



## Building Data Sharing Capacity at Regional Level - <u>AfriGEOSS</u>

**Data Sharing Working Group (DSWG)** (Side Event)

**GEO-** X **Geneva, Switzerland** 12-17 January 2014

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### Africa in Context

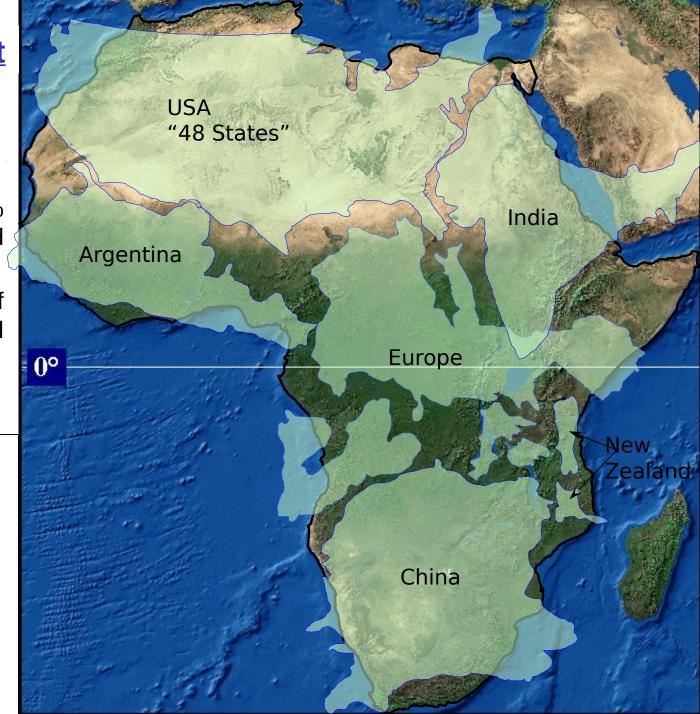
The Size of Africa

- Africa covers 20% of Earth's land surface
- Accounts for 15% of the world's total human population

China9,596,960 Km2USA 9,363,071 Km2India3,287,590 Km2Europe4,936,973 Km2Argentina2,766,890 Km2New Zealand 268,680 Km2

TOTAL : 30,220,164 km2

Area of Africa: 30,318,830 km2







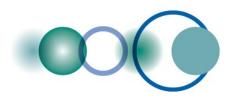
- ... Issues and challenges
  - food security
  - water scarcity
  - environmental degradation
  - peace and security
  - access to health
  - climate change

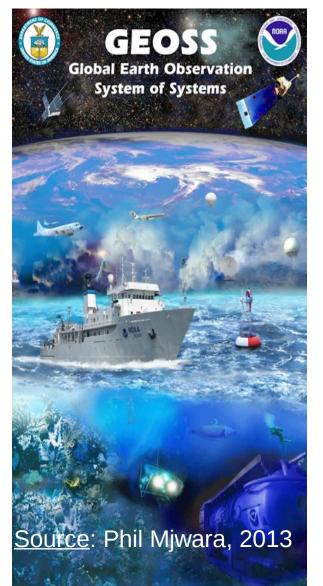
Source: PHI Mjwara, 2013





# GEO OBJECTIVES





- Improve and Coordinate Observation Systems (avoid duplications)
- Provide Easier & More Open Data Access
- Foster Use (Science, Applications)
- Building Capacity
- Identify gaps in observations (based on user requirements)

...Earth Observation Systems should be coordinated and shared internationally

... to answer Society's need for informed decision making



#### Member States (22):

- <sup>0</sup>Algeria
- **OBurkina Faso**
- <sup>0</sup>Cameroon
- OCentral African Republic
- <sup>0</sup>Congo, Republic of the
- <sup>o</sup>Cote d'Ivoire (Ivory Coast)
- <sup>0</sup>Egypt
- <sup>0</sup>Ethiopia
- **O**Gabon
- <sup>0</sup>Ghana
- <sup>0</sup>Guinea-Bissau
- <sup>0</sup>Guinea, Republic of

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- OMadagascar
- 0Mali
- **OMauritius**
- **OMorocco**
- **ONiger**
- **ONigeria**
- **OSouth Africa**
- 0Sudan
- **O**Tunisia









Implementing GEOSS in Africa



Coordinate and bring together relevant stakeholders, institutions and agencies across Africa that are involved in GEO and other Earth observation activities;

- Provide a platform for countries to participate in GEO and to contribute to GEOSS;
  - Assist in knowledge sharing and global collaborations;





Implementing GEOSS in Africa



... Objectives

Identify challenges, gaps and opportunities for African contributions to GEO and GEOSS;

Leverage existing capacities and planned assets and resources; and

Develop an appropriate strategy and participatory model for achieving the above goals.

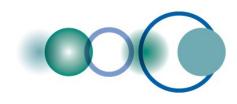
#### GROUP ON EARTH OBSERVATIONS Learning from the SDI Initiatives



- Implementation of Technical Components Stalled
  - Awareness and Expertise in the Principles and Implementation of SDI; and Funding Constraints
- Paradigm Shift Development driven SDI as the Solution
- Many initiatives on the Continent that have and are collecting Geo-information: AfriCover, TIGER initiative, AMESD, MESA, etc;
- Insufficient Knowledge of What Geo-information is available, at which Scale and Format?
- Development of appropriate structures and mechanisms to identify user needs, identify relevant datasets and provide knowledge on what is happening in the geoinformation industry

(Schwabe and Govender, 2009)

#### GROUP ON EARTH OBSERVATIONS Learning from the SDI Initiatives

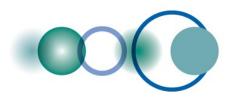


Regional (e.g. UNECA, EIS-AFRICA, AARSE) and sub-regional organisations (e.g. RCMRD, RECTAS, CEDARE, SADC RRSU) have the expertise but further <u>require</u> <u>knowledge,</u> <u>capacity</u> and financial support to the ensure implementation of a driven needs and

#### Africa's Fundamental Datasets:

- a. Geodetic Control Network
- b. Imagery
- c. Hypsography
- d. Hydrography
- e. Boundaries
- f. Geographic names
- g. Land management units/areas
- h. Transportation
- i. Utilities and services
- j. Natural environment





#### ...Call to Action

- AfriGEOSS provides us with opportunities to address the Regional Challenges
- Build necessary Institutional and Individual Capacity to establish the Infrastructure for data access and distribution;
- Through AfriGEOSS
  - We need to contribute to this global initiative
  - We need to coordinate within the regions, nationally and the rest of the continent
  - We need to take charge of EO activities in the continent





## **AfriGEOSS Collaborations**

- Support/Collaboration with similar GEO Community to fast track capacity building especially on the lost ground by Africans in the building of GEOSS;
- Support on the best practice in setting up AfriGEOSS;
- Establishment of Secretariat and involvement of bright minds on secondment to support the establishment of AfriGEOSS.



### The Journey has begun!

# Thank you!

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