

# *The Strategic Planning of Towns and Villages in South Khartoum State*



**BY: SUSAN IBRAHIM ABDALA MOHAMED KHAIR; B.Sc. Architecture Eng. M.Sc.  
Physical Planning and BEDRELDIN HASSAN OMER; B.Sc. Survey Eng.**

**April 2011**

## Self Presentation



Susan Khair is born in 23 July 1980, in Khartoum, Sudan, she graduated in the Islamic University of Omdurman (with a B.Sc. (Hon) in architecture and planning, in (2001); and has had her Master's Degree (M.Sc.) in physical planning, from the University of Khartoum, in (2005). She is currently preparing for her Ph.D., in “Environmental Planning Consideration for developing Khartoum waterfront”, with the Sudan Academy of Sciences.

Susan worked as the chief planning in the Ministry of physical planning and public utilities, in Khartoum, Sudan from 2002 to date. In this capacity, she participated in the design and monitoring projects of Khartoum State.

[info@khartoum-ppu.net](mailto:info@khartoum-ppu.net)

- She worked as a consultant with the U.N. Habitat (Rapid Urban Sector Profiling for Sustainability) (RUSPS), in Gender & Social Issues., in the following capacities:
- Through RUSPS she built national profiles (for three towns), her consultation in Gender and social themes.
- City and Village Strategic planning formulation and RUSPS; she prepared strategic plans for south Khartoum towns & village, her consultation in Gender and social Issues.

Plus other projects

<http://content.undp.org/go/userguide>

- She worked as a coordinator between Mefit/Centecs (the consultant of Khartoum State structure plan) & KPP5 (Khartoum planning project n.5) executive administration.

[www.mefitltd.com/](http://www.mefitltd.com/)

- She is also, now Head of the Architectural Department in the Faculty Engineering Sciences.

**Note:** She was assisted in this research, by Bedreldin Hassan Omar B.Sc (Surveying Engineering; M.Sc in remote sensing and GIS, Sudan Academy of Science, Khartoum, Sudan.) He is the manager of the GIS Department, Khartoum State Water Corporation.

*Front page Jebel Awlyia dam – South Khartoum rural area*



## **Introduction**

It is observed that strategic planning of towns and villages, in most of the less development countries, is based on top – bottom approaches. That is, most of the work is done, from the beginning to end, by government endeavours, which are exerted by experts and senior government officials. There is little participation of the middle levels and the basic levels. This has made the strategic plans not effective enough for the public to respond to; neither does the general public find responses to the real wishes and desires of the ordinary citizen. The strategic plans are not based on participatory consultation, the identification of the priorities, or take into account the logical needs of the people. Thus, participation and partnership should become obligatory, if success is desired, for any future strategic plan.

Experience has shown that State adopts medium and long-term strategic plans, according to the general political orientation, for change to the better. Yet, little attention is paid to the States levels, national concerns and the wishes and desires originating from people's level. Thus plans become expressions of the aspiration of the higher level officials, without any regard to the public and their wishes, so as to make these plans cohesive. This cohesion is only possible through the integration of overall planning strategies of the State with the general public on the levels of policy-making and decision making, in order to avoid the top-bottom approach, and adopt the bottom-top approach. More appropriately is to adopt a mixture between the two approaches, for accomplishing the aspirations of the local communities.

The value of this mixed approach is that it avails benefiting from the special nature and the objective conditions of these local communities, their culture and traditions and their interaction with the environmental conditions, on the bases of their socio – economic development. There are distinct variations between the urban and the rural communities – especially in terms of the rural areas that are situated on the verges of the urban areas.

In reality, the more people participate in the preparation of strategic plans, the more they feel that they have obligations towards their development projects and the implementation. So, whenever this occurs, the circle of participation would expand, horizontally and vertically. In the end this would lead to enthusiasm of all the people for the mechanisms of the projects and as a result community members will consider that these projects are theirs. This is the crux of the whole issue.

In the same way, there is an obligation on the level of the State and the local communities, to implement the Millennium Development Goals, which are closely linked to the concepts related to human sustainable development, for providing the basic services amongst the poor – (i.e. basic education, public health services, the creation of new work opportunities, the preservation of the environmental resources for improving women position, the mother and child health care and the combat of diseases). This means that the objectives of (MDGs) are simply to provide good living environment, through rational government, setting and promote the values of justice and equality amongst the population. Thus, the nearest set-

up which is close to the people and their aspirations, are the base organization which are located closest to the people.

The mechanisms for the achievement of the strategic plan are only one part of a large plan of development of regional development and national development. This necessitates that the strategic planning on all levels, should be integrated and rendered cohesive, if the whole country's strategic planning efforts should be successful. The most important part of the implementation strategy, is the general plan and regional plan. It is the administrative unit, which deals with the status-quo analysis and determines objectives and future targets – both quantitatively and qualitatively.

*Stakeholders meeting*



## **Methodology**

The objectives of the study, was based on projecting the role of integrated participation of all the target groups to avail their an active participation, in the strategic planning stages and involving the local community in the planning and implementation of the development of their areas, so as not to feel that they are aliens to the development process. Moreover, there is a change in the orientation of the policy-makers (at the top), when the grass-roots feel that it is them who planned through participation in the planning process. The executive organ (i.e. the government) has participated by offering the technical support and the financing of the development in the community. The role of the government as represented by the functional central or State bodies, experts, city consultations (i.e. workshops, seminars, the legislators, executives, private sector and non-government organization (NGOs) was to take the initiative for involvement with the popular participation, to the greatest extent, by focusing on the local community members, in addition to the executive local authority (i.e. the administrative unit). This required holding meetings with the two parties (i.e. the government and the stakeholders). The local community representatives for fine – tuning review coordination.

Thus, the descriptive-analytic approach was utilized, as a methodology for the analysis and discussion of the collected data.

The methods for data collection on the other hand included the collection of the primary data, from the primary sources. Thus, the questionnaire method, field meetings and the Geographical Information System (GIS), were used, for the purpose. The data collected in this way were analyses according to SWOT analysis and then the results of the analysis were subjected to discussion in consultative study workshops.

The graphical representation of the methodology in complete form is attached here with (page 9).

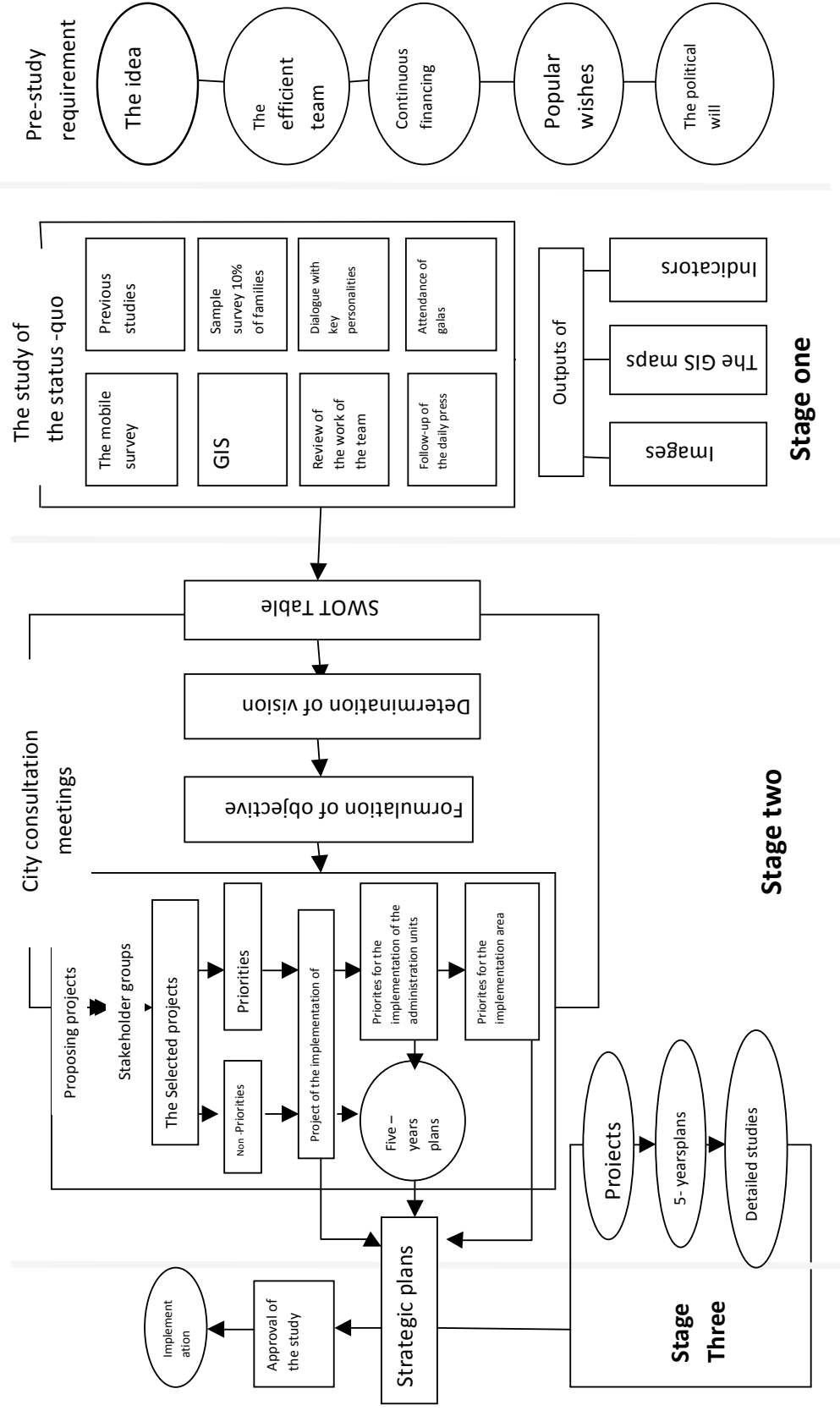
The questionnaires were prepared by a work team. They were distributed by university students (photo3) of urban planning, population planning, environmental planning and social planning. The questionnaire form was distributed to 10% of the families living in the area, which represented a random sample of the population of the rural areas to the south of Khartoum State.

The secondary data sources included the previous studies on the topic of strategic planning and popular participation, reports of the various government authorities in the area, field meetings and the follow-up of the daily press regarding the follow-up of the related topics.



Photos by courtesy of experts and specialist from different entities

# Adjusted Methodology



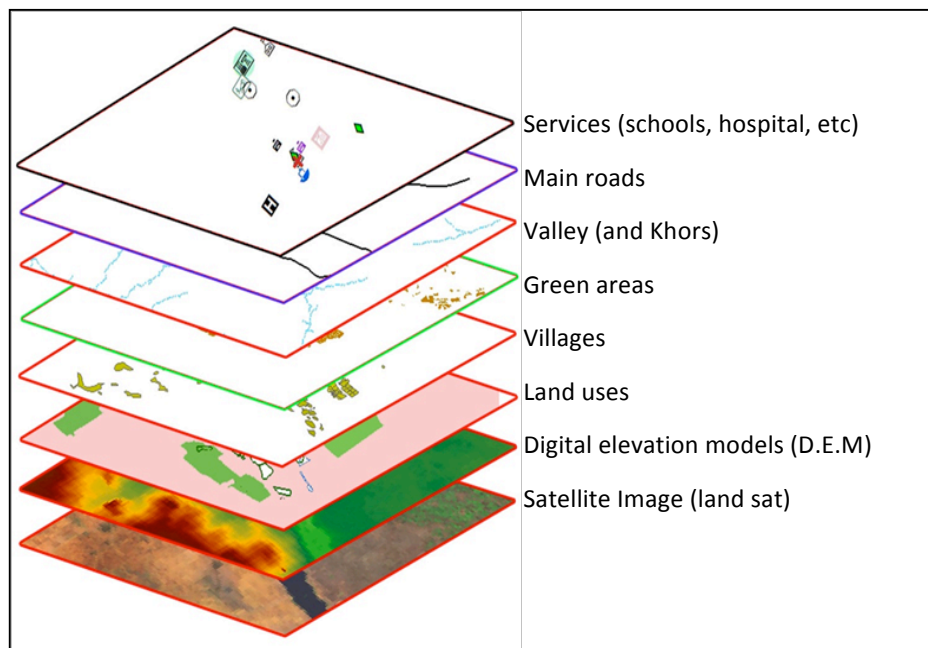
## **The Geographical Information System (GIS)**

The (GIS) was used, as being an important tool, for the determination of the location of the public utilities, land use (land classification), the distribution (as a guide) of the field survey teams and the preparation of maps and included the following applications:

- Services map (school, hospitals etc).
- The main roads.
- Valleys and 'khors'.
- The urban areas.
- The villages.
- The land use.
- The digital heights model.
- Space image (land sat).

(See attached maps)

These maps, through the (GIS), provided the valuable information for establishing the place data, the population number for the year 2008, data about the land use and the deduction of several locations and geographical information. They are also helpful as a tool and basis for conducting the field survey.



**Base map layer structure**

## **SWOT Analysis**

The team used the SWOT analysis, as a means for penetration to the point of strength and weakness, on the internal levels and operation management inside the administrative units. It also included the reflection of the external influence, on the side of the opportunities and threats, which may affect performance. For this purpose the SWOT analysis reports about the study area, covered the various field on the level of units.

## **The Current Situation**

### **The Historical Perspective**

The area of the study, is south of Khartoum State area. It is composed a rural area which encompasses the administrative unit of Jebel Awliya locality and the southern rural area of Khartoum State.

The urban significant feature, in the rural area to the south of Khartoum, is Jebel Awliya dam. In addition, the study area is endowed with being a main station along the Khartoum – Kosti – Deueim road, on the bank of the White Nile. The convenient communication and the said dam made the fish industry flourishes and provided a suitable place for recreation for the inhabitants of Khartoum.

In fact the rural area to the south of Khartoum is an important economic region, for fish marketing, milk and fodder for animals, some cattle, and poultry and forest products. The area is generally agricultural – pastoral land, which flourished after the construction of the dam and the roads.

### **The climate**

The study area is hot most of the year. It reaches more than 40°C in the summer, and reaches 23°–25°C in winter.

Rainfall is very fluctuating; and 150 mm, as an annual average the humidity ratio range between 27.6°C and 46.3°C. The period of the rise of the relative humidity, assist in reducing the amount of evaporation, in the area. There are also sands storms, which increase in the dry years, when rainfall decreases.

The study area is large and amounts to 1140 km<sup>2</sup>. This area forms 5% of the total area of Khartoum State. The area is inhabited by 247,065 person, representing 5% of the total population of Khartoum State.

The other part of the study area (of the rural area of Khartoum State), is the southern rural area of Omdurman in Khartoum State. The total area of the rural sector of Omdurman is 1037.7 km<sup>2</sup> which constitutes 4.7% of the area of Khartoum State. The number of the population of this rural area is 127,230 persons. A cross the area, there is

an asphalt road, which passes, through the area, to the White Nile State and Kordofan State.

The current situation was studied in terms of the basic issues, which are:

- 1- Housing and urbanization issues.
- 2- Social issues.
- 3- Environmental issues.
- 4- The local administration issues.
- 5- The local economy development issues.

## **1. Housing and urbanization issues**

The population census of 2008 showed that the number of the people living in the rural Khartoum State is 247,065 for Jabel Awliya and 127,230 for the southern rural area of Omdurman, who live in 57villages. In many of these villages in both rural areas of south Khartoum State, there are: Kinder gardens, basic education schools for boys and girls, secondary schools, vocational training centres, hospitals, health centres, change points, social centres, mosques and police stations. Other social services include the provision of drinking water for humans, animals and other purposes, electricity supply, social centres, clubs and security posts and the local government structure.

## **2. The local administration Issues**

The local administration of the study area is made up of an administrative unit, which is managed by an executive unit under the leadership of an executive director, who is assisted by 3 administrators. There is also an administration in Jebel Awliya market and a number of accountants and supervisors. The unit concentrates on revenues. There are also technical administration in the field such as the director of education, the public health inspector, the veterinary inspector, the social welfare director and a directorate for the transportation of domestic and household waste. This is the institutional framework of the study area.

The next step is to deal with the administrative framework. Formerly the study area was a local authority with its corporate personnel and popular representation. The area has infrastructures which involved the other government institutions. Presently, the study area follows the local authority centred now in Kalakla, which housed the local authority which formally was in Jebel Awliya.

### **3. The environmental issues**

These issues cover three aspects:

- 1 – Sources of pollution.
- 2 – The collection and disposal of garbage and solid waste.
- 3 – The pleasant household environment.

#### **The sources of pollution**

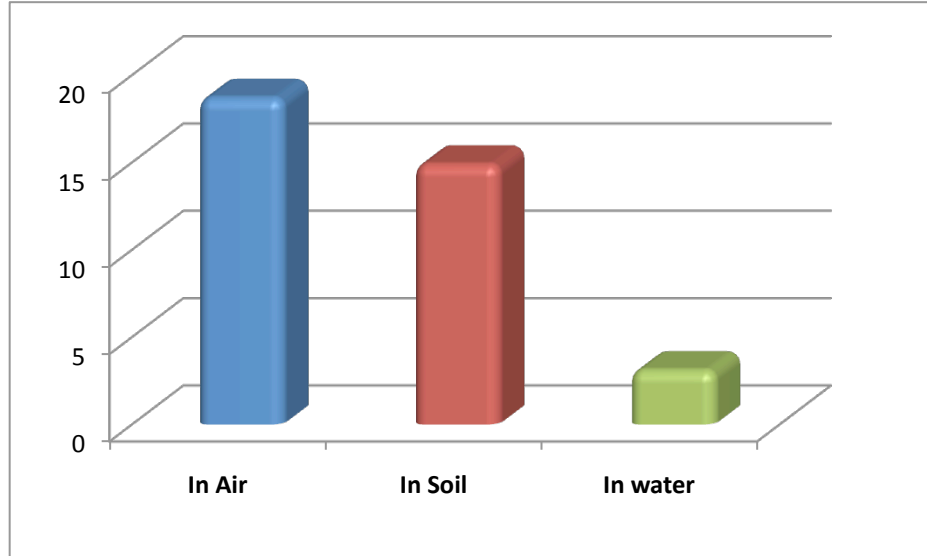
Pollution in urban areas is one of the greatest risks met by humanity. Despite the fact that the study area is a marginal and peripheral zone and the ratio of pollution is low, there are many sources for pollution. These include littering with plastic bags, the chemical fertilizers and the pesticides. The pollution by plastic bags kills animals and affects the growth of trees and other vegetation. There is also noise pollution in the area and water and air pollution.

There is an adopted waste disposal system for household and domestic waste, which include weekly collection in the streets in front of houses. This system is supervised by the popular committees and the administrative unit. Generally the solid garbage is burned, buried under the ground or disposed by other methods.

As for pollution by fertilizers or pesticides, these affect soil and agricultural production and are extremely serious.



**The presently degraded environment**



## Pollution

### 4. The local economy development issues

The inhabitants of the study area are engaged in trade, small industries and crafts, building, fishing, military jobs in the army post in the area, authority officials and others, and work in the other locality in Khartoum State.

The monthly income: Most of the people of the rural area are occupied in the agricultural production, animal husbandry and poultry production.

The monthly income of the people, vary between 90US\$ to 450US \$. The family who live on less than 180 US \$per month, represent 36.4%. Those whose income is more than 450 US \$per month, represents 3.7% of the families.

### 5. The social issues

The social issues included the issues pertaining to general education, with all its levels, the medical services, the social and security services. The significance of the social dimension is that it focuses on the marginal groups, the poor, venerable groups in society, amongst the urban poor and especially women and youth. The target is to address broader concepts like gender equality and women's rights and care for youth (males and females) living in the peripheries and villages near the urban centres. This will strengthen gender and youth awareness in the capital and the centre and the localities. The intention is to support NGOs, youth groups and other interest groups for the promotion of better opportunities. This is strategic planning work.

*Hence the social issues may be started with the deliberation of the following:*

### 5-1. Education

The sources of the data from the education office of the administration unit of the southern rural area of Khartoum State show that the number of kindergartens in Jebel Awliya is 99 kindergartens, while the children at the age of kindergarten is 9,883(4% of the population). There is a need for an additional 36 kindergartens (80 children per kindergarten)

The basic education schools in the Jebel Awliya are 32, while the number of pupils is 44,478(4% of the population) Thus there is need for another is 15 more basic education schools to bridge the gap. As for girls there are 36 basic education schools, which accommodate 22,239 girls (with a gap of 22 schools for girls).

As for secondary schools there are 8 schools in Jebel Awliya. The number of secondary students, (males and females) is 2,322 (4% of the population), who study in 17 secondary schools. The need is for 17 more secondary schools, to bridge the gap.

### 5-2. Health services

There is one hospital in Jebel Awliya town; 19 health centres and 8 change points that provide primary health care. The rate is one bed for 2767 persons for the administrative unit of Jebel Awliya (see fig.2)

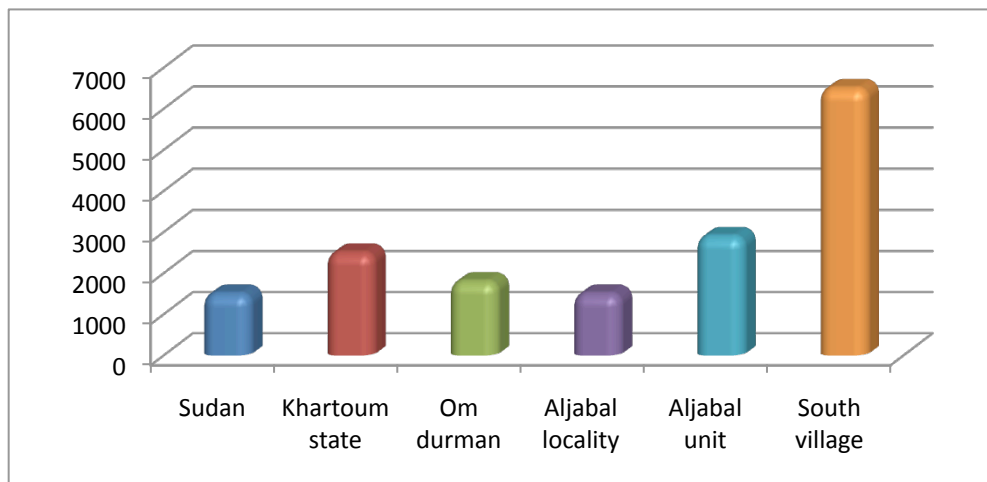


fig.2

### 5-3. Social centres and security

There are 16 social clubs, 31 social centres, 13 police stations and 8 comprehensive security points, in Jebel Awliya.

The situation in the other parts of the southern rural areas is more or less the same, with very little variations. Thus the whole situation can be detected from the situation of Jebel Awliya, as mentioned above.

The SWOT analysis was used as an effective tool for the analysis of the current situation, internally (strength/weakness) and externally (opportunities/threats). The analysis contributed to the participation of the stakeholders in the city consultation, and proposing projects for the problems, which were identified in terms of the previously mentioned issues.

### **Vision and objective**

The strategic studies always depend on the setting as visions, as overall aspirations, to which the stakeholders may aspire, through the objectives to be achieved. Most of the visions called at the beginning of the city consultation for the following:

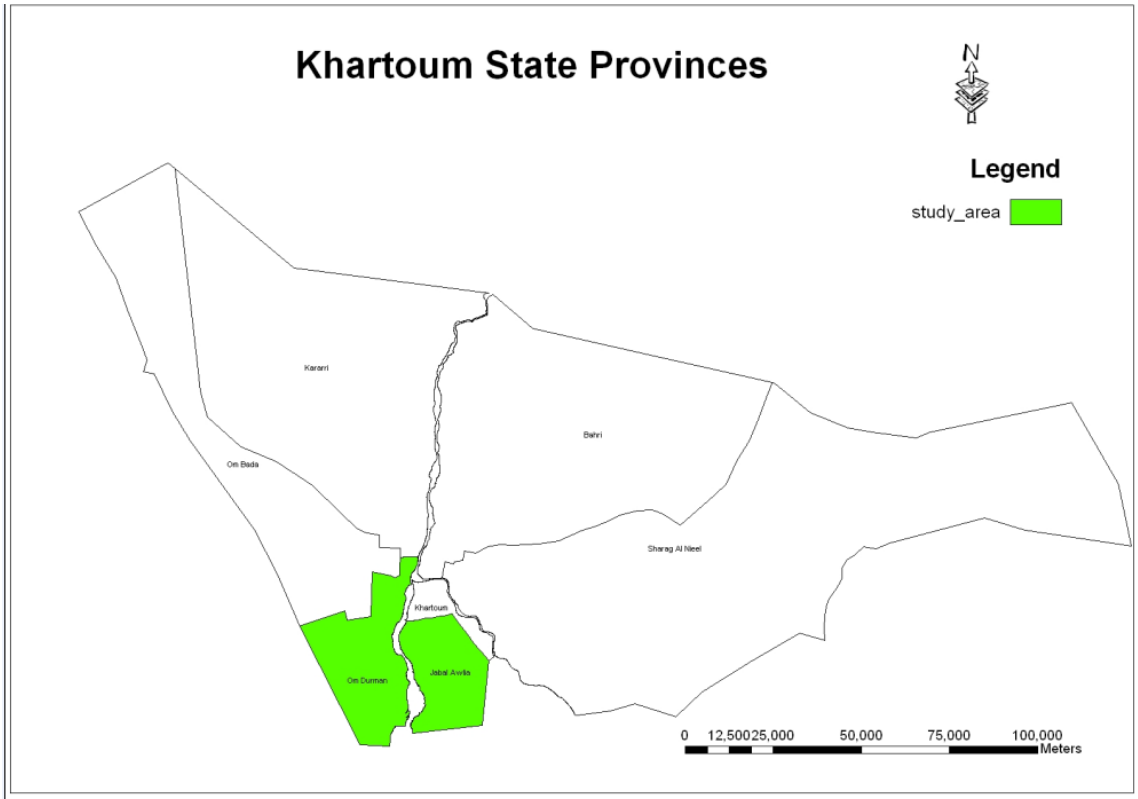
- To endeavour to provide an honourable life for the human being in the region.
- Building a human being in the area, who enjoys all his rights.
- Provide for conservative and sustainable tourism.
- The creation of a safe environment, in which the individual enjoys his/her full rights.
- The provision of employment opportunities.
- The creations of a healthy generation, who are proud of their gains, and who can develop their own future; towards the provision for a safe human being, in good health and with good and sufficient income.

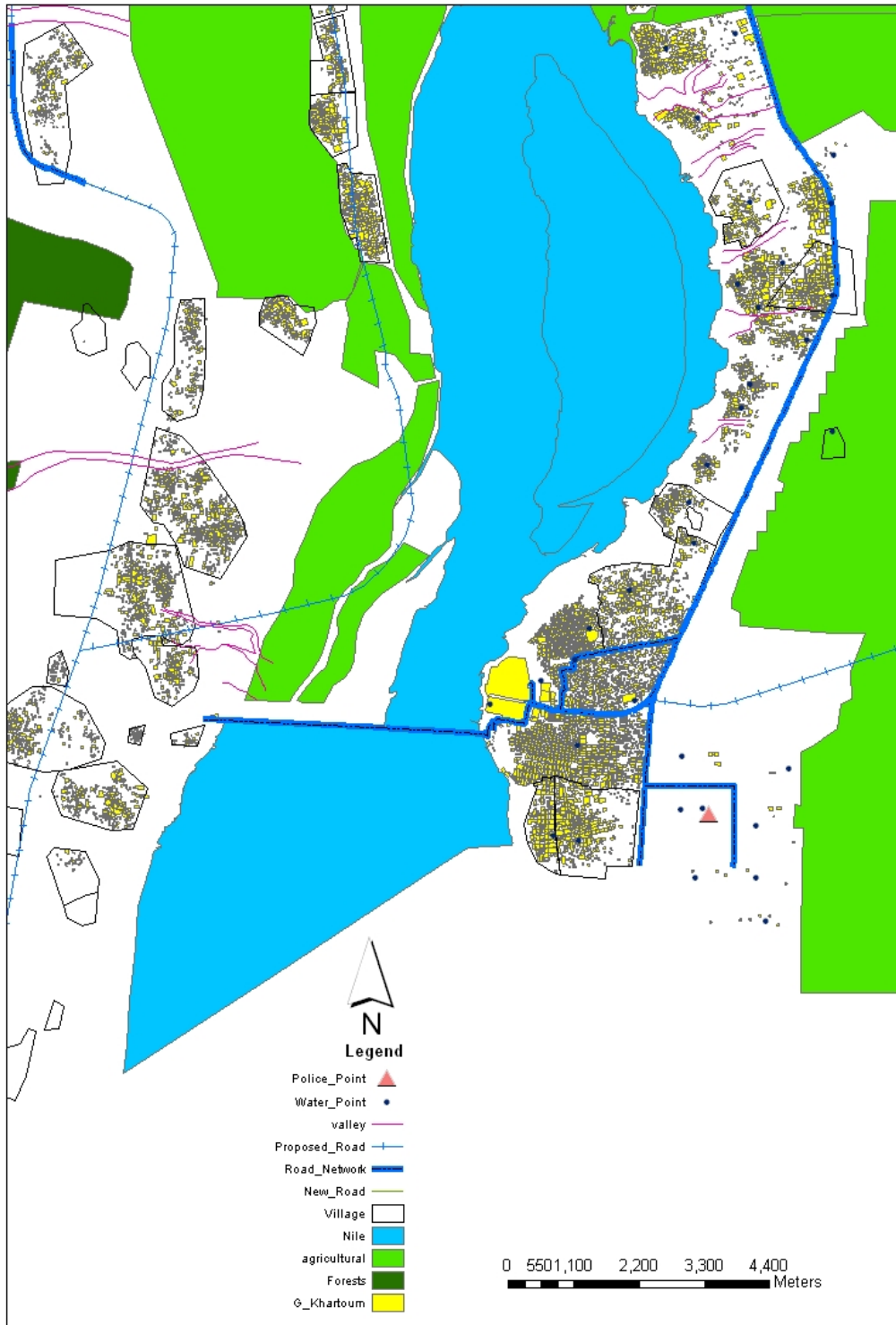
*Thence, the objectives were set for achieving this vision. These are:*

- 1- The development of the area, by replanting the same and extending the utility networks and completion of services for sustainable development.
- 2- The rehabilitation of the agricultural schemes and the development of the training centers for finding more work opportunities.
- 3- The initiation of a good life and environment, which is free from pollution.
- 4- The rehabilitation of the educational, health and social institution and instigation of the social and cultural activities.
- 5- The initiation of the popular committees for popular participation and the coordination between the executive and the legislative organs.

Then the projects, which would lead to the achievement of the above-mentioned objectives, were put on the table according to certain priorities, which were envisaged by the stakeholders.







Study Area (base map & services)



**Experts visit to the south rural area Office meeting of experts**



**Experts meeting with the commissioner of the southern rural area**

## **Bibliography and References**

- 1- Sida Integrated Urban Planning Models, Sweden, 2006.
- 2- Khartoum Structure Plan, Ministry Of Physical Planning, Khartoum, Sudan (In accordance with the giving's of the Millennium Development Goals (MDGs).
- 3- UN Habitat, in collaboration the Ministry Of Physical Planning And Public Utilities, Khartoum State Sudan, The Study Of The South Of Khartoum State .