



## 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.



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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 25<sup>th</sup> of each month to the Editor, Gordon Ojwang' - [gojwang@rcmrd.org](mailto:gojwang@rcmrd.org) or [sdiafrica@rcmrd.org](mailto:sdiafrica@rcmrd.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

Thank you to the [Global Spatial Data Infrastructure \(GSDI\)](#) Association; Hussein Farah, RCMRD (Kenya); Byron Anangwe, RCMRD (Kenya); Richard Munang, UNEP (Kenya); Serena Coetzee, University of Pretoria (South Africa); Kate Lance, GSDI listserv moderator (USA); Karen Levoleger, kadaster (Netherlands) for their contributions to this issue of the newsletter. We also acknowledge the various websites and links referred as source 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 entirety of the 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.



The theme of the conference is "Spatially Enablement in Support of Economic Development and Poverty Reduction".

### Important Links

- 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 Important Dates: <http://www.gsdi.org/gsdiconf/gsdi14/dates.html>

We look forward to seeing you in Addis Ababa in November 2013. Primary organizers and hosts of this conference include the GSDI Association, EIS-Africa, the UN Economic Commission for Africa, EiABC - Addis Ababa University, and the International Geospatial Society.

### GEO Challenge Grant

The Group on Earth Observations (GEO) has contributed \$5,000 to help defray expenses of worthy applicants from economically disadvantaged nations in Africa to attend the combined AfricaGIS 2013 and GSDI 14 conference and training workshops before and after the conference. GEO would like to invite, encourage, and challenge additional geospatial organizations and agencies from across the globe to make additional contributions.

To qualify to receive partial travel support, an applicant must have an abstract or paper accepted for the conference and a resident in or citizen of any nation in Africa. Abstract submissions are due on or before 15 May 2013. Representatives from contributing organizations will serve on the selection panel for participants to receive the travel support. The Global Geospatial Conference 2013 will be held at the United Nations Economic Commission for Africa (UNECA) Conference Center in Addis Abbaba Ethiopia on 4-8 November 2013. Training workshops scheduled on Sunday November 3 and Friday November 8.

If your organization can make a contribution to help support deserving peer professionals from across the African continent, please contact Sives Govender, Director, EIS-Africa, email: [SGovender@eis-africa.org](mailto:SGovender@eis-africa.org), phone: +27-12-3491068.

### How geolocation technology is helping save lives in the developing world



In the developed world, geolocation technology has its upsides and its downsides. On the one hand, we can now follow our progress as we walk from A to B without getting lost, and find the nearest two-for-one pizza deal in the process. In the future, says Jane Frost of the Market Research Society, governments will use such data "to understand how people interact with services such as public transport and health, and to monitor criminals and detect and prevent fraud". On the other, companies will aggressively mine geolocation data to target customers with goods and services according to their habits and location.

In the developing world, and in fragile and conflict states, though, the technology is being put to less controversial use. A project in Nigeria for the UK Department for International Development, for example, which is funding a programme to help reduce child and mother mortality in childbirth by encouraging more mothers to give birth in clinics, has successfully combined GPS data collected during interviews with satellite imagery to clearly show the effect of distance on mortality. "We knew there was a huge difference between the Muslim north and the Christian south," says Johnny Heald of ORB International, the opinion research firm that carried out the interviews using GPS-equipped PDAs. "By interviewing people where we knew clinics were funded, and also a matching sample where they weren't, then overlaying that data on satellite maps, we could show the effect of distance on mortality very effectively."

ORB, which specializes in research in fragile and conflict states, also worked with US satellite imagery and information firm Digital Globe on a more complex project that used so-called "geospatial analysis" to predict where Joseph Kony's notorious Ugandan guerilla group, the Lord's Resistance Army, would strike next. Data-rich satellite maps and geolocation information from the sites of previous attacks were fed into a model that used machine learning to search for likely future targets.

The technology is not without its dangers, for interviewers and interviewees, Heald says: "In some countries, like Somalia or Afghanistan, if you're caught with a GPS device or a particularly advanced mobile phone, you're automatically a spy. Likewise, because GPS pinpoints people very accurately, some people in a sample could be at risk if, say, they expressed certain political views. We have to present the opinions of say, eight or 10 people in a village, collectively. There's an ethical issue here."



Frost notes that concerns about the use of geolocation data also apply in the developed world, "especially when the data is combined with personal information like gender, race, occupation, and financial history. What data is collected and how is developing rapidly, but data privacy legislation is not. Public and consumer trust in data sharing is taking a beating, and organisations need to commit to ethical data sharing that respects personal privacy before trust becomes a real problem."

## [AfDB launches new information highways](#)



Following the launch in March 2013 of Open Data Platforms in 30 African countries, the African Development Bank (AfDB) has launched additional data platforms in the following 10 African countries: Burkina Faso, Burundi, Central African Republic, Chad, Gabon, Mali, Madagascar, Niger, Somalia, Sudan. This brings to forty (40) the number of African countries already connected to the Open Data network.

The Open Data Platform program is part of the AfDB's recently launched "Africa Information Highway" initiative aimed at significantly improving data management and dissemination in Africa. Work is on course to complete platforms for the remaining 13 African countries by July 2013. The Open Data Platform is a user-friendly tool for extracting data, creating and sharing own customized reports, and visualizing data across themes, sectors and countries in tables, charts and maps. Through the Open Data Platform, users can access a wide range of development data on African countries from multiple international and national official sources. The platform also facilitates the collection, analysis and sharing of data among countries and with international development partners.

The platform offers a unique opportunity for various users, such as policymakers, analysts, researchers, business leaders and investors around the world, to gain access to reliable and timely data on Africa. Users can visualize time series development indicators over a period of time, perform comprehensive analysis at country and regional levels, utilize presentation-ready graphics or create their own, blog, and share their views and work with others, thereby creating an informed community of users.

The Open Data Platform initiative is a response by the African Development Bank Group aimed at significantly increasing access to quality data necessary for managing and monitoring development results in African countries, including the MDGs. It responds to a number of important global and regional initiatives to scale up the availability of quality data on Africa and so foster evidence-based decision-making, public accountability and good governance.

Once implemented, the Open Data Platform will be used by African countries for all data submission flows to the AfDB and to other international development partners, such as the International Monetary Fund (IMF), the EU Commission, World Health Organization (WHO), UN Food and Agriculture Organization (FAO), African Union Commission (AUC) and UN Economic Commission for Africa (ECA). This initiative presents a unique opportunity for African countries to take the lead in implementation and promotion of international statistical standards across all countries in the region and in enhancing the quality of the data disseminated by African countries. The initiative will also significantly revolutionize data management and dissemination in Africa, and reposition the continent for more effective participation in the global information economy.

## [Land inventory project begins in Gbarnga, Liberia](#)

The Land Commission launched its Urban Land Inventory Project in Gbarnga, Bong County, intended to map up the city for proper records of the population as well as the number of houses, among others. Giving an over view of the project, the Commissioner for Land Use and Management at the commission called on residents of the city of Gbarnga to cooperate with the commission's field staff for data about the city. Commissioner Victor Helb said the Urban Land Inventory Project would assist government make proper plan for the improvement of the city, noting that it was important for residents of the city to have information about the city in which they reside. He expressed the belief that the project will give authorities and citizens of Bong County basic information about the provincial capital that is highly populated.

Officially launching the project, Land Commission Chairman Dr. Cecil Othello Brandy described the exercise as an opportunity for the city and its residents, admonishing residents to take ownership of the project, especially in providing accurate information about their households. He disclosed that using satellite system, they were able to see about eighteen thousand structures in Gbarnga City. "When we have all of the basic information we need, it will make it very easy for government to development such city," the Land Commission Chairman added.



Dr. Brandy also disclosed that the project, which is in its pilot phase, will be extended to other provincial cities in Liberia in subsequent time. He warned Gbarnga residents against giving a cent to any of the commission's field staff already hired to collect data and maintained that they were being well paid for the job. Prior to the launch of the Urban Land Inventory Project in Gbarnga, the commission hosted a two-day stakeholders' consultative forum intended to discuss the purpose of the project and how residents could contribute to the achievement of its objective. The project is supported by the Peace-Building Fund through UN Habitat is expected to last for four months.

## **Nigeria: Committee submits draft to replace land use Act 1978**

A new set of regulations that would replace those subsisting in the current Land Use Act of 1978 have been drafted by the Presidential Technical Committee on Land Reform, which submitted its 2012 report to President Goodluck Jonathan at the Presidential Villa, Abuja. Prof. Peter Olufemi Adeniyi, who submitted the report to the president, told journalists that the committee had also mounted some CORS station (Continuously Operating Reference Station) for cadastral mapping and introduced systematic land titling and registration in the country.

In February, Adeniyi had revealed that since formal land registration began in Nigeria in 1863, not more than 2.5 per cent of the land in the whole country is registered. He explained that the new Land Use Act in the pipeline would cover designation of urban areas, issue of consent, contents of Certificates of Occupancy (C-of-O), revocation, interest, mortgage and sectional title.

Stating that the committee has designed modalities of titling and registering land that entails the crafting of a manual that people will use in the field, the chairman said "we have done the regulations that have not been done since 1978 when Land Use Act was made. "The regulation covers a lot of areas where we have problem with the Land Use Act including systematic land titling and registration, designation of urban areas, issue of consent, what should be in the Certificate of Occupancy, revocation, interest; but more importantly, mortgage. Also sectional title so that when you have multiple story buildings and people are buying only a flat there, you need a certificate on that," Adeniyi emphasised.

He added that the committee, in collaboration with the Food Agricultural Organisation (FAO), selected a software based on the open source platform that is so flexible, that "can assist in registration and land administration in such a way that there will be less fraud," indicating that the software is very quick to use and can help trace the history of land.

On the installation of the CORS station in Kano and Ondo State, the chairman said: "We have been able to install four of that, two in the pilot area because we are carrying out new methods of registering land. The old one we are used to is sporadic, but we are introducing a systematic land titling and registration in the country." "We have designed the manual that people will use in the field, thereby reducing lots of personal discretion. You have to go by rules and regulation. "We are trying to establish registries in those areas where we are piloting now. We are putting some putting equipment there through the assistance of gems in order to go and start the registration."

## **Flood Disaster: NEMA undertakes mapping of Nigeria's vulnerable areas**



The National Emergency Management Agency (NEMA) of Nigeria had carried out mapping of all the communities likely to be affected by the predicted 2013 flood as part of its preparedness against disaster occurrence in the country. NEMA's Director General, Alhaji Mohammad Sani Sidi, explained that the agency's action plan during a meeting with the Kogi State Governor, Capt. Idris Wada, in Abuja. He said the organisation had also carried out vulnerability capacity assessment of seven communities to determine the existing capacity in each community and its level of resilience. He urged

state governments to take a cue from what the agency was doing in order to compliment the measures.

Nigeria Metrological Agency (NIMET) had predicted rainfall with a possible flooding in some low plain areas. Based on this report, some states in the North-west region such as Sokoto, Kebbi, Zamfara and virtually all the south-south states have also been designated flood prone areas. However, NEMA DG said if the country must avert the flood disaster that happened last year, all hands must be on deck. He noted that as an agency in charge of disaster management, it had upon the 2013 NIMET rainfall prediction, taken some pro-active measures to ensure proper mitigation.

According to him, apart from writing all the state governments to inform them on the need to identify saver grounds within their domains in the event of flooding, the agency had undertaken mapping of all the



vulnerable communities with a view to identifying flood prone areas. He said: "NEMA has since sent letters to all the state governments informing them on the need to identify safer grounds. We have already done mapping of all the vulnerable communities and we have carried out vulnerability capacity assessment of about seven communities to determine capacity that is available in each of the community and their level of resilience. "We expect every state to carry out similar vulnerability capacity assessment of their local communities so that we can determine what kind of hazard exists in our various communities.

Earlier, Wada solicited for NEMA's support in his efforts to avert a repeat of the flood incidents that ravaged some communities in his state. Wada informed the Director General that the state had marked out safe areas in the event of flooding, urging him to help in equipping them. The governor said that the state was at present hosting about 5,000 Internally Displaced Persons (IDPs) from the neighbouring Benue State. "We are hosting over 5,000 displaced people from Benue State as a result of communal disturbance between Fulani herdsmen and Agatu people. Both of them occupy Omala Local Government. We have been housing them, feeding them and we urge NEMA to support us in any way necessary."

The state governor said the government had also started preparing permanent relief camps outside to the usual school premises as a build-up to combat flood recurrence in the state. "The state is keeping a computerised record of persons and properties affected by flood for purposes of compensation and future planning. Other measures suggested as a means of ensuring sustainable management of the flood include dredging of the upstream dams and critical portions of River Niger and River Benue, to expand the capacity of the dams and river courses. "We are embarking on land reclamation of the River Niger bank through sand filling, relocation of flood plain dwellers to safer areas and enforcement of Environmental Impact Assessment requirements on all major constructions and new development projects," he added.

### [New land surveying system underway in Tanzania](#)



A new land surveying and mapping system is in pipeline and will significantly bring down the costs of carrying out the exercise, the Minister for Lands, Housing and Human Settlement Development, Prof Anna Tibaijuka, has said. She said at a two-day national conference for land stakeholders at St Gaspar's Centre that the new system would soon be out and go in tandem with use of satellite technology and reduce land surveying costs. "Once the costs go down, land surveyors in various government departments and private sector will increase the rate at which land is surveyed," she said.

Currently, an insignificant part of the country is surveyed, which keeps people from using their land as capital. Yet it is well established in law that a title deed is conclusive evidence of ownership. It makes one an absolute and indefeasible owner of land in question. According to the Minister, the new system, which would go in line with international standards, would include city and town plans, residential area plans and villages, infrastructure, national reserves and mines among others.

"After the land is surveyed in high numbers, the people and stakeholders will start using their land which is surveyed to bring personal development as they would then use it as collateral to get bank loans," she said. She also said that it would empower the government to be able to register land well surveyed and collect revenue that comes from use of land. In order to reach this level, she said the land survey and mapping department would be making improvements in the system wherever need be and put new measurements called co-ordinates every time there will be changes in the international ITRF realizations.

### [The ecosystem approach: what it is and why we need it](#)



Late in 2011, a team of 14 scientists published a groundbreaking paper in the prestigious journal Science. The paper, entitled Global Seabird Response to Forage Fish Depletion – One-Third for the Birds provided convincing evidence that seabirds begin to suffer when the food available in the ocean declines below a critical level. Their study was one of the most comprehensive ever undertaken and considered seabirds from the Arctic to the Antarctic, and from the Pacific to the Atlantic. Two species of seabirds from Namibian waters – the African Penguin and the Cape Cormorant – were included in that particular scientific study.

The scientists concluded that in order to secure the long-term survival of seabirds – penguins, terns, gulls and puffins, to name a few – fisheries managers must ensure that stocks of small coastal pelagic fish, called "forage fish", are not allowed to fall below one third of their historic maximum biomass (the size of the fish stocks, measured over the long-term).



All 14 seabird species scrutinized by the study are highly dependent on forage fish for food and for every species, the critical threshold was approximately one third of the maximum amount of fish available. Cleverly, the scientists capture this notion in the title of their paper: "One-Third for The Birds".

The implications of the seabird study are clear: we need to take a "big picture" view of our marine living resources. It is no longer sufficient to manage fish stocks with the goal of safeguarding food security, or ensuring the prosperity of the local fishing fleet.

We also have to maintain a balanced ecosystem so as to protect seabirds and other top predators, like sharks, seals and whales, that are affected by fishing and other deep-sea activities like marine mining or oil and gas exploration and extraction.

Over the past two decades, this "big picture" perspective has been aptly captured by scientists who now talk about the "ecosystem approach" to the management of natural resources. The ecosystem approach is central to the many environmental conventions and agreements to which Namibia is a signatory – for example, the United Nations Convention on Biological Diversity and the FAO Code of Conduct for Responsible Fisheries. It promotes the management of entire ecosystems, not for short-term economic gain, but to derive optimal benefits from their goods and services, without damaging the ecosystem itself. Over the past decade, Namibia has taken significant steps towards implementing the ecosystem approach in the management of marine and coastal resources.

A good example of the country's commitment to this new and more holistic system is its involvement in regional efforts to reduce and reverse the degradation of the marine environment. Namibia hosts the Benguela Current Commission (BCC) in Swakopmund and has been working with its neighbours, Angola and South Africa since 1995 – sharing information and working together to modernize and improve environmental policies and legislation, thereby moving towards the sustainable and integrated management of resources. On March 18 this year, the country was proud to join Angola and South Africa in signing the Benguela Current Convention, a legally binding multilateral treaty and the first of its kind in the world. Once ratified, the Convention will provide a legal basis for our three countries to tackle some of the environmental challenges that threaten the integrity of the Benguela region and its resources.

An example of the BCC's work is the spatial mapping of ocean and coastal resources. Technology is allowing us to plot and describe – at an ever-finer resolution – the location of especially sensitive and productive marine ecosystems. An expanded mapping exercise, that incorporates the entire Benguela Current Large Marine Ecosystem, will allow the countries to identify transboundary areas that are particularly worthy of protection or conservation. The declaration of trans-boundary marine protected areas is the logical outcome of this kind of collaboration. Although these kinds of initiative are long-term projects, they will help the BCC to achieve its vision of a Benguela Current Large Marine Ecosystem that is sustainably used and managed, conserved, protected and contributes to the wellbeing of the people.

Hamukuaya the writer of this piece is the Executive Secretary of the Benguela Current Commission (BCC).

## Historic environmental accord signed

Government ministers from Namibia, Angola, and South Africa met in the Angolan city of Benguela, to sign a groundbreaking environmental treaty, the Benguela Current Convention. The Benguela Current defines the boundaries of the Benguela Current Large Marine Ecosystem (BCLME), an area of ocean space stretching from Port Elizabeth in South Africa to the Cabinda Province in the north of Angola. The BCLME is regarded as one of the richest ecosystems on earth, with ecosystem goods and services estimated to be worth at least US\$54.3 billion per year.

"The historic signing of the Benguela Current Convention represents the culmination of many years of research, consultation, and negotiation, all of which have been carried out in a spirit of trust and cooperation," Dr Hashali Hamukuaya, Executive Secretary of the Benguela Current Commission said.

Offshore oil and gas production, marine diamond mining, coastal tourism, commercial fishing and shipping are some of the most important industrial activities that take place in the region.

At the heart of the convention is the concept of the ecosystem approach – a long-term approach that aims to maintain ecosystem goods and services for sustainable use, while recognising that humans are an integral part of the process. Hamukuaya said the signing of this unique multilateral agreement is the next logical step after nearly two decades of collaboration between Angola, Namibia and South Africa.

The Benguela Current Convention is a formal agreement between the three governments that seeks to bring long-term social and economic benefits to the people of the Benguela, a region that takes its name from the Benguela Current – the cold northward flowing ocean current that washes the shores of all three countries. By signing the Benguela Current Convention, the three countries will agree to manage the BCLME in a cooperative and sustainable way for the benefit of the coastal people who depend on the ecosystem for food, work and well being.



The convention will also establish the Benguela Current Commission – in existence since 2007 – as a permanent inter-governmental organisation with a mandate to promote the long-term conservation, protection, rehabilitation, enhancement and sustainable use of the BCLME. By working through the commission, the governments of the three countries will strive to ensure that industrial development progresses in an environmentally responsible manner and that they work together to minimize pollution, harmonize maritime policies, laws and regulations, and monitor and manage fisheries in a cooperative way.

### **South Africa: Elections 2014 - census 2011 results and voter registration**

Following the 2011 census the Electoral Commission with the assistance of Statistics South Africa, has made an analysis of the distribution of the estimated 31.4 million eligible voters per municipality and per ward. It has compared this information with the number of voters currently registered in those wards. One of the main findings indicates that only 10% of 18 and 19 year olds in the country are currently registered as voters. The highest percentage of 15% is in the Eastern Cape and the lowest of 4% in the Western Cape whilst Gauteng has 5% in this age band registered as voters.

In the age band 20 - 29 years some 52% of potential voters are currently registered to vote. The highest percentage of 63% is again in the Eastern Cape with the Western Cape with 43% and Gauteng with 42% at the lower end of the scale. In the various age bands for persons 30 years and older the percentage of registered voters increases dramatically and varies from 85% to 100% for those who are 80 years and older - in fact, in the latter age group we have more registered voters than the census indicated. Overall the Eastern Cape and Free State have the highest rate of potential voters currently registered at 80.1% each whilst Western Cape with 70.4%, Mpumalanga with 70.3% and Gauteng with 69.5% trails the overall current national average of 73.8% of potential voters currently being registered.

Registration rates vary greatly amongst municipalities and there are a few small municipalities, with low population figures, where the indication is that most, if not all, potential voters are registered to vote - statistical distortions can, however, occur more easily with lower rather than higher numbers. The registration patterns per municipality vary from province to province but generally speaking the percentage of registered voters in rural municipalities tends to be higher than is the case in urban and in particular most metropolitan municipalities. Of particular interest is the tendency that the registration rates in different areas within many municipalities are significantly different.

The Electoral Commission published on its website - a provincial analysis and thematic maps which indicate the registration rate in every ward in each of our 234 local municipalities. Whilst it remains the democratic choice of every citizen to participate or not in the electoral process, the information contained in the maps will inform the registration drives of the Electoral Commission to increase the percentage of registered voters to at least 80% of the potential electorate in the next year. It shares that responsibility with civil society organisation that focuses on this area, the social responsibility element incumbent in media coverage and in particular with political parties to enthuse potential voters. The availability of detailed census data has enabled the Commission to provide what are detailed planning tools for all political parties as they contemplate their election campaigns for the elections in 2014. It also informs the media - and the public at large - of the geographically based prevailing interest to participate in our electoral democracy as we approach the 2014 elections and the twentieth anniversaries of our founding democratic elections in 1994. Issued by: Independent Electoral Commission.

### **1st Africa Food security conference: Harnessing ecosystem based approaches for food security and adaptation to climate change**

With the shift towards Sustainable Development Goals (SDG) to replace the Millennium Development Goals (MDGs) after 2015, approaches that serve multiple purposes and provide cross-cutting benefits will be required. Achieving food security is unmanageable without adaptation to climate change measures and practices that support farmers in producing enough food to meet people's nutritional needs and also preserve ecosystems from degradation, for example, preventing soil erosion, water, nutrients and pollinators that underpin agricultural productivity, particularly in smallholder dominated landscapes. The United Nations Environment Programme (UNEP) and FAO is organizing an African food security conference, "Harnessing Ecosystem based Approaches for Food Security and Adaptation to climate change In Africa" which will take place in Nairobi on August 20-21, 2013. Contact Richard Munang at [Richard.Munang@unep.org](mailto:Richard.Munang@unep.org).

### **DEM Training Workshop: EOS WGCapD/RCMRD**, 6-10 May 2013 Nairobi, Kenya

The inaugural Committee on Earth Observation Satellites' Working Group on Capacity Building and Data Democracy (CEOS WGCapD) Digital Elevation Model (DEM) workshop took place at the RCMRD Centre in Nairobi, Kenya on 6-10 May 2013. The workshop was a joint effort of partners - Instituto Nacional de



Pesquisas Espaciais (INPE), Regional Centre for Mapping of Resources for Development (RCMRD), Secure World Foundation (SWF), South African National Space Agency (SANSA), U.S. Geological Survey (USGS) and U.S. National Oceanic and Atmospheric Administration (NOAA).

The purpose of the DEM Workshop was to build capacity in the East African region for utilizing satellite derived digital elevation data, specifically newly released 30m elevation data gathered on the Shuttle Radar Topography Mission (SRTM), in a variety of ways, but with an emphasis on hydrological models.

The presenters and trainers were from FEWSNET, INPE, SANSA, SWF, RCMRD/SERVIR and USGS. A total of twelve participants were trained and included: - Senior Hydrologist, Ministry of Water and Energy, Ethiopia; GIS Technician, Ministry of Water and Environment, Directorate of Water Resources Management, Uganda; Principal Hydrologist, Ministry of Water and Irrigation Mohamed, Kenya; Assistant Inspector for meteorology, meteorological service, South Sudan; Director, Information Management System Section, Ministry of Irrigation and Water, South Sudan; Dean Faculty of Engineering and Geology, Eelo University, Somalia; Hydrologist, Food and Agriculture Organization - Somalia Water and Land Information Management (SWALIM), Kenya; Remote Sensing Technician, Regional Centre for Mapping of Resources for Development (RCMRD), Kenya; Principal Meteorologist, Kenya Metrological Department, Kenya; Remote Sensing Technician, Regional Centre for Mapping of Resources for Development (RCMRD), Kenya; Technical Assistant, Department of Resource Survey and Remote Sensing (DRSRS), Kenya; and Senior Hydrologist, Department of Water Affairs, Zambia. For further information, contact: [farah@rcmrd.org](mailto:farah@rcmrd.org).

## Practical SDI implementation materials from within and outside of Africa

### [Nigeria to curb insurgency with satellite imageries](#)



President Goodluck Jonathan has declared that the Nigeria was prepared to curb insurgency in the country with the use of high-resolution imageries to locate any suspicious changes on the landscape. The President made the remarks while declaring open the 27th FIG (Working Week) International Surveying Congress in Abuja, said high imageries like Geo-Eye, Quick Bird, Ikonos or digital globe would be deployed to tackle the challenge of insecurity.

According to the President, who was represented by the Minister of Works, Arch. Mike Onolememe, "the policy trust of the government as entrenched in the transformation agenda as well as the vision 2020, the global millennium development goals (MDG's) and land reform programmes are expected to receive impetus from the sustainable, fast, reliable and effective service delivery on the part of surveying and mapping sector through efficient acquisition, storage, processing and management of geospatial data and responsive dissemination of geo-information. "These contributions are critical to solving numerous contemporary challenges facing Nigeria today including: security through location of suspicious changes on the landscape using high resolution imageries such as geo-eye, quickbird, ikonos or digital globe."

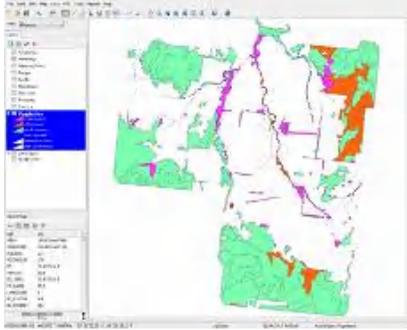
He said the move would also address the flood mapping for delineation of flood plains and inventory of all susceptible features within them. Wealth creation/revenue generation through effective land administration practices by using improved delineation and identification of properties for taxation/tenement purposes using urban aerial photo derivatives. "Erosion monitoring and control using high accuracy digital elevation models (DEMs). Coastal encroachment monitoring using laser-based imageries to overcome constraints arising from cloud cover and forest cover as part of disaster and emergency management of ocean related hazards. "Infrastructure planning, design, development, and conservation through route surveys, right-of-way (ROW) surveys, hydrographic position fixing, bathymetric charting, underwater surveillance, etc.

"However, it is unfortunate that Nigeria as a maritime oil producing nation lacks technical and human capacity in hydrographic surveying in particular due to the lack of any approved course recognized by FIG/International hydrographic organisation advisory board at category A or B in the west African sub-region or even African as a whole. "I wish to therefore use this opportunity to request that FIG should help to establish and develop or select and upgrade existing training facilities to a centre of excellence in hydrography.

"It will also be appreciated if FIG can advocate that relevant donor agencies like the international oceanographic commission should assist Nigeria in establishing a network of real-time disaster ready tidal stations for monitoring and early warning services in case of marine hazards or related emergencies. Nigeria according to him "is on course in various areas of human endeavour and will continue to contribute its quota to world peace and environmental sustainability", he said.



## [AGDATA develops native vegetation classification software](#)



AGDATA Develops Native Vegetation Classification Software for Australian Landowners using TatukGIS SDK. A state-wide landcover and tree study was undertaken by the Queensland Department of Natural Resources to identify and classify all vegetation zones across the state. The primary methodology was remote sensing backed up by field surveys. The result was the creation of a vegetation database the government uses to stipulate vegetation management guidelines by which all landholders must abide. The premise of this effort was to assist landholders, scientists, industry, and government with world's best practice landscape management. Laws were drafted governing management practices in each of the classified zones, with significant penalties for breaches of these guidelines.

While GIS experts had ready access to the spatial data, individual landholders without GIS expertise were being provided a PDF map of their property. The PDF map provided insufficient accuracy to enable landholders to make decisions about use of their land without risk of accidental violations exposing the landowner to the possibility of prosecution.

AGDATA Australia has used the TatukGIS Developer Kernel SDK to develop a custom mapping utility to enable landholders to load the spatial vegetation data, overlay it on their property, and view the classification of each vegetation zone. This allows landholders to clearly identify the vegetation zones in relation to their property with sufficient accuracy to safeguard against infractions and risk of prosecution.

TatukGIS support for the ESRI ArcView Shape format and coordinate systems (including PRJ file) was vital for this project. The Developer Kernel (DK) visual layer property control contains functionality to associate the rendering of map features based on attribute field values, making the process of applying different colours to the vegetation zones trivial. These and other features of the DK component contributed significantly to shortening the project development cycle.

### GIS Tools, Software, Data

## [DEWETRA Platform: Real-time integrated system for risk forecasting, monitoring, and prevention](#)

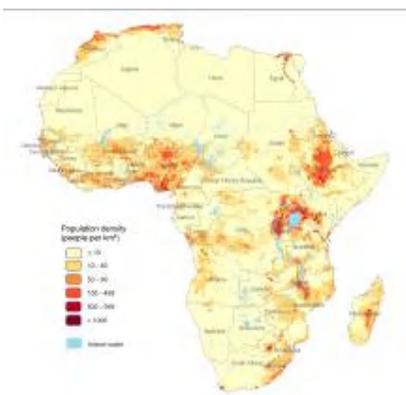
The Department of Disaster Management (DDM) in collaboration with the Caribbean Disaster Emergency Management Agency (CDEMA) Coordinating Unit, with financial support from the Enhancing Resilience to Reduce Vulnerability in the Caribbean Region (ERC) Project hosted a stakeholders meeting to discuss the data needs for the DEWETRA Platform and how it can be used within the Caribbean context. The DEWETRA Platform is a real-time integrated system for risk forecasting, monitoring, and prevention designed by an Italian company - CIMA Research Foundation, on behalf of the National Civil Protection Department. The system offers a flexible and robust tool to support the operational activities of Civil Protection in Italy and is being replicated in countries within the CDEMA membership.

## [Global Roads Open Access Data Set, Version 1 \(gROADSv1\)](#)

Developed under the auspices of the Global Roads Data Development Task Group of the Committee on Data for Science and Technology (CODATA) of the International Council for Science, gROADSv1 combines the best available open access data on roads between human settlements into a global roads coverage consistent with the United Nations Spatial Data Infrastructure Transport (UNSDI-T) version 2 data model.

This first version of the gROADS data set is part of a continuing effort to address the need among professionals in the humanitarian response, development, transportation, biodiversity conservation, and allied fields for free and open, spatially accurate, and readily updateable data on roads in order to better understand issues such as market access, cost of transportation, and human pressures on the environment. Data on road networks connecting human settlements may be especially valuable when used in conjunction with remote sensing and other spatial data to improve decision making related to urbanization and rural development. gROADSv1 is distributed by NASA Socio-economic Data and Applications Center (SEDAC) operated by CIESIN, representing an important step towards addressing the criteria established by the CODATA Task Group.

## [Afripop demography](#)



Large area spatial demographic datasets that provide per-grid square estimates of numbers of people are widely available through a range of projects, including AfriPop, but similar information on the demographic composition of these populations at a subnational scale are not freely available.

AfriPop:demography aims to fill this gap for Africa through the provision of detailed gridded spatial population datasets showing age composition by 5-year groupings and gender.

**23rd March 2013:** New Africa-wide total population distribution datasets at 1km resolution available for [download](#), incorporating all recent country dataset updates.

**23rd March 2013:** Updated datasets for DRC and Morocco available for [download](#).

available for [download](#).

**27th February 2013:** Updated datasets for Angola and Rwanda now

available for [download](#).  
**18th February 2013:** Updated datasets for Burundi, Ghana, Kenya, Madagascar, Mozambique, Namibia, Niger, South Africa, Tanzania, Togo, Uganda, Zambia, and Zimbabwe now available for [download](#).

## 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.rcmr.org/geonetwork> or via email to [remotesensing\(at\)rcmr.org](mailto:remotesensing(at)rcmr.org). Further information, please visit website: [www.rcmr.org](http://www.rcmr.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](mailto:sdi-africa@lists.gsdi.org).

## Call for Applications - GEM Course 2013

Growing population densities are putting increasing pressure on scarce land resources. Adequate solutions to environmental problems such as deforestation, overgrazing, and the depletion and contamination of land and water resources depend on integrated insights and improved management. Planners, managers, policy makers and researchers need to understand the complexity of the factors involved and be able to work together with professionals from a variety of disciplines. Geo - information technology and, in particular, remote sensing, plays a central role in the search for clear analyses and viable policies. Skills in this field will therefore continue to be much in demand in industry, government, and NGOs.

Five renowned European institutes offer you a unique Erasmus Mundus joint European Master of Science (MSc) Course in Geo - information Science and Earth Observation for Environmental Modelling and Management (GEM).

The course has duration of 22 months and will be taught by world-class faculty in five countries: Iceland, UK, Sweden, Poland and The Netherlands. While studying in at least two of the five universities, as well as studying in a multi - cultural environment, students will gain valuable insight into the academic, social and



cultural diversity of northern and central Europe. Graduates gain a multiple MSc degree from the consortium universities.

For the academic year starting in September 2013, the EU Erasmus mundus scholarships are available for both non-EU and EU students. In addition, for exceptional EU candidates, a limited number of scholarships are available that pay full-fees. Deadline for Self-funded non-EU candidates: 1 July 2013. Deadline for Self-funded EU candidates: 1 August 2013.

Apply online: <http://www.gem-msc.org/application/Registration/>. For more information: [www.gem-msc.org](http://www.gem-msc.org) or send an email to [info@gem-msc.org](mailto:info@gem-msc.org).

### 2013 GIS short courses through continued education at University of Pretoria

- Introduction to Geoinformation Standards - 15-16 July 2013 in Pretoria
- Introduction to Quantum GIS (on request)
- Remote Sensing (on request)
- The Basics of GIS (on request)

See [www.up.ac.za/cgis](http://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 presents a full spectrum of GIS courses: June and July 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](#)

### GIS and Remote Sensing courses at Esri Eastern Africa

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.

Client site training arrangement on request for 12-16 students. [Download](#) course catalogue and current class schedule. To register, visit <http://esrietraining.cloudapp.net/>. For more information, contact: [training@esria.co.ke](mailto:training@esria.co.ke), telephone: +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](http://www.itc.nl/CourseFinder). For printed copy of the study brochure, email: ([alumni@itc.nl](mailto: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 the recipient's country or region. For more information about short tailor-made training courses, see [Project Services](#), [Contract training](#).

#### One stop e-government for sustainable land administration

Certificate of attendance Vietnam 09 Sep 2013 2 weeks [Register](#)

#### Sensors, Empowerment and Accountability

Certificate of attendance Tanzania 21 Oct 2013 2 weeks [Register](#)

#### 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 [Register](#)

#### 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 [Register](#)

MSc degree course in GIS and Natural Resource Management with KNUST, Kumasi, Ghana. Starting date: 2 September 2013; Duration - 18.5 months. For more information: [Louis Addae-Wireko, MSc](#) - KNUST and [ir Louise van Leeuwen](#) – ITC

ITC Short Course at Makerere University, Uganda - September 16, 2013

The issue of risk from natural hazards, particularly climate change, is one of the major global challenges of urban development in the 21st century. Nowadays planners, land managers and engineers working in an urban development context all face the question of how to assess the risk of diverse natural hazards that might occur or have already occurred, as well as the vulnerability of the local population. This is especially true of cities in Sub-Saharan Africa, where floods, landslides, heat waves, and droughts are common phenomena these days.

The course focuses on flood risk management. This topic has been chosen because the city of Kampala (where the course will be held) is exposed to this major risk. The concepts taught regarding risk assessment and the identification of adaptation strategies can be applied to other risk domains as well. The experiences and specific situations of the course participants within their own organizations and cities are considered and discussed during the course.

For candidates from Eastern Africa, the closing date - July 16, 2013.

Please visit: <http://www.itc.nl/Pub/study/Courses/C13-PGM-RC-05> for more details, female candidates are encouraged to make application.

### 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. Contact: [info@rectas.org](mailto:info@rectas.org) or [thontteh@rectas.org](mailto: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.

### [Image Interpreter, Mogadishu, Somalia](#)

CARE "... data and other remote sensed information on the status of infrastructure, cropped areas, livestock watering points (water catchments) and land degradation. GIS data management: manage (clean, aggregate, file, report, update, backup, etc) all resulting..." Closing Date: Wednesday, 10 July 2013

### [GIS & GPS Short Course](#) (Bloemfontein, from Jun 03, 2013 08:00 AM to Jun 07, 2013 04:30 PM)

An Introduction to Geographical Information Systems (GIS) & the Global Positioning System (GPS)

### [Spatial databases with PostGIS](#) (University of Pretoria, from Jun 10, 2013 12:00 AM to Jun 14, 2013 12:00 AM)

This course introduces PostgreSQL with PostGIS, covering the following major themes of spatial databases: installing and configuring PostGIS, viewing PostGIS data in a desktop GIS, spatial SQL queries, spatial joins and spatial indexing. Although the theory is explained, most of the time during the course will be spent on practical examples, ensuring that delegates understand how to view spatial data, query spatial databases, etc. The course aims to equip the delegates with the necessary skills and knowledge to use spatial databases in the daily operations of their respective jobs. Date: 10-14 June 2013 Presenter: Gavin Fleming

### [Introduction to Geoinformation Standards](#) (University of Pretoria, from Jul 15, 2013 12:00 AM to Jul 16, 2013 12:00 AM)

During this course, the practical use of geographic information standards will be demonstrated. Upon completion of the course, delegates will know how to read, interpret, and implement a geographic information standard. A selected number of ISO/TC 211 and South African national standards, such as ISO 19115, Geographic Information - Metadata, the South African address standard (SANS 1883) and some OGC web service standards, will be studied during the course. Date: 15-16 July 2013 Presenters: Serena Coetzee and Antony Cooper

### [SA Surveying + Geomatics Indaba 2013](#) (Emperors Palace, Ekurhuleni, Gauteng, from Jul 23, 2013 12:00 AM to Jul 24, 2013 12:00 AM)

The SA Surveying + Geomatics INDABA 2013, taking place on 23 - 24 July 2013 at the Emperors Palace, Ekurhuleni, Gauteng

### [GIS Professional Practice](#) (University of Pretoria, from Aug 05, 2013 12:00 AM to Nov 30, 2013 12:00 AM)

The course covers the Professional Practice theme described in the academic model of the South African Council for Professional Land and Technical Surveyors (PLATO). Topics include professionalism, professional ethics, social responsibility, professional practices, partnerships, client relationships, PLATO legislation and rules, Acts relevant to geomatics (e.g. Promotion of Access to Information Act, Spatial Data Infrastructure Act) and the role of international associations and societies in geomatics. Dates: Distance-



based with workshops on 5-7 August and 25-27 September, exam in November. Presenters: Serena Coetzee and Sanet Eksteen Admission Requirements: Three year BSc degree; BA in geography or environmental science or related field; or relevant National Diploma for PLATO registration.

[Enterprise GIS with FOSS](#) (Le Vendome, Paarl, from Aug 12, 2013 08:00 AM to Aug 16, 2013 04:30 PM)

Taking place 12 to 16 August 2013 Learn how to set up and run a full enterprise GIS with Free and Open Source Software. Cover the full stack: server platform, spatial database, web map servers, map tiling and caching, OGC web services and web map clients. Software includes OpenGeo Suite (PostGIS, GeoServer, GeoWebcache, GeoExt, OpenLayers), Quantum GIS (desktop, server and web client). CPD: 2 points (category 1b)

[Focus on QGIS](#) (Le Vendome, Paarl, from Aug 19, 2013 08:00 AM to Aug 21, 2013 04:30 PM)

This is an introductory-level course. So if you are new to GIS, new to FOSS GIS or are experienced in other GIS software and want to find out how to do your work in Quantum GIS, this course is for you. CPD: 1 point (category 1b)

[Introduction to PostGIS](#) (Le Vendome, Paarl, from Aug 22, 2013 08:00 AM to Aug 23, 2013 04:30 PM)

Geospatial Data in PostGIS PostGIS is a spatial database that is more than just a spatial data store. With PostGIS, users, web map servers and other applications can all run off the same database. And beware! Doing spatial analysis in PostGIS can become addictive. PostGIS and PostgreSQL provide a powerful, enterprise ready geospatial relational database management system. With PostGIS you can insert geometries into a database and then perform spatial queries and analysis on that data. We will show you how to import and export data into PostGIS, manipulate that data using SQL queries and of course visualise the resulting datasets with QGIS. Note that the content in this module will be technical in nature but no basic working knowledge of database systems (tables, fields, primary and foreign keys etc.) is assumed, so we are 'starting from scratch'. We will also look at how PostGIS is used in the context of rolling out an integrated FOSS-based GIS enterprise solution, as well as how it can work in a mixed environment. PostGIS is the cornerstone providing an enterprise platform from which to carry out desktop GIS, in-database analysis and data processing, web mapping and the provision of OGC compliant web services. CPD: 1 point (category 1b)

## Funding Opportunities, Awards, Support

### [ECA fellowship for young African professionals](#)

ECA is inviting applications from qualified young African Professionals in the area of environment and sustainable development. Qualified women are particularly encouraged to apply. Candidates applying for the position must be below 36 years of age at the time of the application. Candidates currently enrolled in a Ph.D. programme or with an admission are also welcome to apply.

Fellowships within ECA aim to provide practical, on-the-job experience to the professionals as they build and develop their professional career at African development institutions, teaching and research think tanks or member States' government institutions. Fellows will also become familiar with the Commission's broad programmes and services to member States and

subregional bodies in addressing environment and sustainable development priorities in Africa.

1. The Fellowship is open only to nationals of United Nations Economic Commission for Africa member states (below 36 years of age at the time of the application)
2. Fellows will receive a monthly stipend of USD 3,000. Fellows will be provided with a return air ticket between his/her country of residence and Addis Ababa, Ethiopia.
3. Fellows cannot be employed on ECA or United Nations regular positions within six months of completion of a fellowship period. Fellows will work on a predefined project, designed to contribute to specific aspects of the work programme of the receiving section, the African Climate Policy Centre (ACPC, <http://www.uneca.org/acpc>). Terms of Reference for each fellowship assignment will be designed to guide the recruitment process.
4. To apply, clearly indicate your preferred area of consideration (in the cover/application letter), and submit your application package ensuring it includes at a minimum: (1) A signed copy of application letter; (2) A signed copy of Personal History Profile (download and use the P11 Form); (3) A copy of your High School/university diploma/degree(s) and Certification(s); (4) A copy of your national passport. P11 Form <http://www.uneca.org/sites/default/files/uploaded-documents/p11.doc>. Email address: [RecruitmentPPost@uneca.org](mailto:RecruitmentPPost@uneca.org), Subject Line: Ref. No. HRSS/13/05/0697. Deadline: 05 June 2013.

[Applications for commonwealth scholarships tenable in South Africa for doctoral studies at the University of Pretoria, South Africa](#)



The University of Pretoria is a research-intensive university. Hence, it is seeking candidates for doctoral studies who will make significant contributions to its research endeavour. As part of South Africa's contribution to the Commonwealth Scholarship and Fellowship Plan, the University of Pretoria has made funds available for two doctoral scholarships for students coming from Commonwealth Countries (excluding South African students). This scholarship known as the University of Pretoria Commonwealth Doctoral Scholarship and will be awarded on a competitive basis. The University of Pretoria has established a reputation for academic excellence, particularly in relation to some of its major research activities.

- The UP Commonwealth Doctoral Scholarship awarded to applicants who are citizens of Commonwealth countries.
- Applicants must conduct their studies at the University of Pretoria.
- Applicants must have completed the degree that will give them admission to a doctoral programme a maximum of three years prior to their application for the University of Pretoria Commonwealth Doctoral Scholarship.
- Applicants must not be older than 35 years of age at time of application
- Masters students currently registered at the University of Pretoria are not eligible for the Doctoral Scholarship.
- The value of this Doctoral Scholarship will be R120 000 in 2014.
- The holder of this scholarship may hold supplementary bursaries/ grants/scholarships.
- The scholarship will be for a maximum period of support of three academic years. Doctoral students who are not able to complete within the maximum three academic year period due to unforeseeable reasons must provide a written motivation supported by their supervisor as to why an extension is necessary. The extension request to be considered by the University's Institutional Selection Committee.

The University of Pretoria has established a reputation for academic excellence, particularly in relation to some of its major research activities. Information about these research activities can be obtained from the website of the University: Intranet: <http://web.up.ac.za/default.asp?ipkCategoryID=8919&language=0>, Internet: <http://web.up.ac.za/default.asp?ipkCategoryID=1630>.

A completed and signed UP Application Form can be downloaded from the following link: <http://web.up.ac.za/Application2014.asp?ipkCategoryID=16904&language=0>. Note: Referees to send directly to [Leanne.vanzyl@up.ac.za](mailto:Leanne.vanzyl@up.ac.za). The closing date for the 2014 Academic year is 30 August 2013. Please quote "UP Commonwealth Scholarship" on your application when applying for this scholarship.

### **[ICCR Scholarships for Ethiopia and Djibouti in India, 2013/14](#)**

The Indian Council for Cultural Relations (ICCR), Government of India is pleased to offer ICCR Scholarships for Ethiopia and Djibouti.. [\[Read Full Scholarship Detail\]](#)

### **[Erasmus Mundus EMJD Research Fellowships for PhD Students, 2013](#)**

Erasmus Mundus funded Doctoral Research Fellowships for third-world country. PhD candidates and EU Students for training and carry out their research activities in at.. [\[Read Full Scholarship Detail\]](#)

### **[World Food Prize Foundation - Borlaug Field Award 2013](#)**

The World Food Prize Foundation invites nominations for the Borlaug Field Award. The Borlaug Field Award (US\$10 thousand) recognizes science-based achievement in international agriculture and food production by an individual under age 40 in the challenge to eliminate global hunger and poverty. Nominations submitted by 30 June 2013.

### **[No-profit supply of computers to developing countries](#)**

Computer Aid International has already shipped over 50,000 PCs to more than 90 developing countries. Out of those 50,000 shipped over 35,000 have gone to educational institutions while the remaining to community organisations working in fields as diverse as HIV/Aids, environment, human rights and primary healthcare. Computer Aid International aims to: (i) Increase the number of refurbished computers being re-used overseas; (ii) increase the number of UK organisations donating their used IT equipment for re-use overseas; (iii) identify and work with those organisations in recipient countries able to derive maximum value from refurbished computers; (iv) provide training and work experience in computer repair to people from socially excluded communities.

## Employment Opportunities



## Massive Recruitment by the Kenyan Government - NLC

The National Land Commission, a constitutional Commission established under S. 67 of the Constitution wishes to fill the following positions.

### **Director of Valuation and Land Taxation**

The Director of Valuation and Land Taxation shall be answerable to the Chief Executive Officer of the Commission.

Key Responsibilities:-

- Setting policies and work programmes for the Department of valuation and land taxation
- Efficient organization, direction, control and coordination of the functions of the property valuation and land taxation
- Advise the National Land Commission on all matters related to Valuation and Land Taxation including executing and supervising valuation work on determination of open market values, compulsory acquisition, Stamp Duty, Estate Duty, Rental levels, Rates, Stand premiums, Investment appraisals, feasibility studies on land market values trends
- Establish a data base of open market values of public land over-time and determine highest and best uses, comparative land values, natural resources valuation on public and community land.
- Create a professional linkage with the Institution of surveyors of Kenya and other land –related professional bodies and the Commission.
- Establish sustainable linkages with international valuation forums including APSEA, CASLE and FIG.
- Offering training and supervision to junior valuation officers and ensuring that ethical codes of practice and professional standards are adhered to by the relevant Commission staff.
- Custody and maintenance of the National Land Commission valuation records, resources, facilities and equipment.
- Personal qualities of integrity, credibility, and dedication that meet the requirements of chapter 6 of the Kenya Constitution.
- Perform other duties that may be assigned from time to time

Qualifications, competencies and Experience:

- A Bachelors Degree in Real Estate or Land Economics from a recognized University.
- A Masters degree in a relevant area will be an added advantage
- Must be a registered (and licensed) valuer with valid up to date certificates
- Must show certificate of computer literacy
- Must have at least ten (10) years of experience in property valuations, five years of which should have been in a supervisory capacity
- Must be compliant with chapter 6 of the Constitution

### **Director- Information, Communication and Technology (ICT)**

The ICT director shall oversee the management, strategy and execution of ICT infrastructure for the organization.

He/She shall oversee technical projects in alignment with organizational goals and direct the effective delivery of networks, development, and disaster recovery systems and processes. The ICT director shall supervise a team of workers, while working closely with management, external vendors and advisors.

### **Key Responsibilities:**

Essential duties and responsibilities shall include but not limited to the following:

- He will prepare financial budgets and present proposals for capital projects to senior executives.
- Researching and recommending new products, identifying new market opportunities and leading efforts to improve business processes.
- Provide leadership, vision, and management to the ICT department.
- Assess and respond to ICT needs of the Commission.
- Manage ICT staff.
- Assist in recruiting, hiring, and providing appropriate training for ICT support staff.
- Advising the Commission ICT matters.
- Sourcing and mobilizing resources for ICT Projects.
- Formulating operational policies and guidelines on the utilization of ICT resources.
- Oversee the development, design, and implementation of new applications and changes to existing computer systems and software packages.
- Be responsible for the ordering, acquisition, inventorying, and disposition of hardware and software.



- Serve as primary contact with outside vendors in the generation of RFPs, bids, contracts, agreements, and other major vendor interactions, Systems Operations and Maintenance.
  - Maintain the integrity and continual operation of the ICT network including the wireless networks.
  - Ensure the continual functioning of mission critical operations.
  - Maintain security and privacy of the information systems, communication lines, and equipment.
  - Develop, review, and certify all back-up and disaster recovery procedures and plans.
  - Personal qualities of integrity, credibility, and dedication that meet the requirements of chapter 6 of the Kenya Constitution.
  - Perform other duties that may be assigned from time to time
- Qualifications, Competencies and Experience:
- Minimum of a Masters degree from an accredited College or University in computer sciences, business administration, public administration, mathematics or related field
  - At least 10 years' experience in technical operations management and/or an equivalent combination of training and experience with at least 4 years an ICT leader in a dynamic environment.
  - Experience in land information management or equivalent is an added advantage.
  - Broad knowledge of information technology processing systems, concepts, and methodologies.
  - Demonstrated aptitude for learning new technologies.
  - Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.
  - Certificates, Licenses and registrations as required

## Head- Audit and Risk Management

Reporting to the Risk and Audit Committee functionally and administratively to the Secretary of the Commission, the successful candidate will be expected to take a leading role in providing innovative risk, audit, assurance and improve the Commissions operations.

### Key Responsibilities

- Determining cost-effectiveness of all operations in the Commission.
- Determining optimum utility of all resources including facilities.
- Counterchecking all payments to ensure that they are correct as per accounting regulations and internal practices.
- Advising the authorities on the corrective measures on flouted financial regulations and procedures.
- Recommending measures to prevent wastes, extravagance and losses.
- Promote efficient and high audit standards at the Commission
- Formulation of audit management policies, procedures, regulations and auditing systems
- Evaluate changing services, processes and operations and putting in required internal controls.
- Issue periodic reports to the Audit committee and facilitate preparation of routine audit reports.
- Monitor emerging trends and successful practices in internal auditing;
- Develop efficient internal controls and risk management strategies in the Commission
- Internal controls and risk management strategies in the Commission.
- Personal qualities of integrity, credibility, and dedication that meet the requirements of chapter 6 of the Kenya Constitution.
- Perform other duties that may be assigned from time to time

### Qualifications, Competencies and Experience:

- Must have a Master's degree in Business administration or other relevant field from a recognized University
- Must have a Bachelor of Commerce or related business degree from a recognized University
- Must have CPA (K) and be a member of ICPAK.
- 10 years' progressive experience in Auditing, 4 of which must be in a senior position
- CISA and CIA qualification will be a definite advantage. Good analytical and reporting skills
- High integrity and honesty.
- Good communication and interpersonal skills
- Hands on skills in MS Office packages, with knowledge of relevant financial packages

## Director of Land Administration



The Director of Land Administration shall be answerable to Chief Executive Officer of the National Land Commission.

Duties and Responsibilities include:

- Efficient organization, direction, control and co-ordination of the functions of Land Administration Division.
- Advise the National Land Commission on all matters related to Land Administration.
- Co-ordinate technical and administrative issues relating to Land Management.
- Coordinate the work of Land Administrators in the Counties.
- Other duties involve setting standards and performance targets for the division in consultation with the Land Management

Qualifications, Competencies and Experience:

- A bachelor's degree in any field related to Land Management.
- A post graduate training in Land Management or related field will be an added advantage.
- Must be computer literate.
- Must have at least 10 years experience on Land Management with at least
- 4 years at senior management level
- Must be a full member of a relevant professional institution.
- Personal qualities of integrity, credibility, and dedication that meet the requirements of chapter 6 of the Kenya Constitution.
- Perform other duties that may be assigned from time to time

### **Director- Land Adjudication and Settlement**

The Director of Land Adjudication and Settlement will be responsible for coordinating and administering the Land Adjudication and Settlement function of the Commission.

Key Responsibilities:

The Director will be responsible for:

- Administration and interpretation of any provisions in the relevant Laws affecting Land Adjudication and Settlement.
- Managing the Land Settlement Fund
- Identifying and acquiring land for resettlement purposes and managing the allocation process.
- Planning for and coordinating for the provision of basic infrastructure in settlement schemes.
- Management of Land Adjudication and Settlement records.
- Developing a national programme for adjudication and registration of community land.
- Providing direction and guidance in the management of Group Ranches.
- Ensuring compliance to standards, guidelines and regulations for land adjudication and settlement programmes.
- Ensuring implementation of recommendations of monitoring and evaluation reports.
- Recommending the gazettment of Land Adjudication Officers.
- Development, implementation and realization of Land Adjudication and Settlement strategic plans and objectives.
- Collaboration with National and County Governments in respect to Land Adjudication and Settlement matters.
- Develop dispute alternative resolution mechanisms in adjudication and settlement of matters
- Attending to court matters where appropriate
- Overall management, mentoring and development of directorate staff.
- Personal qualities of integrity, credibility, and dedication that meet the requirements of chapter 6 of the Kenya Constitution.
- Perform other duties that may be assigned from time to time

Qualifications, Competencies and Experience:

- Master's degree in any of the following disciplines: Land Survey, Planning, Land Economics, Law, Geography, Agriculture, Human Ecology and Sociology or Community Development from a university recognized in Kenya.
- At least 10 years' experience in land management and/or an equivalent and at least 4 years as team leader in a dynamic environment
- Proficiency in use of computers.
- Demonstrated professional ability, high integrity and competence matched by a proper appreciation of the country's socio-economic development needs at the national, sectoral and local levels and.



- Clear understanding of the National Development Goals, Vision 2030, millennium Development Goals, and the role of Land Adjudication and Settlement in achievement of the same.

## **Director Research and Advocacy**

The Director Research and Advocacy will be responsible for coordinating and administering the Research, Training and Advocacy functions of the Commission.

### **Key Responsibilities**

Essential duties and responsibilities shall include but not limited to the following:

- Administration and interpretation of provisions of any Laws that affect the work of the commission as a basis for projecting the Commission's image to the public.
- Managing Research and Advocacy functions of the Commission.
- Identifying Researchable issues and developing research strategies to address the same.
- Collection, collation, storage and retrieval of information obtained from research or any other source and using the same to advise the Commission as appropriate.
- Ensuring compliance to standards, guidelines and regulations for research and advocacy activities.
- Ensuring implementation of recommendations of monitoring and evaluation reports.
- Development, implementation and realization of research and advocacy strategic plans.
- Overall management, mentoring and development of directorate staff.
- Carry out research for the Commission on matters to do and/or related to land.
- Assist in the dissemination of research findings on land and related matters.
- Perform other duties that may be assigned to you from time to time

### **Qualifications, Competencies and Experience:**

- Minimum of a Masters degree (PHD an added advantage) from an accredited College or University in any of the following fields:-Land, Environment, Land management and administration; Natural Resource Management, Land law, land survey, spatial planning or land economics; Education; or Other Social sciences
- At least 10 years' extensive experience in research with at least 4 years as a leader in research in a leading research institution.
- Has engaged in results-oriented research for at least five years in Kenya;
- Is a member of relevant professional organization either locally or internationally;
- Has done some national advocacy assignments preferably as a team leader
- Further qualifications in any of the following: Project Planning and Management, Gender and Development will be an added advantage
- Proficiency in use of computers.
- Demonstrated professional ability, high integrity and competence.
- Clear understanding of the National Development Goals, Vision 2030, Millennium Development Goals, and the role of the Commission in achievement of the same.
- Personal qualities of integrity, credibility, and dedication that meet the requirements of chapter 6 of the Kenya Constitution.
- Perform other duties that may be assigned from time to time

## **Director – Land Information Management System**

The Director, LIMS will report to the Chief Executive Officer (Secretary to the Commission) and will be responsible for developing and maintaining geographic, spatial, legal and environmental databases that are relevant to real property throughout the country.

NLIMS is designed to create, analyze, and publish land-based data such as parcel information, zoning, land use, ownership and general property information.

### **Key Responsibilities:**

The National Land Commission envisages the replacement of the current manual system of land administration and registration by an efficient, cost effective, user friendly web-based system.

The Director of LIMS will be responsible for a system that will:

- Put in place a set of technical processes and procedures for the registration of rights and interests in real property.
- Automate the procedures of land and real estate transactions.
- Support the creation of parcel data using standard cadastral editing tools and the ability to generate reports according to a predefined template.



- Generate standardized query and notification letters as well as other reports.
- Provide a public access module that allows general enquiries by the public.
- Support decentralized business workflows in all the counties.
- Advise on the procurement of appropriate hardware and software.
- Train or recruit professionals and technicians who will run an effective LIMS at national and county levels.
- Coordinate the acquisition of raw data in the field or from other governmental or private sector agencies.
- Delegate responsibilities, communicating with staff, and technical consulting with vendors.
- Allocate resources, budgeting and tracking logistics of GIS projects.
- Personal qualities of integrity, credibility, and dedication that meet the requirements of chapter 6 of the Kenya Constitution.

- Perform other duties that may be assigned from time to time

Qualifications, Competencies and Experience:

The Director LIMS is expected to have not only technical knowledge regarding LIMS or GIS systems but also:

- A minimum Bachelor's degree from a recognized university, in cartography, land surveying, computer science, geography or a related discipline.
- A Masters Degree in a related field is an added advantage
- 5-10 years' experience in hands-on GIS work, and at least 2-years' experience in managing a large GIS installation.
- Knowledge and understanding of the technical aspects relating to GIS and LIMS.
- Possess knowledge of modern principles, practices and technology of GIS database and GIS software, including ArcView and ArcGIS and of cartography.
- Be able to use computer systems with various technological developments such as software and hardware developments relevant to the sector.
- Awareness of the latest trends in GIS technology, especially as applied to cadastral systems.
- Proficiency in computer software programs used in cartography
- Excellent analytical, oral presentation, negotiation and report writing skills.
- Professional attitude to work, including unquestionable integrity.
- Perform other duties assigned from time to time

### **Director, Finance and Administration**

The Director, Finance and Administration will report to the Chief Executive Officer and will be responsible for the finance and administration function including advising the Commission, the Chief Executive Officer and Management on strategic financial performance of the Commission.

Key Responsibilities:

The successful candidate will be a hands-on and participative manager and will lead and develop an internal team to support the following areas: finance, business planning and budgeting.

In addition to the above he/she will he/she will:

- Plan for optimum utilization of resources.
- Provide leadership in the formulation and implementation of financial management strategies policies and procedures.
- Oversee the development and implementation of sound financial management systems
- Assess business risks and create financial awareness on resource allocation, cost reduction and financial discipline
- Oversee and lead annual budgeting and planning process
- Analyze and present financial reports in an accurate and timely manner
- Work closely and transparently with all external partners, including thirdparty vendors and consultants.
- Oversee administrative functions as well as facilities (transport, Estates, Assets all over the Country) to ensure efficient and consistent operations in the Commission
- Perform other duties that may be assigned from time to time

Qualifications, Competencies and Experience:

- A master's degree in Accounting, Business Administration or Economics from a recognized university plus
- Must be a qualified accountant (CPA-K )



- At least eight (10) years relevant experience, 5 of which with a reputable organization and at least 4 years at senior management level.
- (Experience in the public sector will be an added advantage)
- Demonstrated experience using and complying with international accounting standards
- Knowledge of donor contracting policies and reporting standards
- Well-developed IT skills with proficiency in computerized accounting applications and Enterprise Resource Planning (ERP) systems and knowledge of accounting and reporting software
- General management skills
- Excellent communication and relationship building skills with ability to prioritize, negotiate, and work with a variety of internal and external stakeholders
- Personal qualities of integrity, credibility, and dedication that meet the requirements of chapter 6 of the Kenya Constitution.
- Perform other duties that may be assigned from time to time

### **Director- Human Resources Management**

Reporting to the Chief Executive Officer, The Director of Human Resources will be responsible for the developing and implementing appropriate Human Resource [HR] strategies that will ensure that the Commission attracts and retains a professional team of motivated employees.

#### **Key Responsibilities**

- Advising the Commission on all matters pertaining to Human Resource.
- Issuing administrative guidelines on interpretation and implementation of labour laws and other human resource related statutes.
- Aligning the HR strategies to the overall strategy of the Commission.
- Ensuring the Commission develops policies for attracting, retaining and developing Human Resource
- Developing and reviewing the HR policies and procedures
- Manage the recruitment process and analyze the training needs of Human Resource
- Overseeing change management process
- Coordinating policy monitoring and evaluation
- Advising on career development of all employees within the Commission
- Ensuring appropriate HR training and development programs are developed and implemented and
- Putting in place an appropriate performance management system and managing performance contracts.
- Personal qualities of integrity, credibility, and dedication that meet the requirements of chapter 6 of the Kenya Constitution.
- Perform other duties that may be assigned from time to time

#### **Qualifications, Competencies and Experience:**

- Masters Degree in Human Resource Management or related field
- A professional qualification in HR management
- 10 years' experience in a HR advisory role with at least 4 years as a HR leader in a dynamic environment
- Demonstrated leadership, coordination and managerial capabilities
- Excellent interaction and presentation skills
- Computer literacy

### **Director, Legal Affairs and Enforcement**

The Director, Legal Affairs will report to the Secretary of the Commission and will be responsible for the provision of leadership and advice on all legal matters.

Specifically, the director will be responsible for:

- Developing appropriate legal and institutional frameworks for the implementation of the mandate of the Commission.
- Coordinating litigation or court cases for the Commission.
- Overseeing drafting of legal opinions and other relevant legal documents for the Commission;
- Undertaking legal transactions including recovery, conveyance, agreements, leases and partnerships.
- Developing and reviewing legal instruments for the Commission.
- Reviewing existing laws and regulations relevant to the execution of the mandate of the Commission.
- Coordinating enforcement of legal decisions and court orders for the Commission.
- Performing any other duties as may from time to time be assigned by the Secretary.



- Conducting relevant Legal research for the Commission.
  - Advising on all Legal matters related to staff discipline.
  - Personal qualities of integrity, credibility, and dedication that meet the requirements of chapter 6 of the Kenya Constitution.
  - Perform other duties that may be assigned from time to time
- Qualifications, Competencies and Experience:
- For appointment to this position, a candidate must:
  - Have at least a Master's Degree in Law from a recognized university in Kenya.
  - Be an advocate of the High Court of Kenya with a current practicing certificate.
  - Have at least eight (10) years' practicing experience in public/private sector or in a busy firm/organization, with at least 4 years in a senior position
  - Possess at least 5 years experience in litigation.
  - Experience in Alternative Dispute resolution will be an added advantage
  - Demonstrated leadership skills and a team player.
  - Computer literacy

## **Director, Surveying and Planning**

The Director, Surveying and Planning will report to the Chief Executive Officer and will be responsible for coordinating surveying and planning functions including advising the Commission, the Chief Executive Officer and Management on all aspects and types of surveys and related planning tasks the Commission may wish to undertake.

### Key Responsibilities:

The successful candidate will be a hands-on and participative manager and will lead and develop an internal team to operate the following areas: cadastral surveys, topographical surveys, and compulsory acquisition surveys, settlement surveys, adjudication surveys, remote sensing surveys, hydrographical surveys, GIS and coordination of planning tasks.

In addition to the above, he/she will;

- Provide leadership in the formulation and implementation of survey and planning management strategies and policies
- Supervise and coordinate Land Adjudication and Settlement Schemes planning and surveys
- Supervise and coordinate compulsory acquisition surveys
- Supervise and coordinate topographical surveys when and where required
- Coordinate and liaise with the National Mapping Agency for hydrographical, remote sensing and mapping surveys when and where required
- Liaise with the National Planning Agency and county governments on planning tasks when and where required and County governments.
- Oversee the development, coordination and implementation of sound Survey, Mapping and Geographical Information Systems (GIS) management
- Work closely and transparently with all external partners including thirdparty vendors and consultants.
- Oversee administrative functions as well as facilities to ensure efficient and consistent operations of the department of surveys and planning in the Commission.
- Personal qualities of integrity, credibility, and dedication that meet the requirements of chapter 6 of the Kenya Constitution.
- Perform other duties that may be assigned from time to time

Qualifications, Competencies and Experience:

- A Masters degree in any Survey related field, GIS or Planning from a recognized university
- A Bachelor's degree in Surveying or Geomatic/Geospatial Engineering from a recognized university (compulsory requirement). A degree in planning would be an added advantage
- A Full Member of the Institution of Surveyors of Kenya (MISK) - Geospatial Surveyors Chapter (being a Licensed Surveyor would be an added advantage)
- At least Ten (10) years relevant experience, 5 of which must be with a reputable organization and at least 3 years at senior management level (experience in the public sector would be an added advantage)
- Demonstrated experience and understanding in various types of surveys and planning
- Well-developed computer literate skills (knowledge and application of GIS would be an added advantage)
- General management skills



- A successful track record in setting priorities; keen analytic, organization and problem solving skills which support and enable sound decision making
- Excellent communication and relationship building skills with an ability to prioritize, negotiate, and work with a variety of internal and external stakeholders
- Personal qualities of integrity, credibility, and dedication
- Meet the requirements of chapter 6 of the Kenya Constitution.

Important Information to all candidates:

All candidates are required to submit, on application, clearance certificates from Ethics and Anti Corruption Commission (EACC), Kenya Revenue Authority (KRA), Criminal Investigation Department (CID), Credit Reference Bureau, Higher Education Loans Board (HELB), and the relevant professional body(ies).

- Only shortlisted candidates will be invited for interview.
- Shortlisted Candidates shall be required to produce originals of their National Identity Card, Academic and Professional Certificates and Testimonials.

How to Apply

Interested and qualified persons should submit applications to:

The Chairman, National Land Commission, 1st Ngong Road, Ardhi House, 12th Floor, Room 1205, P.O. Box 44417-00100, Nairobi. All applications should reach the Commission by Friday 7th June, 2013 at 5pm.

## Other

### [Apply to be an ESRI education ambassador](#)

Many schools and universities in developing nations lack qualified GIS teachers and are in need of a kick-start, which often comes in the form of a brief educational visit from an experienced GIS instructor. Esri often receives requests to help support underprivileged schools, so the company recently set aside a modest budget to help fund such education ambassador visits.

Last year, Bob Kolvoord, interim dean at the College of Integrated Science and Engineering at James Madison University, became Esri's first education ambassador, graciously accepting a request to visit and teach at the [SOS-Hermann Gmeiner International College](#) in Tema, Ghana. Esri paid for his travel; the host school provided local housing; and Sambus, the Esri distributor in western Africa, provided logistical assistance. This collaborative formula will help make the Education Ambassador program successful.

Visits will be based on a prioritization of requests from schools and the budget that's available. The stays typically will be for 5 to 10 working days and will focus on giving the students hands-on training in Esri technology so they can start to solve community and global problems.

If you are interested in becoming an education ambassador, send a summarized biographical sketch plus a statement of your specific teaching expertise to [edambassadors@esri.com](mailto:edambassadors@esri.com).

### [Regional seminar urges women to take up surveying profession](#)



The FCT Minister for State, Ms Olajumoke Akinjide called on women to take up the surveying profession to meet the MDGs goal on gender equality. Akinjide represented by her Senior Special Assistant (special duties) Mrs. Jummai Kwanashie made the call at the "9th Regional Seminar of the Women-in-Surveying Profession" in Abuja.

She said that the profession was believed to be male-dominated, hence the need for change through awareness creation. "As you are aware, surveying profession is one of the oldest professions in the world, in the past; the surveying profession was entirely dominated by men and was perceived to be a gender biased profession".

"Women now make up to 40 per cent of the working population in Nigeria, with similar figures reflected across other parts of Africa and Europe". "With this growth, the number of women entering and working in the surveying profession has improved tremendously in the last few years". "It is with this great honour that I salute the women who have come together under the institution of Women-in-Surveying for their invaluable contribution to the development of the profession and the country in general". "More is definitely expected from the Women-in-Surveying in emulating the law and medical professions in increasing the participation of women". "There is absolute need for more awareness of the profession in schools and also more colleges are needed, so as to encourage more women to take up the profession." Akinjide said that the FCT administration was committed to making planning and development of infrastructure less cumbersome. She said that surveying and mapping data were required for most well mapped countries.



The National Coordinator of the group, Mrs Augustina Anobili, said that it was important for government to put policies in place that would attract more women into the profession. Anobili said there was severe shortage of women surveyors in the country, noting that this could be addressed with encouragement of more women to take up the profession. She stressed the need to guide young women in the profession on the ethics of the trade, to make them succeed as surveyors. "Presently only five women fellows in the NIS and one in the Surveyors' Council of Nigeria, this is not encouraging." Anobili said the role of surveyors in the country could not be over-emphasised as surveyors were always helping to ensure environmental sustainability.

## Conferences, Events

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

Date	Location	Event
<b>June 2013</b>		
4-7 June 2013	Ohio, USA	<a href="#">Mapping Global Change: Spatial Statistics 2013</a>
10-12 June 2013	Salzburg, Austria	<a href="#">Symposium for Research in Protected Areas</a>
17-18 June 2013	Ghent, Belgium	<a href="#">Conference on Desertification and Land degradation</a>
19-20 June 2013	Napoli (Italy)	<a href="#">Four Decades of Progress in Monitoring and Modeling of Processes in the Soil-Plant-Atmosphere System: Applications and Challenges</a>
23-27 June 2013	Florence, Italy	<a href="#">INSPIRE Conference 2013 Call for Contributions</a>
<b>July 2013</b>		
3-5 July 2013	Denmark	<a href="#">From effective to intelligent agriculture and forestry</a>
6-9 July 2013	San Diego, USA	<a href="#">ESRI Survey Summit - The Esri Annual Conference</a>
7-11 July 2013	Catalonia, Spain	<a href="#">9th European Conference on Precision Agriculture (ECPA)</a>
8-12 July 2013	San Diego, USA	<a href="#">ESRI International User Conference</a>
21-26 July 2013	Melbourne, Victoria, Australia	<a href="#">IGARSS 2013</a> Deadline for abstracts/proposals: 10th January 2013 Check the <a href="#">event website</a> for more details.
<b>August 2013</b>		
13-14 August, 2013	Cape Town, South Africa	<a href="#">Africa Geospatial Forum</a>
25-30 August 2013	Dresden Germany	<b>26th International Cartographic Conference - From Pole to Pole</b>
26-31 August 2013	Busan, Korea	<a href="#">XXVII IUSSP International Population Conference</a>
25-30 August 2013	Hong Kong, S.A.R. China	<a href="#">59th ISI World Statistics Congress</a> E-mail: <a href="mailto:isi@cbs.nl">isi@cbs.nl</a>
26-29 August 2013	Sarawak, Malaysia	<a href="#">8th International Symposium on Digital Earth 2013</a>
27-31 August 2013	Paris, France	<a href="#">IAG International Conference on Geomorphology</a>
<b>September 2013</b>		
17-22 September 2013	Nottingham, U.K	<a href="#">FOSS4G 2013 Conference</a>
23-25 September 2013	Technical University of Lodz, Poland	<a href="#">2nd International Conference on Informatics &amp; Applications (ICIA2013)</a> Abstract deadline: 5 August 2013. Email: <a href="mailto:icia@sdiwc.net">icia@sdiwc.net</a>
24-26 September 2014	Rotterdam, Netherlands	<a href="#">Deltas in Times of Climate Change II</a> <a href="#">Read more</a> , <a href="#">Conference flyer</a>
29 September-2 October 2013	Noordwijkerhout, Netherlands	<a href="#">First International Conference on Global Food Security</a>



<b>October 2013</b>		
<b>15-18 October 2013</b>	Arusha, Tanzania	<a href="#">Africa Climate Conference 2013 (ACC-2013)</a>
<b>23-25 October 2013</b>	Rio de Janeiro, Brazil	<a href="#">Sixth International Conference on Agricultural Statistics- ICAS-VI</a> . Abstract deadline: 15 December 2012 FAO: <a href="http://www.fao.org/economic/ess/ess-events/ess-icas/en/">www.fao.org/economic/ess/ess-events/ess-icas/en/</a>
<b>November 2013</b>		
<b>4-8 November 2013</b>	Adis-Ababa, Ethiopia	<a href="#">GSDI 14 World Conference and AfricaGIS 2013 Conference</a> Please consult the <a href="#">conference</a> web site on a regular basis.
<b>18 November 2013</b>	Africa	African Statistics Day Celebrations - Organized by the UN Commission for Africa and the African Centre for Statistics.
<b>December 2013</b>		
<b>28-31 December 2013</b>	CRRAO AIMSCS, Hyderabad	CRRAO AIMSCS will be organizing a conference during the International Statistics Year, 2013 - <a href="#">Statistics 2013: Socio-Economic and Sustainable Challenges and Solutions</a>
<b>2014</b>		
<b>8-14 June 2014</b>	Jeju ICC, Korea	<a href="#">20th World Congress of Soil Science (WCSS)</a>
<b>2015</b>	Durban, South Africa	<a href="#">14th World Forestry Congress for SA</a>
<b>1-31 August 2016</b>	Cape Town, South Africa	<a href="#">35th International Geological Congress</a> . Registration deadline: 30 June 2016.

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

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