



FROM THE DG'S DESK

Welcome to the first edition of our quarterly e-newsletter in 2016. We started the year with launch of our 2016 Annual Work Plan. The Work Plan is intended to guide the Centre's staff to implement the second year of our 2015-2018 Strategic Plan and to contribute to interventions to resolve the development challenges facing our member States.

We were honoured to host the Chairperson RCMRD Council of Ministers and National Planning Minister, Federal Republic of Ethiopia. The Minister discussed with the management of RCMRD the progress of the implementation of the Strategic Plan and in particular, resource mobilization for infrastructural development at RCMRD. We also hosted a delegation led by the Vice Minister, Ministry of Land and Resources of China who were on a familiarization visit to RCMRD. During the visit an MoU between the National Geomatics Centre of China and RCMRD was signed.

We are pleased to announce that we are the first institution in Africa to provide Sentinel 2 satellite data to African institutions. The satellite provides data at 10m and 20m resolutions in 13 different bands and is available free of charge. We also report on the successful completion of the training of over 5,000 Staff from Ethiopia's Ministry of Urban Development and Housing. The aim of the training programme was to improve land management and administration and service delivery in the urban land sector.

Other activities in the first quarter are training programmes in water bodies mapping, workshop on land administration and governance, GIS training for Botswana, use of flood monitoring tools and climate services workshops held in Rwanda and Ethiopia.

Dr. Hussein O. Farah

Chairman RCMRD Council of Ministers visits

Hon. Dr. Yinager Dessie Belay, Chairman, Council of Ministers and National Planning Minister, Federal Republic of Ethiopia made a familiarization visit to RCMRD on 24th March, 2016. The Minister was accompanied by the Ethiopian ambassador to Kenya and Eng. Sultan Mohamed Alya, the Chairman of RCMRD Governing Council and Director General of Ethiopian Mapping Agency. The Minister discussed with the management of RCMRD the progress of the implementation of the Strategic Plan, and in particular, resource mobilization for infrastructural development at RCMRD. A presentation on RCMRD capacity development programmes and projects was also given.



Hon. Dr. Belay planting a tree during his visit to RCMRD.

The Minister toured the Centre, where he interacted with staff and witnessed the different activities taking place. At the conclusion of his tour, Hon. Dr. Belay addressed the members of staff and praised the important services RCMRD was providing to its member States. He assured the staff of continued support by the Council of Ministers to enable RCMRD achieve its mission. The Minister received Sentinel 2 Satellite data covering the whole of Ethiopia from the Director General, RCMRD. Sentinel 2 is a satellite that provides high resolution imagery. It provides a global coverage of the Earth's land surface every 10 days. Data from the satellite is useful in land use and change detection, disaster relief support, climate change monitoring, forest monitoring, urban planning, among other applications.

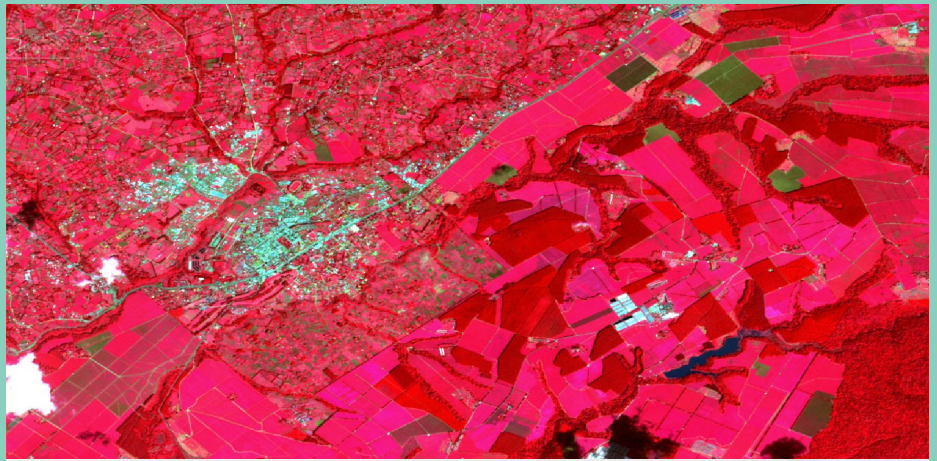
RCMRD Provides Sentinel 2 Data to Member States

RCMRD has the capacity to download, process and archive Sentinel 2 data and make it available to institutions in Africa. RCMRD also recently received Sentinel 2 datasets from the European Space Agency (ESA) : Data Dissemination Service.

Sentinel 2 was launched on 23rd June, 2015 and is equipped with the state-of-the-art Multispectral Imager (MSI) instrument, which offers 10m high-resolution imagery.

The mission provides a global coverage of the Earth's land surface every 10 days with resolution of data at 10m and 20m for land cover mapping in 13 different channels. Data from the satellite is useful in land observation, land use and change detection, providing support in generating land cover classes, disaster relief support, climate change monitoring, among other applications.

In this regard, RCMRD within the framework of the Monitoring for Environment and Security in Africa



(Above) Sentinel 2 image. (Below) Dr. Farah presenting Sentinel 2 data to Dr. Belay, National Planning Minister, Federal Republic of Ethiopia.

(MESA) held a two-week thematic training for forest monitoring and land degradation assessment where

participants from 10 countries had the opportunity to process Sentinel 2 data for their own countries.

Over 5,000 Staff from Ethiopia's Ministry of Urban Development and Housing Successfully Trained



H.E. Mekuria Haile and Dr. Hussein Farah after the handing over the final report of an ambitious capacity building programme.

Dr. Hussein Farah handed over the final report of an ambitious capacity building programme to Ethiopia's Minister of Urban Development and Housing, H.E. Mekuria Haile on 23rd December, 2015.

The programme trained and certified 5,968 staff of the ministry and local governments in cadastral surveys, land registration, urban planning, land and property valuation and land information systems.

The aim of the programme was to improve land management and administration and service delivery in the land sector. The programme lasted for a year and was conducted in five centers, namely, Addis Ababa, Baha- Dar, Hawassa, Adama, and Adigrat. RCMRD partnered with three other institutions to implement the programme.

The Minister thanked RCMRD for successfully completing the capacity building programme and said that it will greatly support Ethiopia's ambition to modernize land administration systems as a core component of achieving sustainable development and good governance.

2016 RCMRD Annual Work Plan Launch

RCMRD launched its 2016 Work Plan on 21st January, 2016 at its premises in Nairobi, Kenya. The event was attended by the Centre's management and staff. The 2016 Work Plan is the second annual plan for the implementation of RCMRD's four year Strategic Plan 2015-2018.

The Strategic Plan outlines the Centre's Vision, which requires the Centre, its stakeholders and partners to stretch their future expectations, aspirations and performance. It also outlines RCMRD's Mission statement that expresses its fundamental purpose and business.

The Work Plan gives details of the activities that will be carried out by the Centre in 2016.

These activities include training and capacity building, project and advisory services, data provision, repair of surveying equipment and



(From left) Prof. Kiema, Dr. Farah, and Dr. Rwiza during the launch of the 2016 Work Plan at the Centre's conference room

research that are expected to contribute to interventions that resolve the development challenges facing the Centre's member States.

The successful implementation of the Work Plan will require support

from RCMRD member States, development partners, cooperating institutions and clients.

RCMRD Signs MOU with Murang'a County Government

RCMRD signed a memorandum of understanding (MOU) with the County government of Murang'a on 26th January, 2016.

The signing took place at the County Government's board room between RCMRD's representatives and Murang'a County government's representatives including the county secretary, County Executive Committee (CEC) member (Lands, Housing & Planning) Hon. Sarah Masaki and CEC member – Eng. Amos Njoroge.

RCMRD and Murang'a County government will strive to partner on services related to building capacities in order to strengthen efforts towards improved agricultural production and infrastructural and social economic development of the County.



Signing of the MOU between RCMRD and the County government of Murang'a.

The parties will collaborate in capacity building, training technical and specialized professionals, promoting Geo-information and project services as well as advisory services to address governance in the County.

Both RCMRD and Murang'a County government will consider mutual arrangements to meet financial obligations for programs initiated between them or with a third party in accordance with the agreement drawn between the parties.

Vice Minister, Ministry of Land and Resources of China Visits RCMRD

A delegation from the People's Republic of China led by Mr. Kurexi Maihesuti, Vice Minister, Ministry of Land and Resources and Director General, National Administration of Surveying, Mapping and Geoinformation (NASG) visited RCMRD on 22nd December, 2015.

The delegation toured RCMRD's facilities to familiarize themselves with the activities of the Centre and held fruitful discussions on areas of cooperation between the Ministry of Land and Resources of China and RCMRD. The Vice Minister was accompanied by Mr. Zhou Yuanbo, Director General, Department of General Affairs, NASG, Dr. Wang Qian, Deputy Director General, Department of Science, Technology and International Cooperation, NASG, Mr. Feng Xianguang, Director General, National Geomatics Center of China (NGCC), and Mr. Wang

Quan, Director General, Satellite Surveying and Mapping Application Center (SASMAG), NASG.

A Memorandum of Understanding (MOU) was signed between RCMRD and the National Geomatics Centre of China (NGCC). The MOU is meant to establish a platform to facilitate and coordinate cooperation between RCMRD and NGCC in

areas of mutual interest with regard to mandates and objectives of the two institutions and specifically, promoting sustainable development in Africa through the use of Geoinformation technologies.



Exchange of MOU between NGCC and RCMRD.

Workshop to Build Capacity in Land Administration and Land Governance

RCMRD held a four-day inception workshop on strengthening the regional Eastern Africa Land Administration Network (EALAN) to build capacity in land administration and land governance in the great lakes region from 25-28th, January, 2016.

Speaking during the opening ceremony, Dr. Hussein Farah, RCMRD's Director General laid

emphasis on the importance of land to human beings, saying, "We all understand the importance of land to our citizens. Many people derive their livelihood from land."

The objectives of the workshop include getting to know each other: EALAN network partners and the implementing consortium of the project, making clear the expectations, joint ambitions and

main strategy for the project, clarifying the approach for work package implementation and of Interest Group (IG), and making clear the mutual responsibilities: as EALAN network and as implementing party, but also as implementing team.

Participants at the inception workshop on strengthening the regional Eastern Africa Land Administration Network (EALAN).



Climate Services Workshop in held Ethiopia



The two-day RCMRD/SERVIR climate services workshop in Addis Ababa, Ethiopia.

RCMRD through its SERVIR program held a two-day climate services workshop in Addis Ababa, Ethiopia from 9-10th February, 2016. The workshop was attended by Ethiopian and regional experts in agriculture, pastoralism, and hydro-meteorology as well as United States of America experts in observational, modeling, and satellite-derived data generation and sharing.

The meeting objectives included improving the understanding of user needs for climate services related to agriculture and pastoralism; increasing awareness about the latest meteorological,

climate, and environmental datasets relevant to climate services for agriculture and pastoralism; identifying opportunities to improve climate services by integrating these datasets; and identifying ways to support these opportunities by building on existing efforts.

An interactive meeting of such experts was meant to allow for a better identification of the tools and skills required to make the best use of both global and locally available climate and environmental information for Ethiopian climate services.

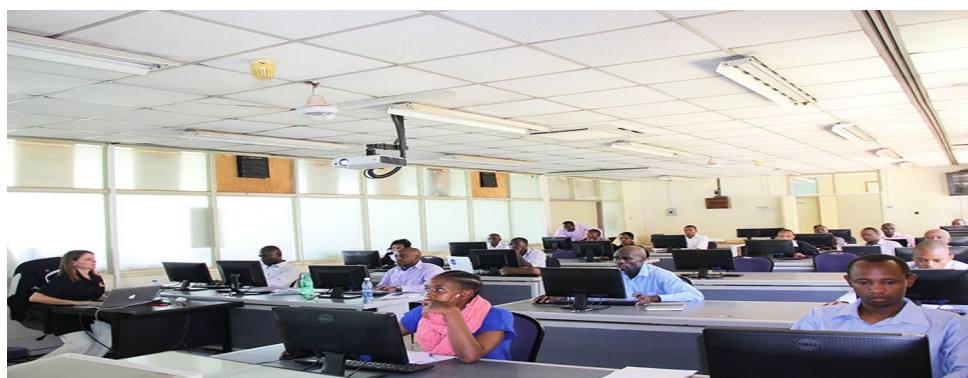
The meeting discussed the specific climate services situations, needs and opportunities of agriculture and pastoralism sectors in Ethiopia. There was also an introduction of several accessible datasets and data streams that could improve existing climate information services.

Additionally, discussions focused on opportunities to improve, such as agricultural monitoring, seasonal forecasting, rangelands monitoring and longer term research and planning. Specific emphasis was placed on meeting needs across various periods, from historic to near-real time to seasonal to decadal.

Mapping Open Water Bodies and their Colour Properties Training

RCMRD held one-week training on mapping open water bodies and their colour properties from February 15-19, 2016. The training was conducted by Dr. Erika Podest from the Jet Propulsion Lab (JPL), the National Aeronautics and Space Administration (NASA). The objective of the course was to provide hands-on training on mapping open water bodies and their colour properties using satellite imagery.

Participants include individuals who have some background knowledge of Remote Sensing and related



Training on mapping open water bodies and their color properties at RCMRD.

software including scientists, students, and end users interested in mapping open water bodies .

Prior to the start of the training, Dr. Podest held a brief discussion with representatives from RCMRD led

by Dr. Hussein Farah on areas of collaboration between NASA and RCMRD.

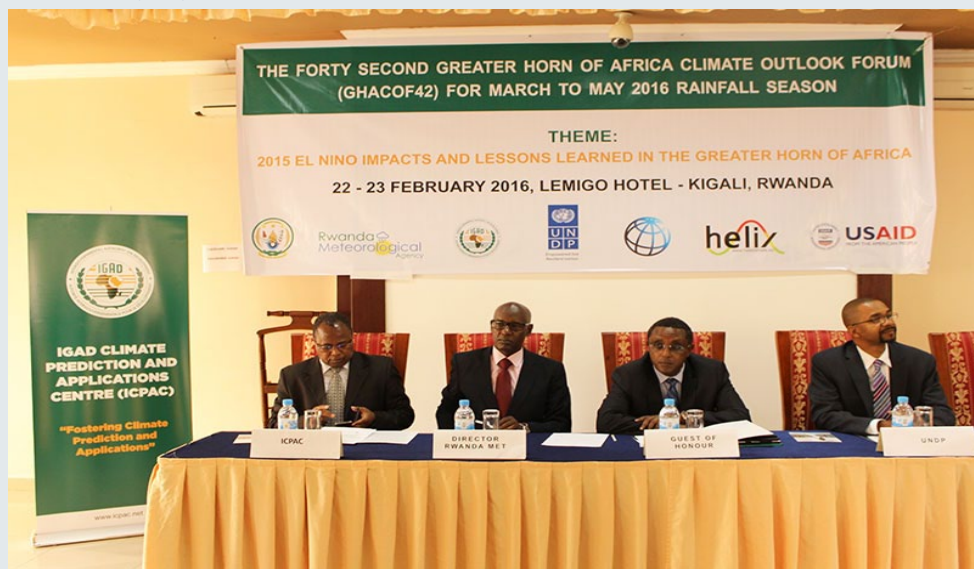
The 42nd Greater Horn of Africa Climate Outlook Forum in Rwanda

RCMRD took part in the forty second Greater Horn of Africa Climate Outlook Forum (GHACOF 42) that was held in Kigali, Rwanda from 22-23rd February, 2016.

The forum was held within the framework of the Intergovernmental Authority on Development (IGAD) regional plan for mainstreaming climate information in the main socio-economic areas so as to support disaster risk reduction for sustainable development.

The forum's theme was "2015 El Niño impacts and lessons learned in the Greater Horn of Africa". This is closely linked to activities within the RCMRD/SERVIR Programme that deal with disasters associated with the climate and are widespread in the Greater Horn of Africa (GHA).

In his opening address, Hon. Vincent Biruta, the Minister for Natural Resources, Rwanda, and member of RCMRD Ministerial



The 42nd Greater Horn of Africa Climate Outlook Forum held in Rwanda.

Council noted that climate change was likely to lead to an increase in frequency, magnitude, and severity of adverse impacts of extreme weather and climate events such as drought, floods, sea level rise, and storm surges.

The Intergovernmental Panel on Climate Change (IPCC) has noted the GHA region to be one of the most vulnerable regions to climate

change in the world.

In this regard, there is need for strong climate advisories like those provided by GHACOFs. The GHACOF products can be used for disaster risk reduction and climate change adaptation to enhance the resilience of communities.

RCMRD's Important Role in Land Potential Knowledge System



The LandPKS project developments meeting at RCMRD.

In the last two years, RCMRD/ has played an important role in the Land Potential Knowledge System (LandPKS) project by providing geospatial datasets, validating model inputs, testing mobile applications, working with African collaborators and stakeholders and promoting the use

of LandPKS applications through National Agricultural Productivity workshops and other forums.

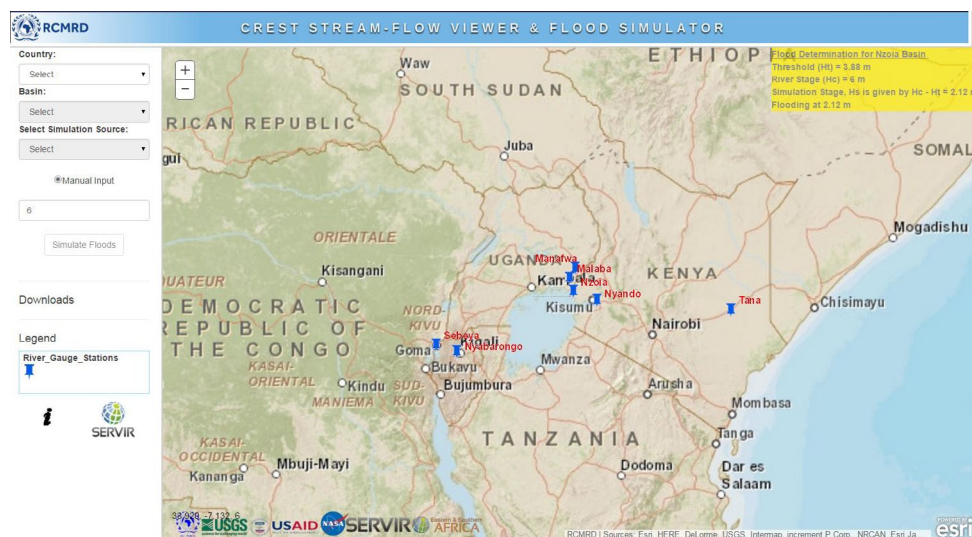
LandPKS is a suite of integrated, modular applications connected to cloud-based analytics and user-accessible cloud storage that will allow users to access share and interpret global knowledge and

information relevant to the unique potential of each piece of land.

LandPKS recently released two android based applications which are available for download on Google Play; Landinfo and Landcover applications.

In 2016, RCMRD/SERVIR will continue to promote application usage, application development and testing, and application outputs validation through existing project outputs.

Flood Monitoring Tools used in more African Countries



The CREST Hydrologic Modeling Tool used in several countries in the Eastern African region to deal with the flood problem.

Floods are among the most devastating natural disasters in Africa region. Having a negative impact on human lives and infrastructure, floods can seriously affect entire communities as well as a significant amount of the resources required in the process of rebuilding.

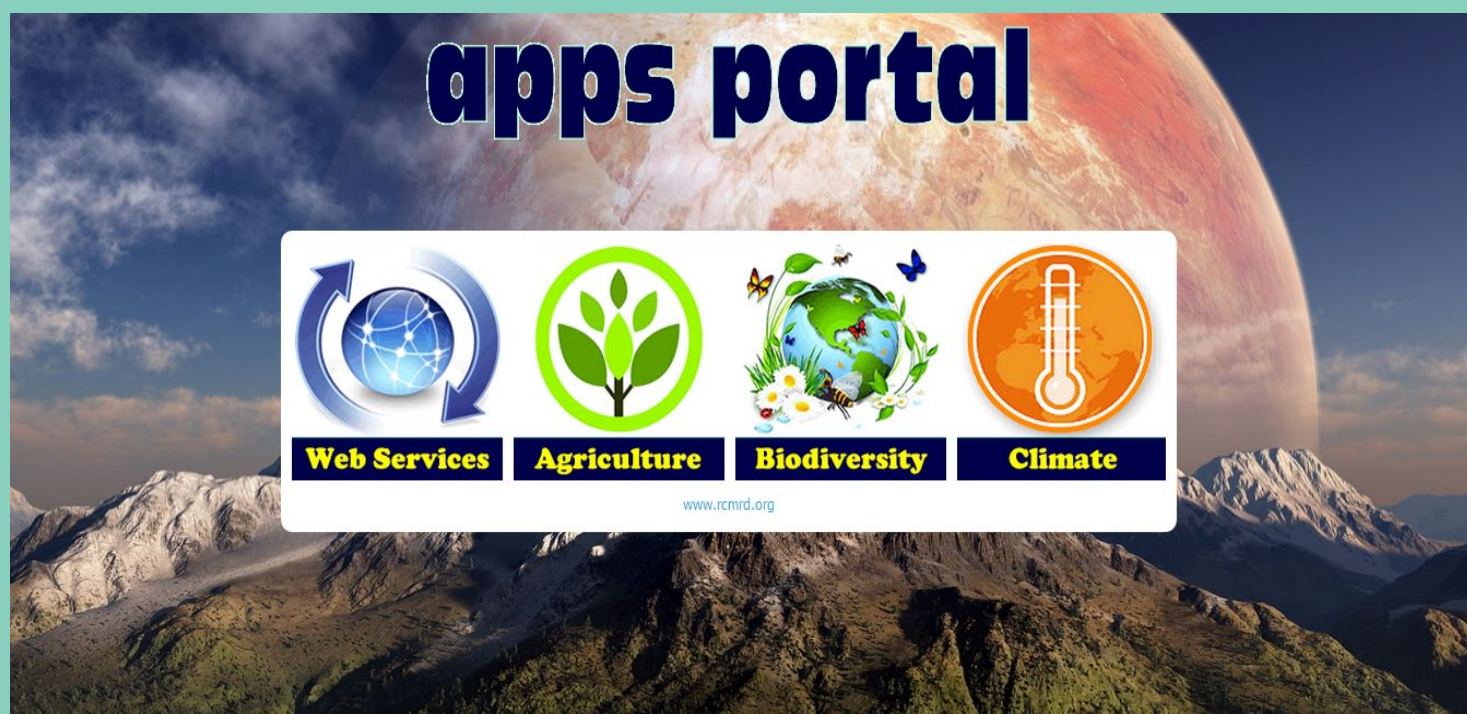
As a result, RCMRD through SERVIR Eastern and Southern Africa has provided the Coupled Routing and Excess Storage (CREST) Hydrologic Modeling Tool to a number of countries including Uganda, Rwanda, Namibia, Kenya and Malawi region to deal with the problem.

CREST integrates satellite rainfall information with land shape, elevation, soil characteristics, and other variables to calculate (model) actual evaporation, transpiration, soil moisture, and stream flow – factors that determine the likelihood of flooding. The tool is available in a historical version and a near-real-time, short-term forecast mode.

RCMRD has also developed a CREST Viewer and Flood Simulator for specific basins in the region. These tools allow end-users to see the modeled information in the form of graphs and maps. In addition, these tools enable end-users, for example, water managers to readily assess impending and near-term likelihood of flooding at selected locations.

The use of these CREST tools has now been extended to other countries in Africa.

RCMRD Develops an Applications Portal



The RCMRD apps portal which can be accessed via RCMRD's website.

RCMRD has developed an apps portal that acts as dashboard or landing page for accessing some of the applications and products that have been developed.

The apps portal allows the user to access all the spatial based services that RCMRD has deployed and shared online.

The services include tools/applications, data sets, products, maps and web map services. The apps portal is accessible via this link <http://apps.rcmr.org/>

Pictorial



Delegation from the People's Republic of China and RCMRD's management.



Participants from the Member States taking part in the Tools for Carbon emissions Estimation and Mapping in East Africa workshop.



Meeting between Members of County Assembly from Siaya County, Kenya and RCMRD representatives.



Participants from Botswana's Survey Department during a 2-week training on GIS.



Jimmy Warah (left) and Dr. Rwiza (right) with external auditor during the ISO quality management auditing



Dr. Elijah Mukhala from World Meteorological Organization meets Dr. Hussein Farah.