



RCMRD



**GMES
AND AFRICA**



**THE GLOBAL MONITORING FOR ENVIRONMENT
AND SECURITY AND AFRICA (GMES & AFRICA)**



**Regional Centre for Mapping of Resources for Development
(RCMRD)**

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@RCMRD_



Regional Centre for Mapping of
Resources for Development



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Resources for Development



We map to solve



The Global Monitoring for Environment and Security and Africa (GMES & Africa) is a joint initiative Programme co funded by the African Union Commission(AUC) and the European Union. It utilizes Earth Observation system to respond to global needs on environment, climate change & ensure civil security.



ABOUT RCMRD CONSORTIUM

The Regional Centre for Mapping of Resources for Development (RCMRD) is an inter-governmental organization with 20 Contracting member States in the Eastern and Southern Africa Region.

RCMRD signed an agreement with AUC GMES and Africa Program as well as Partner organizations to implement GMES and Africa Phase 2 after successfully implementing Phase 1 with 8 other consortium.

PARTNERS INVOLVEMENT

1. Ethiopia Space Science Technology Institute (ESSTI)-Ethiopian
2. Makerere University-Uganda
3. Rwanda Water Resource Board-Rwanda
4. Higher Council for Environment and Natural Resources (HCENR)-Sudan
5. Department of Resource Surveys and Remote Sensing (DRSRS)-Kenya
6. Ministry of Land, Water and Environment-Eritrea
7. Department of GIS, Remote Sensing and Cartography, National Bureau of Statistics (NBS)-South Sudan
8. Cellule Cartographie de la DATUH Mapping Unit-Comoros
9. Ministry of Environment and sustainable Development-Djibouti
10. National Parks and Conservation Service (NPCS)-Mauritius
11. Forest Services Agency (TFS) Tanzania
12. Almaas University Somalia



SERVICE AREAS AND PRODUCTS

Role of partners



END USERS

- ▶ Regional Institutions Eg. EAC, IGAD, AUC
- ▶ Natural Resource Management Authorities
- ▶ Wetland Management Authorities
- ▶ Academia
- ▶ Research Institutions
- ▶ Civil societies
- ▶ National Mapping organisations, agriculture, forest and environment agencies



01

LAND DEGRADATION MONITORING & ASSESSMENT

This service aims to enhance use of Earth Observation technology for assessment of the level and the severity of Land Degradation in Eastern Africa Region.



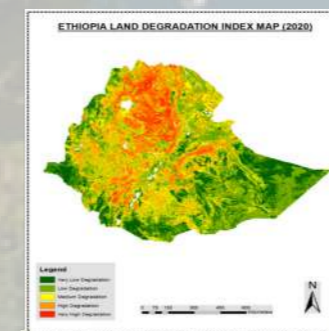
Products Developed

Regional & National Level Products

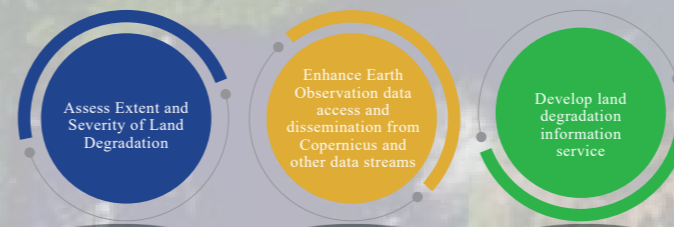
- ▶ Rainfall Erosivity
- ▶ Slope Vegetation Index
- ▶ Land Use land cover
- ▶ Population Index
- ▶ Soil Erodibility factor
- ▶ Land Degradation Maps

Sub National Products

- ▶ Land Degradation
- ▶ Hotspot Map



Objectives



Value Addition

- ▶ End User Product Customization
- ▶ Gender and Youth integration and harmonization
- ▶ National Steering Committee on Land Degradation
- ▶ Private Sector Collaboration
- ▶ Cross fertilization with other consortium

02

WETLAND MONITORING AND ASSESSMENT

This service aims to build institutional and human capacities in accessing and utilizing Earth data in assessing and monitoring Wetlands to improve the decision making process

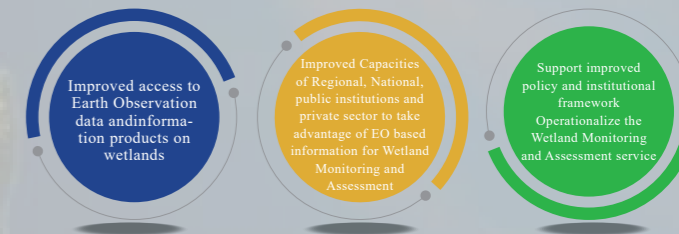


Products Developed

- Wetlands status maps
- Wetlands Change Maps
- Change statistics
- Wetland vulnerability assessment



Objectives



Value Addition

- ▶ Involvement of the stakeholders
- ▶ Simplification for the data
- ▶ Opening more opportunities for inclusivity including Research Institutions in the Knowledge Management groups and platforms
- ▶ Creating more roles for the Private sector
- ▶ Cross fertilization with other consortium

SERVICE AREAS AND PRODUCTS

03 OPEN GEOGRAPHIC REFERENCE VECTOR DATABASE

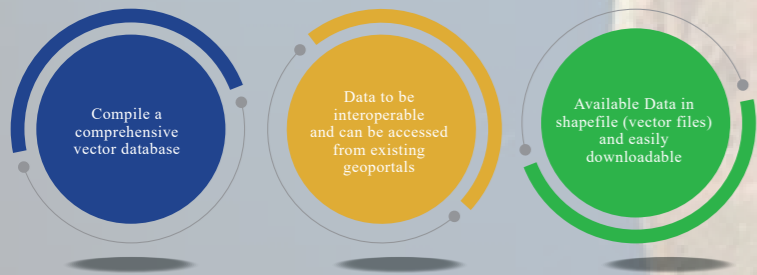
This service area seeks to improve the interpretation of Earth Observation data in decision making by developing a comprehensive database of geographical data. The data can be visualized, analyzed, built and shared. Land degradation and wetlands data is available in the geoportal.



Products Developed



Objectives



Value Addition

- ▶ Regional Statistics and Indicators Dashboard
- ▶ Geo Infographics
- ▶ Build Simple to use Apps
- ▶ Cross fertilization with other consortiums

Datasets Available

Administrative Boundaries
Forest Cover
Land cover maps
Agroecological zones
Protected areas
Rivers
Roads
Towns
Settlements
Water bodies

Why RCMRD GMES & Africa Geoportal

1. We create statistics, info graphics maps with the data
2. People can reach out to get capacity building
3. Users can build maps and create stories out of the data in the geo portal



TRAINING AND CAPACITY BUILDING



High end GIS computer training lab established at RCMRD with 25 Computers. Over 200 people have been trained from 20 Nationalities in different EO programs

UPCOMING OPPORTUNITIES IN TRAINING

- Use of GMES and Africa Services for the focal persons
- Open source software trainings on QGIS and SAR
- Earth Observation for Decision Makers
- E-Station training for RIC
- Decision makers trainings (sensitization and awareness creation) use and application of EO technology for environmental management at national level
- E-Station training for system administrators and thematic experts
- Application of EO based information for decision making

Regional Activities



RCMRD Awarded GMES & Africa Phase 2



GMES and Africa Exhibition at RCMRD International Conference



Needs Assessment Exercise in South Sudan

DATA AND INFRASTRUCTURE



3D image processing and visualization workstation



E-Station at RCMRD donated by African Union Commission and European Union Commission to improve sustainable development of Africa.

Upcoming Events