

Activities Related to the UN-SPIDER Technical Advisory Mission to Sudan

**Dr. Amna Ahmed Hamid
Director, Remote Sensing Authority**

Email: amnaah71@hotmail.com
amnaah71@gmail.com

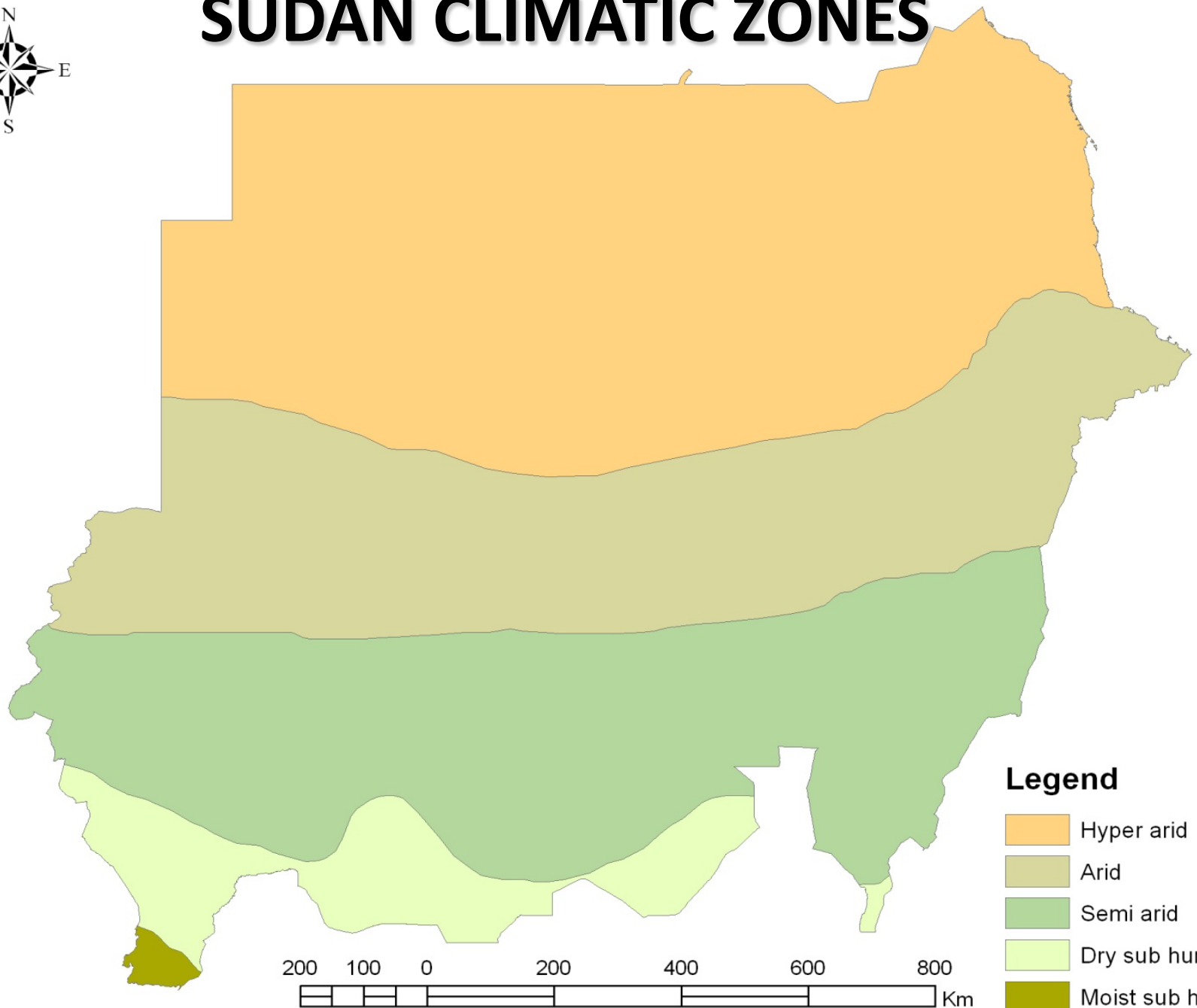
Sudan Profile

- The area of the Sudan is **1.9 million km²**
- Sudan population is about 32 millions.
- Annual rainfall amount exceeds 1,000 mm in the South and below 100 mm in the extreme north.
- Three major types of agricultural systems are practiced in Sudan:
 - (1) irrigated agriculture,
 - (2) mechanized rain-fed agriculture (frequently affected by drought), and
 - (3) traditional rain-fed agriculture (frequently affected by drought).
- Sudan has one of the largest livestock population in Africa, including camels, cattle, sheep, and goats, which depends mostly on the natural rangelands. 2

Sudan Location Map



SUDAN CLIMATIC ZONES



Legend

- Hyper arid
- Arid
- Semi arid
- Dry sub humid
- Moist sub humid

Sudan Profile Cont...

Sudan has experienced many severe disasters (ecological, biological and man – made)

There are many institutes and systems for risk and disaster management in Sudan. Yet, there is no sufficient capacity to deal with disasters.

More over, the space-based information is not fully utilized in the process of risk and disaster management, even though there is more than 45 institutes involved in geo- information field.

Main Institutes Involved in Risk and Disaster Management

- 1. National Council for Civil Defence (NCCD),**
- 2. Civil Defence Department (CDD),**
- 3. Ministry Of Irrigation and Water Resources (MOIWR),**
- 4. Sudan Metrological Authority (SMA),**
- 5. Humanitarian Aid Commission (HAC),**
- 6. Ministry of Health (MOH),**
- 7. Ministry of Agriculture (MOA),**
- 8. National and international NGOs,**
- 9. Civil society organizations,**
- 10. UN Organizations.**

System of Risk and Disaster Management in Sudan

- ❑ **The National Council for Civil Defence (NCCD) is the main decision making body during emergencies.**
- **NCCD adopts the disaster management policies for the country through Central Operations Chamber (COC).**
- **COC is composed of technical experts from different ministries.**
- **The use of space technology and space-based information in the system is very limited.**

Some Sudanese Institutes Involved in Space Technology Activities

- **Remote Sensing Authority, NCR, MOST**
- **National Telecommunication Corporation**
- **Sudan Meteorological Authority**
- **Universities**
- **Private Sector**

UN-SPIDER

Technical Advisory Mission to Sudan

Based on the invitation from the Government of Sudan, UN-SPIDER Technical Advisory Mission (TAM) to Sudan was carried out from 22 to 26 May 2011

Team Composition

- UN-SPIDER, Vienna (Austria) and Beijing (China)
- RCMRD, Nairobi, Kenya
- China National Space Administration, China
- Planet Action, France
- German Aerospace Centre (DLR)
- York University, Toronto, Canada
- UNEP, Nairobi, Kenya
- UNDP, Sudan



Technical Advisory Mission Impacts

- ❑ Awareness at decision makers level
- ❑ Discussions with the ministers and high level authorities
 - Science and Technology
 - Ministry of Interior Affairs
 - Civil Defense
 - Ministry of Health
 - Irrigation and Water Resources
 - Meteorological Authority
 - Ministry of Agriculture
 - Desert Locust Control Centre



Technical Advisory Mission Impacts

Awareness generation at top and middle level authorities

- Round table meeting with over 25 officials
 - Stake holders of Disasters Management
 - Current or potential users of space technology
- Visits to facilities
 - Remote Sensing Authority
 - Meteorological Authority
 - Desert Locust Control Centre



Technical Advisory Mission Impacts

Workshop targeting DM and ST stakeholders

- ❑ One day workshop attended by 120 persons.

Inaugurated by Minister of Science and Technology and Minister of Interior Affairs.

- ❑ **Four** presentations focused on Sudan status, **two** on UN –Spider and TAM, and **three** on experiences and best practices



Activities related to TAM Recommendations

Action Plan – RSA Sudan

- **Networking / Periodical Meetings**
- **Workshop/ Technical Support**
- **Capacity Building**

Networking / Periodical Meetings

Remote Sensing Authority (RSA) has invited **five** major institutes to form a nucleus for risk assessment and disaster managements. This was recognized as a step towards “Institutional arrangements and coordination” .

The institutes are:

1. Civil Defence
2. Ministry of Water Resources
3. Ministry of Health
4. Ministry of Agriculture
5. Sudan Meteorological Authority

Periodical Meetings

The stakeholders meeting on 22 September 2011 was a step towards establishing Technical Advisory Body (TAB) in field of space- based information for RDM

TAB first activity on November and December 2011 was Mapping Capacity of DM institutes.

A number of meetings were held at RSA 2012 to foster networking and to enhance cooperation and data sharing

Workshop/ Technical Support

Technical support was provided by RSA to the relevant institutes through seminars and workshops during May to August 2012

Five days training course was provided by RSA to 11 participants in September 2012. The participants represent the main DM institutes.



Action Plan UN- SPIDER

UN-SPIDER supported Sudan participation in Beijing conference 2011

UN-SPIDER supported Sudan to Participate in Drought workshop in Beijing 2012

UN-SPIDER supports Sudan participation in Beijing conference **"Risk Assessment in the Context of Global Climate Change"** 7-9 November and Capacity Building Program **" Space Technology for Drought Monitoring in Africa and Asia"**, 11-15 November 2012, Beijing, China.

Action Plan UN- SPIDER

UN- SPIDER will support a one day workshop on awareness at decision makers level in 2013

UN- SPIDER will support capacity building in DRM through training course to be implemented in Khartoum Feb. 2013