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Formulation of IGAD Regional Strategy and Medium-Term Implementation Plan 2016-2020

Baseline Studies at the National Level on IGAD Priority Sectors

Volume II: Consolidated Country Reports

Volume II F: SUDAN

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List of Abbreviations

ABS	Agricultural Bank of Sudan
AfDB	African Development Bank
ARC	Agricultural Research Corporation
ARP	Agricultural Revival Program
ASALs	Arid and Semi Arid Lands
CAADP	Comprehensive Africa Agriculture Development Program
CBD	Convention on Biological Diversity
CBOs	Community-Based Organizations
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women.
CDF	Community Development Fund
CNSP	Comprehensive National Strategic Plan
COMESA	Common Market for Eastern and Southern Africa
CPA	Comprehensive Peace Agreement
CTA	Civil Transactions Act
CSO	Civil Society and Organizations'
CVAW	Combating Violence Against Women and children
DECARP	Desert Encroachment Control and Rehabilitation Program
DPD	Doha Peace Document
DRM	Disaster Risk Management
ECOSOCC	Economic, Social and Cultural Council
FAO	Food and Agriculture Organization
FCB	Farmers' Commercial Bank
FDI	Foreign Direct Investment
FEWS NET	Famine Early Warning System Network.
FNC	Forestry National Corporation
FNST	Food and Nutrition Security Secretariat.
FSTS	Food Security Technical Secretariat
GAC	Gum Arabic Company
GDWFA	General Directorate of Women and Family Affairs
GOS	Government of Sudan
GMADU	Gender Mainstreaming & Agricultural Development Unit
Ha	hectare
HAC	Humanitarian Aid Commission
HCENR	Higher Council for Environment and Natural Resources
HOA	Horn of Africa
ICT	Information Communication Technology
IDPs	Internally Displaced Persons
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IGAD	Intergovernmental Authority for Development
IWRM	Integrated Water Resources Management
m	Million
MAI	Ministry of Agriculture and Irrigation
MLFR	Ministry of Livestock, Fisheries and Rangeland
MFNE	Ministry of Finance and National Economy
MWRE	Ministry of Water Resources and Electricity
NAP	National Action Plan
NAPA	National Adaptation Plan of Action

NEPAD	New Economic Partnership for African Development
NBHS	National Baseline Household Survey
NDDCCC	National Drought and Desertification Control Coordinating Council
NGO	Non-Governmental Organization
NISS	National Intelligence and Security Service
RECs	Regional Economic Communities
SCCN	Sudanese Climate Change Network
SGB	Sudan Gezira Board
SIFSIA	Sudan Integrated Food Security for Action Program
SOFA	The State of Food and Agriculture
SPCRP	Sudan Productive Capacity Recovery Program
t	tone
TFA	Traditional Financial Assistance
UNCCD	United Nations Convention to Combat Desertification
UNDAF	United Nations Development Assistance Framework
UNFCCC	UN Framework Convention on Climate Change
UNHCR	United Nations High Commission of Refugees
UNFPA	United Nations Fund for Population Activities
USAID	United States Agency for International Development
WTO	World Trade Organization
WB	The World Bank
WTO	World Trade Organization
WUAs	Water Users' Association

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Executive summary

The early history of what is now Republic of Sudan, along the Nile River, known as the Kingdom of Kush, was intertwined with the history of ancient Egypt with which it was united politically over several periods. By virtue of its proximity to Egypt, the Sudan participated in the wider history of the Near East in as much as it was Christianized by the 6th century and Islamized in the 7th. As a result of Christianization, the old Nubian language stands as the oldest recorded Nilo-Saharan language. The region naturally became a zone of interaction between the Hamitic Arabs and the Negro Africans. This blending resulted in Sudan's many different ethnic groups and unique culture¹. The contemporary Republic of Sudan was formed in 1956 and inherited its boundaries from Anglo-Egyptian Sudan, established in 1899. The 20th century saw the growth of Sudanese nationalism and independence was proclaimed on January 1, 1956. Since then Sudan has been ruled by a series of unstable parliamentary governments and military regimes.

Sudan is the third largest country in Africa. It is geographically situated between longitudes 21.49' and 38.34' East and latitudes 23.8' and 8.45' north. The country area is 187.9 million (m) hectares (ha) the agricultural land area is 108.7 m hectares, and the arable land and permanent crops is 17.2 m hectares, permanent meadows and pastures 91.5 m hectares (FAOSTAT, July 2014). Most of Sudan land is a gently sloping plain covered by rangeland, pasture and forests which supports its livestock population. Rainfall varies, north to south, from 25 – 700 mm and falls in 2-3 months between June and October, with temperatures ranging from 30 – 40 °c in summer and 10 – 25 °c in winter. The north of the country is largely desert, shifting progressively to semi- desert, low rainfall savannah and high rainfall savannah towards the south. Increased temperatures and declining rainfall have shifted the desert south by 50 – 200 Kms over the past 80 years (UNEP 2007). This trend is continuing, meaning large areas of remaining semi-desert and low rainfall savannah – key livestock production zone – are at risk of desertification.

The Nile and its tributaries are the main sources of water in Sudan, though rain-water harvesting is also important in rangeland areas. Agriculture and livestock account for approximately 95% of water use which at 683m³/capita/year is well within the limit (1445m³/capita/year) established by the Nile Water Agreement. The country also has a vast ground water reserves estimated at 9 trillion m³, a very limited portion of which is utilized. In areas far from the Nile increased rain water harvesting and increased use of ground water resources will be essential to build resilience to climate change.

According to the Fifth Population Census of Sudan in 2008², the estimated population of Sudan was 39,155 million with 30.894 million in Northern States of Sudan with 58% rural and 42% urban population and 42% are below the age of 15 years. The annual growth rate is 2.83 per cent compared to 2.53% in 1983 and 2.88% in 1993, making it one of the highest growth rates compared to other developing countries in Africa. This increase in the growth rate over the years may be a result of two factors; the increased life expectancy at birth to 61 in 2008 compared to 48 in 1983 and the slow decrease in fertility. Sudan is a diverse nation with over 500 tribes and its people around 300 languages, vernaculars and dialects. The significant majority of people in Sudan

¹Elmagboul, N.S.E (2013). The Impacts of Civil War on Systems of Livelihood in Rural Settlements in Sudan: a study of the Blue Nile State

² Central Bureau of Statistics (2009)

follow the Islamic Faith, but sizable proportions are Christians or practice local traditional religions, including animism.

According to human development report in 2013, Sudan scored medium in human development, ranking number 166, with statistics indicating that about 17% of the population live on less than US \$1.25 per day. As indicated by the NBHS (2009) report, the national poverty rate stands at 46.5% with regional disparities ranging from a minimum of 26% in Khartoum to a maximum of 69.4% in North Darfur State and the same trend applies for poverty gaps and severity. Such state of affair has increased migration from rural to urban areas, thus weakening the productive capacity in rural areas, deepened poverty in both rural and urban areas, and widened the regional imbalances³. Sudan national population census (2008) recorded a net internal migration of about 1.8 million persons, about 95% of whom were received by Khartoum and the rest (about 100,000) by the eastern States of Red Sea and Gedarif. Concerning the MDGs, still 78 out of every 1000 children born do not live to see their fifth birthday. The maternal mortality estimated at 216 deaths per 100 000 live births in 2010. The MDG target for malaria has been achieved, although it remains to be a major health problem.

The structure of the Sudanese economy by and large exhibits the same patterns and characteristics observed in most developing countries. In 2010 agriculture which includes crops, livestock, fisheries and forestry accounted for 31.1 % of the GDP, while services made up 47.5% and industry which also includes petroleum contributed 21.6 % of the GDP. The growth of the service sector has been largely induced by the oil boom. However, the growth of the oil industry did not lead to structural changes in the economy. On the contrary, the productive economic sectors have in fact been negatively affected by the growth of the oil industry. This was brought about by rapid build-ups of foreign exchange reserves of the country, thus leading to appreciation of the value of the domestic currency as a result of which the traditional export commodities curbed/lost their competitiveness in the international market.

The wide spread conflict witnessed in the country in the last few decades and the eventual secession of the south is believed to be largely due to the unbalanced process of economic growth and the severe inequalities that resulted from it. Whatever the cause, the secession of the south has dramatically changed the economic reality of the Sudan. The Country is now less by 8,260,490 people and about two thirds of its oil revenue. Yet Sudan is still a big country with huge potential. Notwithstanding the above situation, with prudent management and carefully crafted adjustment which could lead to inclusive and vibrant economic, political and social systems, the prospects for rapid economic and social growth are still very high.

For its size Sudan has a lower density of transport infrastructure relative to other countries in Sub Saharan Africa. The transport system in Sudan comprises all the main modes: road, rail, air, maritime, and inland waterway. The trading artery in Sudan is the route that connects Kosti to Port Sudan via Khartoum. This road records the greatest traffic volumes. Another corridor connects Sudan to the Djibouti offering connectivity to the Port of Djibouti and Addis Ababa.

Telecommunication is an area where public private partnership has played a significant role in the development and modernization of the sector. Sudan was a pioneer in Africa on the privatization of telecommunications services that started in 1993, with the establishment of a public-private landline telephone operator (Sudatel) (IPRSP, 2013).

³UNDP, Human Development Report 2009, Overcoming barriers: Human mobility and development

Agriculture, Livestock, and Food Security (ALFS)

Agriculture in Sudan is dominated by three main farming systems namely, irrigated (1.75 million hectares), semi-mechanized rain fed (6.7 million hectares) and the traditional small holder rain fed system (8.8 million ha).

Growth of the sector has been marked by ups and downs and crop yields are well below their research potential. Reasons for the dismal performance are many; to mention a few are drought, poor access to finance, weak management, rising cost of inputs (exchange rate) and conflicts (insecurity). Government formulated several policies, strategies and plans to revitalize the sector *e.g.* Agriculture Revival Program(2008-2013) ARP, quarter centennial strategy (2007-2032).....etc. However, there was a strong need for cohesive and harmonizing action for different plans' implementation, a role which ARP assumed to had been doing. The involvement of most of the line ministries was in form of recipients rather than in form of leaders *i.e.* top/down. Moreover, resource mobilization and transfers might be wasted because of duplicate mandates of those line ministries.

Livestock sub-sector with its estimated at 90-120 millions of cattle, sheep, goats and camels is second in Africa after Ethiopia. It accounts for 47.2% (46.3 for crops) of the agricultural GDP (31% of national GDP) and contributes an average of 20.5% of the total value of exports. Production is entirely based on traditional pastoral/agro-pastoral system and animals are regarded more as a source of social prestige than a source of livelihood. Climate change is likely to exacerbate the livestock situation by forcing longer migrations in search of water and grazing.

Main constraints, however, are the land tenure problem, intensified competition for available grazing, overstocking, conflicts, poor governance and expansion in the semi- mechanized farming which reduced traditional grazing areas and blocked stock routesetc. Opportunities of the sector outweighed the challenges. Sector's priorities are well elaborated, most important of which are vaccination, accessibility to veterinary services, and enhancement of animal disease surveillance system.....etc. To advance the sub- sector the government has made it a focus in all its policies, strategies and plans. Unfortunately, however, debt arrears to IDA and other financial institutions as well as other understandable reasons have blocked access of government to soft loans and other concessions to finance its development plans. Contribution of development partners has been gratifying, effective but limited.

In spite of the partial availability of information about fisheries sub-sector, Sudan is endowed with considerable fresh water and marine resources (129810 km²). Estimates of potential production ranges from 75000- 300000 tones/ year, 88% of which from inland fresh waters, 8.6% from Red Sea and 3.1% from aquaculture. Both inland and marine fisheries are still largely artisanal. Contribution of the sub-sector to the national GDP is marginal *i.e.* 0.4 %. The level of sub-sector development is constrained by several problems mainly institutional capacity. Government role has been shy for the last decades given the potential. It was not until November 2012, in response to government request, that the EU ACP Fish Programme II provided technical and financial support to the formulation of the First National Fisheries Policy.

Although Sudan is self sufficient in the production of sorghum and millet (main staples), it remains to be one of the food insecure countries in the region. This is because availability does not guarantee accessibility as the definition of food security indicates. Low productivity of agriculture coupled with conflicts (political and tribal) of the last five decades and the protracted occurrence of drought and poverty are the main factors that contributed to food insecurity in Sudan. . Of the main challenges to food security and poverty reductions are overcoming the legacies of long years of internal violent conflicts and insecurities; need for climate early

warning system; external debt burden and limited access to external aid and foreign financing.....etc. Some of the opportunities are the wide and diverse natural resource base , neighborhood to the wealthy countries of the middle-east as markets, emergence of gold mining as a potential new driver for the national economy.....etc.

National efforts to improve the situation are the same mentioned for agriculture, livestock and fisheries. The ultimate objective of all national endeavours has been to enhance economic growth to improve the livelihoods of the population. Development partners' contribution has been appreciably high, but more importantly is that only some of it is being linked to development interventions.

Malnutrition (silent hunger) is an important component of food security. It is emerging as a global issue imposing unacceptably high economic and social cost especially in developing countries and in particular IGAD region. Therefore greater efforts should be directed towards interventions that diversify small holder production, such as integrated farming systems. Interventions that raise the micronutrient content of staples directly through bio- fortification are particularly promising. Such agricultural interventions are generally more effective when combined with nutrition education.

In conclusion,

- The situation of food insecurity is an important factor that reinforces the need to enhance agricultural growth to secure food supply and improve the entitlement of both rural and urban poor population.
Some of the recommendations are;
- ✓ The new vision for Sudan's Growth Strategy should attract domestic and foreign direct investment and promote productivity growth of Sudanese firms to be globally competitive and hence sustain the sector's growth.
- ✓ For stability of national income, growth strategy needs to create opportunities for growth in diverse fields of agricultural production (potential crops for export and industry).
- ✓ Growth strategy needs to focus on:
 - i. Targeted support for the agricultural sector including livestock, fisheries and forestry to promote growth and productivity change.
 - ii. Broad support for private sector and CBOs development , with policies, institutions, incentives and services to promote investment, innovation and productivity growth.

- ✓ Reform of the land tenure system is vital to ensure fair and equitable access to land to promote production and reduce poverty and food insecurity (MDGs).
- ✓ The Image that fosters Sudan's effort to attract domestic and foreign direct investment and obtain debt relief and concessional assistance should be enhanced.
- ✓ Enhance agricultural research and extension by increasing their allocation in the national budget and by fostering Public-Private Partnership (PPP) in research.
- ✓ To place country priorities of Agriculture into perspective they must be viewed within CAADP Framework to harmonize policies at national and sub-regional levels.
- ✓ Overcome legacies of long years of internal conflicts and closing gaps of wide disparities

Natural Resources and Environment Protection (NREP)

Natural resources comprise Man, land, water (rivers, rain, ground water...etc), forests, rangelands, biodiversity, wildlife and minerals (oil and gas). They are of great importance to the social and economic life since they constitute a source for food supply, energy, recreation, a major source of medicines and raw material for industrial products. Therefore States should promote, through legislation, their sustainable utilization and best management practices

Climate change and desertification pose crucial challenge to the environment and different aspects of human and animal's life. Moreover waste management is gradually becoming a threat in the industrialized area. Desertification is considered as the first environmental problem in the country. UNEP, (2007) estimated that a southward shift of 50 to 200 km of the boundary between semi-desert and desert has occurred since 1930. Further shift is expected due to declining precipitation and consequently the Gum Arabic belt is also expected to decrease in size (HCENR, 2003; 2007). The remaining semi-desert and low rainfall savannah on sand, which correspond to some 25% of Sudan's agricultural land, are at substantial risks of further desertification and considerable decrease in food production of about 20%. Moreover, it is estimated that future droughts threaten 19 million ha of the mechanized and subsistence rain fed farms, as well as pastoralist societies, principally in Darfur and Kordofan and hence potentiate conflict (HCENR, 2012).

The rapid and disorganized urbanization is associated with chronic waste and sanitation issues (64% of Sudan's urban dwellers live in the city of Khartoum). The most conspicuous environmental problems facing Sudan's urban centres include solid waste management and wastewater treatment.

Trees are the main source of energy and timber for roofing and building in Sudan. Other benefits include grazing, hunting, and forest foods. Sparse tree cover (biomass density of 5 m³/ha) is found in arid and semi arid and exists in the form of short xerophytes thorny trees and shrubs. The forest inventory of (1995/1996) conducted by the Forest National Corporation (FNC) and FAO, estimated forest area in northern Sudan at 12%.

Challenges facing the NRE sector include lack of legislation that delineates the rights of small herders and farmers to natural resource, i.e. land tenure reform; climate change leading to natural disasters e.g. floods (both river floods and flash floods), drought and desertification, riverbank erosion and watershed degradation; deforestation which rate during the past 40 years

ranged between 0.4 and 0.7 million km² per annum thereby ranked among the 10 highest countries in the globe (HCENR, 2013).

Habitat degradation due to the massive expansion of mechanized farming is the most serious problem facing the sector's wildlife and biodiversity component. Moreover, desertification has led to the retreat of plant ecosystems to the south, migration of 17 mammal species, 8 bird species and one reptile species and the loss of 8 plant species.

Opportunities for environment protection include community forests, renewable energy sources of wind and solar all of which proved to be feasible and successful in Sudan.

In conclusion,

For rural communities in Sudan land is not a mere physical resource, it has also an emotional and social implications. Therefore land tenure legislations and policies are of high priority compared with other legal frameworks in natural resources management since the first law was issued in 1899

and reviewed in 1970.

Sudan with the current water availability of 920 m³/ capita/ annum is below the water poverty line (1000 m³/ capita/ annum). Recent projections showed that the country will witness severe water shortages of about 30 billion cubic meters by the year 2027.

Forest cover is estimated to occupy about 12% of the country area. Unfortunately, however, deforestation in Sudan ranked among the 10 highest countries in the globe with an average deforestation rate between 0.4 and 0.7 million km² per annum during the past 40 years *e.g.* the Gum Arabic belt witnessed a southward contraction of 28 to 110 km.

Rangelands cover about 110 m ha and support about 101 million heads of cattle, sheep, goats, camels, and a wide range of wildlife species. They extend over different ecological zones including desert, semi desert, low rainfall savannah and high rainfall savannah, with 80% of land area located in the semi desert and low rainfall savannah.

The governance structure of the sector is complex and hence relatively dysfunctional; *e.g.* Desertification Control Act 2009 is yet to be activated and the National Drought and Desertification Control Coordinating Council is yet to be established.

To release the sector development constraints, few of the recommendations are, institutional and individual capacity building, Empowering local governance and initiation of community-based monitoring and strengthening infrastructure.

Regional Economic Cooperation and Integration (RECI)

The structure of the Sudanese economy by and large exhibits the same patterns and characteristics observed in most developing countries. In 2010 agriculture which includes crops, livestock, fisheries and forestry accounted for 31.1 % of the GDP, while services made up 47.5% and industry which also includes petroleum contributed 21.6 % of the GDP.

Sudan Central Bureau of Statistic (2010) population census data for 2008 indicated that the majority of Sudanese men are employed in the agriculture sector (48.13%), followed by services (35.9%), industry (10.22%) and other activities (5.75%); similarly, the majority of Sudanese women are employed in the agriculture sector (49.48%), followed by services sector (22.45%), industry (2.27%) and other activities (25.8%).

The Arab Labour Organization (2007), indicated high rates of youth unemployment among Sudanese of (41.25%), respectively 43.25% for female and 36.64% for male. The distribution of unemployment by age groups indicated that the highest unemployment was for the age group 15-24 (32.80%), followed by the age group 25-39 (32.44%).

Challenges facing the sector include, but not limited to,

Political stability which is identified as a major concern by local businesses in the PICS. Its is an overarching factor in the perceptions of the business environment;

Manufacturing sector contributed only 6.1 percent of GDP in 2007 compared to 20 to 40 percent in other African countries. This is because it has been characterized by high capital intensity, high value added per worker and high labor costs.

The incidence of high labor costs is a factor in reducing the competitiveness of firms in Sudan but there are other factors. The 2008 Diagnostic Trade and Integration Study (DTIS) identified the reduction of trade costs as, modernizing customs, the development of trade logistics service, the need to build capacity in food and plant safety regulations, and the need to reduce bottlenecks, and fees and charges at Port Sudan as priorities for improving trade and competitiveness.

In the Productivity and Investment Climate Survey (PICS) private sector firms identified two sets of constraints to investment and growth of the private sector. The top three constraints in the first set were political instability, lack of transparency and economic uncertainty and the second set of constraints included infrastructure, finance and taxation.

Much of the formal private economic activity is concentrated to the central core of the country. The regions in the East, West and South are seriously lagging in formal private sector activity and employment. This is because regions are less attractive to private investments for many reasons, including poor infrastructure, lack of access to finance the low education and poor health status of the labor force, insecurity and poor governance and other legacies of the civil conflicts.

Sixty to seventy percent of African households (including Sudan) earn income from the informal sector and policymakers have been slow to incentivize traders to formalize their activities. The informal sector in Africa, is estimated to represent about one-third of official GDP, is characterized by micro, small and medium-size enterprises (MSMEs), predominantly women and individual dealers in agro-business and pastoral activities. Small traders and business owners turn to the informal sector to avoid the complex regulations and duties especially the high price of import and export duties levied in formal trade, cumbersome customs procedures, and the high degree of corruption and “facilitation payments” encountered at checkpoints and border posts

Major opportunities

The greatest potential for inland waterway transport(IWT) still lies in traffic to South Sudan. The prospects for IWT use in Sudan will continue to be tied to economic and political cycles in South Sudan. For South Sudan IWT connectivity with Sudan is important in the short and medium term as the lowest cost means of transport for the northern part of the country. The limited coverage of road transport means the only other mode is air, which is much more expensive.

The Costs of Port passage of a container through all the operational cycles of the port facilities is not high when compared to other ports in Africa.

The government is building a new airport some 40km to the west of Khartoum. The new airport is envisaged as a transportation hub to link Europe and East and Southern Africa. It will have a runway long enough and infrastructure to handle the largest aircraft in the world. The airport

will have passenger capacity of 12m per year and cargo warehouse space of 6,000m² as well as a cold store with 500 tonne capacity.

Sudan has potential to serve as a transit hub with four of the eight immediate neighbors being landlocked countries. This creates the potential to develop some value added logistics services in activities such as assembling or packaging for distribution to these countries.

Recommendation

Improving efficiency at Port Sudan should be the preferred strategy.

In order for Sudan to attract transit traffic to and from the landlocked countries, its own logistics system has to offer a superior service. Given the current low performance of many of the neighboring countries this represents a significant opportunity for Sudan.

Reducing trade taxes and tariffs is required to increase and diversify markets and exports.

Reducing the dependence on trade taxation when Sudan faces severe revenue challenges and large budget deficit requires coordination and broader tax reform.

Road transport will remain a dominant mode of transport for Sudan.

Social Development (SD)

Sudan is a diverse nation with over 500 tribes and its people around 300 languages, vernaculars and dialects. The significant majority of people in Sudan follow the Islamic Faith, but sizable proportions are Christians or practice local traditional religions, including animism. The country is characterized by social and cultural heritage which is manifested in its cultural and ethnical diversities formed on a background of Arab and African cultures and an ancient history which contributed to formulating the Sudanese distinguished character.

In spite of what the wars in the neighbouring countries and the long national conflicts caused in the social fabric and the incidence of poverty and large numbers of the people becoming refugees or displaced, the Sudan, from an international perspective, is still characterized by social cohesion not found in many other societies.

Major challenges facing the social development sector can be summarized as follows:

- There are many factors that generate several challenges for the social development sector in Sudan. These factors refer to the social practices incompatible with the march to establish the modern civil State. The social deformities produced by the civil strife and repercussions of wars in the neighbouring countries led to increasing poverty, displacement and influx of refugees which has threatened the social fabric.
- The negative impacts of the unfair sanctions on Sudan deprived the country from obtaining modern technology, along with the foreign and internal debts and their negative impact on the economic performance and the balanced sustainable development.
- The overwhelming tribal loyalty over national loyalty led to the volatility of local communities that in turn unfolded disputes over resources and local authorities. Weak role of civil (non-governmental) local mechanisms in resolving civil disputes, tribal conflicts (pastoralists and farmers) and lack of security and political stability worsened the rural society.

- The weakness of civil service institutional capacity and its inability to cope with modern management. Moreover the intricate administrative procedures, inadequate job-opportunities and the disproportionate wages with the cost of living, and the weakness of administrative capacities at the States and the poor performance at the level of localities.
- Limited application of the outcomes of the scientific research and inadequate scientific and technological infrastructures, and high production costs and limited application of modern technologies in production sectors, together with insufficient funding, weak bank credit to the private sector with a rising cost of financing.

Although Sudan is facing many challenges but there are encouraging **opportunities** to address those challenges and achieving social development. These include:

- ✓ Good examples, values and ethics of Sudanese society.
- ✓ Realization of peace and consequent stability to enable more effective direction of resources.
- ✓ Clear improvement in some States' resources *e.g.* gold mining and oil production.
- ✓ Availability of good quality, well trained workforce through the planned expansion of high education.
- ✓ The serious efforts exerted by the State to alleviate poverty and to reduce unemployment.
- ✓ Strengthening the social security systems.
- ✓ Broadening of the social safety net to include targeted categories in the neediest areas.

There are some weakness/**gaps** that hinder the achievement of the rapid progress in the social development sector, some of which are:

- Poor communication of Government decisions and lack of an evidence-based policy and decision making within the Government.
- Potential absence of political commitment to implement plans.
- Inadequate grass-roots consultation and participation in political and governance processes.
- Lack of administrative capacity at the State level.
- Excessive and un-necessarily complex government taxes and fees for various transactions to run the government machinery and not for relevant services provision.
- Lack or absence of data to formulate, monitor and evaluate policies and their impact.

The following are the Conclusions for SD sector:

- According to human development report in 2013, the Republic of Sudan scored medium in human development, ranking number 166, with statistics indicating that about 17% of the population live on less than US \$1.25 per day. The state of affair has increased migration from rural to urban areas, thus weakening the productive capacity in rural areas, deepened poverty in both rural and urban areas, and widened the regional imbalances.

- According to the NBHS (2009), 46.5 percent of households in Sudan live below the poverty line. Poverty rates are substantially higher among the rural dwellers, with 57.6 percent of households below the poverty line compared to 26.5 percent of the urban population.
- The Community Development Fund (CDF), supported by the government and the donor community, has been supporting projects identified and implemented by poor communities in 4 states. This CDF has made notable contributions to community development and poverty reduction.
- Private sector involvement in providing schooling is a long-standing practice in Sudan. The government schools account for about 95 percent of enrolments in basic schools. Private/non-government sector role is important for pre-school and secondary education.
- Transition rates between the cycles are very high: about 74 percent of basic school completers continue in secondary education, and about 87 percent of secondary school completers continue in higher education. On the other hand, Sudan, with an increasingly ageing population, faces a double burden of disease with rising rates of communicable and non-communicable diseases.

Some recommendations for the sector development are:

- Sustainability of capacity development through:
 - Development of administrative structures, systems and legislation to render them appropriate for, and congruent with domestic, regional and international transformation. Enhancement of coordination between the three levels of government;
 - Human Resource development;
 - Development of infra-structure and provision of necessary equipment and resources for appropriate working environment in order to improve performance and productivity;
 - Enhancement of ICT infrastructure and their appropriate use to improve performance and efficiency;
 - Mobilization of the required financial resources for the promotion and spread of cultural and social development.
 - Encouragement of ethical values and good conduct;
 - Respect for the role and contribution of religious scholars and faith organisations in the foundation of a good society;
- Development of employment policies and reduction of unemployment:
 - Address the needs of the labour market;
 - Development of policies, systems, rules, regulations and procedures pertaining to the use of national and foreign workers by balancing the need for knowledge and skills transfer on the one hand, and the priority to employ local expertise, where possible, on the other hand;
 - Periodically reviewing wage and service policies and regulations, to achieve balance between employees' rights and duties.
- Support and promotion of Sudan's cultural heritage, and development of arts and traditions:
 - Development of culturally related businesses and investment.
 - Optimum use of ICTs revolution to celebrate diversity of different cultures and

- achievement of positive relations between them;
- Balanced cultural planning, capable of questioning inappropriate values of some foreign cultural influences.
- Strengthening and broadening relations and liaison with foreign institutions and organizations in relevant fields of expertise, and acceleration of the ratification of international and bilateral agreements in the fields of social and cultural development.
- Strengthening partnerships with the private sector, NGO's and civil society organizations.

Peace and Security (PS)

Peace and security are fundamental basis for the political, economic social and cultural development of any nation. No wonder that they are one of the main thrusts of IGAD to ensure resilient livelihood and sustained economic growth in the region. Cross cutting issues of peace and security include governance, politics, human rights, foreign relations, refugees and borders. Hence keeping peace and security under control is not an easy mandate for a country like Sudan with a border line total length of 6780 km. The situation becomes even more difficult when the border is shared by seven countries almost all of them are economically and/or politically unstable. Absence of peace and security means absence of stability, development, loss of human and economic resources, consequently leading to circumstances of turmoil and chaos that can be extremely difficult and costly to handle. Therefore the government places peace and security on top of its priorities, setting plans, programs and spending resources to achieve it.

Of the **main challenges** facing the sector are the inconsistencies in political consensus, divergence of views among the political organizations and parties with different ideologies regarding governance of the country. For instance, the present governing political party adopts the Islamic line while recognizing freedom for all as approved by the Bill of Rights in the Interim Constitution of 2005. The opposition parties see that the ideology followed does not suit Sudan as a multiracial, multi-religious country. Moreover, opinions vary as to the feasibility of the federal system and the economic policies adopted (economic liberalization policy).

Human rights violations are expected in armed conflict areas by the fighting groups. However, in most cases fingers are pointed to national security forces, unfortunately by hostile foreign circles. In many instances eyes are closed when the human right violations come from the armed opposition movements. UN role is neither fair nor effective in bringing an end to such violations and its role is limited to provision of technical support to enhance human rights status in Sudan.

Armed conflict remains the most important challenge facing development in Sudan. The pattern of economic growth had always been lopsided between regions and social groups, benefiting few areas and limited social groups *i.e.* what political opposition and their armed groups call **marginalization**. The gap in income inequality, unemployment and incidence of poverty are realities in Sudan reported by international agencies (UNDP, 1997). These factors resulted in mobilization of armed movements leading to a security flaw in the conflict zones, especially in Darfur rendering displacement of people inevitable and eventually harming the social fabric and disrupting

development and provision of services. In addition, tribal and regional disputes especially in Darfur and Kordofan, flare up over competition on natural resources *e.g.* land, pasture water...etc. leading to losses of lives and property. The government interferes and resolves the dispute via reconciliation which costs huge amounts of money and resource that might have been invested in the development of the same areas. Climate change also plays its role via desertification, drought & natural disasters, in addition to foreign intervention and its support of armed movements.

Border challenges emanate from various reasons like trans-crime (Organized crime), terrorism and drugs and arms trafficking. Sudan has been both a transit and a destination for illegal migrants and trafficked people from the Horn of Africa. Sudan is hosting about 100,000 Eritrean and Ethiopian refugees, has suffered from human trafficking and took a number of steps to curb it. The occurrence of such crimes is attributed to the geographical situation of Sudan along with easiness of communications and transport.

In conclusion:

- The security sector is one of the most important sectors for all aspects of the development. Therefore the government formulated strategies, established institutions and secured funds for it as a top priority to enforce laws and maintain peace.
- The Comprehensive Strategic Plan (CSP) provided a wide area for issues of politics and governance, and the chance is now available to achieve national reconciliation that leads to stability followed by sustainable development.
- Opportunities could be utilized to overcome the challenges listed in the report.

To release the constraints of the sector, **some of the recommendation is:**

- Implementation of the quarter century strategic plan 2007/2031 particularly in areas relating to peace and security as a priority.
- Implementation of the plan set by the Advisory Council for Human Rights in Sudan with the necessary technical support for human rights programs.
- Implementation of the plan pertaining to the Unit of Child & Women Protection (CVAW).
- To intensify the development efforts for the areas hosting the refugees and seek to find lasting solutions for refugees and humanitarian issues.
- Seeking root solutions to tribal conflicts.
- Seek to resolve problems constraining economic development in cooperation with regional & international entities.
- Rehabilitation of disaster prevention units.

Gender Affairs (GA)

In 1995 the world's women, including the delegation from Sudan, met in Beijing, produced a document for governments to adopt. Sudan ranked 129 out of 187 on the 2012 Gender Inequality Index (value 0.604). National Human Development report calculated for the first time human development index values for men and women. The report states that in 2008, human development for females was the highest in Khartoum State and the lowest in South Darfur. The gender gap for Sudan as a whole was estimated at 0.095. The gender gap was widest in South Darfur (0.132). Gender differences against females exist in human development components, except for longevity, in which females were better off than males (UNDP 2012) 81.4% of rural women involved in farming, forestry and fisheries compared to 58.1% to males (Ministry of labor 2011). Although women play a crucial role in agriculture, contributing to both the GDP and to household food security, their contributions to the overall economic development process continue to be undervalued (FAO WFP, 2007).

Some of the **challenges** facing the sector are;

Lack of gender disaggregated data of most line ministries of Sudan limited the determination of the gaps in empowerment or disempowerment of women and men so that gender gaps cannot be discovered and readdressed and gender discrimination would not be overcome. It is often difficult to establish evidence based causal links between impacts of gender inequality on a Sudan's development because of the lack of available sex-disaggregated data. Furthermore lack of gender disaggregated data lead to unavailability of gender indicators that measure changes relating to gender equality over time, which can be measured separately for men and women .Gender equality indicators improve planning and programming.

Gender capacity building conducted by national and international organization focused on gender awareness rather than on technical skills to conduct gender analysis and mainstreaming gender.

Gender equality is an important priority for the Sudan agenda but competes with other, more politically important and with higher profile priorities in continental, regional and national structures. Therefore, it is no surprise that more often than not, **gender equality has not been one of the first key priorities** mentioned especially during important and high-profile occasions such as meetings and/or summits with groups of donor countries and Private investors from the developed world.

The Beijing Platform for Action emphasized the need to systematically integrate gender perspectives in decision-making processes across all sectors. One of obstacles to full implementation is the perception that gender mainstreaming should be dealt with by women or by the women's initiations. Attention to gender equality is often perceived as less urgent than, for example, action to eliminate poverty, poor health or low productivity, which illustrates the limited understanding of the links between gender equality and other development issues.

There exists a strong tendency amongst policy makers in Sudan to equal 'gender' with 'women'. for example, it appeared that 'gender' was mostly translated into a single focus on

women's needs and women's empowerment, without this being clearly rooted in a gender analysis or strategy that addresses power relations between men and women.

Laws promoting gender equity in formal sectors employment **are not enforced adequately and in fact challenged by prevalent male bias practices.** Majority of women are engaged in activities which are not supported by legal frameworks so they cannot claim rights for equity and protection. The Sudan is still to ratify CEDAW the most important framework for advancement of women.

Women's issues are cross-cutting, multidimensional and interrelated, which require, providing considerable **budgets** for programs, projects and activities for women, and that in all respects, the budgets allocated for the implementation of those plans and programs were limited, resulting in scattered activities, unsustainable, and lacked effective mechanisms in the process of evaluation and follow-up, especially at the State level.

The enabling environment for gender equality and women's empowerment may also be influenced by factors that are not easily controlled by individual Governments, organizations or communities, e.g. availability of international financing for development, . Changes in aid modalities and structural reforms.

Major **opportunities** for the sector development include:

Over the years, gender mainstreaming programs in Sudan have provided space for some progress on some issues of concern to women. Several institutional arrangements and instruments have been used in different combinations in different ministries and units with different degrees of success and effectiveness. These include gender focal points and units in various ministries, departments, government agencies and inter-ministerial taskforces for particular programs, gender policies, inter-ministerial bodies, funds, legislation and gender budgeting.

Internationally Sudan has managed to forge strong partnerships with countries and organizations supporting gender efforts to the promotion of gender equality and women's empowerment. National mechanism has a network of relationships with other stakeholders, including other ministries, agencies and donors, civil society and regional and international bodies. International organizations have proved vital for the capacity building of national mechanisms. (GDOWFA 2014 and GDOWFA 2011, UN women 2012).

National Mechanism of gender equality in Sudan has developed many partnership to create environment favourable to gender as follows:

- Membership in international and regional committees, e.g. Family Committee Arabic – Arabic-League.
- World family organization-the Organization of the Islamic Conference, The Economic Commission for women (ECA). Center for gender and development – African Union the African Women Committee – -Intergovernmental Authority on drought and development (IGAD), the status of women in the economic and Social Commission for Western. Asia (ESCWA), the non-aligned movement, the common market for Eastern and South Africa.

A unit to combat violence against women and children within the ministry of justice was formulated by a decree from the president. Nov2005.

The 2008 Census has been disaggregated by sex and age-group, and some surveys funded by donors have collected additional gender-specific information.

Planning processes within government toward achieving the MDGS provided opportunities to addressing many of the critical areas of concern of the Beijing Platform for Action.

Availability of Gender mainstreaming and agricultural development unit can play efficient role in gender equality and empowerment of female farmers in partnership with FAO, WFP ,IFAD and other regional agency. Establishment of 14 women departments of State ministries of Agriculture as focal points to mainstream gender in agricultural projects.

In Sudan Civil Society organizations play critical role in gender equality and empowerment. They are one of important institutional mechanisms. Most of them have good and long experiences and qualified committed staff for gender equality.

The establishment of the African Union (AU) and its institutions, particularly the Directorate for Women, Gender and Development under the Office of the Chairperson of the AU Commission, as well as the Women and Gender Sectorial Cluster Committee as one of the ten such committees of the Economic, Social and Cultural Council (ECOSOCC) of the AU, are developments which have given some impetus to work on gender equality and provided commitments that national mechanisms can pursue.(AU (2004).

Gaps

- GDOWFA has few professional staff and even fewer gender and other technical specialists. This is because the location of national machinery within government meant that their recruits are civil servants employed for their administrative and managerial capacities rather than their technical knowledge of gender equality issues.
- The use of **gender focal points** to mainstream gender in some sectors have been less successful. They often get marginalized. They tend not to be gender experts themselves, they are often young and inexperienced and lack clout and influence.
- Women's national mechanisms are mainly concerned about women's issues and problems, with limited focus on gender-based concepts and issues. On the other hand, these mechanisms do not attract many men to work with them and adopt their cases, thereby leading in some cases to hostility with regard to issues of advancement of women and gender equality.
- In Sudan long years of civil war and conflicts, effects of climate change, HIV/AIDS, massive internal displacement and outmigration constituted major challenges hindering the effective implementation of the national gender policy and strategy.

Conclusions

- Gender mainstreaming is most modern approach. It was expected to be used in the analysis and presentation of the issues of women's empowerment in national policy and by integrating gender issues in all thematic areas of national policy. Gender mainstreaming and addressing gender equality concentrated on central ministries without clear strategies and policies to

promote mainstreaming approaches at local level by local government. Moreover Statistical and gender indicators are not commonly used because of the lack of reliable data disaggregated by sex of most of the ministries. Hence gap in this area also hinder progress in the implementation of global commitment on gender equality.

- Gender issues may continue to be overshadowed by competing priorities such as peace and security, drought and famine, etc. Though these priorities concern both men and women, most decisions and actions are taken by men and may not address specific gender needs of women and girls.
- The work of Sudanese women's civil societies in empowering women is critical for the effectiveness of national machinery to gender policy, but unclear coordination mechanism limit their role to help in setting women's priorities and advocating them within government policies.
- Despite that Sudanese women have acquired political and economic rights for decades, and there is progress in their economic and political participation, still gender gaps persist. This is indicated by high literacy rate, low school attainment specifically among girls in rural areas and disadvantaged states, and by engagement of majority of women in unpaid work and in informal sector activities which are not protected by law. The political participation of women remained limited in quantity and quality and is urban-based.

Recommendations:

- ✓ Disaggregated data is the starting point of any effective analysis of gender gaps. Every project design must include the collection of gender disaggregated data. Technical training in gathering gender disaggregated data is much needed. Data disaggregated by sex provide the basis for analysis and identifying issues to be given priority and the baseline for assessing progress and are also useful for civil society activism.
- ✓ Increasing capacity building of decision makers on gender mainstreaming
- ✓ Sudan gender policy should follow a *rights-based approach*.
- ✓ Promotion of good governance and the rule of law, guarantee human rights and rights of women through democratic and transparent institutions
- ✓ Promotion of gender equality and women's empowerment in the process of regional integration.
- ✓ Creation of conducive environments for the active participation of women in business and industry in Sudan.
- ✓ National machinery should enter into partnerships with universities in order to advance Knowledge production on gender disparities.
- ✓ Strengthening the approach of creation of public gender awareness in all sectors of society.
- ✓ Strengthening the Capacity of the Respective Ministries of Gender for Policy Implementation. Conduct capacity assessment of specifically the Gender Directorate to clarify human resources required to lead policy analysis, planning and turning resolution into act

1. Background

Phase 1 of the formulation process of the next IGAD Regional Strategy and Implementation Plan 2016-2020 which was launched on 5th September 2014 has been concluded with the receipt of the final national Baseline Reports from all the consultants. The baseline studies were conducted on the following six IGAD priority sectors in each of seven member states:

- a) Agriculture, livestock and fisheries development
- b) Natural resources and environment protection
- c) Social Development
- d) Economic cooperation and Integration
- e) Peace and security; and
- f) Gender affairs.

The reports include six sectoral summaries (Chapters) based on the main reports of the Baseline Studies in each member state. The “Chapters” highlight, among other things:

- ☐ Root causes and effects of the challenges facing development each of the six sectors in the country;
- ☐ National policies, strategies and institutional frameworks for the development of each sector
- ☐ Main programmes/projects on each sector, achievements, challenges, opportunities, lessons learnt and future aspirations.

This **Country Report** is produced on the basis of the national level “State of the Sector” reports of the baseline studies. It consists mainly of the six sectoral “chapters” of the baseline studies on the IGAD priority sectors and forms one consolidated and harmonized document with one common table of contents, one introduction/background, one executive summary, one list of abbreviations. It focuses on the current status of each sector, development challenges and opportunities for the future and hence, would constitute an important source of the background data and information for the preparation of the IGAD “State of the Region Report” as well as for the formulation of the IGAD Regional Strategy and Implementation Plan 2016-2020.

2. Country Profile

2.1 Introduction

Sudan occupies the Northeast part of Africa. It is the third-largest African country after secession of South Sudan in July 2011. Sudan holds the potential to be a regional economic powerhouse. It has abundant fertile lands and livestock, a reasonable manufacturing base, and a strategic market location at the crossroads of sub-Saharan Africa and the Middle East.

The rangelands of Sudan support about 101 million heads of cattle, sheep, goats, and camels, and a wide range of wildlife species. Agriculture is the indisputable wealth of the country. Its contribution to the GDP was 39.4 % (2012), 33.8 % (2013). Other natural resources are oil, gold and several minerals.

2.2 History

The contemporary Republic of Sudan was formed in 1956 and inherited its boundaries from Anglo-Egyptian Sudan, established in 1899. For times predating 1899, usage of the term “Sudan” for the territory of the Republic of Sudan was somewhat anachronistic, and may also refer to the more diffuse concept of the Sudan region.

The early history of what is now Republic of Sudan, along the Nile River, known as the Kingdom of Kush, was intertwined with the history of ancient Egypt with which it was united politically over several periods. By virtue of its proximity to Egypt, the Sudan participated in the wider history of the Near East inasmuch as it was Christianized by the 6th century and Islamized in the 7th. As a result of Christianization, the old Nubian language stands as the oldest recorded Nilo-Saharan language.

The 20th century saw the growth of Sudanese nationalism and independence was proclaimed on January 1, 1956. Since then Sudan has been ruled by a series of unstable parliamentary governments and military regimes.

2.3 Geography

Sudan is the third largest country in Africa, stretching from Egypt in the north to South Sudan in the south and sharing borders with seven countries. This vast territory measures about 1,882,000 sq. Km. The country area is 187.9 million (m) hectares, the agricultural land area is 108.7 m hectares, and the arable land area is 17.1 m hectares, and arable land and permanent crops is 17.2 m hectares, permanent meadows and pastures 91.5 m hectares (FAOSTAT, July 2014). It is geographically situated almost at the centre of the continent, between longitudes 21.49' and 38.34' East and latitudes 23.8' and 8.45' north. Sudan shares borders with seven African countries: of which two are Afro-Arab, lying to the north of Sudan, namely Egypt which shares a border of 1,273 km with Sudan, and Libya which shares a border of 383 km with Sudan. To the east, Sudan shares borders with Ethiopia (727 Km) and Eritrea (636 Km). Also to the East, the coastline of the Red Sea extends by 875 Km. To the south lies South Sudan with approximately a border of 1,973 km. Along the west south-western borders, Sudan shares boundaries with the Central African Republic (448 km) and Chad (1,340 km)⁴. The region naturally became a zone of interaction between the Hamitic Arabs and the Negro Africans. This blending resulted in Sudan's many different ethnic groups and unique culture⁵.

Most of Sudan land is a gently sloping plain covered by rangeland, pasture and forests which supports its livestock population. Rainfall varies, north to south, from 25 – 700 mm and falls in 2-3 months between June and October, with temperatures ranging from 30 – 40 °C in summer and 10 - 25 °C in winter. The north of the country is largely desert, shifting progressively to semi-desert, low rainfall savannah and high rainfall savannah towards the south. Increased temperatures and declining rainfall have shifted the desert south by 50 – 200 Kms over the past 80 years (UNEP 2007). This trend is continuing, meaning large areas of remaining semi-desert and low rainfall savannah – key livestock production zone – are at risk of desertification.

The Nile and its tributaries are the main sources of water in Sudan, though rain-water harvesting is also important in rangeland areas. Agriculture and livestock account for approximately 95% of water use which at 683m³/capita/year is well within the limit (1445m³/capita/year) established by the Nile Water Agreement. The country also has a vast ground water reserves estimated at 9 trillion m³, a very limited portion of which is utilized. In areas far from the Nile increased rain water harvesting and increased use of ground water resources will be essential to build resilience to climate change.

⁴Ministry of Information. (2011). Sudan The land of opportunities, facts and Figures. Khartoum, Sudan

⁵Elmagboul, N.S.E (2013). The Impacts of Civil War on Systems of Livelihood in Rural Settlements in Sudan: a study of the Blue Nile State

2.4 Society

According to the Fifth Population Census of Sudan in 2008⁶, the estimated population of Sudan was 39,155 million with 30.894 million in Northern States of Sudan with 58% rural and 42% urban population and 42% are below the age of 15 years. The annual growth rate is 2.83 per cent compared to 2.53% in 1983 and 2.88% in 1993, making it one of the highest growth rates compared to other developing countries in Africa, the Arab and Muslim worlds. This increase in the growth rate over the years may be a result of two factors; the increased life expectancy at birth to 61 in 2008 compared to 48 in 1983 and the slow decrease in fertility where a woman gives birth to 5 to 6 children in her lifetime in 2008 compared to 7 in 1973⁷. The Central Bureau of Statistics (CBS) projects that the total population of Sudan will be 48.1 million by 2018. Sudan is a diverse nation with over 500 tribes and its people around 300 languages, vernaculars and dialects. The significant majority of people in Sudan follow the Islamic Faith, but sizable proportions are Christians or practice local traditional religions, including animism.

Sudan is in a critical political, socio-economic and demographic transition, particularly in the post-cessation era, together with the internationally down-turning economies. Due to the country's cessation, the Sudan has lost 80% of its oil fields, thus leaving a highly exposed economy that is hardly able to service its debts, and achieve tangible progress in the MDGs. Shortage in supply of hard currency has left huge budget deficit and has nearly doubled the US\$ exchange rate against the SDG. The result has been a sharp increase in prices of almost all the basic consumer goods/services, thus further worsening the already beleaguered living conditions of the bulk of the population who are classified as poor.

According to human development report in 2013, Sudan scored medium in human development, ranking number 166, with statistics indicating that about 17% of the population live on less than US \$1.25 per day. As indicated by the NBHS (2009) report, the national poverty rate stands at 46.5% with regional disparities ranging from a minimum of 26% in Khartoum to a maximum of 69.4% in North Darfur State and the same trend applies for poverty gaps and severity. It is also important to note that gaps also exist within states between the different localities. The state of affair has increased migration from rural to urban areas, thus weakening the productive capacity in rural areas, deepened poverty in both rural and urban areas, and widened the regional imbalances⁸. Sudan national population census (2008) recorded a net internal migration of about 1.8 million persons, about 95% of whom were received by Khartoum and the rest (about 100,000) by the eastern States of Red Sea and Gedarif.

The Census data for Sudan showed that the number of unemployed seeking work for the first time increased from 0.6 million in 1993 to 0.94 million in 2008. The age group 20-24 accounted for 18.5 percent of those seeking work for the first time in 2008, indicating the flow of large number of college graduates that had followed from the massive expansion of high education institutions in the 1990's.

The Status Report found that student enrolments have expanded for all sub-sectors of education since 2000. The fastest growth in enrolments since 2000-01 occurred in pre-school (10 percent per year), followed by higher education (7 percent per year), secondary education (6 percent per year) and basic education (5 percent per year). The expansion in enrolments is an evidence of strong demand for education in the society. At the state levels, there is evidence of the positive impact of peace on basic school enrolments for the populations that were affected by conflict prior to 2005. The number of academic secondary schools increased significantly since 2004-05, leading to smaller schools and lower student-teacher ratios. At this level, the average school size has dropped from 269 students per school in

⁶ Central Bureau of Statistics (2009)

⁷ UNFPA (2013) Population Dynamics of Sudan. Accessed in 2013 at: http://countryoffice.unfpa.org/filemanager/files/sudan/facts/population_fact_sheet_final1.pdf

⁸ UNDP, Human Development Report 2009, Overcoming barriers: Human mobility and development

2004-05 to 212 students per school in 2008-09. The student-teacher ratio also dropped from 19 to 17 over the same period. The low student-teacher ratio in secondary schools is likely a result of the greater use of specialized subject teachers at this level. There was a strong expansion in the number of technical secondary schools and teachers, but no growth in enrolments, according to available statistics⁹. Private sector involvement in providing schooling is a long-standing practice in Sudan. The private/non-government sector role is important for pre-school and secondary education. However, government schools account for about 95 percent of enrolments in basic schools, 100 percent of enrolments in technical secondary, and almost 90 percent of enrolments in higher education. In the pre-school sector, non-government schools—which include the religious Khalwa schools as well as fee-charging private schools enroll as many as 38 percent of all students. In academic secondary schools, non-government schools—including Teacher Union tutorial classes- enroll 24 percent of all students. Transition rates between the cycles are very high: about 74 percent of basic school completers continue in secondary education, and about 87 percent of secondary school completers continue in higher education. Thus, relatively few complete a cycle without continuing in the next cycle¹⁰.

Sudan, with an increasingly ageing population, faces a double burden of disease with rising rates of communicable and non-communicable diseases. The Sudan Household Survey 2010 showed that 26.8% of children aged 5 to 59 months had diarrhea, while 18.7% were sick due to suspected pneumonia in the two weeks before the survey was done. Protein energy malnutrition and micronutrient deficiencies continue to be a major problem among children under 5, with 12.6% and 15.7% suffering from severe wasting and stunting, respectively. The most common micronutrient deficiencies are iodine, iron and vitamin A. Concerning the MDGs, still 78 out of every 1000 children born do not live to see their fifth birthday. The maternal mortality estimated at 216 deaths per 100 000 live births in 2010. The MDG target for malaria has been achieved, although it remains to be a major health problem. In 2010, malaria led to the death of 23 persons in every 100 000 population; while in total over 1.6 million cases were reported. The annual incidence of new TB cases for 2010 is 119 per 100 000, half of them smear-positive. TB case-detection rate of 35% is well below the target of 70%, but treatment success rate at 82% is close to the WHO target of 85%. With respect to HIV-AIDS, the epidemic is classified as low among the general population estimated prevalence rate of 0.24% with concentrated epidemic in two states¹¹. Sudan Millennium Development Goals Progress Report 2010 shows some Health MDGs achievements (see Table 4).

Sudan is an arid to semi-arid country with an average annual rainfall of 350 mm/y. The available water resources in the country comprise 31.5 billion cubic meters from different sources including River Nile, seasonal streams and groundwater. The per capita share from the available water resources is estimated at 790 m³/year. This categorizes Sudan among the countries that fall below the water poverty line. The consumed water is used for irrigation (67 percent), industry (5 percent), human and livestock drinking and domestic use (28 percent). The evapo-transpiration losses account for 17 percent.

Unsafe water can be a significant cause of diseases such as trachoma, cholera, typhoid and schistosomiasis. Drinking water can also contain hazardous physical, chemical and radiological contaminants with harmful effects on human health. In addition to its association with disease, access to drinking water is particularly important for the women and children, particularly in rural areas, who bear

⁹ Federal Ministry of General Education, Directorate General of Educational Planning, 2008, Baseline Survey on Basic Education in the Northern States Final Report June 2008

¹⁰ IMF (2012), Sudan Interim Poverty Reduction Strategic Paper.

¹¹ WHO (2014), health in Sudan. <http://En.wikipedia.org>

the responsibility for fetching water, often for long distances. Table (5) displays the available data on achievement of the MDG targets concerning water and sanitation status¹².

2.5 Economy

The structure of the Sudanese economy by and large exhibits the same patterns and characteristics observed in most developing countries. In 2010 agriculture which includes crops, livestock, fisheries and forestry accounted for 31.1 % of the GDP, while services made up 47.5% and industry which also includes petroleum contributed 21.6 % of the GDP. The growth of the service sector has been largely induced by the oil boom. The construction sector grew on average by about 10 % per annum since 1999 while hotels, restaurants, transport, communication and other services also enjoyed high growth rates.

However, the growth of the oil industry did not lead to structural changes in the economy. In fact the share of industry proper (*i.e.* minus the oil industry) remained 9% in 2010 which was no higher than the level it attained in the 1990's. On the contrary, the productive economic sectors have in fact been negatively affected by the growth of the oil industry. This was brought about by rapid build-ups of foreign exchange reserves of the country, thus leading to appreciation of the value of the domestic currency as a result of which the traditional export commodities curbed/lost their competitiveness in the international market. The diminished roles of cotton and Gum Arabic in the external trade of Sudan are good examples that demonstrate the effects of the Dutch disease phenomenon in the economy of the Sudan.

Sudan embraced the stabilization programme on its own without the usual support from the Bretton Woods Institutions in 1992. Mainly owing to lack of resources and weak management the reform initially led to significant deteriorations in the macroeconomic conditions: per capita consumption declined and inflation went into triple digits. However, since 1996 with increased foreign exchange earnings from export of oil and increased inflow of "resource and market seeking" FDI, the economic situation began to show marked improvements. Since then Sudan's economy became one of the fastest growing economies of the Sub-Saharan- African countries. Thus, from 2000-2009, for example... real GDP growth rate averaged nearly 8 per cent per annum and per capita income increased from US\$ 776 in 2004 to US\$ 15704 in 2009.(Central Bank of Sudan 50th annual report 2010..)

On the other hand, the pattern of economic growth in Sudan had always been lopsided between regions and social groups benefiting few areas and limited social groups. Masked behind the high growth rate is, therefore, the wide gap in income inequality, unemployment and incidence of poverty. As a study by the UNDP for the periods 1967-1996 showed, "...income distribution in Sudan appeared to have experienced a dramatic change...*shifting* from moderately unequal to extremely unequal." Likewise the size of the unemployed in 2009 was estimated to be 17%. In all cases of course the incidence between rural and urban, the centre and the peripheries, and gender was highly skewed.

Sudan is also a country distressed with debt burden. According to the Interim Poverty Reduction Strategy Paper," ...the external debt is estimated at US\$ 38 billion by the end of 2010, consisting of US\$ 16.1 billion principal and US\$ 21.9 billion interest arrears" The proportion of the population below the poverty line (defined to be the amount of income that will allow consumption level of 1751kc) in the same year was estimated to be 46.5 % or 14.4 million people.

¹² IMF (2012), Sudan Interim Poverty Reduction Strategic Paper.

Although agriculture is still the predominant activity in Sudan, its share of the labour force has gradually declined while other sectors of economic activity have expanded. Sudan Central Bureau of Statistic (2010) population census data for 2008 indicated that the majority of Sudanese men are employed in the agriculture sector (48.13%), followed by services (35.9%), industry (10.22%) and other activities (5.75%); similarly, the majority of Sudanese women are employed in the agriculture sector (49.48%), followed by services sector (22.45%), industry (2.27%) and other activities (25.8%). Employed Sudanese men constitute the majority of total employment in all sectors (67.67%), whereas employed Sudanese women constitute the minority of total employment in all sectors (32.33%). Sudan not only faces many challenges such as low per capita GDP, low growth of labour productivity, the incidence of high poverty rate, but also the persistence of high and rising unemployment rates.

Sudan like many other typically developing countries not only suffered from high annual population growth rate (2.8%) and a very high rate of unemployment (20.7%), but also from the population structure, which, as in many other Arab countries -with a high percentage of the young-, makes the situation of unemployment even worst and difficult as most of the population is under 25 years of age (22.9% in 2006). Such a population structure has prompted the need to create more job opportunities and is anticipated to put more pressure in the future demands for jobs in Sudan. This situation lead to a very high rate of unemployment among youth population, for example, according to the Arab Labour Organization (2007), data for 2004 indicated high rates of youth unemployment among Sudanese youth (41.25%), respectively 43.25% for female and 36.64% for male. The distribution of unemployment by age groups indicates that the highest unemployment is for the age group 15-24 (32.80%), followed by the age group 25-39 (32.44%).

The wide spread conflict witnessed in the country in the last few decades and the eventual secession of the south is believed to be largely due to the unbalanced process of economic growth and the severe inequalities that resulted from it. Whatever the cause, the secession of the south has dramatically changed the economic reality of the Sudan. The Country is now less by 8,260,490 people and about two thirds of its oil revenue. Yet Sudan is still a big country with huge potential.

Notwithstanding the above situation, with prudent management and carefully crafted adjustment which could lead to inclusive and vibrant economic, political and social systems, the prospects for rapid economic and social growth are still very high.

2.6 Transport and Infrastructure

For its size Sudan has a lower density of transport infrastructure relative to other countries in Sub Saharan Africa. The transport system in Sudan comprises all the main modes: road, rail, air, maritime, and inland waterway. The trading artery in Sudan is the route that connects Kosti to Port Sudan via Khartoum. This road records the greatest traffic volumes. Another corridor connects Sudan to the Djibouti offering connectivity to the Port of Djibouti and Addis Ababa. The total highways' length is 11900 km of which 4320 km are paved. Port Sudan is the main gateway for imports to Sudan supported by two dry ports at Garri about 60 km north of Khartoum and Soba about 30 Km south. Exports, especially livestock, agricultural goods and oil (crude and derivatives) are being handled at specialized facilities mainly in Swakin. The water ways are formed by the navigable sections of the Nile River, from Kosti going south to Juba in South Sudan (extending over 1,435km) and Karima to Dongola connecting to Egypt (330km) (DTIS, 2014). At 4,578 km, Sudan has the most extensive railway network in Africa, after South Africa.

Telecommunication is an area where public private partnership has played a significant role in the development and modernization of the sector. Liberalization of the sector started in early nineties with the regulatory and the supervision function undertaken by the National Telecommunication Corporation (NTC) and the service provision function through the private operators. Sudan was a pioneer in Africa on the privatization of telecommunications services that started in 1993, with the establishment of a public-

private landline telephone operator (Sudatel) (IPRSP, 2013). Main lines in use (2012) were 425000, mobile cellular 27.659 million and internet users 4.2 million.

2.7 Government

Sudan is a Presidential Republic where the President & State Governors are elected through direct free ballot. The Federal and State Parliaments are elected through free direct ballot and proportional representation.

DRAFT

3. Agriculture, Livestock, Fisheries and Food Security (ALFS)

By Dr. Abdalla Mohamed Ali

3.1 Introduction

Agriculture and its two sub-sectors, livestock and fisheries, are the sources of human food and animals feed. Consequently good agriculture and economic situation mean food security and lagging agriculture and poor economy mean food insecurity and poverty. So food security/insecurity and agriculture are two faces for the same coin and they are closely inter-related regarding factors affecting their stature.

Area of Sudan is 187.9 million (m) hectares (ha), the arable land area is 108.7 m ha, the cultivated land area is 17.1 m ha, the cultivated land and permanent crops is 17.2 m ha (16%) and permanent meadows and pastures 91.5 m ha (FAOSTAT, July2014). The agricultural sector's contribution to GDP was 34.4 per cent in 2013. Current population of Sudan is approximately 35.1 million, of which 67 % is rural who are engaged in agriculture and livestock production. Most of Sudan land is a gently sloping plain covered by rangeland, pasture and forests which support its livestock population. Rainfall varies, north to south, from 25 – 700 mm and falls in 2-3 months between June and October, with temperatures ranging from 30 – 40 °c in summer and 10 - 25 °c in winter. The north of the country is largely desert, shifting progressively to semi- desert, low rainfall savannah and high rainfall savannah towards the south. Increased temperatures and declining rainfall have shifted the desert south by 50 – 200 Kms over the past 80 years. This trend is continuing, meaning large areas of remaining semi-desert and low rainfall savannah – key livestock production zone – are at risk of desertification (RB-COSOP 2013 – 2018).

The Nile and its tributaries are the main sources of water in Sudan, though rain water harvesting is also important in rangeland areas. Agriculture and livestock account for approximately 95% of water use which at 683 m³/capita/year is well within the limit (1445 m³/capita/year) established by the Nile Water Agreement. The country also has a vast ground water reserves estimated at 9 trillion m³, a very limited portion of which is utilized. In areas far from the Nile, increased rain water harvesting and increased use of ground water resources will be essential to build resilience to climate change.

Judging from the foregoing natural resource base, agriculture is really the indisputable wealth of Sudan. It is dominated by three main farming systems namely, irrigated (1.75 m ha), semi-mechanized rain fed (6.7 m ha) and the traditional small holder rain fed system (8.8 m ha). **Irrigated agriculture** is found in central Sudan and along the Blue, White and River Niles. It is devoted mainly to production of cash crops such as cotton, sugar cane and wheat and ground nuts. Wheat has been introduced to central Sudan to meet the rising domestic demand as a result of increasing urbanization. The **semi-mechanized large scale rain-fed agriculture** is found in the clay plains of Central and Eastern Sudan. This system produces as much as 95% of the sorghum output. Production is mainly sorghum, sun flower and sesame. It is practiced by large farmers in a low-input / low-output system with limited concern for sustainability. The **traditional small holder rain-fed agriculture** is mainly in the Western regions of Kordofan and Darfur. It is the dominant system which supports about 70% of the rural population. Production is diversified and includes mainly food crops such as sorghum, millet and vegetables and cash crops such as sesame, ground nuts, roselle and water melon seeds.

The livestock sub-sector with its estimated 90 -120 millions of cattle, sheep, goats and camels is second in

Africa after Ethiopia (IGAD, 2005) (Table 1). It accounts for 47.2% (46.3 for crops) of the agricultural GDP (31% of national GDP) and contributes an average of 20.5% of the total value of exports. Production is entirely based on traditional pastoral/agro-pastoral systems and animals are regarded more as a source of social prestige than a source of livelihood; yet its contribution to the national GDP is 13%(IMF, 2014).

Table 1. Estimated numbers (millions) of Cattle, Sheep, Goats, and Camels in Sudan

Year	Cattle	Sheep	Goats	Camels	Total
1988/89	20.2	19.7	14.5	2.7	57.1
2009/10	29.2	38.7	34.3	4.5	106.7
2010/11	41.8	52.1	43.4	4.6	141.9
2011/12	29.6	39.2	30.6	4.7	104.1
2012/13	29.8	39.5	30.8	4.8	104.9
(Daborn & Idris, June 2014).	-	-	-	-	105.0

Source: FSTS, MAI 2014; MLFR.

Regarding fisheries, Sudan is endowed with considerable fresh water and marine resources (129810 km²) comprising a Red Sea coastline of about 853 Km², with an Exclusive Economic Zone (EEZ) of 91600 Km² and a shelf area of 22300 Km². Internal fresh water resources include the River Nile and its tributaries as well as several man-made, reservoirs behind the dams of Jabal Awlia, Sinnar, Resouris, Khash Elgirba, Merowi and the High Dam in Egypt (Lake Nubia). Estimates of the potential production of fisheries range from 75000- 300000 tones/ year, 88% of which from inland fresh waters, 8.6% from Red Sea and 3.1% from aquaculture (FAO 2008). Both inland and marine fisheries are still largely artisanal. Contribution of the sub-sector to the national GDP is marginal i.e. 0.04 %. Although inland fisheries are largely artisanal in nature, a steady increase in market oriented activities has been noted recently, particularly in Lake Nubia and the White Nile. Fishing in marine fisheries is also artisanal targeting mainly finfish and shrimps. Small scale industrial fishery trawlers and highly mechanized vessels operate seasonally.

Although Sudan is self sufficient in the production of sorghum and millet (main staples), it remained to be one of the food insecure countries in the region. WFP beneficiary numbers indicated that around 1.7 million internally displaced persons (IDPs) are living in camps and reliant on external assistance. Other IDPs live in villages but face continuous threats from the ongoing conflict that adversely affect their ability to produce and access food to meet their consumption requirement. While the size of food insecure population varies from year to year, at least 1.5-3 million people, on the average, are estimated to be in need of food assistance annually (FAO/WFP, 2011). According to FAO (2014) , as of January 2014 about 3.3 million people in Sudan faced stress and crisis levels of food security and the overall situation in the country is expected to further deteriorate in 2014. Moreover, malnutrition (silent hunger) is an important component of food security. It is emerging as a global issue imposing unacceptably high economic and social cost especially in developing countries and in particular IGAD region (Table 2).

3.2 Root causes and effects of the challenges facing the sector in Sudan;

Records indicate that performance of the agriculture sector has been declining (Table 3) throughout the last decade leading to **the current almost dismal situation**. Root causes of challenges/constraints affecting the agriculture sector (crops, livestock, fisheries and food security) are almost the same; however, some are sub-sector specific. The shared causes are the low priority accorded to the sector as the fundamental factor behind the deterioration witnessed in all farming systems, inadequate financial resources (loans), climate change hazards, inconsistent and/or inadequate development policies, State Governance and weak functional, technical and institutional capacities. These causes for the sector challenges are very much interrelated and may lead to other sub-sector specific constraints/ challenges. So they need to be considered in a holistic manner in releasing the constraints of the sector.

The following are the root causes and effects of sector challenges:

- Fiduciary environment risks. Key fiduciary risks are related to governance, arrears, counterpart funding and co-financing.
- weak technical and functional capacities at the individual, organizational and policy levels regarding formulation, monitoring and evaluation of the implementation of policies, projects and programmes.
- Policy and institutional framework risks. There are significant risks with recent sector declines resulting from monetary, exchange rate, and fiscal policy. In areas of micro finance, further policy refinements are needed to encourage transparency, investment and wider entry of service providers in the rural finance area.
- Low productivity of the farming systems, livestock, and fisheries as a result of poor capacity development of producers and limited access to improved appropriate technologies (e.g. appropriate breeds, crop varieties), finance, markets, and increasing production by rational expansion of cultivated land.
- High post harvest losses (15-20%) of fisheries resulting from improper handling at landing and during distribution; aquaculture still plays a marginal role, despite the availability of basic pre- conditions;
- Unavailability of grazing system that allows regeneration of pastures and forage vegetation, by provision of improved forage seeds and animal health services;
- Limited veterinary services and areas that can be declared disease free so as to improve quality and marketability of livestock resources;
- Weak technical and functional capacities of agriculture research and extension in crops, livestock, fisheries and natural resources, due to poor public support, public and private partnership and technical assistance to develop the technological foundation and input for the transformation of agriculture;
- Very poor linkage between research and extension; there is a need to develop relevant extension packages for farming systems, livestock and fisheries, devising effective delivery systems and building the capacity of producers;
- Land tenure system needs urgent reform so as to ensure fair and equitable access to land to facilitate promotion of agriculture-led growth and reduction of poverty and food insecurity (MDGs);
- Weak capacities for institutions responsible for collection and flow of statistical data on agriculture, livestock, fisheries, forestry, natural resources to enhance the capacity for designing relevant policies, programmes and plans;
- Low efficiency of existing irrigation system in terms of function and intensity due to the poor institutional, human and technical capacities; there is a room to expand irrigation facilities by water harvesting and exploitation of underground and surface water;
- There is a need to develop the infrastructure and market facilities' to reduce marketing costs and increase value chains by linking producers to modern supply chain;

- Weak technical and functional capacities at the individual, organizational and policy levels. Measures are required to protect, conserve and preserve natural resources and consequently will control challenges such as land degradation, deforestation, soil erosion and desertification the country is facing as a result of climatic changes; *i.e.* mitigating extended climate and drought vulnerability;
- Risks related to conflict and natural disasters. Most development partners' livestock projects are in areas vulnerable to conflict and natural disasters, which could disrupt their implementation.
- There is an urgent need to overcome the legacies of long years of inter-community conflicts and closing the gaps of wide disparities and economic development and access to opportunities;
- Non-oil exports, most of which are agricultural, are low and diversification of agriculture sector is critical for shared growth and sustainable livelihood.
- Outflow/brain drain of experienced veterinarians and professional agriculturist to the neighbouring rich countries in search of decent salaries.
- Acquisition of base-line information on fish resources and levels and trends of fish production and utilization as well as fisheries' forward-and backward-related linkages are prerequisites for fisheries development which require improvement of institutional and human capacities.

3.2.1 Challenges of food security and nutrition

Food security/insecurity and poverty are two faces for the same coin and both of them depend, to a large extent, on agricultural production and economic situation of the country. Sudan has been devastated by decades (1980's – present) of conflict, which has resulted in the destruction of physical and human resources and erosion of institutions and social capital. Outbreaks of violence have forced millions of people to flee their homes and left more of others to face extreme poverty. Such negative impact has been exacerbated by the recurrent hazards including drought, floods and outbreak of animal diseases, which worsened the food security situation throughout the country. Challenges are:

- As of January 2014, about 3.3 million people in Sudan face stressed and crisis levels of food insecurity and are expected to reach 5 million by June 2014, mostly as a result of conflict, prolonged dry spells and floods (FEWS NET, 2013; FAO, 2014). Food prices remained above the last five-year average and were projected to increase in 2014. This would negatively impact the food security situation of the most vulnerable populations, such as the IDPs and poor.
- Cereal prices were significantly above average and have continued to increase, unreasonably, throughout 2014 across most markets in Sudan. The increases were due to the below-average 2013-2014 harvest (FSTS /ACFSAM, 2014), high production costs, and transportation and marketing costs resulting from the partial removal of the fuel subsidy in late 2013 and the approximately 30% devaluation of the currency in November 2013.
- Cereal production in 2014 has been significantly lower than the previous five year average (about 40% less), due to poor and erratic rainfall over much of the Sudan, flooding at a critical time, conflict, and high levels of food insecurity in Darfur, Blue Nile and South Kordofan at planting and / or harvesting time. Tables 4 and 5 substantiate the above drawn conclusion indicating a food gap of 1.064 m tones of cereal, comprising 777000 t sorghum, 267000 t millet and 21000 t maize even after considering the national strategic reserve.

Table 4 Total harvested areas (ha) and yield (t/ha), total production (000 t) of sorghum +millet and wheat (000 ha).

	5- years average 2008/9 - 2012/13	2012/13	2013/14	2013/14 as (%) of 2012/13	2013/14 as (%) of 5ys average
Harvested area	8218	10083	5985	59	73
Yield	0.51	0.58	0.48	82	93
Total Production	4189	5894	2852	48	68

Source: FSTS /ACFSAM, 2014

- Erratic rainy season had a push effect on rural population to urban settling leading to increase in food security and urban poverty.
- Need for early warning system to enable building better information about how change in climate will affect farmers and pastoralist at the household level.

So strong commitment by the government to address the reality of the above mentioned challenges of the sector and perceptions of lack of transparency is crucial for growth and poverty reduction agenda.

Table 5. Cereal supply / demand balance, December 2013 – November 2014 (000 t).

	Total	Sorghum	Millet	Maize	Wheat	Rice
-Availability	3437	2438	361	20	590	28
-Opening Stocks	536	189	1	0	346	0
-Production	2900	2249	359	20	244	28
-Total Utilization	6450	3215	627	41	2490	78
-Food	5444	2722	559	37	2051	75
-Feed	131	112	18	1	0	0
-Seed	112	68	12	0	30	2
-Post-harvest losses	146	112	18	2	12	1
-Export	0	0	0	0	0	0
-Closing Stocks	617	200	20	0	397	0
-Estimated import requirement	3014	777	267	21	1900	50
-Anticipated commercial imports	1950	0	0	0	1900	50
-Estimated gap	1064	777	267	21	0	0

Source: ACFSAM, 2014.

3.3 Major opportunities for the sector development

- ✓ Sudan is a country endowed with rich natural resources which include abundant fertile agricultural lands of which the unutilized part is estimated to reach 91.5 m ha (84% of arable land) (FAOSTAT July, 2014), animal wealth estimated to be between 90-120 million cattle, sheep, goats, and camel, marine and freshwater fisheries resources, rich underground and surface water resources, minerals/oil reserves, game animal reserves and high tourist resort attraction potentials. Sudan is also endowed with climatic diversities which could enable it to produce agricultural products such as cereals, oilseeds, sugar and horticultural crops almost through all seasons of the year.
- ✓ The geographical location of Sudan and its proximity to the major Gulf Countries and European markets coupled with its access to the sea are hugely important opportunities which if prudently exploited could be of immense comparative advantage to boost the growth of agriculture and the economy.
- ✓ The wide gap between actual production and that achieved on research fields also represents a potential to increase agricultural production.
- ✓ The prospect for value addition in all agricultural products and for increasing the export of organic and horticultural products also point out the existence of unutilized potential that could be exploited.
- ✓ The rich natural resources of the country and the recent move to liberalize the economy (The 5-Years Economic Reform, November, 2014) combined with country's historical and cultural linkages to important capital markets such as of the Gulf areas can enable it to increase even more significantly the flow of the Foreign Direct Investment (FDI) into the economy.
- ✓ The commitment to peace and to correct the lopsided developments and inequalities between regions and social groups of the past experience is of course the bulwark of all the opportunities to make economic progress in the country.

- ✓ The huge potential for agricultural industrialization for commodities' value addition (one of the main pillars of the Fifth Economic Reform, November 2014).
- ✓ The 3 successfully piloted delivery models (RB-COSOP, 2009-12) for rural finance *i.e.* bank-owned micro-finance, community owned apex institutions, and women's savings and credit groups, will be scaled up in the next cycle of IFAD's COSOP 2013 – 2018. It is expected to enhance livestock growth and livelihoods of the pastoralists and agro- pastoralists.
- ✓ The number and scope of CBOs have had the potential to improve productivity, resilience to climate change, good stewardship of natural resources and community-based extension and also to create and improve value chain. Piloting has shown that people are willing to pay for services and are able to democratically manage their organizations and conduct business. CBOs also provided opportunities to focus on youth and women's empowerment.
- ✓ Good management of social fencing has been shown to increase rangeland and animals productivity and to bring other benefits like increased social capital, formation of community assets such as water points, increased employment opportunities, reduced conflict between settled and mobile livestock keepers, and reduced dependence on distant grazing. Good management of social fencing contributed to realizing the vision for sustainable management and to improving the climate resilience of natural resources.
- ✓ Estimate of the potential fish production range from 75000 to over 300,000 tons/year, while current annual landed catch is around 34000 tonnes (18%)(EU, 2012); together with the imbalance in animal protein in the diet of rural population in western, central and eastern Sudan, means high consumption and consequently high demand for fish. On the other hand, currently huge resources are untapped (Merawi and Siteet Dams) and some are partially utilized (Lake Nubia, Roseris and Sinnar dams).
- ✓ Historically, oyster cultivation targeted production of oyster shells for export to button manufacturing. The well developed alternative technologies for oyster cultivation need to be further disseminated to expand such a lucrative business;
- ✓ Irrigation canals in major agricultural schemes (center and east) and rainwater "haffirs" (ponds at Western Sudan) can be utilized as aquaculture for eradication of weeds and supplementing the local diet thereby mitigating the effect of the expensive malnutrition.

3.4 Current national policies, strategies and institutional frameworks and gaps for the development of the sector

The country's development goals, policies and programmes are governed and guided by the **Quarter Centennial Strategy (2007-2032)**. Based on this perspective plan the government on its own and in collaboration with development partners had devised short and medium term plans and programmes in which it had clearly articulated its policies and programmes for agriculture and rural development. **The Five-Year Plan (2007-2011)** was the first development plan elaborated to implement the goals of the Quarter Centennial Strategy. The plan essentially aimed to reduce poverty and food insecurity and to realize the MDGs. Consequently, the transformation of agriculture and the sustainable management of natural resources loomed high among the five focus areas or result areas of the plan.

The recent development of the secession of south Sudan with its oil wealth has made the focus on agriculture an even more urgent question. It was this development and the need to strongly support the growth of agriculture that pushed the Government of Sudan to declare what it called "**The Green Mobilization**" *i.e.* **The Agricultural Revival Plan (ARP)(2008-2013)** which has been both the vision and the road map and plan of action to realize the revival of the agricultural sector. **The Interim Poverty Reduction Strategy Paper I (2009-2012)** and the **Interim-PRSP II (2013-2018)** also focused on the development of agriculture and the rural economy as poverty is widely and deeply entrenched in this sector.

The ARP sought to transform agriculture from a sector dominated by subsistence production to a modern sector responsive to market signals and with substantial contributions to poverty reduction, growth, foreign exchange earnings and sustainable management of natural resources. Main pillars of the ARP were:

- To create conducive environment to sustainable development of agricultural productivity and production;
- Build the capacities of producers through reforming their institutions;
- Resolve the land tenure issues which discourage optimal use of large areas in the irrigated and rain-fed sectors;
- Improve agricultural support services including research, technology transfer and extension;
- Develop and modernize agricultural systems with the view to increasing the efficiency of utilization of resources *e.g.* introduction of new systems of livestock and fisheries production;
- Protect natural resources through appropriate management *e.g.* development of the Gum Arabic Belt (GAB) and combat desertification;
- Protect consumers and promote exports by implementing laws and procedures that ensure food safety and control the quality of plant and livestock products whether processed locally or imported in accordance with the accredited international standards; and
- Establish strategic partnership with a view to realize the economies of scale, benefiting from new technologies and getting across to international markets and financial institutions.

The ARP was launched with a proposed budget of SDG 10.1 billion for 2008-2011. It envisaged substantial private and public investments to stimulate growth in the irrigated and semi- mechanized farming system.

After secession of South Sudan, the government had to undertake a major rebalancing of the economy and focused on strengthening the non-oil sector, particularly those with export potential such as livestock. Fortunately the weakening of the currency had increased competitiveness of Sudanese exports which has led to doubling of livestock export in value since 2011. As a result the government has made agriculture, and in particular livestock, **a key policy**. Examples of such efforts have been:

- The Government's **three-year Economic Recovery Program (ERP, 2011-2013)**, which intended to address the challenges and mitigate the effects of secession, promote increased agricultural exports, mainly livestock, and imports substitution.
- The major agriculture sector initiative, The ARP, also promotes livestock exports, increased productivity and efficiency and sustainable development and protection of natural resources.
- Government launched the **First 2008-2012 and second 5-Year Development Plans (2012-2016)** to serve as a growth oriented strategies with primary focus on promotion of livestock sector development as a means of poverty alleviation and sustainable development

The Quarter Centennial Strategy (2007-2032), addressed all current and future expected constraints of the fisheries sub-sector. Along the same lines the government managed to formulate the **First National Fisheries Policy in November 2012** which aimed at revitalization of the sub-sector. Under the new policy the sub-sector will be modernized to increase contributions to national food security, economic growth, and employment whilst conserving biodiversity and the environment. It has been designed to ensure that it plays an integral part in government's shift towards an agriculture- based economy (*a blue growth in a green economy*). The policy was guided by five core principles in consonance with government's wider strategic planning and development objectives. It was also founded on six pillars that addressed main challenges facing the sub-sector *i.e.* improved governance framework, secured fisheries financing, and aquaculture potential unleashed, effective fisheries co-management, business and trade development, and food

security enhancement.

The Country Programme Paper, November 2013 (CPP) was in alignment with the goals of CAADP of eliminating hunger, increasing economic development, and reducing poverty through agriculture by implementing its four key pillars, namely;

- i. Sustainable land and water management.
- ii. Infrastructure for Market Access.
- iii. Increasing food supply and reducing food insecurity;
- iv. Agricultural Research, Technology development and dissemination.

Its priority areas of intervention included:

1. Rehabilitation and development of water resources;
2. Development of livestock infrastructure (access to export market, health management).
3. Rehabilitation and development of range lands.
4. Strengthening of policy, legal and institutional frameworks to manage agric production.
5. Community and institutional capacity strengthening and conflict resolutions.

To address the constraining factors to food and nutrition insecurities, the Government has recently (2014) formulated a bundle of measures and policies under **The Comprehensive National Food and Nutrition Security Policies**. They included:

- i. Macroeconomic Policy. They address food availability and access in major economic policies.
- ii. Basic Infrastructural Improvement. Builds up basic rural infrastructure with impact on food and nutrition security.
- iii. Policies addressing food availability: Sustainable Agricultural Production and Productivity. These tackle sustainable use of natural resources, infrastructural build up to improve food supply/availability and access.
- iv. Policies to support food access included:
 - Productive engagements.
 - Market and trade policies to stabilize food prices.
 - Food and fiber processing industries.
 - Social and humanitarian interventions (in close cooperation with NGOs and regional and international organizations).
- v. Policies to support food utilization and handling;
 - Medical and Health care.
 - Educational and nutritional awareness.
 - Water and sanitation.
 - Other food utilization interventions.

The Five Years Programme for Economic Reform (PER) 2015 – 2019).

Programme pillars included:

- ☐ Commitment to freedom of the economic activities and promotion of local and foreign private sectors by paving the way for a conducive investment environment (economic policies, legal and institutional reforms....etc).
- ☐ Lifting subsidies on energy/electricity and imported wheat and utilization of their financial returns to support the poor sector of the population (a two-edged policy – consultant's view).

- ❑ Adoption of the market- economy policies.
- ❑ Support of self reliance policy.

Institutional Frameworks for the agriculture sector.

The following key actors and institutions of agriculture are found at the federal, state and local levels.

Federal Level Ministries and Specialized Agencies are:

- Ministry of Agriculture and Irrigation (MAI);
- Ministry of Livestock, Fisheries and Rangeland (MLFR);

Their mandate is policy formulation, planning and monitoring of developments, research and extension services, pest control activities in agriculture, Livestock, Fisheries, pasture and irrigation.

Specialized agencies at federal level include

- (i) Agricultural Revival Programme (ARP) and its affiliated Commodity Development Councils. The ARP emphasized wheat, sorghum, millet, sugar cane, oilseeds, milk and poultry (eggs and white meat), and gum Arabic as main commodities for achieving the main objectives of ARP of enhancing food security and promotion of agricultural export.
- (ii) Agricultural Research Corporation (ARC). Is responsible for carrying out research on crop production, plant breeding, soil analyses, crop water management and crop protection.
- (iii) Animal Resources Research Corporation (ARRC) carries out research on animal husbandry and diseases.

Agricultural Financial Agencies are:

- (i) Agricultural Bank of Sudan (ABS),
- (ii) Farmers Commercial Bank (FCB).
Both agencies are mandated to provide short and long-term credit to agricultural development, finance supply of agricultural machinery and inputs.
- (iii) The Animal Resources Bank (ARB) is responsible for financing the livestock sector activities including livestock export.
- (iv) Government Sponsored Agricultural Insurance and Disaster Evasion Fund including „Sheikan’ Insurance Company, which pioneered in providing insurance to agriculture in Sudan. It’s affiliated to Agricultural Disaster Evasion Fund to reduce risks affecting agriculture and ensure credit access to farmers. The Export Insurance Fund gives traders guarantees against risks on their exports. Other private insurance companies operating in agriculture also exist.
- (v) Central Bureau of Statistics (CBS) is responsible for collection of data and statistics on production and service sectors. It carries regular surveys on market prices of important food crops in urban and rural areas. It is entrusted with conducting national surveys and censuses.

State Level:

Each of the 15 States have an executive (Governor and Council of Ministers), legislative (St Legislature) and judicial (State Judiciary) bodies. The executive body is responsible for implementing federal and developing own state-specific policies and programmes.

Local Level:

Includes local CBO’ s like farmers associations, agricultural cooperatives, livestock producers

association, service providers, village councils and Farmers and pastoralists unions.

Gaps

Despite policies', strategies' and plans' ambition and emphasis on development, actual results on the ground leave much to be desired. Currently there are **huge gaps** for the development of the sector which include:

1. There is a strong need for a cohesive and harmonizing action for different plans' implementation; a role which ARP assumed to have been doing. However, the involvement of most of the line ministries in those development plans, including ARP was in form of recipients rather than in form of leaders i.e. top/down approach. Moreover, resource utilization and transfers might be wasted because of duplicate mandates of those line ministries as those resources' transactions were not properly monitored or documented.
2. Albeit the above national efforts, unfortunately, **debt arrears** to International Development Association (IDA), the African Development Bank (AfDB) and other development agencies, blocked access of Government to soft loans and other financial concessions to finance its development objectives. Consequently finance of most of the development programmes of the agriculture sector, underpinned in strategies and plans, has been based on the limited partnership between the Government and UN and regional agencies, *inter alia*, FAO, IFAD, UNEP, WFP, EUetc.
3. Image that fosters Sudan's efforts to attract foreign direct investment, and obtain debt relief and concessional assistance should be enhanced. Moreover, in the Sudan Productivity and Investment Climate Survey (PICS) in 2008, private firms cited political instability, lack of transparency, and economic uncertainty as the top three constraints to growth. So strong commitment by the government to address the reality and perceptions of lack of transparency is crucial for agricultural growth and poverty reduction agenda.
4. The humanitarian approach should focus on livelihood analysis to identify core needs to be addressed at the household while strengthening community resilience and social support system. There is an urgent need for a holistic approach to address food insecurity by addressing the real causes rather than dealing with their effects.
5. Main institutional weaknesses relate to budget, staffing, lack of attention to rain-fed agriculture, and inadequate transfer of federal funds. Moreover, there is a lack of clarity on roles in dealing with agriculture and natural resources, and political support varies among states.

Hence, if the government succeeds in turning its plans and strategies to redirect the economy into reality, then with strong leadership and a clear road map provided by effective policies, agriculture stands a good chance of transforming itself into a considerably more productive and integrated sector

3.5 Important intervention programmes/projects on the sector, achievements, challenges, opportunities, lessons learnt and future aspirations.

i. The Five Years Programme for Economic Reform (PER) 2015 – 2019.

This programme has been approved in November 2014 and its formulation has been based, *inter alia*, on:

- ❑ Quarter Centennial Strategy (2007 – 2032).
- ❑ Poverty Reduction Strategy Paper II (2013 – 2018).
- ❑ Effective Peace Agreements.
- ❑ Objectives and outcomes of The Three Years Programme for the Sustainability of Economic Stability 2012 – 2014.

Programme pillars included:

- Commitment to freedom of the economic activities and encouragement of local and foreign private sectors by paving the way for a conducive investment environment (economic policies, legal and institutional reforms....etc).
- Lifting subsidies on energy/electricity and imported wheat and utilization of their financial returns to support the poor sector of the population (a two-edged policy – consultant’s view).
- Adoption of the market- economy policies.
- Support of self reliance policy.

Programme priorities are:

- 3 Promotion of agro-industrialization.
- 4 Promotion of non-oil exports and tourism.
- 5 Involvement of the PPP mechanism in funding and implementation of the Agro-industry Programme.
- 6 Doubling the area under irrigation sector from 1.7 to 3.4 m ha.
- 7 Extension of the national electricity grid to all irrigated sector.
- 8 Modernization of the three main farming systems.
- 9 Development of the marketing and storage infrastructure.
- 10 Support and promotion of the scientific research and utilizing its output for the development of the agricultural production.
- 11 Human, social and institutional capacity building and development.
- 12 Expansion and strengthening of the present social safety nets.
- 13 Endeavours to release the national debt arrears’ constraints to facilitate the flow of foreign investment and soft loans to finance agricultural development plans.

- ii. To address the constraining factors to food and nutrition securities, the Government has recently (2014) formulated a bundle of measures and policies under The Comprehensive National Food and Nutrition Security Policies. (See 3.4 p18).

- iii. The National Fisheries Policy.

In response to government request, the EU ACP Fish programme II provided technical and financial support to the formulation of the **First National Fisheries Policy in November 2012**. The policy aimed at revitalizing fisheries sub-sector. It has been designed to ensure that it plays an integral part in government’s shift towards an agriculture- based economy (*a blue growth in a green economy*). Under the new policy the sub-sector will be modernized to increase contributions to national food security, economic growth, and employment whilst conserving biodiversity and the environment. The policy is guided by five core principles in consonance with government’s wider strategic planning and development objectives. It is also founded on six pillars that address main challenges facing the sub-sector *i.e.* improved governance framework, secured fisheries financing, and aquaculture potential unleashed, effective fisheries co-management, business and trade development, and food security enhancement.

Achievements

1. A number of steps were implemented to realize the broad objectives of the ARP, especially in the irrigated and semi-mechanized farming areas in collaboration with the private sector. Also

actions were taken to improve livestock and gum Arabic sectors. To mention a few:

- In the Gezira scheme, a reform program was implemented based on the new Gezira Act 2005. In line with the global best practice, Water Users Associations (WUAs) were introduced with greater responsibility for water management. The act also guaranteed free crop choice for farmers and offered tradable long-term leases to farmers to replace short-term land rental arrangements. It also substituted farmers' credit accounts with commercial Banking and refocused the Sudan Gezira Board's (SGB) responsibilities on agricultural research, market information services and farmer training;
 - Improving productivity of the rain-fed semi-mechanized sector via a two stage strategy (tillage approach and zero tillage) based on better utilization and management of natural, technical and capital resource base;
 - Decrees to liberalize the gum Arabic trade were declared, cancelling the exclusive concession on raw gum Arabic export granted to the Gum Arabic Company (GAC) in 1969. All taxes imposed on gum Arabic production were also removed. Decrees were intended to provide the incentives for gum Arabic producers through expected improvement in prices. As a result export jumped from 26000 to 57000 t and liberalization policy for gum export resulted in increased share of producers' income of FOB price from 12 to 50%.
2. The Central Bank of Sudan, Federal Ministry of Agriculture and Irrigation and the WFP started a joint project in 2010 called Connecting Farmers to Market (F2M). It was a multi- sectoral initiative designed to alleviate poverty and contribute to national economy. The concept behind the project has been to enable small-scale farmers (2-3 ha.) to get out of the cycle of under-production and poverty, become self sufficient, and produce a surplus, by connecting farmers to four markets namely; a micro credit market; a micro-insurance market, an extension services market, and a sale market.
 3. WFP's Food for Assets projects (Food for work). They provided food insecure households with opportunities for paid work while at the same time produce outputs that are of benefit to both the beneficiaries and their communities e.g. construction of "haffirs" (water ponds), water harvesting, agro forestry and environmental protection.....etc.

Lessons Learnt:

- ✓ An enabling institutional and policy environment improve the effectiveness of development initiatives. IFAD-implemented pilot intervention for improvement of production and marketing systems for the gum Arabic and livestock sectors (funded by MDTF) used community driven development approach to ensure communities' ownership and sustainability of the service. The exported gums jumped from 26 to 57 thousand tons and the liberalization policy for gum's exports resulted in increased share of producers income of FOB price from 12% - 50%. The sheep export jumped from 1.6m heads in 2009 to 3.2m heads in 2011.
- ✓ Structural issues in country programming could impede implementation and impact. That is, large and dispersed target areas and population and a wide array of interventions made implementation challenging, a situation that needs to be taken into account at project design.
- ✓ Community-Based -Organizations (CBOs) were instrumental in projects' implementation, policy dialogue at local level and in conflicts resolution. For instance, to ensure sustainability of rangeland management interventions, strong commitments to social fencing must first be obtained by target communities.
- ✓ Meeting basic needs of communities was necessary for any project to succeed e.g. access to water builds relationship with communities and reduces conflicts. On the other hand poor access to rural finance prevented success of development initiatives in rural areas and limit sustainability.

- ✓ Because the unpredictable public financial services and poor infrastructure can interfere with the post-project sustainability of services, private delivery and community ownerships are highly required.
- ✓ Rural financial services targeting the poor can be sustainable. IFAD-funded microfinance initiatives have shown that properly designed delivery mechanisms that build trust with clients gradually develop credit absorption capacity.
- ✓ Linking Humanitarian relief with enhancing resilience of communities to natural and human-made disasters, *e.g.* Food for work, proved to be effective in improving the livelihood of rural communities.

Future aspirations:

The Agriculture Revival Programme (ARP) and subsequent strategies and development plans have sought to transform agriculture from a sector dominated by subsistence production to a modern sector responsive to market signals and with substantial contributions to poverty reduction, growth, foreign exchange earnings and sustainable management of natural resources. The national aspiration is, therefore, to see the programme's policies, plans and projects have been realized on the ground leading to established peace and economic prosperity.

3.7 Conclusions and recommendations

3.7.1 Conclusions.

- ❑ Despite the huge natural resource-base wealth of Sudan, the performance of the agriculture sector has been unsatisfactory due to many complicated reasons. Some beyond the control of the government (climate, international politics); others within (governance, management, prioritization regarding available financial resources).
- ❑ Secession of the South and the loss of about 50% of government's revenue (oil) has been a Wake-up call to draw attention to the agriculture sector, the renewable and indisputable wealth of Sudan.
- ❑ Consequently, several policies, strategies and development plans have been formulated to transform agriculture from mainly subsistence production to a modern sector responsive to market signals and with substantial contribution to poverty reduction.
- ❑ Such ambitious institutional reforms, however, fell short of finance and institutional capacity and depended to a large extent on local meagre funding and development partners' contribution, both of which were not enough.
- ❑ Notwithstanding the unfailing national efforts to seek finance, debt arrears (IDA, AfDBetc) blocked access of government to soft loans and other financial concessions to implement its agricultural development plans.
- ❑ Although cohesive and harmonizing actions are strongly needed for implementation of development plans, effective involvement of line ministries in the ARP was minimum due to duplication of mandates (top/down approach).
- ❑ For revitalization of the agriculture sector, the following are landmarks:
 - efficient utilization of natural resources to develop a vibrant farming system, livestock and fisheries production and related agro- processing industries.
 - Sudan has significant irrigation infrastructure and its agriculture is not wholly dependent on rain-fed farming.
 - Proximity to major markets (Gulf countries and Europe) and access to sea, if prudently exploited, could be of immense comparative advantage to boost agricultural Growth.
 - The wide gap between the actual agricultural productivity and that of the research represents a potential to increase agricultural production.

- The prospect for value addition like organic products is an unutilized potential; (global market for certified organic products in 2010 was US\$ 51 billion mostly in Europe 51% and North America 46%) (IFOAM, 2010).
- ❑ Regarding Humanitarian contribution, there is an urgent need for a holistic approach to address food insecurity by addressing the real causes rather than dealing with its effects.
- ❑ Piloting has shown that CBOs and social fencing have had potential to improve productivity by resolving conflicts, increasing rangeland, services like water point.....etc.
- ❑ The huge gap in livestock productivity and production efficiency cannot be addressed by health protection (CAHWs) alone; a holistic approach is needed e.g. fodder production, nutrition, market infrastructure...etc.
- Despite all the environmental and commercial constraints, livestock remains to be the leading agricultural export of Sudan.
- ❑ Outmigration of strong members of rural communities for gold mining and other higher paying jobs, contributed to low productivity of crops and livestock.
- ❑ Enabling institutional and policy environment improves the effectiveness of development initiatives; e.g. IFAD's pilot intervention to improve production and marketing of Gum Arabic and livestock sector using community driven development approach(ownership& sustainability), resulted in:
 - exported Gum jumped from 26 to 57000 tons,
 - liberalization policy increased FOB price from 12 to 50%,
 - sheep export jumped from 1.6 to 3.2 million (2011).
- ❑ The situation of food insecurity is an important factor that reinforces the need to enhance agricultural growth to secure food supply and improve the entitlement of both rural and urban poor population.

3.7.2 Recommendations

3.7.2.1 General Recommendations

- ✓ The new vision for Sudan's Growth Strategy should attract domestic and foreign direct investment and promote productivity growth of Sudanese firms to be globally competitive and hence sustain the sector's growth.
- ✓ For stability of national income, growth strategy needs to create opportunities for growth in diverse fields of agric production (potential crops for export and industry).
- ✓ Growth strategy needs to focus on:
 - i. Targeted support for the agric sector including livestock, fisheries and forestry to promote growth and productivity change.
 - ii. Broad support for private sector and CBOs development , with policies, institutions, incentives and services to promote investment, innovation and productivity growth.
- ✓ Reform of the land tenure system is vital to ensure fair and equitable access to land to promote production and reduce poverty and food insecurity (MDGs).
- ✓ The Image that fosters Sudan's effort to attract domestic and foreign direct investment and obtain debt relief and concessional assistance should be enhanced.
- ✓ Enhance agricultural research and extension by increasing their allocation in the national budget and by fostering Public-Private Partnership (PPP) in research.

- ✓ To place country priorities of Agriculture into perspective they must be viewed within CAADP Framework to harmonize policies at national and sub-regional levels.
- ✓ Overcome legacies of long years of internal conflicts and closing gaps of wide disparities.

3.7.2.2 Specific Recommendations

To release agriculture sector from its constraints, there is a need to:

- ✓ Develop technical and functional capacities at the individual, organizational and policy levels regarding formulation, M&E of policies, programmes and projects' implementation.
- ✓ Enhance productivity of farming systems, livestock and fisheries through capacity development of producers and by increasing their access to improved appropriate technologies (crop vars., animal breeds and tools), finance, market information and by increasing production by rational expansion of cultivated land i.e. not expanding one sub-sector at the expense of the other.
- ✓ Develop technical and functional capacities of agric. Research in crops, livestock, fisheries and natural resources by increasing public support, promoting PPP and enhancing technical assistance.
- ✓ Develop capacities for institutions responsible for collection and flow of statistical data on agriculture, livestock and fisheries to enhance the capacity for designing relevant policies, programmes and plans.
- ✓ Develop institutional, human and technical capacities to improve efficiency of existing irrigation system and expand irrigation facilities by water harvesting and exploiting underground water.
- ✓ Develop infrastructure and market facilities to reduce marketing cost and increase value chain by linking producers to modern supply chain.
- ✓ Facilitate production diversification, and increase production of nutritious foods (particularly horticultural products, legumes, small-scale livestock and fish, biofortified crops, and underutilized foods). Diversified production systems are important to vulnerable producers to enable resilience to climate and price shocks, more diverse food consumption, reduction of seasonal food and income fluctuations, and greater and more gender-equitable income generation.
- ✓ Improve processing, storage and preservation to retain nutritional value, shelf-life, and food safety, to reduce seasonality of food insecurity and post-harvest losses, and to make healthy foods convenient to prepare.
- ✓ Incorporate nutrition promotion and education around food and sustainable food systems that builds on existing local knowledge, attitudes and practices. Nutrition knowledge can enhance the impact of production and income in rural households, especially important for women and young children, and can increase demand for nutritious foods in the general population.
- ✓ There is an urgent need for a holistic approach by the Humanitarian Relief to address food insecurity by addressing the real causes rather than dealing with their effects.
- ✓ Improvement of quality of stock routes including highways and rails to minimize animals' losses in transport and handling facilities at veterinary inspection and vaccination points before export.
- ✓ Development of grazing system that allows regeneration of pastures and forage vegetation, by provision of improved forage seeds and animal health services.
- ✓ To protect consumers and promote exports by implementing laws and procedures that ensure food safety and control the quality of plant and livestock products whether

processed locally or imported in accordance with the accredited international standards.

3.7.3 Intervention Programme Proposals

3.7.3.1 National level

The following projects present investment opportunities where the country enjoys a comparative advantage in the production of certain goods or services which have fast growing international markets:

a. Cereals' productivity improvement programme.

Development objectives are to:

- Emphasize sorghum production in the rain fed sector and reduce irrigated area under sorghum.
- Evaluate comprehensively zero or conservation tillage in mechanized rain fed sector and expand the adoption of this approach based on this evaluation.
- Support a programme for collection of germplasm of sorghum and millet and improve and multiply improved sorghum and millet seeds.
- Develop production and productivity of maize in the rain fed sector.
- Build more national and local (State) strategic grain reserve to stabilize food prices.
- Implement rice production programme in flood areas in the White Nile

b. Oil Crops' (sesame, groundnuts, sunflower..etc.) Improvement Programme.

Development objectives are to:

- Utilization of idle capacities in local oil factories.
- Targeting potential markets, especially Arab Gulf States and IGAD region.
- Overcoming the problem of harvesting especially the shuttering of sesame seeds e.g. introduce mechanical harvesting.
- Reducing Aflatoxin in groundnuts to the acceptable levels.
- Regain membership of Sudan in the groundnut Council.
- Availing of high yielding and disease resistant sesame varieties and breeding non-shuttering varieties.
- Expansion of sunflower production in the rain fed areas.

c. Livestock and Red Meat Development Programme.

Development Objectives are to:

- Conservation of the genetic stock of the local livestock breeds.
- Rational hybridization to increase production and productivity in meat and milk.
- Develop production through pastoral irrigated farms.
- Promote the meat industry in the country.
- Promote partnerships with foreign private sector with a view to develop the meat and dairy industries.
- Develop the feed industry.

d. Wheat productivity and production improvement programme.

Development Objectives are to:

- Realize self-sufficiency and building a reserve sufficient to meet consumption needs for two years.
- Encourage large scale investment projects.
- Intensify research to develop adapted high yielding and high quality varieties.
- Identify constraints and problems of composite flour and propose feasible solutions.

e. Promotion of Vegetables' Production.

Development Objectives are to:

- ☐ Increase productivity and stability of production on the basis of comparative advantages.
- ☐ Develop export-oriented production.
- ☐ Enforce food safety and quality standards.
- ☐ Complete the Horticultural Crops' Export Village and establish others in relevant States.
- ☐ Exempt custom duties on inputs, packing materials, refrigerated transport and storage.
- ☐ Diversify production by introducing new types of vegetables.

f. Development of Gum Arabic and Forestry Products' Programme.

Development Objectives are to:

- ❖ Rehabilitate Gum Arabic Belt.
- ❖ Eliminate all taxes and levies which distort gum marketing.
- ❖ Encourage processing of gum Arabic and change gradually away from export of raw gum.
- ❖ Promote more policies for liberalization of Gum Arabic marketing.

3.7.3.2 Regional Project Proposal at the IGAD level.

1. Livestock Routes and Pastoralists Camps.

Pastoralists migrate seasonally along recognized routes between rainy season grazing areas in the north (poor savannah and semi-desert sandy areas) and summer season areas in the south (rich savannah clay lands, across borders) with South Sudan. The same movement takes place east and west across borders with Ethiopia. This important migration necessitates opening livestock routes and temporary camping areas where provision of services to pastoralists include drinking water, health and veterinary care and education, all at cost to attract private sector. These routes and camps are vital for reducing conflicts over resources between farmers and pastoralists and will help encourage settlement of nomads in the future.

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4 Natural Resources and Environment Protection (NREP)

By Dr. Tarig Elgamri

4.1 Brief Introduction of the sector

Natural resources comprise land, water (rivers, rain, ground water...etc), forests, rangelands, biodiversity and wildlife, minerals (oil and gas). Natural environments are of great importance to the social and economic life since they constitute a source for food supply, energy, recreation, a major source of medicines and raw material for industrial products. Therefore States should promote, through legislation, sustainable utilization and best management practices of natural resources.

The Sudan is generally a dry land country. Its lands are of significant importance since they are the home for two thirds of the population and support most of the country's economic activities viz. crop and animal production. Such ecosystems have offered plants (wheat, barley, sorghum, millet and cotton) and animals (cow, sheep, goat and camel) diversity that have formed many cultures. Climate change and desertification pose crucial challenge to the environment and different aspects of human and animal's life. Moreover waste management is gradually becoming a threat in the industrialized areas.

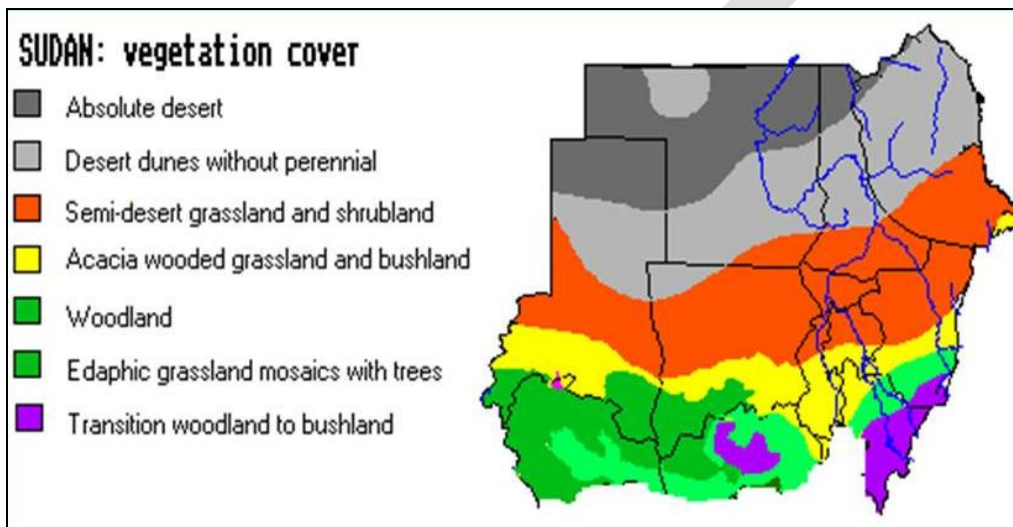
Desertification is considered as the first environmental problem in the country. RS/ GIS analysis of encroaching sahara for the period 1961 to 1991 showed that affected areas lie between Lat. 10 - 18° N (about 50% of the area of Old Sudan). UNEP, (2007) estimated that a southward shift of 50 to 200 km of the boundary between semi-desert and desert has occurred since 1930. Meanwhile further shift is expected due to declining precipitation and consequently the Gum Arabic belt is also expected to decrease in size (HCENR, 2003; 2007). The remaining semi-desert and low rainfall savannah on sand, which correspond to some 25% of Sudan's agricultural land, are at substantial risks of further desertification and considerable decrease in food production of about 20%. Moreover, it is estimated that future droughts threaten 19 million ha of the mechanized and subsistence rain fed farms, as well as pastoralist societies, principally in Darfur and Kordofan and hence potentiate conflict (HCENR, 2012).

Sudan's air temperature has been steadily increasing during the period 1960 – 2009. On average temperatures in 2000-2009 are approximately 0.8° C and 1.6° C higher than they were in the 1960-1969. Climate change is also projected to reduce average rainfall by about 6 mm per month. Such changes in temperature and precipitation are likely to undermine economic development in Sudan (HCENR, 2003; 2012).

The rapid and disorganized urbanization is associated with chronic waste and sanitation issues (64% of Sudan's urban dwellers live in the city of Khartoum). The most conspicuous environmental problems facing Sudan's urban centres include solid waste management and wastewater treatment. In Darfur the majority of the 2 million IDPs' live in the outskirts of urban centres whose size in some cases increased by over 200% during the period 2004 to 2007 (UNEP, 2007).

Trees are the main source of energy and timber for roofing and building in Sudan. Other benefits include grazing, hunting, and forest foods. Sparse tree cover (biomass density of 5 m³/ha) is found in arid and semi arid and exists in the form of short xerophytes thorny trees and shrubs. The forest

inventory of (1995/1996) conducted by the Forest National Corporation (FNC) and FAO, estimated forest area in northern Sudan at 12%. The forest cover before separation of South was 29.6% and after separation is 11.6% as a result of deforestation rate which was 0.7% before and 2.2% after (Khalil and Ahmed (2011)). The important Gum Arabic belt lies in the low rainfall woodland savannah zone with an area of 520,000 km² between Lat. 10° and 14° N. It accommodates about 1/5 of the population of Old Sudan and 2/3 of its livestock and forms a natural barrier (for more than 40% of Old Sudan) from desert encroachment. Therefore it is a source of livelihood, Gum Arabic and shifting cultivation (a system of rotation and inter-cropping).



4.2 Root causes and effects of the challenges facing the sector in Sudan

Land:

- The current legal frameworks dealing with land are greatly confusing with obvious dichotomy between statutory and customary rights.
- Lack of legislation that delineates the rights of small herders and farmers to natural resource, i.e. land tenure.
- Interference of the Federal authorities into States' mandate leading to conflicting decisions.

Water Resources:

Physical challenges include:

- Scarcity and seasonality, climatic variability and change,
- Natural disasters e.g. floods (both river floods and flash floods), drought and desertification, riverbank erosion and watershed degradation.
- The high sediment load which leads to the reduction of storage capacities of reservoirs and siltation of canalization systems).

Challenges related to the human factor include policies legislations, institutional set up and lack of infrastructure. Examples are:

- Low water productivity and inefficient water use.
- lack of safe water supply and proper sanitation facilities.
- IWRM mainstreaming.

- No conflict resolution mechanisms.
- Insufficient capacity (institutional/ human), finance and technology.
- Overlapping of roles and responsibilities which may lead to inefficient use of personnel and financial resources, duplication of efforts and ultimately ineffective management.
- Lack of cross-sectoral co-ordination at the federal and State levels.
- Water and environmental issues have low priority in the media.
- Existing laws and regulation, few as they are, are not enforced.

Forests:

- Average deforestation rate during the past 40 years ranged between 0.4 and 0.7 million km² per annum. Hence, deforestation in Sudan ranked among the 10 highest countries in the globe (HCENR, 2013).
- The most serious pests and diseases include dieback of *Acacia nilotica* trees, termites in Eucalyptus plantations and locust especially on the gum Arabic trees *Acacia senegal*.
- Wild fires are serious problems in all forest, range and wildlife areas except the semi-desert area where grasses are sparse (HCENR, 2009).
- Environmental degradation, invasion by alien species and desertification control
- Climate variability and change.
- Inadequate finance and political support especially at the state level.
- Lack of coordination and conflicting mandates.
- Disproportionate distribution of water points' and demographic changes (IDPs').

Wild life and biodiversity:

- Habitat degradation due to the massive expansion of mechanized farming is the most serious problem facing the sector, commercial poaching and bush meat.
- Desertification has led to the retreat of plant ecosystems to the south, migration of 17 mammal species, 8 bird species and one reptile species and the loss of 8 plant species.
- Livestock encroachment in protected areas that also contribute to spread of diseases
- High way construction, electricity grids and solid waste dumping
- Traditional gold mining which disrupts soil profile and results in erosion.
- Lack of facilities especially vehicles, under staffing and insecurity.
- Negative attitude of local communities towards protected areas.
- Lack of clear policy and awareness (natural resources treated as eternal assets)
- Honey bee collection process that entail tree burning
- Inadequate coordination between institutions working in conservation of biodiversity.
- Lack of legislative enforcement especially in war affected areas.
- Extreme weather conditions (floods and droughts) and wild fires.
- Lack of a national legislation on access to the genetic resources, benefit sharing and farmers' rights.

Minerals petroleum and gas:

Land tenure issues:

- Contradicting responsibilities (federal vs. state).
- Inadequate human and institutional capacity.
- Inadequate equipment, laboratories and machinery.
- Legalization and organization of the traditional mining sector.
- Absence of sector-specific legislation and statutory guidance.
- Lack of performance standards and enforcement capacity.

- Immunity of the oil industry, state-owned firms and major projects to public scrutiny.

Desertification:

- Irrational expansion in the agricultural sector and inadequate government support and extension services.
- Climate variability and change
- Lack of monitoring and evaluation systems..

Urban environment health:

- Treatment and/or disposal of the industrial wastes including petroleum drilling water.
- Rapid and disorganized urbanization.
- Pesticide storage, marketing, handling and miss use.
- Activation of relevant laws

4.3 Major opportunities for the sector development.

Water resources

- There are numerous small seasonal streams outside the Nile Basin which flow along vallies called 'Wadis'. They are characterized by high sporadic, but short duration flows. The largest Wadis are Gash and Baraka in eastern Sudan and Wadi Azum and Wadi Hawar are the main Wadis in western Sudan. These Wadis, recharge the alluvial deposits, and the rest being lost as evaporation. The flow of Wadis in the country is estimated to vary from 5 to 7 bcm/ annum.
- Renewable groundwater resources are estimates at about 4.2 bcm/ annum. Major aquifers include Nubian Sandstones, Umm Ruwaba Formation and alluvial deposits. Studies in Central Sudan revealed the fact that large storage of groundwater also occurs in Eastern Kordofan, Baggara and Blue Nile Basins.

The above sources are found in areas which are drastically hit by drought which affected groups of pastoralist.

Forests

- Although Sudan is endowed by 21 million hectares of forests about 11.6% of the country, it is considered as being in the midst of a genuine deforestation crisis (UNEP, 2007). Average deforestation rate during the past 40 years ranged between 0.4 and 0.7 million km² per annum. Hence, deforestation in Sudan is ranked among the 10 highest in the globe (HCENR, 2013).). Nevertheless, it should be noted that in many parts of Sudan local communities assisted the control of natural resources degradation. In addition to that establishment of community woodlots has contributed to the development of rural Sudan through the setting up of communal facilities. SOS Sahel International (UK) reported that **community forestry** had proven to be a successful strategy in supporting the livelihoods of 32,000 persons in N. Kordofan. Hence community forest as an afforestation approach can be scaled up to combat desertification.

Mineral resources

- Recently traditional gold mining constituted an important economic activity since about one million people are estimated to be engaged with spatial coverage that spread in 18 states. However, the sector is associated with environmental pollution and safety and health hazards. In addition to that it disrupts soil profile and enhances erosion. the activity deserves to be organized and scaled up to achieve both the benefits of the community together with that of the public by:

- Legalization of traditional mining through amendment of the existing laws.
- Provision of services and equipment to reduce health and safety hazards.
- Awareness raising, technical support and training to enhance productivity.
- Environmental protection.

Renewable Energy

- Access to energy is indispensable for poverty alleviation and promotion of economic growth. Rural populations which are usually deprived of power distribution networks and have limited supplies of gasoline and kerosene rely on energy sources like firewood (deforestation), dung, and agricultural wastes.

Wind and solar systems could be a practical alternative since they are easy to set up, uncomplicated to operate and repair, and durable. Recent studies confirmed that the potential of wind energy is considerable as many areas north of 12° N show average annual wind speed of more than 5 m/sec., similar potential is also identified at the Red Sea Hills. Solar energy could either be thermal solar or it could be converted into electricity using photovoltaic cells. It has got very high potential in the country since the average solar insolation is about 6 kWh/m²/day (HCENR, 2013). It is estimated that at least 45,000 households in the rural and peri-urban areas use PV systems. The present generation of solar systems appears to be reliable and cost effective hence, during the past decade or so about 250 solar pumps have been installed in the country especially in Kordofan State (<http://en.wikipedia.org>).

During early 2003 an assembly line of photovoltaic cells was commissioned and commenced production through an agreement with the Republic of China. The capacity of the line is one MGW (equivalent to about 20,000 PV module of 50 WP). The cost of local panels is less than those of the imported ones by about 35%. This technology could be more adapted and scaled up especially solar radiation in Sudan is unlimited for almost around the year. In fact **Sudan Renewable Energy Master Plan** enhances the contribution of renewable energy in the national energy balance with special emphasis in rural areas with a view of achieving environmental protection and sustainable development.

CBOs and Environment protection

CBOs proved to be successful in several rural development activities and can be beneficial for sector development. The following are life examples of success and deserve to be supported.

1. Geriah ElSarha Project:

The project was established as a multipurpose cooperative society (resident pastoral cooperative) which is composed of 38 families in an area of 200 km² (MAFNR, 1976). The project assisted in the settlement of the nomadic communities and adopted the Rest – Rotation grazing technique in the north western part of Kordofan. Project achievements include creation of a descent life for pastoralists through the provision of basic services, improvement of rangelands and control of desertification.

2. ElOdayya Project:

According to El Mustafa, (2010) the project adopted an integrated approach in desertification control in South Kordofan where 22 village councils were constituted adopting the revolving fund approach. Ten ‘hafaers’ and seven community led range enclosures were established together with small scale agro forestry applications.

3. Um Jawaseer Desert Farm Project:

The project adopted irrigated agriculture for the settlement of the nomads of Hawaweer Tribe in the Bayouda Desert of the Northern State. The project adopted the participatory approach

with major emphasis on women development (One-fifth of the land is allocated for women). The project showed high profitability, maintained food security and assisted in the protection of the fragile environment.

4.4. Current national policies, strategies and institutional frameworks and gaps for the development of the sector

- The first national water policy was developed in 1913 to allow for the construction of Sennar Dam and the Gezira Irrigation Scheme. Both the National Water Policy Draft Document of 2000 and the National Plan for Environmental Management of 2007 splendidly assimilated the concepts of Integrated Water Resources Management (IWRM).
- **National Plan for the Development and Utilization of Water Resources:**
The plan puts emphasis on basin wide cooperation and improvement of irrigation efficiencies to enhance water supplies of the country. Basin wide cooperation may include; upstream storage and reclamation projects to enhance the flow of the River Nile (MWRE, 2014). However, conducive political environment among the riparian countries together with environmental considerations and local participation are of prime importance.
- The Forests Act and the FNC Act were passed and implemented in 1989 whereby people participation was legalized as stemmed for the 1986 Policy. The Policy stipulated 15% of the country's land area as reserved forest (HCENR, 2006). The Forests Act identified a range of ownership categories and control measures. For instance tree-cutting for exterior forest reserves were constricted by a permit. Rain fed and irrigated schemes are oblique to allocate no less than 10% and 5% of their land area for forestry respectively (UNEP, 2007).
- The Forests and Renewable Natural Resources Law 2002 aimed to facilitate holistic management of natural resources however; this is challenged by institutional fragmentation (UNEP, 2012). Furthermore, the Law was criticized of leading to encroachment on animal routes since it allows establishment of community forests.
- The 10 year Comprehensive National Strategic Plan (CNSP) targeted a 25% of the country's total land area to be reserved as range land, wild life reserves and forest reserves (HCENR, 2009).
- Access to pasturelands is regulated by few statutory laws e.g. the Civil Transaction Act of 1984 (amended in 1990, 1991 and 1993) stipulates the following:
 - All fallow lands are considered as pastureland.
 - Authorities have the right to impose temporal or spatial restrictions on grazing.
 - Authorities are vested to allocate grazing for the common benefit and protection of animal resources.

The Act contains some disparity since it allows for the allocation and registration of pastureland in the name of a certain community while permits authorities to cancel such benefit.

The Range Protection and Pasture Resources Development Bill 1996 (proposed) was formulated to remedy the CTA especially the legalization of participation.

- In 2002 the Forest and Renewable Natural Resources Act recognized the right of pastoralists for grazing and clear passage. It also mandated FNC oversight over land use and hence its acceptability and effectiveness were jeopardized.

- The Farming and Grazing Regulation Act in Darfur recognizes 7 animal routes (each of 100–150 m width). The Act sets migration schedules and rights and obligations for both pastoralists and farmers (UNEP, 2012).
- **Wildlife Five Year Strategic Plan (2012 – 2016):**

The current five year wildlife strategic plan adopted the following directives:

- Integrated protection.
 - Upgrade of protected areas.
 - Awareness raising and community participation
 - Capacity building and
 - Execution of regular inventories.
- **Sudan Renewable Energy Master Plan:**
The plan was formulated in 2005 to promote the utilization of renewal energy sources. It states the following policy objectives:
 - Assess the current renewable energy situation, evaluate the prospects and formulate a draft master plan for policy development including appropriate institutional structure
 - Enhance the contribution of renewable energy in the national energy balance with special emphasis in rural areas with a view of achieving environmental protection and sustainable development.
 - The plan suggests several renewable energy projects to generate rapid impacts to demonstrate success in the sector. Such projects include use of solar energy, biomass cogeneration in agro industrial sector (sugar cane industry) and the use of wind energy.
 - Institutions working in renewable energy include: MWRE, FNC, Forestry Research Institute, Energy Research Institute, some universities and the National Energy Administration

The National Action Plan to Combat Desertification (NAP) (2006):

- It was developed in compliance with Articles 8, 9 and 10 of UNCCD through an extensive public consultation at the federal level as well as 13 degraded states (NDDCU, 2006). The document provided a comprehensive overview and proposed control actions. It advocated for establishment of NDDCCC to combat desertification with a secretariat at the national level, state councils and local committees. According to UNEP, (2012) the document is yet to gain popularity and needs more emphasis on the linkages with other sectors. In compliance with the Decision 3/ COP 8 the country initiated a process to align its NAP with the current UNCCD's 10-year strategic plan and framework.
- National Adaptation Program of Action (NAPA) (2003-2007): The program identified urgent and immediate activities to promote adaptation. The process adopted stakeholder participation and capacity building. The NAPA was implemented in five States of Old Sudan representing five ecological zones.
- Sudanese Climate Change Network (SCCN): SCCN established since early 2011 to focus more attention on adaptation planning, including capacity building, awareness-raising among government institutions, and strategic outreach to media.

- The National Adaptation Plan (NAP): The plan was developed through an agreement between UNEP and HCENR with an active participation of the 18 states of Sudan. The process included an intensive consultation and capacity building components.

4.5 Important intervention programmes/projects on the sector, achievements, challenges, opportunities, lessons learnt and future aspirations.

1. Biodiversity and wildlife:

The country has joined the CBD in 1995 and International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) in 2002.

In 2005 Sudan signed two protocols:

- The Protocol Concerning the Conservation of Biological Diversity and the Establishment of Protected Areas' and
- The 'Protocol Concerning the Protection of the Marine Environment from Land-Based Activities in the Red Sea and Gulf of Aden'.

Both Protocols are additions to the 'Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment'

2. During early 2003 an assembly line of photovoltaic cells was commissioned and commenced production through an agreement with the Republic of China. The capacity of the line is one MGW (equivalent to about 20,000 PV module of 50 WP). The cost of local panels is less than those of the imported ones by about 35%.
3. **Desert Encroachment Control and Rehabilitation Program (DECARP):**
The program was crafted by national and international institutions. The program is located between Lat. 12⁰ – 18⁰ N with a total area of about 650,000 km². Climatic changes, over grazing, deforestation, expansion of agriculture among others were identified as the major causes of desertification (MAFNR, 1976). The program targeted the development of livelihoods and natural resources and considered public participation as the key to its success.

4. Geriah ElSarha Project:

The project was established as a multipurpose cooperative society (resident pastoral cooperative) which is composed of 38 families in an area of 200 km² (MAFNR, 1976). It assisted in the settlement of the nomadic communities and adopted the Rest – Rotation grazing technique in the north western part of Kordofan. Project achievements include creation of a descent life for pastoralists through the provision of basic services, improvement of rangelands and control of desertification.

5. ElOdayya Project:

According to El Mustafa, (2010) the project adopted an integrated approach in desertification control in South Kordofan where 22 village councils were constituted adopting the revolving fund approach. Ten hafeers and seven community led range enclosures were established together with small scale agro forestry applications.

6. Um Jawaseer Desert Farm Project:

The project used irrigated agriculture for the settlement of the nomads of Hawaweer Tribe in the Bayouda Desert of the Northern State. It adopted participation with major emphasis on women empowerment (one-fifth of the land is allocated for women). The project showed high profitability, maintained food security and assisted in the protection of the fragile environment.

7. Other projects include:

- Sand Dune Stabilization Project in Elbasheiri Oasis.
- Wadi Rokas Water Spreading Project for crop and fodder production (1000 feddan).
- Gardod Project: improved agricultural productivity of crusty soil through; tillage before the rainy season, alley cropping and crop rotation.
- Gum Arabic Restocking Project that rehabilitated 50.000 feddan.
- Several Community Forestry Projects.
- Charcoal production from cotton stalks.
- Biogas and Improved stoves initiatives.
- Molasses and groundnut's husk cubes.
- Tamara Mixed Farming Project.

4.6 Conclusions and recommendations:

4.6.1 Conclusions

Land:

- Land tenure legislations and policies are of high priority compared with other legal frameworks in natural resources management since the first law was issued in 1899.
- For rural communities in Sudan land is not a mere physical resource it has also an emotional and social implications.
- Overlaps in mandate exist between federal and state authorities and customary and statutory laws.
- Competition over land resources has become a major cause of conflict among the pastoral and farming populations in Sudan.
- Recent legislative developments *e.g.* Local Government Act (1998) and The Interim National Constitution of Sudan (2005) recognize customary laws, authorities and local users.
- Lack of coordination exists between State survey departments of the NSA.
- Dissolution of the local governance system affected conflict resolution especially those related to land tenure and utilization of natural resources.

Water Resources:

- Water resources of the Sudan include rainfall, River Nile and its tributaries, ground water and 'wadis'.
- Physical challenges include scarcity and seasonality, climatic variability and change, trans-boundary issues and natural disasters.
- River Nile, groundwater resources and wadis (Baraka, Gash, Azum and Hawar) have got trans-boundary dimensions.

- Sudan with the current water availability of 920 m³/ capita/ annum is below the water poverty line (1000 m³/ capita/ annum).
- Recent projections showed that the country will witness severe water shortages of about 30 billion cubic meters by the year 2027.
- The tasks of water resources monitoring, assessment, development and management were vested to the MOIWR (currently known as the MWRE).
- Policies and legislations concerning water resources management spread over the different sectors with a distinct need for coordination between these sectors.
- Despite the great efforts to craft the water policy of 2007 it's not yet endorsed by the government. Meanwhile, state water policies are still underway.
- A comprehensive water resources act was adopted in 1995 that applies to all water resources and covers water uses for all purposes.

Forests:

- Trees are the main energy source in Sudan beside that they provide timber for roofing and building. Other benefits include grazing, hunting, and forest foods.
- Forest cover is estimated to occupy about 12% of the country area.
- Deforestation in Sudan ranked among the 10 highest countries in the globe with an average deforestation rate between 0.4 and 0.7 million km² per annum during the past 40 years.
- The Gum Arabic belt witnessed a southward contraction of 28 to 110 km compared to the Harrison and Jackson baseline of 1958.
- Forests legislations and governance structures are appropriate; however enforcement and investments are to be strengthened.
- Local communities in many parts of Sudan assisted the control of natural resources degradation *i.e.* CBOs.
- Establishment of community woodlots has contributed to the development of rural Sudan through the setting up of communal facilities.
- The 10 year Comprehensive National Strategic Plan (CNSP) targeted a 25% of the country's total land area to be reserved as range land, wild life reserves and forest reserves.
- Environmental degradation, climate variability and change, wild fires, pests and diseases, invasive species, disproportionate distribution of water points', IDPs', finance are issues of especial concern.

Rangelands:

- Rangelands cover about 110 m ha and support about 101 million heads of cattle, sheep, goats, camels, and a wide range of wildlife species,
- Recurrent droughts, desertification, expansion of rain fed agriculture, invasive species, wildfires, pests and diseases and inequitable terms of domestic trade are issues of especial concern.
- Rangelands spread over different ecological zones including desert, semi desert, low rainfall savannah and high rainfall savannah, with 80% of land area located in the semi desert and low rainfall savannah.

- Access to pasturelands is regulated by few statutory legal provisions *e.g.* the Civil Transaction Act of 1984 (amended in 1990, 1991 and 1993). However, disparity exists between customary and statutory laws.

Biodiversity and Wildlife:

- Encroachment of mechanized farming is the most serious problem facing the sector; others include encroachment by livestock, commercial poaching and bush meat.
- Marine protected areas are in better condition due the low level of development.
- The governance structure of the sector is complex and hence relatively dysfunctional.
- The economic contribution of wildlife tourism is insignificant and hence sustainability is jeopardized.
- High biodiversity erosion is witnessed mainly due to desertification, extreme weather conditions, wild fires and lack of awareness, poor institutional capacity and legislative enforcement.

Mineral resources, petroleum and gas:

- About 40% of the land area of Sudan is covered by the basement complex formations.
- The country possesses huge mineral reserves like gold, iron, copper and silver.
- The minerals sub-sector contributes about 4% of GDP.
- The legislative environment in the sub-sector is conducive for investment.
- Current oil production is about 195,000 b/ d and projected at 320,000 b/ d in 2017.
- Security issues markedly reduced petroleum revenues.
- The unilateral US economic sanctions severely affected the sector.

Renewable Energy:

- Scattered generation by renewable energy is the only solution for rural electrification.
- Wind and solar systems are durable, easy to set up, operate and repair.
- The average solar insolation is about 6 kWh/m²/day (very high potential).
- The potential of wind energy is considerable since many areas north of 12° N and the Red Sea Hills show average annual wind speed of more than 5 m/sec.
- Biomass is the dominant energy source since wood fuel constitutes 70% of national energy consumption with negative impacts on biodiversity and desertification.
- Renewable energy production within the sugar cane industry is associated with pollution.
- The country's geothermal potential is estimated at about 400 MW with fields identified near Jebel Marra, Tagbo, Meidob and the Red Sea Hills.
- Hydropower in Sudan has a potential of 4,860 MW and current generation capacity of 7572 ? MW , meanwhile different projects are under construction.
- Siltation resulted in considerable loss of reservoir capacities behind dams.
- Renewable energy systems are unaffordable for the rural people of Sudan
- Animal wastes and crop residues may alternatively be used as organic fertilizer to combat land degradation and enhance agricultural productivity.

Desertification:

- Recently the ASALs' of the country were subject to severe land degradation.
- The consequences of the phenomenon include dispute over land resources, displacement, famines and increased infant mortality.
- Sudan has created an enabling environment viz. the establishment of NDDCU (the UNCCD focal point) and HCENR, adoption of the federal system and the craft of the National Action Plan to Combat Desertification.
- Desertification Control Act 2009 is yet to be activated and the National Drought and Desertification Control Coordinating Council is yet to be established

Climate change:

- In the Sudan air temperatures had been steadily increasing during 1960–2009 meanwhile, rainfall witnessed significant reduction since early 1960's.
- Sudan signed the UNFCCC in 1992 and ratified in 1993 with HCENR the focal point of the convention. The country produced its first and second national communication reports, NAPA and recently the NAP.

Urban Environmental Health:

- The rapid and disorganized urbanization witness chronic waste and sanitation issues.
- The most serious problems facing Sudan urban centres include solid waste management and wastewater treatment.
- In Darfur the majority of the 2 million IDPs' live in the outskirts of urban centres which size in some cases increased by over 200% during the period 2004 to 2007.
- Water borne diseases constitute about 80% of the reported illness cases.

4.6.2 Recommendations

4.6.2.1 General recommendations

- In rural Sudan livelihoods are linked hence, a holistic livelihood strategy would be more effective.
- Close coordination in the implementation of MEAs' is required to avoid contradicting policies and legislations.
- Political support at all levels and reforms is needed as well as rationalization of institutions.
- Clear definition of responsibilities, duties and roles at the various levels of governance and enforcement of laws.
- Strengthening infrastructure
- Awareness raising and expedition the peace process
- Institutional and individual capacity building
- Empowering local governance and initiation of community-based monitoring.
- Documentation and up scaling of success stories, approved technologies and strengthening scientific research.
- Coordination with regional and international programs especially the IGAD, IDRRISI.

4.6.2.2 Specific recommendations

Land:

- Land issues should be incorporated in the economic and social development policies.
- Adopting the participatory approach in dealing with land related issues.
- Revision of laws to acknowledge the rights of small farmers and pastoralists, secure the rights of women and include recent developments.
- Establishment of the National Land Commission and codification of the traditions.

Water Resources:

- Rectification of Constitutional disparities regarding water resources management.
- Create mechanisms/ institutions to ensure data sharing at the national and regional levels and establishment of a paper and digital library including research directory.
- Expedite the preparation of the national IWRM plan.
- Activation of the Law of the SUMA especially the oversight on the specifications, installation and supervision of met stations and accessibility to data.
- Encouragement of problem solving research and creation of a Research Fund.

Forests:

- Provision of subsidies, loans and technical know-how are needed to promote community and private forests.
- Up-scaling of agro-forestry techniques.
- Control of invasive species specially mesquite.
- Advocacy and provision of alternative energy
- Afforestation should stress responsibilities regarding forests development and protection.

Rangelands:

- Control of habitat degradation.
- Settlement of the nomadic communities

Biodiversity Wildlife:

- Enhancement of tourism to create economic sustainability of the sector.
- Establishment of a biodiversity unit at HCENR the focal point for CBD.
- Control of illegal hunting and Mainstreaming of wildlife conservation within national land use plans and development strategies.
- Specific conservation action is required in some coastal areas that should include a ban on fixed fishing nets marine protected areas important for dugong.
- In line with Regional Action Plans, National Action Plans for corals, turtles, seabirds, mangroves are to be developed and implemented.
- Reduction of camel grazing and the felling and cutting of mangrove trees.
- Formulation of a national legislation on access to the genetic resources, benefit sharing and farmers' rights.

Mineral resources, petroleum and gas:

- Develop a federal, autonomous environmental enforcement unit for the industrial sector, including the oil industry.
- Strengthening the mineral services sector.

Renewable Energy:

- Develop renewable energy for income generating activities e.g. crop drying/ grinding.
- Advocating the establishment of agro forestry, shelterbelts and village forests for the purpose of fuel wood and charcoal production.
- Use of animal wastes and crop residues in biogas production.
- Provision of government financial assistance and subsidies'.

Desertification:

- Revision of the National Action Plan to Combat Desertification.
- Up grading the administrative position of the NDDCU and its support with adequate staff, facilities and financial resources.
- Establishment of the Drought and Desertification Control Coordinating Council.

Climate change:

- Enhancement of the policy environment by crafting the national climate change policy and the climate resilience strategy.

Urban Environmental Health:

- Due to its high efficiency the use of activated sludge technology is highly advocated. Treated wastewater may be used for forestry (to control dust storms and to rehabilitate the degraded lands) and fodder production.

4.6.3 Intervention Programmes**4.6.3.1 National level programmes**

- The country should make full use of existing global interventions and synergies with pertinent conventions such as the CBD, UNCCD and UNFCCC.

4.6.3.2 Regional level programmes**Water resources:**

- Electricity inter connection will assist Sudan to expand its' national electricity grid and hence reduce the cost of production especially in agriculture and industry. On the other hand upstream countries (Ethiopia) will generate additional revenues from the sold electricity.
- Water harvesting is identified as a mean for the settlement of pastoralists and hence maintaining peace both inside and with neighboring countries.

Biodiversity and Wildlife:

- Trans-boundary management of protected areas is suggested for Lake Abiad and Radoum (South Sudan) and Dinder and Atteesh (Ethiopia).
- Regional programs in preservation, disease control and habitat restoration will be of great impact.

Renewable energy:

- To resolve the problem of increased concentration of the sediment load basin, wide cooperation is needed especially in integrated watershed management with main emphasis on the control of water erosion.

Desertification:

- Make full use of the existing global interventions and the synergies with pertinent conventions such as the CBD, UNCCD and UNFCCC.

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5 Regional Economic Cooperation and Integration (RECI)

By Dr. Sara Rasheid Ahmad

5.1 Brief Introduction of the sector

The structure of the Sudanese economy by and large exhibits the same patterns and characteristics observed in most developing countries. In 2010 agriculture which includes crops, livestock, fisheries and forestry accounted for 31.1 % of the GDP, while services made up 47.5% and industry which also includes petroleum contributed 21.6 % of the GDP. The growth of the service sector has been largely induced by the oil boom. As data show the construction sector grew on average by about 10 % per annum since 1999 while hotels, restaurants, transport, communication and other services also enjoyed high growth rates.

The growth of the oil industry did not lead to structural changes in the economy. On the contrary, the productive economic sectors have in fact been negatively affected by the growth of the oil industry. This was brought about by rapid build- ups of foreign exchange reserves of the country, thus leading to appreciation of the value of the domestic currency as a result of which the traditional export commodities curbed/lost their competitiveness in the international market.

Although agriculture is still the predominant activity in Sudan, its share of the labour force has gradually declined while other sectors of economic activity have expanded. Sudan Central Bureau of Statistic (2010) population census data for 2008 indicated that the majority of Sudanese men are employed in the agriculture sector (48.13%), followed by services (35.9%), industry (10.22%) and other activities (5.75%); similarly, the majority of Sudanese women are employed in the agriculture sector (49.48%), followed by services sector (22.45%), industry (2.27%) and other activities (25.8%). According to the Arab Labour Organization (2007), data for 2004 indicated high rates of youth unemployment among Sudanese youth (41.25%), respectively 43.25% for female and 36.64% for male. The distribution of unemployment by age groups indicates that the highest unemployment is for the age group 15-24 (32.80%), followed by the age group 25-39 (32.44%).

The wide spread conflict witnessed in the country in the last few decades and the eventual secession of the south is believed to be largely due to the unbalanced process of economic growth and the severe inequalities that resulted from it. Whatever the cause, the secession of the south has dramatically changed the economic reality of the Sudan. The Country is now less by 8,260,490 people¹ and an oil industry which accounted for 95 % of total export earnings. Yet Sudan is still a big country with huge potential.

5.2 Root causes and effects of the challenges facing the sector in Sudan.

- Political stability, identified as a major concern by local businesses in the PICS, is an overarching factor in the perceptions of the business environment; progress on this front is needed to improve Sudan's image.
- Manufacturing sector contributed only 6.1 percent of GDP in 2007 compared to 20 to 40 percent in other African countries. The manufacturing sector has been characterized by high capital intensity, high value added per worker and high labor costs. This high unit labor cost undermines the competitiveness of manufacturing firms, encourages capital intensive production and reduces employment creation. With the exception of manufacturing in the food, garments and furniture and wood products sub-sectors, the level of the total factor productivity (TFP), or the efficiency of all factors of production in the production process in the Sudan, is low compared to neighboring countries, like Uganda, Tanzania and Kenya.

- Only a small percent (10 percent) of Sudan's manufacturing firms were able to export their products according to the Productivity and Investment Climate Survey (PICS). The incidence of high labor costs is a factor in reducing the competitiveness of firms in Sudan but there are other factors. The 2008 Diagnostic Trade and Integration Study (DTIS) identified the reduction of trade costs as, modernizing customs, the development of trade logistics service, the need to build capacity in food and plant safety regulations, and the need to reduce bottlenecks, and fees and charges at Port Sudan as priorities for improving trade and competitiveness.
- In the PICS, private sector firms identified two sets of constraints to investment and growth of the private sector. The top three constraints in the first set were political instability, lack of transparency and economic uncertainty and the second set of constraints included infrastructure, finance and taxation.
- Due to weak formal institutions for contract enforcement, informal institutions and personal contacts remain important for contract enforcement.
- Property rights, the justice system and contract enforcement influence the perceptions of the business environment.
- Much of the formal private economic activity is concentrated to the central core of the country. The regions in the East, West and South are seriously lagging in formal private sector activity and employment. They are less attractive to private investments for many reasons, including poor infrastructure, lack of access to finance the low education and poor health status of the labor force, insecurity and poor governance and other legacies of the civil conflicts.
- Small and informal enterprises, corruption, the legal system, access to land and access to loans are in the top five constraints for informal firms. The availability and cost of electricity, access to and cost of financing and access to land are perceived as more binding for informal firms outside Khartoum.
- 60–70 percent of African households (including Sudan) earn income from the informal sector and policymakers have been slow to incentivize traders to formalize their activities. The informal sector in Africa, is estimated to represent about one-third of official GDP, is characterized by micro, small and medium-size enterprises (MSMEs), predominantly women and individual dealers in agro-business and pastoral activities. Small traders and business owners turn to the informal sector to avoid the complex regulations and duties especially the high price of import and export duties levied in formal trade, cumbersome customs procedures, and the high degree of corruption and “facilitation payments” encountered at checkpoints and border posts
- Increased competition for road transport.
- Electricity was perceived as one of the most serious constraints for doing business by Sudanese enterprises.

Regarding Trade Policy the following are the challenges:

- Tariff and Tax Policy on Imports discriminates against exporters and potential exporters.
- Tariff Exemptions/Trade Bans/Export restrictions/Trade licenses.
- Removal of existing NTB and prevention of new NTM.
- National Quality Infrastructure imposes unnecessary trade costs.
- Export Quality Permit.

Regarding the challenges facing Trade Logistics, Transit and Customs

- Multiple Border Agencies resulting in delays.
- Difficulty in obtaining information on trade rules and regulations.

- High level (95%) of physical inspection and most valuations still based on BTN.
- Absence of a comprehensive customs modernization strategy.
- Improve professionalism and efficiency of clearing agents.
- Weak and declining logistics performance against comparator countries.
- Large variations in dwell time between different users at Port Sudan.

5.3 Major opportunities for the sector development

- ✓ Abundant natural resources, minerals and hydropower potential offer great opportunities.
- ✓ The region is home to a variety of exotic wildlife, beaches, lakes, waterfalls, forests, woodlands and orchards that produce timber and abundant marine life. In addition to its potential to create valuable tourism sites, beside the creation of potential of creation new jobs.
- ✓ The greatest potential for inland waterway transport IWT still lies in traffic to South Sudan. The prospects for IWT use in Sudan will continue to be tied to economic and political cycles in South Sudan. For South Sudan IWT connectivity with Sudan is important in the short and medium term as the lowest cost means of transport for the northern part of the country. The limited coverage of road transport means the only other mode is air, which is much more expensive.
- ✓ The Costs of Port passage of a container through all the operational cycles of the port facilities is not high when compared to other ports in Africa.
- ✓ The government is building a new airport some 40km to the west of Khartoum. The new airport is envisaged as a transportation hub to link Europe and East and Southern Africa. It will have a runway long enough and infrastructure to handle the largest aircraft in the world. The airport will have passenger capacity of 12m per year and cargo warehouse space of 6,000m² as well as a cold store with 500 tonne capacity.
- ✓ Sudan has potential to serve as a transit hub with four of the eight immediate neighbors being landlocked countries. This creates the potential to develop some value added logistics services in activities such as assembling or packaging for distribution to these countries.
- ✓ Recent geopolitical developments present Sudan with an opportunity to improve regional connectivity. Sudan can serve as a trade gateway to neighboring countries which can be potential markets for Sudanese exports such as food products.
- ✓ In order for Sudan to attract transit traffic to and from the landlocked countries, its own logistics system has to offer a superior service. Given the current low performance of many of the neighboring countries this represents a significant opportunity for Sudan. Such infrastructure connectivity will provide a backbone for improved services to reduce logistics costs. However, for benefits to be maximized it would be important to also review and modernize practices for transit under customs bond. Current practices are tailored to domestic operations and result in increased costs for international transit.
- ✓ Reducing trade costs and increasing trade represents the most powerful policy package available to the GOS for reducing poverty and placing Sudan on the path to meeting the MDGs and advancing to middle income status. Sudan can benefit from the experience of other developing countries that have effectively traded their way out of poverty.
- ✓ Sudan has an extensive though not continuously navigable inland waterway that has significant potential to provide a low cost and environmentally friendly transport service, from Kosti going south to Juba in South Sudan (extending over 1,435km) and Karima to Dongola connecting to Egypt (330km).
- ✓ The status of modern information technology and of the advanced communication technology recently established in the Sudan can provide an excellent opportunity to further information and communication technology for development within the strategies and

approaches of the Programme, thereby achieving broader outreach and substantive development results.

5.4 Current national policies, strategies and institutional frameworks and gaps for the development of the sector.

No specific national policies/strategies were named in the sector baseline report. However, mandates and objectives of the five sub-sectors were elaborated as follows:

The Financial Policies

1. Realizing the Ministry of Finance mandate over the public money.
2. Strictly complying with the approved budget with no spending not allotted there in.
3. Achieving integration between the general federal and the states' budgets.
4. Directing the foreign financing and domestic debt to the national development and infrastructure projects.
5. Increasing the contribution of the telecommunications and information and electronic applications sector to the gross domestic product (GDP) by encouraging investments in this sector.
6. Completing the requirements for the Sudan to get its rights in the global initiatives to exempt foreign debts.
7. Completing the accounting, control and auditing system in economic management.
8. Developing the stock market (financial papers market) and establishing more investment funds and portfolios and investment deposits to encourage and stimulate national savings.
9. Raising the spending rates on the social development to fight poverty by increasing the investment projects and expanding the social security networks.
10. Offering incentives to investments in the least developed states and encouraging the build, operate and transfer (BOT) system.
11. Achieving balance in monetary policies between the sustainable growth and the prices stability.
12. Directing monetary policies to rationalize spending on imports.
13. Building mega banking entities and intermediate financial institutions and encouraging the banking out spreading.

The Production Policies

1. Benefiting from the regional and international organizations and bilateral cooperation with the countries in capacity building and transfer of technology and indigenizing technology and applied research to improve the quality of production and raise productivity.
2. Raising the awareness of livestock producers on their economic potentials, developing breeding techniques by establishing modern farms and by the restoration, reservation and maintenance of natural pastures.
3. Creating an environment of production through the sustainable stable economic policies.

4. Providing long-term financing for projects with due attention to small and microfinance, expanding the umbrella of agricultural insurance and activating the role of agricultural risk prevention fund.
5. Encouraging secondary (convertible) industries to achieve added value with compliance with standards and specifications.
6. Employing the idle capacities in the productive sector.
7. Stimulating and empowering the private sector and creating communication channels with the public sector to overcome obstacles and creating conducive environment for national and foreign investments and joint ventures.

The External Area policies

1. Reviewing the laws influencing the economic and trade activity to keep up with the requirements of production and World Trade Organization (WTO).
2. Endorsing the policies for the integration of the Sudan in the global economy with precautions to the negative effects of Sudan's accession to the regional economic and international blocs (COMESA...etc.
3. Focusing on raising the productivity of goods and services targeting export.
4. Addressing the administrative problems of and bureaucratic procedures impeding foreign trade, domestic and foreign investment.
5. Rationalizing imports and directing such to the production inputs.
6. Stimulating non-oil exports through incentive policies and addressing the problems hindering expansion therein.
7. Establishing industrial cities and specifying agricultural zones for the production of exports goods based on high quality standards " production for export" while promoting the exports of added value.
8. Coordinating and organizing crops and livestock markets in the different states in a drive to establish commodity bourses (exchange markets).
9. Maximizing the proceeds of Sudanese overseas workers (expatriates) through training and qualification programs responsive to the requirements of the global labor market.
10. Setting up controls and procedures for the remittances of profits of foreign investors and encouraging them to use part of them in internal developmental projects.
11. Encouraging the establishment of free zones in sea, river and border ports.
12. Employing the international aid and donors' contributions in developmental projects rather than relief.

13. Developing trade exchange systems with the state of South Sudan.
14. Reducing foreign manpower in the fields wherein local cadres are available.
15. Replacing high-interest loans with modern funding formulas like the BOT and Islamic international finance windows.
16. Avoiding the loans for balance of payments unassociated with goods and productive projects.
17. Improving the negotiation capacities with bilateral, regional and international sources of finance in compatibility with the country finance and banking systems.

The Services 'policies

1. **Increasing** the contribution of tourism in the social and cultural change and in gross national production (GNP) through the exploitation of and preservation tourism resources and through expansion in tourism associated services projects.
2. Encouraging and promoting domestic tourism.
3. Using the economic information in introducing the policies and spreading awareness on the objectives and of the economic programs and projects.
4. The sound management of natural resources based on environmental feasibility studies in developmental projects to ensure environment protection and climate change control.

Infrastructure Policies

1. Giving priority in spending to the infrastructures such as the networks of national and rural roads and highways, the rehabilitation and expansion of railways networks, sea, river and dry ports and airports.
2. Shifting the balance from the use of fossil energy biomass to hydro, geothermal and renewable energy and developing policies and rules regarding the generation of electricity from different sources.
3. Rationalizing energy consumption and reducing losses at production and distribution stages.
4. Securing oil products supplies to all production and consumption sectors to contribute to the economic and political stability.
5. Encouraging investments in the field of electric power generation, transmission and distribution.
6. Developing commodities and passenger transportation and reducing its cost and upgrading the standard of services and removing the procedures impeding the flow of interstate traffic and movement.

7. Focusing attention on electric linkage projects with the neighbouring countries for electric stability of low cost.
8. Developing statistical and data collection systems and measurement, monitoring and evaluation (M&E) methods.
9. Coordinating policies and raising the efficiency of the integrated transport network.
10. Activating ports for connecting the neighbouring states and promoting cross-border (transit) trade

Institutional Framework

Trade Policy-Making Institutions

- Ministry of Foreign Trade (MOFT)
- Bank of Sudan,
- Ministry of Finance,
- Ministry of Agriculture,
- Ministry of Animal Resources and Fisheries,
- Ministry of International Cooperation,
- The Commission on WTO Affairs,
- Customs General Administration,
- Chamber of Commerce,
- Chamber of Industry and Ports Corporation
- Export Councils
- National Council for Exports Development (NCED)

Trade Supporting Institutions and Bodies

- Commercial Attachés. Sudan has several commercial attachés in its Embassies abroad which are expected to perform important functions in supporting trade promotion activities.
- Customs General Administration (CGA)
- National Agency for Insurance and Finance of Exports (NAIFE).
- Sudan Trade Point (STP)

- Trade Information Center (TIC),
- Sudanese Standards and Metrology Organization (SSM).

5.5 Important intervention programmes/projects on the sector, achievements, challenges, opportunities, lessons learnt and future aspirations.

Interventions

- ❖ Complementing Infrastructure investments in Sudan's transport system by integrating logistics services.
- ❖ Setting an inland depot container by the Sudanese authorities north of Khartoum, which will not be affected by the daytime ban on trucks.
- ❖ Increasing port storage fees in Port Sudan as an incentive to reduce storage periods which would accelerate the cargo clearance and evacuation process in order to free storage capacity.
- ❖ Several interventions to revive the inland water transport system, especially in South Sudan, include the provision of container handling facilities, emergency rehabilitation at old Kosti port, concessioning the new Kosti port, new infrastructure at Juba and studies on dredging, navigation and river hydrography. Sudan has already taken significant steps to improve IWT services through private sector participation.
- ❖ Allowing private sector firms to provide inland waterway transport services provide a firm foundation for the future of the sector.

Achievements

Air Transport Achievements

- ❖ Strong international gateway in Sudan, with increasing traffic between Sudan and South Sudan.
- ❖ Good connectivity with the Middle East, Europe, and Ethiopia.
- ❖ The government is building a new airport some 40km to the west of Khartoum. The new airport is envisaged as a transportation hub to link Europe and East and Southern Africa. It will have a runway long enough and infrastructure to handle the largest aircraft in the world. The airport will have passenger capacity of 12m per year and cargo warehouse space of 6,000m² as well as a cold store with 500 tonne capacity.

ICT's Achievements

- ❖ Impressive increase in mobile penetration across the country.
- ❖ Tariffs compare favorably with African peers.

- ❖ Sudan has become among the most liberalized telecom markets in Africa.
- ❖ Established regional infrastructure backbone for ICT with connection to undersea fiber optic cables.

Energy Achievements

- ❖ Strong increase in installed capacity in Sudan varies between 2005 and 2009.
- ❖ Increasing reliance on hydropower.
- ❖ High reliance on modern fuels for cooking.
- ❖ Moderate tariffs for power. Strong record in collection of bills

Ports Achievements

- ❖ Increase in traffic in Port Sudan.
- ❖ Port authority has generated significant revenues and has used these funds for port infrastructure upgrades.
- ❖ Port Sudan becoming a feeder port.

Surface Transport Achievements

- ❖ Lower freight tariff charges compared to several African peers because of a competitive trucking industry and lower petroleum prices.
- ❖ Internal corridors are relatively well developed. The national highway authority is already implementing a program of high way improvements to connect to neighboring countries, with several sections already completed. Connections to Eritrea, which is not landlocked, are largely completed while several links to the South Sudan are still in need of financing. Similarly some of the neighbors, especially Ethiopia, are also building roads towards their common border with Sudan. (DTIS, 2014).

Challenges

Challenge to Regional Integration

- ❖ Regional railway networks are not commercially run and are poorly maintained. In networks which further increases coast roads also have incompatibility problems, with some designed for higher axle load limits roads than others.
- ❖ Cumbersome trade logistics and regional variations in technical standards also pose transit challenges. Major seaports have poor handling facilities and equipment, capacity constraints, insufficient logistics infrastructure such as container freight stations; all of which result in higher transaction costs to operators, and causes inordinate delays and cargo pilferage damage.
- ❖ Neglect and under-investment in the power sector. The state monopolies undertake under one roof electricity generation, distribution, grid management and price regulation. Failure to unbundle

this services has constrained and limited the scope for investment opportunities in any of the segments, in particular the private sector.

- ❖ The cost of broadband internet access is high. Eastern Africa lags behind other African regions on intra-regional roaming arrangements.
- ❖ Weak institutions and human capacity limit REC effectiveness. The RECs, IGOs and member countries have insufficient financial and technical capacity to design, implement and maintain sound ROs, especially in complicated corridor based investment projects. There is also inadequate capacity to undertake thorough policy analysis and also lend credence to convincing negotiation abilities for international trade and technical agreements.
- ❖ Political strife is a regional curse that frightens investors, inhibits development and stifles economic growth, these conflicts consume resources.

Challenges to Private Sector-Led Growth

(See 5.2 p 47).

Trade Policy Challenges

(See 5.2 p48).

Challenges to Trade Logistics, Transit and Customs

(See 5.2 p 48).

Opportunities

(See 5.2 p 48).

5.6 Conclusions and recommendations:

5.6.1 Conclusions

(No conclusions in both baseline and sector chapter)

- ❖ Recent reforms in allowing private sector firms to provide inland waterway transport services provide a firm foundation for the future of the sector.
- ❖ Improving efficiency at Port Sudan should be the preferred strategy
- ❖ High input costs, inefficient marketing and transport networks and regulatory restrictions all contribute to the observed low productivity and underperformance in agriculture as a key sec

5.6.2 Recommendations

5.6.2.1 General recommendations

- Improving efficiency at Port Sudan should be the preferred strategy.
- In order for Sudan to attract transit traffic to and from the landlocked countries, its own logistics system has to offer a superior service. Given the current low performance of many of the neighboring countries this represents a significant opportunity for Sudan.
- Reducing trade taxes and tariffs is required to increase and diversify markets and exports.

- Reducing the dependence on trade taxation when Sudan faces severe revenue challenges and large budget deficit, requires coordination and broader tax reform.
- Road transport will remain a dominant mode of transport for Sudan.

5.6.2.2 Specific recommendations

- It is important to make improvements to remove some of the current bottlenecks. The government has already invested significantly in improving road infrastructure including the shorter route between Port Sudan and Khartoum via Atbara. However, there are still sections of the route that need widening, especially those that carry high volumes of traffic. Such widening will reduce delays but will also help improve safety.
- To address delays and smooth flow to Khartoum, building a bypass and a new bridge is necessary to connect to the Soba Dry Port without passing through the city or relocating the dry port. to an area building a bypass and new bridge to connect to the Soba Dry Port without passing through the city.
- Improvements in road transport will bring the largest returns in the short term. This will require further investments in infrastructure along sections of the Port Sudan-Khartoum route to reduce delays and increase safety.
- Increased transparency regarding the correct application of trade policies and administrative procedures would increase the predictability of trade costs and transit times, making it easier for companies to integrate into regional and global value chains.
- Continue strategic investments in connecting transport infrastructure and services to neighboring countries, through the National Highway Authority and SRC plans.
- Priority should be to connect to Ethiopia, which is keen on alternative links especially for its Western part, as well as to South Sudan Chad and the Central African.
- Harmonize technical standards with neighboring countries. One of the areas that can disrupt cross border operations of transport services are differences in vehicle technical configurations and axle load limits.
- Establish institutional mechanisms to develop regional corridors in order to make sure there are proper and compatible linkages in infrastructure and services for cross border operations. This is a multi-stakeholder exercise involving numerous parties that have to be coordinated to develop any regional route into a trade and transport corridor.
- It is recommended that the current in-country **tourism** requirements be greatly streamlined and facilitated through a “one-stop-shop” approach.
- Reliable and consistently collected data is necessary for measuring the tourism sector’s performance and making important decisions in areas such as product development, investment promotion, and marketing.
- Surveys regarding visitor expenditure and satisfaction should be collected every two years.
- In order to facilitate travel to the country, as well as sending a strong signal to the market that Sudan is truly open for tourism, visas on arrivals for selected countries should be offered at all major border posts.
- A new national tourism plan must be created to reflect Sudan’s present situation. It should incorporate an overall vision and strategy for sustainable development of the tourism sector.

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6 Social development (SD)

By Dr. Niveen Salah Eldin Ibrahim

6.1 Brief Introduction of the sector

Sudan is a diverse nation with over 500 tribes and its people around 300 languages, vernaculars and dialects. The significant majority of people in Sudan follow the Islamic Faith, but sizable proportions are Christians or practice local traditional religions, including animism. The country is characterized by social and cultural heritage which is manifested in its cultural and ethnical diversities formed on a background of Arab and African cultures and an ancient history which contributed to formulating the Sudanese distinguished character.

Sudan is in a historical moment after the separation of South Sudan, the signature of a new peace agreement with some rebel groups from Darfur, and the resumption of conflicts in South Kordofan and Blue Nile States. In addition the economy is in a critical situation with loss of oil revenues, high debt burden, prevalence of poverty, and challenges of strengthening reforms, maintaining performance achieved after the Comprehensive Peace Agreement in 2005, and improving performance. These transformations have generated social and cultural challenges and all affect the processes of population development.

In spite of what the wars in the neighbouring countries and the long national conflicts caused in the social fabric and the incidence of poverty and large numbers of the people becoming refugees or displaced, the Sudan, from an international perspective, is still characterized by social cohesion not found in many other societies.

6.2 Root causes and effects of the challenges facing the sector in Sudan;

There are many factors that generate several challenges for the social development sector in Sudan. These factors refer to the social practices incompatible with the march to establish the modern civil State. The social deformities produced by the civil strife and repercussions of wars in the neighbouring countries led to increasing poverty, displacement and influx of refugees which has threatened the social fabric.

The negative impacts of the unfair sanctions on Sudan deprived the country from obtaining modern technology, along with the foreign and internal debts and their negative impact on the economic performance and the balanced sustainable development.

The overwhelming tribal loyalty over national loyalty led to the volatility of local communities that in turn unfolded disputes over resources and local authorities. Weak role of civil (non-governmental) local mechanisms in resolving civil disputes, tribal conflicts (pastoralists and farmers) and lack of security and political stability worsened the rural society.

The weakness of civil service institutional capacity and its inability to cope with modern management. Moreover the intricate administrative procedures, inadequate job-opportunities and the disproportionate wages with the cost of living, and the weakness of administrative capacities at the States and the poor performance at the level of localities.

Limited application of the outcomes of the scientific research and inadequate scientific and technological infrastructures, and high production costs and limited application of modern technologies in production sectors, together with insufficient funding, weak bank credit to the private sector with a rising cost of financing.

6.3 Major opportunities for the sector development

Although Sudan is facing many challenges but there are encouraging opportunities to address those challenges and achieving social development. These include:

- Good examples, values and ethics of Sudanese society.
- Realization of peace and consequent stability to enable more effective direction of resources.
- Clear improvement in some States' resources.
- Availability of good quality, well trained workforce through the planned expansion of high education.
- The serious efforts exerted by the State to alleviate poverty and to reduce unemployment.
- Strengthening the social security systems.
- Broadening of the social safety net to include targeted categories in the neediest areas.

6.4 Current national policies, strategies and institutional frameworks and gaps for the development of the sector.

The following sub-sector goals were identified by the Second Five-Year national plan (2012-2016)

a) The Sector of Labour and Human Resources:

- o Reviewing labour laws and legislation on periodical basis to achieve the institutional reform.
- o Benefiting from successful international achievements in the areas of administrative reform, human resources development and communications and information technology (CIT).
- o Comprehensively reforming the civil service performance by simplifying procedures, utilizing the information technology and reforming the work environment.
- o Adopting indicators for institutional performance via monitoring and evaluation (M&E).
- o Supporting and encouraging training centers in both the public and private sectors and upgrading performance by developing advanced standards and techniques and improving the training environment.
- o Availing equal opportunities in personnel qualification and training.
- o Making fundamental structural changes in the civil service with commitment to job description, work directories and manuals and reviewing the selection criteria to recruitment.
- o Linking the promotion system to training, qualification and actual performance rating and achieving the principle of equality (career path).
- o Applying the criteria of competence in assuming leadership positions in the civil service.
- o Reviewing the wages policies and the conditions of service periodically in order to remove anomalies and design a fair and motivating wages system to all categories of workers.
- o Eliminating anomalies in the public service pensions and designing a fair pensions' scheme that realizes decent living to workers after retirement.
- o Establishing a database to enumerate the human capabilities in terms of quantity, type and level of qualification to use it in planning of the work force.

b) Education, Training and Scientific Research:

- o Allocating a specific percentage of the gross national product (GDP) for education, scientific research and training.
- o Horizontal and vertical expansion in technical education to keep pace with the labor market needs, capable to provide qualified manpower provided its outputs shall not be less than 20% during the 2nd Five-Year Plan period.
- o Focusing on training, capacity-building and human cadre qualification particularly in the States besides the expansion of vocational training centers and connecting them with sustainable development plans and projects.

- Activating the role of the National Council for Training in mapping up training plans in coordination with the training departments in the government units, the private sector and the civil society organizations.
- Focusing on training, qualification and supporting scientific research and creating a portfolio to support scientific research with the contribution of philanthropists and the private sector.
- Encouraging the private sector to invest and participate in training and capacity-building based on approved standards and specifications.
- Developing and modernizing policies for training and capacity building of government employees.
- Directing higher education institutions to develop curricula while emphasizing the importance of basic science as the spearhead for the development of knowledge and likewise for the human sciences related to socioeconomic development.
- Introducing the new disciplines and specialties imposed by the technological and knowledge advancements.
- Building partnerships between local higher education institutions with overseas counterparts and organizing joint study programs to consolidate cooperation amongst forthcoming generations at both regional and global levels.
- Strengthening the role of higher education institutions in mapping up policies, conducting research and development projects in the context of clear-cut institutional relationships.
- Including values, traditions and heritage and the environmental awareness within the curricula of higher education.
- Adopting planning, studies, research and evaluation as the basis for policy and program development in continuous coordination between the federal and state organs.
- Providing the scientific research requirements such as labs and necessary materials.
- Encouraging the publishing of scientific production and building a comprehensive database of scientific research to be available to all.

c) Poverty Reduction and Realization of Millennium Development Goals (MDGs):

- Meeting the citizens' basic needs of health, education, drinking water and food.
- Upgrading the quality of social services in line with the Millennium Development Goals (MDGs) requirements.

d) Social and Health Work:

- Activating, supporting and employing national and foreign voluntary efforts and international organizations aid by virtue of affiliation to them to effect real contribution in the socioeconomic, health and environment fields.
- Executing proposed policies and projects for graduates' employment.
- Extending the umbrella of social security networks and increasing the reserves of the social security systems.
- Stepping up the execution of the national housing and physical development project and providing adequate shelter and housing for limited income persons and the poor segments in the cities and towns.
- Developing the basic services in rural and conflict-affected areas to reduce internal migration (displacement).
- Activating the role of partnerships with the developing countries and adding momentum to the drive towards the countries of the South like China, Malaysia, India and Brazil to benefit from their experiences in self-reliance.
- Encouraging the women's participation in local development through the productive families and food security projects.

- Upgrading and developing partnership among the institutions and organizations working in the field of humanitarian action and building of capacities and skills in various specialties.

e) Culture, Guidance and Youth Welfare:

- Maximizing the value of belonging to the homeland in the movement of the society and loyalty thereto without compromising its sanctity or abusing it and working to highlight its bright image domestically and abroad.
- Addressing the financial requirements of social and cultural development and encouraging investment in this field.
- Providing infrastructures and aides such as the facilities and qualified cadres to achieve the comprehensive development of social and cultural sector.
- Promoting the principle of partnership in financing the social and cultural sector development between the national government and state governments and localities on the one hand and the institutions, organizations and associations of the civil society and the private sector on the other.
- Enabling worshipping places and their leaders to perform their mission in guiding society towards goodness and benevolence.
- Reclaiming the endowment pivotal role in the society development and ascertaining pillars and rituals of the religion.
- Activating and developing the youth activities institutions such as the youth centers.
- Strengthening the elements of religious coexistence.

f) Non-Governmental (National) Area:

- Completing the legislative reform that enables the civil society organizations to participate in the democratic transformation and peace and unity consolidation.
- Employing the civil society capabilities in disarmament, demobilization and reintegration and developing the capacities of conflict resolution institutions and mechanisms¹³.

Institutional Framework of the social development Sector:

The responsibilities of administration and implementation of social development policy and strategies is carried out through joined and collaboration work between Governmental bodies which are represented by different ministries including **Ministry for welfare and social security, Ministry of Youth and sport, Ministry of education, Ministry of health, Ministry of Finance & National Economy, National Council for Strategic Planning, National Population Council and Ministry of Labour and Administrative Reform**. And different international and local non-governmental organization such as UN agencies (WHO, UNFPA, UNICEF, UNESCO, UNAIDS, UNDP, UNV), IFAD, WORLD BANK, OXFAM, PRACTICAL ACTION, CARE, ZOA, BBSAWS, CAFA.... ect.

Gaps/Weakness for the social development sector

¹³ Ministry of presidential Affairs (2012), 2nd Five-Year Plan (2012-2016) Vision, Mission, Challenges and Strategic: Concerns, Objectives and Priorities plus Indicators.

There are some weakness/gaps that hinder the achievement of the rapid progress in the social development sector, which are:

- Poor communication of Government decisions and lack of an evidence-based policy and decision making within the Government.
- Potential absence of political commitment to implement plans.
- Weak performance of monitoring systems.
- Lack of civil service institutional capacity, coupled with out-of-date administrative processes and systems.
- Inadequate grass-roots consultation and participation in political and governance processes.
- Lack of administrative capacity at the State level.
- Excessive and un-necessarily complex government taxes and fees for various transactions to run the government machinery and not for relevant services provision.
- Lack or absence of data to formulate, monitor and evaluate policies and their impact.
- Unnecessarily complex administrative processes and procedures.
- Depreciation of productive assets and absence of a strategy for asset replacement or renewal.
- High production costs across sectors.
- Limited application of modern technologies across economic sectors.
- Relatively limited application of science and technological research in the economy.
- Inadequate education in both Arabic and English.
- Deterioration in public service levels in war-stricken areas.
- Scarcity of potable drinking water in many parts of the country.
- Scarcity of employment opportunities in many parts of the country.
- Inadequate real wage levels.
- Lack of policies requiring measurement and auditing¹⁴.

6.5 Important intervention programmes/projects on the sector, achievements, challenges, opportunities, lessons learnt and future aspirations.

The government does recognize the **pertinent need to investment** in social development sector so as to provide better opportunities of livelihood and good quality of life for children, particularly girls and poor families. Many policies and strategies, within the social sector, were developed to deal with these groups and other vulnerable ones to cater for them, and to develop programs that address both their immediate and long term needs so they can be part of the overall development process in the country.

The Sudanese government has developed several mechanisms so as to achieve its set targets in the Millennium Development Declaration by 2015. **The five- Year National Strategic Plans (2007-2011) and (2012-2016)**, which are guided by **the 25 Years strategy vision**, are both encompassing clear commitments and action plans to achieve sustainable development alleviation of poverty and the other Millennium Development Goals (MDGs). Furthermore, the Sudan has developed over the years several documents to guide and set frameworks for many sectors particularly the social and economic ones, leading to a unique and harmonized social and economic development framework. On top of these, is the **Quarter Century Strategy (2007-2032)** which was developed across all sectors, and is used to inform many of the existing and newly developed policies, strategies and legal frameworks.

¹⁴ National Council for strategic plan (2011)

All of these are of course being based on the Sudan Constitution. The National Population Policy review has referred to and included all these in its process¹⁵.

In addition to abovementioned mechanisms the Sudan developed other policies and strategies frameworks to guide the national implementation of developmental agendas, these include:

- The Strategic Sectoral Five Year Plan (2007-2011) and (2012-2016) (for the different relevant sectors)
- A Family Strategy was developed and ratified by the Minister of Social Welfare.
- A National Reproductive Health Strategy (NRHS) 2007-2011 was launched in June 2006. Its primary objective is “acceleration of progress towards meeting the nationally set and international agreed upon Reproductive Health (RH) targets as specified in MDGs”.
- A detailed Road-Map for Reduction of Maternal and Neonatal Morbidity and Mortality was formulated in 2007 and its implementation is underway in a coordinated manner and with a performance monitoring mechanism in place.
- A National Strategy for the Abandonment of Female Genital Mutilation/Cutting (FGM/C) has been developed in 2008 through wide consultation with the key stakeholders, including NGOs and main gate-keepers and at the community level.
- A National Strategy for Youth was drafted in 2012 by the Federal Ministry of Youth and Culture.
- A National Migration Council, chaired by the Vice President, was established in 2008 to review the country’s current migration issues, policies and laws.
- A Program for the Repatriation and Reintegration of Sudanese refugees has been developed jointly by the GONU, GOSS, the IOM and the UNHCR and commenced its operations in 2006 for the organized return of refugees.
- The government issued 29 Presidential decrees to authorize exemption and lifting of a number of restrictions specifically related to humanitarian work in Darfur.
- A Monitoring and Evaluation Unit was established within the General Secretariat of the National population Council to monitor and evaluate implementation of the Program of Action of the National Population Policy¹⁶

6.6 Conclusions and recommendations:

6.6.1 Conclusions

According to human development report in 2013, the Republic of Sudan scored medium in human development, ranking number 166, with statistics indicating that about 17% of the population live on less than US \$1.25 per day. The state of affair has increased migration from rural to urban areas, thus weakening the productive capacity in rural areas, deepened poverty in both rural and urban areas, and widened the regional imbalances. Migration within a country does not affect its total size of the population and growth rate but it affects regional and sub-regional population distribution. The informal nature of human mobility from neighbouring countries and the existence of an irregular migration phenomenon in the country mean that the total number of foreign nationals in Sudan could be much higher. Immigrants are mostly located where the pressure from neighbouring countries is higher, i.e. Eastern Sudan, Darfur and Khartoum State. The 2009 National Baseline Household Survey (NBHS), the first nationally representative household consumption survey conducted in Sudan since 1978, provides estimates for the various dimensions of poverty.

¹⁵ MoSWS and NPC (2013) Sudan Position Paper on ICPD beyond 2014

¹⁶ ibid (2013)

According to the NBHS (2009), 46.5 percent of households in Sudan live below the poverty line. Poverty rates are substantially higher among the rural dwellers, with 57.6 percent of households below the poverty line compared to 26.5 percent of the urban population. Poverty in Sudan varies significantly by region and a state, Khartoum is the region with the lowest poverty incidence, followed by Northern region. The poorer states in Sudan are predominantly rural but there are exceptions. The Red Sea state has the second highest urbanization rate after Khartoum but is among the poorest five states. Conversely, the Northern state has the lowest urbanization rate and the 3rd lowest poverty rate.

The benefits of social protection go beyond strengthening the provision of basic social services and reducing poverty. A comprehensive Social Protection program contributes to sustainable and inclusive growth and supports pro-poor development. The Community Development Fund (CDF), supported by the government and the donor community, has been supporting projects identified and implemented by poor communities in 4 states. This CDF has made notable contributions to community development and poverty reduction. The low growth of employment, increasing unemployment and low levels of productivity remain at the core of high and persistent levels of poverty in the Sudan. In 2009, according to NBHS, 34 percent of the total labour force and 50 percent of the rural labour force were engaged in agriculture. Sudan has rich agricultural resources but productivity is very low in the farming and livestock sub-sectors.

There is very little information on social participation of youth. Historically educated youth played a critical role in political transformation of Sudan and were engaged in politics in universities. Results of the youth study in Gedarf and Kassala states, show significant changes as communities of the eastern Sudan are known to be among the most conservative in the country in relation to women public roles. Average returns by level of schooling indicate rates of 18 percent for higher education and 14 percent for the primary level of education. The incidence of poverty was also lower at 44 percent compared to 59.5 percent. The fastest growth in enrolments since 2000-01 occurred in pre-school (10 percent per year), followed by higher education (7 percent per year), secondary education (6 percent per year) and basic education (5 percent per year). In most of the other states, basic enrolment growth slowed down as these states, were already close to enrolling all children in basic education.

The number of academic secondary schools increased significantly since 2004-05, leading to smaller schools and lower student-teacher ratios. At this level, the average school size has dropped from 269 students per school in 2004-05 to 212 students per school in 2008-09. Private sector involvement in providing schooling is a long-standing practice in Sudan. The, government schools account for about 95 percent of enrolments in basic schools, private/non-government sector role is important for pre-school and secondary education. However 100 percent of enrolments in technical secondary, and almost 90 percent of enrolments in higher education. In academic secondary schools, non-government schools-including Teacher Union tutorial classes- enrol 24 percent of all students. Transition rates between the cycles are very high: about 74 percent of basic school completers continue in secondary education, and about 87 percent of secondary school completers continue in higher education. Similarly, Sudan, with an increasingly ageing population, faces a double burden of disease with rising rates of communicable and non-communicable diseases.

The study found that the per capita share from the available water resources is estimated at 790 m/y, which makes Sudan among the countries that fall below the water poverty line. The consumed water is used for irrigation (67 percent), industry (5 percent), human and livestock drinking and domestic use (28 percent). There are many factors that generate several challenges for the social development sector in Sudan, these factors refers to the Social practices incompatible with the march to establish the modern civil state.

6.6.2 Recommendations

6.6.2.1 General recommendations

- Sustainability of capacity development through:
 - Development of administrative structures, systems and legislation to render them appropriate for, and congruent with domestic, regional and international transformation. Enhancement of coordination between the three levels of government;
 - Human Resource development;
 - Development of infra-structure and provision of necessary equipment and resources for appropriate working environment in order to improve performance and productivity;
 - Enhancement of ICT infrastructure and their appropriate use to improve performance and efficiency;
 - Mobilization of the required financial resources for the promotion and spread of cultural and social development.
 - Encouragement of ethical values and good conduct;
 - Respect for the role and contribution of religious scholars and faith organisations in the foundation of a good society;
- Development of employment policies and reduction of unemployment:
 - Address the needs of the labour market;
 - Development of policies, systems, rules, regulations and procedures pertaining to the use of national and foreign workers by balancing the need for knowledge and skills transfer on the one hand, and the priority to employ local expertise, where possible, on the other hand;
 - Periodically reviewing wage and service policies and regulations, to achieve balance between employees' rights and duties.
- Support and promotion of Sudan's cultural heritage, and development of arts and traditions:
 - Development of culturally related businesses and investment.
 - Optimum use of ICTs revolution to celebrate diversity of different cultures and achievement of positive relations between them;
 - Balanced cultural planning, capable of questioning inappropriate values of some foreign cultural influences.
- Strengthening and broadening relations and liaison with foreign institutions and organizations in relevant fields of expertise, and acceleration of the ratification of international and bilateral agreements in the fields of social and cultural development.
- Strengthening partnerships with the private sector, NGO's and civil society organizations.

6.6.2.2 Specific Recommendation

- a) For poverty reduction
 - Reduction of absolute poverty from the present level, through the following:
 - Broadening of the umbrella of social support and enhancement of the role of *zakat* and benefits;
 - Delivery of new projects for increasing income – alternative livelihoods;
 - Fair distribution of development revenues;

- Increasing availability of labour opportunities for competent poor people;
 - Focus on rural development.
- b) For youth and adolescents
- Development of programmes to address the needs of young people:
 - Organization and coordination of intellectual and creative activities for young people and encouragement of their creativity and imagination;
 - Building of partnerships with the national organizations, corporations and youth unions, and promotion of their benefits and activities.
 - Sports development:
 - Promotion of necessary infrastructure for the development of sustainable sporting excellence.
- c) For Health
- Sustainability of social development and achievement of the MDGs through:
 - Reduction of mortality rates for children under five years of age by not less than 50%;
 - Reduction of mortality rates among women at childbirth by 50%;
 - Control of the spread of HIV/AIDS;
 - Reduction in the incidence of malaria infection;
 - Discouragement of antisocial behaviour that can lead to the spread of disease and undermine the moral strength of society.
- d) For Education
- Sustainability of social development and achievement of the MDGs through:
 - Increase in the spread and quality of basic primary education provision;
 - Raising the enrolment rate for basic education to 80% and increasing the rate of completion and transfer to secondary education – particularly for girls;
 - Development of technical and technological education;
 - Development and approval of educational curricula with inclusion of features reflecting the special aspects of Sudanese identity;
 - Support and optimum utilisation of scientific research activities and the use of modern technology in different domains:
 - Encouragement of scientific research which is oriented towards the solution of the Nation's challenges;
 - Encouraging greater use of all available information and the outcomes of scientific research, as well as modern technology in decision making processes, and in planning for social development.
- e) For water and sanitation
- Sustainability of social development and achievement of the MDGs through:
 - Delivery of projects for (or with demonstrable attention to) environmental sustainability;
 - Reduction in the number of people who do not have access to secure safe drinking water, and people who have no sewage systems;
 - Optimum exploitation of natural resources and maintenance of the environment:
 - Preservation of a clean environment and attention to threatening factors;
 - Raising environmental awareness;
 - Achievement of a balanced sustainable development.

6.6.3 Intervention Programmes

6.6.3.1 National level programmes

Capacity building to empower civil societies to strengthen their role in developing the economy and in achieving the balanced development:.

- ❖ Capacity building to empower civil societies to play their part in influencing government, the direction and growth of the economy, and the effective implementation of strategic plans at regional and local levels;
- ❖ Activating and supporting the national and foreign voluntary effort and employing international organizations aid in the social, youth, sports, health, environmental and cultural fields and the humanitarian affairs and building broad partnerships with civil society organizations.
- ❖ Empowerment of youth through workshop, projects and media to activate their political and socio-economic participation through strengthening Youth organizations.
- ❖ Align vocational training and education outputs to labour market needs to increase employment opportunities through capacity development of supply-side institutions;
- ❖ Double efforts in scientific research and focus higher education priorities on the needs of the economy.
- ❖ Adoption of Concentrate Language Encounter Approach (CLE) by government to reduce the illiteracy gap.
- ❖ Activating the role of Parent Teacher Association (PTA) to strengthen the link between the community and educational institution.
- ❖ Emphasise quick start and impact projects specifically to facilitate reintegration of returnees and support for war-affected groups;
- ❖ Build institutional and organisational capacity of government employees – particularly for the leadership and management of the administration at the Federal, State and local levels.
- ❖ Special projects should be implemented by Ministry of Welfare and social security in partnership with international organizations for rehabilitating the persons with special needs and integrating them in the society.
- ❖ Special programmes should be implemented by Ministry of Health for supportive, preventive, curative and rehabilitation of health services and achieving justice in distribution.
- ❖ Ensure balanced sustainable development at State and local levels through equitable resource allocation and service delivery in the areas of education, health, housing, water and sanitation to ensure progress towards achievement of the MDGs;
- ❖ Focus specific projects towards poverty alleviation through community development projects to ensure a fair balance between urban and rural areas, and develop quick start and impact projects in this field;

6.6.3.2 Regional level programmes

- ❖ Develop regional and local administrative capacity for the planning, and management of programmes and projects.
- ❖ Building a good networking and partnership mechanisms between different countries in IGAD region

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7. Peace and Security (PS)

By Mohamed Gafar Anan

7.1 Brief Introduction of the sector

Peace and security are fundamental basis for the political, economic social and cultural development of any nation. No wonder that they are one of the main thrusts of IGAD to ensure resilient livelihood and sustained economic growth in the region. Cross cutting issues of peace and security include governance, politics, human rights, foreign relations, refugees and borders. Hence keeping peace and security under control is not an easy mandate for a country like Sudan with a border line total length of 6780 km. The situation becomes even more difficult when the border is shared by seven countries almost all of them are economically and/or politically unstable. Sudan shares 1273 km with Egypt, 636 with Eritrea, 727 with Ethiopia, 1973 km with south Sudan, 484 km with Central Africa, 1348 km with Chad and 383 km with Libya.

Peace and Security are one of the important focal sectors in Sudan. It is considered one of the main interfaces that reflect the country's sovereignty, independence and prestige. Hence it is listed under the focal sovereignty of the comprehensive strategy that is adopted in Sudan. Absence of peace and security means absence of stability, development, loss of human and economic resources, consequently leading to circumstances of turmoil and chaos that can be extremely difficult and costly to handle. Therefore the government places peace and security on top of its priorities, setting plans, programs and spending resources to achieve it. The security sector is managed by several institutions *i.e.* The Presidency and the leaders of the security services and a number of ministries and departments related to security sector.

7.2 Root causes and effects of the challenges facing the sector in Sudan;

Governance, politics and human rights

Of the main challenges facing the sector are the inconsistencies in political consensus, divergence of views among the political organizations and parties with different ideologies regarding governance of the country. **The present governing political party** adopts the Islamic line while recognizing freedom for all as approved by the Bill of Rights in the Interim Constitution of 2005. The opposition parties see that the ideology followed does not suit Sudan as a multiracial, multi-religious country. **Moreover**, opinions vary as to the feasibility of the federal system and the economic policies adopted (economic liberalization policy).

Human rights violations are expected in armed conflict areas by the fighting groups. However, in most cases fingers are pointed to national security forces, unfortunately by hostile foreign circles. In many instances eyes are closed when the human right violations come from the armed opposition movements. UN role is neither fair nor effective in bringing an end to such violations and its role is limited to provision of technical support to enhance human rights status in Sudan.

Armed conflict

Armed conflict remains the most important challenge facing development in Sudan. The pattern of economic growth had always been lopsided between regions and social groups, benefiting few areas and limited social groups *i.e.* what political opposition and their armed groups call **marginalization**. The gap in income inequality, unemployment and incidence of poverty are realities in Sudan reported by international agencies (UNDP, 1997). These factors resulted in mobilization of armed movements

leading to a security flaw in the conflict zones, especially in Darfur rendering displacement of people inevitable eventually harming the social fabric and disrupting development and provision of services. In addition, tribal and regional disputes especially in Darfur and Kordofan, flare up over competition on natural resources *e.g.* land, pasture water...etc. leading to losses of lives and property. The government interferes and resolves the dispute via reconciliation which costs huge amounts of money and resource that might have been invested in the development of the same areas. Climate change also plays its role via desertification, drought & natural disasters, in addition to foreign intervention and its support of armed movements.

Economy

The international economic crisis and the economic sanctions imposed on Sudan had negative effects on a lot of economic sectors particularly agriculture, which supports the livelihoods of 76% of the rural population, industry and transport. All that resulted in low production, rise in exchange rate of Sudanese currency against foreign currency, extreme hike in prices of services and commodities, and deterioration of living conditions. The economic crisis was aggravated after secession of South Sudan. These developments have increased ill-feelings and frustration among all sectors of the society especially the rural poor.

Security

The challenge facing the security sector is how to handle and deal with the existing threats most of which are economic, social or political reasons. The matter necessitates functional and physical capacity building, to confront insecurity. So the shortage of trained human elements and the insufficient materials resource are the main reasons which is an alarm for crime spread and security flaws.

Border Challenges

Border challenges emanate from various reasons like trans-crime (Organized crime), terrorism and drugs and arms trafficking. Sudan has been both a transit and a destination for illegal migrants and trafficked people from the Horn of Africa. Sudan is hosting about 100,000 Eritrean and Ethiopian refugees, has suffered from human trafficking and took a number of steps to curb it. The occurrence of such crimes is attributed to the geographical situation of Sudan along with easiness of communications and transport. So coordination and cooperation between neighbouring countries is an absolute necessity. Also the lack of demarcation of borders, led to disputes with South Sudan, Egypt and Ethiopia. In addition, sea borders and the non-populated isles that remain uncontrollable by the security authorities aggravate the situation.

Humanitarian Affairs

Challenges facing the humanitarian issue are the continuous and huge flow of refugees from their homeland for political or economic reasons (political or economic refugee) as well as National Service conscription (DRAFT) evaders in their respective homeland. The problem facing Sudan is how to absorb the big number of refugees that are now more than 166000(the number outside the camps could reach ten times). Although the responsibility for those in the camps is handled by the UNHCR, the UN policy towards refugees is to return them to their respective homelands or

reintegration & settlement in Sudan, which will cost Sudan heavy price in the near future because the UN would be no longer responsible after integration and resettlement in Sudan since the UN lift her hand once the refugees are integrated and settled in Sudan.

The effect of armed conflict is evidenced in security disorder, chaos ,instability and displacement of citizens leaving behind their villages and ways of living like farming and animal grazing .This also applies to those affected by natural disaster: drought, desertification and flash floods, hence they are forced to migrate to other proportionally safe locations leaving their villages ,farms and livestock. Eventually the government has to spend more money out of its already depleted resources to aid those displaced either due to armed conflict or natural disaster. Speculations that displacement is associated with health and social problems like disruption of the social fabric in areas of armed conflict needs be proved

7.3 Major opportunities for the sector development

In the scope of governance and politics, there emerged a political will for dialogue among all parties that might lead to a political consensus. The government commitment to negotiation was expressed in the President's speech (The Jump Speech) where he identified a number of the most important themes of peace, identity and economy. One of the dialogue approaches was the mechanism of (7+7) composed of the government & the opposition. The 7+7 mechanism has already started its work towards conducting national dialogue that comprised the entire political spectrum, along with the community dialogue consisting of all community sectors to express their opinions freely in terms of how to handle all the national issues. The ultimate objective of the task was finding a solutions to Sudan's historical problems, and thus to complete the required picture towards national reconciliation.

In the scope of peace, the political commitment of the government and the armed movements to the peace was obvious through conducting talks and dialogue. In addition the implementation of Darfur & East Sudan Peace Agreements, along with the treaties with South Sudan regarding Blue Nile & South Kordofan has come into effect.

In the field of border, there is a good legal cover & deep commitment on the government side for bilateral, international and regional agreements as well as through regional & international security organizations of the African Union & IGAD, together with the national laws regarding combating terror, human trafficking, terror financing and money laundering, with the political will to solve border issues with Egypt & Ethiopia via negotiations.

7.4 Current national Policies, strategies

➤ The quarter century strategic plan 2007/2031

The strategic vision of the Sudan revolves around the completion of building a unified, safe, civilized, advanced and progressive Sudanese nation. Objective targets have been put into place to achieve the comprehensive vision as follows:

1. The completion of the constitutional and administrative structures of the federal government and activate its institutions pursuant to the transitional constitution as per the Comprehensive Peace

Agreement, and to enhance presidential governing system, and develop the parliamentary and supervisory work.

2. To maintain the unity of the homeland and strengthening its sovereignty.
3. To achieve and maintain security in its comprehensive concept.
4. To enhance trust and national loyalty and peace keeping.

➤ Governance

- Regarding governance the comprehensive strategy called for achievement of good governance through the peaceful exchange of power & to establish a constitutional and institutional structures and actors with the development of the justice system to strengthen and develop the levels of the federal and State governments. The plan put in place policies for commitment to transparency and accountability in handling the homeland affairs and issues.
- the State is seeing the promotion of democracy and Shura in the Sudanese political life, and started to apply the relevant criteria through political pluralism, parliamentary supervision and freedom of expression. Hence, private satellite channels spread in addition to radio stations along with quite a number of newspapers and electronic publications without restrictions other than law.
- For this purpose the government formed the Electoral Commission, special election Act that came into force in the elections of 2010, which resulted in the National Congress Party winning the elections(under the supervision of the international and regional community and IGAD) and formed the incumbent government

➤ **Human Rights & Gender:**

In the Transitional Constitution of 2005 there is a complete Chapter for "Bill of Rights" in which quite a number of human rights were renewed and/or introduced e.g. the right of a decent life , personal liberty , freedom from slavery and exploitation, equality before the law , the rights of women and children, prohibition of torture, right of litigation. There is an Advisory Council for Human Rights, composed of government and non-governmental organizations relevant to human rights.

There is an independent expert concerned with human rights. He visits the homeland periodically, presenting his reports in terms of human rights status in Sudan. He is availed with complete freedom and cooperation of the government to review the situation and submit his reports to the UN. The establishment of the **National Commission for Human Rights** and enabling it to perform its role, is a further step in the direction of the promotion of human rights.

More attention is given to **gender** and the involvement of women in various aspects of life and to continue programs to protect children and women. The comprehensive Strategy guarantees equal rights of women and men in all life aspects. The government implemented the 25% for women in parliamentary membership, council of ministers and other official positions. Also the establishment of the Unit for **Combating violence against women and children (CVAW)** which has developed a plan designed to deploy the protection and promotion of peace and anti-poverty programs and interest in the provision of health services and social protection.

➤ **Security and peace**

- National Intelligence & Security Service (NISS) operates according to a policy based on building a highly efficient service to improve the work environment, widely spread and enhanced by modern technology. It has work scopes:1/ internal scope linked with internal homeland issues in terms of providing security ,support peace and reconciliation issues, provision of useful & integrated intelligence information to decision-makers, directing state policies and follow up and report on the problematic issues of everyday life and the requirements of the citizens.2/ In the outer sphere it follows a policy based on bilateral regional and international cooperation with all nations to confront the common challenges.
- "Peace priority is unmatched by any other priority"- that is an expression in the **Comprehensive Strategic Plan (CSP)** while establishing guidelines for the peace plans. CSP adds that peace remains responsibility of the government & the entire community and final peace cannot be achieved without a Sudanese will. Hence it remains necessary to gather the national will before seeking other ways. This plan is based on the Constitution in terms of peace and national reconciliation and agreements. The objective of the plan is to seek to unite the internal front and employ foreign relations in the service of peace.
- Efforts are underway to activate the mechanism of **Warning and Early Response**, focusing especially on the Sudanese-Ethiopian border and with the State of South Sudan overlapping areas. And it is hoped to expand the work of the early warning system to include internal conflicts like Darfur conundrum & tribal conflicts in order to ensure facing the problems before their occurrence

➤ **Border issues**

- There is a joint committee to conduct exploratory survey in order to demarcate the Sudanese/Ethiopian borders with a length of about 1606 Km.The committee reports to the joint political committee; however, there are certain problems due to intervention of Ethiopian farmers in Minor and Greater Fashga areas that pertain to Sudan. Such incidence leads to friction between the two parties, while efforts continue to resolve the issue.
- After long negotiations, the mutual 9 agreements of cooperation with South Sudan were signed, and among them were the border issues. The agreement came up with the treaty of soft borders including border trade, security and population/pastoral overlap. The AUHIP under the chairmanship of Thabo Mbeki suggested a map called Thabo Mbeki map that determined the zero line and the border zone ((SDBZ) distancing 15 Kms from the borders of each country.
- Implementation of Human trafficking Act, Terror combating Act and other relevant Acts , to be followed by joint security conventions, programs and operations with the neighbouring countries in addition to capacity raising, provision of technical aids & rapid intervention ,community policing with developing the border areas, will improve the situation.

➤ **Disaster**

- Contingency planning, establishing readiness for particular hazard types is happening at State level and within ministries. Contingency plans exist at State level based upon State'-

specific scenarios. **The National Environmental Action Plan** has not yet been finalized. There is a **Climate Change Adaptation Action Plan** (supported by GEF and UNDP) with pilot areas in five States. The Action Plan defines climate change scenarios and proposes adaptation activities.

Institutional framework

- Key security institutions in the country are:
 - The **Armed Forces, Police and National Intelligence & Security Service (NISS)** coordinated by,
 - **The National Security Council** as the highest entity chaired by the President and
 - Includes key ministries such as the of **Ministry Defense ,interior, justice** and the **Ministry of Finance** .Its task is to draw the security policy in the homeland along with follow up through its arms in the various States
- Disaster Risk Management Institutions and Organisations are
 - On the political level Sudan has a **Ministerial Committee for disasters and humanitarian response** under the first Vice President, the **Higher Council for Civil Defence (HCCD). The Humanitarian Aid Commission (HAC).**
 - **The Higher Council for Environment and Natural Resources.**

7.4 Important interventions

- ❑ The law regulating political action in the presence of Political Activity Registrar& other mechanisms for democracy like Elections Committee, led to a democratically elected government along with future readiness for any democratic entitlements. Moreover, the steps of national dialogue are in full swing, which led to the formation of a mechanism known as 7+7 that is hoped to result in political reconciliation.
- ❑ In terms of peace, the CPA has established peace putting an end to the longest African war, leading to the birth of South Sudan State. Now it is necessary to implement the various treaties of peaceful coexistence between the two neighboring countries. Implementation of the CPA has been closely monitored by the concerned authorities in the two countries along with IGAD and AU. Negotiations regarding the Blue Nile and South Kordofan took off between the government and SPLM/North, while the 7+7 mechanism is moving in the same direction.
- ❑ Regarding Darfur conflict, a lot of agreements have been ratified ,the most comprehensive of which was Doha agreement (**DPD**) that is now under implementation via several administrative, security and economic arrangements. Of the outcomes are the formation of the Transitional Authority for Darfur, and involvement of several Darfurians in central & state Constitutional posts. The security arrangements lie in the presence of the UNAMID forces and the national forces. Qatar document (DPD) continues to be open for all other non-signatory armed movements to join.
- ❑ For disaster management Early Warning Center participates efficiently and effectively in managing some constituent groups for disaster managementsuch as
 - FTF Flood task force
 - Flood security and livelihood FSL
 - FSIS food security and insecurity
 - CEWRU Conflict early warning and response

- DRM Project disaster Risk management (UNDP + Higher counseling of civil devices).

❑ Disaster Risk Management Initiatives by International Organisations in Sudan

- Support by international organisations is largely in areas of emergency response, contingency planning and preparedness. There is no systematic and little actual support for comprehensive disaster risk management. UNDP has had intermittent engagement with government on disaster risk management but thus far this has not led to substantial progress being made in establishing national coherence. FAO provides resources to build food security and protect livelihoods (as does UNDP). WHO plays a lead support role in health emergencies while UNICEF provides emergency support to children through education, health and water and sanitation sectors. WFP provides food relief and along with HAC and FAO conducts annual crop forecast and food needs assessments.
- The role of the UN in supporting government both federally and at State level includes assistance to emergency, contingency planning and support to humanitarian action. It also provides a link with development objectives through its oversight of the UN Development Assistance Framework (UNDAF) and its responsibility in early recovery. UN agencies have provided technical support to State Governments to assist the development of contingency plans for responding to disasters triggered by key hazards, these plans built around the development of scenarios. HAC takes the lead in this process along with the UN agencies and NGOs. The contingency planning process should involve all the major stakeholders.
- UNDP's Crisis Recovery and Mapping Analysis (CRMA) Project has provided mapped, in-depth situational analyses covering different sectors and threats for key areas (such as Eastern States and South Kordofan) to assist government to apply evidence-based planning and has provided some key capacity development for information focal points in relevant ministries in these States.

❑ Regarding border issues, the most important interventions is the signature of the International Convention for the fight against Transnational Organized Crime, via which Sudan could cooperate regionally & internationally to fight such crimes. Sudan issued a code criminalizing human smuggling and trafficking with hard punishment amounting to death sentence against traffickers. Also established a mechanism to combat and prevent human trafficking. The immigration police started a massive border control patrols to crack down against traffickers and it has achieved success with the number of deportees reaching 300 persons.

❑ Sudan is committed to the international community through its membership in the United Nations and many international and regional organizations such as the AU and the Arab League and the Islamic Confer, IGAD and the IGAD program of security sector. Sudan has signed several agreements related to the scope of security for example, Sudan signed thirteen agreement out of sixteen special conventions to combat terrorism and weapons of mass destruction, as well as the Convention against Transnational Organized Crime , the UN Convention against Corruption , the Single Convention on Narcotic Drugs and the Convention on the IGAD extradition and judicial assistance. In the frame of international cooperation Sudan joined Rome Declaration 2003 to combat poverty, the Paris Declaration on aid

effectiveness, 2005, the Convention on the IGAD 1986, the NEPAD 2001, the agenda of the work of Accra 2008, the Cotonou Agreement in 2001, COMESA 1994, the Brussels Plan of Action for the least developed countries 2001/2010.

All of these areas represent opportunities for regional and international cooperation and coordination.

Lessons Learnt

- ✓ Adoption of strategic planning e.g. QUARTE Century Strategy (2007-2031).
- ✓ Quiet Diplomacy in dealing with International issues, dialogue and negotiation to target national reconciliation e.g. CPA, Eastern Sudan Agreement, Darfur Agreements.
- ✓ Interest in scientific research and the creation of research centers in the areas of peace and security, which is a positive development that moves the security services via a scientific qualitative approach to the world of modern technology.
- ✓ Involvement of civil community organizations in all life aspects in order to enhance its role in peace, security and other important issues, which is the current orientation of the government, and shall be strengthened by community dialogue.
- ✓ Use of the latest technology to assist in strengthening the work of the security services to raise the capacity and the required efficiency.

Future aspirations

- ❑ It is hopeful that Sudan people arrive at peaceful solutions for the current or future problems. The homeland aspires to take advantage of the available opportunities to release the intricate economic situation of its constraints. The endowed natural resource wealth of agricultural land, water for irrigation, minerals and abundant livestock can easily lead Sudan to better horizons of progress and development.

7.5 Conclusions and Recommendations

7.5.1 Conclusions

- The security sector is one of the most important sectors for all aspects of the development. Therefore the government formulated strategies, established institutions and secured funds for it as a top priority to enforce laws and maintain peace.
- The Comprehensive Strategic Plan(CSP) provided a wide area for issues of politics and governance, and the chance is now available to achieve national reconciliation that leads to stability followed by sustainable development.
- Opportunities could be utilized to overcome the challenges listed in the report.

7.5.2 Recommendations

7.5.2.1 General Recommendations

- Implementation of the quarter century strategic plan 2007/2031 particularly in areas relating to peace and security as a priority.
- Implementation of the plan set by the Advisory Council for Human Rights in Sudan with the necessary technical support for human rights programs.
- Implementation of the plan pertaining to the Unit of Child & Women Protection (CVAW).
- To intensify the development efforts for the areas hosting the refugees and seek to find lasting solutions for refugees and humanitarian issues.
- Seeking root solutions to tribal conflicts.
- Seek to resolve problems constraining economic development in cooperation with regional & international entities.
- Rehabilitation of disaster prevention units.

7.5.2.2 Specific Recommendations

- Good governance, rule of law, freedom and human rights is required for continuation of the national dialogue and reconciliation.
- To emphasize Raising security forces capabilities necessitates support by training and modern equipments.
- Enhancing exchange of information & expertise with international and IGAD regional conventions.
- Continuation in peacekeeping and peace building programs as well as implementation of the peace agreements.
- To activate the early warning mechanism in Sudan must be financially and technically supported with the study of the possibility of expanding its functions to cover all aspects of conflict and, dispute and disaster.
- Vulnerable populations need to be aware of the hazards and the related effects to which they are exposed and be able to take specific actions to minimize the threat of loss or damage.
- Local communities need to have sufficient familiarity with the hazard to which they are exposed. Community leaders must understand the advisory information received, to be able to advice, instruct or engage the population in a manner that increases their safety or reduces the possible loss of resources on which the community depends.
- National governments need to exercise sovereign responsibility to prepare and issue hazard warning for their national territory in a timely and effective manner. They should ensure that warnings and related protective guidance are directed to those population determined to be most vulnerable to hazard risk. The provision of support to local communities to develop knowledge and response capabilities is an essential function to translate early warning function into risk reduction practices.
- Regional institutions need to provide specialized knowledge and advice in support of national effort to develop or sustain operational capabilities, especially for countries that share a common geographical environment. Regional organizations are crucial to linking international capabilities to the particular needs of individual countries and in facilitating effective early warning practices among adjacent countries.
- International bodies need to provide the means for the exchange of data and knowledge as a basis for the efficient transfer of advisory information as well as technical, material

and organizational support for the development and operational capabilities of national institutions officially designated as responsible for early warning practice.

- Focusing on the mainstreaming of disaster risk reduction into development planning, on the strengthening and enhancement of institutional capacity, on improving early warning and information management, on the creation of a national database including the framework for promoting community risk assessment and on building mechanisms to promote increased cooperation, networking and coordination between stakeholders at national, state and community levels.
- Completion of border demarcation with neighbouring countries.
- Conclusion of agreements on security cooperation between the countries of the region.

7.5.3 Intervention Programmes

7.5.3.1 National level programmes

- Training programs to raise professional and technical capacity of Security and peace Services.
- Programs for the reform of the security sector by benefiting from the plan of the African Union and IGAD.
- Awareness raising regarding human rights as per the already prepared plan.
- Formation of committees to demarcate borders after studying the matter thoroughly.
- Activating the work on the Sudanese-Ethiopian border.
- To establish strategic developmental plans that enhances humanitarian response regarding disasters.

7.5.3.2 Regional level programmes

- Programs to reform security sector on the regional level.
- Plans and training programs for joint operations on the regional level (to benefit from Chadian/Sudanese experience in this context).
- Conclusion of agreements and harmonization of legislation and laws on the level of the region, creating understanding and harmony in dealing with security problems.
- Programs for border demarcation with the regional countries.
- To address trans-crime (Organized crime), and human trafficking particularly in East Sudan.
- To enhance units of Women & Child Protection & Preservation of human rights.
- Programs that contribute in sustainable solutions for humanitarian problems.
- To solve disputes inside the respective countries to prevent refugee flow.
- Programs to prevent disasters and provision of financial and technical support.
- Studies and programs to promote democracy and freedoms and foster a spirit of dialogue within countries of the region.

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8. Gender Affairs (GA)

By Dr. Shadia Abdel Rahim Mohammed.

8.1 Brief Introduction of the sector

Sudan has long been party to the Beijing Plan of action throughout the decades. In 1995 the world's women, including the delegation from Sudan, met in Beijing, produced a document for governments to adopt. This was a milestone for advancing women's rights and empowerment (GDWFA, 2014). Sudan ranked 129 out of 187 on the 2012 Gender Inequality Index (value 0.604). Sudan National Human Development report calculated for the first time human development index values for men and women. For Sudan the report states that in 2008, human development for females was the highest in Khartoum State and the lowest in South Darfur. The gender gap for Sudan as a whole was estimated at 0.095. The gender gap is widest in South Darfur (0.132). Gender differences against females exist in human development components, except for longevity, in which females are better off than males (UNDP 2012) 81.4% of rural women involved in farming, forestry and fisheries compared to 58.1% to males (Ministry of labor 2011). Although women play a crucial role in agriculture, contributing to both the GDP and to household food security, their contributions to the overall economic development process continue to be undervalued (FAO WFP, 2007).

8.2 Root causes and effects of the challenges facing the sector in Sudan

- Lack of gender disaggregated data of most of line ministries of Sudan limited the determination of the gaps in empowerment or disempowerment of women and men so that gender gaps cannot be discovered and readdressed and gender discrimination would not overcome. It is often difficult to establish evidence based causal links between impacts of gender inequality on a Sudan's development because of the lack of available sex-disaggregated data. One way to measure gender inequality is to look at the differences for women and men in areas such as education and health, decision making and access to economic opportunities .There is no a clear policy on the need for gender disaggregated information and analysis to tap into information about the gaps and to see how men and women can be involved. Agriculture and food security data are not disaggregated by sex that limit the existence of the clear policy of gender equality and women empowerment. It is moreover all of the agriculture and food security projects were not based on gender analysis and there were no gender indicators to evaluate the impact of the projects on men and women. Gender capacity building conducted by national and international organization focused on gender awareness rather than on technical skills to conduct gender analysis and mainstreaming gender. Analysis based on quantitative data reveals that considerable progress has been made in terms of women's access to education and health care in Sudan. However, this level of analysis doesn't show how gender inequality influences policies. This is why we decided to dig deeper. Furthermore lack of gender disaggregated data lead to unavailability of gender indicators that measure changes relating to gender equality over time, which can be measured separately for men and women .Gender equality indicators improve planning and programming. They can be used to evaluate the outcomes of gender specific and mainstream interventions and policies and help reveal barriers to achieving success.

- Gender equality is an important priority for the Sudan agenda but competes with other, more politically important and with higher profile priorities in continental, regional and national structures. Therefore, it is no surprise that more often than not, **gender equality is not one of the first key priorities** mentioned especially during important and high-profile occasions such as meetings and/or summits with groups of donor countries and Private investors from the developed world. The key priorities such as economic growth, fair trade, development, economic and political integration, infrastructure investment, peace, security and stability, usually receive greater attention.
- The Beijing Platform for Action emphasized the need to systematically integrate gender perspectives in decision-making processes across all sectors. One of obstacles to full implementation is the perception that gender mainstreaming should be dealt with by women or by the women's initiatives There is still not widespread understanding that gender mainstreaming contributes to informed analysis and to effective decision-making and policy processes. Attention to gender equality is often perceived as less urgent than, for example, action to eliminate poverty, poor health or low productivity, which illustrates the limited understanding of the links between gender equality and other development issues. Understanding the rationale for taking account of gender equality is but a first step. It must be followed by increased experience and skills in integrating gender perspectives, into all sectors and agencies.
- There exists a strong tendency amongst policy makers in Sudan to equal 'gender' with 'women'. for example, it appeared that 'gender' was mostly translated into a single focus on women's needs and women's empowerment, without this being clearly rooted in a gender analysis or strategy that addresses power relations between men and women.
- **Laws promoting gender equity in formal sectors employment are not enforced adequately and in fact challenged by prevalent male bias practices.** Majority of women are engaged in activities which are not supported by legal frameworks so they cannot claim rights for equity and protection. The Sudan is still to ratify CEDAW the most important framework for advancement of women. Advocacy efforts should continue to influence politicians of importance of such frameworks for women empowerment. It is worth mentioning that the Sudan registered reservations all articles that contradict Islamic law (the Sharia) on the adoption of CEDAW by UN general assembly in December 1979).
- **Women's issues are cross-cutting, multidimensional and interrelated,** which requires, providing considerable budgets for programs, projects and activities for women, and that in all respects, the budgets allocated for the implementation of those plans and programs are limited, resulting in scattered activities, unsustainable, and lacked effective mechanisms in the process of evaluation and follow-up, especially at the State level.
- Sudan's experiences recurrent and prolonged conflicts, the adverse effects of climate change, HIV/AIDS, massive internal displacement and out migration. These and other factors constitute major challenges hindering the effective implementation of national gender policy and strategy.
- The enabling environment for gender equality and women's empowerment may also be influenced by factors that are not easily controlled by individual Governments, organizations or communities, for example, the global political and policy environment, the availability of international financing for development, and the development of new technologies. Some global trends and measures also affect women at the micro-level. Globalization, including trade

liberalization for example, affects women's migration and employment. Changes in aid modalities and structural reforms, while aiming to create overall enabling environments for development, may have limited or even adverse effects if they do not take into account gender perspectives and the interests and needs of women.

- The persistence of gender gaps is also related to the limitations in programming approaches and conceptualization. Despite those activities aiming for 'capacity building' still needed expertise for gender- sensitive programming is lacking in government. This is because what is done is training without mentoring and monitoring for impacts on practices. The training by time turns to be theoretical exercise.
- The study identified progress of considerable numbers of women's rights and laws verified by government .But the lack of coordination, advocacy and lobbying limit the use of these rights for the support of gender equality.

8.3 Major opportunities for the sector development

- ✓ Over the years, gender mainstreaming programs in Sudan have provided space for some progress on some issues of concern to women. Several institutional arrangements and instruments have been used in different combinations in different ministries and units with different degrees of success and effectiveness. These include gender focal points and units in various ministries, departments, government agencies and inter-ministerial taskforces for particular programs, gender policies, inter-ministerial bodies, funds, legislation and gender budgeting.
- ✓ Over the years Sudan has managed to forge strong partnerships with countries and organizations supporting gender efforts to the promotion of gender equality and women's empowerment. National mechanism has a network of relationships with other stakeholders, including other ministries, agencies and donors, civil society and regional and international bodies.. Although UN-Women and other UN Agencies, UNDP and UNMIS, have provided technical support, implementation of the policy. International cooperation based on partnership and equality is one of the most important arenas for promoting gender equality. International organizations have proved vital for the capacity building of national mechanisms. (GDOWFA 2014 and GDOWFA 2011, UN women 2012).
- ✓ National Mechanism of gender equality in Sudan has developed many partnership to create environment favourable to gender as follows:
 - Membership in international and regional committees, for example:-
 - Family Committee Arabic – Arabic-League
 - World family organization-the Organization of the IslamicConference, The Economic Commission for women (ECW) Center for gender and development – African Union the African Women Committee – -Intergovernmental Authority on drought and development (IGAD), the status of women in the economic and Social Commission for Western Asia (ESCWA), the non-aligned movement, the common market for Eastern and South Africa.
- ✓ The unit for combating violence and the center for women human rights in co-ordination with the Ministry of Justice developed a committee to revise Sudanese laws addressing women

- rights in accordance with the interim national constitution 2005 and the ratified laws by Sudan. A workshop was implemented to discuss the outcome. The Unit implemented three surveys on the national definition of GBV , the incidence of GBV in Khartoum state, and the last survey was on the effect of violence on health and economy The unit started to develop a database for indicators of VAW from all states and concerned institutions
- ✓ A unit to combat violence against women and children within the ministry of justice was formulated by a decree from the president. Nov2005. Main of many activities conducted by the unit :
 - Ensuring the commitment of the government.
 - The unit of combating VAW implements a workshop with gender unit, UN special mission about the -UNSCR 1325 and the Ministry of Justice issued measures to combat violence against women in Darfur and declared it in public media in co-ordination with the U.N special mission in Sudan 18th August 2007.
 - The prosecutor general issued a circular No. 7 to facilitate protection and legal rights of women in Darfur. A protocol for clinical management of victims of rape to ensure documentation of medical history for victims of rape, revised and developed in co-ordination with the unit and UNFPA to help victims to have the right for legal compensation at any time required (Atiat 2014).
 - ✓ The 2008 Census has been disaggregated by sex and age-group, and some surveys funded by donors have collected additional gender-specific information.
 - ✓ Planning processes within government toward achieving the MDGS provided opportunities to addressing many of the critical areas of concern of the Beijing Platform for Action.
 - ✓ The United Nations Development Assistance Framework (UNDAF) for the Republic of Sudan is the result of a consultative process between the Government and the United Nations Country Team (UNCT), analyzing how the United Nations System can most effectively respond to the national priorities. UNDAF will be implemented through the Country Programs and Country Cooperation Frameworks agreed to by United Nations partner organizations in Sudan. UN women contributions of implementation of three pillars to achieve gender equality.
 - ✓ Availability of Gender mainstreaming and agricultural development unit can play efficient role in gender equality and empowerment of female farmers in partnership with FAO, WFP ,IFAD and other regional agency. Establishment of 14 women departments of State ministries of Agriculture as focal points to mainstream gender in agricultural projects.
 - ✓ There are opportunities for national mechanism to make significant gains in the national, Regional and international contexts. Institutional mechanism has grown to expand their work beyond project implementation and more involved in policy work.
 - ✓ In Sudan Civil Society organizations play critical role in gender equality and empowerment. They are one of important institutional mechanisms. Most of them have good and long experiences and qualified committed staff for gender equality.
 - ✓ Ministry of Finance and National Economy in partnership with Ministry of Welfare and Social Security, UN women and African Development Bank, conducted as part of the project of Public Financial Macroeconomic Management Capacity building Project (PFMMCBP) training workshop on gender –responsive budgeting (Nov 2014).
 - ✓ The establishment of the African Union (AU) and its institutions, particularly the Directorate for Women, Gender and Development under the Office of the Chairperson of the AU Commission, as well as the Women and Gender Sectorial Cluster Committee as one of the ten such committees of the Economic, Social and Cultural Council (ECOSOCC) of the AU, are developments which have given some impetus to work on gender equality and provided commitments that national mechanisms can pursue.(AU (2004).

- ✓ IGAD has pivotal roles in creating broad consensus through participation in relevant fora and facilitating the implementation of international, regional and national commitments on gender-related issues.
- ✓ IGAD has acquired high-level diplomatic and negotiating skills and these are highly needed competencies essential for all development programs in general and for gender mainstreaming in particular. In this regard, IGAD's ability to engage regional and international partners and to speak with one voice for all the member states.
- ✓ Regional Ministerial Meeting of Women's Affairs at IGAD which was held in Khartoum to discuss the involvement of women in the peace process. The meeting went out to plan to integrate type in the process of peace-building and conflict resolution.

8.4 Current national policies, strategies and institutional frameworks and gaps for the development of the sector

National and Sectorial Policies For Gender Equality And Empowerment of Women.

Successive governments focused on the formulation of policies and strategies targeting women. The most important was the Comprehensive National Strategy (1992-2002), which devoted special strategy for Women and followed by the establishment of the Ministry of Social Welfare and Women and Child Affairs after the Beijing Conference. The new ministry represents the national mechanism tasked with advancement of women. It was followed by the formation of the national plan for the Advancement of Women, which included the crucial themes of Beijing approach (GDOWFA, 2014).

There are a number of policies and decrees and laws that have been formulated to promote women empowerment in Sudan. These include:

- The National Policy for Women Empowerment has been issued by the Council of Ministers (March 2007) which encompasses identified seven critical areas: Poverty, Women and Economic Development, Women in Education, Women and Reproductive Health, Women's Political Participation, Women and Peace, and Gender Based Violence.
- The 25 year National Strategic Plan for (2007-2031) incorporated women's advancement by focusing on the contribution of women to the Renaissance of the Sudanese society. National Women Empowerment Policy, endorsed by the President of the country in 2007 considered the pillars of the Beijing Platform. The policy focused on 6 pillars for empowering women: education, health (including environment and hygiene), political participation, peace and conflict resolution, economic empowerment and human rights.
- Three government institutions lead implementation of the policy, i.e., Women Centre for Peace and Development, Women Human Rights Centre and the Strategic Centre for Community Rehabilitation which are affiliated within the premises of the Ministry of Social Welfare.
- The detailed action plan formulated for implementation of policy and this was included in the Five Year Strategy for the years 2007-2011.
- The formulation of a Five-Year Strategy for Child Welfare 2007-2011 in partnership with ministries of concern with children as a comprehensive and integrated strategy.

- The Strategy for Combating HIV/AIDS among women with full support from National program combating HIV/AIDS and UNAIDS and civil society.
- The National Population Policy emphasized gender equality in realizing population and development programs (GDOWFA, 2011).

Institutional framework for Gender Equality and Women's Empowerment

Institutional Arrangements:

The main national women's machinery in Sudan is the **General Directorate of Women and Family Affairs (GDOWFA)** which is housed in the Ministry of Welfare and Social Security (MOWSS). The Directorate is charged with mainstreaming gender concerns into policies and plans for empowerment of women. National mechanism in Sudan adopted the multiple mechanisms in which there are six mechanisms include departments, divisions and units in ministries, parliamentary caucuses and select committees, gender focal points/gender. The establishment and use of multiple mechanisms is an important development because it spreads the work of promoting gender equality and women's rights across several institutions.(GDOWFA 2011).

Mandate of GDOWFA:

- Setting up strategies, policies, plans and programs concerning the promotion & advancement of women.
- Establishment of comprehensive database providing gender profiles.
- Review and fulfillment of national, regional & international commitment relating to women's empowerment.
- Create linkage across all sectors & connect with decentralized structures at state level both governmental & NGOs.
- Develop Capacity Building programs (GDOWFA 2011).

Mechanisms to support gender equality and women's empowerment

Mechanisms (center , units and departments)
1.The Unit to Combat Violence Against Women and Children.
2. Women Centre for Peace and Development.
3. Center for Research and Documentation on Women, Gender Peace-building.
4.Mechanisms for Women Sectoral Ministries.
5. Mechanisms for Women in Higher Education.
6. Mechanisms of Women's Affairs at States
7. National Population Council
8. National Human Rights Commission.
9. Human Rights Advisory Council
10.the Protection of the Family and Children: Ministry of the Interior

Source: Compiled from Beijing +20 report 2014

Gaps

- GDOWFA has few professional staff and even fewer gender and other technical specialists. This is because the location of national machinery within government that meant that their recruits are

civil servants employed for their administrative and managerial capacities rather than their technical knowledge of gender equality issues (United Nations Economic and Social Council(2014))

- There is misconception of understanding gender policy for most ministries ‘policy’ consists of a series of directives and orders and a matrix of project targets
- The use of **gender focal points** to mainstream gender in some sectors have been less successful. They often get marginalized. They tend not to be gender experts themselves, they are often young and inexperienced and lack clout and influence. They take on, or are assigned focal point duties in addition to their routine responsibilities, and can experience difficulty managing their competing time demands and responsibilities.
- Factors that negatively affect performance in general include, among others, poor coordination between development partners whether from governmental, non-governmental or donor entities; and the non-participation of such entities in decision-making related to plans and policies governing the activities and aimed at advancing and developing women. The problem resides in the lack of human and financial resources of coordinating entities, or the lack of appropriate competences, particularly those that can make a change; and the non-institutionalizing of coordination entities within administrative structures, which weakens their effects, particularly given that gender-based integration can sometimes be among the diversified tasks of coordination entities with regard to gender issues and concepts or the units for equality of opportunities.
- Women’s national mechanisms are mainly concerned about women’s issues and problems, with limited focus on gender-based concepts and issues. They do not adopt issues for analyzing relations on a gender-based principle and for reformulating them in such a way as to achieve gender equality. On the other hand, these mechanisms do not attract many men to work with them and adopt their cases, thereby leading in some cases to hostility with regard to issues of advancement of women and gender equality, and the criticism of these mechanisms as well as requesting institutional mechanisms on the rights of men.
- The main obstacles that weaken the role of women’s national mechanisms in Sudan are linked to the structure, formation and competences of such mechanisms and their lack of financial resources, data, statistics and professional cadres specialized in such issues as gender-based integration, gender equality and empowerment of women. Given that some of these mechanisms in women’s issues are still new, there is insufficient experience to implement their tasks, diverse entities working on women’s issues, lack of coordination among them and weak follow-up and evaluation; and results often turn out to be unclear or undocumented.
- In Sudan long years of civil war and conflicts, effects of climate change, HIV/AIDS, massive internal displacement and outmigration constituted major challenges hindering the effective implementation of the national gender policy and strategy.

8.5 Important Intervention Programmes/Projects on the Sector, Achievements, Challenges, Opportunities, Lessons Learnt And Future Aspirations.

Interventions /Achievements

- Most sectorial ministries and commissions have created departments for gender and gender mainstreaming in their respective ministries and commissions (e.g. Central Bureau of Statistics, National Strategic Planning Council). Ministries with gender units or focal points are health, justice, labor, education, agriculture, animal husbandry, interior, foreign Affairs, finance and national economy,

Agriculture and Environment

- Gender Mainstreaming & Agricultural Development Unit' (GMADU) is the institution responsible for gender equality and empowerment in agriculture. The GMADU consists of 3 sections: Policies and strategies, Studies ,Research and Training, and Project Formulation .GMADU established network among gender focal points in the four State (Red Sea Algadaref , Kassala and Blue Nile) (GMADU 2014).
- Sudan is more engaged in climate change and gender issues; Sudan is one of 11 countries that submitted a position paper to the UN Framework Convention on Climate Change UNFCCC on how to achieve gender balance within the UNFCCC
- The Government of Sudan and UNEP are currently planning and proposing the creation of a gender strategy to address climate change and environmental issues in Sudan (2014-2018).
- Sudan, as an LDC country party has implemented a NAPA and NAP (for 18 states) on Climate Change where gender participation is the one of its guiding principles.
- GMADU built the capacity of focal points in four states (Red sea Kassala, Gadaref and Blue Nile) to integrate gender issues in climate change ,food security and resilience

Education.

- The most important achievements in the area of education, the high rate of assimilation of girls, in the primary school: gender gap dropped from 12.6% to 8.3% in 2007. This is due to the State adopting the Millennium development goals ,the recommendations of the Conference on education for all, a presidential decree issued on mandatory education for all based on the principles of equity, justice, gender equality. The education strategy for 2000- 2027 provides for universal basic education with increasing enrolment and reduction of drop-out rates, quality teacher training, adult education and literacy, financial literacy for women, and state directorates for girls' education including nomadic girls, the rate of which went from 0 to 10%.

- The establishment of the directorate of girl's education has helped in narrowing the gap. The Education Management Information System (EMIS) includes gender-specific indicators. All data in the Ministry of education are disaggregated by sex. The staff of the Ministry of Education, in general, have a positive mind-set towards gender equality in education, and show improved attitudes and political will towards girls' education.(GDOWFA 2011).
- The Ministry of Education works in the framework of the Partnership in Education with the relevant organizations of the implementation:(UNICEF Education Foundation 2013 – 2014,
- The Italian cooperation promoted rural girls education in Eastern States((Red Sea Gadara and Kassala(within the project of peace and development conducted through bilateral and multilateral programs. The project improved educational infrastructures to put schools within easy reach of girls in the community

Health

- Sudan recently launched the National Reproductive Health Policy, 2010 which envisions "equality reproductive and sexual life for all women, men, adolescent young children and the elderly". The endorsed policy draws on the existing national policies and strategies, national and international commitments. It also sets an agenda for health system reforms assuring that reproductive health services are available not only throughout a woman's life-cycle- ensuring her the right to survive pregnancy and childbirth and enjoy a good family life- but also to their partnering men, adolescent and youth and the elderly.
- This visualization is in line with the provisions of the national constitution, as enunciated in article 32(4) as, 'the State shall provide maternity and child care and medical care for pregnant women'.
- The State adopted policies and strategies to reduce maternal mortality from 509 per 100,000live births (safe motherhood survey 1999-2002) to 216 per 100,000 live births (family survey2010). Strategy has been developed to reduce the socio-economic and cultural causes of maternal Morality.

Gender and HIV/AIDS:

- Within the UN system, UN-Women partnership with UNAIDS was effective in supporting gender mainstreaming into the Sudan National Aids Strategic Plan 2010-2015. The plan recognized the link between GBV and exposure to HIV infection enabling programs and projects to effectively address the horizontal linkages in their projects. Other partnerships with UNAMID in Darfur contributed to the effective programming of sexual violence affecting women living in IDP camps (UNFPA 2011).

Fight against poverty and economic empowerment for women

- In recent years the Government of Sudan has taken action to reduce gender disparities and promote the empowerment of women and make progress towards the gender MDGs: The economic empowerment of women, is one of the central issues which contributed to women's employment, training and capacity-building to enable them perform multiple roles. The state has made numerous efforts through the development of policies, strategies, economic empowerment of women, including the national policy for the empowerment of women (IMF2012).
- Macro finance policies are part of the Central Bank financing Policies which included: The fund ceiling increase from 10% to 12% has been specialized financing ceiling for social development. Moreover, the decree No. 18/2007 stated that 30% out the fund ceiling is for women and 70% is for rural. The Central Bank of Sudan decree No. 18/2007 about the organization and development of the creation of a bank specialized fund for families (Family Bank) beside the Savings and Social Development Bank.(Sudan, Ministry of Finance, 2011).The *Micro-finance Unit in the Central Bank of Sudan* was established in 2007 and has Mandated 30% of the micro-finance for poor women.
- The establishment of specialized bank financing for families (bank of the family) in 2008.To work in the area of poverty and reduction through the financing of projects, or economic activities in the areas of: - Services - Productive Families - shelter - small industries – Animal production - transport and storage and raise the level of income of the beneficiaries, in addition to raising standard of living families socially & economically targeting gender equality. The World Bank support across different groups, women's associations, (122,021) beneficiaries benefited from these projects from 2009-2013, total of (33. 999) of who(29%) were women and total fund 659. 639. 735 SDG.
- Collaboration between NGOs, UN and government bodies have prepared several programs for capacity building and training, especially focusing on women. As one example, the UNDP has initiated the project on the Gender Mainstreaming Initiative, with the support of the UNDP Gender Thematic Trust Fund, in early 2007. The project emphasized capacity building for empowering women to reduce their vulnerability, build their leadership, have access to necessary resources, and thus protect their human rights(Japan International Cooperation Agency 2012).
- **The Sudanese Businesswomen Secretariat (SBS)**, of the Sudanese Businessmen and Employers' Federation is affiliated to the Sudanese Business men and Employers' Federation (SBEF) and is based in Khartoum and has branches in some states. Its main objectives include promoting economic empowerment of women, involving women in making the economic and social decisions of the country, enhancing relations with similar organizations inside and outside Sudan through participation in training programs, conferences and workshops, organizing training courses and carry out research to support Business women activities, and helping businesswomen access to finance from the local and foreign institutions (Abdel Rahman,W. (2012).

- Key studies undertaken, *e.g.* study of the finance law and budgeting directives undertaken, and a paper written that formed the basis of a guidance manual to assist Parliamentarians, the media, CSOs and other actors to monitor the budgetary process; an economic empowerment study covering the 19 localities in South Kordofan was undertaken, and informed the Ministry of Social Development in identifying priorities for women's economic empowerment. (UN women 2012)

Gender, Political and Decision Making

- Some of the interrelated factors contributing to the progress of political participation of women are: a) the increase in number of educated women who are able to use their education and their experiences to press for their rights; b) encouragement and support of enlightened men; c) the technical and financial support of UN Agencies and international organizations for capacity building of women in political parties; d) the increasingly changing values and attitudes approving women public engagement. UN women (2012)

Gender based violence.

- A plan of action for combating violence was developed and workshops were implemented at state level with different stakeholders and the outcome was :
- Media Forum for raising awareness about CVAW.
- Creation of a Task Force for implementation POA
- Identification of a short and long term goals
- A national Plan of Action was developed by concern ministries to combat violence against women in Darfur accordingly the Unit implemented two workshops in Nyala and Alfasher for raising awareness and training. Targeted groups were law enforcement officials, tribal leaders, NGOS as well as other counterparts including Ministry of Health and police, also including IDPs in the different camps.
- Post exposure kits for medical treatment and prophylaxis for victims were provided free in all health centres in Darfur states.
- Training workshop for 45 members of the civil society organizations on psycho – social support for victims in Khartoum .

Challenges

Agriculture and Environment:

- Agriculture and food security data are not disaggregated by sex. No separate gender policy for agriculture. Women's contribution to agriculture and food security is not valued. Limited financial and funded resources. Lack of capacity building and sensitization on integrating gender issues in the programming and projects of climate changes.

Peace and Conflict Resolution.

- Poor women's empowerment in Areas of negotiation and conflict, which led to poor

participation in building and sustaining peace. Negative effects of conflict on women and the family economically, socially and psychologically. The existence of gaps in legislative and legal frameworks for the protection of women in conflict areas.

Gender and Economic

- Laws promoting gender equity in formal sectors employment are not enforced adequately and in fact challenged by prevalent male bias practices. Majority of women are engaged in activities which are not supported by legal frameworks so they cannot claim rights for equity and protection.
- Lack of studies, research, database and in-depth surveys to identify gaps in various areas of women. Lack of data and information disaggregated by type, lack of information on gender based violence-negative customs and traditions that restrict women's participation in some activities
- Majority of women are engaged in activities which are not supported by legal frameworks so they cannot claim rights for equity and protection. Laws promoting gender equity in formal sectors employment are not enforced adequately and in fact challenged by prevalent male bias practices.

Education

- Sudan has made significant progress towards the gender empowerment related MDGs. It is on track to meet those MDGs on closing the disparities on educational enrollment. However, the regional disparities in access to education by girls as well as boys will remain a challenge for Sudan. Furthermore, there will still be a large number of girls as well as boys that may not be in school, or have dropped out of schools because the schools are not easily accessible by being too far from home as well as the inherited negative traditional social and cultural attitudes, which impede the education of girls, especially in rural areas.

Political participation and decision making:-

- Women's limited participation in political parties and entities like local professional associations.
- The low rate of participation of women in legislative and executive organs.
- Weak competition of women in geographical constituencies
- The gender issues for political participation and representation are tremendous. The quality of women participation remained limited as many women have not been exposed to political socialization. Thus political dialogue and analysis remained dominated by men.
- The paucity of gender disaggregated data and information on political participation is a challenge for monitoring progress. There is lack of data on women participation in local councils and popular committees. In fact there is need to understand the socio-cultural and economic factors

influencing quality participation of women at all levels. In addition there is no information on young women political participation

Gender Based Violence:

- The exclusion of combating violence against women and child from the 25 year quarterly national, policy and political plan.
- Lack of Female employment opportunities and wage discrepancies combined with the high cost of living.
- Lack of awareness and understanding of the negative consequences and impact associated with gender-based violence on society and developing means of eradicating it
- The proportion of illiteracy among women and children and their lack of awareness relating to their rights.
- The difficulty of achieving sustainable peace
- Poverty.

Lessons learnt

- Progress has been made on political empowerment of women but economic empowerment remained a hurdle. The female labour force participation rate is less than a third of males and gender disparities are substantial in formal employment, particularly at the upper positions as well as in legislative bodies. However, the expansion of education and other social services is changing the pattern of female labour force participation and employment. The numbers of women in formal employment is growing in the low and middle ranks.(IMF 2012).
- National constitutions and family laws have been revised (new legal acts/frameworks elaborated) in Sudan to ensure gender equality and equity as well as to redress gender-based discriminations, yet progress is slow.
- The progress in women/girls economic participation is partly related to the increased educational opportunities and expansion in urban markets. With increasing economic hardships, conflicts and migration of men, women have to work and maintain their families. But an overall major influencing factor is the change in cultural expectations related to women economic roles.
- There are indicators that the economic participation promotes the women empowerment. For example, women are leading company executives; some women in urban formal and informal sectors control decision over the incomes and resources they earn including their free mobility in the public arena. In addition many of the women elites engaged in civil society organizations (CSOs) are working women with diverse technical expertise
- Number of girls in primary schools is evidently increasing due to increase in number of girls' schools especially in the private sector. The progress is notable in higher education as there are universities for women and in some classes the number of young women is more than men.

Families who afford to pay for their girls schooling and higher education allow their daughters to move to and live in larger cities for secondary school and university. The progress in education is promoted by increase in number of schools for girls and boys, changing attitude of parents towards education and the education policies response to CRCEFA and MDGs and more specifically the support of UN agencies and donors.

- Much sexual risk taking by girls and young women is marked by unequal gender relations, and unequal access to resources, assets, income opportunities and social power. Far more must be done to ensure sustainable livelihoods for women and girls, particularly those living in female-headed households, if they are to be able to protect themselves against HIV infection and deal with its impact. Boosting women's economic opportunities and social power should be seen as part and parcel of potentially successful and sustainable AIDS strategies
- Gender and nutrition in Sudan are inextricable parts of the vicious cycle of poverty. Gender inequality can be a cause as well as an effect of hunger and malnutrition. Not surprisingly, higher levels of gender inequality are associated with higher levels of under nutrition, both acute and chronic undernutrition. Gender and nutrition are not stand-alone issues; agriculture, nutrition, health and gender are interlinked and can be mutually reinforcing.
- The need for gender sensitive responses to the effect of climate change .Climate change has serious ramifications in four dimensions of food security: food availability, food accessibility, food utilization and food systems stability. In the context of climate change, traditional food sources become more unpredictable and scarce. Women face loss of income as well as harvests—often their sole sources of food and income. Related increases in food prices make food more inaccessible to poor people, in particular to women and girls. Furthermore, women are often excluded from decision-making on access to and the use of land and resources critical to their livelihoods. For these reasons, it is important that the rights of rural women are ensured in regards to food security, non-discriminatory access to resources, and equitable participation in decision-making processes
- In many cases, showing that water projects work better when women are involved and had a greater impact on mobilizing finance for gender-biased projects than showing that access to water has an impact on gender equality.
- The quota system applied in General Elections law of 2008 is a clear policy of empowerment of women in Sudan , particularly in the area of political empowerment.

8.6 Conclusions and recommendations

8.6.1 Conclusions

- Gender mainstreaming is most modern approach. It was expected to be used in the analysis and presentation of the issues of women's empowerment in national policy and by integrating gender issues in all thematic areas of national policy. Gender mainstreaming and addressing gender equality concentrated on central ministries without clear strategies and policies to promote mainstreaming approaches at local level by local government. Moreover Statistical and gender indicators are not commonly used because of the lack of reliable data disaggregated by sex of

most of the ministries. Hence gap in this area also hinder progress in the implementation of global commitment on gender equality.



Gender issues may continue to be overshadowed by competing priorities such as peace and security, drought and famine, etc. Though these priorities concern both men and women, most decisions and actions are taken by men and may not address specific gender needs of women and girls. Moreover, they could drain scarce resources that could have been used for gender-responsive programs /projects such as food security and nutrition, adequate access to water and sanitation, education and skills development.

- Planning processes within government toward achieving the MDGS provides opportunities to addressing many of the critical areas of concern of the Beijing Platform for Action. The weight given to monitoring MDG indicators and associated capacity development investments, provide opportunities to raise long standing concerns about improvements, in data to better reflect women' situation in these area.
- The work of Sudanese women's civil societies in empowering women is critical for the effectiveness of national machinery to gender policy. but unclear coordination mechanism limit their role to help in setting women's priorities and advocating them within government policies.
- Despite that Sudanese women have acquired political and economic rights for decades, and there is progress in their economic and political participation, still gender gaps persist. This is indicated by high literacy rate, low school attainment specifically among girls in rural areas and disadvantaged states, and by engagement of majority of women in unpaid work and in informal sector activities which are not protected by law. The political participation of women remained limited in quantity and quality and urban-based.

8.6.2 Recommendations

8.6.2.1 General Recommendations.

Disaggregated data is the starting point of any effective analysis of gender gaps. Every project design must include the collection of gender disaggregated data. Technical training in gathering gender disaggregated data is much needed. Data disaggregated by sex provide the basis for analysis and identifying issues to be given priority and the baseline for assessing progress and are also useful for civil society activism. Gender statistics should do more than simply have male and female categories: they should focus on the issues of particular relevance to women and men and girls and boys and their different roles in society. It should also involve the development and testing of indicators and research methodologies for strengthening gender analysis and monitoring and evaluating the implementation of the Beijing Platform for Action.

- Increasing capacity building of decision makers on gender mainstreaming
- Sudan gender policy should follow a *rights-based approach*.
- Promotion of good governance and the rule of law, guarantee human rights and rights of women through democratic and transparent institutions
- Promotion of gender equality and women's empowerment in the process of regional integration.
- Creation of conducive environments for the active participation of women in business and industry in Sudan.

- Ensuring the implementation, monitoring and follow-up of national, regional and international initiatives including the Beijing Platform for Action, the AU Gender Policy, the IGAD Gender Policy and the African Women Decade
- Assessing the macro policies to integrate gender into those policies.
- laws to protect women in informal sector should be formulated
- . . Adopting gender budgeting as strategy to alleviate poverty and empower Sudanese women.
- Develop mechanism for harmonization, coordination, and complementarity between and among different actors who promote gender equality.
- National machinery should enter into partnerships with universities in order to advance Knowledge production on gender disparities.
- Strengthening the approach of creation of public gender awareness in all sectors of society.
- Strengthening the Capacity of the Respective Ministries of Gender for Policy Implementation. Conduct capacity assessment of specifically the Gender Directorate to clarify human resources required to lead policy analysis, planning and turning resolution into action
- Implementing the Declaration of the Sixth Meeting of Ministers in Charge of Women/Gender Affairs of IGAD Member States, especially the “realization of the Regional Strategy for Enhancing Representation of women in decision-making positions at the level of the 50/50 share by 2015; this should happen both within the IGAD structures and at member states’ level
- Engage women parliamentarians in developing strategies for effective legal reform,
- Develop communication strategies to facilitate flow of information among different actors involved in gender equality.
- supporting experience-sharing and experiences related to the advancement of women on the national, regional and international levels.
- The media should be a strong force in the protection of women’s rights and promotion of gender equality, equity and empowerment of women

8.6.2.2 Specific Recommendations

Agriculture and Environment

Gender equality being crucial for agricultural development and the attainment of the MDGs, the Ministry of agriculture gender Unit should:

- advocate for gender mainstreaming and women’s participation at all levels and stages of agricultural decision-making;
- facilitate the review Sudan’s policies to ensure that problems constraining the role of women in food security and nutrition are addressed adequately;
- facilitate women’s access to agricultural services, tailoring such services to their needs;
- work with relevant stakeholder to ensure that the selection and introduction of agricultural technologies is gender-sensitive and responsive to gender-specific needs

Environment

- Build capacity for protecting natural resources and mainstream gender in the sectoral activities;
- Elaborate concrete plans to ensure food security and a healthy environment
- Develop benchmarks for and undertake Monitoring and Evaluation of member states’ implementation of national and regional commitments on reducing the differential impacts of climate change on women and men; girls and boys
- Link environmental issues and impacts with gender as water and firewood scarcity have proportionally negative impact on women.

Gender and Peace

- Institutionalize mechanisms and machineries to ensure women's equal participation in political decisions-making positions and processes as necessary condition for peace and security in Sudan;
- Mainstream women's concerns and gender perspective into the evolution of democratic cultures and good governance
- Ensure security and protection of women and girls in conflict situations; and
- Strengthen the role of women and girls in peace-building, conflict early warning, conflict prevention, conflict resolution, and post-conflict reconciliation, recovery and reconstruction.
- Encourage Community participation, including women and girls in peace building and decision making process

Gender and Humanitarian interventions

- mainstream gender issues and perspectives in Humanitarian interventions;
- establish institutional mechanisms for ensuring consistent and quality participation of women and girls at all level of humanitarian interventions, promote a culture of tolerance, non-violence, inclusivity and peace

Gender Responsive Institutional Innovations

- strengthen implementation capacity of the gender policy, programs, and projects
- Strengthen international, regional and national commitments on gender and women's empowerment into action

Education

- Ensuring equal access to education; eradicating illiteracy among women;
- Improving women's access to vocational training, science and technology, and continuing education; developing non-discriminatory education and training;
- Allocating sufficient resources for and monitoring the implementation of educational reforms; and promoting lifelong education and training for girls and women.
- More research should be conducted on the gender equality and education.
- The problem of girls dropped out should be studied in relation to gender equality and discrimination.
- Raising awareness among families about the importance of girl's education, increasing spending on basic education and creating support programs of microfinance to ensure county of girls in education.
- Reduce gender disparities in education enrolment and dropout rates for primary, secondary, tertiary and post-graduate levels, with priority given to war-affected and marginalised areas

Health

- Increase women's access throughout the life cycle to appropriate, affordable and quality health care, information and related services;
- Strengthen preventive programs that promote women's health; undertake gender-sensitive initiatives that address sexually transmitted diseases, HIV/AIDS, and sexual and reproductive health issues;
- Promote research and disseminate information; and increase resources and monitor follow-up for women's health.

Economy:

- Promoting women's economic rights and independence, including access to employment, appropriate working conditions and control over economic resources;

- Facilitating women's equal access to resources, employment markets and trade,
- Providing business services, training and access to markets, information and technology, particularly to low-income women; strengthening women's economic capacity and commercial networks;
- Eliminating occupational segregation and all forms of employment discrimination; and promoting harmonization of work and family responsibilities for women and men.

Political Participation and Decision Making

- Support to women's, CSOs' and grassroots participation in Constitution-making processes; Provision of grant to Political Affairs Council to establish gender database of women in political parties and trainings for members of 10 political parties to influence gender equality issues; Capacity development for relevant political structures on gender
- Support to review laws, policies and enhanced practices to ensure commitment and accountability to women's rights; Support to women parliamentarians to review laws and enforcement practices from a gender perspective, to ensure commitment and accountability to **women's rights**
- Support to women parliamentarians and women members of legislative assemblies for establishment of mechanisms of dialogue during national and regional development strategy planning processes
- Capacity development for CSOs and women in Government to advocate for a gender-responsive Constitution and ensure its protection to women's rights

Gender Based Violence

- Ensuring that **laws** against GBV should give adequate protection to all women. Effective legal measures include penal sanctions, civil remedies and compensatory provisions. .
- Implementing gender-sensitive training of public officials including judges and police.
- Providing women victims with effective complaints procedures and remedies, including compensation
- Establishing or supporting appropriate **protective and support services** for women who are victims or at risk of violence, rape, sexual assault and other forms of gender-based violence, including refugees, specially trained health workers, rehabilitation and counseling, and ensuring that such services are accessible to rural women.
- Undertaking **preventive** measures, including public information and education programs, to overcome attitudes, customs and practices that perpetuate violence against women.
- Compiling statistics and research on the extent, causes and effects of violence, and on the effectiveness of measures to prevent and respond to violence.

8.6.3 Intervention Programmes

8.6.3.1 National level programmes

Capacity Building Intervention:

Capacity building workshops to achieve Gender equality and empowerment in politics and decision makings for the following:

- Women parliamentarians in national and state legislative assemblies for gender-responsive interventions that would help them in the dialogue during national and regional development strategy planning processes

- Sectorial Ministries, lawmaking and Government institutions to integrate women's priorities in national and sub-national plans, policies, budgets, laws and programs.
- Gender machinery staff to monitor, coordinate and advocate for gender-responsive planning and budgeting, in all government institutions and law reform processes;
- CSOs and women in Government to advocate for a gender-responsive Constitution and ensure it protects women's rights and to ensure accountability in delivery of gender-responsive public plans and budgets.
- people implementing the law on women's legal rights, such as judges and police officers.

Manuals development

- Develop guidelines, manuals and white papers on gender-mainstreaming and representation of women in resource allocation and decision-making processes
- Develop gender mainstreaming checklist for health sector. The purpose of the Checklist is to provide ministry of health and other related health projects with a tool to facilitate effective analysis and identification of the gender issues in the health sector, to design appropriate gender sensitive strategies/components, allocations of resources and definition of monitoring indicators through all stages of the project/program cycle.
- Prepare guidelines, directives and manuals for humanitarian aid workers for gender-sensitive and gender-responsive interventions.

Advocacy

- Advocacy for incorporation of gender equality commitment in peace building initiatives, humanitarian and security measures in conflict-affected and post-conflict contexts.
- Advocacy for policies and strategies for protection of IDPs, women and girls, particularly in areas in need.
- Raising awareness with regard to women's legal rights, helping poor women and supporting them in case they wish to resort to jurisdiction.
- Including men in plans and activities aimed at enhancing gender equality in order for the women's issue to become a societal.
- Conduct high level advocacy to mobilize resources and technical as well as political support for gender-responsive programs and interventions.
- Conduct advocacy for gender-mainstreaming at all levels of education

Communication and networking

Development of National Communication Strategies to establish

- Mechanism of flow of information among different gender actors

- Networking
- Develop ICT project to spread legal awareness in the society on the rights of women and children

Study and Researches

- Conduct studies on the magnitude and impact of labor migration on gender equality and women's empowerment; also develop appropriate measures to reduce the negative impact of out migration on source countries.

8.6.3.2 Regional level programmes.

- Develop mechanism to follow up implementation of the recommendations of IGAD gender expert meetings.
- Build the capacity of the staff of machineries of IGAD member States to **Develop monitoring system to the implementation of the national gender policy and Mechanism to facilitate follow up.**
- Development of communication strategies to facilitate flow of information among gender actors and development of suitable mechanism and partnership networking.
- Support women movements, NGOs, CBOs and networks for the benefit of grassroots women and protection of their rights before, during, and after conflicts.
- Create regional consultative platforms on peace for the exchange of knowledge and information and harmonization of strategies leading to inclusive outcomes.
- Developing the Manuals on Engendering the different sector program in IGAD member States.
- Strengthen gender audit, mainstreaming mechanisms and institutions.
- Highlight gender in the overall mission, vision or objectives of the IGAD
- Document successful stories and experiences of gender equality and women's empowerment among IGAD countries

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9 Overall conclusions and recommendations

- ❑ Despite the huge natural resource-base wealth of Sudan, the performance of the agriculture sector has been unsatisfactory due to many complicated reasons. Some beyond the control of the government (climate, international politics); others within (governance, management, prioritization regarding available financial resources).
- ❑ Secession of the South and the loss of about two thirds of government's revenue (oil) has been a Wake-up call to draw attention to the agriculture sector, the renewable and indisputable wealth of Sudan.
- ❑ Consequently, several policies, strategies and development plans have been formulated to transform agriculture from mainly subsistence production to a modern sector responsive to market signals and with substantial contribution to poverty reduction.
- ❑ Such ambitious institutional reforms, however, fell short of finance and institutional capacity and depended to a large extent on local meagre funding and development partners' contribution, both of which were not enough.
- ❑ Notwithstanding the unfailing national efforts to seek finance, debt arrears (IDA, AfDBetc) blocked access of government to soft loans and other financial concessions to implement its agricultural development plans.
- ❑ Although cohesive and harmonizing actions are strongly needed for implementation of development plans, effective involvement of line ministries in the ARP was minimum due to duplication of mandates and top/down approach of planning.
- ❑ For revitalization of the agriculture sector, the following are landmarks:
 - efficient utilization of natural resources to develop a vibrant farming system, livestock and fisheries production and related agro- processing industries.
 - Sudan has significant irrigation infrastructure and its agriculture is not wholly dependent on rain-fed farming.
 - Proximity to major markets (Gulf countries and Europe) and access to sea, if prudently exploited, could be of immense comparative advantage to boost agricultural exports and Growth.
 - The wide gap between the actual agricultural productivity and that of the research represents a potential to increase agric production.
 - The prospect for value addition like organic products is an unutilized potential; (global market for certified organic products in 2010 was US\$ 51 billion mostly in Europe 51% and North America 46%) (IFOAM, 2010).
- ❑ Regarding Humanitarian contribution, there is an urgent need for a holistic approach to address food insecurity by addressing the real causes rather than dealing with its effects.
- ❑ Piloting has shown that CBOs and social fencing have had potential to improve productivity by resolving conflicts, increasing rangeland, services like water point.....etc.
- ❑ The huge gap in livestock productivity and production efficiency cannot be addressed by health protection (CAHWs) alone; a holistic approach is needed *e.g.* fodder production, nutrition, market infrastructure...etc.

Despite all the environmental and commercial constraints, livestock remains the leading agricultural export of Sudan.

- ❑ Outmigration of strong members of rural communities for gold mining and other higher paying jobs, contributed to low productivity of crops and livestock.
- ❑ Sudan with the current water availability of 920 m³/ capita/ annum is below the water poverty line (1000 m³/ capita/ annum). Recent projections showed that the country will witness severe water shortages of about 30 billion cubic meters by the year 2027.
- ❑ Deforestation in Sudan is ranked among the 10 highest countries in the globe with an average deforestation rate between 0.4 and 0.7 million km² per annum during the past 40 years. Establishment of community woodlots has contributed to mitigation of the problem.
- ❑ The situation of food insecurity is an important factor that reinforces the need to enhance agric-led growth to secure food supply and improve the entitlement of both rural and urban poor population.
- ❑ According to the NBHS (2009), 46.5 percent of households in Sudan live below the poverty line. This represents approximately 14.4 million people. Poverty rates are substantially higher among the rural dwellers, with 57.6 percent of households below the poverty line compared to 26.5 percent of the urban population. Such situation has increased migration from rural to urban areas, thus weakening the productive capacity in rural areas, deepened poverty in both rural and urban areas, and widened the regional imbalances.
- ❑ Government realized that the current regional and international political climate necessitates coping with rather than defying it. Consequently present policy called for reconciliation with opposition via dialogue and negotiations.
- ❑ Gender mainstreaming and addressing gender equality is concentrated in central ministries without clear strategies and policies to promote it at local level by local government. Moreover Statistics and gender indicators are not commonly used because of the lack of reliable data disaggregated by sex of most of the ministries.
- ❑ Despite that Sudanese women have acquired political and economic rights for decades, and there is progress in their economic and political participation, still gender gaps persist. This is indicated by high illiteracy rate, low school attainment specifically among girls in rural areas.

Recommendations:

- ❖ Enhancement of institutional, physical and functional capacity development across all priority areas.
- ❖ In order for Sudan to attract transit traffic to and from the landlocked countries, its own logistics system has to offer a superior service. Given the current low performance of many of the neighboring countries this represents a significant opportunity for Sudan.
- ❖ Disaggregated data is the starting point of any effective analysis of gender gaps. Every project design must include the collection of gender disaggregated data. Technical training in gathering gender disaggregated data is much needed. Data disaggregated by sex provide the basis for analysis and identifying issues to be given priority and the baseline for assessing progress. Gender statistics should do more than simply have male and female categories: they should focus on the issues of particular relevance to women and men and girls and boys and their different roles in society.

9.1 Important lessons and best practices to be learnt from development experiences of Sudan

- ✓ An enabling institutional and policy environment improves the effectiveness of development initiatives. IFAD-implemented pilot intervention for improvement of production and marketing systems for the gum Arabic and livestock sectors (funded by MDTF) used community driven development approach to ensure communities' ownership and sustainability of the service. The exported gums jumped from 26 to 57 thousand tons and the liberalization policy for gum's exports resulted in increased share of producers, income of FOB price from 12% - 50%. The sheep export jumped from 1.6m heads in 2009 to 3.2m heads in 2011.
- ✓ Structural issues in country programming could impede implementation and impact. That is, large and dispersed target areas and population and a wide array of interventions made implementation challenging, a situation that needs to be taken into account at project design.
- ✓ Community-Based -Organizations (CBOs) were instrumental in projects' implementation, policy dialogue at local level and in conflicts resolution. For instance, to ensure sustainability of rangeland management interventions, strong commitments to social fencing must first be obtained by target communities.
- ✓ Meeting basic needs of communities was necessary for any project to succeed e.g. access to water builds relationship with communities and reduces conflicts. On the other hand poor access to rural finance prevented success of development initiatives in rural areas and limit sustainability.
- ✓ Because the unpredictable public financial services and poor infrastructure can interfere with the **post-project sustainability** of services, private delivery and community ownerships are highly required.
- ✓ Rural financial services targeting the poor can be sustainable. IFAD-funded microfinance initiatives have shown that properly designed delivery mechanisms that build trust with clients gradually **develop credit absorption capacity**.
- ✓ Linking Humanitarian relief with enhancing resilience of communities to natural and human-made disasters, *e.g.* Food for work, proved to be effective in improving the livelihood of rural communities.
- ✓ Progress has been made on political empowerment of women but economic empowerment remains a hurdle. The female labour force participation rate is less than a third of males and gender disparities are substantial in formal employment.
- ✓ There are indicators that the economic participation promotes the women empowerment. For example, women are leading company executives; some women in urban formal and informal sectors control decision over the incomes and resources they earn including their free mobility in the public arena.
- ✓ Much sexual risk taking by girls and young women is marked by unequal gender relations, and unequal access to resources, assets, income opportunities and social power. Far more must be done to ensure sustainable livelihoods for women and girls, particularly those living in female-headed households.
- ✓ The quota system applied in General Elections law of 2008 is a clear policy of empowerment of women in Sudan , particularly in the area of political empowerment.

9.2 Complementarities between the country and IGAD Priority Sectors

Country priorities are more or less the same as those of IGAD except that the former is at the micro (local) and the latter at the macro (regional) level. This is actually what IGAD vision is all about. Challenges and their causes are almost shared among the national priorities and all of them revolve around finance of interventions, climate change and repercussion of both on society which leads to conflict thereby completing the vicious circle.

To attain its vision, IGAD mandate is to mobilize and properly manage the financial resources (donors, financiers.....) in an integrated approach within the region.

9.3 Institutional and legal frameworks to strengthen complementarities between national and regional interventions (programmes and projects)

1. Livestock Routes and Pastoralists Camps.

Pastoralists migrate seasonally along recognized routes between rainy season grazing areas in the north (poor savannah and semi-desert sandy areas) and summer season areas in the south(rich savannah clay lands, across borders) with South Sudan. The same movement takes place east and west across borders with Ethiopia. This important migration necessitates opening livestock routes and temporary camping areas where provision of services to pastoralists include drinking water, health and veterinary care and education, all at cost to attract private sector. These routes and camps are vital for reducing conflicts over resources between farmers and pastoralists and will help encourage settlement of nomads in the future.

2. Electricity inter connection will assist Sudan to expand its' national electricity grid and hence reduce the cost of production especially in agriculture and industry. Meanwhile upstream countries (Ethiopia) will generate additional revenues from the sold electricity *e.g.* Millennium Dam.