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添付資料 1 : GFMP プロフィール

Gezira Family Medicine Project

(GFMP)

PROJECT PROFILE

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GEZIRA FAMILY MEDICINE PROJECT (GFMP)

Introduction:

Sudan lies in the northern east sub-Saharan Africa covering 1,861,484 km²[10] with a population of 34 million (2012), an infant mortality rate of 68 deaths per 1,000 live births, and a Life expectancy at birth: 55.4 years[11] Gezira state is one of the 17 states in Sudan, Centrally located in the country, is about 25,500,0 km², a total population of about 3,7million [2009]. 44% are below 15 years of age , 16.4% are below five years of age. Annual population growth is 2.6% and the total fertility rate is 5.9. Rural population constitutes about 80% of the total population, scattered over 3000 villages; however there is an ongoing process of urbanization. Gezira state depends mainly on agriculture, its position in the middle part of Sudan has protected it from the conflicts which characterize many periphery states. The main causes of morbidity and mortality are infectious and parasitic diseases such as malaria, TB, Schistosomiasis, diarrheal diseases, and malnutrition. Recent data and surveys have shown that also non-communicable diseases are emerging as a public health problem due to the change in socioeconomic and lifestyle conditions.

The modern health systems all over the world are now totally dependent on the primary health care and family medicine as the corner stone for the health system.

Reformation of the health system by this way will lead to a better quality of health services , better distribution of resources and equity in health service provision.

Sudan is a huge country, people are scattered in the rural and urban areas. This makes it difficult in health service provision. The use of the modern telecommunication and information technology presents an effective solution for such a problem. Telecommunication and information technology will be used in 3 important areas:

1. **Telemedicine:** Communicating the specialist doctors in the city with the family doctors who are distributed at the rural and urban areas, saving time, effort and money.
2. **Distance learning:** For the doctors working at the health centers so as to combine the health service provision with the training.
3. **Electronic filing system:** This is a mandatory part of the modern health system which keeps the history of the patient, medications, personal data, statistic reports and all the important data.

GEZIRA FAMILY MEDICINE PROJECT (GFMP):

Gezira state took the initiative to start modern family medicine in Sudan through the Gezira Family Medicine Project (GFMP). This was a pilot project which has reflected a big success although it is short time since its start:

- More than **2000 patients could consult specialist** while they are sitting with their family doctors through online consultations (Telemedicine)
- More than **200 family physicians received advanced training and were able to transfer health services** for rural and urban communities during their study (In-service training through distance learning).
- More than **80 village could recruit a doctor for the first time** in its history.
- **Hospital report showed significant reduction in the total consultation** number before and after the start of the GFMP (50.000 reduction rate between 2010-2011)
- **On arrival death has been reduced from 20 to zero at the maternal hospital.**

NATIONAL FAMILY MEDICINE PROJECT (NFMP) Is under planning, aiming to replicate the GFMP on the national level, supporting and upgrading the positive sides and avoiding difficulties. Six states including the eastern states(Kassala and Gadarif) in addition to Kurdufan, white Nile, River Nile and Sinnar have received the first course in how to replicate the GFMP in their states.

Justifications:

- In Sudan we have a good infra structure and human resources regarding telecommunication.
- Sudan is a huge country which makes e. health solutions is more suitable.
- Through Family doctors health services can be presented to all people in rural and urban areas in equity.
- A significant rate of people in Sudan is living in rural areas; most of them are totally isolated during autumn.
- The project will present job and training opportunities for doctors and medical staff.
- The success of the family medicine dependant health systems internationally.
- The high political commitment in Sudan.

- The technical and financial support from Federal Ministry of Communications Telecommunication Company as a major stakeholder.
- Using modern telecommunication in training and telemedicine will save much time and money both for the country and the people.

Project objectives:

1. Covering Sudan with 10000 qualified family doctors .
2. Presenting high quality health services for all people in equity.
3. Increasing patient’s satisfaction.
4. Promoting effective community participation in health services presentation.
5. Making a national and international model in family medicine.
6. Increasing the internet utilization culture.

Vision

Accessible family doctor and specialist services for each family.

Mission

Presenting accessible high quality health services for all people in affordable prices, making a unique model.

Project description:

The project is using modern telecommunication technologies so as to reach its planned goals as follows:

The use of modern telecommunication in the GFMP

All family doctors are equipped with computers and free internet access. This helps in achieving the coming three important tasks:

- **Telemedicine** communication with voice and picture between the family doctors and the patient on one side and the hospital specialists on the other side will spare time, effort and money for the patients.
- The doctors will gain their **training** and lectures from the project datacenter through the internet.
- The computers will be used for the patient **filing system**

Telemedicine:

To complete the quality cycle of the family medicine project, a telemedicine subproject intervention is an highly considered . By using the internet applications , family doctors sitting together with their patients at the health center can communicate with the specialists in Hospitals. The communication is through picture and voice. The project is aiming to use the available simple resources in the start and gradually coming to use the modern advanced equipments.

Master grade training program:

The candidates will awarded a master grade in family medicine while they are presenting their health services at the level of the health center. Modern technology completely adopted. The candidates communicate and get all their lectures from the university through the internet using special software educational program (Cisco- Webex). Making what is called “Virtual class room” and “virtual university”. For the skills training they have one day every week at hospital.

The training vision is to make a national training center for the whole Sudan from Gezira distributing the gained experience and using telecommunication as an important tool.

Electronic filing system:

Is relatively un-common in the health system in Sudan. In the family medicine perspective it is essential to have electronic filing system for each patient. This will help in presenting continuous professional care. Every month the candidates should send statistical report showing the common diseases divided by the age groups.

Project beneficiaries

- People living in Sudan attending health centers.
- Family physicians.
- Other care providers.
- Rural areas, health centers and rural hospitals.

Project structure:

The project is a collaboration project between the federal ministry of telecommunication and information technology and the federal ministry of health on the other partners. Other important partners include the state ministries of health, national medical specialization board, universities and training centers in addition to the health insurance fund.

Development Stages:

Stage	2010	2011	2012	2013	2014
Campaigns , Preparations and startup					
Distance education and training					
Telemedicine (Medical consultation)					
Maturity					

Through the internet the family doctors have continuous contact with hospital specialist doctors while the use the telemedicine to get consultations..

They are connected also to the university using Cisco Webex software program.

National and international mentors are supposed to be connected with the candidates.

So as to achieve the above mentioned connections, the family doctors are supposed to be equipped with computers, internet lines, software, cameras and other accessories.

Project needs:

Mobile car clinics : To provide health services to the community, especially those living in remote, isolated areas. This lies on the main concerns of the GFMP and will add much to the existing efforts in providing specialist services to these areas.

The use of the mobile car clinics is expected to help in maternal follow up for pregnant women, increase of the number of vaccinated children in addition to the reduction of mortality and morbidity.

Our already existing telemedicine studios can be connected to the telemedicine equipments fixed on the mobile car clinics. The mobility of the clinics will save much money by reducing the need for buying equipments to every centre, in addition it can minimize the needed staff.

Monitoring and Evaluation Plan

1. Field Visits and surveys.(FVS)
2. Report Writing.(RW)

Act	2012				2013				2014				Responsibility	
	Q	1	2	3	4	1	2	3	4	1	2	3		4
1			RW						FV/RW				FV/RW	COMMITTEE
2			RW	RW					FV/RW				FV/RW	GOS
3				FV/RW					FV/RW				FV/RW	Training center
4			FV						FV/RW				FV/RW	COORD-LOC
5				RW	RW				FV/RW				FV/RW	Training Adm
6					RW				FV/RW				FV/RW	M.OF.L.G
7				RW	RW	RW			FV/RW				FV/RW	M.OF.F
8				FS	RW				FV/RW				FV/RW	M.OF.H
9			FV	RW					FV/RW				FV/RW	M.OF.H
10					FV	RW			FV/RW				FV/RW	M.OF.H
11									RW				RW	Training center
12									RW				RW	ALL

Stages and telemedicine intervention time frame:

Stage	Stage 1
1	Video conferencing (Optimum quality to connect the consultant with family clinic)
2	Electronic stethoscope and ultrasound device for maternal follow up
3	- Mobile car clinics to provide full telemedicine equipment including electronic: Oto-ophthalmoscope, ECG, laryngoscope, Rdilogy..etc

Technology innovations involved in the project:

Family medicine project considered as a pilot one in Sudan, it is the first project that is dedicated to provide health services depending on internet and related technologies.

The last records about Internet, laptops , modems and others related software showed that family medicine project classified as one of the biggest projects ever applying and adopting the informatics modern approaches in the country.

Internet:

More than 500 one connect USB modems will distributed for around 500 family physicians Sudani and Thabit companies selected to provide the internet services for the project, the wide network signal coverage of Sudani will help to improve the project outreach polices.

Physical Hardware:

More than 1000 notebooks will distributed amongst more than 1000 family physicians, well planned capacity building intervention will be provided for physicians.

Family Medicine Virtual University:

Family medicine Project awarded an M.Sc programme for physicians involved into the project.

The virtual University allow the students to attend training and lectures using Internet, Cisco Webex solutions is providing the service, about 1000 students with 10 hostnames , video and VOIP services will put the project at the top Africa and first in Arab nations.

Sudan Telemedicine Intervention:

To complete the quality Cycle of the project, a sub-project launched to enable medical consultants to provide online consultation for family physicians.

Telemedicine programs will be used at the current phase, daily consultation will made under the project supervision, the project leaders are planning to raise fund to complete the cycle of Telemedicine sub-project.

Family Clinic Database:

In additions to above mentioned software, Family Clinic Database launched and installed in 183 notebooks, the database depends on ICD-9 codes and updated to ICD-10 in 2011.07.12.

New Values will be added By GEZIRA FAMILY MEDICINE PROJECT:

GFMP will add a lot of new values concerning the technology revolution, these values are:

1. Rise up the capacities and skills of about 1000 doctors every year in term of Internet and computer software usage.
2. Refreshing the market of Internet and Informatics in Sudan (About 1000 Internet Router with monthly subscription and data transfer estimated at 100000 GB data exchange).
3. New IT careers and jobs created by the project estimated at 25 Job every year and total of 75 jobs at the end of the project cycle.
4. Better health service provision specially at the rural areas.
5. Less hospital consultations.
6. Community based health services.

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添付資料 2 : 実証試験 (GFMP) レポート

**Report on Dr. Car Service in Um-Elgura Locality,
Gezira state, Sudan**

(Period; 04.02.2013-28.02.2013)

Presented to

Ministry of foreign affairs Japan

JICA

Axiohelix Co. Ltd.

Smart Energy Co. Ltd.

TSI Co. Ltd

Presented by

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Introduction

This project is a collaboration project between Japan represented by the ministry of foreign affairs-JICA and Sudan represented by the Gezira Family Medicine Project (Here after GFMP), ministry of Health, Gezira state, Sudan. Japan has great efforts and many collaboration projects in Sudan and other developing countries. Health sector is gaining priority in such efforts. Innovative ideas were required to provide high standard health care services to all people, in equity. Accessibility of health services has represented a main challenge in many African countries; Africa experiences 24% of the global burden of disease, but has only 2% of the global supply of doctors [1], recruitment of doctors and providing medical equipment to remote areas are mandatory to strengthen the health system.

Dr. Car project is an innovative idea aiming to provide a solution for such challenges, the idea of mobile clinics is used from before, but the technology development has added new strengthening ideas to that. High quality equipment compacted in small sizes made the Dr. Car be able to present more comprehensive health care-at a hospital level; the telemedicine communication is another strengthening factor.

The GFMP is described by other African countries in the PRIMAFAMED annual meeting as a good mode for other African countries [2]. The project (described in details in attached paper) could recruit 207 doctors for both training and service purposes. The project could provide comprehensive health care services including general health care, fighting against maternal mortality, childhood death, and tropical diseases like Malaria, HIV and Tuberculosis. The comprehensive approach of health care in family medicine is against fragmenting health care services in many programs like Malaria program, HIV program and antenatal care programs [3].

Main goal

The goal of Dr. Car project is to evaluate the role of the ‘‘Dr. Car’’ in presenting health care services.

Methods

Study area

Gezira state of the Sudan

Sudan lies in the northern east sub-Saharan Africa covering 1,861,484 km², with an estimated population of 34 million (2012). According to official reports, Sudan has an infant mortality rate of 68 deaths per 1,000 live births, maternal mortality of 750 deaths/100,000 live births, and a life expectancy at birth of 55 years. Gezira state is one of 17 states in Sudan, centrally located in the country, with a total area of about 25,500 km². Gezira state has a total population of about 3.7 million; 44% are below 15 years of age, and the annual population growth is 2.6% and total fertility rate is 5.9. Rural population constitutes about 80% of the total population in Gezira, scattered over more than 3000 villages; however there is an ongoing process of urbanization. Gezira state depends mainly economically on agriculture; its position in the middle part of Sudan has protected it from the conflicts that have characterized many periphery states.

The main causes of morbidity and mortality are infectious and parasitic diseases such as malaria, tuberculosis, schistosomiasis, diarrheal diseases and malnutrition. Non-communicable diseases are also emerging as a public health problem due to the change in socioeconomic and lifestyle conditions.

Gezira state has seven localities: Medani, Managil, Kamlin, South Gezira, East Gezira, Hasahisa and Um-Elgura. The activities of the Dr. Car project was targeting Um-Elgura locality. Its population is 282460 (6% of Gezira population), covering an area of 2011 km². It includes 121 villages and 16 camps. There are one local hospital and three rural hospitals, only 11 medical officer doctors and

three specialists in these hospitals- an internist, gynecologist and paediatrician. Primary health care is presented through 12 health centres and 37 health units [4].

Gezira Family Medicine Project (GFMP)

GFMP is a product of collaboration between several partners including the Ministry of Health at Gezira state, University of Gezira, Sudan Medical Specialization Board (SMSB); National Health Insurance Fund (NHIF) and community representatives. The mission of the project is to provide high quality, accessible and affordable primary care based health services. The original main aim was to supply the Gezira state by 1000 trained family doctors in a period of five years, with a rate of 200 per year. A family doctor would then be responsible for 3000 to 5000 persons. Other aims included presenting high quality health services in equity, increasing patients' satisfaction, promoting community participation, increasing total coverage with health insurance services, presenting job opportunities for doctors and providing a unique educational model which could be applied in other states in Sudan and internationally.

Through the first batch, 207 candidates started their training and service provision in 160 health centers, of which 84 had never been served by a doctor before. The curriculum is community oriented and follows international recommendations. The doctors were rather young (mean age 32.5 years), the majority was males (57%), and 32% were graduates from University of Gezira.

Respondents stated to have rather high confidence in skills like asthma management and post abortion uterine evacuation, least confidence in skills like management of depression and insertion of intrauterine device. Data from the health centers showed a large variation in buildings and equipment. The majority were poorly equipped for management of non-communicable diseases, as only 10% had ECG machine, 5% had spirometer and 1% had a defibrillator.

Challenges facing GFMP:

Although Gezira Family Medicine Project (GFMP) could present effective solutions for many health provision issues, there are still some challenges which need innovative solutions. The number of

doctors at the primary care level has been doubled after GFMP, moreover doctors are more trained and qualified, and 84 centers received doctors for the first time, more equipment are sent to the health centers. Family doctors as primary health care team leaders could strengthen maternal and childhood programs as well as HIV, Malaria and tuberculosis programs.

Recruiting doctors and primary care staff to many remote areas is still a challenge, especially where there is no electricity, scattered population, no or very old health center buildings. Non communicable diseases (NCDs) like diabetes, hypertension, cancer and coronary heart diseases are emerging as a real threat in Sudan and Africa as general [5]. Necessary equipment are needed for the diagnosis and management of these diseases, local resources to provide such equipment for each center are not realistic.

Dr. Car as a feasible, practical solution

To overcome the above challenges, Dr. Car came as a practical, feasible solution, providing equipment, primary health care team including family doctors to rural and urban areas.

Study population

People living in Um-Elgura locality, Gezira state, Sudan

Data collection

Data was collected during consultation from patients' records registered by family doctors.

Data analysis

Data was entered and analysed in an Excel sheet.

Results

Dr. Car equipment have been used in Um-Elgura locality in the period February 4th 2013 up to February 28th 2013 (N: 24 days). The total number of consultations during this period was 6160 consultations.

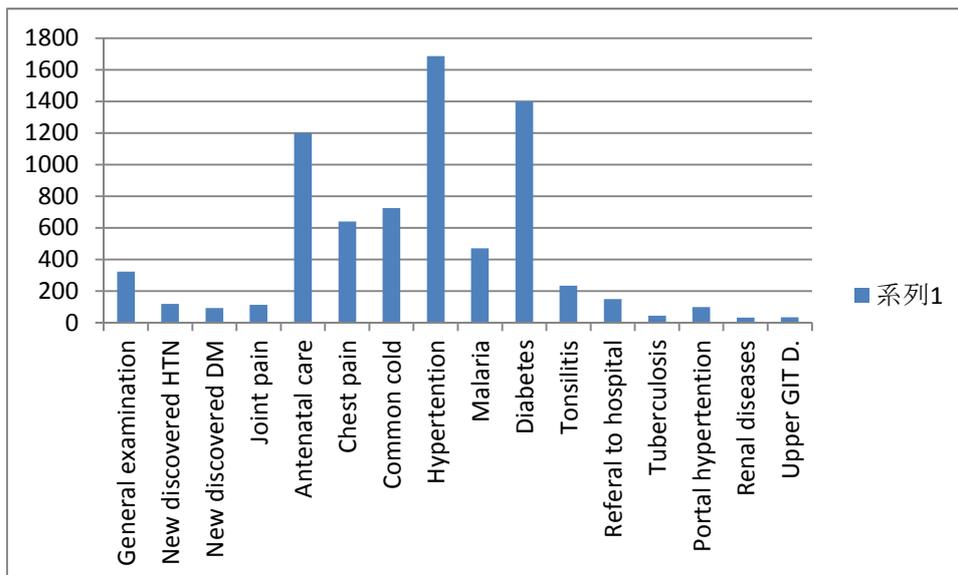
The active days were 21 days. Number of consultations per day ranged between 171 and 364 (Mean: 293 consultations per day)

Non Communicable Diseases (NCDs) represents the main reason for encounter followed by antenatal care (Maternal health).

Figure 1 shows number of consultation according to the diagnosis

Figure 1

Number of consultation according to the diagnosis

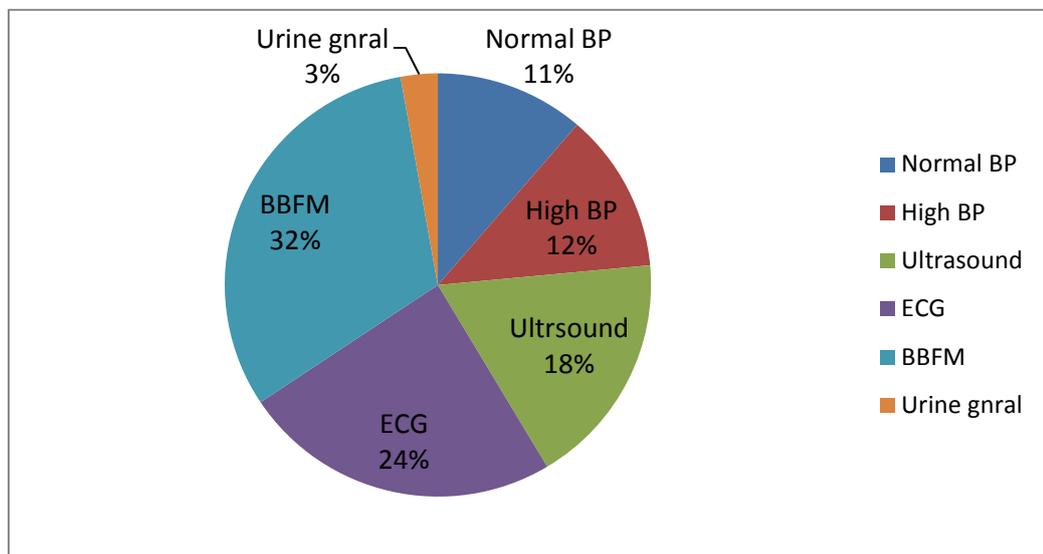


Equipment used included the following:

- Electrocardiogram (ECG)
- Sphygmomanometer
- Ultrasound
- Autoclave
- Laboratory
- Pharmacy
- Laptops for telemedicine and electronic filing system
- Another car for logistics, bringing medications, staff and other logistics.

Figure 2

Investigations used for patients contacted Dr. Car in the study period



BFF: Blood Film for Malaria; BP: Blood Pressure; ECG: Electrocardiogram

Running cost for the mobile car clinic

This includes the following:

Item	Cost per day (SDG)
Incentives to the working staff.	1500
Fuel for Dr. Car and logistic car	300
Maintenance for the cars	200
Renting of the logistic car	300
Consumable material for the equipment (Ultrasound gel, ECG papers...etc).	500
Consumable materials for the laboratory	500
Telephone and internet connection	100
Total	3400 SDG

- *Working staff includes :*
 - 3 to 4 family Doctor
 - 3 Lab. Technical
 - 2 Assistant Pharmacist
 - 1 Nurse
 - 1 I.T person
 - 2 Driver

Health care provision in Gezira:

1. Hospitals: Can be:
 - Rural hospital (In remote areas)
 - Specialized second line hospitals (In the centre of each locality) or
 - Tertiary hospitals for subspecialties in Medani (capital of the state).
2. Health centres: Characterized by clear variation in buildings, staff, equipment, catchment area and function. The staffs include usually a family doctor(s), nurse(s), midwife, lab technician(s), nutritionist(s), vaccination technician, pharmacist and administrators.
3. Health units: In areas where there is no hospitals or health centres, no doctor, health care is provided through a primary health care team including nurse, midwife and vaccination technician.

Patients should either pay themselves for health services or through health insurance which is available mostly in the cities, but much less in remote areas.

The State Ministry of Health is responsible for the running cost at hospitals. At rural hospitals, health centres and health units the responsibility is shared between the locality and the State Ministry of Health. The operational budget is mainly dependent on local resources at the health institutions which include consultation fees.

The staffs have usually permanent salary; this is usually low paid, but it is compensated by on top money paid from the local resources of the health institution (Incentives).

Building a new modern health centre costs around 100.000 (One hundred thousand) USD-this figure is obtained from the constructor of ‘‘Ab-beid’’ Health centre near Hasahisa city in Gezira.

The number of patients (Consultations) per day varies between different health centres, depending on the catchment area, population in this area, epidemiology of diseases, number of doctors and health services presented. The number of consultation is usually between 10 and 30 consultations per day. The running cost of the health centres is usually covered through own resources. Patients pay themselves or through health insurance fund; they pay for consultation, laboratory diagnosis and medications. The running cost of the health centre varies also depending on its activity and health services presented. The income of the health centres usually covers the running cost including the staff incentives, maintenance of the building and equipment, buying consumable materials and electricity.

Running cost for a health centre in Gezira:

Item	Cost per day (SDG)
Incentives to the working staff.	500
Electricity and water	50
Maintenance for the buildings	200
Consumable material for the equipment (Ultrasound gel, ECG papers...etc) if available.	100
Consumable materials for the laboratory	100
Telephone and internet connection	100
Total	1050 SDG

Discussion

Evaluation of the use of Dr. Car

What changes made by the Dr. Car regarding health service provision?

The study period is rather short to reflect general change in health indicators, but recognizing the reason for encounter in Figure 1:

- Antenatal care was done for 1300 pregnant women (21% of all consultations) using ultrasound, many risk pregnant women are referred for close follow up at hospital.
- A total of 3624 children under 15 years of old were treated (58% of all consultations)
- Regarding Non-communicable diseases; blood pressure was controlled in 1685 consultations while diabetes was controlled in 1400 consultation.

What economic changes made by the Dr. Car?

1. Dr. Car with its mobility can cover huge area which might need at least 10 health centres to be covered- this is calculated according to the number of consultations per day at the health centres (Mean: 20 consultations) and the number of consultations at the Dr. Car (Mean: 293 consultations)

2. Available equipment- including ultrasound and ECG on the Dr. Car are usually of high standard. These equipment are usually not available at the health centres and even not in some hospitals. It is not cost effective to buy such equipment to all health centres and hospitals; monthly or weekly planned visits by a Dr. Car might be enough to satisfy the need at these centres.
3. Recruiting doctors and other staff to the remote areas is a real challenge; Dr. Car could visit remote areas which have never been visited by doctors before, provided health care to people who have never seen doctor before this recruitment could not be achieved even with higher costs.
4. The transportation cost from remote villages to the health care institutions is not affordable for many patients; the transportation cost can be much higher than the cost of health care!
5. The flexibility in the use of the Dr. Car makes it more cost effective. The staff and equipment can be adjusted according to the mission needed by the Dr. Car. The Dr. Car can be used for: Massive treatment, massive screening, follow up of pregnant women (maternal health care), school health and childhood follow up, home visits- for elderly, handicapped and chronic ill patients.
6. Telemedicine communication between the Dr. Car and the specialists in the city could spare effort, time and money for both service provider and consumer.

7. In case of catastrophe, especially in rain season; Dr. Car might be the only alternative for health service provision.

Comparison between Dr. Car and health centre:

Building a new modern health centre costs around 100.000 (One hundred thousand) USD-this figure is obtained from the constructor of ‘‘Ab-beid’’ health centre near Hasahisa city in Gezira. Furniture and equipment cost are excluded.

The number of patients (Consultations) per day varies between different health centres, depending on the catchment area, population in this area, epidemiology of diseases, number of doctors and health services presented. The number of consultation is usually between 10 and 30 consultations per day. The running cost of the health centres is usually covered through own resources. Patients pay themselves or through health insurance fund; they pay for consultation, laboratory diagnosis and medications. The running cost of the health centre varies also depending on its activity and health services presented. The income of the health centres usually covers the running cost including the staff payment, maintenance of the building and equipment, buying consumable materials and electricity.

The operational budget-Running cost per day of a Dr. Car is 3400 SDG divided by the mean number of consultation per day (293 per day):

$$3400/293= 11.6 \text{ SDG per patient.}$$

Regarding the health centre: Running cost per day/Nr of patients:

$$1050/20= 52.5 \text{ SDG per patient.}$$

Challenges faced Dr. Car use

- The project period is relatively very short.
- For appropriate follow up of the patients, the Dr. Car should visit villages in regular basis; this is expected to be achieved when more cars are available.
- Overcrowding; people have hard need to health services; this can also be solved by providing more cars and by engaging the local community in keeping the system.
- It was not allowed to take payment from the patients during the first visits; such visits are usually free of charge. The GFMP could convince the authorities that payment will present a guarantee for the continuity of work.
- Some villages do not have internet access.
- The distances are very long to some villages; the solution was to make the Dr. Car continue from a village to another without returning to Medani-the centre, before the week end..

Technical opinions for future Dr. Cars:

According to the planned way of use in the future (follows), we can present the following options:

- The Dr. Car is preferred to be a four wheel drive car.
- It should be higher from the ground.
- More sitting seats are needed.

- The inside chair-couch is not needed to be suitable for dental chair in every car, one such chair is enough.
- Dental machine and equipment for One Dental car. Expected to be mainly used in school screenings for screening and treatment.
- One portable mammography machine is needed for breast cancer screening.
- A ‘Doctor bag’ is required, suitable for small equipment and medications. This can be used in home visits and when the doctor comes down to a school or a health centre office.
- Some laboratory equipment are mandatory, this has been provided locally, we are able to provide them from local resources in the future; this includes microscope, colorimeter and glucometer.

Future plans

We believe that Dr. Car project is able to provide a cost effective health service solution for many challenges in urban and remote areas in Gezira. It could solve the two major classical challenges, staff recruitment and economical constrain in providing equipment to health service institutions.

The GFMP is applying for **10 Dr. Cars** as a second step. The present Dr. Car is now providing services in Um Elgura which is the smallest locality with a population constituting 6% of Gezira population. The GFMP is planning to provide each locality with at least one Dr. Car, the three biggest localities are planned to be served with two Dr. Cars.

Plan for utilizing Dr. Car

Dr. Car can be used for

1. *Mass treatment:* In remote areas where there is weak or no health care services. People in such areas are usually eager to meet such services; they have chronic and acute problems that need medical intervention. A broad spectrum of diseases is expected including tropical diseases like Tuberculosis, Malaria, Bilharziasis, leishmaniasis and HIV, in addition to Non-Communicable diseases like Diabetes, Hypertension, Cancer and Coronary heart diseases. Such visits to rural areas can be arranged in a regular basis so as to follow up patients with chronic diseases. Antenatal care is a goal in such visits. Equipment should include the laboratory, ECG, ultrasound and sphygmomanometer. The staff consists of 3-4 family doctors, 3 lab technicians, 2 nurses, driver IT technician. Drugs are taken with, assisting car(s) for logistics is usually necessary; running cost is covered by patients payments and or contribution from the locality.
2. Mass screening visits: the Dr. Car is used to discover the epidemiology of certain diseases like cancer- mainly cancer of the cervix of the uterus and breast cancer in women, cancer of the prostate for men (PSA) can be done although it is controversial about its effectiveness. Screening of tropical diseases like HIV, Bilharziasis and Tuberculosis is possible. NCDs like Diabetes and Hypertension is screened also during mass treatment visits as opportunistic screening. Planned screening of coronary heart diseases using ECG, Hypertension and Diabetes is performed for 'at risk' population, they can be invited in decided date by their family doctors for screening, coordinated with the visit of Dr. Car. The screening staff is usually less than the mass treatment staff including mainly technicians for the needed procedure. The running cost is usually covered by associations, organizations and institutes concerned with the targeted screening.
3. Dr. Car can be used for antenatal care; this can be arranged by inviting pregnant women in certain village(s) in coordination with Dr. Car visit. Such activity can clearly reduce

maternal mortality. At risk pregnant women can be followed up by another visit or referring to the nearest relevant health care institute. Ultrasound is essential in such visits. The Federal Ministry of Health is promoting such activity and promising full payment for the running cost.

4. School Health program: Unfortunately there is no complete childhood follow up program (well baby clinic) in Sudan. Special program to screen children at the entry of primary school (6 years) is arranged in Gezira in the last years, many cases are discovered and referred for treatment.
5. Home visits in urban areas: Very old people, very ill patients and handicapped people depends on home visits, advanced equipment might be needed also.
6. In crisis situations like floods, Dr. Car might be the only way for presenting health care, emergency medications and equipment might be needed. The ministry of health is expected to utilize the car in such situations and to provide the running cost.
7. Other uses: Dr. Car can be used in other activities like vaccination campaigns, in-field teaching for family doctors and medicine students; arranged and funded by the faculty of Medicine.

Expected local contribution

Local contribution is planned as follows:

1. The running cost which is estimated to be 3400 SDG/day; the resources is detailed above, according to the way of utilization of the car. This includes:

- ✚ Incentives to the working staff.
- ✚ Fuel for Dr. Car and supporting logistic car
- ✚ Maintenance for the cars
- ✚ Renting of the logistic car
- ✚ Consumable material for the equipment (Ultrasound gel, ECG papers...etc).
- ✚ Consumable materials for the laboratory
- ✚ Telephone and internet connection

2. Laboratory equipment including Microscope, Colorimeter and Glucometer for each car.
3. Accessories like catheters and emergency medications.
4. The customs fees if the cars will be owned by the Gezira government.

Conclusion

Dr. Car provides a practical cost effective solution for our health service challenges in Gezira state.

During the study period, 6150 consultations have been done including a variety of diseases in different age groups including childhood diseases and antenatal care. We are applying for 10 more cars in the future. The success of this model can contribute to promising health service outcomes which will promote others in developing countries to use the model.

Acknowledgement

We would like to thank those community accounted people who have participated in this project, both from Japan and Sudan sides. Many thanks also to our colleagues who have participated in data collection, entry and analysis including Dr. Sameh, Dr. Elbagir, Dr. somaya, Dr. Rana, Ashraf hafiz and Muhanad from GFMP.

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添付資料 3 : 水滅菌処理試験結果データ

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
 رؤيتنا إمداد مياه عذبة نظيفة وصحية وبوعاء المستهلكين بولاية الخرطوم

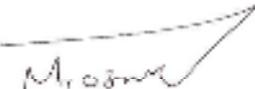
**KHARTOUM STATE WATER CORPORATION
 CENTRAL LABORATORY
 BACTERIOLOGICAL ANALYSIS OF WATER**

SERIAL NO	ME/2/BC/13/0009
DATE OF SAMPLING	5.2.2013
DATE OF EXAMINATION	5.2.2013
DATE OF COUNTING	6.2.2013
SAMPLE COLLECTED BY	وزارة الصناعة
SAMPLE TESTED BY	Mohamed
RESULT COUNTED BY	Aatiga

NO	LOCATION	TOTAL COLIFORM COLONY/100ML	TOTAL COUNT COLONY/5 ML
1	Treated water with UV-Filter	Zero	NIL
2	Treated water with UV-Filter(Recycled)	Zero	NIL
3	Raw water	12	20

COMMENTS:

Sample(3)(Raw water) contain coliform bacteria , Treated water with UV-Filter is free from contamination.

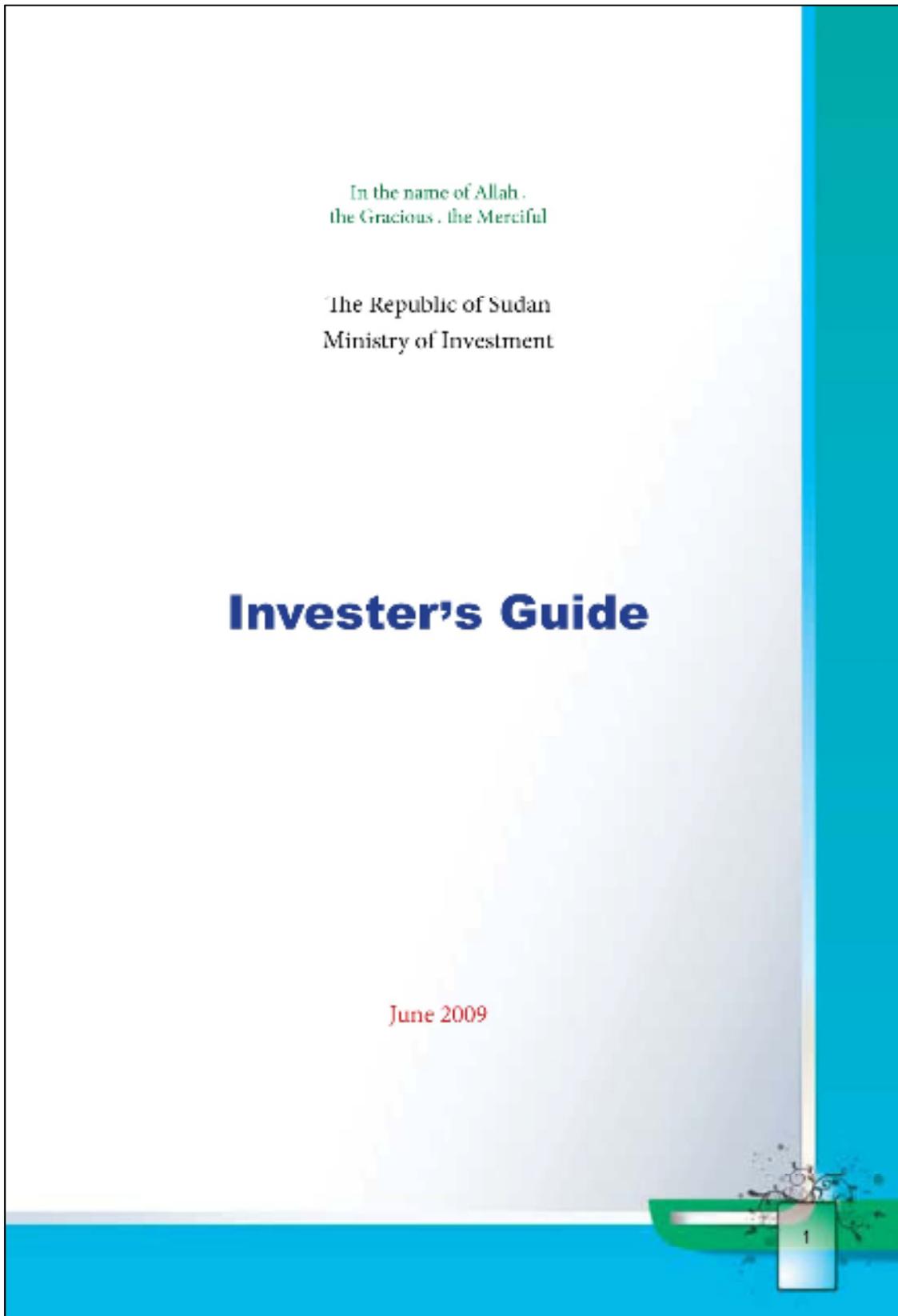

Mohammed Osman
 Director of Lab

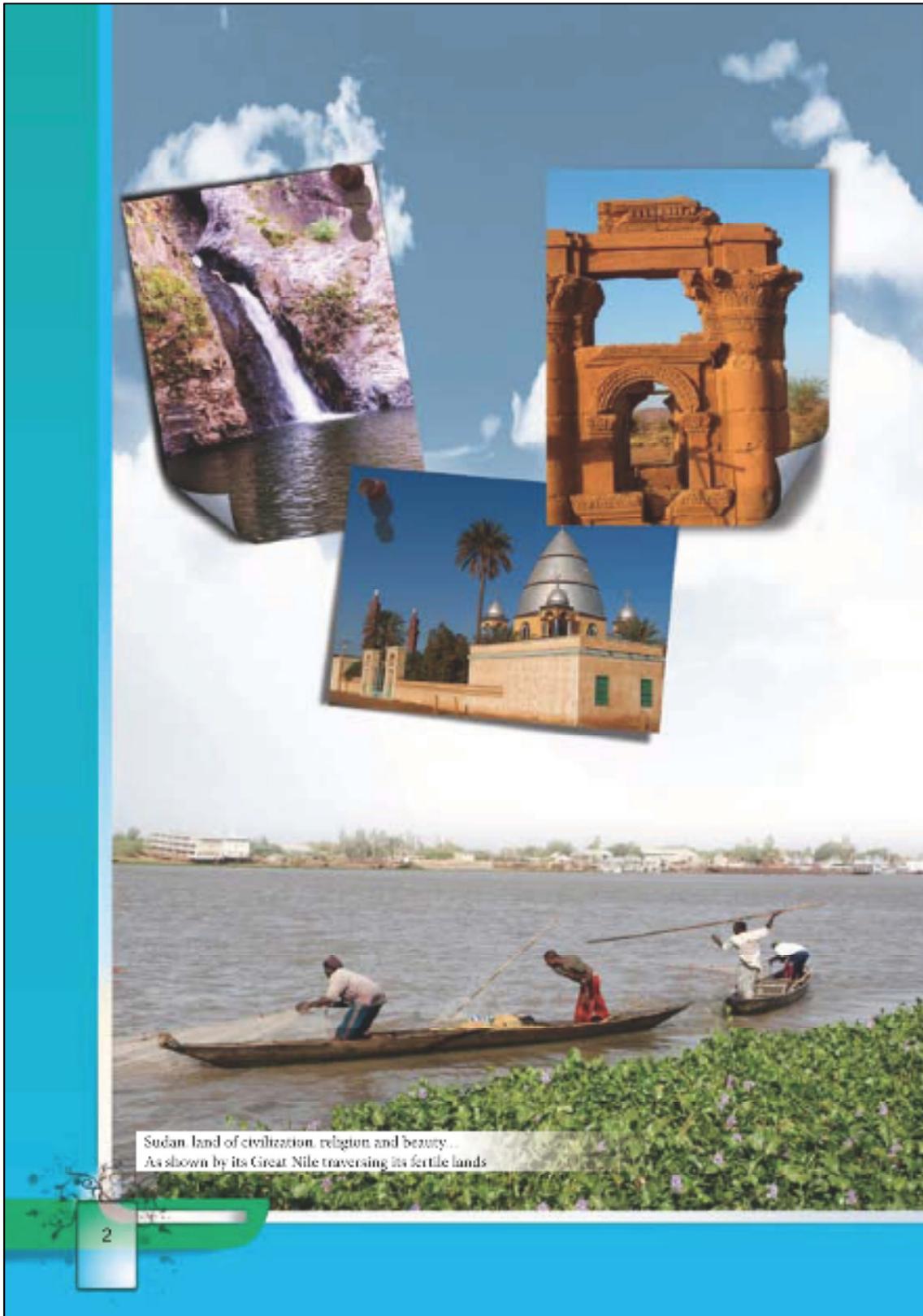


T: 0155133994 F: 0155774240 M: centrallabkscw@gmail.com Record No: N1 file:- DC /13/2/P9



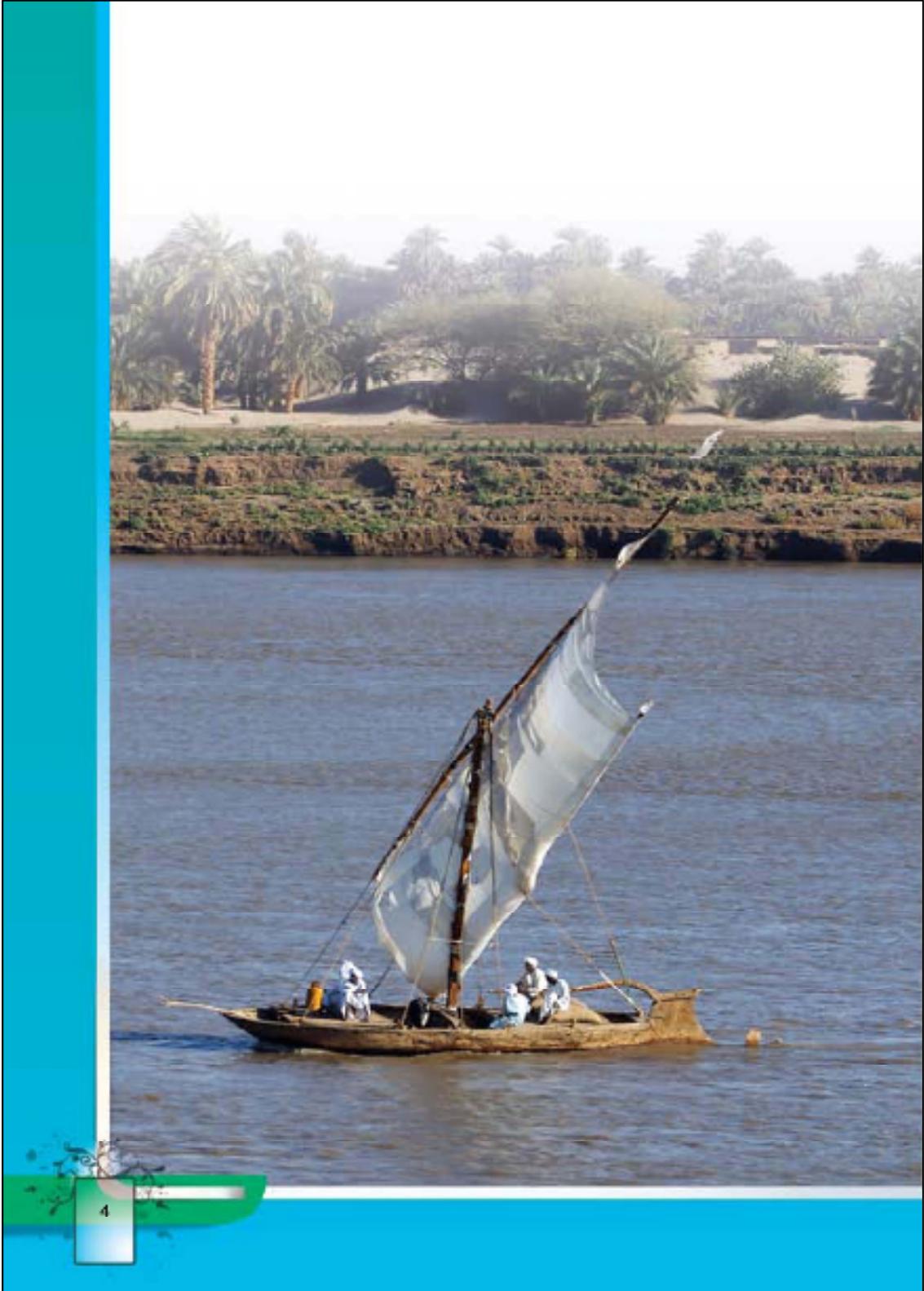
添付資料 4 : Sudan Investor' s Guide





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Introduction.

This Investment Guide provides investors with comprehensive information about investment in Sudan in all its basic pivots which benefits the investor in respect all they need to know about investment in Sudan, in addition to information which facilitates her/his investment mission and to her/his life during her/his life in Sudan. It is an integrated and comprehensive package of information though not detailed; yet will meet all needs and will easily guide the investor to more detailed information that serves her/his purposes.

The information contained in the Investment Guide had been set in sequential form according to the priority of information needs of the investor to enable him move from the basic and general information about Sudan to information about the investment environment, opportunities, procedures and institution in a way that serves the investor's aims.

This Guide is meant to assist in the exchange of information between the Investor and the Ministry of Investment in Sudan to enable the Investor wishing to invest in Sudan to confidently make clear and well informed decisions.

The Ministry of Investment is readily prepared to cooperate with and assist all investors who wish to invest in Sudan by providing them with information, in all fields of investment, to help them take decisions and develop their investments in Sudan.

We hope that the information contained in this Investment Guide will be helpful to investors inside and outside Sudan to come to a comprehensive understanding of the requirements for establishing an investment project in Sudan and what helps them in making their living and stay in Sudan comfortable and enjoyable.

Thank you
Awad Al-Khatim Balhi Al-Tayeb
Under Secretary
Ministry of Investment

Water is one of the abundant natural resources in the Country.

Why Invest in Sudan?

1. It has a distinguished strategic site at the heart of Africa.
2. It has a reasonably developed infrastructure.
3. It has a quite modern and developed communication network.
4. There is a one stop shop for facilitating all administrative procedures for investment
5. There are legislative and legal guarantees for protection of investments
6. There is full freedom for transferring profits abroad
7. There are sufficient investment opportunities within a privatization system.
8. There is a large, low wage and trained labor force.
9. Stability of economic and financial policies.
10. There is a strong free market and diverse resources economy.
11. Sudan is a member of the COMESA Countries Free Trade Zone Region.
12. Sudan is a resource-rich country, which include agricultural land, fresh water, forests and animal and mineral wealth.
13. Investment in Sudan is characterized by a high economic viability.



Tuh Suspended Bridge... a gateway for investment in a productive island

First. Basic Information.

1. Map of the Sudan



2. Location of Sudan.

Sudan lies in the north eastern corner of Africa, between latitudes 4 – 23 degrees north and between longitudes 2238 east. In respect of area, Sudan is the largest Country in Africa, it has an area of 2.5 million square kilometers. It has common borders with nine African countries; namely are: Egypt and Libya on the north, Chad and Central African Republic on the west, Zaire, Uganda and Kenya on the south and Ethiopia and Eritrea on the east. It also neighbors the Kingdom of Saudi Arabia which lies on the eastern coast of the Red Sea.

3. Airports, Landing Fields and Ports.

Sudan has (17) airports, (8) of which are International airports. It has (63) landing fields in various parts of the country. The Red Sea is the only sea outlet for Sudan to the outside world. It has Port Sudan harbor which includes the Northern Harbor, the Southern Harbor, the Green Harbor and Al Khair Dama Dama Harbor, in addition to Osman Digna Harbor at Sawakin and Martyr Zuhair Mohammad Salih at Wadi Halfa.

4. The Geography and Climate of Sudan.

Sudan's climate varies from a dry semi-desert climate in the north through a moderate rainfall Savanna climate in the central region to an Equatorial heavy rain climate in the southern parts of the Country where the rainfall ranges in average between 75 – 1155 mm. Temperatures range between 45 degrees Centigrade as a maximum in summer and minimum 20 degree in winter.

5. Terrain

It is a flat plain in general, with mountains in the far South, North-eastern and Western regions, and desert in the North.



6. Population.

According to the 2008 Census, the population of Sudan amounted to approximately (40) millions.

7. The Government System in Sudan.

According to the 2005 Interim Constitution, the government system is decentralized. Its levels are represented in the National Government, the Government of Southern Sudan State and local Governments.

8. Sudanese Exports.

Animal wealth, Gum Arabic, cotton, oil seeds (sesame and ground nuts) and minerals (gold, chromium and petrol) are only some of Sudan's exports.

9. Export Procedures.

There are four procedures for exports, which are:

1. Trades register for exporters and importers.
2. Deposit contract.
3. Depositing foreign currency and filling the form EX (Bank of Sudan).
4. Customs' Exports Administration (final approval).

10. Sudanese Imports.

These consist of agricultural equipment, production inputs, food materials, electric equipment, machinery and equipment, manufactured goods, means of transport, wheat and wheat flour, chemicals, textiles, tea and coffee.



Various Sudanese exports

Secondly, Life in the Sudan.

1. Currency of the Sudan.

The Sudanese currency is the pound which is equivalent to 0.4 US dollars.

2. Festivals and Official Occasions

1. The Holy Eid AL-Adha, from 9 to 13 Zu AlHaja
2. The Holy Birthday of Prophet Mohammed, 12, Rabie Al Awal.
3. Israa and Mieraj, 27 Rajab.
4. The Holy Eid AL- Fitr, the first day of Shawal.
5. The Hijri New year, the first day of Muharam.
6. Christmas Day, 25, December.
7. Independence Day, the First of January.
8. The National Salvation Revolution Day, the thirtieth of June.

3. Accommodation and Rents.

Accommodation is available for all. Rent starts at 4,000 US dollars for company offices in first class areas and goes down to 500 dollars in other areas.

4. Education System.

Public and private education is available for foreigners and local citizens in most regions of the Sudan.

5. Marketing.

There is a variety of shopping markets in Sudan which meet the consumption needs of Sudanese citizens as well as foreigners. There are specialized and international standard marketing centers, in addition to markets in residential areas in the Capital where goods for all sorts of needs are available and accessible to all.

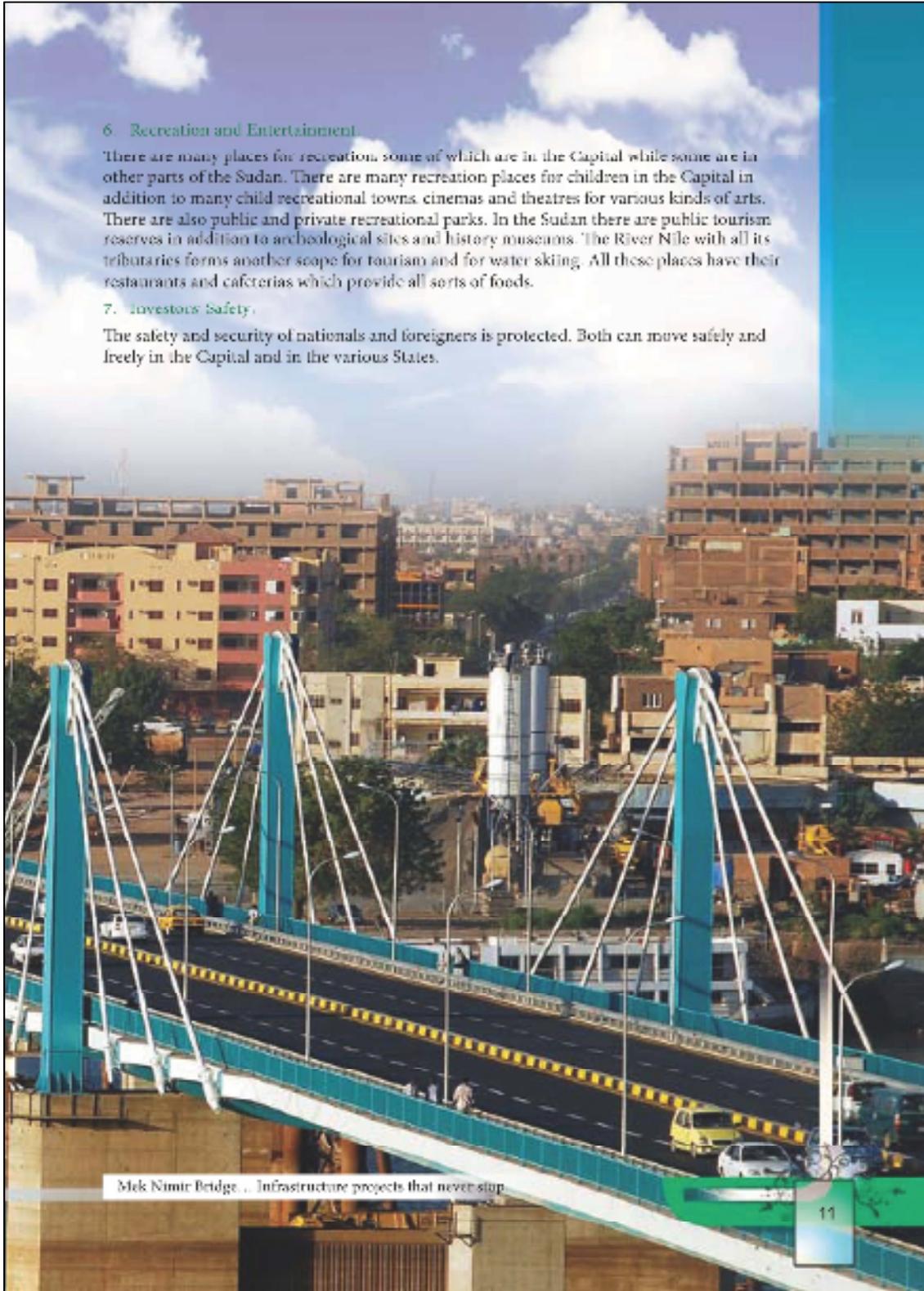


6. Recreation and Entertainment.

There are many places for recreation, some of which are in the Capital while some are in other parts of the Sudan. There are many recreation places for children in the Capital in addition to many child recreational towns, cinemas and theatres for various kinds of arts. There are also public and private recreational parks. In the Sudan there are public tourism reserves in addition to archaeological sites and history museums. The River Nile with all its tributaries forms another scope for tourism and for water skiing. All these places have their restaurants and cafeterias which provide all sorts of foods.

7. Investors Safety.

The safety and security of nationals and foreigners is protected. Both can move safely and freely in the Capital and in the various States.



Mek Nimir Bridge ... Infrastructure projects that never stop

8. Hotels in the National Capital.

No.H	Hotel Name	Room Prices (in US dollars)	Telephone No.
1	Al Fateh Tower (Seven Star)	Luxurious Single, 431 + tax	156555555
		Executive Room, 504.5 + tax	156555510
		Executive Wing, 695.4 + tax	
		Ministerial Wing, 1584 + tax	
2	Ballman (Hilton) (Five Star)	Presidential Wing, 3856 + tax	
		Luxurious Single, 230 + tax	
		Luxurious Double, 260 + tax	
		Eighth Floor, 240 + tax	
		Seventh Floor, 240 + tax	
3	Grand Holiday Villa (Five Star)	Presidential Wing, 800 + tax	774100778930.
		Small Wing, 520 + tax	
		Single, 230 + tax and breakfast	83774039.
		Double, 260 + tax and breakfast	83773961-
4	Al.Salam Rotana (Five Star)	Wing 500 + tax and breakfast	
		Wing Reception Room, 600 + tax and breakfast	
		Classic Room,	87007777
		Single, 650 + tax	
		Double, 700 + tax	
		Rotana Club Room, Single, 800 + tax and breakfast	
5	Palace (Five Star)	Double, 900 + tax and breakfast	
		Classic Wing, 1200 + tax	
		Rotana Club Wing, 1400 + tax and breakfast	
		Royal Wing, 7000 + tax	
		Single, 265 + tax and breakfast	85- 338229
6	Regency (Four Stars)	Double, 315 + tax and breakfast	
		Wing, 360 + tax and breakfast	
		Single, 130 + tax	83775970-
7	Al Bahrain (Four Star)	Double, 150 + tax	
		Single, 125 including tax and breakfast	83784054-
		Double, 175 including tax and breakfast	771097
		Wing, 200 including tax and breakfast	
8	Al- Firdos (four Star)	Flat, 300 including tax and breakfast	
		Single, 150 + tax	83775987-
		Double, 177 + tax	770965
		Wing, 200 + tax	



Al Salam Restara Hotel... an oasis for investors and Sultan's guests

9	Shahrazad (Three Star)	Single, 56 +tax Double, 76 - tax Family Room (four people)- 129 - tax	83775987 770965
10	Khartoum Plaza	Single, 97 + tax and breakfast Double, 130 + tax and breakfast Wings- For one person, 150 including tax and breakfast. For two persons, 200 including tax and breakfast. For three persons, 250 including tax and breakfast	8772764 772275
11	Green Village (Three Stars)	Single, 95 including tax and breakfast Double, 114 including tax and breakfast	83263664 263644
12	Al-Faystl (Three Stars)	Single, 60 + tax Double, 90 - tax	

The hotel services had been developed in the Sudan to meet the needs of those who seek them. Investment in the hotel industry has grown and expanded significantly. In Sudan there are hotels that have international standards in respect of services. This comes in all standards from seven stars down to motels and popular lodging houses. This is not restricted to the Capital only, but is found in all other parts of Sudan. (A table of hotel names is attached).



9. Most Important Tourism Attractions

Tourism had also developed widely in Sudan. Sudan is a country that had been bestowed with rare tourism resources along the charming Nile banks, as well as the archeological heritage that goes back deep in history reflecting all the Sudanese ancient civilizations. This had led to the increased and sustained development of tourism in Sudan. There are some rich natural reserves in Sudan such as the Dindir, Radom and Nimuli in the South, and Jebel Marra in the west. In addition to these, there are the relics of ancient civilizations in the North, like Karma, Cush, Meroe and Napata. There are also museums that exhibit this history, such as the National Museum, Rashid Al-Khalifa Museum and some other museums distributed over different parts of the Sudan. Another thing that attracts tourists to Sudan is amicable and friendly treatment which tourists receive in Sudan as guests in the Country. Sudanese people are quite welcoming and hospitable to their guests. Another feature that attracts tourists to Sudan is the rich ethnic diversity of its people and intermixture which resulted in a rainbow of features and variety of tribes.

10. Domestic Transport and Car Rental in Sudan.

A network of domestic transport had been established in Sudan to meet all the travel needs of foreign visitors. It enables them to arrive easily to all parts of the country through public and private means of transport. There are Car Rent Companies (limousine companies) which facilitate movement inside and outside the Capital and enable tourists and investors to arrive at all parts of the Sudan (such as Qaafid Limousine, Al-Muhajir Limousine and others). Their rental prices are quite reasonable compared to those in other countries.



Tourism: Sudan's promising economic future.

Thirdly, Investment Environment in the Sudan.

This is related to five basic points which are:

1. Security and political stability.

Sudan had been politically stable for the past twenty years. Moreover, all public policies had been considerably stable leading to stability in 90% of its regions; the exception is some small foci in peripheral regions where the government is working fervently to bring under control.

2. Economic Stability.

Petrol extraction had been going for some time, and this has given a significant boost to the economy as shown by the latest economic report for 2008. This boost is manifest in an energetic and much freer market, the drop in inflation, a high rise in economic growth rate and the significant rise in Gross Domestic Product. These indicators gave rise to a healthy and flexible economy which attracts investors to achieve maximum returns possible.

Aggregate Economic Indicators:

Indicator	2007	2008
The rate of Growth of Gross Domestic Product	9.1%	7.8%
Gross Domestic Product at current prices (million dollars)	10947589.3	12265836.2
Inflation Rate	8.1	14.3
Exchange Rate (Sudanese Pounds)	2.016	2.09
Money Supply Growth Rate	9.6%	16.3%
Balance of Payments (million US dollars)	- 282	21.1
Exports as percentage GDP	19.2%	19.1%
Imports as percentage GDP	17%	13.5%

Source: Ministry of Finance and National Economy.

Percentage contribution of different sectors to Gross Domestic Product.

Sector	2007	2008
Agricultural Sector	34.6 %	35.8 %
Industrial Sector	31.1 %	31.5 %
Services Sector	34.3 %	32.7 %
Total	100 %	100 %

Source: Ministry of Finance and National Economy.

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Source: Ministry of Finance and National Economy.

3. Infrastructures.

Sudan has some reasonable infrastructures especially in the North and Central regions. There is ongoing progress in developing infrastructures in Sudan which allows investors flexibility of movement and investing in all sites, and enables the smooth flow of their products to markets inside and outside Sudan. These infrastructures comprise paved roads, airports, harbors, river transports, and railways, modern and advanced communications in addition to electricity and water supplies and sewage.

4. Legislations.

Investment Promotion Act in the Sudan is characterized by offering high privileges which distinguish it regionally and internationally. This is so because legislation and privileges are considered to be an important factor for attracting investors. In addition to any guarantees and privileges that encourage investment in all fields. As well, taxes were reduced from 35 % on business profit taxes and to 15 % on the Services sector, 10 % on the Industrial sector and 0 % on the Agricultural sector.

These taxes start a year after the establishment of the project. In addition to that there are full customs exemptions on capital goods for the project in terms of equipment and others. There are also tax reductions on production inputs for investment projects up to 97 %. Moreover, and for investment projects is granted at encouraging prices. It follows from all this that foreign investments have sufficient guarantees enshrined in the Investment Promotion Act. This is reinforced by Sudan's membership in Arab World and international investment insurance institutions. Other privileges are that investors have the freedom of movement of capital and of managing investment projects after they become operational in addition to the fact that the Law does not discriminate between foreign and local investors.

5. Administrative Situation.

Sudan paid great account to the significance of administration in respect of investment and started to fine-tune administrative performance and streamline and simplify procedures so that an investor can obtain her/his relevant licenses and investment privileges. Assisted by the World Bank, The Islamic Development Bank and UNIDO, Sudan started to improve the administrative situation markedly. One of the most significant pivots in this respect of the enhancements that is in place is the establishment of a one stop shop which now covers over 90% of investment procedures. In addition, the establishment of a Higher Council, headed by President of the Republic will play a major role in solving investment problems, thus ensuring continuous improvement in performance regarding administration of investment performance and become in consonance with international standards.



Marawi Dam, Northern State... a great achievement

Fourthly, Natural Resources.

1. Agricultural and Animal Resources

Sudan has rich and diverse natural resources above and under the ground in addition to its variable climatic zones. In respect of agriculture, Sudan has about 200 million feddans of arable land and only 30% of which are used so far. These are lands are close to rivers and other water sources, while others are rain-fed.

The diversity of climate has had influence on the diversity of agricultural production across Sudan. Such variety can be found in many other regions of the world, and includes fruits, oil seeds, food products, Gum Arabic and many, many other crops; due to the fertile soils and the abundant water resources. In addition to that, Sudan is blessed great livestock wealth that spreads over large areas of natural grazing lands. It is an animal wealth that amounts to an estimated total of about 140 million heads of camels, cattle, sheep and goats). Furthermore, Sudan has rich wild life of flora and fauna and fisheries in rivers and in the Red Sea, which represent quite a large food reserve. The natural pastureslands in Sudan are subjected to any type of chemical treatment. They vary in their nutritional value and quality according to the different climates. All in all they amount to about (250) million feddans which are sufficient to meet all the needs of animal wealth in the traditional sector. It is worth noting that animal wealth is also being reared in irrigated regions as a modern sector. Sudan has considerable capabilities and experience for producing and exporting meat to the Arab and other overseas markets.

2. Mineral and Petrol Resources:

Sudan has considerable mineral and petroleum wealth. The minerals include gold, chromium, iron, copper, uranium, gypsum, porcelain, mica, tin and many other minerals in its eastern and western parts. There are also large quantities of oil reserves which are not extracted yet, with opportunities still available for investment. The extraction of petrol had a great effect in supporting economic development.



Khartoum Refinery for Oil refining operations

Fifthly Registration Procedures

1. Investment Entity.

An investor may choose any of the following types of investment.

1. Individual ownership
 2. Partnership
 3. Company
 4. A branch of a foreign company
- ### 2. Procedures for company registration.
1. An application addressed to the Trade Registrar with the proposed names.
 2. Memorandum and Articles of Association of the Company.
 3. Procedures after obtaining preliminary approval.
 - a. Preparing the Company site.
 - b. Presenting the Articles of Association in three copies, stamped by
 - c. The Taxation office and Zakat Chambers.
 - d. Filling form (12), related to the Company capital.
 - e. Filling form (c2), related to acknowledgement.
 - f. The Judiciary Form (Publication Form).
 3. Procedures for registering a foreign company branch:
 1. Applying to the Trade Registrar for registration.
 2. Presenting Memorandum and Articles of Association of the Parent Company.
 3. Registration list or establishment approval of the Mother Company.
 4. Authenticated delegation from the company to a resident in Sudan to Receive legal warrants.
 5. Decision from the management of the Parent company for establishing a branch in Sudan.
 6. Availing previous documents under the company stamp, Authenticated by Ministry of Foreign Affairs in the country of Registration, or by the Sudanese embassy in that country.
 4. Procedures for Trading Name registration.

The Applicant is obliged to do the following.

 1. Making an application showing the Trading Name proposed for registration.
 2. Completing the Trading Name registration form, authenticated by an advocate.
 3. Presenting the approval of the relevant official entity.

After meeting all above conditions and procedures, the applicant should present two establishment certificates in Arabic and English signed by the Trading Name Registrar and authenticated by the stamp of the General Trade Registrar stamp



5. Migration Procedures.

All migration dealings such as entry visa, residence permits, registration of Foreign Investors and renewals are made by the Alien Passports Unit in the Ministry of Investment.

6. Foreign Labor in Sudan.

Foreign labor is dealt with according to the 1989 Investment Promotion Act amended in 2007, and according to the 2001 Labor Law. All foreign labor procedures are carried through the Ministry of Investment, Labor Commission Unit.

7. Documents required for registration of Foreign Capital.

1. Company Memorandum of Association in case the project belongs to a company.
2. Company Registration Certificate.
3. The Company's Trading Name.
4. Investment license.
5. In case of capital in cash:
 - a. A document showing the transfer of money to Sudan.
 - b. ii) Receipts showing change of foreign currency into local currency.
 - c. j) In case of capital in kind.
6. Presenting import certificates for machinery, equipment and instruments.
 - a. or (j - m) forms.

8. 8 In case of Service Capital.

Lists of the payments made, authenticated by a resident Sudanese Certified Auditor.

9. 9. Procedures for obtaining Exporters and Importers Register.

1. Final License for investment.
2. Trading Name.
3. Industrial - Commercial Chamber Membership.
4. Bank statement showing the project account number.
5. In the case of companies, the Articles and Certificate of Association, authenticated by the Companies' Registrar.
6. For renewing registration of companies, cooperative societies, institutions and corporations, deposits of (c 28) and (c 5) must be brought from the Prosecutor General Chamber.
7. For individuals, the trade license for importing and exporting should be renewed for the year present.

Sixthly, Procedures for Obtaining License and Investment Dealings.

1. New License.

Documents Required.

1. Feasibility Study authenticated by an Investment Expert House (original + copy).
2. Application for a new license signed by the project owner.
3. A delegation authenticated by an advocate or a court for investment procedures.
4. Attaching a copy of Association Contract (in case of Companies).
5. Attaching a copy of Articles of Association Certificate (in case of companies).
6. Partnership contract (in case of partnership between individuals).

2. Modern Means of Transport.

Documents Required.

1. A copy of license.
2. A copy of Trade Name.
3. A copy of a recent Deed Certificate.
4. A sketch diagram for the purposes of visiting the site.
5. Name and telephone number.
6. A delegation from the Board of Directors authenticated by an advocate or a court.
7. Articles of Association.
8. Company Establishment certificate (in case of companies).
9. Report about the condition of buildings.
10. An application signed by the Project Owner.
11. Import certificate.
12. A valid Deed certificate for means of transport (for transport projects).



The friendly foreign labor force in Marawi Dam.

3. List of Requirements

Documents Required:

1. Two copies of the License.
2. Two copies of the Trading Name.
3. Two copies of the list of equipment and machineries required.
4. A recent Deed certificate for the land plot.
5. When executing the list with the Customs Authorities, an approval for work on a rented site should be attached (in case of rented sites).
6. Approval of the list of requirements by the technical circles is not legally binding to the Ministry. The approval shall be made according to regulations.
7. Tourist activities (such as hotels, resorts, restaurants, ...etc.) shall be given a list of requirements after determining the site.

4. Breaking Partnership.

Documents Required.

1. A copy of the License.
2. A copy of the Trading Name.
3. A recent Deed Certificate.
4. A delegation, authenticated by an advocate or a court.
5. Report about the condition of buildings.
6. Sketch diagram for the purposes of visiting.
7. An application signed by the project owner.
8. An import certificate.
9. A valid Deed certificate for means of transport (for transport projects).
10. A recent Deed certificate for the land plot.
11. Preliminary Partnership breaking contract.
12. The Board of Directors decision of approval for breaking partnership (for companies).
13. A delegation by the Board of Directors, authenticated by an advocate or a court (for companies).
14. The signature on Partnership Breaking Contract is compared to the application.

5. Introducing a Partner.

Documents Required:

1. A copy of the License.
2. A copy of the Work Name.
3. A recent Deed certificate.
4. A Preliminary Partnership Contract.
5. An agent certified by an advocate or a court.
6. An application signed by project owner.
7. A decision by the Board of Directors certified by an advocate or a court for signing and follow-up (in case of companies).
8. Import Certificate.
9. A recent, valid Deed certificate for means of transport (in transport projects).
10. The signature on Partnership Contract is compared to other signatures for conformity.

6. Fees for Licensing and Investment Dealings

No.	Item	Fees in SDG
1	Application for licensing privileges	150
2	Licensing an Investment Project	1000
3	Decisions of Preferential/Additional privileges	500

7. Fees for Dealings regarding the status of the project.

No.	Item	Fees in SDG
1	Introducing a Partner	500
2	Breaking Partnership	1000
3	Changing Purpose	1000
4	Mortgage	500
5	Transfer of Ownership	1000

8. Fees for Trading Name Registration Services.

No.	Item	Fees in SDG
1	Registering Trading Name, Sole Trader Company	320
2	Registering Partnership Trading Name	600

Seventhly, Allocating Land and Investment Land Prices.

1. Documents Required for Allocation:

1. A copy of the License.
2. A copy of Trading Name.
3. A delegation, certified by an advocate or a court.
4. Articles of Association (in the case of companies).

2. Land Prices in Khartoum State:

Area	Distinguished Site Price		Ordinary Site Price			
	SDG	US dollar	SDG	US dollar	SDG	US dollar
East Khartoum North, Industries	60	27			52	24
Industries, Omdurman	55	25			42	19
Horse Racing Track	50	23	38	17.3	35	16
Suq Mahali; Block 35)	50	23	38	17.3	35	16
Industries, Al-Shajara	50	23	38	17.3	35	16
Soba (Industrial)	24	11	22	10	20	9
Al-Jaili (Industrial)	14	6.4	12	5.5	10	4.5

3. Land Prices in Gezira State:

Area	Meter Price in SDG	Meter Price in US Dollar
Maroijan	12.5	5.7
Shendi Foag	5	2.3
East of the Nile	7.5	3.4
Fadasi	10	4.5
Hasahissa	12.5	5.7
Abu Ushar	10	4.5
Al- Kamlin	7.5	3.4
Al-Jadid Al-Thawra	14	6.4
Al-Managil	10	4.5
Rufra	7.5	3.4
Abu Guta	10	4.5
Other Regions	5	2.3

Lands for service are subject to evaluation by an Assessment Committee depending on the location of the land.

4. Land Prices in White Nile State.

Area	Block	Price in SDG/Meter	Price in US Dollars/Meter
Industries - Rabak	1	8 - 10	4
Industries - Kosti	1, 2	8 - 10	4
Industries - Tandakti	-	5	2.3
Industries - Al Dueim	-	8	3.6

Economic Services along roads and highways start from 10 to 15 SDG per square meter. - price in dollars.

Agricultural Lands

These are granted on production relations. Rents vary from (1) to (2) SDG or 0.5 dollars per feddan.

5. Land Prices in Red Sea State.

Area	Price in SDG/ Meter	Price in US Dollars/Meter
Transport Sector	6	2.7
Industry, Port Sudan	8	3.6
Localities	3 - 5	2
Agricultural	65 per feddan	29.5

6. Land Prices in Northern State.

Area	Price in SDG/ Meter	Price in US Dollars/ Meter
Industrial	3	1.36
Services	4	1.81
Agricultural (underground irrigation)	1	0.45
Agricultural (Nile water irrigation)	3	1.36

7. Land Prices in River Nile State.

Region	Price in SDG/ Meter	Price in Dollars/Meter
Industrial	11	5
Service	11	5
Agricultural	25	11.36

8. Land Prices in Sennar State.

Area	Price in SDG/Meter	US Dollars/Meter
Industrial	10	4.5
Fuel Stations at Commercial Price.	30	13.6
Stations in Rural Areas at a favorable price.	5	2.2
Block 95, Sennar.	20	9
Block 20, Sennar.	50	22.7
Block 29, Sennar	50	22.7

Eighth. Investment Opportunities Available in Sudan.

Investment opportunities in Sudan vary according to the wide diversity of resources on and under the ground surface. These resources had already been mentioned in detail, and they can be categorized into three major sectors, which are:

1. The Agricultural and Animal Sector.
2. Industrial Sector
3. Services Sector.

1. Service Prices in Khartoum State.

Water Prices (Pre paid):

Code	Interpretation	The Minimum in meters	The Minimum in SDG	Excess in SDG
1	Commercial	60 meters	90 SDG	X 2

Electricity Prices.

Category	The Price in SDG per Kilowatt - hour
Services	0.34
Industrial	0.24
Agricultural	0.22

2. Agricultural and Animal Sector. Here, investment opportunities comprise the following:

1. Cereals, such as sorghum, maize, millet, cassava and baflra.
2. Oil seeds such as sesame, sunflower and ground nuts.
3. Fruits and vegetables such as mango, banana, grape fruit, guava, galia, leafy vegetables, green pepper, beans and onions.
4. Other cash crops such as cotton, fragrant, and medical plants.
5. Forestry products such as furniture.
6. Various red meat exports.
7. White meat such as poultry and fish and ostrich meat.
8. Hides and leather exports.



Petrodar Oil Operations Company a pioneer Company in Oil investment fields

9. Wild life and tourism
 10. Poultry and feed lots.
 11. Milk and milk products
 12. Fish farms
 13. Local drinks like Karkade, tabaddi, aradeib and guddeim.
3. Industrial Sector: Here, investment opportunities are available in the following areas:
1. Building materials, cement, ceramics, steel, iron formation and cables.
 2. Agricultural products processing industries
 3. Weaving and textile
 4. Oils.
 5. Petroleum industries.
 6. Fertilizer and pesticide industry.
 7. Furniture industry.
 8. Production of sugar from sugar cane and beetroot.
 9. Mineral waters industry
 10. Leather works.
 11. Ready made clothes.
 12. Plastic industry.
 13. Manufacturing of human and veterinary drugs
 14. Packing materials industry.
 15. Fruit concentrates.
 16. Vegetable, fruit, meat and fish canning.

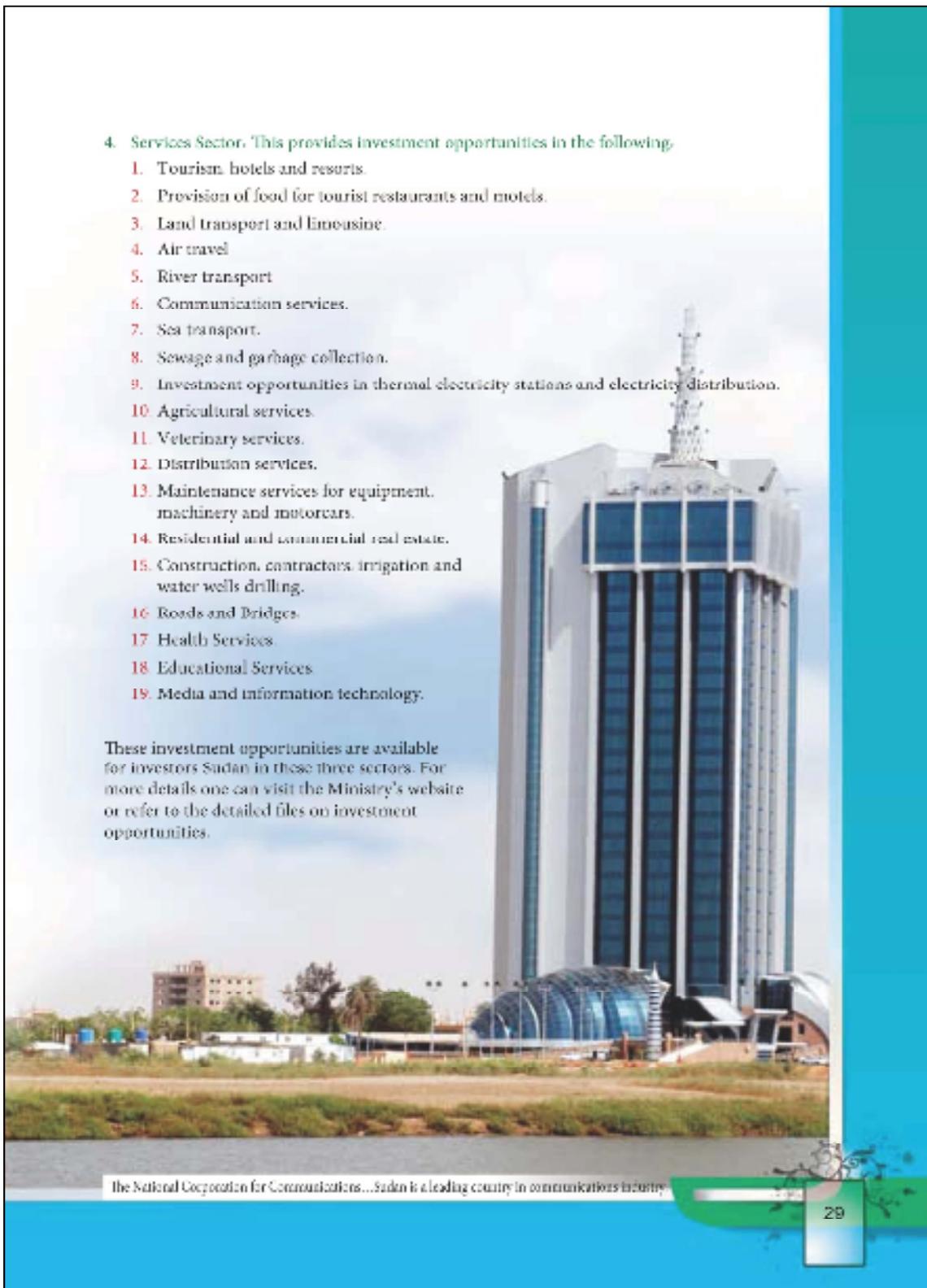


Gtad Industrial Group, the base for industrial progress in Sudan.

4. Services Sector. This provides investment opportunities in the following.

1. Tourism, hotels and resorts.
2. Provision of food for tourist restaurants and motels.
3. Land transport and limousine.
4. Air travel
5. River transport
6. Communication services.
7. Sea transport.
8. Sewage and garbage collection.
9. Investment opportunities in thermal electricity stations and electricity distribution.
10. Agricultural services.
11. Veterinary services.
12. Distribution services.
13. Maintenance services for equipment, machinery and motorcars.
14. Residential and commercial real estate.
15. Construction, contractors, irrigation and water wells drilling.
16. Roads and Bridges.
17. Health Services
18. Educational Services
19. Media and information technology.

These investment opportunities are available for investors Sudan in these three sectors. For more details one can visit the Ministry's website or refer to the detailed files on investment opportunities.



The National Corporation for Communications...Sudan is a leading country in communications industry.

Ninth. Private Sector.

In the Sudan, the Private Sector gets a great deal of attention from the Government. This enabled it to get full freedom in practicing economic activity in all sectors, in agriculture, industry, commerce and services. This sector can enter into partnership with foreign investors in various development projects. The private sector has its own organizations represented in Businessmen Union, and the Sudanese Chambers of Commerce, Industry and Agriculture, which exert great efforts in supporting and strengthening the role of private sector and increasing its contributions in the economic and social boom which the Sudan is witnessing now. In terms of government policies regarding this sector, it had allowed it a considerable proportion of the total development plans which amount to about 75%.

Tenthly. Official Institutions for Investment. These consist of the following.

1. The Higher Council for Investment.
2. The Ministry of Investment
3. Investments Administration in the States.
4. The Administrations concerned with investment in the various Ministries.
5. The Economic Attache's in Sudanese embassies abroad.



The Central Bank of Sudan... a pioneer in banking development in the Country.

The Ministry of Investment.

The Ministry of Investment, Khartoum, West of the Hilton Hotel.

Office	Number
The Minister's Office	Tel.83760848/ Fax. 83760847/
State Minister's Office	Tel.83794783/ Fax.83794784/
Under Secretary Office	Tel.83787194/ Fax.83787192/
Investors Services Directorate	83747498/
Researches and Information Directorate	83779628/
Coordination and Follow up Directorate	83783332/
Administrative and Financial Affairs Directorate	83772030/
Promotions and publicity Directorate	83770691/
Investment Map Directorate	0155151400
Training Directorate	0155151411
Planning Directorate	83787198/
Public Affairs Directorate	0155151416
Telephone Exchange	837787195 – 787193 – 770039

E-mail: investment@sudanmail.net;

Website: (www.sudainvest.gov.sd);



Ministry of Investment...a reactor of economic activity.

Table (1).

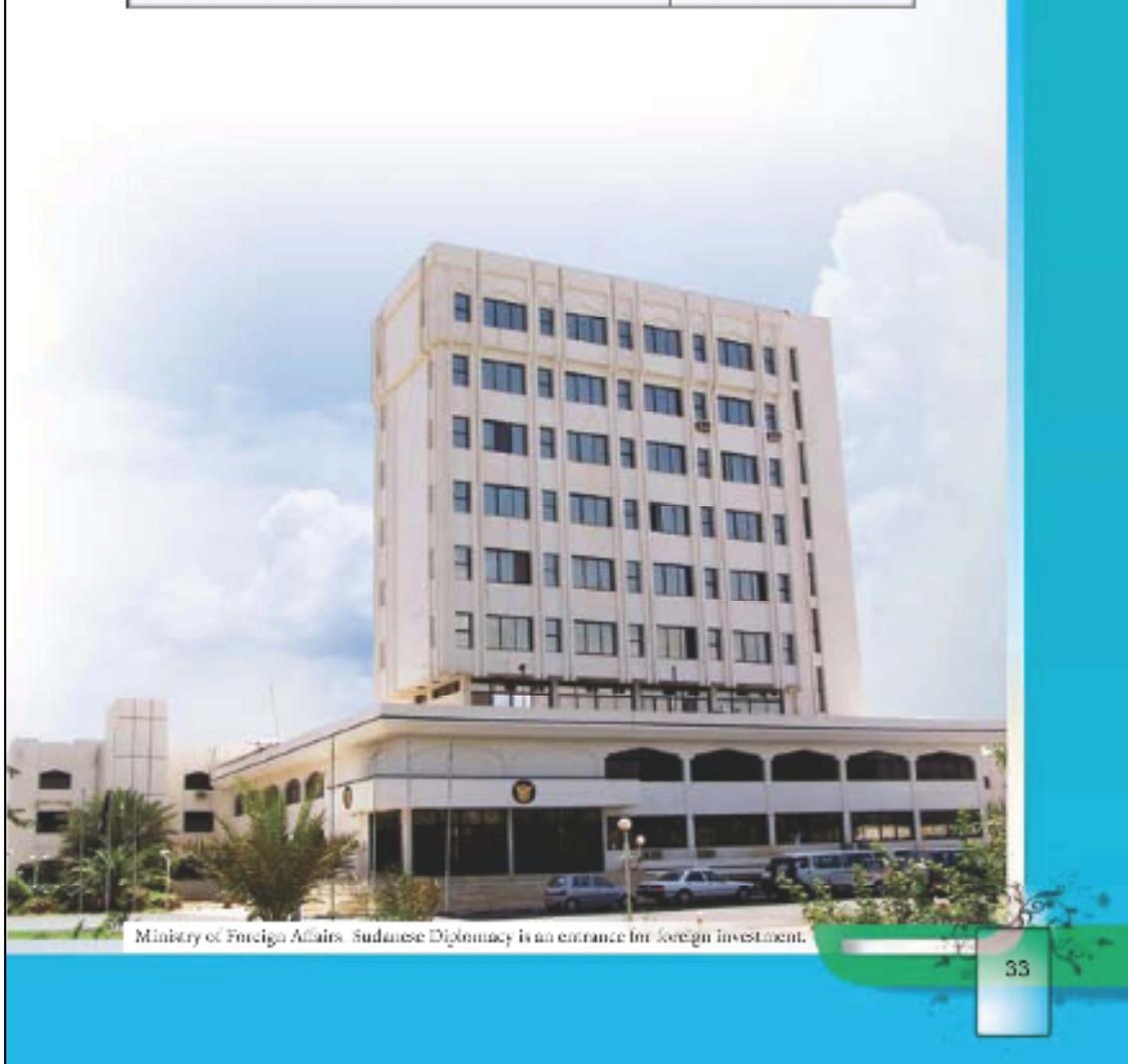
National Ministries

Ministry	Telephone Number	Website
Ministry of Presidential Affairs	83786394/	www.Presidency.gov.sd
Ministry of Council of Ministers	83778861/	www.sudan.gov.sd
Federal Rule	83775003/	www.fedral.gov.sd
Ministry of Defense	83775114/	
Ministry of Foreign Affairs	83775453/	www.mofa.gov.sd
Ministry of Interior	83779900/	www.moi.gov.sd
Ministry of Justice	83784781	www.moj.gov.sd
Ministry of Information and Communications	83777582/	www.minic.go
Parliamentary Affairs	83772323/	www.parlim.gov.sd
Finance and National Economy	83771758/	www.mof.gov.sd
International Cooperation	83772169/	
Energy and Mining	83775595/	www.spc.gov.sd
Irrigation and Water Resources	83/ 777533	www.molwr.gov.sd
Agriculture and Forests	83777430/	www.sudagric.gov.sd
Industry	83783123/	www.industry.gov.sd
Foreign Trade	83778960/	www.sudantrade.gov.sd
Investment	83760848/	www.sudaninvest.gov.sd
Animal and fish Wealth	83464984/	ww.mrf.gov.sd
Tourism and Wild life	83742604/	www.sudanontourism.gov.sd
Transport, Roads and Bridges	83775865/	www.mot.gov.sd
Health	83774381/	www.fmoh.gov.sd
Humanitarian Affairs	83234248/	www.mha.gov.sd
Labor, Public Service and Development of Human Resources	83778635/	www.molar.gov.sd
Environment and Physical Development	83773832/	
Higher Education and Scientific Research	83774290/	
Culture, Youth and Sports	83497405/	www.youthsports.gov.sd
Social Welfare, Woman and Child Affairs	83772780/	www.welfare.gov.sd
Guidance and Endowments	83789190/	www.ishad.gov.sd
General Education	83777016/	www.moe.gov.sd
Science and Technology	83/99216	www.most.gov.sd

Table (2).

Studies and Information Centers.

Strategic Studies Center	8377060;
Middle East Studies Center	83238180;
Sudanese Studies Center	83488632;
The National Center for Information	83796902;
Sudan's Academy for Communication Sciences	83225205;
Instant Information Network	83799900;
Veterinary Researches Center	83380004;
Agricultural Researches Center	83413835
Energy Research Center	830004;
National Center for Researches	83774090;



Ministry of Foreign Affairs - Sudanese Diplomacy is an entrance for foreign investment.

Table (3)

Institutions and Corporations

The African Bank for Development	83796663/
The Consultative House for Development of Khartoum	83773017/
The National Company for Roads and Bridges	83771899/
The Arab Organization for Agricultural Development	83471374/
The Arab Corporation for Investment and Agricultural Development	83784919/
The Sudanese Council for Voluntary Organizations	83462332/
Khartoum Center Corporation	83787812/
Humanitarian Aid Commission	83234242/
Smuggling Combat	83477889/
Meteorological Corporation	83772384/
Railways Corporation	83773116/
Civil Aviation Corporation	83792673/
River Transport Corporation	83330165/
Customs Police Forces	83781761/
The Sudanese Company for Free Zones and Markets	83263661/

Table (4)

Banks

No.	Name of the Bank	Telephone No.
a)	Central Bank	
1.	Bank of the Sudan	778064 - 772166
b)	Specialized Banks	
1-	Farmers' Commercial Bank	774960
2	Animal Wealth Bank	479348- 479373
3.	Sudanese Agricultural Bank	774049 - 77740
c)	National Banks (Public Sector)	
1.	Khartoum Bank	779924 - 775955
	Commercial Banks	
1-	The Saudi-Sudanese Bank	762529 - 784901
2	Albaraka Islamic Bank	783962 - 780688
3.	Al Tadamon Islamic Bank	781709 - 771505
4-	Exports Development Bank	782817
5	Workers' National Bank	783218
6.	Faisal Islamic Bank	772106 - 772131

7.	Sudanese Islamic Bank	766968 - 766977
8.	Al. Shamal Islamic Bank	766473 - 766474
9.	Sudanese-French Bank	778600
10.	Omdurman National Bank	770400 - 779306
11.	Ivory Bank	776772 - 784517
12.	Sudanese National Bank	762123 - 762125
13.	Al Nilein Bank Group	771208
	Foreign Banks	
1.	Abu Dhabi National Bank	-775779 -773070
2.	The Arab Bank	749020 - 773647
3.	Oman Bank Limited	761959 - 761961

Table (5)

Emergencies and Hospitals.

Central Ambulance, Kh. North	85337224.	Al. Faisal Hospital	463914
Central Ambulance Omdurman	87551100.	Al. Maghrabi Hospital	271499
Central Ambulance Khartoum	83432500.	Al-Molazmin Hospital	556496
Rescue Police	999	Omdurman Hospital	552716
Fire Brigade, Khartoum Center, Headquarters	83774444.	Khartoum North Hospital	330021
Fire Brigade, Khartoum South	83464444	Khartoum North Special Hospital	331184
Fire Brigade, Khartoum Market	83466806.	Midwives Hospital	551392
Fire Brigade, Omd. Al-Sha'abi	87554439.	Sahiron Hospital	265315
Fire Brigade, Omd. Headquarters	87552152.	Soha Hospital	452247
Fire Brigade, Omd. Al-Thawra	87541848.	Al -Sha'ab Hospital	774300
Fire Brigade, Kh. North	85313313.	Khartoum Teaching Hospital	779500
Khartoum Electricity Emergencies- Headquarters	83777296.	Khartoum Southern Hospital	776205
Omdurman Electricity Emergencies	83558866.	Ear, Nose and throat Hospital	777774
Kh. North Electricity Emergencies	85341164.	Ahmed Gasim Hospital	340437
Khartoum Water Emergencies	83776386.	Ibn Sina Hospital	472222
Omd. Water Emergencies	87551195	Ibrahim Malik Hospital	428245

Khart. North Water Emergencies	83330891	Al. Watani Hospital	489288
Al Qibli Hospital	559395	Al. Saudi Hospital	566510
Al- Turki Hospital	612002	Al-Akadimi Hospital	427762
The Military Hospital	074181	X- Ray Hospital	793063
Physicians' Hospital	471973	Parents' Hospital	552663
Children Emergency Hospital	781020	Special Military Hospital	074536
Ibn Khaldoun Hospital	471747	Heart Center Hospital	333133
Blue Nile Hospital	551003	Al. Hikma Hospital	472525
Sudan's Heart Center	232133	Jabir Abu Al- Izz Center for Diabetes	466829
Khartoum Dental Hospital	781754	Tijani AL- Mahi Hospital	553495
Nur Al- Oyoum Military Hospital	223403	Saad Abul Ha Hospital	466829
Chinese Friendship Hospital	550047	Tropical Regions Hospital	557702
International Hospital	335094	Al- Naw Hospital	531383

Table 6)
Telephone Numbers of Embassies in the Sudan

Country	Telephone	Fax
Republic of Afghanistan	83221827	
Federal Republic of Germany	83777875	83777622
Republic of Indonesia	83564673	83564671
Islamic Republic of Iran	83781490	83778668
The Democratic Republic of Algeria	83233212	83224190
The Democratic Republic of Somalia	83283558	83283885
The Republic of China	83272730	83271183
The Republic of Iraq	832/1866	832/1825
The Arab Republic of Egypt	83766181	83778741
The United Arab Emirates	83471094	83471110
The Kuwaiti State	83773184	83781112
The Palestinian State	83238791	83221873
The State of Qatar	83/ 266218	83221873
The Sultanate of Oman	83471605	83471017
Switzerland	8347101	83472804
The United Kingdom	83777105	83776457
The United States of America	83774700	83774137

The Republic of Uganda	83797867,	83797868,
Lebanon	83461320,	83461246,
The Republic of Tunisia	83487974,	83487950,
The Niger	83471196,	
Austria	83773774,	
The Moroccan Kingdom	83473068,	83471053,
The Arab Republic of Syria	83471153,	83471066,
The Hashemite Kingdom of Jordan	83483127,	83471038,
The Brazilian Federal Republic	83217079,	83217049,
The Republic of Bulgaria	83560106,	155128500
Canada	83563572,83 563670 ,	83563671,
The Republic of Central Africa	83259003,	83259004,
Chad	83471048,	83462945,
China	83272730,	83271138,
Congo	0155125046	0155125046
Denmark	83476965,	83470803,
The Republic of Djibouti	83251925,	83251960,
Eritrea	83251000,	83251001,
The Federal Republic of Ethiopia	83471379,	83741141,
France	83471082,	83465928,
Greece	83765902,	83765901,
India	83474084,	83474050,
Republic of Italy	83471615,	83471217,
Japan	83 471802	83471600,
Republic of Kenya	83463728,	83472264,
Republic of Korea	83580031,	83580035,
Libya	83222457,	83227319,
Malaysia	83482763,	83482762,
Islamic Republic of Mauritania	83261928,	83269126,
Malta	83475263,	83475216,
The Netherlands	83471200,	83471201,
The Federal Republic of Nigeria	83779120,	83771491,
The Norwegian Kingdom	83578336,	83577180,
The Islamic Republic of Pakistan	83262199,	83273777,
Rumania	83338114,	83341497,
Federal Republic of Russia	83471042,	83471238,
Rwanda	83595848,	83595847,

The Kingdom of Saudi Arabia	83- 472583	83471069;
Republic of South Africa	83585301;	83585082;
Spain	83763639;	83471386;
Sweden	83-476965;	83595620;
Republic of Turkey	83794215;	83794218;
The Republic of Venezuela	83563944/83-563933;	83563942;
Yemen Arab Republic	83471623;	83471020;
Republic of Zimbabwe	83472254;	83592036;

Table (7)

Airlines

Airline	Telephone
Sudan Airways	83452451;
Air France	83774230;
Saudi Airways	83771692;
Yemeni Airways	83797979;
British Airways	83774578;
Egypt Air	83781428;
Ethiopian Airways	83781923;
Kenyan Airways	83781080;
German Airways	83771361;
Kuwaiti Airways	83781823;
Gulf Air	83778503;
Qatari Airlines	83779389;
Emirates Airways	83799475;
Syrian Airlines	83761353;
Spirit of Africa	83793675;
African Airways (Libya)	83777347;
Jordanian Airways	83729847;
Netherlands Airways	83781652;
Union Airways	83741869; 83 741868;

Table (8)

Telephone Codes for Local and International calls

Codes for Local calls

Town	Code	Town	Code
Khartoum	83	Port Sudan	03118
Khartoum North	85	Kassala	04114
Omdurman	87	Madani	05118
Athara	02118	Al-Hassabeissa	05148
Al-Damar	02168	Al-Kamlin	05448
Shandi	02618	Barakat	05168
Karima	02318	Rufa'a	05458
Dongola	02418	Al-Manaqil	05178
Al-Obayed	06118	Addamazin	05518
Al-Nuhud	06428	Sennar	05618
Nyala	07118	Sinja	05628
Al-Fasher	07318	Kosti	05178
Juba	08118	Wau	08418

Table (9)

Codes for International Calls

Arab Countries	
Sudan	00249
Jordan	00962
Syria	00963
Iraq	00964
Kuwait	00965
Saudi Arabia	00966
Yemen	00967
Oman	00968
Arab Emirates	00971
Bahrain	00973
Qatar/Doha	00974
Egypt	0020
Morocco	00212
Algeria	00213
Tunisia	00216
Libya	00218

Somalia	00252
Djibouti	00253
European Countries	
Greece	0030
Holland	0031
Belgium	0032
France	0033
Spain	0034
Portugal	00351
Ireland	00353
Cyprus	00357
Russia	007
Italy	0038
Romania	0040
Switzerland	0041
Austria	0043
United Kingdom	0044

Denmark	0045
Sweden	0046
Poland	0048
Germany	0049
Asian Countries	
Japan	0081
South Korea	0082
China	0086
Turkey	0090
India	0091
Pakistan	0092
Singapore	0065
Indonesia	0062
Philippines	0063
Iran	0098
Thailand	0066
African Countries	
Senegal	00221
Ivory Coast	00225
Nigeria	00234
Chad	00235
Zaire	00243
Angola	00244

Ethiopia	00251
Kenya	00254
Tanzania	00255
Uganda	00256
Mozambique	00258
Cameron	00237
Mali	00223
Guinea	00224
South Africa	0027
Niger	00227
Gabon	00241
Zambia	00260
Zimbabwe	00263
Eritrea	00191
Countries of America	
U.S.A	001
Canada	001
Mexico	0052
Cuba	0053
Argentina	0054
Brazil	0055
Chile	0056
Colombia	0057



Sudapet Company for Oil Operations... a source of radiation for energy projects.

添付資料 5 : ゲジーラ州 MOH によるサポートレター

جمهورية السودان
ولاية الجزيرة
وزارة الصحة
تلفون : 42104

Republic Of Sudan
Gezira State
Ministry Of Health
تلفون : 52249 Email : mohgs2009@hotmail.com

مكتب وزير الصحة

De/4/3/2013

To
AXIOHELIX .japan
TSl co.ltd .japan
SMART ENERGY . japan

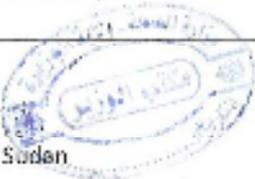
Support for Mobile Clinic Project (Dr Car)

We understand the value added by the mobile clinical project sponsored by Japanese ODA, and operated in Gazira Family Medicine Project(GFMP), Medani, Gazira State, Sudan. The statistics showed that a single Dr Car can cover 7-10 health center and increase the accessibility of medical service to those who needed and we could not provide them so far.

We became to know the project team is preparing for another funding sponsored by JICA. We in Ministry of Health, Gazira State, would like to express our possible contribution that should include commitment to cover the expenses mentioned below, as well as administering the project activities and facilities in a proper way to assure its sustainability and function.

- 1) Operational cost(fuel, maintenance, insurance, support technical team expenses) of the Dr Car will be paid by Gazira State government through the GFMP(GAZIRA FAMILY MEDICINE PROJECT).
- 2) Medical lab tools such as microscope.
- 3) Custom Clearance

Dr: Elfatih Mohamed Malik
Minister of Health Gazira State Sudan



添付資料 6 : FMOH によるサポートレター

<p>Republic Of Sudan Federal Ministry Of Health Ministerial Executive Office</p>		<p>جمهورية السودان وزارة الصحة الاتحادية المكتب التنفيذي الوزاري</p>
<p>To: Axiohelix Co. Ltd. Smart Energy Co. Ltd. TSI Co. Ltd</p>		
<p>6.3.2013</p>		
<p>SUBJECT : Support for Mobile Clinical Project (Dr Car)</p>		
<p>We as Federal Ministry of Health would like to express our appreciation for mobile clinic project initiated by (JICA) in Gezira State.</p>		
<p>Our national health policy emphasizes reaching all citizens in the country with focus on remote and disadvantaged communities.</p>		
<p>The mobile clinic is considered one of the effective strategies to promote health care services and reach the unreached population, therefore, the project which has recently started in Gezira state will obtain our utmost support and we look forward to be expanded to other states in the near future.</p>		
<p> Dr. Sulaiman Abdalghabar Abdalla Director of the executive office Federal Ministry of Health Khartoum, Sudan</p>		
		
<p>Tel . 83774381 83774710 83773001 ٨٣٧٧٣٠٠١ - ٨٣٧٧٤٧١٠ - ٨٣٧٧٤٣٨١ : تلفون Fax : 83778704 - 83769929 ٨٣٧٦٩٩٢٩ - ٨٣٧٧٨٧٠٤ : فاكس Kh.P.O.Box.303 Telex :22896 Telegraphic Address (DAMA) Email:headmofha@yahoo.com الخرطوم ص.ب: ٣٠٣</p>		