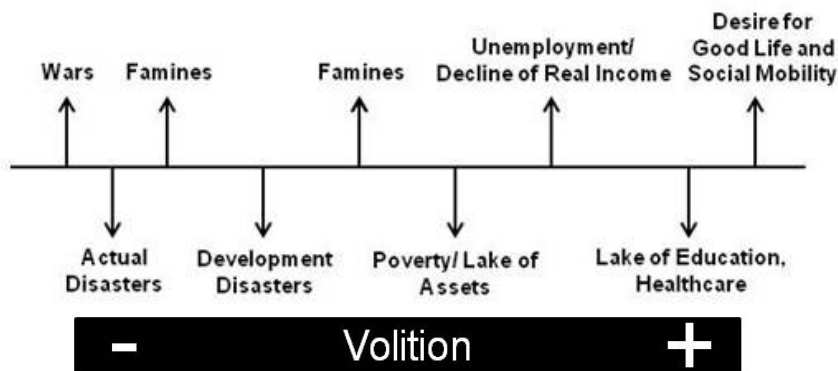


Figure 5: Scale of Migration-Inducing Forces. Sources, (Hamid, 1996)

According to this rapid growth Khartoum has been suffering from an exertion on urban environment. Initially, 60% of existing housing in poor condition when we evaluate them with the international measure for housing condition (building material, number of rooms, number of people per unit, existing latrine, kitchen and external fence). Moreover the quality of public services is often compromised by lack of staff, equipment and supplies.

The rapid growth of the city has put huge pressure on water supplies even in better-off areas, in addition to people complain of serious problems with water flow and purification. Although, Khartoum drainage and sanitation system is in poor condition, and covering only 28% from the whole state when the most resident use pit latrines and other basic systems such as septic tanks. Finally, urbanization has had a major impact on cultural changes and rising insecurity (Sara Pantuliano, 2011).



Figure 6: Decline of City Urban Environment

3. Sudan experience in the planning development projects

After Independence there were four plans for developing Khartoum. These are: (1) twenty year plan 1960-1980 by Doxiadis, (2) fifteen years regional plan for Khartoum and a master plan for the three towns by Mefit 1975-1990, and (3) ten year Khartoum structure plan by Doxiadis and A. Mustafa 1990-2000. But, none of the three previous plans had its full-implemented target because of a fragile economy, ineffective government institution, and

environment problems.

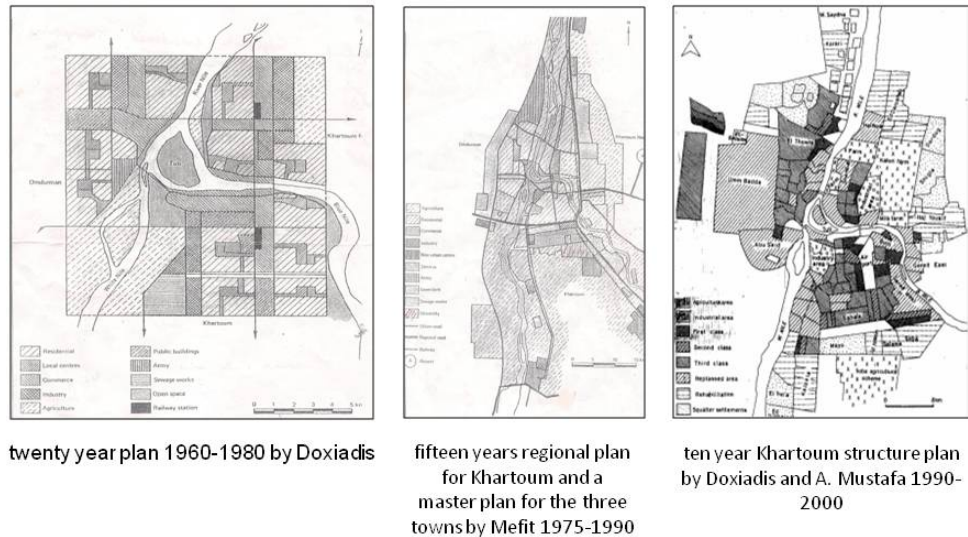


Figure 7: The Previous Development Plans for Khartoum

Before laying down the fourth structure plan for Khartoum, the government's urban planning strategy has three main components; replanning of squatter areas, preparing site for communities affected by replanning process, and relocation of communities (Sara Pantuliano, 2011). These strategies solved many Khartoum's squatter settlement problems and offered accommodation for displaced people, but they created many problems in the process due to city expansion.

4. The Role of Planner to Solve Khartoum Problems

A key element in improving the local capacity to develop, implement and manage initiatives is to support network of organizations that have knowledge and expertise in sustainability. That because the urban planning discipline has emphasized the power of planners to promote sustainability and resolve environmental issues through stockholders engagement and participation.

However the planning whether based on project, plan or process work only when the result are feasible simultaneously in physical, functional, financial and political ways. Having merely one or two of these feasibilities just won't work (Saunders, 2006).

Moreover, it must be mentioned the latest Khartoum structure twenty five year plan (2007-2032), divided into five different phases, each phase is five years. That will be reviewed in five different levels as shown in Figure 8;

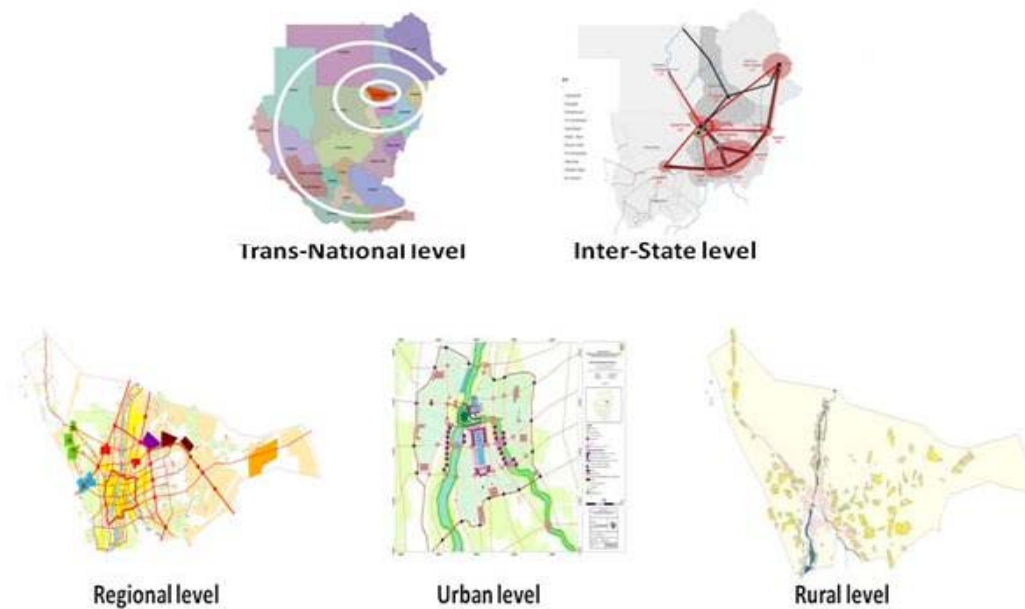


Figure 8: Khartoum Development Levels. Sources, (MEFIT, 2009)

The Urban Development Framework is based on the halting of the horizontal expansion of the capital and establishes the outer ring road as a physical demarcation of its boundaries. The accommodation of future urban growth shall be through a densification mechanism in an urban renewal context but, strategically, the future urban development of Khartoum shall be based on the establishment of 9 (nine) new towns, to accommodate more than 6,000,000 future inhabitants within the next 25 years.

Therefore, planners made a formula for implementation process shown in Figure 9 with the main key milestones of; implementation, monitoring, review and update.

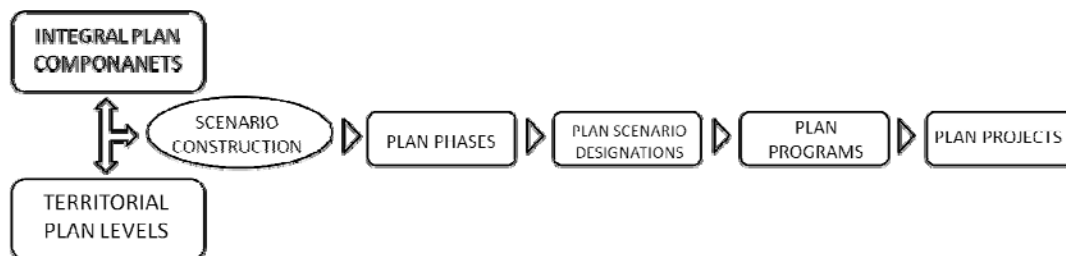


Figure 9: Formulation of Khartoum structure plan. Source, (MEFIT, 2009)

So, the new plan could be the solution if the implementation departments do their roles and there is a political will to do this plan and support it with different mechanisms.

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