



***Sudan VNRs for High Level Political
Forum 2018
on SDGs 6,7,11,12,15,17***

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SECTION I

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#The Government, The Research and Academia
Institutes, The CSOs, and The Private Sector#

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Context:

Over the last few decades Sudan has been plagued with some epochs of drought and civil wars in several parts of the country and political and administrative instability nationwide, all leading to high population movements (displacement), drop in production and productive capacity and huge degradation in the level of services provided to its citizens, particularly the rural population and were all made worse by the international economic sanctions imposed on Sudan. The cessation of South Sudan in 2011, marked the beginning of a sharp economic decline as the Sudan lost about 80% of its oil revenues from the areas that became part of the new state of South Sudan. Development assistance also experienced a sharp decline as a result of the international economic crisis (2008) as well as the donors' fatigue. Besides, and due to environmental conditions and political instability in the Horn of Africa region, Sudan also received huge numbers of refugees, putting more pressure on service institutions particularly in eastern and western Sudan and in the capital Khartoum.

Adding to that the **laws and legislations** are not put in place or seems to be enforced quietly especially dealt with Environmental and Natural Resources Conservation, Low progress made in the issues of **WASH** (Water, Sanitation, and Hygiene issues), as Sudan ranking is very low, or "Off Track", as of the last MICS 2014 report, and up today (Fig. 1) in calculating open defecation at most states of Sudan, and less of Water coverage. Despite of that efforts given by the Developing partners and NGOs in trying to meet the sector needs.

Sudan **Energy** Index shows that Most of the Petroleum and Hydro Energy consumed by household sector is in form of LPG and Electricity, while Industrial and Transportation sectors are dominant in the CO2 emissions. While many scenarios for mitigation measurements could be adopted in decreasing the emissions which result with a positive impact in increasing of the GDP, this can result from transformation towards Renewable energy and increasing of the transportation sector efficiency (Fig.2).

Issues of Biodiversity Conservation, Illegal Hunting and Non abide Tourism, Disaster Risks Reduction and Mitigation seems to be the dominant, especially when it is intersect with other Goals (Goal13 on Climate Change)

Introduction:

In response to UNDESA start of the SDGs' Voluntary National Review process, Sudan among 47 countries is expected to submit its report to the High-Level Political Forum (HPLF) on sustainable development in July 2018, to be convened under the auspices of the Economic and Social Council. The theme is on "Transformation towards Sustainable and Resilient Societies" and the set of goals to be reviewed in depth will be Goals 6,7,11,12,15, and 17.

Environmental Initiative for Sustainable Development (EnvI) - Sudan, on behalf of Africa Working Group on monitoring the SDGs (AWG), and Africa Vision Agenda 2063, and Action for Sustainable Development (A4SD), take the lead, in partnership with UN Global Compact Sudan Network and under the auspicious of Sudanese Businessmen and Employers Federation

conducted A consultation sessions on the National Review Process, upon which this report is dependent.

The session was addressed by the SG of the Business Federation, who committed himself and the Federation to fulfill their Roles and Responsibilities towards SDGs.

Furthermore, Consultations and dialogue included numerous and key stakeholders from Governments, CSOs, Research and Academia Institutes, and private sector.

The current VNR report has depended on information from a wide range of **Government Departments and Authorities (15) , Research Institutions (4), Civil Society Organizations (13) and Private Sector Institutions (4)..(Table 1).**

Achievements towards the SDGs 6,7,11,12,15,17:



On the outset of its engagement with the SDG process in September 2015, Sudan Government initiated **The Higher Committee for Sustainable Development (HSD)**, chaired by the Vice President, and the Secretary General of the National Population Council (NPC) which is the Focal Point and lead institution for the HSD secretariat. The committee, however, does not include representatives from Civil society or the Private sector!

Sudan National SDG program main objectives were set as:

1. Prosperity and Economic development
2. Social Development
3. Peace and Security
4. Conservation of the Environment

In line with 201the SDG global objectives, the national program rests on five pillars: people, planet, prosperity, peace and partnership. The program also adopts a transformative approach with its three economic, social and environmental dimensions as a mechanism to produce a development that is sustainable, inclusive, equitable and sensitive to human rights especially of the more vulnerable groups such as women and children, disabled, and elders.

Guided by the above, three documents were prepared:

- a. The National Sustainable Development Program (2016-2020)
- b. Sustainable Development Implementation plan (2017-2020)
- c. State Sustainable Development Plans (North Kordufan State).

The Sudan government, for the VNR, focused on the Three Objectives of (a) Peace Building; (b) Poverty Reduction; and (c)Agriculture and Social Development.

“Envi” for its report focused on Four Categories as reference points for the VNR process, provided in a matrix for the different stakeholders to respond to. These include:

- a. The Institutional Capacity Building. (policies transformation, training & capacity building provided).
- b. Data Acquisition, Handling and Dissemination of Information. (data availability, quality, and accessibility).
- c. Progress made and Future Action Plans.
- d. The Challenges.

Prior to questioning them, stakeholders were gathered in a workshop in which the SDGs and the VNR process were explained and discussed. Rather than that a following Up interviews in promotion for the SDGs and collecting the data via Matrix were taking place. Unfortunately not all those approached responded to the questions and some of the responses were not directly relevant to the questions. It is important to note that most of the information received as sample were from Khartoum State, and represent some of the Federal institutions related to the SDGs under review.

➤ **A. A Sample of Government Institutions Achievements and Outstanding Progress:**

➤ **The National Population Council**

Several Consultative dialogue and workshop was organized by the National Population Council (the National SDG focal Point) with all stakeholders, mostly.

In collaboration with the National Forum for Voluntary Work (new body endorsed by the Ministry of Social Affairs), in early June 2018 at Khartoum, the NPC conducted a brief session on goals subject to the review. #In fact the leadership of National Focal Point in Sudan made a statement that considers some of the SDGs to be irrelevant to Sudan, without justification!!#

➤ **The Higher Council for Strategic Planning; and the Ministry of Strategic planning (Khartoum State)**

The Ministry started developing a comprehensive state and sectoral strategy in line with SDG but the policies, programs and projects were not coupled with the achievement indicators at the practical level in various state institutions. This presents a major challenge for measuring progress.

➤ **The Central Bureau of Statistics**

The CBS established a special unit for the CDGs to prepare the necessary indicators to measure progress towards the SDG objectives and prepared special questionnaire to be used in its Cluster Survey and MICS Report planned for 2019, funded by the World bank, UNICEF, WHO, and other developing Partners. The plan is in line with the global guidelines of the UN International Statistical Commission Organization, which made it an obligation of including the 17 SDGs' standards and indicators in conducting surveys.

“Envi” receive a call by the Head of Bureau to be part of the 2019 statistics.

➤ **Federal Ministry of Environment, Natural Resources and Physical Development:**

The Ministry working almost in most of the SDGs through pertaining Policies and guidance laws and legislations for Environmental resources and Physical Planning.

Most of the SDGs were targeted through Projects addressed Waste Management, Air Pollution Control, Climate Change Resilience and Mitigation and Adaptation, Clean energy, Land Degradation and Wetlands Assessment, and Partnership with the Developing Partners and Embassies.

The Ministry designed a biodiversity strategy. Its action plan addresses five thematic areas: education, awareness raising and training, legislations and policies, conservation and sustainable use. Each of the five areas covers eight Biodiversity components: plant agro-biodiversity, forestry, rangeland and livestock, wildlife, marine and inland water ecosystems, biotechnology and bio safety, invasive alien species and climate change impacts.

Working on “The State Environmental Outlook Report (2011-2030)”, in term of the second report with SDGs Perspectives. It’s a full database via assessing the Environmental hazards and Natural Resources situation, and building Strategies and Needs via assumptions criteria.

➤ **The Higher Council for Environment and Natural Resources (HCENR):**

The HCENR represent the technical arm and coordinating body for all Ministry of Environment’s Projects. It is also the think-tank that proposes policies and regulations governing environmental and natural resource issues. Over time it has accumulated a wide information base which is disseminated through its website and in publications, especially on bio-diversity and renewable energies.

Working on “**Climate Risk Finance for Sustainable and Climate Resilient Rain-Fed Farming and Pastoral Systems Project (CRFP)**”.The project aim to facilitate and benefit 1.3 million farmers and 300.000 pastoralists in 6 vulnerable states in Sudan.

To make use of the Green Climate Fund (GCF), HCENR prepared a “**Green Climate Fund (GCF) Readiness and Preparatory Support Program**” aiming at supporting the Government of Sudan in strengthening national capacities to effectively and efficiently plan for, access, manage, deploy and monitor climate financing through the GCF. The Program will help develop a strong institutional framework for GCF coordination, engage a wide range of stakeholders in an inclusive and strategic process, mobilize the private sector and prepare Sudan for direct access to GCF funding for its climate change adaptation and mitigation priorities. The Program will be implemented from 2018 – 2020 with UNDP as a delivery partner.

On the Biodiversity, HCENR working on “**The National Biodiversity Planning to Support the Implementation of the CBO 2011-2020 Strategic Plan-Sudan**”.

The HCENR released publications on (as an example):

- The National Report on Climate Change Impacts and Opportunities for Biodiversity and Ecosystems.

- Sudan National Adaptation Plan.
- The Economic Evaluation of Ecosystems and Biodiversity; Finance and its mainstreaming into National Development Policy and Planning.
- The National Biodiversity Resource Mobilization Plan (2015-2020).

➤ **The Higher Council for Physical Planning (Ministry of Environment and Natural Resources and Physical Planning):**

Adjusting Policies and laws with the convened partners from concerned Ministries at States (Ministry of Physical Planning). Endorsing The Code of Conduct for Buildings, updates in 2015. Supervise all the Ministers deal with Physical Planning and Revising the projects submitted. Giving the ratification of the projects submitted if bided with the

➤ **The Forestry National Corporation (Ministry of Agriculture):**

- Launching of the Integrated Carbon Sequestration Project, to reduce carbon emissions, as the first forest mitigation project in Sudan, as one of the " GEF 4" projects. Financed by GEF with USD 3,650,000, and co- financed by IFAD: USD 10,991,000 through Butana Integrated Rural Development Project (BIRDP); in addition to the local component funded by FNC, through the Federal Ministry of Finance and National Economy (USD 840,000) and Government of Sudan as taxes and others (USD 67,700), for a period of 4 years (2014-2017) and supervised by IFAD. The mitigation approach is to reduce GHG emissions from Land Use Land Use Change in Forests (LULUCF) for emission or removal factors (tons of CO₂eq per ha per year) will be calculated by using IPCC defaults or country specific factors.
- The Red-R emission and Forest Degradation Project; it calculates the degradation of forests, and accordingly the emissions. This project have full consultation with all stakeholders, and representation of the CSOs and the community in all its phases.
- The Gum Arabic Belt Rehabilitation and Mitigation Project (GEF/ FAO/ GCF).

➤ **Ministry of Tourism, Antiquities and Wildlife:**

Developing the Tourism on the Federal Level, through Promotion, and Informatics targets in enhancing Eco Tourism and Spreading Culture Tourism. The Ministry with its vision is working in Participating the communities and CSOs in their projects. Participating at International events and Tourisms exhibitions through the International Organization for Tourism. Enhancing communities in making Handicrafts. One of the tools of the Ministry is the Wildlife Forces Administration at Technical and Capacity Building Level, and enforcement the laws of Illegal Hunting.

➤ **Disaster Prevention Unit (Humanitarian Aid Commission):**

Guided by the output of the 6th Session of the Africa Regional Platform and the 5th High-Level Meeting on Disaster Risk Reduction which was held in Mauritius (November 2016), the Government of Sudan expressed its commitment to implement the Sendai Framework through several activities performed by the unit.

National priorities were identified as follows: increasing political commitment to disaster risk reduction; improving identification and assessment of disaster risks; enhancing knowledge management for disaster risk reduction; increasing public awareness of disaster risk reduction; improving governance of disaster risk reduction institutions; and integrating disaster risk reduction in emergency response management.

Several disaster risks and emergencies strategies and policies were prepared:

- The National Policy for Disaster Risk Management, 2017
- Sudan Strategy for Disaster Risk Reduction (SSDRR), 2016 – 2030
- Khartoum State Strategy for Disaster Risk Reduction (KSSDRR), “Building Safety Culture for Resilience”, 2015 – 2030
- The National Disaster Risk Management Program in Sudan, Enhancing and Strengthening national capacities for Multi Hazard early Warning system
- Sudan Multi-Year Humanitarian Strategy, 2017 - 2019

It must be noted that all strategies and policies at all levels are still awaiting to be approved by the government authorities (The Cabinet , and the Parliament).

- Conducting Early Warning Training Session (September 2015)
- Conducting a study on Vulnerability Assessment of Sudan, in collaboration with the Sudanese Red Crescent Society, Khartoum (December 2017)

➤ **Sudanese Standards and Metrology Organization (SSMO)**

SSMO is currently redefining its standards to comply with the SDGs, particularly the ISO 26000, which tackles the issues of the Social Responsibility of organizations, with regards to the impact of their decisions and activities on society and on the environment, through transparent and ethical behavior in compliance with from ISO 26000 (2010).

➤ **WASH Unit (Ministry of Water Resources and Electricity)**

The National WASH Strategy (2017-2030) now under reviewing by consultants and consultation covered all the 18 states of Sudan to Cope and align with SDGs targets (Goal6). The AWG member in Sudan share with presentation to the consultants and in a consultative meeting of 3 states, to facilitate enabling them towards transformation and measurements.

➤ **Ministry of Physical Planning (Khartoum State):**

Strengthening Goal 11. Endorsing of the Master Physical Plan of Khartoum State. Providing Sustainable Shelters for low income citizens. Establishing more than 3000 Popular HH in an ongoing project in collaboration with the Housing Physical Fund. Revising the Bridges and High ways Systems for smooth transportation and Use. Rehabilitation of the Highways for the Safety Use.

➤ **Ministry of Infrastructure and Transportation (Khartoum State)**

To transform and Cope with the SDGs targets, especially towards Goals Developing of the Infrastructure, and Rehabilitation and functioning of the existence Sewage Plants through

phase. The Renewable Energy projects target by the Ministry through its mandate with the M. of Electricity.

The Ministry endorsed from the budget with International Cooperation Fund, the ESKADA Monitoring System for Water Pipelines and Public Transportation.

B. The Research Institutes:

➤ **The National Research Center:**

Has 22 Units; 3 of them dealt with Goals 6 & 15; Intervention of Genetic plant species resistant for desertification. Applying Water Harvesting Techniques.

➤ **The National Center for Energy Research:**

Conducting Research Work, and Manufacturing Solar Systems and Wind Generation Power. Producing Energy from Bio-Gas. Established Solar Power Generation units at Darfur States. Providing training for Academia groups and Researchers.

➤ **The Regional Center for Water Harvesting (Ministry of Water Resources and Electricity):**

Established in Khartoum at 2013, under the Umbrella of UNESCO. Increases capacities and knowledge for researchers in Water Harvesting Area; Building Partnership, and exchange of Knowledge and experiences with the International Centers. Building a Data base on Research Projects.

➤ **The Water Research Center (Faculty of Engineering, University of Khartoum):**

Providing Research and Capacity training for the researchers. Have a regular Consultation Open Dialogue with key stakeholders Via **Policy-Science Ad hoc dialogues**, including International Academic expertise from Africa Region and Germany on the issues of concern.

C. The Civil Society Organizations:

Several CSO networks and groups started to engage with SDGs, and some of them perform their tasks in enforcing towards transforming policies to cope with SDGs perspectives, this including; *Envl*, *SECS*, *Sudan SDG Platform*, *Sudanese Consumer & Protection Society*, *Practical Action*, *Friends of Peace & Development Organization (FPDO)*, *International Charity Organization for Water*, *Sudan Workers Trade Union Federation (SWTUF)*.

- **Envl**: Is a NNGO, registered in 2011. Working through three Strategic Program; Environmental Citizenship, Data Acquisition and Handling, Environmental Peace Building & CC Program. Starting its journey with RIO+20 declaration as negotiator among representative of CSOs at the Arab League. Participated with the UN platforms on SDGs context, and as Arab region representative at 4th Round at Bali, Indonesia for the SDGs negotiation (2014). The focus thematic area are Raising Awareness, Lobbying and Advocacy

for Environmental issues and SDGs in Sudan and Regionally, and Research Work. Its a Focal Point and Executive Board Member for many Regional and International Alliances, on WASH specifically.

Envl working in Advocacy via the Parliament, the Cabinet of Ministers, and consultative Dialogue, or through training manner involving multi stakeholders in transforming their policies to cope with SDGs and its indicators revealed.

Consolidated a full Partnership with Media; with Press Articles, TV and Radio Live Broadcast and Interviews on the issues of concern...Making use of Social Media; Face Book, Twitter, Instagram, and Whats App. Mobilize the Role of CSOs and the Private Sector towards the SDGs.

➤ **UNGC-SN**

It is a Sudanese Local Plattform and Network for UNGC. It's a partnership Plattform of the Private Sector and CSOs as signatories for the Mandate of **Human Rights, Labour, Environment, and Anti-Corruption**.

UNGC-SN_Conducted several sessions targeting the Private Sector via transforming its Policies and Mandatory towards the SDGs.

➤ **SECS**

SECS implemented a number of projects that falls under SDG 6,7, 11, 15 and 17. These include:

- Enhancing the communities' resilience and capacity to adapt to climate change in Khor AlTeena Villages, North kordofan state, 2017 (ongoing)
- Friendly Neighborhoods and Roads Initiative in Rahad locality, North kordofan state (2016-17) and in Khartoum (2018)
- Enhancing Community Resilience to climate change, North Darfur state (2017-2020)
- Awreness Campaigns for the conservation of Sanganaeb and Dongonab Marine Reserves (2016-2017)
- Enhancing participatory approaches in expanding the culture of Environmental Rights
- Engagement with a number of global environmental networks and resource centers.

➤ **Sudan SDGs Platform:**

Sudanese SDG's Plattform is a civil society network, established in 2017, under members experiences programs which convened with the SDGs. The platform decided to prepare a shadow report or Voluntary National Review (VNR) to be submitted to the High Level Political Forum (HLPF), which will be held in July 2018 in New York under the auspices of the Economic and Social Council. We decided to prepare this review in accordance with resolution 67/290, which state " Member States also decided that the HLPF will support participation in follow-up and review processes by the major groups and other relevant stakeholders, and paragraph 89 of the agenda 2030 which states "Member States also called upon major groups and other stakeholders to report on their contribution to the implementation of the Agenda". Organized several awareness meetings for CSOs and prepared a VNR report.

➤ **TUNZAE Eco Generation:**

An Environmental Networking Platform for Children and Youth. Working with a representative from Sudan as an Ambassador for Africa Region. Working with a partnership with other relevant platforms in SDGs to promote and Advocate for Children and Youth generations needs.

D. The Private sector:

➤ **Sudanese Businessmen and Employers Federation**

The SG of the Business Federation, who committed himself and the Federation to fulfill their Roles and Responsibilities towards SDGs. The federation hosting the Secretariat of the UNGC-SN.

A Bilateral Agreement and MoU was signed with the Ministry of International Cooperation as a step forward in Scaling Up to allocate the Local and International Contribution for Development.

➤ **Redan Travel and Tourism Agency**

The agency working with a vision of SAFARI Eco-Tourism. It is established around 40 settlement in the area of Antiques, in order to rest and providing raising awareness and published guidance to ensure the Eco-Tourism.

➤ **SWITCH Company for Trading and Engineering:**

Biggest Company in importing of Green Eco Technologies; Water Solar Systems, Lighting Solar System, Auto Mobile Eco Generators,..

➤ **SENNAY Company for Technology & Trading:**

Importing of New Green technologies and Practical Field ones; Water Filters.

Conclusion:

Although there are Positive and Progress efforts through some of the examples presented, but No substantial change appears to have happened in transforming policies and implementation plans to comply or run in line with SDGs; objectives or progress indicators. Lack of awareness, poor capacity and the adhoc approach seem to be the main reasons.

Observations and Comments on the VNR Process:

Most of the achievements of Government institutions are in their planning stage, or even the full orientation for the SDGs is NOT met, and heavily dependent on expected external funding and the outputs are generally weak. Although the problem of funding has been the main challenge reported by most of the institutions consulted, attributed to international

economic sanctions and boycott or poor local budgets, the poor performance can be attributed to three sets of factors:

The Institutional Arrangement:

A. Policy and planning Problems, including:

1. One of the actual reasons behind poor performance was that the effort has been exerted more on preparing the VNR report rather than in integrating the SDGs in programming and planning processes. The late drive to prepare for the VNR also indicate the lack of readiness among concerned institutions for the VNR, as indicated by absence from the start of the yard sticks to measure progress at the implementing institutional level.
2. Two of the three issues selected as “National Priority Areas” for Sudan VNR report, peace building and social protection, lack the necessary statistical indicators upon which progress can be assessed and it may be impossible to measure change in them over a short span of time. The third, (SDG 1 NO Poverty), suffer the problem of reliability of statistics and lack of transparency sometimes
3. Availability, accuracy and accessibility to statistics remain a major handicap for reporting and for implementation at the institutional level, particularly in the States other than Khartoum
4. Shortage and poor technical capacity of the cadre that is supposed to be tasked with transforming the SDG indicators into implementation plans, especially at the States’ level
5. The lack of a reference point or baseline for planning, monitoring and reviewing progress towards SDG implementation.
6. No Update for most of the laws and legislations that it could enhance/ progress in the achievements of SDGs Targets. (The Antiquities laws 1999, The Illegal Hunting Law1986).

B. Administrative and Management Problems

1. Lack of integration of plans in line with the national strategy as many sectoral plans are still pending approval from higher authorities
2. Poor coordination among various stakeholders and development partners, including the UNDP, the national Focal point, the numerous state institutions concerned and civil society organizations as indicated by restricting coordination and integration concepts in practice to the few and far between workshops. Coordination is also poor in the CSO sector and extremely limited with the private sector.
3. Absence of monitoring units at institutional level that is ready to provide accurate and up-to-date statistical data on its areas of specialization

C. Other Practical Problems

1. The numerous numbers of government departments, specialized councils and institutions involved, sometimes with overlapping and/or conflicting mandates and laws governing their work, e.g. in land use and lack of the hierarchical structure that controls planning and monitoring processes
2. Misconception about the SDGs at the institutional level at both government and CSO level as most of them reported on specific projects implemented under the name of SDGs or

environment, sometimes implemented at dates preceding the global adoption of the SDGs. This indicates in part the poor capacity of the cadre concerned, and its orientation with the SDGs prospective, or the poor commitment of the institution concerned.

3. The CSO sector suffers the problem of marginalization by state institutions, poor in external funding upon which it is heavily dependent as a result of economic sanctions, drop in global funding and difficulty of financial transfer to Sudan and the orientation of global funding to humanitarian issues.
4. Lack of trust and the wide gap between government institutions and Civil Societies Organizations resulting in discrepancies in the statistics used, the failure to make use of the know-how related to the SDGs in the CSO sector and the failure of CSOs from the capacity building programs implemented by the State and its international partners

Recommendations:

1. The Full of Commitment towards SDGs mandate by all stakeholders is needed.
2. Enhancing dialogue and strengthening partnership between government institutions, CSO sector and international partners concerned with SDGs.
3. Building a shared vision on transformation of SDGs and their indicators to become part of the day-to-day planning and implementation strategies and putting in place a capable monitoring body for all sectors.
4. With the help of international partners, implementing a serious and integrated capacity building program for government institutions and CSOs on SDGs, their practical use and their monitoring indicators. This to be set at the Federal and State Levels.
5. With the active participation of all partners, implementing a large scale awareness raising and advocacy program on SDGs and their practical usage at all levels, based on a unified vision and approach to allow for adequate monitoring.
6. Securing funding for CSOs for implementing awareness and advocacy programs and setting in place a permanent monitoring mechanism for the various sectors.
7. Showing greater political will on the part of the government by shifting focus from preparing “satisfactory” reports to seriously monitoring progress in a transparent and scientifically-grounded approach as a base for seeking external technical and financial support.
8. Strengthening of the Institutional frameworks.
9. Enhancing the Training and Capacity building for all stakeholders.
10. Promote the Green investment among the Private Sector.

SECTION II

ANNEXES



Table 1: Institutions Consulted


Government Departments	CSOs	Research Institutions	Private Sector
Federal Ministry of Environment, Natural Resources and physical Development (6,7,11,15,17)	 Environmental Initiative for Sustainable Development (EnvI) (6,7,11,12,15,17)	National Research Center	Sudanese Businessmen and Employers Federation
Ministry of Federal Government (6,15)	The UN Global Compact - Sudan Network (UNGC-SN). (6,7,11,12,15,17)	National Center for Energy Research (7,17)	Redan for Travel and Tourism Agency
Ministry of Water Resources, Irrigation, and Electricity (6,7)	Sudanese Consumer & Protection Society (6,7,11,12,15,17)	The Regional Center for Water Harvesting (6,17)	SENNAY Company for Technology & Trading
Ministry of tourism, Antiquities and wildlife (15,17)	Sudanese Environmental Conservation Society (SECS) (6,7,11,12,15,17)	Water Research Center – University of Khartoum. (6,17)	SWITCH Company for Trading and Engineering (6,7)
Ministry of Strategic Planning and Information – Khartoum state (6,7,11,12,15,17)	Sudanese Organization for Technology Transfer (7,11,12,17)	Individual Experts	
Ministry of Physical Planning – Khartoum State (11,17)	Sudanese SDGs Platform (6,7,11,12,15,17)		
Ministry of Infrastructure and Transport – Khartoum state (6,7,11,17)	AlBarkal Antiquities and Culture Society (15,17)		
The National Population Council (6,7,11,12,15,17)	Wild Life Conservation Society (15,17)		
Strategic Planning Council (6,7,11,12,15,17)	Friends of Peace & Development Organization (FPDO) (6,7,17)		
Sustainable development Committee, National Assembly (parliament) (6,7,11,12,15,17)	International Charity Organization for Water (6,17)		
Sudanese Standards and Metrology Authority (6,7,11,12,15,17)	Sudanese Youth SDGs Platform (6,7,11,12,15,17)		
Central Bureau of Statistics (CBS) (6,7,11,12,15,17)	TUNZAE Eco Generation (6,7,11,12,15,17)		
Early Warning Unit, Humanitarian Assistance Commission (11,17)	Practical Action Organization (INGO) (6,7,17)		
Thr Higher Council for Environment and Natural Resources (7,15,17)			
The Higher Council for Physical Planning and Infrastructure (11,17)			

Fig. (1): Water & Sanitation (MICS, 2014):

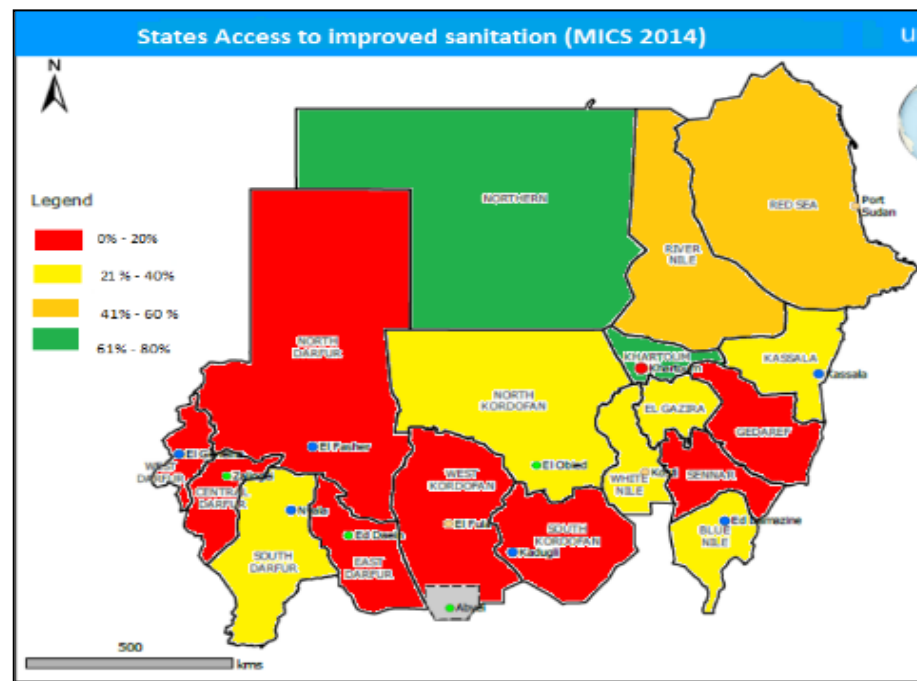
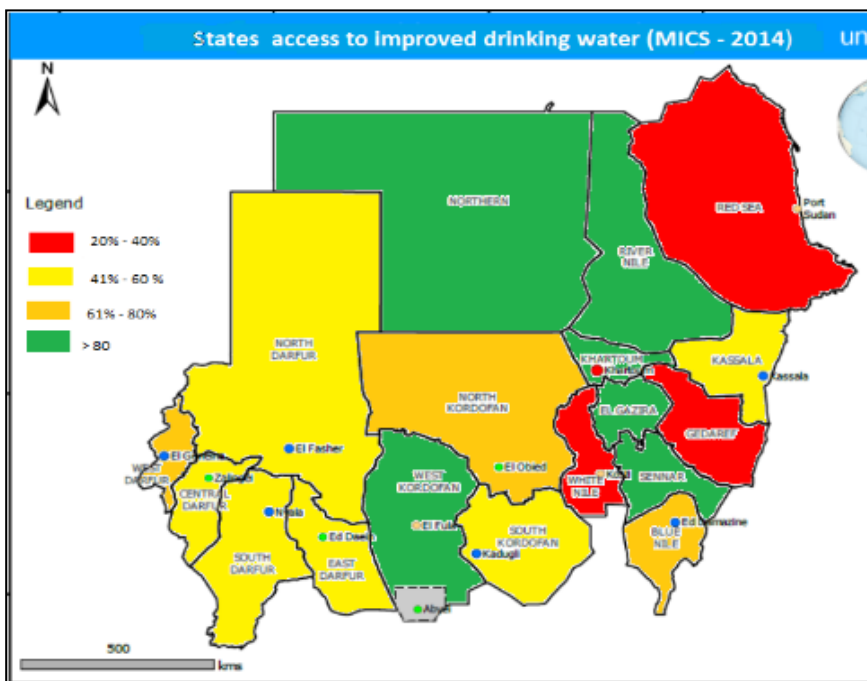
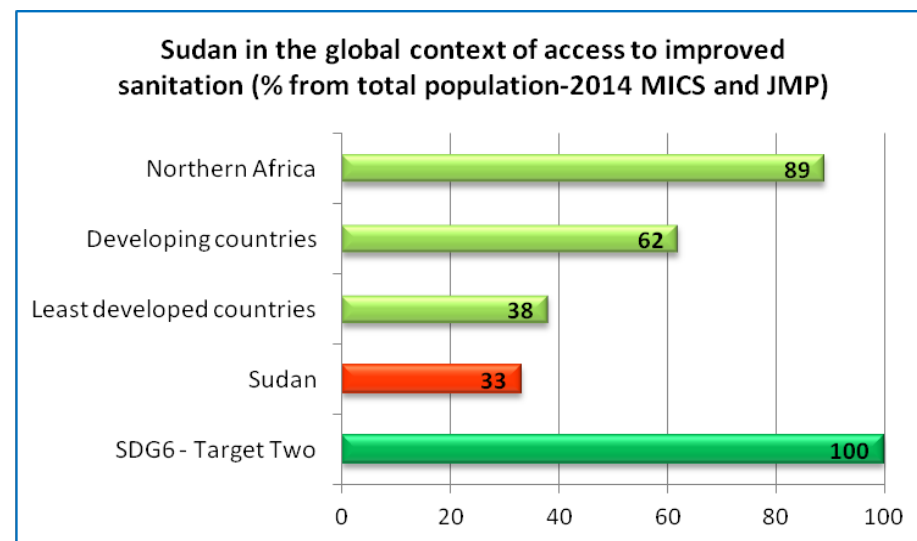
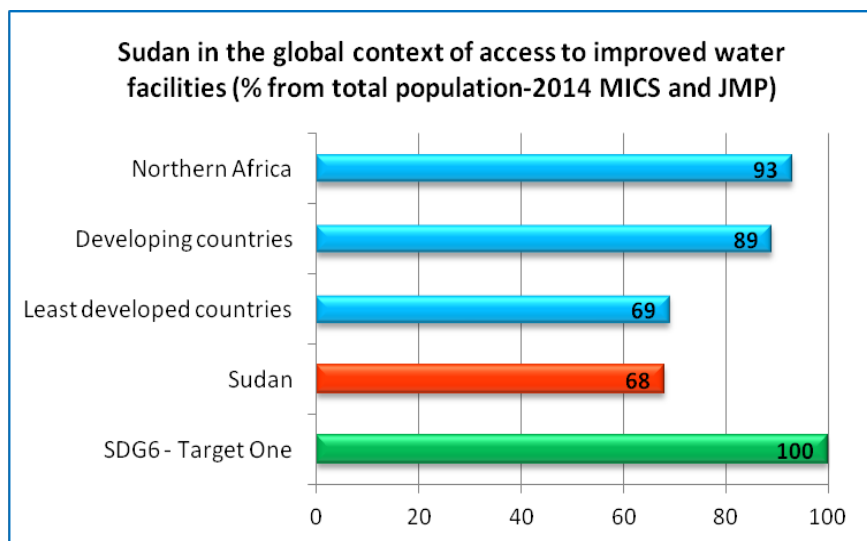
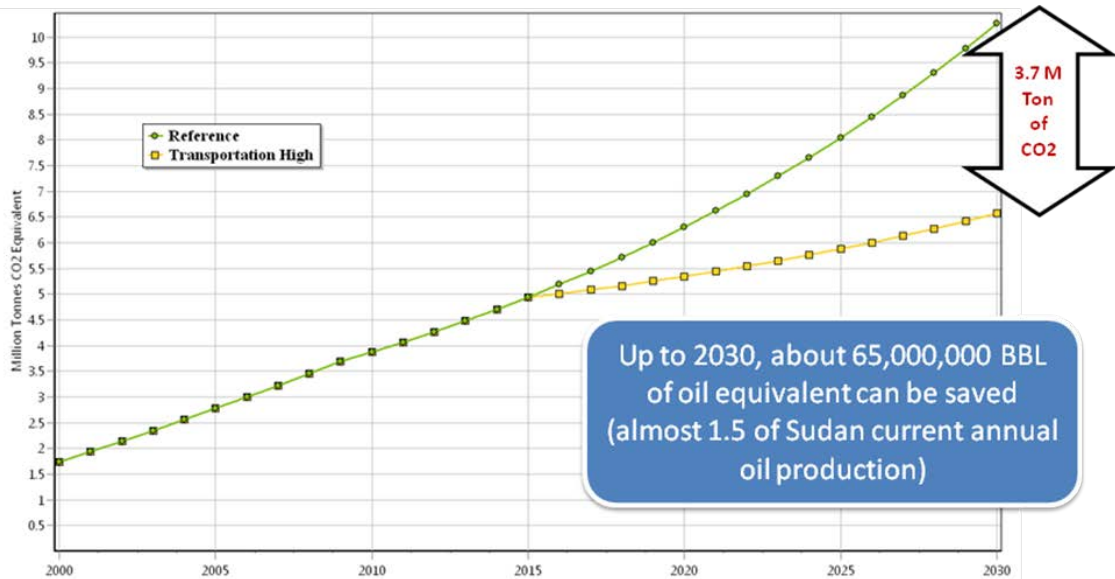
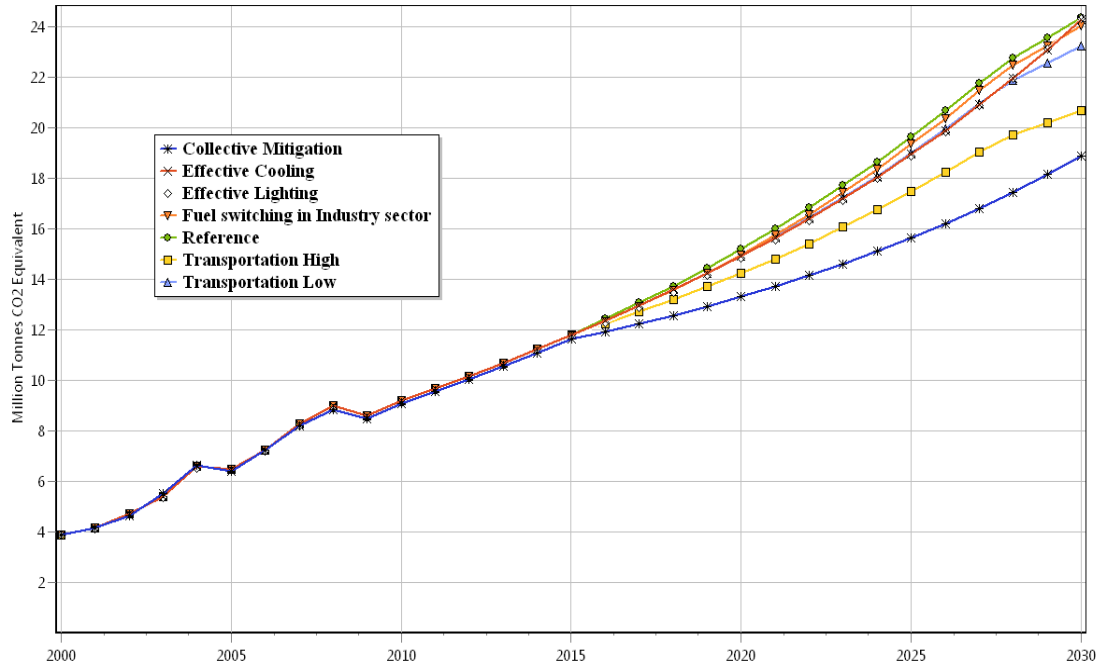


Fig.(2): Energy Sector:

Collective Mitigation Effect



Transport mitigation by increase of efficiency