

COUNTRY REPORT BY PATRICK W.WARGUTE – DIRECTOR, DIRECTORATE OFRESOURCE SURVEYS AND REMOTE SENSING (DRSRS), MINISTRY OF MINING, KENYADURING48TH MEETING OF THE TECHNICAL COMMITTEE OF THE RCMRD10th – 11th NOVEMBER 2014, ADDIS ABABA, ETHIOPIA

The Chair of the Technical Committee,

Representative of the Economic Commission for Africa (ECA),

Director General - RCMRD,

Members of the Technical Committee,

Distinguished Participants,

Ladies and Gentlemen,

I wish to appreciate the warm welcome and hospitality accorded to us by the Federal Government of Ethiopia in this beautiful city of Addis Ababa as we gather for the 48thMeeting of the Technical Committee and the Governing Council for the Regional Centrefor Mapping of Resources for Development (RCMRD).

GENERAL OVERVIEW

Chair,

The DRSRS is charged with gathering of data on the environment and natural resources planning, conservation and management using remote sensing, GIS and conventional sampling techniques.

I wish to give a general overview about the key achievements of the DRSRS over the past one year. The DRSRS successfullyundertook a number of projects related to natural resource management in the country. Some of our key achievements in natural resource mapping for the lastone year include the following;

• The completion of mapping of wildlife corridor and migratory routes and dispersal areas in Kenya

- Completion of 4 of 5 river drainage basins as part of inventory and mapping of Wetlands in Kenya (phase II) after the publication of "Kenya Wetlands Atlas" in phase I
- Conducted Wildlife/Livestock surveys and produced population trends and distribution maps for the rangeland Counties of Turkana, Marsabit, Narok and Kajiado whose data was used to map wildlife corridors.
- Mapped the Ewaso Nyiro north forest water tower, mangrove forest along the Kenyan Coast and land degradation mapping in Makueni County.
- Land use and cover of mapping of parts of Mombasa and Kwale counties were done to help these counties in the development of their county integrated development plans (CIDPs).

MAJOR POLICY AND LEGISLATION ISSUES

- Continued with the development of *N*atural Resource Data and Information Management (National Remote Sensing) Policy and Bill. The purpose of which is to anchor DRSRS under a policy and legal framework and transform it into an authority (KENRSA)
- Participated in development of various policies and legislation on land, wildlife, and forestry.

INRASTRUCURE DEVELOPMENT

• Continued with the improvement of database infrastructure including hardware and software and other equipment. The DRSRS has acquired a digital Camera(CS-10000) for large format aerial photography.

HUMAN RESOURCE, EDUCATION AND TRAINING

• Continued to build staff capacity in GIS, Remote Sensing and other fields of natural resource management. Many members of staff have undergone skill development training abroad and within the country.

COLLABORATION WITH RCMRD

Ladies and Gentlemen

The DRSRS has collaborated with RCMRD in many projects including the mapping and production of a comprehensive Forest cover for Kenya and land use and environmental hotspots in 5 drainage basins in Kenya. The cooperation between RCMRD and DRSRS has seen the staff of DRSRS undertaking training on GIS and Remote Sensing, early warning and disaster risk reduction and management at RCMRD.

PARTNESHIPS, BILATERAL, REGIONAL, INTERNATIONAL COOPERATION AND AFFILIATIONS

Chair

The DRSRS collaborates with various institutions within and outside Kenya.

• Collaborated with Kenya Forest Service (KFS) and Regional Centrefor Mapping of Resources for Development (RCMRD) under thesupport of PASCO Japan produced a comprehensive Forest cover forKenya.

• In partnership with AGRICAB, Vito (Belgium) and Wageningen University developed a methodology on "Estimation of Crop Area in Kenya by use of a multi-approach Point Frame Sampling and AerialPhotography".

- The Clinton Foundation under Climate Change Initiative (CCI) in land use/cover mapping as it relates to climate change and carbon trading
- The University of Helsinki, Finland, on the use of LIDAR for forest cover mapping in parts of Kenya
- USAID/NASA donated LANDSAT satellite on Kenya from 1973-2014 to DRSRS
- IGAD on AMESD (African monitoring of environment for sustainable management) for early warning systems and land degradation assessment
- The African Conservation Centre (ACC) and other stakeholders including RCMRD under the Ministry of Environment, Water and Natural Resources in mapping and production of "Kenya Natural Capital and Biodiversity Atlas"

FUTURE PROJECTS/PROGRAMS

Ladies and Gentlemen

This year the DRSRS will undertake the following projects:

- Undertake Athi and Tana River drainage basin as part of inventory and mapping of Wetlands in Kenya (phase II) after production of "Kenya Wetlands Atlas" in phase I
- Undertake wildlife/livestock surveys and produce population trends and distribution maps for the rangeland counties of Laikipia, Isiolo, Narok, Taita-taveta, Tana River, Machakos and Kitui. This will eventually produce "Kenya Wildlife and Livestock Population and Distribution Atlas"
- Map the Mau forest water tower and land degradation in Narok County.

- Complete land use and cover mapping of Mombasa, Kwale, Kakamega, and Kilifi counties. Commence land use/cover mapping of Nyamira and Marsabit counties.
- Together with Mines and Geology Directorates and RCMRD map landslides in parts of Kenya as an early warning system for disaster risk reduction and management.
- The DRSRS wishes to purchase LIDAR scanner to map forest and mineral deposits in Kenya
- Participate in geophysical mapping of Kenya for mineral exploration through the support of the Government of China

• Land use /cover mapping through support by Clinton Foundation CHALLENGES IN MAPPING

Chair,

Despite the achievements highlighted DRSRS faces challenges that include understaffing due to high staff turn-over due to natural attrition, resignation and retirement, low training, inadequate budgetary allocation and equipment such as vehicles, computer hardware and software. It is envisaged more staff will be recruited with the creation of new ministerial structure Chair

Finally, DRSRS will continue to promote the development and application remote sensing and GIS technologies on natural resources management, collaborate and partnerwith other organizations to enhance capacity building on the same foreffective and efficient natural resource,

assessment, mapping and management in the Country and will to continue support RCMRD to deliver on its mandate.

Thank you very much