



SDI-Africa Newsletter

The Spatial Data Infrastructure - Africa (SDI-Africa) is a free, electronic newsletter for people interested in Geographic Information System (GIS), remote sensing and data management in Africa. Published monthly since May 2002, it raises awareness and provide useful information to strengthen SDI efforts and support synchronization of regional activities.

The Newsletter is prepared for the [GSDI Association](#) by the [Regional Centre for Mapping of Resources for Development \(RCMRD\)](#) in Nairobi, Kenya.



To subscribe/unsubscribe to SDI-Africa or change your email address, please do so online at:

<http://www.gsdi.org/newslist/gsdisubscribe>



The [Regional Centre for Mapping of Resources for Development \(RCMRD\)](#) implements projects on behalf of its member States and development partners.

The centre builds capacity in surveying and mapping, remote sensing, geographic information systems, and natural resources assessment and management. It has been active in SDI in Africa through contributions to the [African Geodetic Reference Frame \(AFREF\)](#) and [SERVIR-Africa](#), a regional visualization and monitoring system initiative. Other regional groups promoting SDI in Africa are [ECA/CODIST-Geo](#), [RCMRD/SERVIR](#), [RECTAS](#), [AARSE](#), [EIS-AFRICA](#), [SDI-EA](#) and [MadMappers](#)



Announce your news or information

Feel free to submit to us any news or information related to GIS, remote sensing, and spatial data infrastructure that you would like to highlight. Please send us websites, workshop/conference summary, events, research article or practical GIS/remote sensing application and implementation materials in your area, profession, organization or country. Kindly send them by the 25th of each month to the Editor, Gordon Ojwang' - gojwang@rcmr.org or sdiafrica@rcmr.org. We would be happy to include your news in the newsletter.

This would be interesting to a colleague

PLEASE share this newsletter with anyone who may find the information useful and suggest they subscribe themselves. You can visit the [GSDI](#) website: Newsletter back issues - <http://www.gsdi.org/newsletters.php>. You can join the GSDI Association at <http://www.gsdi.org/joinGSDI>.

Enjoy Reading - the SDI-Africa team



Support and Contributions to this Issue

Thanks to the [Global Spatial Data Infrastructure \(GSDI\)](#) Association; Hussein Farah, RCMRD (Kenya); Kate Lance, GSDI listserv moderator (USA) and Karen Levoleger, kadaster (Netherlands) for their contribution to this issue of the newsletter. We acknowledge the various websites and links referred to here as sources of information.

SDI News, Links, Papers, Presentations

[GSDI 14 World Conference and AfricaGIS 2013 - November 4-8, 2013](#)



[EIS-Africa](#), the [GSDI Association](#), the [International Geospatial Society](#), and the [United Nations Economic Commission for Africa \(UNECA\)](#) are pleased to announce a close partnership in offering the joint AfricaGIS. The GSDI 14 World and AfricaGIS 2013 is a combined conference that will take place at the UNECA Conference Center in Addis Abbaba, Ethiopia from November 4-8, 2013. AfricaGIS is the largest regularly occurring GIS conference in Africa with participants from the entire continent. The GSDI World Conference has built a reputation for excellence in content and moves across the globe to offer geospatial specialists in all parts of the world opportunities to better exchange ideas and learn from global peers in building spatial data infrastructure. Theme of the conference: "Spatially Enablement in Support of Economic Development and Poverty Reduction".



Conference Website: <http://www.gsdi.org/gsdi14>; Past GSDI World Conference Proceedings: <http://www.gsdi.org/gsdiConferences>; Past open access Books affiliated with the conference: <http://www.gsdi.org/openaccessbooks>; Other: <http://www.gsdi.org/gsdiconf/gsdi14/dates.html>

Global Geospatial Conference 2013 Programme Published

The detailed programme for the Global Geospatial Conference 2013 has been published on the conference website. This is the combined GSDI 14 World Conference and AfricaGIS 2013 Conference being held in Addis Ababa, Ethiopia, from 4-8 November 2013, at the United Nations Conference Centre (UNCC) of hosts UN Economic Commission for Africa (UNECA). (See http://www.gsdi.org/gsdiconf/gsdi14/prog_details.html).

Call for Expressions of Interest in Hosting GSDI 15 and GSDI 16 Conferences

The Global Spatial Data Infrastructure Association <http://www.gsdi.org/> supports a major international geospatial conference every twelve to eighteen months. The conference is typically delivered in affiliation with another regularly held national, regional, or global geospatial conference and/or with the support of a major sponsoring organization. The gathering is purposefully moved around and across the globe in order to accomplish the Association's purpose of promoting international cooperation and collaboration in support of local, national, and international spatial data infrastructure developments that allow nations to better address social, economic, and environmental issues of pressing importance. The locations and proceedings of the past twelve world conferences may be found at <http://www.gsdi.org/gsdiconferences>.

The GSDI 14 World Conference will be held in Africa at the UNECA Conference Center, Addis Ababa, Ethiopia in November 4-8, 2013: <http://www.gsdi.org/gsdiconf/gsdi14/>. Ideally, GSDI 15 should be held within the period of November 2014 to May 2015 and GSDI 16 would be held approximately 12 to 18 months after that.

The GSDI Association is inviting expressions of interest to host either of these conferences. Affiliation with the GSDI World conference can bring international and global attention to a national or regional geospatial conference or Spatial Data Infrastructure initiatives, attract substantial international participation and sponsorship, and increase numbers of attendees overall.

While the GSDI Association can provide substantial support services, we try to work with a competent local organizing committee that is committed to working with broad geospatial stakeholder communities and which has a proven track record of supporting large geospatial events. Many tasks must be accomplished in preparing for a successful conference. The major conference planning and implementation tasks to be accomplished by the parties are open for negotiation. The specification of these tasks is typically set forth in a written agreement between the GSDI Association and a local legal entity such as a local hosting organization or government agency.

Because revenue from the GSDI World Conferences is an important contributor to the Association's overall budget, organizations proposing to host the next conference(s) should also provide a business case to support their proposal, indicating expected income, expenses, and the cost- and revenue-sharing proposal.

Organizations or agencies interested in hosting the 15th or 16th GSDI World Conference should submit a written expression of interest of a maximum of four pages that must include:

- Name of the organization(s) or government agency(s) to serve as the local organizer for the conference,
- Name of the national, regional or global conference with which the GSDI World Conference would be affiliated (if any),
- Country, city and venue proposed for the conference (if known); the proposed approximate date for the conference,
- Short statement concerning the resources the local organizers would be able to contribute to the conference and past record in providing such resources,
- Facilities available for the event; the benefits to GSDI of affiliating with the organisation and/or event,
- Other pertinent information bearing on the success of the conference, and
- Name and contact details for further communications.

Please send your expressions of interest to mgallant@gsdi.org no later than 17 October 2013.

Proposers will have the opportunity to briefly present their expression of interest orally to the GSDI Council at its meeting on Sunday 3 November 2013 in Addis Ababa. A physical spokesperson is not required but highly recommended. Council members will vote on the proposals and thereby indicate the preferred options with which the GSDI officers should negotiate to select the organizers and locations for GSDI 15 and GSDI 16.

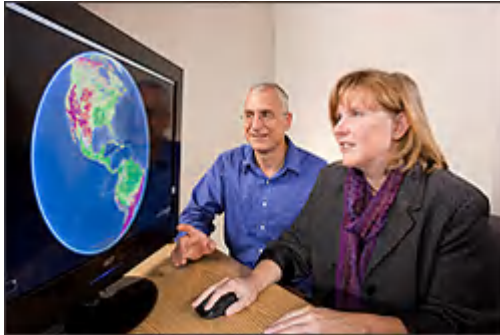
More frequent droughts in East Africa linked to global climate "shift"

A [newly published paper in Climate Dynamics](#) shows for the first time that the increased occurrence of drought in East Africa in recent years is part of a global shift in rainfall patterns mainly caused by natural



variations in sea-surface temperatures in the tropical Pacific Ocean. The shift in occurred abruptly in 1998-1999, according to the study. "While climate change may act to modify things slightly, the dominant factor is what's happening in the tropical Pacific from one decade to the next," says lead author Bradfield Lyon. The shift is also responsible for increased drying in recent years in the southwestern US, central-southwest Asia, southeastern China and portions of eastern Australia.

[New way to map drought and water use worldwide](#)



Physical scientist Martha Anderson and research leader Bill Kustas view a global scale map of evapotranspiration generated with the ALEXI model. Anderson and Kustas are collaborating with U.S. and international researchers from all the major continents in evaluating ALEXI output.

Every month, the National Oceanic and Atmospheric Administration's (NOAA) Center for Climate Prediction has a drought briefing by teleconference to identify the latest drought areas in North America. ARS scientists Martha Anderson and Bill Kustas are hoping that in a year or so, data from their computer model/satellite package will give evapotranspiration (ET) maps a seat at that briefing. With funding from NOAA and

the National Aeronautics and Space Administration (NASA), they have developed a modeling system that NOAA will use to generate ET estimates over the continental United States. NOAA will evaluate these ET products to see how well they work for operational hydrologic and meteorological modeling. One application of the remotely sensed ET maps will be to monitor drought over the

The work has advanced enough that the team wants to expand its drought monitoring to Mexico, Canada, and Central and South America. They are mapping parts of Africa - including the Horn of Africa region, where drought has caused famine in Somalia - with data from European Union meteorological satellites.

Anderson recently attended a conference in Ethiopia on soil moisture and drought monitoring to help subsistence farmers cope with increased weather variability. Scientists, Ethiopian government officials, and disaster-aid groups participated in the conference and showed great interest in the new water-use and drought-early-warning information that can be provided by satellite systems.

Use of ET for Drought Mapping – the scientists simplified the estimation of ET by using measurements of land-surface temperature obtained from weather and research satellites. With this data, they can infer soil moisture without needing data on precipitation, soil characteristics, or anything else below the Earth's surface. Their ET maps can discriminate rivers, lakes, irrigated cropland, and wetlands based on the cooler surface temperatures. These maps are remarkably similar to those created by more complex hydrologic computer models requiring significantly more input data - which is often not readily available.

ALEXI Infers Soil Moisture - Anderson and Kustas feed the remotely sensed temperature data into their computer model, ALEXI (Atmosphere-Land Exchange Inverse), and it mathematically partitions the composite measurements into soil and plant temperatures. In turn, the equations use these component temperatures to make separate estimates of soil evaporation and plant transpiration. Soil evaporation estimates allow inferences about soil moisture in the first several inches of topsoil. Plant transpiration estimates do the same for soil moisture in the root zone, which can extend down to 3 feet or more, depending on plant type. Information about root-zone soil moisture is critical to farmers because it helps them decide how much and when to irrigate or how drought is likely to affect yields in dryland agricultural areas. These soil-moisture estimates can also be integrated into hydrological models to estimate total water losses and gains, accounting for factors such as runoff, drainage, and ground-water recharge.

The scientists use coarse-resolution data from geostationary satellites to screen for drought stress and then take a closer look at stressed areas with high-resolution data from other satellites. Geostationary satellites appear motionless because they orbit at 22,000 miles above Earth's equator. These satellites take snapshots of land-surface temperature conditions every 5 to 15 minutes. Scientists at ARS, NASA, and Johns Hopkins University are testing the drought-mapping software side by side with traditional hydrologic mapping to see if the best parts of each method could be combined to improve regional water-budget estimates. Currently, they are comparing the two techniques to see how well each one estimates water usage along the full length of the Nile River. [Read full article.](#)

[Protected areas, a global perspective](#)

The World Database on Protected Areas (WDPA) is the most comprehensive dataset on the world's protected areas covering both terrestrial and marine protected areas. Currently there are about 200,000



records in the database covering nearly every country and territory. The basis for the database began in 1959, when the United Nations Economic and Social Council called for a list of national parks and equivalent reserves in recognition that they 'are valuable for economic and scientific reasons and also as areas for the future preservation of fauna and flora and geologic structures in their natural state' (Resolution 713 (XXVIII)). The first UN list of protected areas was published in 1962. Today the UN list is incorporated into the WDPA - which was established in 1981.

The WDPA consists of spatial information (where a protected areas) and associated descriptive information (what the protected area is called, its designation type, etc). The database is regularly updated through direct contact with countries and other relevant partners and covers a diverse range of protected areas. The data can be viewed and downloaded via the online map viewer, protected planet: www.protectedplanet.net.

The database includes nationally designated areas (e.g. national parks, nature reserves) as well as areas designated under international agreements and conventions (e.g. UNESCO World Heritage Sites, Ramsar Wetlands of International Importance). In order to qualify for inclusion in the WDPA, a site should meet the IUCN or CBD definition of a protected. The global protected areas system is in constant flux with new protected areas created, areas expanded and contracted, and community and private protected areas receiving increasing recognition. At any one time, the WDPA provides a snapshot of the current data made available to UNEP-WCMC and an updated version of the database produced every month.

One of the key uses of the WDPA is tracking global progress towards protected area targets. In particular, the Convention on Biological Diversity (CBD) Aichi Target 11 calls for: 'By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.' (CBD COP 10, Decision X/2). In terms of coverage, the WDPA tells us that protected terrestrial areas have increased from 8.9% of the world's land surface in 1990 to 14.6% in 2012, and during this time, protected marine areas have more than doubled in coverage from 4.6% to 9.7%. The database is a joint project between the United Nations Environment Programme (UNEP) and the International Union for Conservation of Nature (IUCN), maintained by the UNEP World Conservation Monitoring Centre (UNEP-WCMC) in Cambridge, UK.

Satellites help direct groundbreaking development work - World Bank group

The technology is especially useful in areas where conflicts, strife, or wars make it difficult to gather data, and it can provide wide-scale observations that cross-country borders. A single satellite pass can take a high definition image of the entire Mozambique Channel in a matter of seconds.

"One of the most difficult tasks facing developing countries is how to monitor large areas with limited resources," said Zoubida Allaoua, a director in the bank's Sustainable Development Network. "The use of satellite technology in our work is ground breaking in its ability to track information across hundreds of thousands of kilometers, in a manner that's highly reliable and cost effective but not intrusive." The partnership's maritime surveillance system, designed for countries of the Mozambique Channel, detected 38 oil spills over a five-month period, providing authorities with enough real-time information to investigate suspected polluters.

In São Tome and Principe, eoworld mapping activities and coastline monitoring focused local authorities and the communities on climate adaptation, providing important data for plans to locate critical infrastructure and housing in less vulnerable sites. Arlindo de Ceita Carvalho, São Tome and Principe's general director of environment, said the satellite mapping information is extremely valuable in efforts to counter coastal erosion and mitigate the effects of climate change.

"These products serve as a baseline and communication tool for the participatory risk planning with local communities," he said.

Satellite monitoring of the Lake Titicaca Basin, a UNESCO heritage site straddling the border of Bolivia and Peru, showed a 7 percent decrease in the size of the lake between 2003 and 2010, documenting for the first time the unprecedented degradation of the protected wetlands. "This is the only existing land cover dataset of this specific area in Boliva/Peru in more than 10 years, and definitely the first one with 5 meter spatial resolution," said Marco Otto, chairman of climatology at the Technical University in Berlin. "It is an invaluable resource for detailed research on vegetation dynamics and land cover change within this data sparse region, which faces many future challenges in climate and resource management."

ESA will launch a fleet of 20 new satellites by the end of the decade, making sure Earth observation data will be available for the next 20 years. "The new ESA missions will be part of the biggest Earth observation program ever developed," said Maurice Borgeaud, head of ESA's Department of Science Applications and Future Technologies Department. "And it will be supported by a free and open data policy."



A recent report shows great potential for using Earth observation data to help developing countries. Some of the success stories include:

1. Tracking land movement in Jakarta: Satellites accurately identified land movement trends in Jakarta and other cities at an unprecedented level of detail and accuracy. In Jakarta, pumping water from deep wells is causing the land to sink by as much as 10 cm a year. The information generated by the satellites helps manage ground water extraction (the main cause of the sinking land) and supports regular monitoring of high-rise buildings and coastal defense infrastructure.
2. Gathering forest data in Liberia: Liberian authorities have struggled for years to get an accurate assessment of the country's forest base. By 2004, most of the existing forest maps were outdated or fragmented and could not provide a complete picture of the current forest inventory. The eoworld team used state-of-the-art satellite techniques to provide comprehensive land use mapping and forest baselines. As a result, the Liberian government now has the most accurate assessment of deforestation trends to date, and it is using the data to improve forest management and identify options for national land use reform.
3. Mapping water in Zambia: Rural communities in Zambia rely on small reservoirs for water, but incomplete existing inventories of these small water bodies made it difficult for local authorities to comprehensively manage resources. The eoworld project used remote sensing to identify and map small reservoirs in Zambia's southern province and to provide information to assess water quality in Lake Malawi and erosion patterns along Malawi's Shire River Basin.

The second phase of the ESA/World Bank partnership triples the size of technical assistance and expands the program beyond the initial technology demonstrations to mainstream the use of Earth observation in the developing world.

SWALIM locates source of the Kismayo charcoal pile



Charcoal production in Somalia is a serious problem and the environmental damage caused is a huge concern for the future generations. In September 2012, huge piles of charcoal were discovered in the Kismayo port of Somalia. Pictures of mountains of charcoal aired by local and international media caught the attention of the world, mainly because of the fragility of the land of Somalia, which is arid with little tree cover. It was estimated that the charcoal business from the port was in the tune of 25 million US dollars every year. "Where could such large volumes of charcoal come from in such a dry country?" This was the question in the minds of all who saw these piles of charcoal.

Using years of experience in Somalia, well tested land resources assessment expertise and with the aid of a set of tools and technologies, SWALIM set out to track the source of the Kismayo charcoal. Preliminary analyses led to a focus on the South and Middle Juba regions. High resolution satellite imageries for the past two years (2011 and 2012) and for 2006 were acquired and analysed. The 2006 images were considered as the benchmark for the past situation as the charcoal must have been produced within the recent years. Analysis was done using methods that allowed rapid scanning of the ground looking for signs of charcoal kilns. An interesting picture emerged rapidly. It was clear that the charcoal came from the woody areas south of Afmadow in Lower Juba region, about 100 kilometers north of Kismayo. Much of the charcoal had been produced in 2012, with few signs of production in 2011 and almost no production in 2006. The analysis also showed numerous road tracks emerging in 2012 while land remained undisturbed in 2006 and with few tracks in 2011. These tracks were trucking routes for transportation of charcoal from the kilns to the sea port. Overall, the analyses revealed tree cover loss of up to 10% between 2006 and 2012 in the areas where the charcoal was produced.

While the charcoal operation discovered at Kismayo was of such a large scale, the problem is widespread in Somalia. SWALIM has generated a number of datasets, information products and tools that are being used to address land degradation in Somalia. In a SWALIM study carried out in Puntland in the areas North and South of Garowe, vegetation cover was observed to have reduced by between 10 and 15% over a period of five years due to charcoal production. The Puntland government is implementing a rangeland rehabilitation project with the support of European Union under the MDG initiative. SWALIM is expected to support the project with assessment and monitoring tools.

With this in mind the UN Joint Programme for Sustainable Charcoal Production and Alternative Livelihoods (PROSCAL) was developed in response to UN Security Council Resolution 2036 (2012) that seeks



international cooperation to ban illegal exports of charcoal from the country. The Somali government, regional governments, NGO's and CBOs will work together with the UN to implement this program in order to stem land degradation arising from charcoal extraction. PROSCAL will be implemented between 2013 and 2015 and focuses on 3 components: capacity building & regional cooperation, development of alternative energy sources and creation of alternative livelihoods. Under the capacity building component, SWALIM will take the lead in developing monitoring systems of charcoal production, reporting and movement in Somalia. This article is part of a joint study by SWALIM and the Joint Research Centre of the European Commission (JRC). For more information contact swalim@fao.org.

[Ghana: Regional workshop on street naming](#)

An orientation workshop on street naming and property addressing system to integrate street naming and house numbering process with the creation of a reliable tax database for each district was conducted in Koforidua, Ghana. The workshop brought together Municipal and District Chief Executives from the region to help close the limited-resource gap available to the MMDAs to deliver much needed services to the citizenry. Addressing the participants, the Eastern Regional Minister, Hellen Adjoa Ntoso noted that Ghana had traveled far in terms of modernization with modern infrastructures like roads, schools, hospitals but still lacked the right means of identifying these facilities by outsiders. Ms Ntoso stressed the need for the region to do its best to not only undertake the exercise but also ensure that it was completed within the stipulated period. "My understanding is that the orientation exercise, apart from assessing the progress of work at the MMDAs, it is also to equip the MMDAs in the region with knowledge to help ensure a successful implementation of the street naming and property addressing," she noted.

Miss Ntoso said the region had already started the exercise with the training of technical staff of the various MMDAs, which was currently underway with street addressing teams also being set up. She urged assemblies to involve relevant stakeholders in the exercise to avoid controversies in the future.

Miss Ntoso therefore appealed to Municipal and District Chief Executives to fully support the technical teams financially to undergo the training successfully bearing in mind the importance government attached to the exercise. The Deputy Minister for Local Government and Rural Development, Baba Jamal Ahmed noted that the Regional Town and Country Planning Offices had been directed to assign District Officers with additional responsibilities to districts without town and country officers. He therefore urged them to comply with the directives to ensure that every district had a Town and Country Planner to facilitate the process, adding that, the ministry was working with the National Service Secretariat to ensure posting of planners to district without them. "It is important to note that street naming and property addressing system is a key performance indicator of agreement signed by the Minister, all regional coordinating councils (RCCs) and MMDAs, we must therefore endeavor to achieve this performance indicator," he added.

Copies of the street naming policy guideline and how to do manual were distributed to participating MMDAs with additional equipment for setting up Geographic Information Systems (GIS) units at the Regional Town and Country Planning Offices donated on behalf of government.

[Satellite maps to aid REDD and biomass mapping in Kenya](#)



Scholars from Africa, South America, and Asia took part in a two-week workshop at the Woods Hole Road campus (WHRC). They came to learn advanced satellite imaging techniques, and left at the end of September with maps that will help their countries manage their forests and take part in a potential global carbon credit trading system. The WHRC is leading an effort to create the first pan-tropical biomass map that will demonstrate the future effects of deforestation and land use change across the globe. This information is key in developing the Reduced Emissions from Deforestation and Forest Degradation (REDD) policy initiative being negotiated under the United Nations Framework Convention on Climate Change (UNFCCC).

Under the REDD system, countries like the United States that emit a large amount of greenhouse gas could purchase carbon credits from countries like Gabon that have a lot of forest, but need cash to continue to protect it. The

system is also designed to encourage countries like Kenya to build up its forests, reversing the trend of deforestation that threatens to increase not only global carbon emissions, but also the ability of its citizens to grow food and find safe drinking water.

Using the maps, governments and tropical forest stakeholders will be able to monitor and track changes to land cover, helping inform policy decisions, said Joseph Kellendorfer, a WHRC scientist co-leading the pan-



tropical mapping effort. Tropical deforestation is estimated to be the cause of about 17 percent of man-made global carbon emissions, which makes it an easy target for combating climate change, said Dr. Kellndorfer. "These maps give us a first estimate of what we're talking about trading," he said.

As the scholars taking part in the workshop indicated, deforestation is caused by a variety of factors. While logging is an obvious source, agricultural expansion exacerbated by population pressures and a turn to the cultivation of cash crops is also taking a major toll on tropical forests across Africa and Southeast Asia. In Colombia, a decades-long guerilla war is having an impact even in remote forests; in Bolivia, hydroelectric projects threaten to flood the lush jungle of the Amazon basin.

"In Africa, deforestation is done by people who are trying to feed their families," said Dr. Laporte, pointing out that people are driven to cut down the forest in a quest to find wood for cooking and heating. Although REDD was not adopted by the UNFCCC Conference of Parties that met in Copenhagen last December, Dr. Laporte said it is only a matter of time before a global carbon-trading system is in place. Already, there are several bilateral agreements in place between developing nations and high carbon-emitting countries and states. Progress on REDD achieved in Copenhagen will continue at the next COP meeting in Cancun, Mexico, starting in late November. Shifting the focus of international climate talks to helping communities and developing nations solve their own problems, the field survey sessions that Dr. Laporte and her colleagues take part in reach some of the most rural or forested areas in the world. With additional income from REDD, communities will have the time to wait for the trees to grow, while also improving their farmland, he said. "REDD provides a great opportunity to help resolve the global challenge of poverty. This is a huge economic and ecological benefit that we cannot quantify." Read more...

[Land use planning started on the NIRAS Limas project in Tanzania](#)



An important step in sustainable land and forest management was taken in Mtawatawa and Litou villages in Liwale in Tanzania. The village assembly approved the proposal for the land use plan. 75 % of the total village area, close to 13,400 hectares was finally proposed for village forestland in Mtawatawa. Mtawatawa villagers can now study their current land use from digitized maps. Villagers have been waiting

for decades for official user rights to the village forests.

To stop uncontrolled burning of agricultural land, a fine has been set by the village assembly for unauthorized land burning. In order to slow down deforestation caused by shifting cultivation, farming is favored in permanent plots and in areas that have already been taken into cultivation. Shifting cultivation is still the most common way of reclaiming farming land in Liwale where land is abundant and population relatively small compared to the rest of Tanzania.

The preparation of the Land Use Plan and the respective by-laws in one village takes around two weeks and involves 35 elected villagers assisted by a team of Liwale district officials and a field coordinator from MJUMITA. Satellite images and remote sensing are utilized during maps preparation, which is supported by a GIS expert.

LIMAS supports the preparation of land use plans in 24 villages surrounding Angai forest. The fieldwork is done in cooperation with the District Council and the Community Forest Conservation Network of Tanzania. LIMAS project is being implemented in Southern Tanzania, in Newala and Liwale Districts during 2010 - 2014. The Governments of Tanzania and Finland fund the project, while NIRAS provides technical assistance. For more information please contact the Chief Technical Advisor, Meeri Komulainen at limas.cta@gmail.com.

[Liberia: Charity group to give scholarship to geology department](#)

An American based organization in Liberia is expected to extend its scholarship program to students of the Geology Department at the University of Liberia. Raise Your Hand Foundation Country Director, Alexander Ireland, said his organization's scholarship is based upon needs and academic performance. He explained that plans are underway to meet with authorities at the University of Liberia to finalize discussion on the process of the scholarship. He noted that when the conclusions are reached with UL authorities, students with grade point of 3.00 and good conduct will be given the opportunity to apply.

When asked about his recent trip to the three African countries, the RYHF Country Director said his trip was intended to assess fistula activities in Niger. Currently, Raise Your Hand Foundation is sponsoring students at Cuttington University in Bong County, Stella Maris, Smyth Institute, Bomi Community College and Grand Bassa Technical College.



Practical SDI implementation materials from within and outside of Africa

[Uganda rainy season - Is Government well prepared for natural disasters?](#)

The number of natural disasters in the world has shot up over the past two decades. Scientists argue over the extent to which climate change is responsible for this phenomenon but no one can deny such disasters are increasing in scale and frequency. According to the World Bank, the high incidence of disasters occurring in Uganda every year has a negative impact on both the economy and people. Drought and floods are identified as the disasters afflicting people most.

Households affected by particular disaster type in Uganda every year are categorized as follows; droughts 55%, floods 18%, rain 5%, hailstorm 4%, famine 4%, landslide 4%, rainstorm 2%, epidemic 2% and other disasters 2%. With Uganda beginning to face the problem of climate change, about half of the country's districts are likely to become drought-prone by 2035. Due to climate change, Uganda is experiencing unreliable and extreme rainfall which results into shorter and irregular heavy rains as well as longer drought episodes.

Droughts, flooding and landslides affected 3.6 million Ugandans between 2000 and 2009. And the Intergovernmental Panel on Climate Change (IPCC) predicts effects of climate change in Uganda will include an increase in erratic rainy seasons, intense rainstorms and matched longer drier spells (IPCC 2007, Climate Change Synthesis Report, Geneva Switzerland).

With a rapid growing population, disease outbreak, environmental degradation and climate change, people's overall levels of risk to disaster in Uganda are steadily increasing. This affects economic growth and progress on reducing poverty. We know that disasters affect poor people the most through higher mortality rates, loss of earnings, destruction of household goods and equipment used in business or livelihoods and ability to access food and health care. But we also know that reducing the risk of disaster can be an effective means to avoid future emergency costs for donors and the poor. When big disasters strike such as landslides, we need donations from the public to help communities and survivors recover from devastating disasters. But the question is; is the Government ready and well prepared for any natural disaster that may occur as scientists predict intense rainstorms? Read more...

[Timelapse: Watch the world change over nearly three decades of satellite photography](#)



People interested in what is going on at home do not build spacecraft and telescopes. Rockets fly in one direction: up. Telescopes point in one direction: out. Of all the cosmic bodies studied in the long history of astronomy and space travel, the one that got the least attention was the one that ought to matter most to us - Earth.

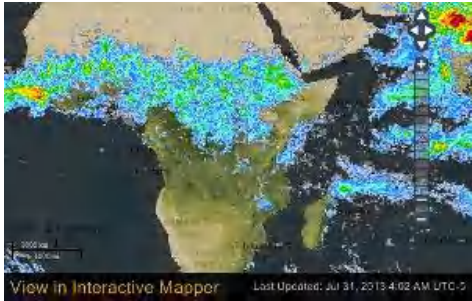
That changed when NASA created the Landsat program, a series of satellites that would perpetually orbit our planet, looking not out but down. Surveillance spacecraft had done that before, of course, but they paid attention only to military or tactical sites. Landsat was a notable exception, built not for spycraft but for public monitoring of how the human species was altering the surface of the planet. Two

generations, eight satellites and millions of pictures later, the space agency, along with the U.S. Geological Survey (USGS), has accumulated a stunning catalog of images that, when riffled through and stitched together, create a high-definition slide show of our rapidly changing Earth. TIME is proud to host the public unveiling of these images from orbit, which for the first time date all the way back to 1984.

It took the folks at Google to upgrade these choppy visual sequences from crude flipbook quality to true video footage. With the help of massive amounts of computer muscle, they have scrubbed away cloud cover, filled in missing pixels, digitally stitched puzzle-piece pictures together, until the growing, thriving, sometimes dying planet is revealed in its entire dynamic churn. The images are striking not just because of their vast sweep of geography and time but also because of their staggering detail. Consider: a standard TV image uses about one-third of a million pixels per frame, while a high-definition image uses 2 million. The Landsat images, by contrast, weigh in at 1.8 trillion pixels per frame, the equivalent of 900,000 high-def TVs assembled into a single mosaic. These Timelapse pictures tell the pretty and not-so-pretty story of a finite planet and how its residents are treating it - razing even as we build, destroying even as we preserve. It takes a certain amount of courage to look at the videos, but once you start, it's impossible to look away. See <http://world.time.com/timelapse/>.



SERVIR regional visualization and monitoring platform



The evolving SERVIR regional visualization and monitoring platform is established in Africa to improve scientific knowledge and decision-making in a range of application areas (e.g., biodiversity conservation, disaster management, agricultural development, climate change adaptation, etc.).

The development started with the core ecosystems data, but quickly expanded to include additional agricultural and infrastructure data such as [Google Map Maker Roads](#) and [Open Street Map](#) roads for sub-Saharan Africa. SERVIR ended up with over thirty gigabytes of spatial data (both raster and vector) stored across multiple file and [SDE](#) geodatabases.

The site uses a combination of custom python scripts in conjunction with the ESRI ArcGIS Server 9.3.1 javascript API. Downloading data is as simple as selecting one or multiple layers, entering an e-mail address, and defining an area on the map. Because of the large file sizes, the defined areas are limited to about the size of Mali. The system sends the user an e-mail with a download link to the server at RCMRD (Regional Center for Mapping Resources for Development) in Kenya.

The download include an ArcGIS MXD, the basic metadata and in some cases licenses. In the near future, additional non-ESRI download formats could be supported as well as increased number of data sources from RCMRD's catalog for the African spatial data. [View the prototype for the Ecosystems Clip, Zip, & Ship here](#), which is currently limited by size of the exported file. See also: <https://www.servirglobal.net/Global/Articles/tabid/86/Article/603/Default.aspx>.

RCMRD Data Dissemination

The Regional Centre for Mapping of Resources for Development (RCMRD) has a large landsat data archive, dating back to 1972 for all African countries. It is also a reseller agent in Africa for the Digital Globe - QuickBird and WorldView 1/2 high-resolution satellite imagery, and supplies data from GeoEye (GeoEye 1/2, IKONOS & Orbview imagery), SPOT image (SPOT 2.5m, SPOT 5m & SPOT 10m), USGS (Landsat MSS, Landsat TM & Landsat ETM+) amongst other active and passive satellite image products and datasets for Africa. These datasets are available at subsidized rates. Other low-resolution imagery datasets available include 90m SRTM, NOAA, MERIS, MODIS, scanned maps, and vector data for Africa.

The center in collaboration with European Space Agency (ESA) and EUMESAT has established a facility for direct satellite reception for MERIS, MODIS, NOAA, and EUMESAT Meteosat Second Generation (MSG) data. These datasets amongst other services can be accessed online via: <http://www.rcmrd.org/geonetwork> or via email to remotesensing@rcmrd.org. Further information, please visit website: www.rcmrd.org.

Training Opportunities

Have you signed up to receive [SDI-Africa Newsletter](#) notices? It only takes a minute, and then the GSDI Association can notify you when a new issue of the SDI-Africa newsletter is available, plus alert you to particular GSDI announcements (like a call for GSDI grants, or a call for papers for a GSDI conference).

The GSDI Association also hosts an [SDI-Africa E-mail Discussion List](#) with intermittent news and announcements of opportunities (this discussion list is separate from the SDI-Africa Newsletter list).

- The [SDI-Africa E-mail Discussion List](#) is open and available to anyone to read on the web. To submit messages or to receive submitted comments or notices by e-mail, one first must register.
- To see the collection of prior postings to the list, visit the [SDI-Africa E-mail Discussion List Archives](#).
- To post a message to the list, send an email to sdi-africa@lists.gsdi.org.

2013 GIS short courses through continued education at University of Pretoria

- Introduction to Quantum GIS (on request)
- Remote Sensing (on request)
- The Basics of GIS (on request)

See www.up.ac.za/cgis/http://web.up.ac.za/default.asp?ipkCategoryID=16147&subid=16147&ipklookid=11

ESRI Technical Certification

ESRI has set the industry standard for GIS technology and is now establishing benchmark standards for individuals who use Esri software with the recently launched Esri Technical Certification Program. The ESRI



Technical Certification Program recognizes qualified individuals who are proficient in best practices for using Esri software certification is awarded in different areas of expertise at both Associate and Professional level. The program is open to ESRI users worldwide and consists of 13 certifications recognizing expertise in desktop, developer, or enterprise use of ArcGIS. Users achieve certification by successfully completing computer-based examinations offered in more than 5,000 testing locations in 165 countries. Users are able to test for five certifications. Establishing an industry recognized benchmark of expertise in using ESRI software will:

- Improve success with GIS by creating a community of professionals proficient in using ESRI software.
- Help organizations maximize their investment in ESRI products by employing a workforce certified in using best practices.
- Create professional development opportunities.
- Provide an opportunity for individuals, partners, consultants, and other organizations to distinguish themselves among their peers.
- Assist hiring organizations in assessing candidate skills and abilities.
- Workplace experience, combined with GIS education and ESRI training courses, is the best preparation.

ESRI Technical Certification web site lists specific skills assessed in each exam, as well as training courses that aid in acquiring and improving these skills. [Read more.](#)

[ESRI South Africa full spectrum of GIS courses: October and November, 2013](#)



The course covers GIS theory and functionality: The desktop products (ArcView, ArcEditor, and ArcInfo; Server products (ArcGIS server and ArcSDE); Programming to enable customization of the product, ArcGIS extensions, as well as Introductory and advanced courses in ERDAS Imagine Remote Sensing Software'. Various training venues are available at Esri South Africa, for further information contact: 011 238 6300 or [Email the training team](#)

[ESRI Eastern Africa GIS and remote sensing courses](#)

ESRI Eastern Africa is now offering update courses to conform to improvements in ArcGIS 10 and ENVI 4.8, conducted with skilled and experienced instructors together with conducive and state-of-the-art training facilities. Courses offered in the following tracks: fundamentals of ArcGIS desktop; data and map production; geoprocessing and analysis; enterprise GIS; multi-user geodatabases; and remote sensing.

Request for training arrangement for clients on site for 12-16 students. [Download](#) the course catalogue and current class schedule. To register visit: <http://esrietraining.cloudapp.net/>. For more information, contact: training@esria.co.ke, Phone: +254 20 2713630/1/2 or visit the offices on 3rd floor, KUSCCO Centre, Kilimanjaro Avenue, Upper Hill, Nairobi, Kenya.

[University of Twente - Faculty of Geo-Information and Earth Observation \(ITC\): 2013-14 courses](#)



Apply online for courses starting in the academic year 2012-2013. Browse by programme (degree, diploma, and certificate), course domain (disaster management, earth sciences, geoinformatics, governance, land administration, natural resources, urban planning, and water resources or location in the course finder at www.itc.nl/CourseFinder. For printed copy of the study brochure, email: (alumni@itc.nl).

[ITC Refresher Courses](#)

In addition to the wide range of standard courses offered, ITC frequently provides training courses specifically designed to meet customers' capacity building requirements. These courses are conducted in the Netherlands or in recipient's country or region. For more information about short tailor-made training courses, see [Project Services](#), [Contract training](#).

[Sensors, Empowerment and Accountability](#)

Certificate of attendance Tanzania 21 Oct 2013 2 weeks

[Modernisation of Land Administration Systems in Sub Saharan Africa \(MODALS\)](#)

Methods and approaches to promote gender equality and incorporate poverty alleviation and good governance Certificate of attendance Ethiopia 21 Oct 2013 2 weeks

[The use of social media, crowdsourcing and webmapping to enable spatial web presence for the private sector in Southern Africa](#)

Certificate of attendance Namibia 28 Oct 2013 2 weeks

[Short-courses offered by RECTAS](#), Ile-Ife, Nigeria



The [Regional Centre for Training in Aerospace Surveys \(RECTAS\)](#) is offering a number of three-week courses. Note that RECTAS is able to package and deliver customised training for



interested organisations. These could be either advanced or other certificate programs. Please contact: info@rectas.org or thontteh@rectas.org.

Regional Centre for Mapping of Resources for Development (RCMRD) Training Programme



Geo-informational Courses (the courses last between one week to three months, and offered throughout the year):

- Introduction to Remote Sensing & Image Processing
- Introduction to Geographic Information Systems (GIS)
- Introduction to Global Positioning Systems (GPS)
- Application of Remote Sensing & GIS in natural resources management
- Application of Remote Sensing & GIS in Early Warning Systems for Food Security
- Application of RS & GIS in Disaster Risk Management
- Geospatial database development and management for use in planning process and decision making
- Principles of Digital Cartography
- Application of GPS technology in resource surveys and mapping
- Integrated Water Management
- Application of GIS in poverty mapping, health care & good governance
- Land Information Management Systems
- Service and Repair of Survey equipment

Information Technology Courses (targeted at school leavers, corporate organizations, and public).

Academic Programs

- Bridging Certificate in Mathematics
- Certificate and Diploma in Information Technology

Short Programs

- Foundation Course Graphics Application & Web Design
- Database Management
- Software Application Development
- Networking & Infrastructure Development
- PC Maintenance

Corporate Courses

- Information Systems for Management
- Computer Aided Financial Management
- Computerized Registry Management
- Management Information Systems for Monitoring and Evaluation
- Integrated Computer Training for Managers
- Database Design and Management
- Computer Based Auditing
- Computerized Records Management for Lawyers
- Analysis and Design of Information Systems
- Advanced Computer Applications for Executive Secretaries
- Basic Programming Skills

The center also offers tailor-made courses to suit specific needs of corporate clients. Courses also conducted at location of the client's convenience.

Funding Opportunities, Awards, Support

World Bank Group fellowship program for Ph.D. students of African descent

World Bank Group Fellowship Program for Ph.D. students of African descent

World Bank Group is launching the World Bank Group Fellowship Program for Ph.D. students of African descent. The program will increase the diverse workforce that is a priority for the Bank and its clients. The Fellowship Program aims to build a pipeline of researchers and professionals from the African Diaspora, particularly women, who are interested in working in the development field at home or abroad, and in starting careers with the World Bank Group.

Fellows will spend a minimum of six months at the World Bank in Washington, D.C. getting hands-on experience in development work. This includes knowledge generation and dissemination, design of global and country policies and the building of institutions to achieve inclusive growth in developing countries. While benefitting from research and innovation in multiple sectors, Fellows will also work on economic policy,



technical assistance, and lending for eliminating poverty and increasing shared prosperity. Special attention will be given to work with Fragile and Conflict-Affected States.

Who Should Apply?

Doctoral students of African descent within one or two years of completing a Ph.D. program in the following fields: Economics, Demography, Applied Statistics and Econometrics, Impact Evaluation, Education, Health, Energy, Agriculture, and Infrastructure.

Candidates must:

- Be enrolled in an academic institution and returning to university after the fellowship
- Be 32 years of age or below
- Have an excellent command of English, both written and verbal
- Possess strong quantitative and analytical skills

[Critical Ecosystem Partnership Fund - Biodiversity Conservation in the Eastern Afromontane Region](#)

As an element in its worldwide programs, the CEPF makes grants in support of biodiversity conservation in the Eastern Afromontane biodiversity hotspot. The current announcement is for projects in Burundi, Dem Rep Congo, Ethiopia, Malawi, Rwanda, Tanzania, Zambia, and Zimbabwe that correspond to the strategic directions indicated in the call for proposals. The deadlines for letters of interest (English, French) are 31 October 2013 for large grants (over US\$20 thousand), and 14 November 2013 for small grants.

[European Commission \(EC\) - Banana Production in the Ivory Coast](#)

The EC will make grants to strengthen the profitability and competitiveness of the Ivory Coast's bananas in the world market. Funding supports actions to improve productivity and environmental impacts of existing banana plantations, and to invest in new plantations. Applicants are banana producers established in the Ivory Coast for at least two years. Grants are from €50 thousand to €2 million, varying by objectives (lots) and cost sharing. Reference EuropeAid/134407/L/ACT/CI. The application deadline is 30 October 2013.

[European Commission \(EC\) - Environmental Governance in Sierra Leone](#)

The EC announces funding to support Sierra Leone in environmental awareness and education, and pilot projects concerning climate change. The program is open to nonprofit organizations established in Sierra Leone and to international organizations. Grants are a maximum of €600 thousand for environmental awareness, and €800 thousand for climate change, subject to cost shares. Reference EuropeAid/135003/M/ACT/SL. The deadline for concept notes is 07 October 2013.

[United Nations Economic Commission for Africa and the African Innovation Foundation - Innovation Prize for Africa 2014](#)

The Innovation Prize for Africa encourages innovations that contribute towards developing new products, increasing efficiency, and saving costs in Africa. Priority thematic areas for the innovations include agriculture and agribusiness; environment, energy, and water; and others. The contest offers US\$150 thousand in prizes. The closing date for submissions is 31 October 2013.

[World Wide Fund For Nature \(WWF\) - Prince Bernhard Scholarships for Nature Conservation 2014](#)

WWF supports professional training and formal studies of individuals working in disciplines directly relevant to nature conservation. Eligibility extends to mid-career nationals from Africa; Asia and Pacific; Latin America and Caribbean; Eastern Europe; and the Middle East - including WWF staff, or candidates working as partners with WWF. The maximum grant is CHF 10 thousand for studies or training lasting one year or less. The application deadline is 11 January 2014.

[Social Science Research Council - Next Generation Social Sciences in Africa](#)

The Social Science Research Council offers fellowships to support the advancement of social science faculty in Sub-Saharan Africa toward completion of doctoral degrees in topics of peace, security, and development. Past topics have included some related to climate change and land issues. The fellowship supports 9-12 months of PhD dissertation research with grants up to US\$15 thousand. Applicants must be citizens of and reside in a Sub-Saharan African country while holding a current faculty position at an accredited college or university in Ghana, Nigeria, South Africa, Tanzania, or Uganda. The application deadline is 01 December 2013.

[U.S. Agency for International Development - Agricultural Development in Ghana](#)



In support of its program "Feed the Future," USAID/Ghana will make a grant of US\$35 million for agricultural transformation that aims to increase rural household incomes in Ghana. The emphasis is private-sector activity to increase value chains. Applications are invited from qualified organizations in the USA and elsewhere. Funding Opportunity RFA-641-13-000002. The closing date for applications is 28 October 2013.

[U.S. National Oceanic and Atmospheric Administration \(NOAA\) - Ocean Exploration 2014](#)

NOAA's office of Ocean Exploration and Research invites pre-proposals in support of its program to search, investigate, and document poorly-known and unknown ocean areas through interdisciplinary exploration. The program is open to qualified applicants worldwide for grants ranging from US\$10 thousand to US\$2.5 million. The deadline for pre-proposals is 15 October 2013.

[World Academy of Sciences \(TWAS\) - Research Collaboration 2013](#)

The "TWAS Research Professors in Least-Developed Countries" aim to build the capacity of universities and research institutes is currently disadvantaged in terms of having outside connections. The costs of the programs is divided among TWAS, the host institutions, and the sponsoring institutions. The deadline for Research Professors program is 31 October.

[U.S. Agency for International Development - Agricultural Development in Ghana](#)

In support of its program "Feed the Future", USAID/Ghana will make a grant of US\$35 million for agricultural transformation that aims to increase rural household incomes in Ghana. The emphasis is private-sector activity to increase value chains. Applications are invited from qualified organizations in the USA and elsewhere. Funding Opportunity RFA-641-13-000002. The closing date for applications is 28 October 2013.

[U.S. National Oceanic and Atmospheric Administration \(NOAA\) - Ocean Exploration 2014](#)

NOAA's office of Ocean Exploration and Research invites pre-proposals in support of its program to search, investigate, and document poorly-known and unknown ocean areas through interdisciplinary exploration. The program is open to qualified applicants worldwide for grants ranging from US\$10 thousand to US\$2.5 million. The deadline for pre-proposals is 15 October 2013.

[World Academy of Sciences \(TWAS\) - Research Collaboration 2013](#)

Research collaboration at TWAS includes the "TWAS Research Professors in Least-Developed Countries" and the "TWAS Visiting Scientists Program." Both programs aim to build the capacity of universities and research institutes that are currently disadvantaged in terms of having outside connections. The costs of the programs are divided among TWAS, the host institutions, and the sponsoring institutions. The deadline for Research Professors program is 31 October.

Employment Opportunities

[Statistician, Addis Ababa, Ethiopia](#)

This position is located in the African Centre for Statistics (ACS), United Nations Economic Commission for Africa. The incumbent works under the direct supervision of the Chief of Statistical Development Section. Under the overall guidance of the Director of ACS and the direct supervision of the Chief of Statistical Development Section, the statistician is expected to:

- Initiate and co-ordinate the development of appropriate methods for obtaining relevant data;
- Ensure the quality of collected data for accuracy, consistency and comparability;
- Plans and conducts analytical programmes of work in relevant areas of statistics. This may include: identifying projects, conducting analysis and participating in technical advisory activities for national capacity building;
- Coordinate the elaboration and implementation of regional and national strategies for statistical development, and work with countries and partners in mobilizing resources for the statistical strategies and programmes;
- Undertakes methodological research with regard to standards on concepts, definitions and classifications to assist countries and other constituents in strengthening their statistical development;
- Develops new or improved statistical methods and quantitative models for analyses and projections;
- Provides guidance and advice to other divisions and Sub-Regional Offices, field experts, etc., in the planning, operation and evaluation of statistical programmes and projects;



- Collaborate with experts in the development community; prepare for and participate in inter-agency consultations, meetings, and conferences related to statistical capacity building and development and assist in drafting relevant report; and

Professionalism:

- Knowledge of statistical programmes to analyze and evaluate complex data. Ability to formulate new strategies and technical approaches with respect to statistical development. Shows pride in work and in achievements; demonstrates professional competence and mastery of subject matter; is conscientious and efficient in meeting commitments, observing deadlines and achieving results; is motivated by professional rather than personal concerns; shows persistence when faced with difficult problems or challenges; remains calm in stressful situations. Takes responsibility for incorporating gender perspectives and ensuring the equal participation of women and men in all areas of work.
- Technological Awareness: Keeps abreast of available technology; understands applicability and limitation of technology to the work of the office; actively seeks to apply technology to appropriate tasks; shows willingness to learn new technology.
- Advanced university degree (Master's degree or equivalent) in statistics, mathematics, economics, sociology or related field. A first-level university degree in combination with qualifying experience may be accepted in lieu of the advanced university degree.
- A minimum of seven years of progressively responsible experience in the collection, compilation, analysis and dissemination of statistical data or related area. Qualifying years of experience are calculated following the receipt of the first level university degree recognized by the United Nations.

Please apply online. Closing date: 05 October 2013.

[Research Officer, Addis Ababa, Ethiopia](#)

This position is located in the AUC-ECA-AFDB Joint Secretariat Support Office (JSSO) at the Economic Commission for Africa (ECA). The incumbent works under the direct supervision of the Coordinator of the JSSO. Within delegated authority and in coordination with the relevant Directors of substantive divisions of the Commission, the Research Officer will be responsible for the following duties:

- Participate in policy development; review the assessments of issues and trends, prepare evaluations of research activities and studies.
- Serve as an effective spokesperson and maintain collaboration and partnerships with key officials at all levels inside and outside the institutions.
- As directed, represent the Coordinator at official functions and accompany him on major official visits.
- Prepare complex reports, substantive background papers and briefing notes on key topics as they relate to programme and administrative matters, including undertaking extensive research on key topics.
- Ensure timely review and/or submission of all documentation, including contributions to statements and speeches and provide extensive and substantive review in consultation with author divisions to impart quality and ensure the document conveys correct messages. Identify and track follow-up actions.
- Propose new research projects; draft protocols, guide design of data collection instruments, standard operating procedures and data collection management tools and databases; design and support the implementation of quality assurance in research monitoring systems.
- Undertake research; identify problems/issues; oversee the monitoring and reporting of progress of all ongoing research; complete analysis; present information gathered and formulates development policies, strengthening delivery systems and monitoring and evaluating the programmes; prepare relevant reports for the institutions.

Education

- Advanced university degree (Master's degree or equivalent) in social science, economics or related area. A first-level university degree in combination with qualifying experience may be accepted in lieu of the advanced university degree.
- A minimum of seven years of progressively responsible research experience in the areas of economics, administration, or programme work or related field including experience in research methods and statistics.

Please apply online.

[Programme Management Officer, Addis Ababa, Ethiopia](#)

This position is located in the Strategic Planning and Operational Quality Division at the United Nations Economic Commission for Africa (UNECA). The incumbent works under the direct supervision of the Chief, Operational Quality Section. Within delegated authority, the Programme management Officer will be responsible for the following duties:



- Develops, implements and evaluates assigned programmes/projects, etc.; monitors and analyzes programme/project development and implementation; reviews relevant documents and reports; identifies problems and issues to be addressed and initiates corrective actions; liaises with relevant parties; ensures follow-up actions.
- Performs consulting assignments, in collaboration with the client, by planning facilitating workshops, through other interactive sessions and assisting in developing the action plan the client will use to manage the change.
- Researches, analyzes and presents information gathered from diverse sources.
- Coordinates policy development, including the review and analysis of issues and trends, preparation of evaluations or other research activities and studies.
- Generates survey initiatives; designs data collection tools; reviews, analyzes and interprets responses, identify problems/issues and prepares conclusions.
- Organizes and prepares written outputs, e.g. draft background papers, analysis, sections of reports and studies, inputs to publications, etc.
- Provides substantive backstopping to consultative and other meetings, conferences, etc., to include proposing agenda topics, identifying participants, preparation of documents and presentations, etc.
- Initiates and coordinates outreach activities; conducts training workshops, seminars, etc.; makes presentations on assigned topics/activities.
- Leads and/or participates in large, complex field missions, including provision of guidance to external consultants, government officials and other parties and drafting mission summaries, etc.
- Coordinates activities related to budget funding (programme/project preparation and submissions, progress reports, financial statements, etc.) and prepares related documents/reports (pledging, work programme, programme budget, etc.).

Education:

- Advanced university degree (Master's degree or equivalent) in business administration, management, economics or a related field. A first-level university degree in combination with qualifying experience may be accepted in lieu of the advanced university degree.
- A minimum of seven (7) years of progressively responsible experience in project or programme management, administration or related area. Qualifying years of experience are calculated following the receipt of the first-level university degree recognized by the United Nations.

Please apply online. Closing date: 26 November 2013.

Other

[Despite technological advances, South Africa still lags in internet usage](#)

South Africa is one of the most technologically advanced countries in Africa, yet two-thirds of its adults have never used the Internet. Described by some as Africa's most sophisticated economy, South Africa has some of the best rail, road and communication facilities on the continent. The World Economic Forum's most recent competitive index ranked South Africa as number two in Africa, behind Mauritius. South Africa boasts of having the only commercial nuclear energy station in Africa. In 2024, it will be home to the largest and most sensitive radio telescope in the southern hemisphere.

A recent study by the South African Network Society survey - a research organization looking at the social impact of new telecommunications networks and technologies in Africa - found that only 34% of South African adults use the Internet. That's about 12 million people. Three-quarters of the Internet users are urban dwellers. The majority of them use their cell phones for access, while the remainder rely on Internet cafes or educational or work facilities.

Sonkabite Reginald Mugoe, a 19-year-old student in Johannesburg, is an active Internet user. "I am always with my phone, every time I feel like I can get into the Internet, I get in, Google," Mugoe said. "If I struggle with answers sometimes I search for the answers, but if I want to use a PC, I go to an Internet cafe or even I want to print something that I'm researching about."

There are many reasons for the dismal Internet statistics in South Africa, said South African Network Society survey leader Indra de Lanerolle. First, home Internet access is too expensive for most South Africans. Prices for mobile data have also been found to be unaffordable. And Lanerolle says language is another huge barrier. Those whose reading skills are limited to local South African languages are effectively shut out. "We do have expensive costs and cost is a big limitation to Internet use," he said. "It stops some people from using the Internet at all, and the other thing it does it stops people using it very much. So unless we do better than 1 in 3 connected, increasingly that's going to be a real disadvantage for the country." Read more...



Insurance innovations for development and adaptation

A [new fact sheet](#) put together with the US Agency for International Development answers frequently asked questions about index insurance and how IRI and other institutions are using it to help farmers around the world become more productive and adapt to climate change. To learn more about this exciting and innovative field, visit [Financial Instruments](#) page.

1st Africa Food Security and Adaptation Conference

The report details out the experiences shared on Ecosystem-based approaches for food security and climate change adaptation, the lessons learnt in using Ecosystem-based adaptation approaches, mainstreaming Ecosystem-based approaches for food security and climate change adaptation, implications for future Africa food security & adaptation under increasing temperatures (2oc, 3oc, 4oc), recommendations and the conference declaration on Ecosystem-based approaches for food security and climate change adaptation

Items newly added to this listing of events since the last SDI-Africa issue are marked *** NEW ***

Conferences, Events		
Date	Location	Event
October 2013		
15-17 October 2013	Arusha, Tanzania	Africa Climate Conference 2013 (ACC-2013)
16-18 October 2013	Jinja Nile Resort, Uganda	8th Esri Eastern Africa User Conference
21-22 October 2013	Tunis, Tunisia	TIGER Workshop 2013: Achievements Review and Future Planning . See also: http://www.itc.nl/Pub/organisation/News-overview/in2013/in2013-August/TIGER-Workshop-2013.html .
23-25 October 2013	Munich, Germany	Esri Europe, Middle East, and Africa User Conference (EMEAUC)
23-25 October 2013	Beijing, China	United Nations International Conference on Space-based Technologies for Disaster Management . Contact Mr. Shirish Ravan at shirish.ravan@unoosa.org , Phone: (+86) (10) 6353 3527
23-25 October 2013	Rio de Janeiro, Brazil	Sixth International Conference on Agricultural Statistics-ICAS-VI , Abstract deadline: 15 December 2012 website: www.fao.org/economic/ess/ess-events/ess-icas/en/
25 October-2 November 2013	Addis Ababa, Ethiopia	ISPRS/RCMRD Summer School Consortium
29 October-2 November 2013	UNECA, Addis Ababa, Ethiopia	10th ISPRS Student Consortium & WG VII/5 Summer School Further information: http://www.rcmrd.org/index.php/10th-isprs-student-consortium/general-information
30 October-01 November 2013	Dar es Salaam, Tanzania	Local Climate Solutions for Africa Conference (LOCS) Contact: locs4africa@iclei.org
November 2013		
04-08 November 2013	Adis-Ababa, Ethiopia	GSDI 14 World Conference and AfricaGIS 2013 Conference
06-08 November 2013	Butare, Rwanda	6th National University of Rwanda (NUR) International Scientific Research Conference 2013 Contact: nurconference2013@nur.ac.rw
10-16 November 2013	RCMRD, Nairobi, Kenya	RCMRD Governing Council
11-22 November 2013	Warsaw, Poland	19th Session of the Conference of the Parties to the UNFCCC (COP 19) Email: secretariat@unfccc.int
16-17 November 2013	Warsaw, Poland	Global Landscapes Forum Email: a.neureuther@cgiar.org



18 November 2013	Africa	African Statistics Day - Organized by UN Commission for Africa and African Centre for Statistics.
19-21 November 2013 * NEW *	Nairobi Kenya	Regional Conference of the International Network of Women Scientists and Engineers (INWES) . See http://www.aawse.org/images/stories/docs/inwes_2013_final.pdf
19-22 November 2013	Nairobi, Kenya	Fifth Annual International Conference of Crisis Mappers (ICCM 2013 Nairobi)
25-30 November 2013 * NEW *	Libreville, Gabon	49th Session of the International Tropical Timber Council (ITTC) and the Associated Sessions of the four Committees (Finance and Administration, Economic Information and Market Intelligence, Forest Industry, and Reforestation and Forest Management)
December 2013		
28-31 December 2013	CRRAO AIMSCS, Hyderabad	Statistics 2013: Socio-Economic and Sustainable Challenges and Solutions
2014		
10-14 February 2014	Delhi, India	World Congress on Agroforestry 2014 (WCA2014) Deadline for abstract submission: 30 September 2013
25-30 May 2014 * NEW *	Cancun, Mexico	46th GEF Council Meeting and GEF Assembly Contact: secretariat@thegef.org
8-14 June 2014	Jeju ICC, Korea	20th World Congress of Soil Science (WCSS)
15-21 June 2014	Riviera, Bulgaria	5th Jubilee International Conference on Cartography & GIS & Seminar with EU cooperation on Early Warning and Disaster/Crisis Management Contact: Prof. Dr. Temenoujka Bandrova at www.uacg.bg . Deadline for report publishing: 10 January 2014
14-19 July, 2014 * NEW *	Nairobi, Kenya	The African Association of Women in Geosciences (AAWG), 7TH Conference - Earth Sciences and Climate Change: Challenges to Development in Africa
2014 * NEW *	Jamaica	CIF 2014 Partnership Forum and Associated Meetings Contact: cifevents@worldbank.org
2015	Durban, South Africa	14th World Forestry Congress for South Africa
1-31 August 2016	Cape Town, South Africa	35th International Geological Congress

Please mention SDI-Africa as a source of information in correspondence about items in this issue.

To subscribe or unsubscribe to SDI-Africa, please do so online at: <http://lists.gsdi.org/mailman/listinfo/sdi-africa> and follow the steps

Gordon Ojwang', Editor, gojwang@rcmrd.org or SDI-Africa AT gsdi.org or sdiafrica@rcmrd.org

Global Spatial Data Infrastructure (GSDI) Association
<http://www.gsdi.org>
Copyright © 2013. All rights reserved.

DISCLAIMER:
The Editor, GSDI, and Web Host will not be held liable for any errors, mistakes, misprints or incorrect information.