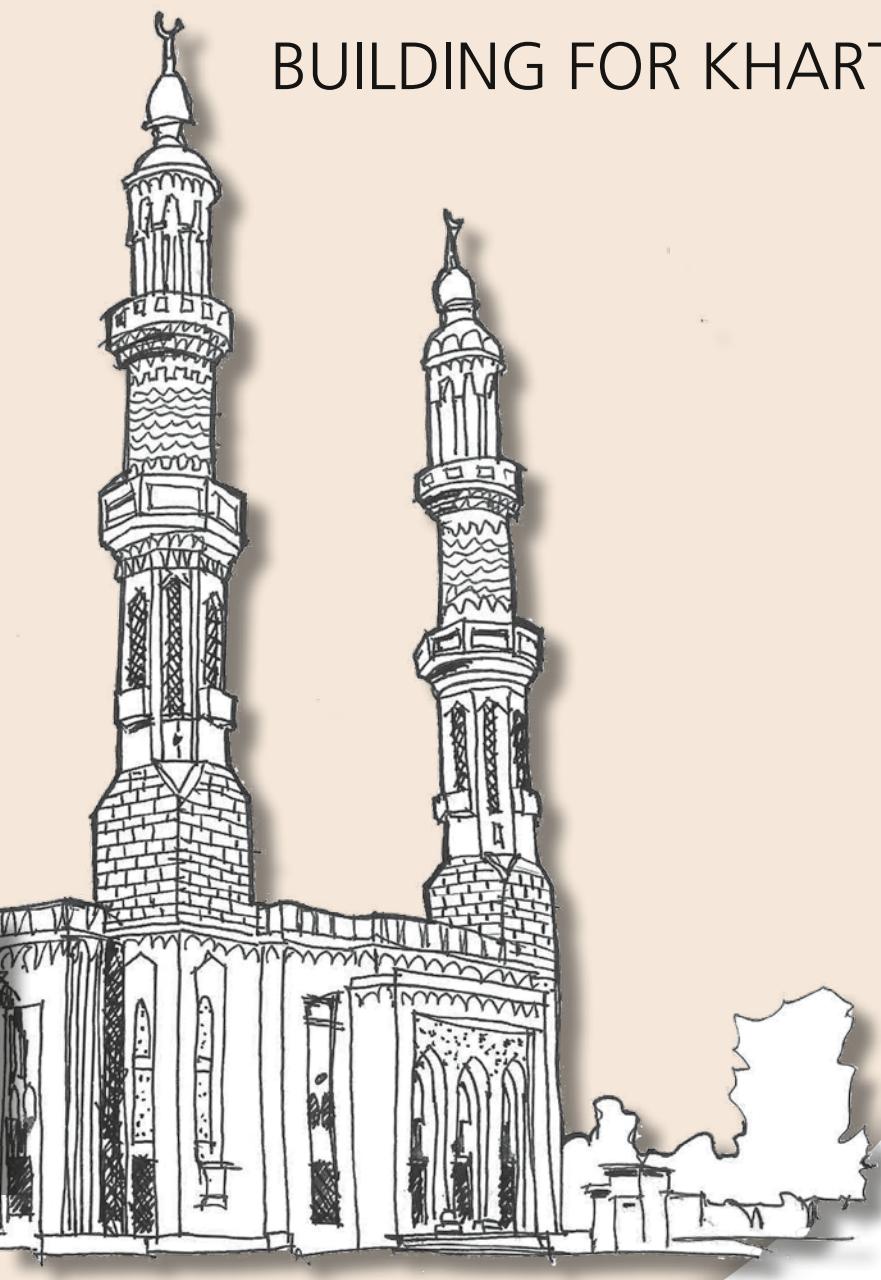




URBAN SECTOR STUDIES AND CAPACITY BUILDING FOR KHARTOUM STATE



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ACRONYMS

IDP	internally displaced person
ILO	International Labour Organization
NGO	non-governmental organization
UN	United Nations
UNCHS	United Nations Centre for Human Settlements
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UN-HABITAT	United Nations Human Settlements Programme
UNHCR	United Nations High Commissioner for Refugees
UNRISD	United Nations Research Institute for Social Development
UNIDO	United Nations Industrial Development Organization
WHO	World Health Organization

FOREWORD

During the last few decades, Khartoum State has faced a very complex process of rapid urbanization while applying different planning approaches. They have resulted in a significant number of habitat problems, but have also achieved many positive results, providing lessons learned as a guide for future actions. This situation presents a considerable challenge to greater Khartoum, demanding equitable and sustainable interventions to develop holistic solutions to meet the basic needs of all residents and reduce poverty in the long term, through sustainable urban development.

In this context, UN-HABITAT, in collaboration with the Ministry of Physical Planning and Public Utilities of Khartoum State, commissioned this report on urban sector studies. It presents the outcomes of five sector studies: spatial planning, land, housing, basic urban services, and local economic development. The final diagnoses were based on systematic analyses of multi-sectoral problems, considering their causes in relation to poverty, deprivation, and vulnerability. The diagnoses further relate to the capacity of the Ministry of Physical Planning and Public Utilities to perform its basic function as controller and promoter of urban development.

As the need for pro-poor approaches emerges as a crucial factor, specific capacity-building strategies are proposed. A separate report containing specific pro-poor policies, as input for the ongoing Khartoum Planning Project, contributes guidance for developing a policy framework that responds to the actual situation depicted in the studies. Advice and recommendations to monitor and evaluate the Khartoum Planning Project explain the standards and indicators that could create mechanisms to ensure the participatory and strategic development of the planning process. A study detailing urban planning and development frameworks applied in Khartoum historically explains how they influenced the creation of the different categories of urban poor identified in the studies and suggests possible strategies and policies for tackling their particular problems.

Finally, the report presents recommendations and guidelines for action plans, based on the results of the urban sector diagnostic studies. There are proposals for the spatial planning of new subdivision projects that have affordable basic urban services, the development of a socially sustainable housing market, the creation of transport sub-centres, and the promotion of local economic development that includes different microcredit schemes targeting the revitalization of social entrepreneur programmes.

Alioune Badiane
Regional Director
United Nations Human Settlements Programme
Regional Office for Africa and the Arab States,



1. SUMMARY

This report presents the summary of studies carried out through a collaboration between the Government of Sudan's Ministry of Physical Planning and Public Utilities and UN-HABITAT. Each section of this report presents a complementary analysis of different factors behind the growth of urban poverty in Khartoum State, taking into account five crucial sectors: land, physical planning, housing, basic urban services, and local economic development. These analyses allow for a diagnosis of the problems and an identification of existing potential, which is linked to the capacity of the Ministry of Physical Planning and Public Utilities to control and promote sustainable urban development. The report proposes capacity-building strategies to enable the ministry to achieve sustainable urban development. One study provides a systematic analysis of problems and opportunities to tackle them, providing inputs on specific pro-poor policies for the ongoing Khartoum Planning Project. A second study proposes changes in the structure of the planning ministry, a different approach to human resource development, and institutional partnerships with public institutions and the private sector, all integrated into a comprehensive capacity-building strategy. A third study provides alternative methodologies to monitor and evaluate the Khartoum Planning Project, based on standards and indicators seeking to ensure participatory, effective, and efficient control of the planning process. Finally, a study detailing the urban planning and development frameworks applied in Khartoum in the past explains the creation of the different categories of urban poor identified in the studies and also proposes specific strategies and policies to tackle their most critical problems.

The linkages among the different studies provide multiple inputs for proposals and recommendations for the Khartoum Planning Project. Key findings are presented below:

A) SECTOR STUDIES

The report presents the outcome of five sector studies: spatial planning, land, housing, basic urban services, and local economic development and its different links. The studies are based on a systematic analysis of multi-sectoral problems and their causes, particularly in relation to poverty, deprivation, and vulnerability¹.

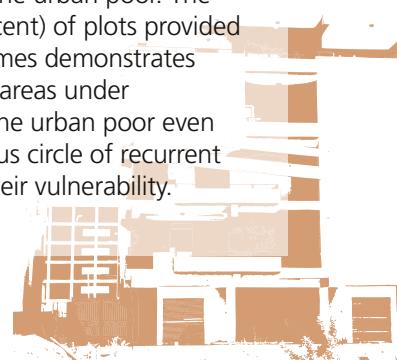
¹ These three definitions follow UNCHS criteria (Global Report on Human Settlement, 1996): poverty, as a lack of income compared to expenditures; deprivation, as the lack of certain basic services as habitat, social services, etc; creating the threat of sudden crisis; and vulnerability, as a permanent situation of deprivation and crisis.

People's habitat conditions and location in the metropolitan structure are of paramount importance for explaining the factors creating poverty: deprivation of basic resources, high urban expenditures, and a lack of opportunity for income generation. The rural poor are also considered in the analysis, which investigates the major causes behind their migration. Some recommendations are given on how to tackle the more critical problems; alternative paths for action are included.

During the last few decades, Khartoum State has experienced rapid, complex urbanization regulated by traditional urban planning approaches. The failure of consecutive "master plans" to implement pro-poor policies partially explains the growing number and complexity of urban problems, and particularly habitat problems, in Khartoum during its history. At the end of the 1980s, several factors caused a massive influx of displaced people, who gathered around Khartoum for survival. The governmental response, which involved preparing comprehensive master plans, was obviously insufficient to tackle the growing socio-territorial problems resulting from the rapid urbanization. However, some lessons learned by this exercise led to valuable governmental initiatives to cope with poverty and marginality during the late 1990s and early 2000s, targeting the belt of informal squatters around greater Khartoum. Although the initiatives generated dramatic evictions and complaints about human rights, a significant number of low-income populations were integrated into traditional neighbourhood structures. The different sectoral studies focus on understanding the reasons behind urban poverty in Khartoum.

A SHORT SUMMARY OF THE STUDIES FOLLOWS:

The **spatial planning** study identifies urban sprawl, low densities, and a "leapfrog" growth pattern as crucial factors in segregating the poor and making basic urban services unaffordable. The analysis shows that it is not enough to consider land as the only resource through which to settle the urban poor. The low occupancy rate (up to 50 percent) of plots provided through "sites and services" schemes demonstrates that. In addition, being located in areas under environmental threat segregates the urban poor even more and exposes them to a vicious circle of recurrent crises such as floods, increasing their vulnerability.



The lack of a comprehensive scope of actions and the lack of coordination of public policies regarding infrastructure, transport, public services, etc., create serious malfunction in urban activities and of course particularly affect the poor.

The **land** study highlights the difficulties the poor face in getting land ownership and tenure, because they cannot afford the different taxes and fees required for issuing title rights. The regulation of land markets with ambitious plot sizes and rigid subdivision standards explains the low occupancy. The poor find it almost impossible to build with permanent materials and difficult to engage in land transactions, which pushes them towards informal markets to cover their basic habitat needs. This means they are slowly removed from development possibilities, such as access to credit and income generation opportunities, etc.

The **housing** study reveals the lack of affordable financial mechanisms as the major reason behind the low level of construction, even among poor people who own land. Building regulations and the high cost of building materials (partially a result of the taxation system) negatively affect access by the poor to decent habitat conditions. Unregulated renting alternatives contribute to making the problem worse, although they provide a way to get into the city for those with an income source there.

The **basic urban services** study explains how high costs and the low quality of services contribute to increasing the gap between rich and poor. The poor are excluded from the water network and thus pay higher prices for lower quality services (e.g. water from water trucks). Sanitation requires further controls from local authorities, but the communities' habit of digging their own latrines keeps the issue under control. The garbage system is efficient in collecting waste but weak in disposing of it. Transportation costs normally exceed what the urban poor can afford, especially when travelling outside of the city.

The local economic development study reveals the changing balance between income and expenditure for the four categories of urban poor, relating to their housing and income generation skills. Lack of irrigation affects the development of rural areas and explains migration to the city. The linkages between rural poverty and urban squatting have been documented through a survey of income generation sources for both groups. This has uncovered evidence for the need to

generate sustainable mechanisms for the reintegration of segregated urban communities, while simultaneously creating the strategic infrastructure, skills, and financial resources to improve development opportunities in rural areas.

B) PRO-POOR POLICIES

An assessment of current policies is presented, with alternative recommendations for future actions, which are supported by specific programmes and projects for the short, medium, and long term.

Proposals for the spatial planning of new subdivision projects with affordable basic urban services include increasing densities in strategic areas, encouraging the development of a socially sustainable housing market, creating transport sub-centres, and promoting local economic development, including different microcredit schemes that target the revitalization of existing social entrepreneur programmes. Urban renovation² involves intervening in central areas and changing land uses and densities. It is proposed to include affordable housing projects in the ongoing downtown renovation plan that will create a new central business district, relocating current ministerial headquarters and industrial zones. The goal is to facilitate access by middle- and lower-income groups to the city centre, contributing to creating a multicultural and diverse higher density environment, with mixed land uses. A renewal³ of strategic zones is proposed in greater Khartoum, introducing higher densities and new transport facilities.

In remote areas, the strategy foreseen is neighbourhood revitalization, which empowers existing local economic development opportunities by supporting the construction of basic infrastructure for micro-production. In addition, rehabilitation activities will support local communities to improve their habitat conditions, taking advantage of industrial relocation plans to generate pro-poor settlements in the surrounding area. A pro-poor action plan is presented. In the short term, urgent actions will be implemented on a range of issues, from land disposal to settling populations with local economic development initiatives. In the medium and longer term, activities will

² Urban renovation here refers to the complete change on land uses and densities given by the Khartoum Structural Plan for the central area.

³ Renewal alludes to introducing some changes in land use and increasing densities, but maintaining the same population of the area, seeking to make basic urban services more affordable for lower-income residents.

involve shaping programme policy with regard to public transport, housing, and basic infrastructure.

C) CAPACITY BUILDING

The report presents a capacity building study, integrating a training need assessment and institutional and human resource development analysis, which assesses structures (hardware), managerial styles, systems and procedures, and staff skills and values (software). It reveals the major problems and opportunities at the Ministry of Physical Planning and Public Utilities, as well as its capacity to respond to the needs of the various categories of urban poor. Recommendations on how to tackle the most critical problems are included, assessing the ministry's capacity to implement pro-poor policies.

The Ministry of Physical Planning and Public Utilities has implemented different urban planning approaches. Regarding the administrative structure, the ministry faces a restructuring process that will shift it from a centralized, bureaucratic institution to a decentralized one, transferring responsibilities to the different corporations⁴ in charge of specific public services. The isolation of ministry departments has led to a growing institutional fragmentation. Attacking Khartoum's urban problems by sector has proved inadequate; there is a need to respond holistically to the complex nature of the urban problems identified. Corporations, although still public, introduce private components for financial sustainability and institutional upgrading.

Institutional fragmentation erodes the mission of the Ministry of Physical Planning and Public Utilities, with public authorities responding to the ministry and other organizations responding to the minister – each with their own managerial style, regulatory framework, funding capacity, and performance. Ministry headquarters and branches at localities face isolation and low capacity, eroding decentralization principles. Ministry branches lack coordination with localities and Popular Committees, which affects their capacity. New technologies such as a Geographic Information System and an intranet are proposed in order to support training and institutional change.

The report highlights the ministry's institutional gaps and bottlenecks in human resource management. It supports an action plan that covers short-term actions such as removing bureaucratic obstacles that affect the relationship of ministry headquarters and branches at localities; a mid-term and long-term goal is building partnerships with corporations, community-based organizations, and the private sector, within the framework of pro-poor policies.

D) MONITORING AND EVALUATION FRAMEWORK

The report presents alternatives for designing a framework for monitoring and evaluating the Khartoum Planning Project. It is proposed that consultative community mechanisms involving different stakeholders evaluate the planning process; while at the same time routine ministry work is organized to feed a permanent monitoring process. Short-term data will be collected, complemented by periodical assessments based on key indicators and community consultations, and will feed the annual reviews. Assessments every three years and a final evaluation provide progressive pictures of the impact of the plan on the key problems identified. The goal is to identify early the achievements in addressing the most critical problems in order to introduce necessary amendments on time.

These indicators are conceived to operate in line with the urban indicator programme, to get the appropriate information to sustain the process. The final goal of both monitoring and evaluation is to ensure that policies and programmes have proper follow-up (short term, medium term, and long term) to identify inappropriate approaches in time and to correct them. Measures to avoid repeating such mistakes can also be introduced, so as not to affect the project's overall performance.

The development of specific indicators to measure the Khartoum Planning Project's achievements contributes to addressing key problems. The design of systematic monitoring mechanisms provides inputs for periodical evaluations and correcting plans and programmes. This is different from traditional approaches, which are mostly focused on fulfilling administrative procedures, achieving sound financial accountability, and ensuring control of human resources, all of which are but a minor part of the overall plan. This report presents

⁴ Khartoum State Water Corporation, the State Water Corporation (a misleading name because it is in fact in charge of sewage), the Housing and Development Fund, the land department, and the Solid Waste Disposal Corporation.

possible alternatives to measuring the performance of the Ministry of Physical Planning and Public Utilities and the impact on inhabitants' welfare. The goal is to set up an effective tool for a permanent reorientation regarding decision making, flexible enough to introduce corrective measures whenever necessary.

An ideal five-year time frame is presented, with benchmarking for yearly monitoring, a review after three years, and a final evaluation at the fifth year, incorporating inputs to the plan as sector adjustments. At the end will be a global plan assessment, linked to the ministry's vision and values and Khartoum Planning Project content, and shared with all stakeholders.

The institutional framework within which this process would occur has been given particular consideration, taking into account the restructuring process of the current organizational chart of the ministry and certain cultural and social characteristics of Khartoum State. Taking advantage of the international experience in this field, some recommendations are included on the monitoring and evaluation framework design, in the context of cities facing rapid urbanization.

E) URBAN PLANNING AND DEVELOPMENT

This summary report presents the outcome of the urban planning and development report, sketching out the whole planning process and the implementation of urban and development policies. Documentation is presented of the national and state levels preparing the plans and the localities following up their implementation. Sources for this documentation include interviews with public officials and stakeholders involved in the planning process at different stages and to different degrees. The purpose is to provide a detailed diagnosis of problems and opportunities.

Urban planning processes in Khartoum clearly involve three levels: the national level, which is headed by the National Committee for Planning; the state level, which is in charge of the Ministry of Physical Planning and Public Utilities, recognizes differences between urban and rural areas, and deals with land uses and subdivisions, density control, and the supply of major infrastructure (roads, drainage, etc.); and the local level, which takes care of revenue collection, public services, local infrastructure, building, and sanitation control in localities (it is also in charge of the ministry's

local branches). All three levels work complementarily, following budgets that are coordinated by 1) the different departments of the ministry, 2) public service corporations, and 3) localities. Khartoum enjoys the privilege of being the seat of both national and state governments; it has ample resources to carry out social policies, backed by well-organized and established communities. But on the government side, the disconnection between central planning and local agendas used to block the actual implementation of development projects.

A clear indicator is the limited implementation of master plans, in part resulting from the Ministry of Physical Planning and Public Utilities' lack of capacity to coordinate central and local agendas, and in part because of a lack of community participation to legitimize the urban planning and development process.

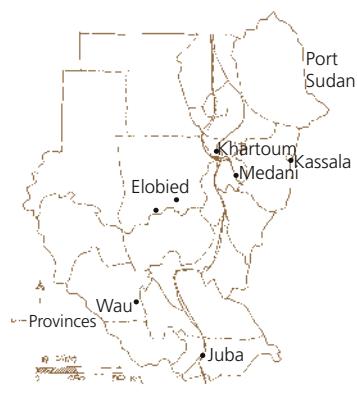
The ministry uses a technocratic planning approach, neglecting popular participation as a tool to legitimize state action plans and regulatory frameworks. Another crucial factor relates to the mismatch between timing and the resources of central and local administrations. While decentralization trends tend to pass additional responsibilities to local levels, experience has shown that this happens without enough resources for localities to perform their role properly. The existence of separate bodies such as the public service corporations operating outside the planning ministry further complicates the coordination of plan implementation.

The report analyzes the cycle for urban planning and development, identifying major bottlenecks. They result from centralization, repeating traditional approaches (which are rigid, long term, and non-participatory), and failing to cope with rapid urbanization problems. Market liberalization tends to push up prices and especially affects the poor; this requires urban planning and development frameworks and strategies to be reshaped. A detailed analysis of current master plan-related activities and local agenda design reveals contradictions between social priorities and implementation stages, demanding more strategic, flexible, dynamic, multi-sectoral, and sustainable approaches.

2. BACKGROUND

The census of 1973 indicates that Khartoum, Khartoum North, and Omdurman had 808,800 inhabitants; in 2005, the estimation was more than 6 million inhabitants. This means that the population grew by a factor of eight between 1973 and 2005. The average annual growth rate is estimated at 6.6 percent, going from 1.8 million in 1983 to 3.5 million in 1993 (Population Census, 1993). Metropolitan Khartoum is the largest city in Sudan (Figure 1), concentrating 26 percent of the national population and maintaining a growth rate that is three times as high as the national rate of 2.6 percent. This overwhelming predominance of Khartoum attracts massive migration from different regions, shaping its multiethnic urban pattern.

FIGURE 1. ADMINISTRATIVE MAP OF SUDAN

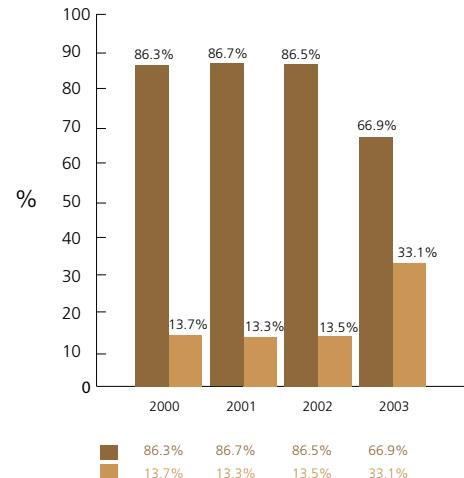


Source: www.unsudanig.org

However, such an extremely rich social structure creates multiple political and economic tensions, which result from the coexistence of different cultures, igniting periodical crises and conflicts among its very different inhabitants.

The statistics on migration from rural areas (Figure 2) show that in 2000, 2001, and 2002 there was a very small variation between the rural and urban population (reducing from 13.7 to 13.3 to 13.5 percent). But the percentage between 2002 and 2003 increased hugely (from 13.5 to 33.1 percent), marking a new era of urban growth. Such an increase can be explained by the incorporation of rural villages into the urban fabric and the arrival of migrants from different regions, particularly from the south, which at the time was fraught with conflict. Darfur was meanwhile facing successive droughts.

FIGURE 2. KHARTOUM URBAN AND RURAL POPULATION



Source: Khadija M. Osman, based on data obtained from the Central Statistic Bureau.

The actualization of peace, followed by the expected spontaneous relocation of IDPs⁵ (originally from the south) to their former homes, creates the historical chance to re-plan squatter areas and low-income neighbourhoods in general, in order to create better living conditions. However, the low flow of returnees to the south, the arrival of new IDPs, and the increase in poverty at the state level complicate such plans. Most rural villagers⁶ (Figure 3) live in survival mode and are potential migrants to metropolitan Khartoum, seeking better living conditions, social services (health, education, etc.), and income generation opportunities.

The state response to the massive rural migration and people fleeing the war was uniform: sites and services schemes, which, though they were effective in settling low-income communities initially, shaped Khartoum's current urban sprawl. Urban poverty increases proportionally to migration, reducing land and income generation opportunities. Informal settlements become more and more of an option for the vast majority who do not meet sites and services requirements⁷.

5 A total of 68,000 internally displaced persons have returned from Khartoum to southern Sudan. By the end of 2007, after the signing of the Comprehensive Peace Agreement, a total of two million southern Sudanese had returned, according to the UNMIS Regional Coordinator for Southern Sudan and Deputy Resident Coordinator for Sudan, David Gressly (Sudan Tribune, 28 March 2008).

6 Khartoum State includes 538 villages, distributed throughout a total urban area of 4,000 square kilometres.

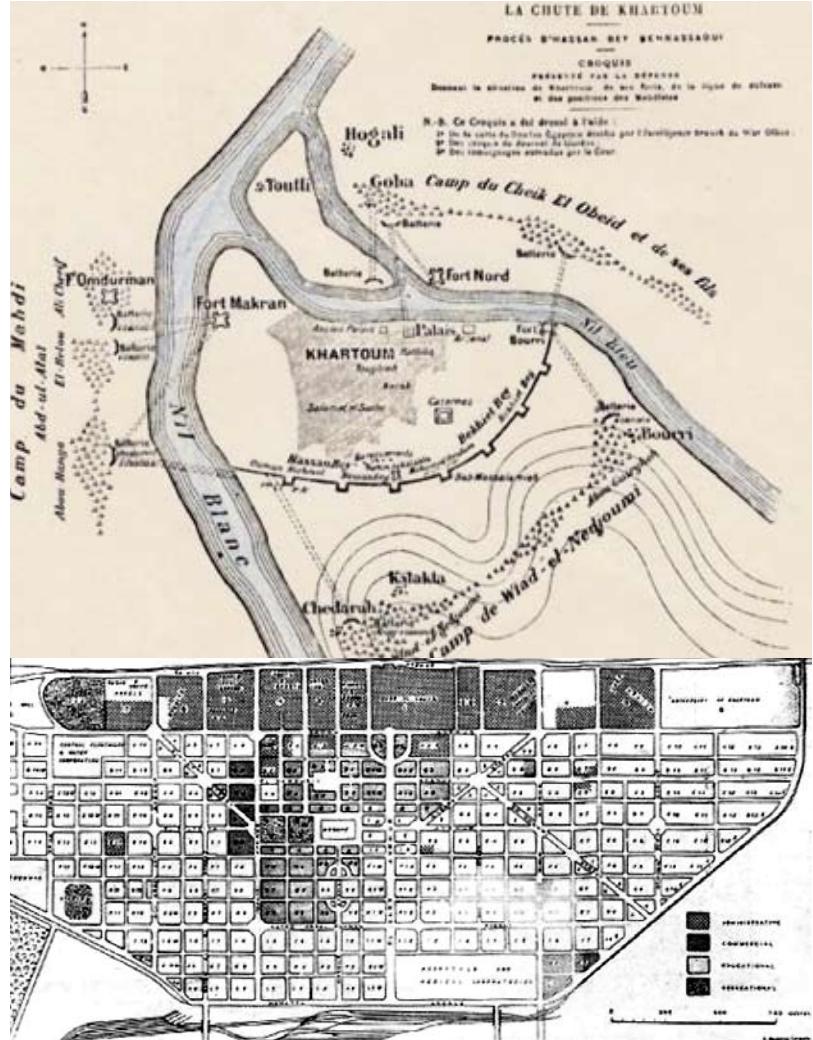
7 Particularly the issue of possessing identity documents and being able to demonstrate that they have lived in Khartoum for at least ten years.

FIGURE 3. RURAL VILLAGES IN KHARTOUM STATE

Source: Salah Osman, based on Ministry of Physical Planning and Public Utilities data.

Khartoum's planning tendencies were inherited from the British colonial times. It establishes a system of land use and subdivision based on three nationalities: English, Egyptian, and "native". Housing for native Sudanese was strictly controlled in order to keep the minimum number of people needed for supporting economic activities, but explicitly avoiding the mass settlement of Sudanese. The settlement of public officials was supported by providing land at nominal prices, on which houses could be built with permanent construction materials. This social hierarchy was supported by land allocation, creating three plot categories: first, second, and third class, with different plot sizes and lease periods, according to income strata. There was historically a fourth class category, reserved for economic migrants, known as "native lodging areas". The Village Land Regulation (1948, still under colonial rules) allowed such fourth class plots to be upgraded to third or second class if the occupant was able to build a permanent structure. This law was later abolished, accepting only the minimum plot size of third class for legal registration (200 square metres), which disallowed the poorest from accessing secure land tenure. Notoriously, this zoning mechanism has remained the same until today, controlling Khartoum's development throughout its history and constituting the basic structure for the whole socio-territorial planning system.

The planning approach consists of controlling land allocation, minimizing the occupation of agricultural land for urban uses. On the other hand, the plan seeks to keep most available land under governmental control. Since the 19th century, Khartoum has played a major role as a commercial centre, linking the three major towns of Khartoum, Khartoum North, and Omdurman. The key for such control was based on not providing land ownership, except for those minorities associated with the government bureaucracy machinery.

FIGURE 4. MC LEAN PLAN LOCATION 1912

Source: National Museum of Khartoum

For the rest, the practice of permanent demolition of residential structures and relocation of communities was the mechanism used to regulate the growth of the three towns. In 1900, a meticulous land survey was carried out and land claims were invited, investigated, and verified. All proven and undisputed claims were registered by 1925; new claims were not considered after that year, and all the remaining land was registered in the name of the government. This was considered a major achievement of the colonial administration (Bushra Babiker, 1997).

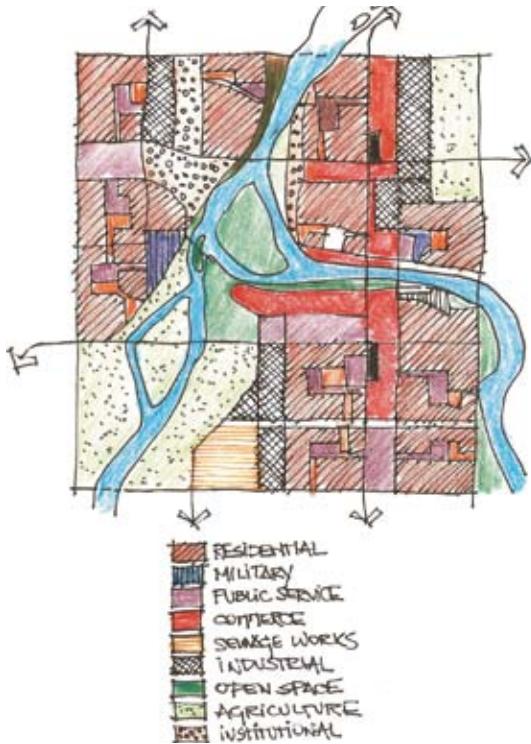
The land regulation act of 1925 sought the strict and effective use of land, preventing speculation. In 1908, Mc Lean carried out a "master plan" that defined an urban boundary, avoiding urban sprawl, and remained unchanged for 40 years. The master plan exercise targeted a population of 100,000 inhabitants in a total urbanized area of 11.5 km², implying a gross density of 87 persons per hectare. The urban plan consisted of a strong definition of the urban boundary through a surrounding wall, in the current Khartoum city

(Figure 4). This master plan marked the “golden era” of Sudan’s urbanism because it included the design of an urban pattern that matched the most modern landscape and architectural concepts of that time, shaping Khartoum into a “civilized” colonial centre. The pride of the citizens at that time would endure throughout the 20th century, serving as a reference model to compare with the future decay of the city.

The master plans that followed maintained essentially the same planning system, but differed from Mc Lean in assuming urban expansion. Land allocation was transferred to the central government, which was in favour of expanding the capital and loosening power to allow the local administration to impose planning rules to control such expansion. Gradually, the local town planners and their central town planning committees succumbed to popular demand for housing and the relentless pressure from above.

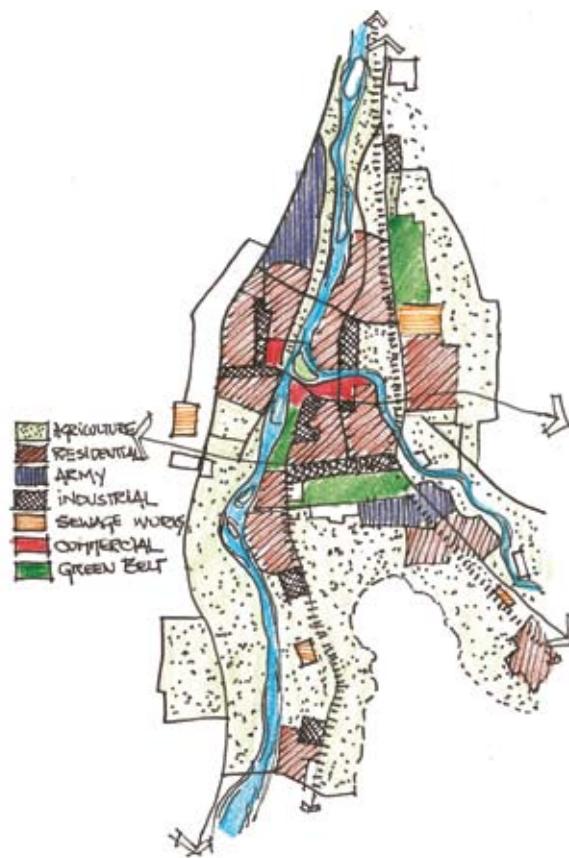
Dioxidais in 1960 (Figure 5) and Mefit in 1975 (Figure 6) proposed consecutive schemes seeking to respond to rapid urban growth through rational land use and road network expansion as a metropolitan city, including new neighbourhoods. But the Dioxidais master plan originally targeted 700,000 inhabitants in 182 km²; compared to its predecessor, it implied a significant reduction in density, reaching a density of 15 inhabitants per hectare. Mefit sought to increase densities, reaching 23 inhabitants per hectare, but this was still too low to cover infrastructure costs. The rapid urbanization and the lack of investment in infrastructure and social services shaped a greater Khartoum that was completely dependent on central Khartoum, in terms of social services, jobs, and business.

FIGURE 5. DIOXDAIS PLAN, 1960



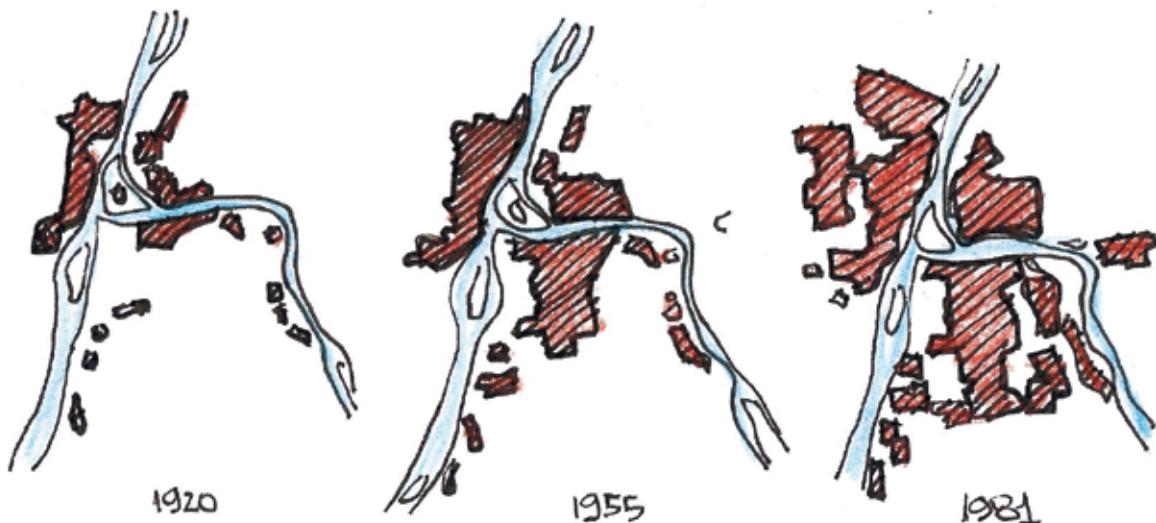
The radical decision of the Central Town Planning Board in 1978 to double and sometimes even triple the size of plots, in addition to increasing the number of plots planned, was a critical failure in meeting service and infrastructure supply. Although the Mefit plan was not officially approved, mainly due to administration shortcomings, its orientation and recommendations continued to guide the planning of Khartoum for the next two decades.

FIGURE 6. MEFIT PLAN, 1975



In particular, the housing component and some services received much attention. The main obstacles that hampered the performance included the general weakness of planning institutions, lack of finance, and political instability, as well as burgeoning squatter settlements that coincided with an unprecedented wave of rural-urban migration. The aftermath of the consecutive plans was the significant expansion of Khartoum in all directions, based on low-density schemes (Figure 7).



FIGURE 7. EXPANSION OF KHARTOUM 1920-1981

Source: Documentation provided by Salah Osman

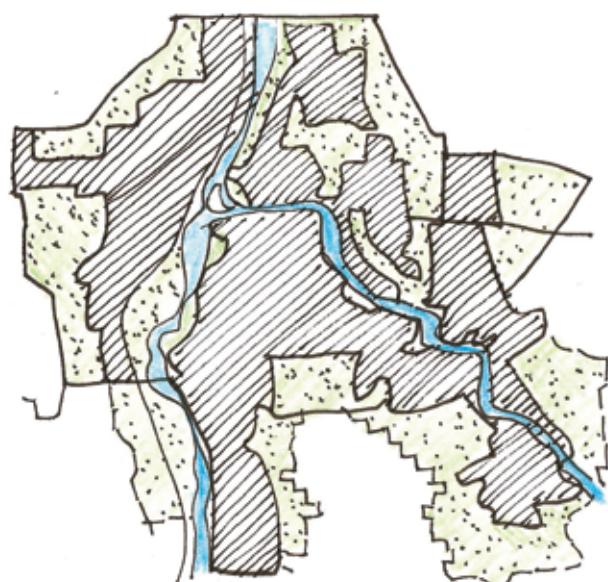
The year 1981 marked a downturn in the state's ability to control urban sprawl, "leapfrog" growth, advancement on agricultural land, and, in particular, the development of squatting practices by newcomers. Statistics from that time reflect a chaotic and risky situation of random urbanization and the inability of the public administration to deal with the problem. Towards 1985, Khartoum was surrounded by squatter settlements (Figure 8). This informal population reached around 50

percent of the urban territory at that time, creating a perceived threat to governance and rule of law.

In the 1990s, a new master plan, this time again by Doxiadis (Doxiadis Associates and A. M. Mustafa), targeted 5.3 million inhabitants in an area of 1,441 km², reaching a density of 37 inhabitants per hectare (Figure 9).

FIGURE 8. SQUATTER AREAS IN KHARTOUM, 1985

Source: Archive of the Ministry of Physical Planning and Public Utilities (provided by Salah Osman)

FIGURE 9. DOXIADIS AND MUSTAFA STRUCTURAL PLAN, 1990

Source: Historical archive of the Ministry of Physical Planning and Public Utilities (provided by Salah Osman)

The plan assumed urban sprawl and leapfrog growth to be inevitable, consolidating the existing situation, but did not introduce any new mechanism to control urban expansion. In parallel, the ministry explored different control strategies, developing combined operations of demolition, replanning, relocation, and incorporation. Implementation of the plan met the same fate of its predecessors.

Demolition was applied to those illegal settlements blocking the development of neighbourhoods or occupying roads or public areas (Figure 10).

**FIGURE 10. STRATEGIES TO DEAL WITH SQUATTER AREAS
1990-2001**



Source: Archive of the Ministry of Physical Planning and Public Utilities (provided by Salah Osman)

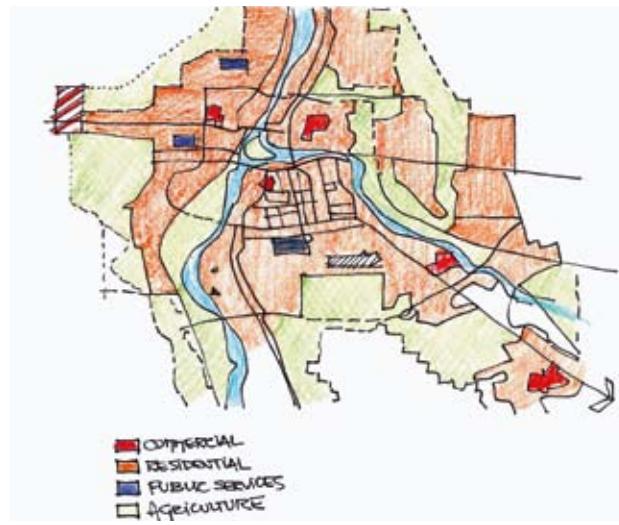
This methodology triggers numerous conflicts, social, political, and ethnic because it was associated with politicians' intentions to "clean up" certain areas dominated by political opponents.

Re-planning consists of targeting existing neighbourhoods, with or without land titling, but keeping the same population in their original neighbourhood. This operation was generally celebrated because it implied the recognition of inhabitants' land rights and the possibility of accessing certain services. Most traditional neighborhoods regularized their plots of third and fourth class, introducing roads and sanitation services that structurally improved their living conditions.

Relocation consists of transferring a population from one site to another and complements demolition, which is very traumatic and is criticized from different angles, particularly with the accusation that it brings segregation and is an apartheid policy (Suleiman, 2007). Incorporation, typically applied in old villages, provides roads and basic urban services, plus land titling to ensure tenure rights. Although such incorporation was crucial to getting rid of nearby squatters, the squatting practices around old villages continue.

The latest master plan 2000-2007 (Figure 11) repeats previous land use and, once again, expands urban boundaries, but it introduces new modalities to deal with rapid urbanization. It assumes the metropolitan character of the city, requiring major high roads and road networks to facilitate movement and targeting two major problems - flooding and inadequate settlements through replanning schemes.

FIGURE 11. THE LAST MASTER PLAN 2000-2007



Source: Archive of the Ministry of Physical Planning and Public Utilities (provided by Salah Osman)

Integrated into the successive master plans presented above, four mechanisms were historically applied to manage the problem of squatter housing in greater Khartoum:

- **Eradication:**

It was practised since 1927 and until the late 1970s. This led to changing the location of informal settlements and increasing urban land speculation

- **Land price control:**

It consisted of defining prices for residential land, then charging high fees for land exchange. That resulted in unprecedented high land prices and increased speculation. There was a lot of pressure on the administrative system to conceal the consequences of this policy.

- **Rent control:**

Several acts were issued in the 1970s to control the rent of houses. This resulted in hesitation among developers and owners to produce housing for the market; hence, demand increased, along with prices and speculation.

- **The Green Belt:**

A huge green belt was initiated south of Khartoum in the 1970s to stop the mushrooming of squatter settlements. However, it failed because the squatters built new settlements behind it. Other bounding concepts, designed to circumscribe the urban area with huge agricultural projects, suffered a similar fate.

By 1991, the Village Regulation Administration was activated; in 2000, the name was changed to the Urban Development Administration. A change in the policy of the government towards squatters was registered. The new package of policies included different solutions to different types of squatters. The main policy concepts for dealing with squatter settlements in the 1990s could be summarized in three major groups:

1. OFFICIAL CANCELLATION OF THE 4TH CLASS AREAS:

This approach upgraded 4th class areas to 3rd class. One of the more prominent examples is the relocation of "Ishash Falata" neighbourhood to Al Ingaz neighbourhood. Table 1 below shows a comparison between the previous settlement and the new settlement. With the same number of residential plots and the same population, the plot size was reduced (from 300-350 square metres to 100 square metres) and the total required area was decreased by 133 hectares (two-thirds). This increased the density from 167 persons per hectare to 455 persons per hectare (nearly 2.5 times).

TABLE 1. COMPARISON OF ISHASH FALATA TO INGAZ RELOCATION PROJECT

	New Ingaz neighbourhood	Old Ishash Falata
Number of residential plots	3,956	3,993
Population	53,000	53,000
Plot area	300-350 square metres	100 square metres
Total area	210 hectares	77 hectares
Residential density	167 persons per hectare	455 persons per hectare

2. DAR AL SALAM CONCEPT:

This concept is a simple sites and services approach, accompanied by the freezing of some building by-laws, especially those stipulating building standards. Basic services are provided such as potable water, levelling of the site, and protection from floods. The concept began by grouping several settlements around a serviced core, composed of 10,000 housing units. The idea is to replicate the practice in each of the three sections of Khartoum. Omdurman hosts a population double the size of the Dar Al Salam project. The concept has shown positive results and a shorter consolidation time (around ten years) than what was achieved in the former settlements. It was replicated around the localities until a total number of 339,667 families of the original squatters and IDPs were settled.

3. INCORPORATION OF VILLAGES WITHIN THE URBAN FABRIC:

Villages have been the main incubators for squatters over the last three decades. An active process of brokerage and speculation instigated the phenomenon. Incorporation first took place for villages within the urban fabric and then for remote villages. Since tens of villages are encroached upon by the city boundary, incorporation of these villages and their illegal extensions within the urban fabric is a sine qua non.

4. LINKING REGIONAL VILLAGES TO THE URBAN SYSTEM:

The programme to link regional villages to the urban system includes about 538 villages scattered around the region of Khartoum, hosting about 5 million inhabitants. The concept is to link these villages structurally by networks and roads. This effort began in 2006 and is expected to take about five years. It began by defining the villages, classifying them, and giving them the same status as localities. An extension of land for each village, to accommodate its expected expansion over the next ten years, is planned and distributed among beneficiaries against special deserving criteria. The criteria are the same as those for the national sites and services, but some conditions are eased and some stipulations frozen, in order to enable the citizens of these villages to have an incentive to remain and carry out agro-industrial activities. The philosophy is to empower villages as income generation sources, as well as to tackle the price of basic food and supplies in the metropolis. Both are crucial components of the village development strategy and the Structural Plan of Khartoum State.

3. POLICY IMPACT ASSESSMENT

The sector studies assess these different policies and approaches, evaluating their respective results. They have considered a comprehensive list of systematic government actions, from master plans to specific public works and service supply, analysing how they affect different target populations and territories. The study considers goals, methodologies, and impacts (Table 2).

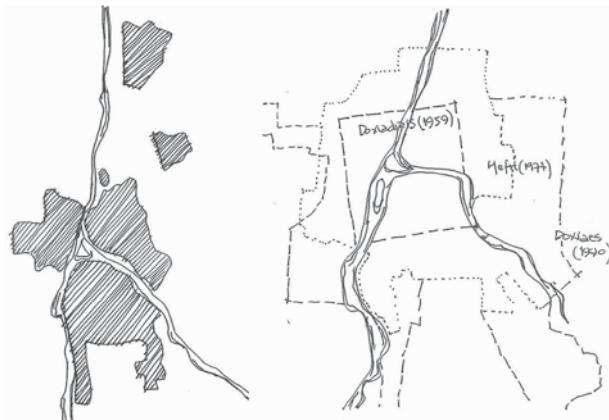
TABLE 2. POLICY IMPACT ANALYSIS

Urban policies	Target	Method	Impact
Master and structural plans	Organize urban growth	Land use and coordination of public works	Low performance. Horizontal urban growth
Incorporation and regularization	Consolidate existing low-income neighbourhoods	Supply of land rights and strategic roads	Urban upgrading of deteriorated areas
Sites and services	Facilitate population settlement	Land subdivision and relocation	Sprawl
Dar Al Salam	Settle the urban poor	Land subdivision services	Consolidated through land and some services
Housing Development Fund	Create different habitat alternatives	Land subdivision services and building	Financial problems reaching the urban poor
Public works	Connect the urban system (roads and bridges)	Road network	Connection of isolated areas
Public service corporations	Maximize supply of services. Minimize prices	Effective service management	Higher prices of basic services (water and transportation)

The target of the consecutive master plans was to control Khartoum's expansion. From the very beginning, different city boundaries were defined in order to achieve a density ratio through strict land use "zoning". Such approaches simplify very complex social variables and assume that, independent of their social status, people receiving a piece of land will be able to build on it and develop their economies. Rapid urbanization makes the urban boundaries obsolete as soon as they are established. The city has grown up permanently beyond its boundary (Figure 12), failing to allocate land for the growing number of urban poor, who are unable to afford the construction of their infrastructures and houses.

The comparison of the different master plans (Table 3) over the last century shows this permanent expansion, reflecting the search for increasing densities to make urban services affordable for the poor.

FIGURE 12. COMPARISON OF MASTER PLAN AND METROPOLITAN EXPANSION



Source: Salah Osman

TABLE 3. COMPARATIVE ANALYSIS OF SUCCESSIVE MASTER PLANS

Structure plan	Targeted populations	Total urbanized area per km ²	Gross density person-to-hectare
Mc Lean 1912	100,000	11.5	87
Doxiadus 1960-1980	793,000	1.82	44 designed 15 altered
Mefit 1975-1990	2,500,000	1.103	23
Doxiadus 1990-2000	5,300,000	1.441	37
Current situation (2007)	7,000,000	1.650	42

Table 3 shows that the original density (an average of 87 inhabitants per hectare in the Mc Lean plan) until 1990 was historically low: 87, 15, 23, 37, and 42 inhabitants per hectare, compared to other state capitals such as Nairobi, which, although it is still low, has 64.7 inhabitants per hectare (UN data: urban indicators. Kenya Country Profile, 2009). The current situation has pushed this number up again, reaching 42 inhabitants per hectare, although this is still low enough to make basic urban services affordable for the different categories of the poor⁸. For comparison purposes, density in Mexico is 58 inhabitants/hectare, London 45 inhabitants/hectare, Cairo 365 inhabitants/hectare, Tokyo 180 inhabitants/hectare and Mumbai 340 inhabitants/hectare. The correlation among densities, income, and living expenditure provide a clue to understanding the factors that shape urban poverty in Khartoum (Figure 13).

⁸ According to Acioley and Davidson (1996), when densities increase from 50 to 200 inhabitants per hectare, infrastructure costs decrease spectacularly.

FIGURE 13. THE RELATIONSHIP AMONG DENSITY, INCOME, AND EXPENDITURES



The inability of the successive plans to keep urban development under control motivated the creation of three major instruments to deal with rapid urbanization: replanning, including demolition and relocation; incorporation (Figure 14) of old villages into the urban fabric through new roads; and regularization (Figure 15) of existing neighbourhoods, without ownership titles and with more flexible regulations for issuing building permits (the method consists of developing technical documentation and legal titles to ensure land titles for existing neighbours).

FIGURE 14. MAP SHOWING INTEGRATION OF OLD VILLAGES.



Source: Salah Osman.
Photo by the authors

FIGURE 15. NEIGHBOURHOOD REGULARIZATION



It took place over the last 15 years, but after a robust replanning effort, a total of 160,903 families in 6 localities have benefited from this policy, as shown in Table 4.

TABLE 4. STATISTICS OF INCORPORATION OF ADJACENT VILLAGES INTO THE URBAN FABRIC

Area location	Total number of families incorporated
Jabal Awlyya Locality	37,515
South Green Belt	21,233
Eastern Nile Locality	33,590
North of Khartoum North	25,633
North of Omdurman	10,962
Omdurman Locality	21,970
Total	160,903

In general, the impact of the three approaches can be considered positive, as they facilitate integration and speed up the consolidation of low-income neighbourhoods, encouraging investment in basic services, upgrading living conditions, and minimizing living expenses.

However, during the last decade demolishing substandard settlements has received ample criticism from the international community, because it was seen to be part of an intentional political strategy that persecuted southern Sudanese and populations from Darfur, alleged opponents of the government. "The government undertook a process of systematic demolition of settlements, relocating families and re-allocating land. As a result, the government officially recognizes only 400,000 displaced persons in Khartoum; the rest have been redefined as squatter settlers" (Lautze and Osman 2001: 80-82, quoted by Orchard, 2006).

It is further explained that "for decades urban planning in Greater Khartoum has been associated with violations of human rights. Demolitions and relocations have driven the poorest to the furthest peripheries of the city. In the case of IDP camps, residents have been given a temporary usufructuary (usage) access to land while in the squatter areas land has usually been squatted and illegally subdivided. Although some resist, IDPs mostly submit to urban planning decisions in the hope of eventually getting land ownership in subsequent plot allocations. Most know little about plot prices and official criteria of plot allocation. Rumours abound and some families move into the IDP camps before the demolitions and establish a *racuba* – a shelter made of branches, plastic sheets and cardboard – in the hope of getting access to legal title. The hopes are often dashed in an untransparent and corrupt system which privileges wealthier people" (de Geoffrey 2005). Another specialist (Rick Delhas, quoted by de Geoffrey) declares that "there are four reasons

why the Sudanese Government displaced people. First, displacement was used as a counterinsurgency tactic. Second, the war economy needed cheap labour" (de Geoffrey, 2007:22).

From this perspective, there is a clear intention from the government to manipulate urban planning and land management instruments to segregate political opponents. In addition, it is explained that another reason for such evictions is that most of the land on which the first waves of southern IDPs settled has now acquired significant commercial value.

From the official government perspective, such criticism is in fact an exaggeration of isolated cases and a misunderstanding of the policies applied. Beyond this, there is a consensus to respect the need to review the policies using the "Guiding Principles" as a general legal framework⁹.

Sites and services schemes have the target of facilitating the settlement of a population. The method is simple: subdivide land in available areas, generally on the city outskirts; relocate people who have settled temporarily; and provide them with legal titles. The assumption is that this population by themselves will build the necessary services and houses. The studies have shown that such assumptions were wrong, because of the low percentage of plots (below 50 percent; see Table 5) occupied by families who can afford their houses and basic services. There is evidence that most of the beneficiaries prefer to remain in the city squatting, renting, or living in the camps rather than move to low-density neighbourhoods¹⁰, which is the main goal of planning policies.

The direct impact of applying such a habitat approach was the horizontal expansion of the city, creating urban sprawl and "leapfrog" urban development. Both effects were very negative, because the poor were segregated from development possibilities, with unaffordable services.

Dar Al Salam (Figure 16) appears to be a natural evolution of the "sites and services" approach, in the context of humanitarian emergencies. It assumes that land by itself is not enough to really settle the urban poor; it is necessary to also supply some strategic services such as elevated water tanks, social facilities such as schools and health centres, and depending on the group, eventually items such as food.

FIGURE 16. MAP AND VIEW OF DAR AL SALAM AND ITS LOCATION

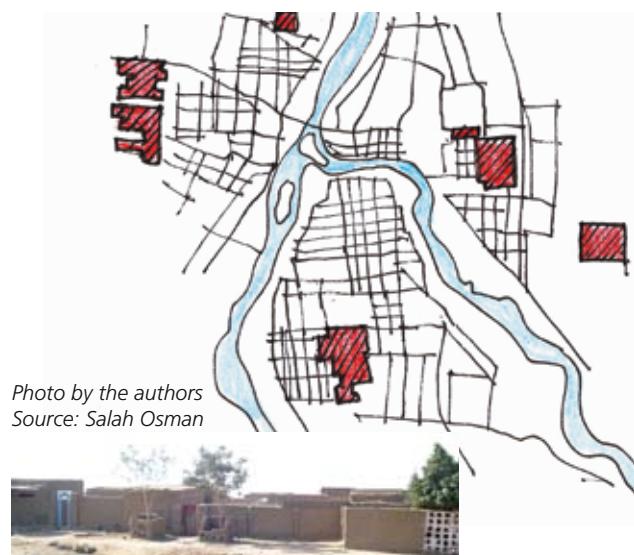


TABLE 5. DEVELOPMENT RATES IN SITES AND SERVICES PROJECTS 1959-2005

Group and year	Build up plots percentage	Under construction percentage	Vacant plots percentage	Average annual supply (plots)	Total group supply (plots)
Group 59-60	98.7	1.0	0.3	2,330	4,660
Group 61-70	87.4	5.8	6.8	2,443	24,430
Group 71-75	57.9	7.1	35.0	908	4,540
Group 76-81	25.8	7.6	56.5	2,555	15,330
Group 82-87	45.8	13.2	41.0	509	3,054
Group 88-97	27.0	9.0	64.0	12,000	120,000
Group 98-05	14.0	3.0	83.0	16,000	128,000
Total supply of Site and Services 1959-2005					300,014
Average	40.1	8.1	51.7	6,250	

Source: Osman, 2001:11. MPPU

9 The Guiding Principles is an agreement signed by the Governor of Khartoum, the European Commission, and the UN establishing the obligations of the government to fulfil human rights principles while relocating IDPs.

10 Studies show that creating the necessary densities to make basic urban services affordable for the urban poor takes 20 to 30 years, on average.

On the other hand, depending on the particular conditions of the inhabitants, the application of more flexible building regulations which allow people to build at their own level and pace, without imposing rigid restrictions is key to speeding up and facilitating the

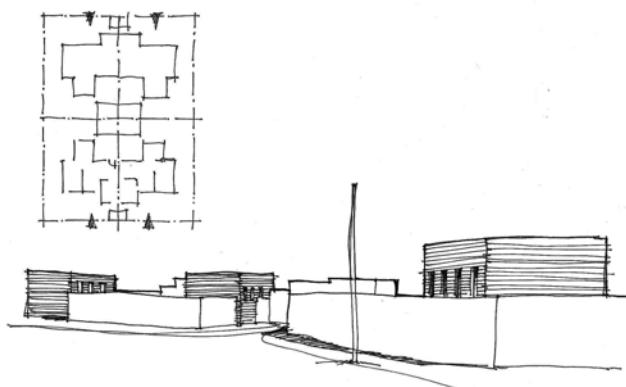
settlement process. The impact of Dar Al Salam was successful: with 100,000 housing units, a similar number of families accessed a habitat with a good location and full services (see Table 6, below).

TABLE 6. SUMMARY OF ACHIEVEMENTS OF THE OFFICIAL RESPONSE TO SQUATTERS AND IDPS, 1990-2005

District	Locality	Settlement	Number of plots	Total district
Omdurman		Al buga'a	26,077	
		Al amir	16,930	
		Naziheen	40,096	
		Dar alsalam	71,112	
		Total Um Baddah	154,215	
		West harat	9,624	
		Marzoog	9,164	
		Al fat'h 1	37,200	
		Total Karrari	55,988	210.203
Khartoum		Mayo unity	6,710	
		Soba salama	10,521	
		GadsyaDikhinat	3,025	
		Dar al salam	15,000	
		Ingaz	550	
		Total Gabal Awlya	35,806	35.806
Khartoum North		Al Baraka	5,224	
		Al Takamul	3,400	
		Wad Albashir	2,315	
		Ingaz	1,547	
		Dar al salam	15,216	
		Total Sharg Alnil	27,702	27,702
Total No. of Plots Allotted 1990-2005			273,711	

The Housing Development Fund (Figure 17) is a "revolving fund" supplying a complete housing solution for the whole population spectrum, but especially the urban poor supplying plots, housing, infrastructure, and social services. The method is based on massive construction in the urban outskirts, through soft credit repayable on a hire-purchase basis over 12 years. Since its creation in 1962, when it was a small department in the Ministry of Engineering Affairs (now Ministry of Physical Planning and Public Utilities), the Housing Development Fund has grown. It became an independent body in 2001, giving the fund power to compete in the low-cost housing market. The strategy consists of supplying land at nominal prices and removing taxes for building materials (black cement, etc.).

FIGURE 17. EXAMPLE OF PROJECT FROM THE HOUSING DEVELOPMENT FUND



Source: Plant belongs to the Housing Development Fund. Photo by the authors.

The Housing Development Fund also seeks to attract investment to redistribute wealth through a cross-subsidy scheme. There are three types of housing units provided by the fund. The first unit, under 280 square metres, targets popular housing demand and requires an average monthly payment of SDG 143. The second type, a middle class (economic) housing unit, requires monthly payments of up to SDG 360. The third type, "villas or apartments" for upper income groups, has a monthly payment that exceeds SDG 400. Official statistics (Housing Development Fund 2008) reflect the fund's decision to encourage the popular housing offer (the first type), building 11,952 units between 2002 and 2007. Only 4,608 units were built for the middle class and just 248 units for the upper class.

However, although these achievements are important, they have a limited impact on creating a market. The studies estimate that public housing covers only 10 percent of the existing market, with 90 percent being done through self-help construction. The estimated total housing deficit is 22 percent of the housing stock, which is 650,000 units. Sixty percent of the housing stock is considered to be in poor condition. Assuming that the estimated deficit is 183,480 units and that 390,000 units are in poor condition, the total number of housing units required is 473,480. Further investigation verifies that an additional 60,000 units per year are needed as part of the regular demand. Considering that 11,952 popular housing units were built in 5 years (an average of 2,390 units per year), with a demand of 60,000 units per year the Housing Development Fund supplied just 3.9 percent.

The sector studies consider the applied financial mechanism to be the reason for the poor performance of the fund as a genuinely affordable alternative for the majority of the poor. Although the credit introduces cross-subsidy schemes, transferring funds from the upper class to the lower social class, it in fact does

not produce the results reflected in the figures, as construction volume remains limited. A bottleneck facing the fund is a shortage of available land on which to undertake massive construction, which is profitable for private companies engaged in the construction process. This limitation leads the fund to build outside of the urban fabric, making its offers more unaffordable and unattractive for the poor.

Public works historically played a relevant role in helping the poor to get inside the urban fabric. The incorporation of old villages was done intentionally through new roads that connected them with the existing urban fabric. Significant efforts were made to connect the urban structure (Figure 18), building new roads that connected consolidated Khartoum with greater Khartoum. Land prices reflect the impact of the new roads in poor areas. The lack of bridges connecting the different riverfronts emphasizes the gaps among Khartoum's sections, concentrating most of investments on one side. Recently, the planned construction of new bridges and their potential to strengthen links among previously isolated areas have been reflected in land prices.

FIGURE 18. ROAD NETWORK CONNECTING DIFFERENT AREAS OF KHARTOUM



The urban services corporations, previously purely public organizations, are now outside of the traditional structure of the ministry. These bodies, such as the Khartoum State Water Corporation, the Electrical Corporation, the garbage service, and the different private transport companies, have as their main goal the introduction of efficiency into urban service delivery. In theory, this should imply less cost, more quality, and more efficiency in the use of resources.

The studies compare water pricing as an indicator of income percentage spent on water. This reaches more than 10 percent for the categories described as urban poor, and it is estimated that for lower income groups the actual cost of water is 5 times higher than for the rest. This is mostly because of the lack of networks, which obliges them to buy water from street vendors.

Sanitation is a problem in areas where the weak soil makes the installation of pit latrines difficult. Drainage presents a serious challenge because of badly designed channel slopes, which cause serious flooding. In addition, garbage is disposed of in drainage channels, aggravating flooding risks. Garbage generally is successfully collected, but the system still faces difficulties in the final disposal stage.

With regard to transportation, it is completely private, tariffs are high, and services are not available in greater Khartoum, where the poor use donkeys, trucks, and other cheap means of transport. There is a clear correlation between the speed at which people move and their income. Those in the consolidated urban areas commute on highways in modern cars. The disappearing middle class uses public transport along central avenues, while the poor spend a high percentage of their income on public transport, or use donkey carts in greater Khartoum. Many of the most vulnerable, such as the handicapped and the unemployed, remain isolated in segregated zones on the metropolitan outskirts, where practically no transportation and roads are available at all.

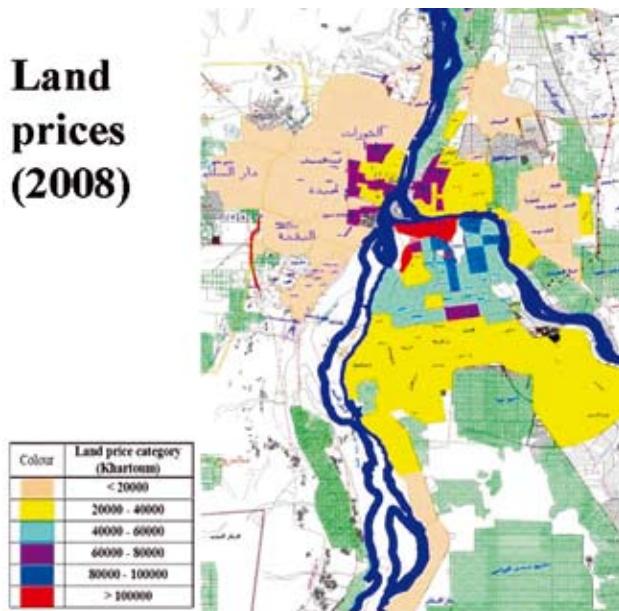


4. DIAGNOSIS OF URBAN-RURAL POVERTY

The studies summarized here identify three major factors that cause unsuitable and unaffordable habitat conditions for the poor: socio-territorial fragmentation, mono-functional urban uses, and a disconnected urban structure.

Socio-territorial fragmentation is a factor because it was observed that real estate dynamics, reflected in the enormous gaps among the different categories of land prices (Figure 19), tend to push the poor out of the urban fabric, creating a clear duality between the "formal" city (basically consolidated Khartoum and most of the centre of Khartoum North and Omdurman) and the separate "informal" city (basically greater Khartoum) and further reproducing fragmented urban patterns. This urban structure reflects mono-functional urban uses, emphasizing the dual city effect. Finally, there is a disconnected urban structure, in which the formal areas with roads and easy access by relatively cheap transportation contrast with those areas that have difficult access because of inadequate roads and relatively expensive transportation. This metropolitan "mosaic", working in parts, results in extremely inefficient and slow socio-economic progress and affects all inhabitants, but especially the urban poor.

FIGURE 19: LAND PRICES MAP (2008)



Source: Prepared by UN-HABITAT team in Khartoum based on information provided by the judiciary and the Ministry of Physical Planning and Public Utilities.

Such factors shape three phenomena. Urban sprawl results from the expansion of low density neighbourhoods, mostly because of the application of "sites and

services" and similar schemes, which are designed on the assumption that supplying land at nominal prices is enough to ensure the settlement of inhabitants in general, and the poor in particular. Secondly, there is "leapfrog" development, caused by urban growth that targets new areas beyond the consolidated city boundaries (such as old villages) and advances on agricultural land. The socio-territorial pattern of these new areas does not match their surroundings, creating tensions among neighbours. Thirdly, there is social segregation and urban fragmentation.

The first two phenomena directly affect the habitat conditions of the poor, who, even if they are able to access a plot, cannot afford to connect to water and sanitation facilities or build permanent houses. Such a situation leads them to settle informally in areas that lack basic social services and infrastructure, with expensive living conditions and scarce income generation opportunities.

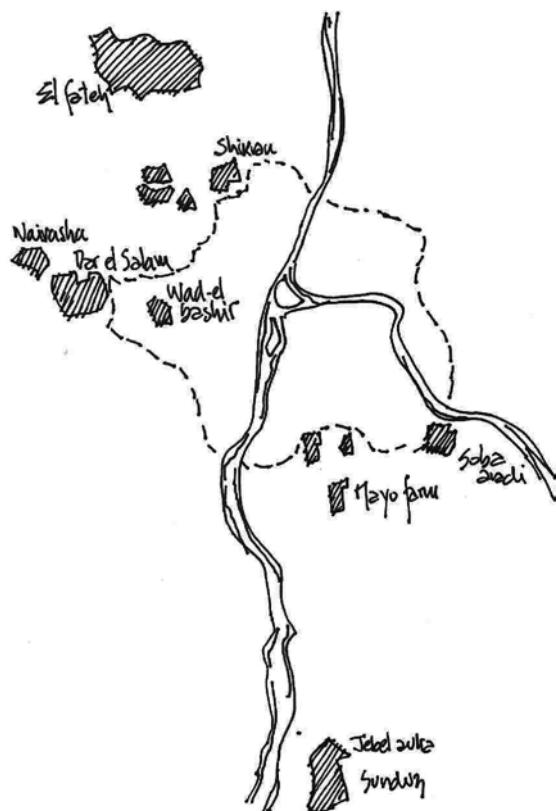
Their hope is to survive while they save money to be able to afford housing construction costs in the (remote) areas where they own land. This situation aggravates the problems and creates the third phenomenon segregation and fragmentation. The remote location affects the socio-economic performance of low-income groups because of the high transportation costs. Informal squatters in unsuitable areas create isolated "ghettos", and, apart from suffering from poverty, experience stigmatization from the rest of the society. Crime and other illegal activities inevitably increase. The combination of variables mentioned is presented in Figure 20.

FIGURE 20. FACTORS SHAPING POVERTY IN KHARTOUM

Factors	Low density and rapid urbanization	Metropolitan advance on agricultural land	Growing social gap, high urban living costs
Urban phenomena	Urban sprawl	Leap frog urban development	Urban duality, segregation and fragmentation
Key problems	High percentage of unbuilt plots (lack of funds + speculation)	General poor and unaffordable habitat conditions	Scarcity of land - high cost of housing
Causes	Unaffordable services, housing & lack of employment opportunities	Unskilled labour force to adapt from rural to urban income generation activities	Lack of land ownership, stigmatization, High cost renting in inner city
Urban poor category	Poor neighbourhoods in remote locations	Poor urban villages	Informal squatter and IDP camps, Overcrowded renting in inner city

Two categories of urban poor can be identified in the uneducated labour force: those working mostly in the countryside (the so-called "traditional category" of the poor) and the IDPs or "emergency poor" (Figure 21), who have emerged as a result of extraordinary situations. A third category, sometimes termed the "new poor", involves those previously belonging to the middle class (public servants and professionals), who became poor after the application of liberalization policies. As the state economy was tightened to adjust to the plans, low salaries and the removal of subsidies for public services¹¹ resulted in poverty for a new set of people.

FIGURE 21. LOCATION OF IDP CAMPS



Source: UNHCR. www.unsudanig.org

Another possible classification for poor habitat types can be taken from *Urban Sudan Slum Study* (Galal El Din Eltayeb 2005), which identified three types: 1) inner city slums, which are areas that are annexed and engulfed by urban extension, e.g. a former village (Ushash Fallata), which has been redeveloped and whose dwellers have been moved farther out; 2) outer slums, which are areas that have been planned by the authorities and distributed to the landless; and 3) squatter settlements, which are built on land illegally occupied by newcomers.

The residents in these areas are either from southern Sudanese tribes (Dinka, Nuer, Shuluk, etc.) or from

western Sudanese tribes (Fur, Nuba, Mseiria, Zaghawa, Masalit, Borno, Rizeigat, etc.) originating in Kordofan and Darfur. Living conditions, as expected, are very bad. In this context, having been denied construction rights (even mud, because it is considered a semi-permanent material), the residents resort to erecting their shelters from cardboard, sacks, tin, and plastic sheeting. Taking advantage of background studies like the above slum study, different types of urban poor have been identified in this report and serve as a guide for the different sector studies: those living in traditional low-income neighbourhoods, with secure tenure but not necessarily with access to the urban fabric; old villages, with communal land tenure and IDP camps, where food and basic education and health is supplied, but without secure land tenure; and squatter areas, without secure land tenure or social services, but with a location that facilitates the survival and eventual development of micro-business activities, minimizing transportation costs.

Each of these different categories of habitat/poverty conditions very much influences income and expenditures, reflected in their housing, basic urban services, and local economic development. From the side of both expenditure and income, renting alternatives can be found in the three different types, which create real estate markets, formal and informal, with their own rules and characteristics. Knowing these rules is important for understanding the socio-territorial dynamics behind the duality that exists with formal and informal structures. The rationale behind camps is a response to emergency and war-related conflict, while state, NGO, or UN relief is often designed and planned with a transitory character.

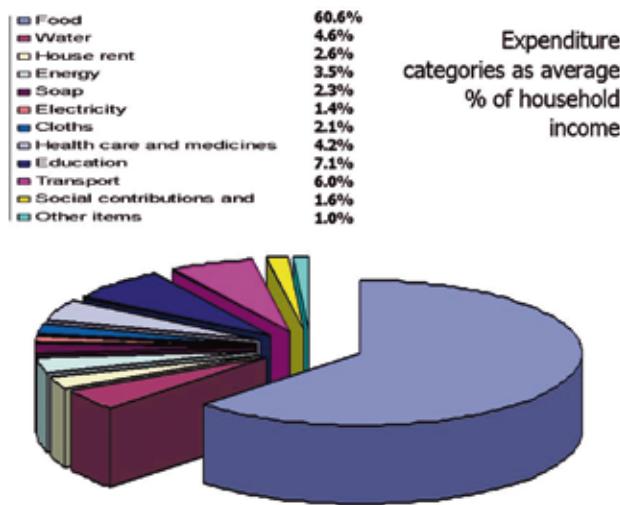
The biggest problem in quantitative and qualitative terms was the squatter areas during the 1990s because they represented a significant percentage (depending of the period, reaching up to 60 percent) of the total area of greater Khartoum, constituting a belt around the city completely outside of governmental control¹². This situation has led the authorities to undertake violent demolition and relocation, which dramatically reduce the areas occupied by squatters. The application of these policies has drawn criticism and international concern, but locally it is considered an achievement because it allows the Ministry of Physical Planning and Public Utilities to regain control of the urbanization process. Low-income neighbourhoods, although they might have secure tenure, reveal the city's duality because of their lack of basic urban services. They live within a poverty cycle, building and rebuilding basic mud huts, as their limited incomes make the construction of a permanent house difficult.

11 For Ahmed and El Battani (1995), this new category is estimated to be 20 percent of the total number of poor, which is defined as those earning less than USD 1 per day.

12 Such is the case with the Mayo squatter area, famous because even the police are unable to get inside.

This brief analysis allows an exploration of pro-poor ideas from a general perspective: the urban poor are not only living in camps or squatter areas, where they have access to a few income generation strategies, but are also living in shanty towns without the income to afford basic urban services. The magnitude of the problem of supplying a decent habitat for the poor must be addressed through inclusive strategies, empowering communities to enter the powerful Khartoum economy. Studies on expenditure among households in IDP and squatter areas in greater Khartoum reveal that just house, water, and transport costs use up 71 percent of the family income (Figure 22). Despite such discouraging figures, the enormous sacrifice made by these families when they invest 7 percent of their income in education is quite remarkable. The figures emphasize once again the importance of people's ability to access serviced areas, in order to minimize their cost of transportation (6 percent).

FIGURE 22. EXPENDITURE CATEGORIES AS AVERAGE PERCENTAGE OF HOUSEHOLD INCOME (IDPS AND SQUATTERS)



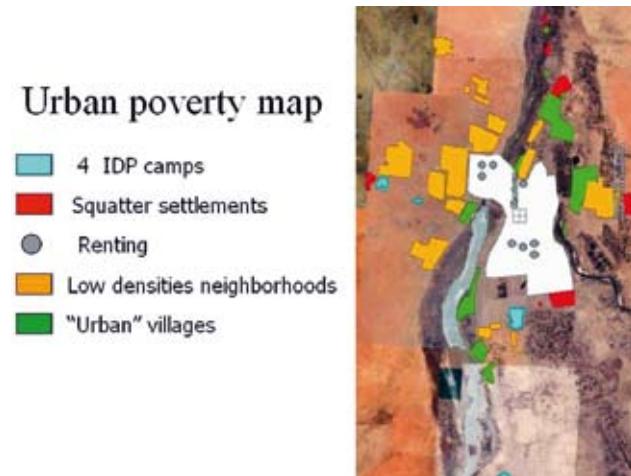
Source: Baseline study for the Urban Poverty Alleviation Project, assessing the project's impact on household budget in IDP and local communities in Khartoum, Khartoum North, and Omdurman, 1999, pp. 6-7; 12.

In order to analyse the different types of urban poor, socio-spatial criteria were adopted and the poor were classified according to their location (Figure 23): IDPs living in camps; squatters located in different areas (including those living in old villages incorporated into the urban fabric, with numerous low-income families); low density sites and services, though these are only sites because they lack basic services such as water and sanitation and have a low level of occupancy; and renting in different areas, which involves living in overcrowding conditions, with high expenditures.

The map reflects the duality between the consolidated city and greater Khartoum. The former is compact

and has full services; it is an area that includes most of Khartoum and the centres of Khartoum North and Omdurman. This contrasts with greater Khartoum, which has a predominantly fragmented pattern and limited services, and shapes a different habitat for the urban poor. Assuming an estimated 7 million total inhabitants in the metropolis, 60 percent, or 4,200,000, were considered poor.

FIGURE 23. KHARTOUM URBAN POVERTY MAP



Source: Elaborated by the UN-HABITAT team, Khartoum, 2008.

This figure can be further broken down: 38 percent live in low density areas, typically sites and services schemes; 23 percent live in squatter areas¹³; 16.6 percent live in old villages incorporated into the urban fabric; 11.08 percent live in higher densities, typically crowded areas near markets where the poor provide domestic services or are microenterprise entrepreneurs; and 8.52 percent live in formally designated IDP camps (Figure 10). An assessment of renting has shown that this type exists in all categories, operating in formal and informal markets (Table 7).

TABLE 7. CATEGORIES OF URBAN POOR (2008)

	IDP camps	Squatter areas	Villages	Low-income neighbourhoods	
				High middle density (including renting)	Low density (sites and services)
Estimated area	18 km ² 1,800 hectares	15 km ² 1,500 hectares	38 km ² 3,800 hectares	12 km ² 1,200 hectares	94.5 km ² 9,450 hectares
Estimated population	400,000	400,000	700,000	700,000	2,100,000
Density inhabitant-hectare	222	266	184	583	100
Percent of total population	5	5	10	10	30
Percent of urban population	10	10	15	15	50

Source: UN-HABITAT team in Khartoum

¹³ Calculation was done based on a spatial analysis through Google Earth and field surveys, complemented with several assessment reports that estimated IDP populations in camps.

The categories "IDP camps" (Figure 24) and "squatter areas" (Figure 25) are different; while the camps have order and security of tenure, the squatter areas have no legal recognition and are perceived by neighbours and public officials as a "threat" to order and the rule of law. Khartoum has a long history with squatters, since the first squatter area appeared in 1927 beside the Khartoum North industrial area. There is always a link between squatting practices and migration, which can be seen in the newcomers' ignorance of land allotment systems. The influx of migrants to Khartoum in 1961 was unprecedented. This was exacerbated in 1983 by the drought in the west and the war in south Sudan, which pushed up the national urbanization ratio (urban population to the general population) to 13 percent by 1987. It is estimated that 96 squatter settlements circled Khartoum at that time, hosting 600,000 inhabitants or 40 percent of the greater Khartoum population.

This figure reached 60 percent by 1989 - 1990. But government efforts to deal with the problem in a developmental context, in addition to massive demolition campaigns, brought the figure down to 5 percent of the total Khartoum population for the period between 2001 and 2007. Diversification in the residences of the urban poor is crucial to understanding and addressing the urbanization problems of Khartoum.

Average densities do not reflect important differences: 222 inhabitants per hectare in IDP camps and 266 in squatter areas represent high densities that create a risky sanitation scenario (considering the lack of basic infrastructure). Basic urban services are a crucial problem because, although networks are available, connecting illegal shelters is prohibited, as they are considered non-permanent constructions. A positive factor for these communities is cheaper transportation because of proximity to the city fabric. The maximum densities occur in low-income/high density neighbourhoods, which have 583 inhabitants per hectare in consolidated areas close to downtown, with overcrowded families sharing multi-storey buildings. Ten percent of the poor live in these areas. This category is associated with those poor people who are able to leave IDP camps or squatter areas and rent basic bedrooms. Although this habitat also represents sanitation-related threats, it is adopted by those poor seeking proximity to the consolidated areas. Low income/low density neighbourhoods, sites and services, and old villages have average densities of 100 - 184 inhabitants per hectare and are disconnected from local economic development opportunities.

The number of IDPs living in squatter areas is crucial data for assessing how habitat conditions influence development possibilities. According to the Feinstein International Study Centre (Jacobsen 2008), most IDPs live outside the camps, a number estimated at

between 1 million and 1.28 million. There are up to 391,000 IDPs in the camps, and a total of between 1.33 and 1.67 million IDPs in all of Khartoum.

Communities categorized as old villages (Figure 26) have relatively high densities, which create land tenure problems even though its inhabitants access land titles based on communal documents.

FIGURE 24. IDPS IN REFUGEE CAMPS

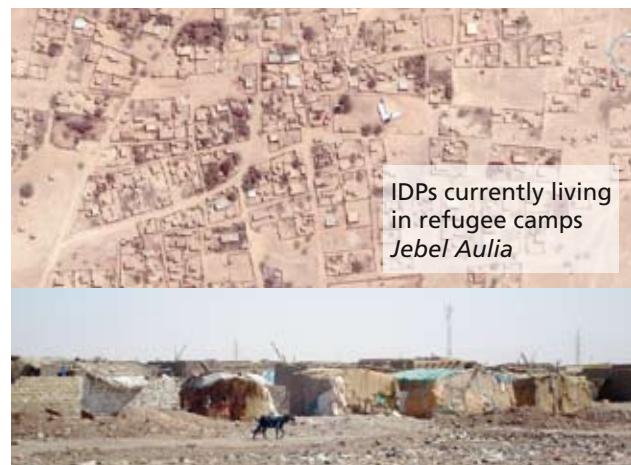
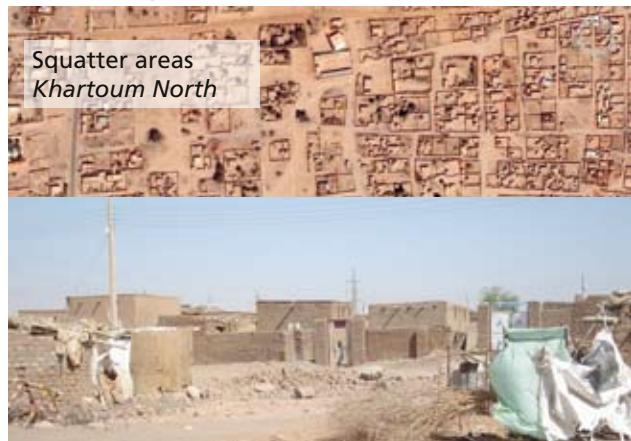


FIGURE 25. SQUATTER AREAS



The settlement of newcomers in the surroundings without any legal documents makes them "de facto" squatters. In the case of low-income/high density areas (Figure 27), where the urban poor rent, the advantage is the access to sources of income generation; however, there is overcrowding and expenses are high¹⁴.

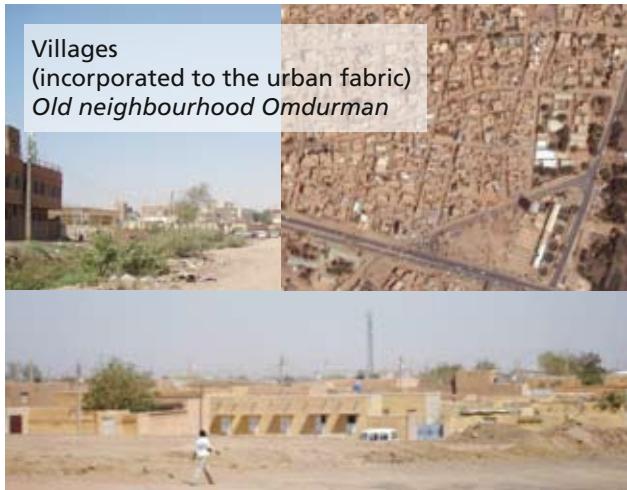
The high cost of construction materials makes it difficult for poor families to afford the traditional self-building process¹⁵, taking four years on average to build a single room. After such a long time renting or staying in another place, many choose to keep their plots unbuilt,

14 The studies shows a great disparity between monthly payment of rent alternatives between low and high densities neighborhoods, varying between SDG 60 and 400. Assessment of average low-income groups affordability is SDG 150.

15 Average construction prices vary between 117 and 1,200, depending on taxes application.

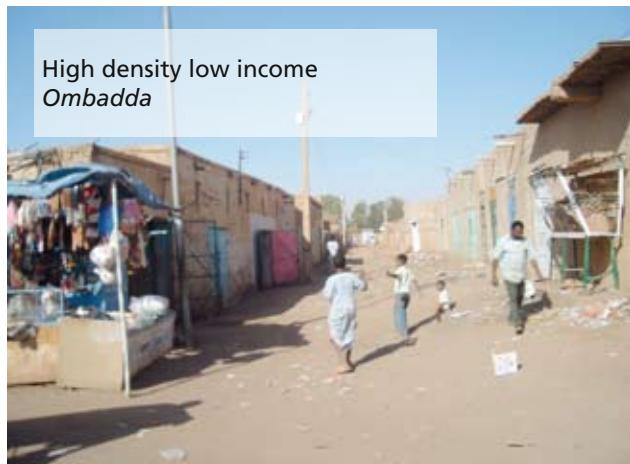
which partially explains the large amount of empty land. Another factor is the absence of taxation on empty land, which encourages speculation from upper income groups. In addition, high taxes in key areas prevent the poor from building on or owning land, because they cannot afford construction costs and taxes.

FIGURE 26. URBAN VILLAGES



The low density "sites and services" category (Figure 28) reflects a social mix with different plot sizes, building restrictions, urban services, local economic development dynamics, and locations, reflecting a great diversity of development possibilities. Basic urban services in this category do not exist, because soil conditions in some areas make the costs too high.

FIGURE 27. HIGH DENSITY, LOW INCOME

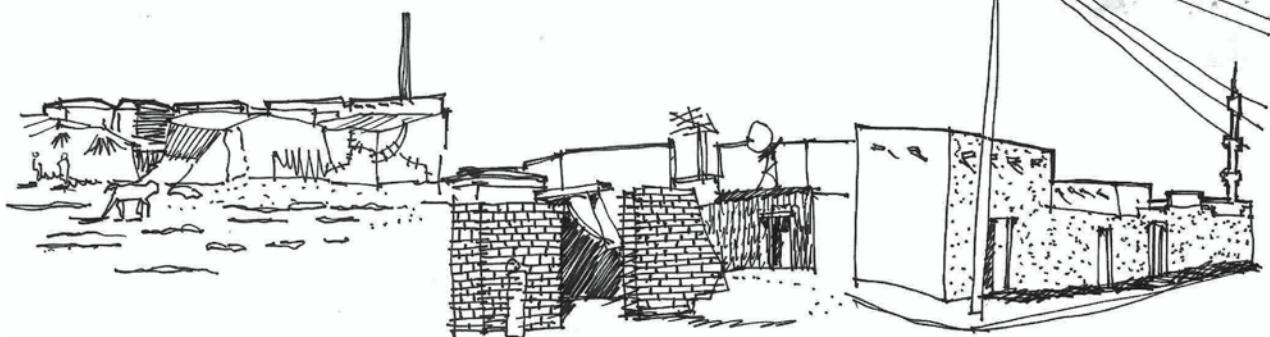


Photos by the authors

FIGURE 28. LOW DENSITY, LOW INCOME



FIGURE 29. WHAT ARE THE PROBLEMS?



High Living Expenses...
Low income generation opportunities
Gocio-Territorial Segregation
Permanent Eviction Risk

HIGH GST LAND FEES
AND TRANSFERENCE
RIGID BUILDING REGULATIONS
HIGH TAXES ON BUILDING MATERIALS
INSECURITY AND FLOODING
LOW SKILL LABOR FORCE

RIGID LAND USE ZONING
BLOCKING NEIGHBORHOOD LED
LOW PENALTIES AFFLUENT BUS
FINANCE
RECURRENT FLOODING BECAUSE
LACK OF ADEQUATE DRAINAGE
LIMITED TRANSPORT SYSTEM



Although most of the social assistance targets the poorest, who are typically IDPs living in camps and squatters (together nearly 32 percent of the urban poor), the study also considers the remaining 68 percent, who face some advantages with respect to land ownership, but lack adequate housing, inexpensive basic urban services, and local economic development possibilities (Figure 29).

In summary, the lessons learned can be grouped under six themes:

1. Failure of land supply as a singular strategy

to settle the urban poor. The analysis shows that the poor experience diverse situations that deserve specific responses regarding habitat, social services, income generation, etc.

2. Permanent relocation of squatter populations

creates a vicious circle of more squatting in new areas. The practice of forced relocation, except in those cases justified by the existence of environmental hazards, very much erodes the ability of the urban poor to progress and inhibits social peace.

3. Lack of organized reception areas to settle

transitory migrants (IDPs or rural migrants). It is clear that the official IDP camps are insufficient to receive the massive migration flows; in addition, the camps do not provide the necessary facilities to ensure a development process that includes education, health, etc.

4. Low density planning and habitat schemes

lead to socio-territorial fragmentation and segregation. The correlation between density and local economic development possibilities can be seen throughout Khartoum's history. But permanent relocation, which expands the metropolis horizontally, distances the poor from appropriate habitat, infrastructure, and job opportunities.

5. Lack of finance mechanisms and resources to

support the development of the urban poor, including access to decent housing. Most of the policies that are applied, except the housing fund, do not utilize finance mechanisms, even though there is ample evidence of a financial bottleneck faced by the poor as they struggle to afford housing and urban facilities.

6. Sector approach: a sector policy approach pro-

duces the disconnection between the problems of the urban poor and their development opportunities throughout Khartoum. The different programmes work in isolation, do not complement similar efforts, are poorly coordinated, and ultimately fail to tackle the problems integrally.

5. PRO-POOR RECOMMENDATIONS

The conclusions from the sector studies provide inputs for the development of recommendations; a summary is presented in Table 8.

implementation are very scarce. The “Guiding Principles” illustrate valuable action that can encourage further steps towards the fulfilment of human rights

TABLE 8. SUMMARY OF MAJOR PROBLEMS AND POLICY IMPACT ANALYSIS

	Main problems	Policy impact analysis
Land	<ul style="list-style-type: none"> • High cost • Costly, lengthy, and complicated transfer 	<ul style="list-style-type: none"> • Land lease as a social development policy is limited by current land scarcity • Abuse of land disposal because of lack of institutional structures on site
Spatial planning	<ul style="list-style-type: none"> • Rigid land use zoning, separating uses and social classes • Segregation of poor populations in remote locations • Lack of integrated approaches that target flood prevention, plus neighbourhood revival and upgrading 	<ul style="list-style-type: none"> • Sites and services low construction ratio • Dar Al Salam facilitates low-income community settlement • Structural plan under process • Land use fragmentation
Housing	<ul style="list-style-type: none"> • High construction costs • Rigid building regulations • Low occupancy of private plots • Lack of affordable housing options 	<ul style="list-style-type: none"> • Loss of public housing policies • Tax policies affecting building materials • Tolerance of spontaneous construction of extra rooms for renting
Basic urban services	<ul style="list-style-type: none"> • Low supply to low-income areas • Lack of coordination between Ministry of Physical Planning and Public Utilities departments and public-private corporations 	<ul style="list-style-type: none"> • Lack of integrated public policies • Cross-subsidies supporting urban poor • Private transport system increases cost service in the urban outskirts
Local economic development	<ul style="list-style-type: none"> • High living expenses • Lack of income generation sources • Unskilled local labour force facing difficulties competing with foreigners 	<ul style="list-style-type: none"> • Shift in social policies towards more market-oriented initiatives • Training in different professional activities

The different problems identified shed light on the factors that shape the different categories of urban poor. On the land side, the high cost of land, unaffordable for the majority of the urban poor, constitutes a key obstacle, which distances the poor from available development possibilities. Along the same lines, costly, long, and complicated land transference blocks the urban poor from using their limited resources to implement development strategies, such as getting apartments that are better located to support their income-generating activities.

On the policy side, land sale procedures are abused because of lack of proper control, allowing speculation. On the spatial planning side, the above-mentioned phenomena of urban sprawl and leapfrog development appear to be the major problems threatening the sustainability of the whole metropolis. Different local planners believe that unrealistic estimation of land requirements is the major reason behind urban sprawl (Hafazalla 2007). One way to regain control over urbanization is to have a strategic review of zoning and include mechanisms to regulate densities.

There are no relevant policies for these problems; policies exist only for some initiatives, particularly those created by the humanitarian crisis. These do have political support, but operational mechanisms for

through development. However, the lack of these steps in practice damages the different categories of urban poor, especially affecting those groups that are unable to generate their own survival strategies and rely mostly on external aid.

Taking into consideration these problems, recommendations are proposed that look forward to a pro-poor policy agenda. The specific recommendations coming out of the highlighted observations are:

1. Shift from **land to habitat** (housing plus basic urban services) supply. Although the “sites and services” approach was officially stopped last year, no new and comprehensive approach has been identified to deal with the habitat problems of the urban poor. A reorientation of land policies, including taxes and regulations, in order to facilitate land transactions is identified as being crucial for sorting out the bottleneck facing the poor in their habitat and development strategies.
2. Replace **relocation with alternative housing schemes** in the same location. The lack of an alternative habitat pushes low-income groups to settle informally in squatter areas. Rather than insisting on demolishing and relocating the urban poor, the development of alternative housing schemes is a

strategic part of achieving a suitable and affordable habitat for the urban poor. As an initial step, and in order to protect the rights of the poorest, it is recommended to use the "Guiding Principles" when dealing with those poor facing eviction threats.

3. Re-create **reception areas** (based on the colonial law establishing "Native Lodging Areas") where poor migrants can settle, progressively acquired secure land tenure, and accordingly build basic dwellings. Land studies have shown that this legal resource existed in previous law, matching international human rights legislation. Such areas can be designed in their location and pattern as places where migrants can acquire a place to stay temporarily and the urban poor can access information and training. Through proper planning, the state minimizes social conflicts and maximizes available manpower to support metropolitan development. A promising alternative is to coordinate actions in the lodging areas, so that unemployed and vulnerable groups can work on constructing infrastructure for basic urban services and on housing units destined to serve as renting facilities for the poor. This creates a "win-win" situation, achieving income generation for the poor while building infrastructure that reduces expenditure in other development categories.
4. Promote socio-territorial integration through **densification**. The link between density and development, observed in several sector studies, shows the importance of increasing density to attract investment in poor areas and minimize the cost of basic urban services. The study shows that, in order to achieve this goal, more flexible mechanisms are needed for official land transactions (including the acquisition of land), opening the door to the possibility of exchanging goods for housing. It is proposed that alternative organizations (cooperatives, associations, etc.) for getting land be facilitated through creating incentives and minimizing building construction taxes.
5. **Review building regulations** in poor neighbourhoods (without jeopardizing safety) in order to facilitate the construction of housing that low-income groups can afford. In such a process, facilitating the building of an extra room for **renting** and legal coverage for a simpler agreement (thus overcoming difficulties implicit in the current renting act) is also very important.

Recognition of the potential of informal markets to satisfy the housing needs of the poor is crucial, as is the introduction of some basic regulations based on realistic standards. In this context, new forms of renting, including leasing¹⁶, are important.

6. Supply **financial resources, mechanisms, and institutions** to facilitate income generation and affordable housing for the urban poor¹⁷. Such mechanisms need to be reinvented, considering that most socially oriented credit schemes have disappeared, while social safety networks of the state have been dismantled. Some initiatives involving revolving funds, microcredit, etc., from governmental programmes, cooperative groups, and NGOs provide clues on how to approach financial mechanisms, but this clearly requires further analysis and development. Once again, tools such as tax exemptions and promotional laws have shown themselves to be of paramount importance for developing sustainable social markets for housing, basic urban services, and goods and services for local economic development.
7. Develop **income generation and alternative job** schemes for the urban poor, taking advantage of the development of services, real estate, and industry in Khartoum. The study shows that living conditions and income generation opportunities vary from one type of habitat to another. In old villages, the unemployment ratio is high and directly connected to a shift from agricultural skills to urban service skills. Training institutions are vital for bringing these populations back into available employment opportunities. In squatter areas where people are already engaged in microenterprise activities, soft credit and microcredit complement housing transactions. In low density areas, the availability of land provides an opportunity for specific microenterprise initiatives; technical advice, training, and some funds are required to collectively initiate small industrial activities and support them to reach profitable markets.

Such actions will require a very accurate survey, as there are valuable local zoning initiatives to promote microenterprise for poor and vulnerable groups. Such initiatives have been designed and implemented at the locality level, and the results, though still humble, can be replicated at higher metropolitan and state levels.

¹⁶ Purchase over a long period of time, based on an extra payment of rent agreed between landowners and renters.

¹⁷ Further investigation on inflation is recommended in the different sector studies, to assess how the poor can be protected from price increases in basic expenditure, housing, and renting.

6. ACTION PLAN

The different lines of action, expressed in terms of urban strategy, targets four main programs: Urban upgrading, renewal, revitalization and renovation.

The specific terms are explained below:

- **Upgrading** is intervening in already existing neighbourhoods to improve them.
- **Renewal** is intervening in an existing urban area and partially changing land uses and densities.
- **Revitalization** seeks to empower local economic development, recovering the strength that the area may have had in the past.
- **Renovation** is a complete transformation of an area, both in terms of land use and inhabitants, and replaces these with other land uses, increased densities, and new people.

These categories for intervention define operational lines to be inserted in the framework of the structural plan, shaping the scope of pro-poor policies.

TABLE 9. URBAN PROBLEMS AND PROGRAMME RESPONSES

Urban phenomena		Urban sprawl	"Leapfrog" development	Urban duality, fragmentation
Goal		Ensure safe water and sanitation in all neighbourhoods	Promote compact urban pattern	Socio-territorial integration
Actions		Urban upgrading	Urban revitalization	Urban renovation
Structural plan	Short term	Flood prevention, cleaning drainage, water, sanitation, drainage, and waste disposal	Pave access roads and improve transport; training in agro-industry	Native lodging area concept; application of "guiding principles"
	Middle and long term	Development of transport sub-centres	Flood prevention, stopping river water; urban-rural networking	Middle density social housing schemes
Capacity building (short and middle term)		Ministry of Physical Planning and Public Utilities and localities supervise service supply	Ministry and commissioner, take control of land disposal; training for income generation	Task force supervises land and housing issues

Programmes refer to several projects acting to achieve goals through complementary projects. And different programmes act complementarily to achieve policies. Thus the programme defines the direction towards policies and the framework for projects.

The proposed pro-poor conceptual scheme has two dimensions: actions per sector¹⁸ and actions per territory. Figure 16 below graphically presents 8 essential lines for action, per sector and per territories. It starts by targeting the relationships among the rural villages, promoting the supply of basic infrastructure like bridges and roads to encourage networks that connect to major urban areas. It is also proposed to create edge settlements¹⁹, areas in which to settle massive migrant flows during an emergency.

A master plan for expanding the water network must take urban growth trends into account, focusing on better controlling the sanitation systems in use and creating flexible land ownership by facilitating its transfer and allowing it to be used as an exchange asset for social capitalization. Given the problems related to high transportation costs, the creation of sub-centres is proposed as a pro-poor policy. This is where poor communities can easily and cheaply get to their different locations without paying extra costs or using risky transportation methods²⁰. Such sub-centres must be designed to operate with multi-modal transportation²¹, generating a renewal process in their surrounding areas.

Urban upgrading programmes, targeting specific neighbourhoods, are necessary to avoid the collapse of buildings and to provide water and sanitation, drainage, etc., according to the priorities of specific neighbourhoods²². Developing flexible regulations to encourage densification is also included as an important goal, based on the success of the Dar Al Salam concept.

The urban renewal of low-income neighbourhoods encourages higher densities through social housing projects, supporting the vision for a more compact urban pattern. It also reduces sprawl and leapfrog urban development, as well as social segregation.

18 The list of programs proposed for implementation is the following:
 1) Flooding prevention, 2) Land management, 3) Basic urban service extension and upgrading, 4) Popular housing alternatives, 5) Major urban interventions, 6) Local economic development initiatives 7) Urban observatories

19 Applying the concept of colonial "Native Lodging Areas" from previous laws.

20 The use of donkey carts has been reported in the analysis, with complications for vulnerable groups such as the handicapped, the elderly, and pregnant women.

21 Combining bus, taxi and river transportation, in the short term; in addition to train and trams in the future.

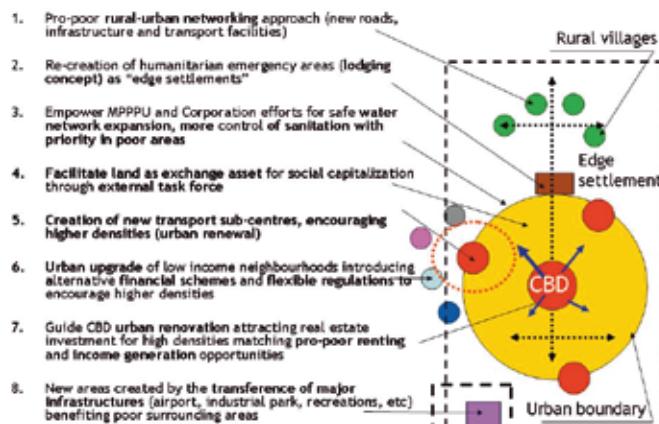
22 It is highly recommended in this case to apply Rapid Urban Sector Profiling for Sustainability (RUSPS) methodology for the purpose of community participation.

Creating housing options in better locations is pro-poor because it gives disadvantaged groups access to development possibilities that are more closely linked to the city economy. This process normally requires active public involvement, through regulations and public works, and never comes out of free market mechanisms.

The guided renovation of the central business district is another important goal to highlight; it seeks to attract real estate investment that matches pro-poor renting and income generation opportunities. To complement this, the development of new areas (the new airport, an industrial park, recreational corridors, etc.) is included, creating opportunities for secure settlement and the development of the poor in surrounding areas.

Conceptually, the different actions promoted can be summarized in the following scheme (Figure 30).

FIGURE 30. SUMMARY PRO-POOR POLICIES

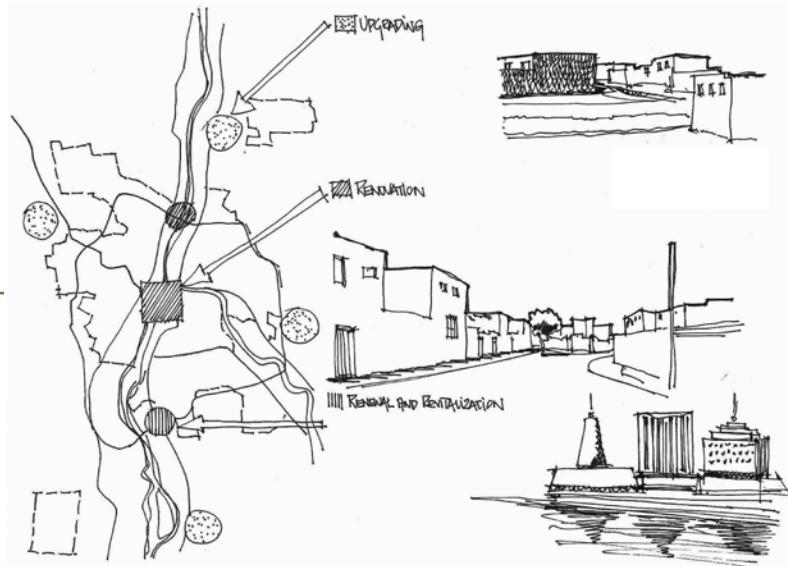


Modifications would be introduced into the legal framework, starting with those changes that can be achieved in the short term, together with concrete resources allocated for social investment and public works. For instance, programmes related to urban upgrading, revitalization, or complete renovation, which would target specific neighbourhoods to save their buildings or provide water and sanitation and drainage, result from analysing the specific problems identified per neighbourhood²³. Developing flexible regulations to encourage densification is also included as an important goal, but it is foreseen that this will take a longer term to achieve.

This different actions have territorial impacts, which the action plan targets in the short term, medium term, and long term, introducing concrete upgrades to the living conditions of the urban poor and minimizing

their cost of living. They also will expand the poor's income generation possibilities, closely linking them to metropolitan economic development trends, in which new industrial areas and the further development of agro-industrial activities at the periphery play a major role. The territorial expression of all these different programmes is presented in Figure 31. It includes actions in the city centre, along the periphery, and outside of the city where relocations are planned (airport, etc.).

FIGURE 31. PRO-POOR ACTION MAP



Short-term and long-term actions involve progressive interventions in geographical areas that are currently engaged in a restructuring process. The pro-poor policy plan seeks to subvert any negative processes therein, such as segregating the urban poor from the urban fabric, while taking advantage of any positive trends such as the densification of poor neighbourhoods, which is facilitated through making the building regulations more flexible and introducing land subdivision changes, social credit mechanisms, etc.

The specific problems identified per category of the urban poor have been targeted by specific proposals, presented in Table 10.

Actions in the short term address the key problems faced by the urban poor relating to: land, spatial planning, housing, basic urban services, and local economic development. The design of pro-poor policies involves three dimensions: modification of the legal framework, social investment, and public works.

- I. **Modification of the legal framework**, including:
 - a. A task force for controlling land disposal, introducing external land inspectors (lawyers specially appointed and under special contracts) and facilitators of land transactions

²³ It is recommended to apply Rapid Urban Sector Profiling for Sustainability (RUSPS) methodology for the purpose of community participation.

Table 10. Proposals for the different categories of the urban poor

Urban poor	Major problems	Major proposals
Low income neighbourhoods	Lack of safe water and drainage. Frequent flooding. Lack of income opportunities. High cost of transportation.	Extension of safe water network. Flood prevention. Training for income generation opportunities. Minimize cost of transportation by creating sub-centres.
Urban villages	Squatting in the surrounding areas. Lack of income opportunities. Flooding from the river.	Further control on land disposal. Training in agro-industrial activities. Preventing flooding from the river through retaining walls. Integration through strategic roads.
Renters	Overcrowding and high cost of accommodation.	Encourage building extra rooms for renting in low-income neighbourhoods, fulfilling basic building regulations.
IDP camps	Lack of proper accommodation and basic services. Lack of income generation possibilities.	Designate special areas for emergency migration, in parallel with encouraging the construction of affordable basic dwelling schemes (cooperatives and private sector). Training for income generation schemes in new areas.
Squatters	Land tenure insecurity. Recurrent threat of eviction. Lack of proper water, sanitation, drainage, solid waste collection, etc.	Monitor land disposal, ensuring tenure for low-income groups. Supply of proper water, sanitation, drainage, and solid waste collection services in areas close to the urban fabric.

- b. Restoration and update of the old law ("Native Lodging Areas"), facilitating the settlement of those willing to remain in urban areas and developing the concept of edge settlements. In parallel, the supply of incentives for small agricultural schemes to be competitive in the local market through microfinance and training
- c. Better control of sanitation systems and incentives for more rational use of water and disposal of waste water
- d. Permanent survey of population settlement trends (monitoring the evolution of areas occupied by IDPs, squatters, villages, etc.) facilitating and coordinating slum preventive action plans.
- e. Removal of building regulations in designated poor neighbourhoods, allowing the use of boundary walls and detached typologies, which seeks to reduce building construction costs and make the construction process shorter and more affordable for poor communities
- f. Change of the land use zoning system (first, second, and third class) for a more density-oriented planning concept
- g. Reduction of transportation tax on products from rural areas produced by low income communities.

II. Social investment in:

- a. Encourage a credit system for housing, based on mortgage for low-income owners of empty plots
- b. Reduction of taxes on basic building materials in general, with special incentives for low-income communities (housing, water cooperatives, etc.) that match the criteria of vulnerability and promote those proactive groups developing promising microfinance schemes
- c. Encourage the creation of cooperative societies to supply affordable housing, cheap transportation facilities as well as microfinance associations, supporting them with the creation of markets for their products
- d. Acquisition of plots in areas assigned to the urban poor close to new areas (the new airport and industrial areas) and coordination with public service corporations to include the areas in the plans for the supply of water and sanitation
- e. Ensure that social funds (Ministry of Social Affairs, zakat, NGOs) complement Ministry of Physical Planning and Public Utilities initiatives (credits for housing, microenterprise, etc.)

III. Public works:

- a. A task force for flood prevention and community drainage construction, cleaning, and maintenance
- b. Encouragement of water network extensions through cooperatives, encouraging proper coordination and fair treatment by public service corporations
- c. Encouragement of sub-centres, areas designated as transport centres that would connect different transportation modalities (bus, railway, tram, and boat). Renovation and renewal of these neighbourhoods must ensure the right densities to make urban services affordable for the different income groups living in the area.
- d. Renewal and renovation plans for the central business district, including facilities (shops and apartments) can include affordable alternatives for the urban poor. This is crucial for encouraging a central business district that really reflects the multiethnic character and social disparity of Khartoum, avoiding its possible isolation from the rest of the city.
- e. Construction of a storm water reservoir (Ministry of Physical Planning and Public Utilities and Ministry of Agriculture) and building dikes for irrigation in agricultural areas, matching efforts to empower ongoing agro-industrial schemes that are financially supported by different ministries.
- f. Facilitation of a road network connecting rural networks (for the cheap transportation of agricultural products to Khartoum), as well as

an exploration of using the Nile River to expand the transportation of goods and passengers and thus facilitate linkages among consolidated areas, greater Khartoum, and villages.

Short-term actions for each of the three dimensions mentioned above include the following steps.

MODIFICATION OF THE LEGAL FRAMEWORK:

- i. A task force for controlling land disposal, creating external land inspectors and facilitators of land transactions. This requires a partnership between Ministry of Physical Planning and Public Utilities headquarters, the ministry's branches, localities, and organizations supplying lawyers (universities, the Union of Lawyers, etc.). Specific terms of reference should be established to describe activities that this task force should perform: monitoring land disposal, helping the poor (including the transfer of land for apartments), etc.
- ii. Restoration of the old colonial law ("Native Lodging Areas"), developing the concept of edge settlements. The idea is that this change in land law, restoring the old "fourth class" law, gives the chance for the IDPs occupying valuable land areas (possibly with enough income to meet the construction of permanent buildings) to build their homes with their own efforts together with their communities, becoming "de facto" landowners and starting a virtuous cycle of progress.
- iii. Better control of sanitation and a permanent survey of plans and population trends (monitoring IDPs, squatter areas, sanitary conditions, etc). This requires an exchange of resources between Ministry of Physical Planning and Public Utilities branches and localities to allow the use of human resources to control the use of prohibited sanitation systems that damage the environment (e.g. digging machines that contaminate the groundwater. See figure 32) and replace them with environmentally friendly technology.
- iv. The review and removal of building regulations in poor neighbourhoods, seeking to reduce building costs and make construction affordable to poor communities. This requires a specific analysis to determine which neighbourhoods should be targeted.²⁴

SOCIAL INVESTMENT:

- i. A credit system for housing, allocating a revolving fund with its own administration or channel the activities through cooperatives.
- ii. Reduction of taxes on building materials for low-income communities. This policy must complement

the allocation of credit funds that target popular housing and must be applicable to specific materials used by the poor (stabilized cement blocks, bricks, etc.).

FIGURE 32. EXAMPLE OF DIGGING MACHINES THAT CONTAMINATE THE GROUNDWATER



- iii. Encouraging the creation of cooperative societies to supply affordable housing and cheap transportation facilities. The idea is to call cooperatives from poor neighbourhood and provide credit to them to support affordable housing projects and to supply transport facilities covering the service beyond the edge of the consolidated urban area, seeking to reduce the duality between Khartoum and greater Khartoum.
- iv. Acquisition of plots in areas close to new developments (the airport and industrial zone) in order to promote the poor. These plans imply land subdivision close to the location of the new airport and new industrial zones, creating areas with good potential for pro-poor development (competitive microenterprise, etc.).
- v. Ensure that different social funds (Ministry of Social Affairs, zakat, NGOs, etc.) complement Ministry of Physical Planning and Public Utilities initiatives (credit for housing, microenterprise, etc). Ideally there will be a formal agreement among these different organizations, monitored by an association of beneficiaries.

PUBLIC WORKS:

- i. A task force for flood prevention and community drainage construction, cleaning, and maintenance. This emergency policy seeks to unify the efforts of the Ministry of Physical Planning and Public Utilities, the localities, and other sectors in order to work together to prevent future flooding in vulnerable areas.

²⁴ The sector studies come out with the preliminary conclusion that old areas and incorporated villages of Khartoum and Omdurman face this problem and will benefit with new and more flexible building regulations, allowing poor families to reduce construction costs.

- ii. Encouragement for the extension of water network through cooperatives. The idea is to match Khartoum State Water Corporation efforts with initiatives in poor communities to provide water at affordable prices. The idea is that the water corporation can apply cross-subsidies to finance initiatives in poor areas administrated by local leaders.
- iii. Encouragement to create sub-centres, which are areas designated for connecting different transportation modalities (bus, railway, tram, and boat) associated with the renovation of surrounding neighbourhoods. This is a medium-term policy that requires the designation of the exact location of the sub-centres in the short term.
- iv. Renewal and renovation plans for the central business district, including facilities (shops and apartments) affordable to the urban poor. This is a long-term plan, but the projects and programmes must be identified in the short term, in order to advance discussions with different stakeholders.

FIGURE 33. MAP OF VULNERABLE FLOODING AREAS FOR ACTION AND SCENES OF FLOODING.



- v. Construction of a storm water reservoir (Ministry of Physical Planning and Public Utilities and Ministry of Agriculture) and building dikes for irrigation in

agricultural areas. This short-term policy can be carried out with matching funds from the Ministry of Physical Planning and Public Utilities and the Ministry of Agriculture, implemented through village cooperatives working in agricultural schemes.

- vi. Facilitation of a road network that connects rural areas (for cheap transportation of agricultural products to markets in Khartoum). This short-term action must be included in the action plan of the roads and bridges department at the Ministry of Physical Planning and Public Utilities, giving priority to local economic development promotion.

Some concrete proposals were developed that led to the development of pro-poor policies, targeting specific bottlenecks identified in the system that delivers urban services to the poor. Such proposals were formulated from the perspective of the particular sectors to which they belong, expanding efforts done in the past by the Ministry reshaped in the format of policies that aims to significantly reduce obstacles for the self-development of the urban poor, following an egalitarian vision of individual progress and respect for human rights.

LAND

- 1) *Unify the taxation and fee system for the urban poor and assist them in the procedure, creating a group of external lawyers to speed the process and defend the poor against possible land speculation.*

The studies revealed that acquiring land is a lengthy process. The proposal seeks to facilitate and monitor the land titling process, introducing an external body with the legal authority and management capacity to help the land department and judiciary system to speed up the process by following up on each step, controlling the actual sale on behalf of the beneficiaries, and preventing abuses relating to land speculation by different groups claiming to be authorities on land disposal²⁵.

- 2) *Reduce the fees paid by the poor in case they want to sell or trade their land to acquire other land, housing, or other assets.*

This proposal is strategic in terms of encouraging more freedom for the urban poor to sell or trade their land for other assets, other plots or housing such as apartments. The fees tend to be unaffordable for the poor. Considering the high percentage of urban poor in Khartoum, the impact of such a fee reduction will be significant; however, considering that the applications for land transactions will double or triple, it is

²⁵ Suggestions on land rights awareness, training, and procedural upgrades are included in the report on capacity building, detailing the training and institutional implications of this proposal.

predicted that the total revenues will not be reduced and may even be enlarged.

The importance of this proposal is that it can establish the foundation for real estate market mechanisms, through which the urban poor can obtain the most suitable location for themselves, or, for landowners, use land as an initial asset for their development plans. It is important to consider the possibility that uneducated groups with short-term views might use these incentives to exchange their land for cash and thus lose all their assets.

3) Update and Recover the concept of the "Native Lodging Area" as a migrant reception zone in emergency situations, but also in a more organized context where they can access free or subsidized plots and basic accommodations (tents), as well as social support to get jobs or receive training for income generation activities.

The old colonial legislation (the Land Acquisition Act, 1930) established the concept of "Native Lodging Areas" as zones where, for special reasons such as emergencies, "native" people could settle temporarily. Posterior legislation (the Village Land Regulations, 1948) amended the concept and established that such areas can be upgraded to either second or third class, opening up the areas to those unable to afford the construction of their houses using permanent materials (this refers implicitly to the poor).

This amendment has allowed several initiatives in which previous native lodging areas have become formal settlements. However, this has been more of the exception than the rule. The reason is that the successive governments have been reluctant to give land ownership rights to newcomers because they were uncertain of their final destination. Land tenure on government land was tolerated in areas formally designated as refugee camps; however, even when people have stayed for long periods, they cannot claim any land rights. Meanwhile, the spreading phenomenon of squatting is in line with poor people's search for entitlement to land, even if it is illegal. Renting in squatting areas is a well-documented phenomenon²⁶ that involves a significant number of IDPs and newcomers, who are highly vulnerable and unable to afford the growing renting prices.

The proposal seeks to accommodate newcomers at nominal prices, based on their income potential. But in addition to supplying habitat, it seeks to coordinate actions among different ministries and governmental bodies to supply vocational training in order to prepare

the newcomers to compete in the local job market, avoiding the drawn-out scenario of unskilled people searching for jobs without qualifications. The difference between normal IDP camps and the proposed revival of the native lodging areas is that, with the latter, people can be "upgraded" to become formal renters, depending on their training performance and their potential to match market demand. Once they get a source of income, they can opt to remain in the area, given its nominal rents, or move out to live in formal housing.

4) Develop popular housing schemes through waqf as a basic mechanism to achieve land tenure for the poorest groups.

Waqf is a key institution in Muslim societies. Various sources emphasize the importance of waqf in dealing with land tenure problems. The sector studies highlight the legal background and perspectives of waqf in the particular context of Khartoum. The law stipulates that 10 percent of subdivided land be allocated for waqf purposes. This is an enormous source of revenue, which in the case of Khartoum is used effectively to generate a very important fund for charity. The mechanism of using land revenues to support the development of the urban poor is excellent for achieving positive results in a short time, as well as being sustainable in the long term. The proposal of allocating land for waqf as a mechanism to ensure land tenure for the poor is attractive in that it targets the "poorest of the poor" and essentially constitutes a way to ensure their tenure rights. However, it does not provide for land inheritance, something that in the Sudanese context may limit development because people count on the initial capital to support future family growth.

Still, taking into account the strategic importance of properly settling the poorest of the poor, providing not only tenure rights, but also basic urban services and housing, this approach hugely facilitates the creation of more efficient mechanisms to develop a real estate market, including renting and selling different housing types.

5) Make more flexible land subdivision regulations, especially in areas of the city (old villages, high-density zones) where it is not possible to match the minimum plot size of 200 square metres.

The sector studies have come out with specific observations on problems related to inhabitants in old areas who do not have the minimum plot size (200 m^2) because it was already subdivided and it is not possible to inherit land titles. This problem especially affects the urban poor in high density areas, unable to invest in upgrading their habitat because they cannot exchange land on the market and remain living in substandard

²⁶ Research on renting was carried out that showed that approximately half of the urban poor use renting mechanisms, especially in the greater Khartoum area, including squatting zones.

conditions. Such a paradoxical situation leads people to live in very poor conditions or rent in other areas, meaning that the whole society loses out, as these strategic urban areas are not being put to good use. Land subdivision maintains the rationale of generating plot areas on which acceptable building standards will be used, avoiding the construction of buildings that do not meet lighting and ventilation criteria. The principle of having a minimum plot area also helps with the future densification of certain areas, with the construction of multi-storey buildings. However, certain flexibility on land subdivision patterns is important to consider, particularly with plots whose form allows certain construction projects for housing or renting, creating opportunities for low-income groups to develop.

6) Encourage cooperative associations to make building houses and basic urban service facilities more affordable for the urban poor.

Paralleling the above-mentioned initiatives regarding waqf (targeting the “poorest of the poor”) encouraging cooperative associations through different channels, including credit incentives and dissemination of local best practices²⁷, would highlight the advantage of combining efforts to reduce housing costs. The Civil Transaction Act of 1984 established that cooperative associations may agree to be under family ownership, if members of a family are united by a common business or interest. This legal background is of paramount importance for empowering social protection networks that poor communities can use to be legally protected in their business and residential activities. Many in Khartoum are not aware of such an advantage, and normally when poor people form associations for a certain purpose, it is done informally and in a way that is not protected by existing laws. The cooperative association law also constitutes a valid mechanism to include disadvantaged groups such as the handicapped or women, who otherwise may not be entitled to land property. However, the potential for conflict given that disputes on property rights have damaged existing informal social welfare networks must be considered with special care before promoting this approach.

SPATIAL PLANNING

1) Empower localities and Ministry of Physical Planning and Public Utilities branches to share service delivery, including monitoring and supervision of works and land disposal.

The historical evolution of the Ministry of Physical Planning and Public Utilities organizational chart reflects the recurrent divorce between the “technical” struc-

ture, the “political” side, and the “local” side, where localities are the decentralized bodies that deliver the ministry’s urban services. The creation of the “popular committees” is an expression of this situation, in which technical decisions must be submitted to the committees for effective approval and implementation. There are many different fields in which the practical implementation of the ministry’s normal tasks such as monitoring and supervising works and controlling urban development is far beyond the manpower and technical capacity of the ministry’s local branches. On the other hand, over the years localities have developed a bureaucracy that gives them the sole role of fee and tax collector. This negatively affects their relationship with their own communities, as it associates them with financial burden and not with services.

In such a context, it is considered strategic to shape a stronger partnership between local ministry branches and the localities for specific tasks that have been historically neglected such as controlling urbanization and coordinating service delivery. The assumption that a more proactive approach will improve the relationship between the ministry’s headquarters and its local branches is also explored in this proposal.

2) Put in practice the “Guiding Principles for Relocation”, signed by the governor and the European Commission (EC), to create an agenda for relocation and give housing alternatives to those opting for voluntary relocation. It will also ensure adequate awareness and dialogue, as well as extensive public participation, for those deciding to remain in the area. Special consideration will be given to vulnerable groups and special cases, to be covered through special social assistance funds.

The problem of squatter areas has acquired international dimensions, being extensively reported in the media and academic forums. Such a situation creates enormous pressure on the government to agree on the “Guiding Principles for Relocation”, ensuring (among other things) that when IDPs are forcibly relocated, mostly because of replanning exercises, they are provided with essential needs like food and water and are treated in accordance with human rights standards. However, addressing the basic problem of the squatters i.e. how to provide permanent solutions to avoid them squatting in other areas requires a housing policy to be inserted in the structural plan. What is still lacking is a concrete housing policy realistically targeting the different categories of urban and rural poor, backed by the available laws, that is inserted in the current plans and policies to complement the guiding principles.

The proposal seeks to respond to this lack by supplying a step-by-step mechanism to guide future govern-

²⁷ The methodology of presenting cases in which cooperative associations achieve good results is included in the report on capacity building.

mental actions related to re-planning and relocation²⁸. Essentially, it provides four alternatives:

- 1) For those who voluntarily decide to relocate themselves, alternative housing schemes are offered²⁹. The government will back their application to be included in the schemes according to their particular situation (their land ownership status and ability to trade it for an apartment, their income level, their family composition, their willingness to live in certain zones, etc.).
- 2) For those who can demonstrate their vulnerability (martyrs, widows, etc.) or who are extremely poor, basic dwellings will be provided on waqf land near to where they squat, either with nominal rent or without payment.
- 3) For those who want to remain, awareness-raising activities will be conducted about the relocation day, negotiating about the process and seeking to minimize conflicts. In case a negotiated solution cannot be reached, the Ministry of Physical Planning and Public Utilities will provide details of the exact relocation hour, ensure the supply of food and water, and escort them to their final destinations in the IDP camps or outside of Khartoum.
- 3) *Set up a structural planning concept, replacing previous socio-territorial segregation zoning (first, second, and third class) with an inclusive city approach that encourages the densification of central areas.*

The planning system that has been applied in Khartoum has serious socio-territorial implications; after independence, it has been based on segregating people according to their ethnic origins and their income. The aftermath is low density urban growth, segregating the poor in remote areas and keeping most existing plots vacant. Considering the current ample size of Khartoum, it is impossible for the city to afford the infrastructural cost of this sprawl. The shift from this planning approach to another one based on regulating density requires the reshaping of the whole planning system. Indicators must be introduced to regulate the use of the land and not exceed the maximum allowed built-up volume. Densification of the central areas will result from the higher prices of the land in the strategic

28 A complete and separate report is provided on the practical implementation of the "Guiding Principles for Relocation", detailing how the signed document can be implemented through the current planning and policy restructuring process and analysing its possible aftermath when applied to different areas with different types of inhabitants.

29 A complete separated conceptual paper is attached, detailing alternatives for housing the urban poor in Khartoum. The paper was a contribution in a seminar held in Khartoum on 28 April 2009, organized by the Syndicate of Architects of Khartoum.

zones. The challenge of the structural plan is to develop a system that reshapes the previous regulations and moves towards more socio-territorial inclusiveness.

- 4) *Design major intervention projects with a pro-poor approach, including flood prevention that uses recreational waterfronts to attract activities affordable to low-income group, and renewal of the central business district to recover strategic areas for popular activities.*

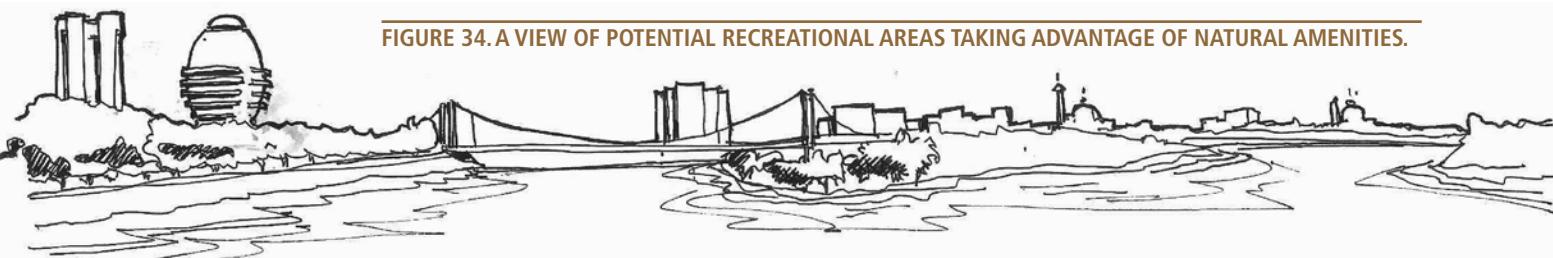
"Major intervention projects" in Khartoum implies the clearing of large areas, including the downtown, which is currently occupied by factories, the airport, and riverfront businesses. Normally this scale of urban intervention leads to big investors generating massive real estate business that inherently neglects the priorities and development possibilities of the poor. In the case of Khartoum, this is an even bigger worry because the poor are the majority and it emphasizes the already significant duality between the formal, consolidated city and the mostly informal greater Khartoum.

Recreational activities are almost non-existent in poor neighbourhoods. This is especially bad for young people, who end up becoming frustrated. Also, socio-economic activities operate in tandem with leisure areas, and their absence eliminates possible sources of income. Recreational areas that take advantage of natural amenities have enormous potential, bringing people together from different income groups and contributing to peace. The achievement of these particular goals should be included in the structural plan as a starting input, keeping in mind the added advantage of recovering strategic areas for the poor before real estate interests target them. The projects must strike a balance between real estate programmes, important for getting revenues for the whole city, and social development initiatives that focus on strategic areas.

- 5) *Create sub-centres to improve transport mobility to the peripheries, reducing socio-territorial fragmentation and transport costs.*

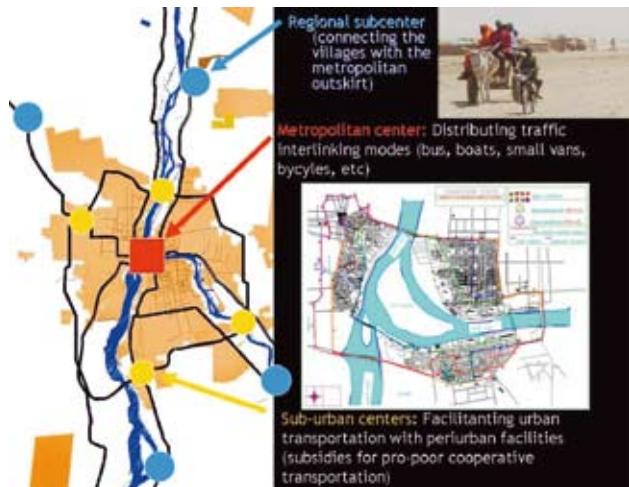
Another very important input for the structural plan is the creation of sub-centres. The Khartoum transport system operates as a centralized network. Because of the configuration of the three original cities and the lack of bridges, in the past the city centre was consolidated as an "empty" area (in terms of land use) that acts as a commuter hub with transference in all directions. The centre is served by the major high roads, collecting traffic from the different feeder roads. This model creates a very congested traffic situation. The proposal targets areas in greater Khartoum that can

FIGURE 34. A VIEW OF POTENTIAL RECREATIONAL AREAS TAKING ADVANTAGE OF NATURAL AMENITIES.



become sub-centres with multimodal transport exchanges (taxis, buses, boats, and eventually trains and trams). Their ideal location will be along the riverfront, empowering the proposed recreational development of certain zones for low-income groups (Figure 35).

FIGURE 35 AREAS PROPOSED TO LOCATE TRANSPORT SUBCENTERS: CROSS BETWEEN THE RIVER AND THE HIGHWAYS



- 6) Promotion of a rural village network that is incorporated into the metropolitan economy through special incentives, facilities, and tax reductions, in order to promote local economic development opportunities in disadvantaged zones.

The economic situation in rural villages is delicate, and an increase in poverty can immediately increase the migrant flow towards Khartoum. The trend to provide benefits for the urban poor without any assistance to the rural poor, combined with a decline in income generation possibilities in rural areas, may lead to further inequality and massive migrations. This can certainly overwhelm the city's capacity to properly settle a new wave of migrants.

Meanwhile, the high price of basic food in Khartoum and the high reliance on imported products very much damage the potential self-sufficiency of all Khartoum residents. Assistance to poor communities in the countryside historically has been a governmental target; however, recent neo-liberal policies have neglected the rural poor, imposing taxes that very much affect the regional economy. The structural plan of Khartoum should not consider the urban entity in isolation. It should understand the regional dynamics as a whole, coming out with initiatives to include the regional villages.

The situation should be addressed in three major areas: incentives, reviewing taxes in certain zones in order to promote strategic products related to the basic diet of the Sudanese; roads and infrastructure, ensuring that transporting products to markets does not damage profitability when compared to urban ac-

tivities; and financial services, providing credit to allow rural economic activity to keep going.

HOUSING

- 1) Make building regulations more flexible (particularly those applied to the urban poor) and promote practices such as the use of common walls, in order to significantly reduce construction costs.

The sector study on housing and spatial analysis agrees on the importance of making more flexible building regulations. A comparison between "sites and services" schemes and "Dar Al Salam" initiatives shows that in the latter, in which building regulations were not applied as strictly, the urban poor managed to build their houses. Field visits show that normally they do not use side setbacks, but instead build directly on the common wall. The result is a significant reduction in the initial capital needed to buy building materials. However, it is important to keep in mind that building regulations are essential for the safety of communities. It is recommended that the Ministry of Physical Planning and Public Utilities review building regulations and consider a special chapter in which regulations could be applied more flexibly to the urban poor, without completely relinquishing its obligation to take care of building security and safety.

- 2) Promote regenerated plots, allowing multiple residential units in small plots in the inner city, particularly for the poor.

Plot regeneration is proposed in order to address the observed trend of urban poor in high-density areas building extra rooms to accommodate extended families or to rent. Formally, allocating more than one family per plot is not acceptable in the current planning system. However, from a socio-territorial perspective, this would allow the urban poor to get accommodation in areas where land and buildings may be unaffordable for the majority of the inhabitants. Despite the benefits, the risks must also be considered. Constructing upper floors or extra rooms without proper assessment could affect the structural integrity of a building and increase the possibility of accidents.

In order to prevent accidents but not neglect the obvious habitat needs of poor people, the proposal eases regulations on one hand, but on the other reinforces the important role of the Ministry of Physical Planning and Public Utilities in monitoring and supervising activities.

- 3) Create public-private partnership incentives (e.g. removing material taxes) to attract investments in housing projects, especially for low-income dwellings.

The recommendation is to review the taxation system, particularly with regard to building materials;

in Khartoum, 15 to 20 percent of construction costs result from taxes. Such a percentage is prohibitive to the urban poor, explaining why most of them prefer to build with temporary materials (mud or plastic) that are not taxable. The reduction of taxes on certain basic building materials would reactivate the construction industry and low-income housing market, as well as attract private investors. The partnership between the public and private sectors to create a sustainable social housing market is crucial for coping with the problem of low- and middle-income groups, releasing public resources to focus on the “poorest of the poor”.

However, any initiative dealing with taxes must be assessed holistically from the perspective of the different sectors involved. For example, the Housing and Development Fund found that getting tax-free imported materials did not always make a difference. The sustainability of the policy requires a long-term analysis, possibly programming a step-by-step process of tax reduction while housing policy goals are implemented.

- 4) *Restructure the approach applied by housing policies, introducing new modalities that target the different categories of the urban poor, such as loans to build on private land and mechanisms to exchange land for apartments.*

The Housing and Development Fund, as the major housing policy designer, has historically operated on the assumption that massive housing on public land is the best way to address the demands of the urban poor. However, because of varying densities and the high percentage of empty plots, the system requires reorientation. One way to do this is to make the system more flexible, allowing the fund to operate on private plots (which otherwise not be economically sound because of high administration and managerial costs) with credit and loans, particularly targeting the urban poor. The second mechanism is to build hosting complexes in different locations for those beneficiaries who want to exchange their plots (based on a survey), matching their land value to the value of apartments. In this way, the Housing and Development Fund can create a land bank and keep its construction machinery running, or eventually using it for other purposes and get revenue on this land. This second mechanism gives the ministry the possibility of recovering land from private lease and the real estate projects a socially inclusive approach.

- 5) *Create microcredit mechanisms that are administered at the community level as revolving funds for habitat upgrading (housing and basic urban services).*

The completed study shows that 60 percent of the housing stock in Khartoum is in poor condition; most houses are made of mud, which requires periodic

renovations that are expensive in the long term. Having community-administered microcredit finance building upgrading is an important opportunity to reach vulnerable groups and improve their living conditions. The big challenge is to create sustainable community-based organizations to manage the microcredit scheme and keep the fund operational for multiple actions with new beneficiaries, without losing the capital³⁰.

- 6) *Regulate the renting market, introducing incentives for low-income groups to meet basic living standards, with affordable prices controlled by autonomous bodies.*

Renting has been reflected in the studies as a major form of accommodation for the poor. However, the lack of regulation frequently leads to abuses that affect the interests of the urban poor. One of these used to be the imposition of prices far beyond the real estate market value, taking advantage of the lack of warranties of the poor families and their legal ignorance. Overcrowding and lack of basic services (figure 36) used to be significant causes of the spread of disease in poor neighbourhoods. In order to address such a situation, the proposal seeks to reinforce the law of 1991 on building rent, with the addition that any room for rent should meet basic hygiene standards, including ventilation and natural lighting. This is to be established by the Ministry of Physical Planning and Public Utilities and inspected by the above-mentioned joint effort between ministry branches and localities.

Such regulations are essential to guarantee the adequate living conditions of the tenants. Prices and conditions must be inspected, in order to prevent possible abuses³¹. A transparent information system is needed to create awareness among the tenants with respect to alternative renting prices.

FIGURE 36. EXAMPLE OF ADDING EXTRA ROOMS FOR RENTING IN POOR NEIGHBORHOODS



- 7) *Encourage the use of prefabricated building components, thus reducing construction costs by 30 percent, and disseminate research data and the results obtained so far.*

30 Several resources on microcredit management and community development can be obtained from the report on local economic development and from the ILO library.

31 The rent control system was applied in Khartoum in the 1980s, without positive results, and abandoned early 1990s.

Prefabricated building components have been proposed as an important housing policy input, because of their potential to generate local economic development and also reduce building construction costs. However, as the industry is still not developed enough to meet such expectations, the proposal was limited to encouraging the dissemination of research done in the field, looking for cases that demonstrate this industry's validity.

BASIC URBAN SERVICES

- 1) *Ensure safe and affordable water for urban poor communities, monitoring the cross-subsidy system, the pricing, and the measurement of consumption through a joint effort between the Ministry of Physical Planning and Public Utilities and Khartoum State Water Corporation.*

Water management analysis in Khartoum has noted the effectiveness of the water company to produce and distribute water at acceptable prices. One remarkable aspect is the promising cross-subsidy system being applied to reduce the cost of third class plots and supply water for free through communal pipes to IDP camps and squatter areas. But field surveys and several sources have confirmed that poor water quality and high prices exist in poor areas, creating a serious health threat. The key to extending the water network is a successful cross-subsidy system, together with appropriate pricing and the measurement of consumption, in order to restrict water loss. But an institutional analysis of Khartoum State Water Corporation shows that to achieve this, it is necessary to create a robust partnership, matching land regulatory mechanisms with the capacity to manage systems.

- 2) *Establish more control over sanitation systems, particularly those illegal systems that contaminate the groundwater (delegated at locality level).*

Sewage has for a long time been dealt with at the individual level in Khartoum, without problems. The ample use of pit latrines, even in poor communities who built them as soon as they settled, has restricted the Ministry of Physical Planning and Public Utilities' involvement on this issue. However, increased densities in certain zones have made this system obsolete. Digging technologies continue to risk contaminating the groundwater. Although the law forbids such practices, the ministry contradicts its own law by contracting the services of these machines. It is impossible for ministry headquarters to control this activity, and control is only feasible at the locality level. The proposal for combining efforts among ministry headquarters, local ministry branches, and locality staff must be proactive in identifying those processes that negatively affect public health and the environment and acting to stop them.

- 3) *Assign drainage cleaning and construction activities as a cash-for-work scheme for income generation for the urban poor; adequately staff the project and train the beneficiaries.*

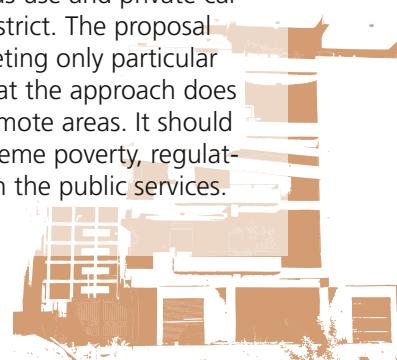
One of the major sources of conflict between localities and the Ministry of Physical Planning and Public Utilities has been drainage cleaning, whose concession is disputed. The lack of specific criteria to define the responsibilities of the ministry and localities unnecessarily complicates the system. Community works such as drainage cleaning are services in which low-income communities can engage to generate income; passing such work on to private contractors is becoming expensive. Considering the constant risk of flooding during the raining season, the intention behind training low-income communities to become formal workers seeks also to create special community groups responsible for controlling flooding.

- 4) *Designate garbage disposal sites; coordinate with localities on disposal and maintenance issues, particularly the separation of dangerous waste (e.g. hospital waste) from common residential waste; and coordinate those groups working in recycling.*

The garbage system has reportedly been effective in collection but has faced difficulties in disposal. It seems that problems exist among localities regarding the designation of disposal sites. As Khartoum continues to grow, it is expected that this problem will also grow, to the point of being dangerous. Any agreement on disposal sites requires a lot of consultation and analysis, backed by localities. Separating dangerous garbage (especially waste from hospitals) requires specially trained staff based in localities, who must work in close coordination with other parts of the company and maintain the disposal sites to avoid any possible threat to human health in the surrounding area. The proposal includes the organization of special groups from poor areas working in recycling, with adequate equipment and training.

- 5) *Create multi-modal transportation facilities, with special prices.*

In line with the proposal from the spatial planning sector, the creation of multi-modal transport facilities must be promoted. These will be located in a belt surrounding consolidated Khartoum, and a selected subsidy will be applied for transport in greater Khartoum, generated from fees for public bus use and private car parking in the central business district. The proposal must be evaluated carefully, targeting only particular neighbourhoods and ensuring that the approach does not encourage urbanization in remote areas. It should only be applied in areas with extreme poverty, regulated through special mechanisms in the public services.



LOCAL ECONOMIC DEVELOPMENT

- 1) *Reduce living expenditures by subsidizing strategic goods for each category of the urban poor through incentives and tax deductions on basic food, water, sanitation, transportation, and housing (community-based organizations are to supervise this).*

Normally in Sudan, charity organizations use the zakat fund, waqf, or the Social Development Fund. There are hardly any civil society organizations with their own resources to supply basic goods such as food, water, sanitation, or transportation. Charity organizations target specific needs of the poor, such as health and education, according to certain principles of solidarity what is missing is a development strategy through which a charity can match the efforts of community-based organizations in local economic development promotion. The proposal seeks to introduce alternative schemes, shifting from social assistance to the poor to development supported by governmental efforts to minimize taxes and supply subsidies. This will encourage the development of certain activities, removing obstacles and reducing prices.

- 2) *Promote income generation schemes, encouraging microenterprises in poor areas to access markets through special incentives, such as microcredit that targets activities like farming, fishing, and milk production, thus empowering rural villages' economies.*

The study surveys identified several relatively successful activities; not so much in terms of income generated, but more in the number of people employed and the movement towards development. Microcredit seems to be particularly applicable in certain neighbourhoods where social networking is tight and familiar business associations already exist.

The recurrence of certain types of microenterprise in particular zones can bring about a “clustering” phenomenon, which potentially drives the local economy towards the development of some competitive products. This is the case with fishing and milk production; having been initiated as individual activities, they have been imitated by neighbours and have received support from the government through special grants and credit. Other clustering can be found in specific sectors such as markets, construction, mechanics, artisanship, and domestic services, each concentrated in a certain area of the city. The Ministry of Physical Planning and Public Utilities can protect the phenomenon through the structural plan, with specific land use regulations that encourage the development of certain activities through microcredit, tax deduction, incentives, etc.

- 3) *Promote partnerships and coordinated actions among the Ministry of Physical Planning and Public Utilities, the Social Development Fund, and zakat*

and waqf organizations to develop revolving funds that target habitat and local economic development projects for the different categories of the urban poor.

Partnerships between the Ministry of Physical Planning and Public Utilities and social and charitable organizations are important because they provide a strong platform on which to raise funds to support local economic development initiatives. Such initiatives must emerge from the specific demands of the community, expressed systematically through consultative meetings. Parallel to analysis and pro-poor policy development, the UN-HABITAT team in Khartoum is developing an unconventional housing and development pilot project in a particular area. The Rapid Urban Sector Profiling for Sustainability team is carrying out consultation works in both informal and formal, establishing what the priorities are for intervention. The implementation of these new approaches relies very much on the healthy partnerships among institutions, with their particular commitment and responsibilities clearly detailed in each case.

- 4) *Promote vocational training in strategic sectors in order to minimize the displacement of unskilled local labourers by foreign workers.*

Vocational training centres provided by ILO seek to improve local skills in sectors and services currently in high demand, such as new building technologies (these now require an imported labour force). This situation is particularly risky, considering the massive migration of labourers needed to cover the demand in different housing and industrial activities. For the training centres to be more effective, broader support from social organizations is required in order to develop microenterprise networks, introduce entrepreneurial knowledge, and improve organizing and mobilizing capacity. In this way, the training increases the capacities of those individuals receiving it, as well as their communities.

- 5) *Provide transitory tenure of waqf land to urban poor organizations to develop income generation initiatives, including microenterprise clustering, markets, and urban agriculture schemes.*

Waqf land can be used for developmental purposes microenterprise, market development, and urban agriculture schemes and can support a growing number of urban poor engaged in income generation initiatives. The idea behind this proposal is to change the top-down social assistance mechanism into a bottom-up approach, giving the beneficiaries more freedom to choose their own way to implement development strategies. The approach is unconventional, but studies on social development in Arab countries report a recent shift towards a new interpretation of traditional mechanisms in Islam for dealing with poverty. This marks a move from pure assistance to enabling approaches.

7. CAPACITY-BUILDING GOALS AND ACTION PLAN

Capacity building is understood in this report as a process involving institutional and human resource development changes and using a pro-poor action plan. The Ministry of Physical Planning and Public Utilities, which is responsible for controlling urban and rural development in Khartoum State, must currently deal with socio-economic problems that exceed its traditional scope of work. This requires a new vision for the ministry and the new skills and capacity to achieve it. The aim would be to overcome the tendency of departments to work narrowly in their own sector; a more collaborative scheme is needed among departments and institutions, together with ample public participation.

This report complements the diagnosis of urban problems and potentials in Khartoum, as well as a pro-poor policy report. Such diagnoses and plans present different factors that inhibit the development of the urban poor. The pro-poor action plan makes suggestions to remove these obstacles, such as supplying strategic public works and changing regulations, in which the planning ministry plays a crucial role.

In such a context, capacity-building strategies become the cornerstone for achieving this pro-poor agenda. Defining the goals leads to specific capacity-building action plans. The assessment of current ministry problems and potentials seeks to define the direction for the proposed changes, with different alternatives to implement them.

The general goals are summarized below.

1. Improving administrative and financial management processes. The ministry faces serious problems in its administrative procedures especially at localities, where pro-poor actions are urgently needed.
2. Building competencies/training: A) Basic: The ministry provides computing and administrative skills training, but it has repeatedly been observed that such skills are rarely introduced into daily work routines, which are not altered by such training. There is a need for the skills to have a practical application to the daily work. B) Technical: Technical skills are needed to support the development of core competencies at the ministry, in order to organize specific priorities related to pro-poor actions (land management issues, basic urban services, and local economic development). C) Management, leadership, outreach, and networking: These are crucial competencies to build in a cross-sector manner in ministry departments, coordinating with public service companies.

3. Organizational development: Governance, structure (including new roles and functions), system (particularly information management), budget, infrastructure (including equipment), and processes (issues linked to vertical and horizontal coordination among departments at ministry headquarters and locality branches) will be looked at.
4. Policy and regulatory framework for pro-poor service delivery (particularly with regard to decentralization and privatization issues).

As a starting step for capacity building at the ministry, it is proposed to target goals related to training and institutional gaps through the following actions:

TRAINING:

- T1) Development of training action plans for the **Training, Scientific, and Research Department**. Human resource development plus a monitoring and evaluation mechanism.
- T2) Training on the **administrative and financial management process** (basic, technical, management, and leadership).
- T3) **Organizational development**: Governance, structure (roles and functions), information management, budget, infrastructure, etc.

INSTITUTIONAL GAPS:

- I1) Support to the **survey department**, targeting Geographic Information Systems and an intranet as crucial tools to speed up the work.
- I2) **Horizontal coordination** among departments on cross-sector subjects, e.g. design and implementation of "Guiding Principles for Pro-poor Settlements"³².
- I3) **Vertical coordination** between the Ministry of Physical Planning and Public Utilities headquarters and branches, creating a coordination agenda and follow up; and between ministry branches and localities, applying mechanisms to ensure public participation and the control and monitoring of agreed-upon pro-poor plans.
- I4) Creation of a **monitoring and evaluation framework** specifically applied to the structural plan and the development of programmes and projects.

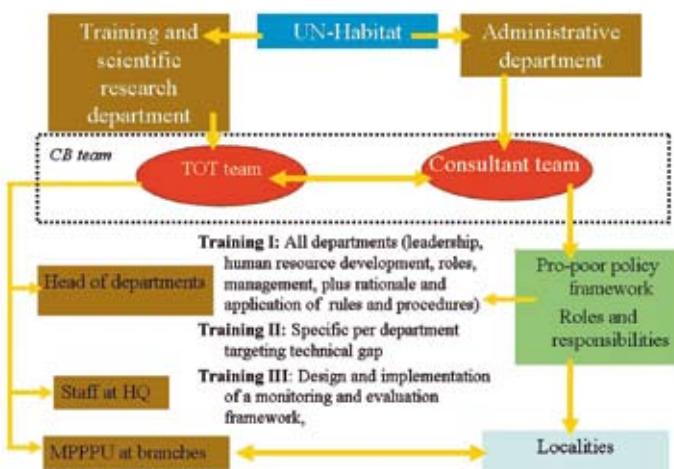
³² The "Guiding Principles for Relocation" is an agreement between Khartoum State and international donors, backed by the European Commission, to complement the human rights legal framework for the protection of refugees and internally displaced persons in Khartoum who are facing eviction and relocation. Details of this agreement are presented in the first report (entitled "Diagnosis") of this UN-HABITAT series.

- 15) Follow up on the **policy and regulatory framework**, including controversial and complex issues such as decentralization, privatization, etc., and the expected aftermath.

The plan is to create two teams at the Ministry of Physical Planning and Public Utilities: one dedicated to training, eventually applying the methodologies of training of trainers and supported by staff from the Training, Scientific, and Research Department; the second made up of associated consultants working in different fields at the ministry (with UN-HABITAT), on pro-poor policies and institutional development. These two teams will work with complementarity, developing training and policy frameworks and clarifying roles and responsibilities for better ministry performance. The teams will liaise with and train both heads of departments and key staff.

The goal is to introduce teamwork approaches. It is hoped that the capacity-building process for both training and institutional gaps will be applied horizontally, bringing the different departments together on specific pro-poor programmes and projects, expanding the current practice of using technical committees committees. It will also be applied vertically, linking ministry headquarters with its branches and the branches with each other, setting an agenda for discussion and follow up. Finally, the vision includes linking ministry branches and locality staff to work together to control and monitor specific urban services. This vision to initiate capacity building at the ministry is summarized in Figure 37.

FIGURE 37. CAPACITY-BUILDING ACTION PLAN



TRAINING COMPONENT

TRAINING FOR THE TRAINING, SCIENTIFIC, AND RESEARCH DEPARTMENT

Brief diagnosis: It has been observed that training for the different departments has not been effective in changing work practices (after receiving training, staff

return to their original practices).

Action plan: Work out with the head of the department a plan for a systematic and permanent training need assessment, appointing key staff to be trained in this field. This enables them to identify priorities for training needs and survey available suitable institutions to deliver the training.

The department team will identify and ensure the provision of training in the following areas:

1. Leadership, human resource development, roles, management, and rules and procedures **for all heads of departments**.
2. **Specific training per department** targeting technical gaps (see annex), in which the trainer will play the role of facilitator, identifying suitable trainers to address the priorities identified in each department.
3. Design and implementation of a **monitoring and evaluation framework per department**, introducing performance indicators to measure the impact of training and encourage staff to apply their new skills in their daily work. Human resource development is to be introduced at this stage, in coordination with the consultant team working on institutional gaps, especially analysing the incentive system.
4. The same methodology expanded at **ministry branches and the locality level**, including the three different types of training.

INSTITUTIONAL GAPS COMPONENT

Brief diagnosis: It is observed that the Ministry of Physical Planning and Public Utilities faces difficulties in coordinating actions horizontally among departments, as well as vertically with its local branches. Regarding horizontal coordination, the study reveals that technical committees produce positive results because they enlarge the department's capacity for action and create benefits by sharing resources; expanding the role of such committees is proposed. There are also several bottlenecks related to the system for providing economic incentives to staff, without proper mechanisms to monitor policy achievements or control departmental and individual performance. Finally, certain trends in the policy and regulatory framework, including decentralization and privatization, influence decision making, but without proper technical follow up on the framework's implications, particularly in terms of pro-poor planning policies.

Action plan: A complementary team in the administrative department, with the participation of available consultants from the ministry and external bodies, will work collaboratively to achieve the goals detailed below.

1. Development of a **document integrating the current laws and regulations** related to land

use, building regulations, taxes, fees, etc. into a unique handbook that is easy to read and interpret. A significant number of copies will be printed and (cooperating with the Training, Scientific, and Research Department team) disseminated among ministry staff. This team must also be in charge of coordination to ensure that **new pro-poor policies** elaborated in the structural plan, at the planning office, or in any department is documented and used in training and awareness.

2. Support to the **survey department**, providing **assistance in GIS**³³. The specific support includes the development of an **intranet** in which staff can transfer digital information among headquarters, departments, and branches, expanding the data base to include the locality level.
3. Promotion of **horizontal coordination**, using existing **committees** as a focal point for a systematic **technical think tank** and **resource sharing**, and also introducing the comprehensive coverage of key issues, organized as specific **programmes** and **projects**³⁴ with concrete actions, time schedules and funding³⁵.
4. Promotion of **vertical coordination** between **ministry headquarters and its branches and between ministry branches and localities**. Setting up a reporting and communication agenda is recommended, in order to reduce the knowledge gap and increase the capacity of localities to interact with ministry headquarters, addressing problems and receiving assistance on conflict resolution.
5. Creation of a **monitoring and evaluation framework** for the whole ministry, but specifically at the level of the structural plan and its different components (programmes and projects), developing indicators that can serve as a foundation for launching urban indicator programmes from the different localities, and calling for the participation of different stakeholders³⁶.
6. Follow up on the **policy and regulatory framework**, including major trends such as decentralization and privatization, assessing the expected results in different fields and advising on recommended actions.
7. The capacity-building principles proposed for the ministry in the short, medium, and long term are summarized in Figure 38, presenting 4 major areas for action: building competencies for training; improving administrative and financial management;

improving organizational development; and developing a policy and regulatory framework (Figure 38).

FIGURE 38. SUMMARY OF CAPACITY-BUILDING PRINCIPLES

Summary CB principles

Building competencies-training

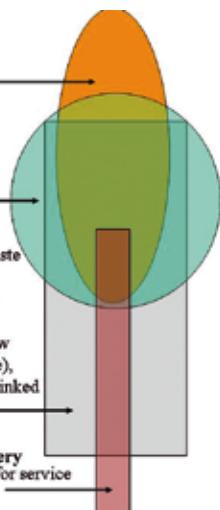
Cross cutting, identifying those particularly relevant for realizing objectives of pro poor

Improving administrative and financial management process

- A) Basic (ex. Computing skills...),
- B) Technical (core competencies and thematic inc. land, waste management, LED), and
- C) Management and leadership, outreach and networking.

Organizational development: Governance, structure (inc. new roles and functions), system (info management for example), budget, infrastructure (inc. equipment, processes, issues linked to vertical and horizontal coordination)

Policy and regulatory framework for pro poor service delivery (issues raised in relation to decentralization, privatization for service delivery, land, etc)



33 Discussions have taken place on appointing sub-units to enlarge spatial analysis tools and produce maps.

34 The pro-poor policy report includes a complete description of the programmes proposed.

35 For example, a cross-cutting topic that has been discussed is the design and implementation of "Guiding Principles for Pro-poor Settlements", including the issues of land, basic urban services, housing, spatial planning, and roads; such an action would be undertaken by a committee with counterparts from other ministries and bodies such as the Social Development Foundation.

36 A specific report on the monitoring and evaluation framework (number four in this UN-HABITAT series) is presented separately.

8. MONITORING AND EVALUATION FRAMEWORKS

International experience on the monitoring and evaluation frameworks of urban plans shows that it is crucial to develop indicators and procedures that truly match the urban phenomena being targeted. Purely financial or economic indicators may mislead an assessment of urban processes. Urban poverty, for instance, relates very much to concrete habitat conditions, which are measured relatively easily through the following indicators: square metres built, building materials used, habitat quality, water and sanitation supply, etc. However, assessing social progress requires these indicators to complement sociological aspects such as working conditions, average income, health and education standards, etc.

The challenge of monitoring and evaluation is selecting the right data to build indicators that reflect the complexity of urban life from different angles: social, economic, environmental, and ethnic. Unrealistic indicators (requiring information that is not available or is very costly to produce, and lacking systematic procedures to collect such information) make the process fail. In Khartoum State, the lack of reliable information is a main factor in the production of poor monitoring and evaluation results. The design strategy of feeding the monitoring and evaluation process with urban observatory outputs is smart, but must take into account possible delays and coordination problems, which affect the performance of the whole process. Such potential problems must be addressed at an early stage in the process, otherwise the risk of repeating "empty" assessments will seriously damage the expected performance.

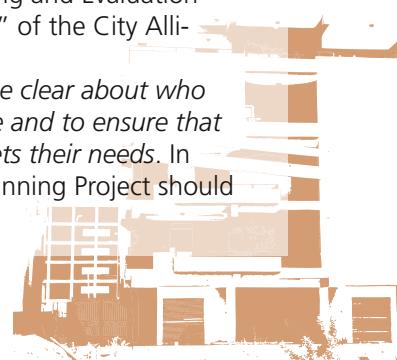
- Khartoum should develop its city development strategy in parallel with a specific monitoring and evaluation framework because of the possibility for feedback. Defining a priori programmes and a policy assessment strategy will provide direction. Indicators imposed ad hoc at the end of programme implementation suggest a role in which they do not really influence the planning process. A more positive role for monitoring and evaluation would be the consideration of multiple factors simultaneously. In brief, the following could be considered:
- Giving priority to the **indicator reports**, which would allow several ways to measure the same phenomenon, give an opportunity for cross-checking, and obtain more precise interpretations of the problem.
- Empowering **information systems**, with a particular emphasis on systematizing administrative

registers. The importance of this relates to optimizing the structures and mechanisms available to produce data for the monitoring and evaluation process. This requires a priori institutional agreements for cooperation to be in place. The idea of using urban observatories as facilitators of these agreements can work, but this requires a proactive agenda to ensure that the data, design of indicators, and information flows are in place before the monitoring and evaluation starts to work.

- **A participatory approach** at different levels, ensuring that common people have the chance to express themselves, individually or through certain organizations representing them. But participation in Khartoum may be limited because of cultural and social conditions, making it necessary to design mechanisms adapted to local conditions. These may include additional confidentiality and very specific community interest discussions, keeping the more general discussions for community representatives. Interaction should be encouraged within existing institutional contexts. The approach should be documented systematically, to serve as a monitoring and evaluation step.
- **Feedback is important** and accumulation of evidence needs reflection, discussion, and eventual dissemination in order for schemes to focus on results. Once again, participation must be completely open in order to avoid hierarchies that keep minorities voiceless.
- **Linking among planning activities**, budgeting, operations, monitoring, and evaluation, and the monitoring and evaluation must highlight gaps in such links. For instance, Dar Al Salam and sites and services, as habitat policies, cannot be assessed in isolation; they require an approach measuring their real effect on poverty, the environment, governance, etc.

These different recommendations cover the initial stage of the Khartoum Planning Project plan with regard to the design of the monitoring and evaluation approach. A more ample view of the subject should take into account the nine principles of good monitoring and evaluation (extracted from the "Guidance Framework: Integrating Monitoring and Evaluation into City Development Strategies" of the City Alliance):

- **Audience:** *It is necessary to be clear about who the users of the system will be and to ensure that the information collected meets their needs.* In this respect, the Khartoum Planning Project should



clarify early on those participating in the monitoring and evaluation process, formally inviting them and publicly communicating an agenda for monitoring and evaluation. Specifying the responsibilities of those involved is also crucial for legitimizing the process.

- **Practicality:** *The system should be practical and realistic in terms of the availability and reliability of the information.* Data available in Khartoum are scarce, mostly because they come from state or national surveys and are not disaggregated at community level. The lack of local data complicates monitoring and evaluation because it impedes the possibility of comparing the situation before and after the application of certain programmes and policies.
- **Flexibility:** *The overall framework for monitoring and evaluation should be capable of being modified as the city gains more information and the challenges facing the city change.* Khartoum is in the process of modernizing its public structures. So it is expected that capacity building and the introduction of information technologies will, apart from setting up urban observatories, significantly expand the capacity to generate and interpret data. This implies that monitoring and evaluation should consider the possibility of introducing more and more sophisticated information for specific detailed assessment purposes, according the local capacity. This would mean that the state, but also the private sector and NGOs, could provide better data.
- **Building capacity:** *Monitoring and evaluation should build on the existing information capacity.* This recommendation is important and complementary to the previous one: monitoring and evaluation needs to be operational from the beginning, because this contributes to upgrading planning and programming, which of course requires up-to-date data.
- **Relevant and focused:** *Monitoring and evaluation should be relevant to and focus on the key objectives of city development strategy.* The Khartoum Planning Project needs to ensure that indicators are relevant to the priority subjects selected and focused on the cause of the problems, not its symptoms.
- **Simple and at the right scale:** *Monitoring and evaluation should be at the right scale, beginning with a core set of indicators that can be refined and expanded over time.* Examples of such indicators are presented in the annex, illustrating how the Khartoum Planning Project could initiate a monitoring and evaluation system that, depending on the progress of the urban observatory project, can expand to introduce further indicators.
- **Appropriate and meaningful:** *Monitoring and evaluation should include both quantitative and qualitative measures that make sense and are rel-*

evant. Such conditions must be checked by technical specialists in each field, but also require strong backing from the people to ensure its suitability.

- **Balanced:** *Monitoring and evaluation should cover both what the city development strategy is hoping to achieve (its outcome) and how it is to be done (the process).* The Khartoum Planning Project targets urban problems and uses capacity building at the Ministry of Physical Planning and Public Utilities to address them. Monitoring and evaluating such a process requires indicators that relate to the impact of urban policies and the performance of the capacity-building initiatives.
- **Benchmarking:** *The monitoring and evaluation should make it possible to make comparisons with other cities where this is helpful and informative.* The use of "best practices" allows a look at Khartoum's achievements in global and specific terms, creating the chance to explore innovative approaches.

9. URBAN PLANNING AND DEVELOPMENT FRAMEWORKS

Sector studies have identified specific bottlenecks in urban planning and development strategies (Figure 39). A crucial one, already presented in the previous paragraph, is centralization. Khartoum being the seat of the federal government means funds are available from state and federal sources. This allows the implementation of very ambitious urban renovation programmes that neglect development in more disadvantaged areas of the state. Such centralization leads naturally to a traditional planning approach, which is rigid, long term, fragmented, unsustainable, and non-participatory.

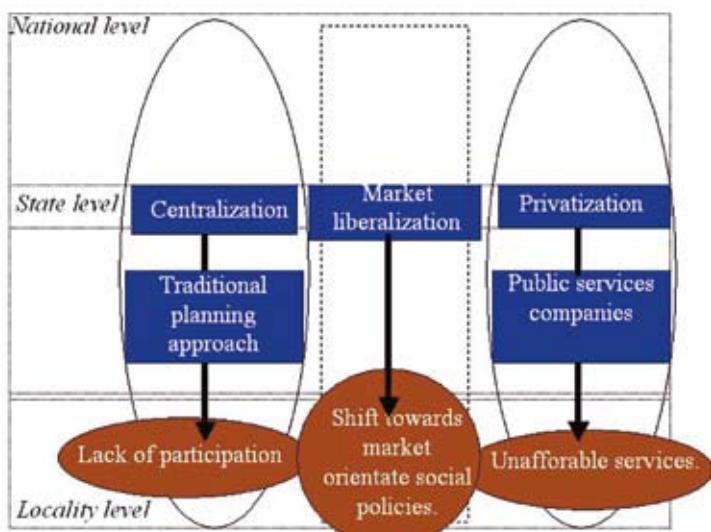
Traditional planning approaches are rigid because they are based on rules and standards far removed from the reality most people live in; this rigidity facilitates the development of informality, rather than actually controlling urban growth. It also affects the development process: informal populations have minimal access to permanent habitat and functioning facilities, spending most of their life and a disproportionate percentage of their small earnings on services that could be cheaper and better. Income generation strategies such as microenterprise activities are also affected by rigid rules. Long-term planning targets economic and social development, working with the concept of "master plans", but tends to neglect short-term social needs.

The fragmentation of public policies according to separate issues limits their performance. By not combining urban planning and socio-economic development, an unsustainable situation is created in which the proliferation of poverty dampens the whole planning process. Combining urban planning and development requires a different approach; the traditional role the Ministry of Physical Planning and Public Utilities played supplying sites and services and approving building construction plans is divorced from social reality, as people cannot afford construction work. A much more harmonic approach, expected to be introduced in the Khartoum Planning Project, consists of the ministry being involved as a major promoter of local economic development strategies supporting existing initiatives and removing those obstacles created by unfair and inadequate regulations.

The lack of participation defines the major bottleneck facing Khartoum regarding urban planning and development. The lack of legally supported mechanisms for participation, such as public audiences, is one of the major factors preventing current initiatives from involv-

ing more people. The top-down approach, inherited from the colonial period, implies a loosening of the involvement and support of communities and different productive sectors. This situation leads the state to work in isolation; they are administratively backed by localities, but are certainly not receiving popular or political support. The result is the discouragement of agreed-upon proactive actions, something essential for successful planning exercises.

FIGURE 39. MAJOR BOTTLENECKS IN URBAN PLANNING AND DEVELOPMENT



A second bottleneck results from market liberalization trends. Such trends push up the prices of basic urban services, a result of the competition over scarce resources, land, and water, which especially affects low-income groups. Several initiatives have been designed to compensate these effects, including subsidies for vulnerable groups and special incentives. But state bodies, and even the society as a whole, are not normally aware of the mechanisms designed to ensure that market-oriented socio-development policies really work. Urban planning rules also need adjustment to match the new goals of attracting investment and distributing wealth, with a pro-poor urban planning and development commitment.

In this new scenario, land use initiatives seek to facilitate real estate investment, which will naturally happen in exclusive neighbourhoods, segregating the poor neighbourhoods in which public investment is necessary to minimize the "dual city" effect. These operations, which are certainly complex, require capacities that the Ministry of Physical Planning and Public Utilities historically lacks. This creates pressure for insti-

tutional re-engineering for better performance, which, when delayed, threatens to thwart the plans. Organizations dealing with social development (*zakat*, *waqf*, NGOs, the Ministry of Social Affairs, etc.) are facing similar restructuring challenges in order to perform better in the new system and achieve the development desired for the urban poor and the society as a whole. Urban planning and development play a leading role in promoting (with other ministries and partners) those approaches already tested and considered valid.

The third bottleneck is the wave of privatization that is flooding public services. The direct impact is unaffordable services for the vast majority of people, because private companies operate on the basis of real prices that result from the relationship between supply and demand. The resulting high prices of basic services such as water, sanitation, and transportation are prohibitive for a significant percentage of the poor. From an urban planning perspective, this requires the creation of institutions able to regulate such companies and insert their investment plans into an urban development strategy. This requires a lot of coordination and negotiation skills inside Khartoum State, which does not exist at the moment. This creates a third bottleneck because it limits the practical implementation of urban planning and development strategies, affecting the urban poor's access to urban services and economic development.

Challenging such bottlenecks requires a new paradigm for planning based on the following principles: participation, involving key stakeholders and actors to identify the strategic needs and entry points; integration of sectors through a holistic approach that includes visioning, action planning, and decision making to avoid duplication and overlap; strategy, which identifies priorities and addresses them by conserving resources and directly responding to needs as they emerge; sustainability, which comprehensively addresses local development (social, economic, and environmental) on a platform of good governance (ensured by participation and capacity building); and flexibility and dynamism, responding effectively to and accommodating rapid urban changes³⁷.

For such an approach to really work, a preparatory capacity-building process is required for the state and locality administrative structures, relying on successful experiences in participatory planning and implementation with communities and different stakeholders.

"The capacity to manage rapid change is one of the key attributes of good governance. The capacity to manage urban and institutional change is often con-

fused with the investment capacity of city or municipal authorities. The two are not necessarily the same since such authorities can do much to encourage and support private investment, not only in enterprise, but also in a city's built environment and in infrastructure and services" (UNCHS, 1996). The Khartoum Planning Project will do better to guide private investment, prioritizing pro-poor policy goals and funnelling resources from its active private sector rather than trying to use its own budget to cope with the growing habitat problems. However, financing strategic infrastructure to support local economic development in vulnerable neighbourhoods is still a prerogative of the state, which does not contradict the validity of the enabling approach but rather confirms it.

³⁷ Extracted from "Enhancing the Capacity of Khartoum State in the Formulation of an Implementation of Pro-poor Urban Planning Policies" project document.

10. FINAL REMARKS

Although Khartoum is a powerful metropolis (Figure 40), with vibrant communities, a rich historical legacy and a unique natural landscape, where the White and Blue Nile converge, and strategic regional location and resources attracting foreign investments, the problems created by poverty, forced migration and ethnic tension constitute a major threat. The different report outputs presented highlight the need for further consideration of urgent urban problems, which continue to emerge even alongside a promising economic revival. Poverty is growing, together with associated social problems such as non-existent basic urban services, and the situation puts the sustainability of the whole metropolis at risk.

Controlling sprawl and leapfrog development requires urgent and definitive action on squatting practices. But the technical foundations and methodology used for such decisions must be socially acceptable. In the short term the "Guiding Principles" provides an important framework, but it requires further details and efforts for practical implementation. In this regard, it is critical to bring together the government, the UN, and the European Commission, as well as counterparts and representatives from the affected communities to monitor the actual implementation of the guiding principles, expanding the ongoing regular meetings organized by the governor (Wali), in which UN-HABITAT, various donors, and representatives from the popular committees and localities participate. More participation from the affected population will serve to smoothly shift this from a routine activity to an opportunity for negotiation, agreement, and discovery of solutions. Such a promising scheme requires the application of participatory mechanisms that are wisely designed and introduce the rationale of positive discussion from the very beginning. But a participatory approach requires legal instruments, backed by experience, and this is not available at the moment. Rapid Urban Sector Profiling for Sustainability combines a diagnosis of local problems and popular consultations, providing a crucial input towards building more participatory approaches.

It is clear that policies are required to settle IDPs and low-income groups on a permanent basis. Pro-poor policies are required that encourage the construction of more accessible housing, based on participatory approaches. Public and private sector partnerships at the moment only target the construction of upper income housing. It is necessary to encourage further public-private partnership experiences in the field of popular housing and urban services.

FIGURE 40. AERIAL VIEW OF KHARTOUM



However, it is important to reinforce the role of the state as leader of the process, engaging more stakeholders and not acting in isolation, as this was a problem in previous planning schemes. Even during the most productive periods of the state, when it followed the trilogy of land, housing, and basic urban services, the housing demand was much bigger than the supply. The poverty growth rate in these periods coincided with the inadequate supply. During the period of public withdrawal, the mismatch grew between supply and demand of popular facilities, contributing again to increased poverty rates.

Currently, the favourable economic conditions in the state create enough resources to address poverty problems. However, the policy impact assessment revealed that a lack of funds is only a part of the problem. There are distortions in the application of pro-poor regulations, such as speculation on land for real estate purposes; public works are also diverted to finance the priorities of the upper classes. The repetition of previously implemented schemes on land subdivision, housing, and basic urban services shows that there is limited ability to tackle the problems. Even though it is successful in many aspects, the government is impeded in working out a comprehensive strategy to deal with the causes, not just the symptoms. The introduction of principles for strategic planning in the public agenda seeks to overcome the traditional limitations, without losing positive experiences.

The studies point out the use of land as a crucial factor in differentiating between poor and non-poor, and the need for innovation to tackle the problems. Traditionally, sites and services schemes have used land as the

basic resource to settle all inhabitants as equals. But as land becomes a scarce resource, the poor are excluded from the few available ways to own land.

Innovative land development in the context and framework of appropriate urban planning approaches in Khartoum leads to socio-economic development in several ways (UNCHS, 1996: 305): strengthening the management of urban infrastructure by calling for further coordination between state and parastatal organizations; improving the citywide regulatory framework to increase market efficiency and private sector participation, empowering small contractors currently challenged by large or foreign construction contractors; improving the financial and technical capacity of municipal institutions by reorganizing planning mechanisms in order to regain control of urban development; strengthening financial services for urban development by supplying affordable credit to the poor that is flexible enough to also finance multi-storey buildings and thus increase densities. This helps to move away from the old colonial system of zoning (according to plot size, which is related to social hierarchy), which is criticized as being a form of "apartheid". It develops new approaches to settling different income groups, giving priority to the problems of the majority, not only through physical actions such as generating plots and roads, but also through matching such assets with financial resources to mobilize efforts aimed at self-development.

Many of these innovative mechanisms contribute to capacity building in a much broader sense. The impact of such contributions would be greatly enhanced and better targeted if there was much better coordination of policies and programmes between city planners and the wide range of local business interests in both the formal and informal sectors. For instance, the introduction of mixed use zoning (residential and commercial) would be of immediate benefit to small household-based businesses, which form a core part of the informal sector and which are not provided for under traditional master plans with their emphasis on separate land use zoning.

The actions reported to the level of localities in Khartoum, to protect the interest of the microenterprises of low income sectors opens a window of opportunity to optimize available space strategic location, such as the communal markets. Even more ambitious, the inclusion of income-generating activities through urban renewal plans provides valuable clues for understanding and intervening in the relationship between poverty and marginalization resulting from isolation and segregation of different social and ethnic groups. The growing separation between formal and informal markets makes the efforts to integrate the urban poor difficult. The real estate markets in Khartoum and greater Khartoum show huge disparity in land prices

and real estate values. Informal markets play a crucial role providing services, land, and housing at affordable prices to those who cannot access the formal markets.

Experiences such as Dar Al Salam provide a way to reduce such gaps: reviewing and making more flexible building and land subdivision standards, introducing regulations that favour local investment in permanent constructions, and minimizing temporary "solutions". A smooth transition from informal to formal markets, facilitating the legal mechanisms to formalize the process, would constitute a way forward to empower the poor and protect their rights to land, basic urban services, and permanent housing instead of what normally happens, which involves land and transitory dwellings, without services. The inability of the poor to afford formal procedures and fees make them highly vulnerable. They are unable to secure land tenure, which negatively affects their development, as they cannot build homes or infrastructure and have difficulty generating income.

Environmental infrastructure has not been managed in an integrated manner, even where the different forms of infrastructure provision are under the same ministry, local authority or parastatal. Integrated management is needed; for instance, inadequate water supply leads to poor sanitation, while inadequate provision for sanitation can mean the contamination of surface water and groundwater. The absence of a well-managed solid waste collection and disposal system often leads to refuse blocking drains, which in turn causes flooding in low-lying areas and water pollution. An integrated approach is also needed to promote the conservation of water resources, both in terms of quality and quantity, and the efficient and equitable allocation of scarce water resources among competing uses.

In the study, there are recommendations regarding the supply and management of basic urban services, depending on the type of service provided. Full or partial privatization is considered in the report as a possible alternative. Although it clearly points out the non-existence of homogeneous schemes for different services, it also addresses the issue of common principles regarding the role to be played by the state and the private sector. The key is that the state must maintain control of the service, with strong monitoring and evaluation mechanisms, and eventually partner with community groups, backed by civil organizations. The private sector will step in when appropriate, as it has the skills and resources to upgrade the service. But the state must apply the right regulatory framework to avoid increasing prices through fair competitiveness, subsidies for legitimate vulnerable groups and incentives for sound self managed community organization.

An important factor to take into account is the role of international investment, which lobbies to get profit-

able public services contracts. The report emphasizes the importance of the state retaining control and authority in the design of policies, ensuring that the public service markets are not split into small pieces. The private sector would probably select only those service markets that are profitable, neglecting the low-profit markets where low-income communities typically live. Another important dimension associated with liberalization is the increase in speculation in certain areas, with various actors seeking to gain profit from real estate operations. This leads to the eviction of informal low-income groups.

Once again, the process highlights the importance of using a pro-poor regulatory framework, ensuring that private investment (local or international) prioritizes the poorest groups. Such a framework overcomes the traditional rules and procedures on which Khartoum developed and includes much more sophisticated mechanisms of cooperation, coordination, and partnership among different sectors and issues. With the state enabling the private and nongovernmental sector, it is tackling in an integrated manner the problems of the urban poor through a sustainable development strategy.

This enabling approach helped to develop what might be termed a new agenda for habitat, as it relied on market forces for many aspects of shelter provision, but within a framework that addressed those areas where private, unregulated markets do not work well (UNCHS, 1996: 337). This does not imply that state should be marginalized, but on the contrary it should focus its actions on those areas where the markets cannot do it better, minimizing and simplifying the problem.

The approach thus uses private markets for land, building materials, finance, and finished housing, as there is an advantage in terms of cost reduction, a rapid response to changing demands, and a diverse range of housing products available for sale or rent. However, not only private sector firms are seen as more effective producers and providers of housing, housing finance, land development, and housing-related infrastructure and services than the government there are also institutions such as NGOs, cooperatives, and volunteer agencies.

Governments retain a key role in ensuring that land and housing finance are available and that the provision of water, sanitation, drainage, and all other infrastructure expands to match the growing housing stock, although private firms or voluntary organizations may have a central role in actual provision. The report reveals how, although it achieves important results, public investment in irrigation schemes is insufficient to kickstart the regional economy and generate development for the rural poor. Additional partner-

ships with private investors to support agro-industries are clearly needed, including the poorest communities in the process through sound regulations and public investment.

This new approach accepts that the privatization of some services can bring major benefits, but privatization is no longer the standard solution for all services. The tendency in market economies to promote short-term optimization at the expense of longer-term investment and planning is of concern, as is the lack of attention paid to the influential role of interest groups and other non-economic factors in manipulating the way markets work to the advantage of some and the detriment of others. This observation re-emphasizes the limits of the market mechanism and reasserts the importance of governmental involvement in social action.

However, the report explains the impossibility of introducing such innovations without addressing existent information gaps, which must be removed to support specific project proposals. The general lack of information is one of the major obstacles to reaching consistent conclusions. Such difficulties relate to the lack of a comprehensive, reliable Sudanese survey, something that is expected to be solved through the new survey done by the national census³⁸, which is particularly disaggregated at the locality level. The sector studies highlight the fact that habitat problems differ very much among the different categories of the poor in Khartoum and thus require particular responses. This input calls attention to the importance of a pro-poor action plan and a capacity-building strategy for the Ministry of Physical Planning and Public Utilities, moving the organization from being a bureaucracy to being a service delivery organization.

There are possibilities to introduce strategic changes into the current policies, with a positive impact. The shift from land supply to proactive and holistic approaches demands new capacities at the ministry, which in some way have already started to be developed through the reshaping of the institutional chart. This has created decentralized and autonomous bodies that are by far more proactive than the previous departments, which merely approved plans and implemented public works.

Coordinated actions and matching funds among the public, private, and nongovernmental sectors appear to be particularly important in the current context of Khartoum.

The shift from “assistance” to “partnering” in the development process returns to the issue of state

³⁸ Carried out in June 2008 by the National Bureau of Statistics.

capacity and community groups carrying out the participatory planning process. Such participation is the cornerstone for legitimizing pro-poor policies and generating the popular support to implement them. Participation in Khartoum requires a very balanced approach, involving organizations that represent the interests of the poor collaborating with the state structures, starting with localities. Empowering further coordination between the ministry and localities on the one hand, and civil society organizations and localities on the other hand, appears to be a strategic move towards participation. The methodology and basics of the participatory approach are expected to be included in the next stages of the project, necessarily adapted to the particularities of the different categories of urban poor.

Urban renewal, renovation, revitalization or upgrading plans without popular participation may require in the long term the introduction of inclusive city mechanisms that prevent social conflicts. Housing, basic urban services, and local economic development, being key components of urban renewal, must include popular participation by involving the different categories of the poor through specific mechanisms that smoothly build partnerships and ownership of the projects. The linkages among projects, programmes, and policies must be clear for all participating stakeholders, in order to build trust and an agreed vision for the future..

The different observations and recommendations included in this summary seek essentially to identify ways to create the momentum to regain planning authority in a transitional context. Planning in Khartoum has a long and controversial history. But moving forward from past mistakes, introducing lessons learnt and successes into the future requires a clear understanding of the complexities of the current urban poor communities and their strategies for survival, as well as the several ways forward to initiate or expand actions that empower specific communities and indeed the whole society towards achieving their human rights.

The capacity-building action plan appears to be a necessary complementary action to the development of different pro-poor policies, simultaneously targeting human resource development and institutional adjustment. On human resource development, the plan views the Training, Scientific, and Research Department as the cornerstone, providing training for the staff, in collaboration with consultants who will complement efforts to integrate pro-poor policies in ministry structures. On institutional adjustment, measures to empower communication and collaboration among departments and with external organizations (public corporations, the land department, the Housing and Development Fund, various ministries, NGOs, donors, and the private sector) are proposed through

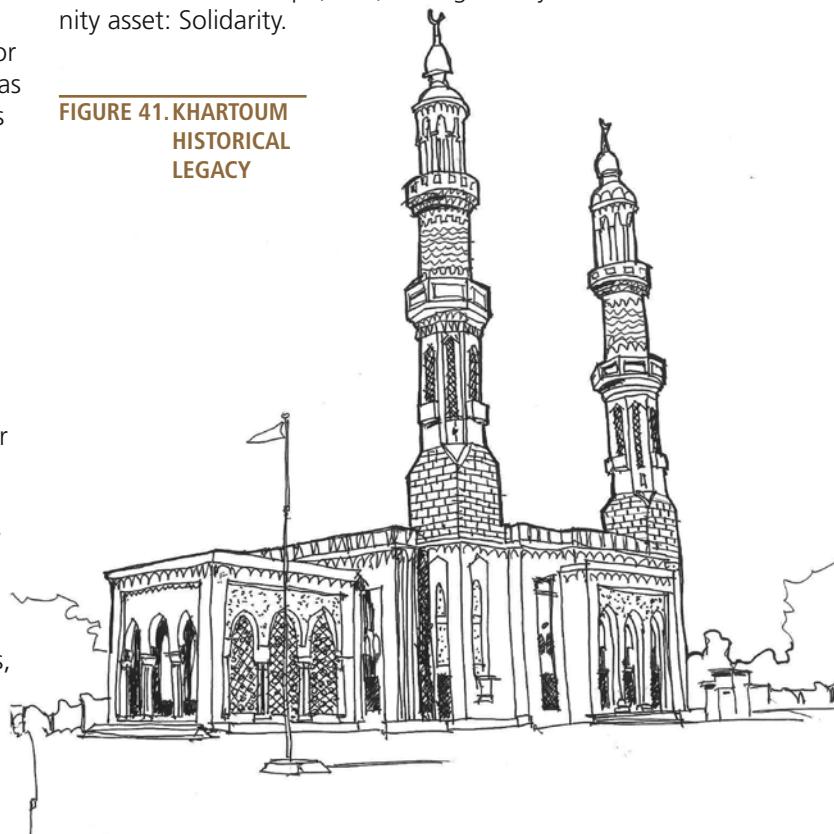
the development of an intranet and the use of existing structures (e.g. planning committees).

Monitoring and evaluation framework alternatives provide concrete schedules and methods to assess the structural plan and its multiple components. Such demand for information highlights the importance of urban observatories as a major data provider and legitimizes its reliability in orienting the planning process and checking the validity of the planning strategies. In addition, urban planning and development analysis contribute significant inputs with regard to how routine mechanisms and legally established practices generate particular habitat conditions that favour certain urban poor types. Such inputs shed light on the poor planning principles that remain from colonial times.

The interlink among these different subjects opens multiple perspectives from which to review planning approaches and introduces the "enabling framework", which is promoted as a more effective way to deal with problems stemming from rapid urbanization. The framework prioritizes poverty problems being tackled by the public sector, acting cooperatively to create an alliance of ministries, public corporations, and special offices, together with NGOs, community-based organizations, and key stakeholders from the private sector. Transparency in this process will only be provided through public participatory planning mechanisms.

Finally, a pro-poor vision for sustainable metropolitan development means essentially to empower and update the existing mechanisms, legal, social, economic and environmental, to share the enormous resources of Khartoum, growing foreign investment, multicultural environment, historical legacy (figure 41), strategic location and landscape, etc., through a key community asset: Solidarity.

FIGURE 41. KHARTOUM HISTORICAL LEGACY



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