SPATIAL DATA INFRASTRUCTURE - AFRICA NEWSLETTER

The GeoSpatial Community

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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 sesning application and implementation materials in your area, profession, organization or country. Kindly send them by the 25th of each month to the Editor, Gordon Ojwang' - gojwang@rcmrd.org or 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

Thanks to the Global Spatial Data Infrastructure (GSDI) Association; Hussein Farah, RCMRD (Kenya); Kate Lance, GSDI listserv moderator (USA); Karen Levoleger, kadaster (Netherlands), Caroline Knightley, TRAFFIC International and IUCN (UK) and Samira Korban-de Gobert, United Nations Environment Programme (France) for their contribution to this issue of the newsletter.

SDI News, Links, Papers, Presentations

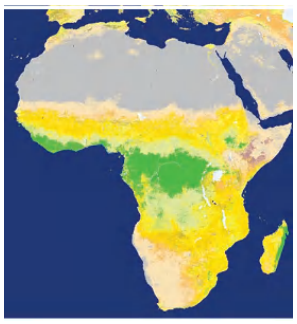
Global Geospatial Conference 2013 - A Success!

For an update on what has been called one of the most successful GSDI conferences yet, please see Prof. David Cleman's article in GIM International magazine as reprinted in the GSDI Newsletter.

Well done to everyone who helped to make this a successful event - on the part of the organisers, the presenters, and the attendees. Special thanks go to the GSDI Association's member UN Economic Commission for Africa, who hosted the event at the UN Conference Centre in Addis Ababa and w hose staff worked tirelessly to ensure the success of the event, supported by the Local Organizing Committee, led by EiABC - Addis Ababa University and the Ethiopian Mapping Agency. Special thanks also to EIS Africa whose AfricaGIS 2013 was an integral part of the conference, giving it a valuable regional focus. And finally, many thanks to the Sponsors, without whose financial support the conference would not have been the success that it was, including Esri, Google, Intergraph, GEO (Group on Earth Observations) and DigitalGlobe.

A full conference report, with photos is in preparation. Visit the conference web site to access the full program of presentations, abstracts, and papers that comprise the Proceedings.

Working Group to develop land cover data for the African element of AfriGEOSS established



Land cover data are some of the most important inputs for monitoring human and ecosystem health, climate change, agricultural sustainability, management of water, forest and other natural resources, land use planning, reducing land degradation , conservation of biodiversity, and renewable energy assessment. Information on land cover change provides significant value to both the scientific community and the general public. Therefore, land cover information plays a critical role in supporting policy and decision making at local, regional, continental, and global levels.

Mapping Africa's land cover has been facilitated by the availability of free and open data from the US Landsat program, as well as data processing/analysis capabilities in African regional centres and international partners (including China, EU, US). These data and processing capabilities are leading to the creation of a new continent-wide map for the year 2010, continent-wide samples documenting land cover change between the 1990-2000-2010 epochs, regional maps for 2000 and 2010, regional validation datasets, and selected national and project scale mapping for specific tasks such as Agriculture, Forestry and Other Land Use (AFOLU) carbon accounting. However, in several countries data gaps, inadequate institutional frameworks, missing networks of experts and technological barriers mean that the specific needs of policy makers cannot always be met.

An international Symposium on Land Cover Mapping for the African continent was held in June 2013 in Nairobi, Kenya to address the gaps and deficiencies identified above. The United Nations Environmental Programme (UNEP) and the Regional Centre for Mapping of Resources for Development (RCMRD) hosted the Symposium with support from the US Department of the Interior, Tsinghua University and the joint USAID/NASA SERVIR program. The major objectives of the event were to share ongoing technical collaboration, data availability, capacity-building successes, and to increase communication between and among the various stakeholders. The Symposium brought together a diverse group of more than 100 participants from four continents (Africa, America, Asia, and Europe). Participants were from governments and academia, and NGO representatives from nineteen African countries, including regional entities. The key recommendation from the Symposium was to advance Land Cover mapping initiatives in the African Continent. An important outcome of the Symposium was the commitment to establish a Working Group on Global Land Cover for Africa under the Group on Earth Observations (GEO).

Working Group on land cover for Africa

The purpose of the Working Group is to contribute to the development of a land cover data products for the entire African continent at a 30-meter resolution for the African element of the Global Earth Observation System of Systems (AfriGEOSS). This will be established by building mutually beneficial partnerships with national and regional institutions to assess and respond to their land cover needs, developing products while increasing their involvement in the Global Land Cover Database effort. The Terms of Reference of the Working Group are as follows:

- Contribute to the development of a land use/land cover data product for the entire African continent at a 30-meter resolution for the African element of the Global Earth Observation System of Systems (AfriGEOSS);
- Advocate for Earth Observation data providers to adopt a policy of full and open access to their data;
- Raise awareness of the availability of land use/land cover data, tools, applications, and land cover change dynamics among decision makers at multiple levels;
- Build mutually beneficial partnerships with national and regional institutions to assess their land cover needs, such as products and tools, while increasing their involvement in data validation for the global land cover data product;
- Build capacity within and among national and regional institutions to integrate land cover data into decision-making processes;
- Promote sound governance policies and activities that maximize the value and usefulness to decision makers of land cover data at multiple scales (e.g., data openness, data sharing, institutional transparency, common data standards); and
- Establish an Africa-focused Community of Practice for Land Use and Land Cover to facilitate networking among scientists and technicians.

In November 2013, alongside the Africa GIS/GSDI 14 conference held in Addis Ababa, Ethiopia, an interim Executive Board and a Technical Advisory Committee for the Working Group were established. The members of the Executive Board and the Technical Advisory Committee include experts representing the different sub-regions of Africa and international partners.
The immediate actions of the Working Group to be accomplished in the first year were identified as follows:

- Integration into the GEO Work Plan
- Inventory of Land Cover data sets in Africa
- Standardization and validation of the 30m Global Land Cover of Africa
- Resource mobilization for the Working Group
- Development of a five year Strategic Plan

Call for Participation

All Experts and relevant national and regional institutions in Africa are welcome to participate in the activities of the Working Group and provide necessary support. International and development partners are requested to collaborate with the Working Group and provide technical and capacity building support. See: Assessment of Progress - Target and Task [PDF].

Scientists launch satelite technology to fight human wildlife conflict

A satellite technology that protects the country's reserves and protected lands from poaching and addresses human wildlife conflict has been launched coming at a time when the cases of poaching in the country has been at an unprecedented high. The technology,The Africa Soil Information Service (AfSIS)'s, developed by scientists from World Agroforestry Center (ICRAF)hopes to reduce the potential of human-wildlife conflicts by informing livestock herders and crop farmers where to graze and plant new crops that will increase their productivity, reduce land degradation, and reduce conflicts with wild animals.
According to experts, research on conservation, soil and land status mapping which has been embraced by agricultural scientists and conservationists could help save Africa's rapidly declining wildlife population. Tor-Gunnar Vagen, a senior scientist at ICRAF and principal investigator for the soil health mapping component of AfSIS in an earlier interview said a case study of Kenya's Laikipia county, one of the country's most diverse wildlife regions, had shed light on the interaction between soils, land and human-wildlife conflict.
He said satellite images of the region show a high prevalence of soil erosion on land in Laikipia where the conflict has been rife. By cross mapping this with other datasets that represent progressions in patterns of agriculture amongst pastoralists, shifting paths of migration taken by wildlife, river direction flow changes and land cover change, conservationists can map out areas where the probability of conflict is high.
This, Vagen said, means that communities can be more effectively educated on appropriate livestock numbers, settlement rotation, and the management of shared grazing pastures. "With proper management of livestock and agriculture, there is no reason that humans and animals cannot co-exist. We have the tools through these methods to make informed decisions that can help reduce conflicts between humans and wildlife," he said.
Conservationists said rising demand for ivory and rhino horn in Asia has caused a poaching crisis in recent years across Africa as a whole with over 1,000 rhinos killed on the continent in the last 18 months. This, coupled with the human wildlife conflict that has exacerbated in recent times has become a cause for concern. The Kenyan government has been spending over Sh71million annually in compensation to victims of human wildlife conflict and the satelite technology couldnt have come at a better time.

Drones to protect Uganda wildlife

The Uganda Wildlife Authority (UWA) has said it will start using spy drones as one of the measures to curb the increasing levels of poaching in its national parks. Dr. Andrew Sseguya the UWA Executive Director told Media Owners and Editors in Kampala that they intend to take up the measure before the end of the year.
"The new plan we have is zero tolerance to poaching. We launched a tourism intelligence unit to curb poaching which I can report is doing very well. Very soon we shall use spy drones to protect our parks from poachers," said

Sseguya. He said the drones will be able to capture images/footage of poachers while in the act, for further review. "We can have one drone with all the necessary equipment including spying cameras," he said.
A drone is an aircraft without a human pilot on board and its flight is controlled either autonomously by computers in the vehicle or under the remote control of a pilot on the ground or in another vehicle. Drones are equipped with infra-red cameras, Global Positioning Systems (GPS), laser or GPS guided missiles and other systems.
The state of poaching of wild animals in Uganda, though the UWA says is not out of control, observers say it is alarming. A report released recently indicates that in 2011, about 25 elephants were killed in Uganda. Large caches of ivory are always impounded at Entebbe International Airport destined for various destinations. Since its creation in 1996, UWA inherited the problem of poaching and encroachment of protected areas and has been battling them for sixteen years now. Fortunately, the efforts UWA has since invested in fighting poaching yielded fruit as the wildlife numbers have continued increasing.
Statistically, large mammals' censuses revealed that the elephant numbers for Queen Elizabeth Protected Area increased from 400 in 1988 to 2,959 in 2010, buffaloes from 5000 to 14,858, Hippos from 2200 to 5,024 and Kobs from 18,000 to 20,971. In Murchison Falls Protected Area, elephant population increased from 201 in 1995 to 904 in 2010, buffaloes from 2,477 to 9,192, giraffes from 153 to 930 and Hartebeests from 2,431 to 3,589. "However, it is important to note that the killing of elephants for ivory generally shot up over the last four years, not only in Uganda but within the entire elephant range states in Africa, for which concerted efforts of governments, NGOs, Donors, communities and the general public are needed to fight it," said a statement the UWA released in regard to the growing concerns of poaching. Elephants are generally killed not for meat but for their tusks made of ivory that is used in making expensive jewelry. Sseguya said they will also take the Biodata and DNA samples of poachers for international exposure. Source: East African Business Week.

Valuable geospatial data locked up by misguided nations

Many governments, particularly those in low-income countries, are “shooting themselves in the foot” by failing to give research and development communities open access to their caches of geospatial data, experts have warned.
The potential of such data that includes geographic positioning information and satellite imagery to aid fields such as disaster response, agriculture, conservation, and city planning far outweighs any potential value from selling the information, they say. Some examples of the beneficial sharing and opening up geospatial data were highlighted at a meeting in Geneva, Switzerland, (13-17 January 2014) of the Group on Earth Observations, a voluntary partnership of governments and international organizations.
But the misguided belief that government data represent a lucrative revenue stream is still stifling countries’ development potential, says Paul Uhlir, the Director of the board on research data and information at the US National Academy of Sciences. “They see it as a valuable commodity that they can make some money from, but, quite frankly, open [data] policies are much more economically generative than closed ones,” “By hoarding the data they’re minimizing massively its value for other uses and shooting themselves in the foot.”
Restricted access to official data troves is not limited to geospatial information, but the considerable expense involved in collecting it amplifies governments’ desire to recover some costs, he adds. While countries, both rich and poor alike, have a mixed record of making their geospatial data freely available, developing nations are generally “uncooperative”, Uhlir says.
For example - projects such as gROADS - an open-access data set complied by the International Council for Science’s Committee on Data for Science and Technology (CODATA) to map road infrastructure aim to encourage governments to loosen this grip. Although companies already provide accurate road maps, data cannot be extracted freely for other applications, limiting their use to navigation, or to commercial users with deep pockets. By offering open-access information, gROADS allows the development sector, governments, civil society and researchers to conduct studies, plan services and develop new applications from the existing data sets. The initiative has greatly improved the availability of roads data but is still impeded by a “twentieth century mentality” that data are power and must be guarded closely, says Alex de Sherbinin, chair of CODATA’s group working on the gROADS project.
Michael Simpson, the executive director of the Secure World Foundation - a US space technology foundation agrees that many developing nations are taking positive steps towards better sharing of geospatial data. Any restrictions to data sharing, of which there are still far too many, often result from the complex rules that shape relations between government departments and beyond, rather than an overt resistance to openness, Simpson says. “It is a classic bureaucratic tangle rather than a cultural issue that is specific to developing

countries," he adds. The only way to solve this problem is by national governments taking the lead, says de Sherbinin. Without a clear directive towards open data from the highest levels of government, civil servants will instinctively hold onto information from fear of displeasing their superiors, he adds.

Landowners in Lesotho benefits from land administration reform project

For the past five years, Kadaster International has been responsible for project managing the 'Land Administration Reform Project' (LARP) in Lesotho, Africa. Laws and regulations have been altered and a new Land Act adopted. Landowners can now receive a lease, which proves that the land is rightfully theirs. A formal proof of ownership makes a huge difference for the ordinary people in Lesotho. They can leave their land as inheritance in a will and choose who will inherit it, or they can use their land as collateral for a loan.

The reforms in laws and regulations changed some elements of the process of land registration. Presently, leases can be issued or changed within 3 weeks, which before, could take more than a year. Also due to the new Land Act, the Land Administration Authority (LAA) was established and to support the work at the LAA, a Land Management System (LMS) developed.

The system is based on the Open Source Solutions for Open Land Administration (SOLA) from the Food and Agriculture Organization of the United Nations (FAO), whose staff trained local developers and adjusted the system to the demands of the LAA.

At the end of 2008, only 12,000 leases were formally registered. By September 2013, Kadaster International had identified some 60,000 landowners and mapped their parcels. The project managed to deliver 10,000 signed and registered leases to the lessees. The LAA is now continuing this work with extra funding from the Government of Lesotho, which proves the sustainability of the LAA.

The Millennium Challenge Cooperation (MCC) from the USA was the donor for this project. Their objective is to reduce poverty worldwide by stimulating economic growth. The project encountered numerous challenges along the way. In the end, government support strengthened. This resulted in strong support towards the LAA. The registration of land provides a basis for improving the economy in Lesotho.

Source: Kadaster International. See also: http://www.kadaster.nl/web/Nieuws/Bericht/Succesvolle-afronding-project-voor-landadministratie-in-Lesotho.htm.

Handover of cartographic products to Malian partners

An OSS delegation visited Bamako (Mali) on 18-22 November 2013 on a joint mission within the framework of the ILWAC and REPSAHEL projects.

An official ceremony was held on 22 November 2013 at the headquarters of AEDD (Agence de l'Environment and Développement Durable) during which the OSS delegation presented the ILWAC project's outputs and delivered a set of maps to the project's stakeholders in Mali, namely the AEDD and La Direction Générale la Protection Civile (DGPC).

The ILWAC-Mali project aims to set up an information-sharing and knowledge management system for informed decision making on sustainable land management and climate change adaptation in the country. The ILWAC outputs include:

- Thematic maps on climate vulnerability and risks.
- Land-use maps elaborated and finalized during the first phase of the ILWAC project, which encompass recommendations made by the Malian project stakeholders. A total of 72 maps were delivered to the partners, one of which is a global map at 1:2 000,000 and 71 maps covering the entire territory at 1: 200,000.
- Methodological guides for the assessment of carbon sequestration potential and vulnerability to climate change. These methodological guides present the approach followed by OSS and its partners (AEDD and DGPC) in the maps' elaboration and the delivery of capacity building on climate change adaptation options.
- An Information System on Sustainable Land Management, which has been set up at the AEDD.

During the meeting, the project's Malian stakeholders have expressed satisfaction with the developed products and praised the collaborative approach adopted by OSS.

Livraison de produits cartographiques

Une délégation de l'Observatoire du Sahara et du Sahel (OSS) s'est rendue, du 18 au 22 novembre 2013, à Bamako (Mali) dans le cadre d'une mission conjointe relative aux projets ILWAC et REPSAHEL.

La réunion du projet ILWAC, tenue le 22 novembre 2013 au siège de l'Agence de l'Environnement et du Développement Durable (AEDD), a permis de présenter les produits réalisés par l'OSS dans le cadre du projet ILWAC et de les livrer aux principaux partenaires nationaux, à savoir l'AEDD et la Direction Générale de la Protection Civile (DGPC). Il s'agit :

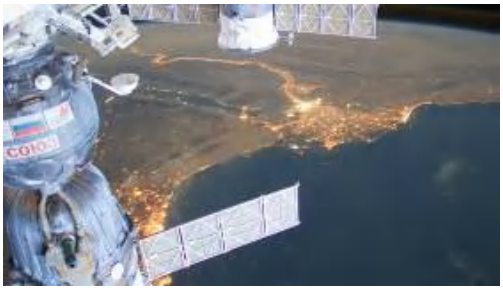
- des cartes thématiques en rapport avec les questions climatiques (vulnérabilités et risques) ainsi que les cartes d'occupation du sol réalisées dans le cadre de la première phase et finalisées en prenant en compte des commentaires et remarques de partenaires maliens. Au total, 72 cartes ont été livrées dont une carte globale au 1/2 000 000 et 71 cartes couvrant l'ensemble du territoire au 1/200 000 ;
- des guides méthodologiques sur l'estimation de la séquestration de carbone et l'analyse de la vulnérabilité aux risques climatiques. Ces guides serviront aux services techniques pour comprendre la démarche utilisée par l'OSS et ses partenaires (AEDD et DGPC) dans la réalisation des dites cartes et renforcer leurs capacités en matière d'adaptation au changement climatique.
- de l'installation du SI-GDT (Système d'Information sur la Gestion Durable des Terres, (http://www.gdtmali.org/) au niveau de l'AEDD.

De leur côté, les partenaires maliens ont exprimé leur satisfaction et se sont félicités de la démarche collaborative adoptée.

Rappelons que le projet ILWAC vise la mise en place d'un système global, cohérent et intégré de gestion des informations et des données en vue d'une prise de décision éclairée sur les questions liées aux changements climatiques, à la gestion durable des terres et des risques de catastrophe climatiques.

Pour plus d"informations, lire le rapport de synthèse (http://www.oss-online.org/sites/default/files/fichier/Rapport%20de%20Synthèse_Novembre2013.pdf) ou visiter la page du projet (http://www.oss-online.org/fr/ilwac).

Egypt plans to launch satellite for scientific research and a new space agency



Egypt plans to launch its second satellite for scientific research and establish a new space authority and national space agency as well as work with other African states to pave the way for a new African space agency. But some experts have warned that the aspirations may exceed Egypt's financial and human resources, and that the country is rushing to launch a new satellite despite having learnt little from the loss of its first one in 2010 after just three years of operation.

The planned satellite - EgyptSat 2, will be manufactured, assembled and tested in Egypt, Mohamed Medhat Mokhtar, says the chair of the National Authority for Remote Sensing and Space Sciences (NARSS), Cairo. "The design phase has been running for ten months successfully using Egyptian expertise," Mokhtar says. "An expert foreign partner will join at the end of this phase to review and approve the outcome of the design phase, and hence support the activities of the next phases."

Belal El-Leithy, the manager of NARSS's earth observation ground receiving station, says "Sat 2 will use modern technology to acquire images for uses in several sectors, including agricultural, geological, and environmental applications and research. We hope to be ready to launch Sat 2 in about three years."

Egypt launched its first satellite in 2007 but some critics argue that the country has done little to retain its expertise in this area. "We have lost most of the engineers we have trained in the EgyptSat 1 programme, as some went to [work in] refrigerator factories and others left the engineering field completely," says Ayman Hamdy Kassem, professor of aerospace engineering at Cairo University and a member of the research and training team for the EgyptSat 1 satellite project.

Echoing Kassem's views, Farouk El-Baz, Director of the Center for Remote Sensing at Boston University, United States says that EgyptSat1's short life discouraged similar projects. "They lost communication with the satellite and had no idea why. So no one learned a thing from the loss," he says. Because the satellite was designed abroad, in Ukraine, Egyptian scientists and engineers were not fully trained in its design or monitoring, says El-Baz. "Thus, it was basically a loss for Egypt because it was not part of a long-term programme to place Egypt onto a space research track."

But El-Leithy maintains that EgyptSat1 was an experimental satellite that was only designed to operate for three years with full performance, which, he says, it did, providing many useful images for Egypt and its neighbours. “Countries all over the world lose control over satellites all the time, as this type of industry is risky because it operates in a harsh environment,” he says. “The problem,” he adds“ is when you let one incident stop your progress and waste your gained technological expertise and your trained scientific workforces.”
Egypt is also planning to establish two new space bodies. The Egyptian Space Authority would be responsible for space technology activities, including the research, design, manufacture, assembly and testing of satellites. And Egypt’s interim president is said to be reviewing a proposal to set up a national space agency. “The state space agency of Egypt will be an independent entity and will directly answer to the presidency of Egypt,” Mokhtar says.
Mokhtar adds that Egypt is working with other African states, including Algeria and South Africa, on preparing policies and strategies to establish the first African space agency under the continental coordination of African union commission. El-Baz says the national space agency could help “infuse a spirit of science excellence” in the present day NARSS, which is poorly funded and has no clear objectives. But Kassem is highly skeptical that the agency will take off in the near future because of a lack of funding and trained personnel.

Ahmed Bello University (ABU) Zaria successfully develops SDI for Planning and Management
Ahmadu Bello University Zaria, Nigeria has successfully developed an SDI for proper planning, management, and monitoring. The University is looking for collaborators to work together to advance and further develop such an initiative for onward implementation to other agencies. For further information, please contact: Murtala Muhammad Tukur, ABUGIS Coordinator, Vice Chancellor's Office, ABU Zaria: mtmurtala@gmail.com, Tel: +234-8066167112.

Invitation to the Geospatial Conference in Tunis 2014 (GCT), Tunis-Gammarth, March 17-21, 2014
On behalf of the organizers of the Geospatial Conferences in Tunis (GCT), the German GeoConsultants Group (3G) and the new African Geospatial Sciences Institute (AGSI) in Tunis, invites you to participate in the GCT2014 at the Ramada Plaza Hotel in Tunis-Gammarth.
The success of the first two Geospatial Conferences in 2012 and 2013 has clearly shown the importance and relevance of geospatial information for the management and development of the North African region.
As a forum and meeting ground for North African government and geospatial industry participants, it is the objective of the GCT conferences to build geospatial bridges between the international community, Europe and North Africa. The sharing of knowledge and the creation of personal contacts are the foundation for new ideas, new business opportunities, and the successful application of geospatial solutions to existing issues.
Geospatial Information (GI) is a key component to all management processes. GI enables and accelerates regional development, creates new employment, helps to improve services and overall living conditions for citizens and is the basis for the management and preservation of limited natural resources for future generations.
Today, the geospatial community has all the tools, hardware and software and many years of experience in the implementation of geospatial programs, to provide and adapt GI technology and resources for programs in North Africa.

3rd International conference on the use of space technology for water management, 1-4 April 2014, Rabat, Morocco
The Conference is hosted by the Royal Center for Remote Sensing (CRTS) on behalf of the Government of Morocco, and co-sponsored by the European Space Agency (ESA) and the Inter-Islamic Network on Space Sciences and Technology (ISNET). The Conference is planned for a total of 100-150 decision-makers, technical experts, researchers, and educators drawn from international, regional, national, and local institutions, academic institutions, multi-lateral and bi-lateral development agencies, non-governmental organizations (NGOs) and private industry will take place on 1-4 April 2014 in Rabat, Morocco. Experts and professionals from both space-related and water management institutions will provide an opportunity for exchange of experiences and strengthen networks and partnerships to increase the use of space technology-based solutions for water resources management.
Financial support to defray the cost of travel (a round trip air ticket - mostly economic fare) and/or room and board expenses for the duration of the conference will be offered to a number of selected participants within the limited financial resources available. However, not all participants can be funded due to limited

availability of financial support and participants are strongly encouraged to find additional source of sponsorship. The deadline for applications is 20 January 2014.

Practical SDI implementation materials from within and outside of Africa

PublicaMundi Survey: What do you think about Open Geospatial Data?

GET participates in PublicaMundi, an FP7- funded research project. Partners of this project are IMIS Athena, Rasdaman & GeoLabs. PublicaMundi is a research project proudly funded by European Commission's 7th Framework Programme.

PublicaMundi aims to make open geospatial data easier to publish, view, and reuse. Regardless of how you are involved in the open data life cycle, they would like to hear your thoughts. Your responses, ideas, and insights can help them devise faster, more efficient ways to use and reuse open geospatial data.

There are three surveys available to complete, depending on your role:

- Users of open data (you are using open data or you are interested in open knowledge)
- Publishers of open data (you are publishing open data or operate an open data catalogue)
- Developers (you develop applications – with or without open data)

Remember that if you have more than one role (e.g. publisher and developer) you can always complete more than one survey. Thank you for your time!

Google Earth enables remote tracking of fish catches

Persian Gulf governments could use Google's free global satellite imaging program to better monitor and control fishing in their waters, say experts. Their comments follow a study that used Google Earth to uncover huge discrepancies between reported and observed fish catches in the region. The study, which tracked fishing from space, found that actual catches taken from Persian Gulf fisheries could be six times greater than the official numbers the Gulf States reported to the UN's Food and Agriculture Organization (FAO).

Researchers from the University of British Columbia (UBC) in Canada used Google Earth to count, for the first time, intertidal fishing weirs - an old technique used to catch fish by placing obstructions across tidal waters. They examined six countries on the Persian Gulf: Bahrain, Iran, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

The study published last year (27 November) in ICES Journal of Marine Science, highlights the unreliability of some countries' official reports to the FAO. It found 1,900 weirs were operational in the countries surveyed in 2005 and estimated their combined production that year at approximately 31,000 tones of fish - more than six times the combined total of 5,000 tones the six countries reported to the FAO that year. "Underreporting fish catches can jeopardize a country's food security and economy, not to mention impact entire marine ecosystems," says Dalal Al-Abdulrazzak, the study's first author.

Al-Abdulrazzak, a PhD student at UBC, says she hopes her technique and other remote sensing satellite tools could be used to complement existing methods of monitoring fisheries and set more appropriate management targets in the Middle East and North Africa. "Countries report their catches voluntarily to the FAO, and the quality of a country's data is based on its national capacity to collect that data", A whole host of issues can affect the quality of these data including resource limitations and political interference. SciDev.Net asked for a comment from the Saudi Arabian department that reports these data, but received no reply.

The research team faced several challenges while gathering data. For example, some countries failed to provide complete data sets on their catches to the FAO, making comparisons with the scientists' observed figures impossible. In addition, for some areas of the coast, including parts of the Iraqi shoreline, the images were of too low a resolution to be able to see the fish weirs. As a result, the researchers were unable to include these regions in their studies, so the figures may still underrepresent catches.

Yet Al-Abdulrazzak says the technique's insights far outweigh its limitations. She says it could help enforce fishing regulations in remote or inaccessible areas. It also allows researchers to monitor fishing in poor countries that spend little on ecological management themselves, she adds. "Using Google Earth is a powerful technique, and I think it will have a great role especially in monitoring, controlling, and providing surveillance of the fishing process in many countries," says Gamal El-Naggar, of World Fish research centre in Egypt.

Adel Ahmed Tharwat, professor of fish resources and ecosystems at King Faisal University in Saudi Arabia, says: “Gulf countries should be expanding the use of satellite remote sensing in fisheries management, as this would help in building a concrete database for fishing inventory numbers and distributions in this region.” This satellite information, combined with field data, should help officials make appropriate decisions on managing fisheries and will become an important part of the development of fisheries and food security plans in the Gulf countries, says Tharwat. Link to full study in ICES Journal of Marine Science.

GIS Tools, Software, Data

RCMRD Data Dissemination

The Regional Centre for Mapping of Resources for Development (RCMRD) has a large landsat data archive, dating back to 1972 for all African countries. It is also a reseller agent in Africa for the Digital Globe - QuickBird and WorldView 1/2 high-resolution satellite imagery, and supplies data from GeoEye (GeoEye 1/2, IKONOS & Orbview imagery), SPOT image (SPOT 2.5m, SPOT 5m & SPOT 10m), USGS (Landsat MSS, Landsat TM & Landsat ETM+) amongst other active and passive satellite image products and datasets for Africa. These datasets are available at subsidized rates. Other low-resolution imagery datasets available include 90m SRTM, NOAA, MERIS, MODIS, scanned maps, and vector data for Africa.
The center in collaboration with European Space Agency (ESA) and EUMESAT has established a facility for direct satellite reception for MERIS, MODIS, NOAA, and EUMESAT Meteosat Second Generation (MSG) data. These datasets amongst other services can be accessed online via: http://www.rcmrd.org/geonetwork or via email to remotesensing(at)rcmrd.org. Further information, please visit website: www.rcmrd.org.

African elephant data

Centuries ago, the African elephant (Loxodonta africana) inhabited most of the African continent. Today, elephants are found only south of the Sahara and their range is fragmented and discontinuous. As a result of this range loss and fragmentation, along with poaching of elephants for ivory, elephant numbers declined across the continent. By the 1980s, the decline had provoked serious concern about the long-term survival of the species. This concern highlighted the need to monitor and report the continent-wide status of elephant populations.
The African Elephant Database (AED) aims to satisfy that need. It is a collaborative effort between conservation agencies and researchers in the 37 states that make up the present range of the African elephant. Information on elephant distribution and abundance is gathered by field surveys and questionnaires, and stored in a database using a Geographical Information System (GIS), along with information on other factors such as vegetation type, cover, and protected area boundaries. With the African elephant facing increasing pressure from a variety of threats, monitoring elephant range and numbers provides wildlife managers with invaluable data for the effective conservation and management of remaining populations, and decision-makers with information on which to base national and international policies relevant to elephant conservation.
The AED is unique in its capacity to accommodate data of variable reliability - from estimates obtained through systematic total counts to "guesstimates". Comprehensive African Elephant Status Reports (AESR) are produced and published every three to five years.
In 2009, the AfESG partnered with the Asian Elephant Specialist Group to build a joint database, the African & Asian Elephant Database (AAED). The AAED is now live, and the AfESG is working to update it with all the survey data received since the last African Elephant Status Report in 2007.
The AAED is an Open Source software project, built by Solertium. Every aspect of the database is powered by free and open source software. If you are interested in joining this project, please visit the site to learn more. The AAED allows you to:

- Explore data from past reports
- Submit new data
- Request data
- See all the latest data as we get it

The European Commission, CITES MIKE, the Asian Elephant Conservation Fund of the USFWS, Tusk Trust, and Save the Elephants supports of the development and ongoing maintenance of the AAED. Wildlife authorities, NGOs, and independent researchers continue to send their survey data for incorporation into the AAED.

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.

ESRI Technical Certification

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

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

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

ESRI South Africa full spectrum of GIS courses: February and March, 2014

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

ESRI Eastern Africa GIS and remote sensing courses

ESRI Eastern Africa is now offering update courses to conform to improvements in ArcGIS 10 and ENVI 4.8, conducted with skilled and experiences instructors together with conducive and state-of-the-art training facilities. Courses offered in the following tracks: fundamentals of ArcGIS desktop; data and map production; geoprocessing and analysis; enterprise GIS; multi-user geodatabases; and remote sensing.
Request for training arrangement for clients on site for 12-16 students. Download the course catalogue and current class schedule. To register visit: http://esrieatraining.cloudapp.net/. For more information, contact: training@esriea.co.ke, Phone: +254 20 2713630/1/2 or visit the offices on 3rd floor, KUSCCO Centre, Kilimanjaro Avenue, Upper Hill, Nairobi, Kenya.

University of Twente - Faculty of Geo-Information and Earth Observation (ITC): 2014-15 Courses

Apply online for courses starting in the academic year 2013-2014. Browse by programme (degree, diploma, and certificate), course domain (disaster management, earth sciences, geoinformatics, governance, land administration, natural resources, urban planning, and water resources or location in the course finder at www.itc.nl/CourseFinder. For printed copy of the study brochure, email: (alumni@itc.nl).

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

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

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

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

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

Academic Programs

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

Short Programs

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

Corporate Courses

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

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

Funding Opportunities, Awards, Support

Association of Commonwealth Universities - Mobility Grants for Early-Career Academics, 2nd Call for Applications

The Association of Commonwealth Universities is offering staff at ACU member universities the opportunity to attend relevant conferences or academic meetings in another Commonwealth country. The scheme aims at early-career academics that have not yet had the opportunity to work, study, or travel outside their own country. The closing date for the second round of applications is 7 February 2014.

Belgium's University Commission for Development - Awards, Courses, and Training 2014-2015

The French-language universities of Belgium award 150 scholarships and 70 training grants each year to applicants from developing countries through Belgium's University Commission for Development (CUD - Commission universitaire pour le Développement). Subjects include aquaculture; tropical animal and plant resources; environmental management, management of natural hazards and others. Eligibility requirement defined by age, previous education, and nationality. The deadline for applications (French or English) is 12 February 2014.

Conservation International (CI) - Women and Environment in East Africa

In partnership with BirdLife International, CI will make grants in Kenya, Tanzania, and Uganda to support gender equality and women's empowerment (e.g. leadership skills development, technical training, etc.) vis-à-vis the environment. The focus is on women in and near the high-biodiversity, sites (terrestrial and fresh water) listed in the announcement. Grants are a maximum of US$10 thousand. Letters of inquiry submitted before 28 February 2014.

European Commission (EC) - Energy in Fragile African Countries

The ACP-EU Energy Facility II calls for proposals to increase supplies of renewable energy and to improve measures for energy efficiency in Burundi, the Central African Republic, Liberia, Mali, and Somalia. Eligibility for funding extends to state and non-state actors in the EU and its candidate countries; the European Economic Area; the ACP countries (including the five African countries named above); and other least-developed countries as defined by the United Nations. Grants range from €1 million to €2 million, varying with cost shares. Reference EuropeAid/135073/C/ACT/Multi. The deadline for applications is 14 February 2014.

European Commission (EC), Erasmus Mundus – CARIBU

CARIBU is an Erasmus Mundus program to increase academic mobility, research, and capacity building between participating universities in the EU with partner universities and research institutes in the following ACP countries: Bahamas, Cameroon, Dem Rep Congo, Ethiopia, Gambia, Ghana, Mozambique, Samoa, Suriname, Tanzania, Timor-Leste, and Uganda. Priority fields include agriculture and environment, among others. The first call for applications closes 17 February 2014.

Fondation Ensemble - Program Fund and Small Grants 2014

Fondation Ensemble supports field projects in sustainable development and conservation. In 2014, grants in the Program Fund are up to €50 thousand per year (up to 50% of the project budget) for projects of two to four years in Cambodia, Ecuador, Laos, Mozambique, and Peru. The subject areas are sustainable agriculture and fishing; renewable energies; eco-materials; and biodiversity conservation. Additionally, applicants in coastal areas of West Africa from Mauritania to Liberia are eligible to apply for grants in biodiversity conservation. The Small Grants range from €3 - €30 thousand (up to 50% of the project budget) for projects of up to two years in conservation of threatened animal species in any country of the world. The deadline for concept notes is 7 February 2014.

Fondation Nature & Decouvertes - Grants for Nature Protection in France and Africa

The foundation supports projects for nature protection, education, and public awareness in France and Francophone Africa. Applications for small grants ("coup de main") can be submitted throughout the year. The application deadline for major projects (from €3 thousand to €10 thousand) is 15 February.

International Livestock Research Institute (ILRI) - Africa Biosciences Challenge Fund 2014

The Biosciences eastern and central Africa (BecA) Hub awards research fellowships to African agricultural researchers for short-term projects at the BecA-ILRI Hub, Nairobi. Candidates should be currently engaged in agricultural research and affiliated with a national agricultural research program or university in the eligible countries. The Fund supports travel, accommodation, stipend, and research costs. The application deadline is 28 February 2014.

JRS Biodiversity Foundation - Grants for Bioinformatics 2014

The JRS Biodiversity Foundation supports innovations and capacity building in biodiversity informatics. Preference is for projects that focus on biodiversity in Africa and on teams and home institutions that are mainly or at least partly African. Multi-year project budgets may range from about US$50 thousand to about US$250 thousand. The deadline for proposals is 21 February 2014.

King Baudouin Foundation - King Baudouin African Development Prize 2014
The King Baudouin African Development Prize rewards innovative initiatives to improve the quality of life of local communities in Africa. Candidates for the Prize can be individuals or organizations, working in any field of endeavor. Past winners include champions of fair trade, environmental conservation, and land reform (among a wide field of other issues). The Prize is worth €150 thousand, awarded every other year. The deadline for nominations for the 2014 award is 28 February 2014.

Landesa Rural Development Institute - Women's Land Rights Visiting Professionals 2014
Landesa's program for Visiting Professionals supports motivated professionals to enhance their ability to improve women's land rights in the developing world. Landesa provides orientation and leadership training in Seattle (USA), followed by mentoring in a mutually agreed project in the specified regions (India, China, and East Africa: Kenya, Uganda, and Tanzania). Applicants should have at least five years of development experience. The application deadline is 14 February 2014.

Netherlands Organization for Cooperation in Higher Education (NUFFIC) - MENA Training in the Netherlands 2014
The government of the Netherlands funds the MENA Scholarship Program to contribute to capacity building in ten countries of the Middle East and North Africa: Algeria, Egypt, Iraq, Jordan, Lebanon, Libya, Morocco, Oman, Syria, and Tunisia. The grants are to mid-career professionals in professional fields that include agriculture and environment (among others) for short courses in the Netherlands. NUFFIC particularly encourages applications from women. The deadline to apply for scholarships is 4 February 2014.

Netherlands Organization for Cooperation in Higher Education (NUFFIC) - Netherlands Fellowship Programs 2014-2015
The Netherlands Fellowship Programs (NFP) offer opportunities for professionals in 50 developing countries to pursue master's degrees, PhD studies, and short courses in the Netherlands. To be eligible for funding, individuals applying for fellowships must be admitted to relevant academic programs. Programs include subjects in agricultural and veterinary sciences; sustainable energy; marine biology; water resources; environmental governance; and various other areas related to environment and natural resources. Application deadlines vary by sub-programs - with deadlines on 4 February 2014, 6 May 2014, and 7 October 2014.

Swedish International Development Agency (Sida) - Research Training Partnership with Uganda
Sida will fund partnerships between Swedish universities and Makerere University in Uganda. The aim is research strengthening at Makerere. The call is open to all Swedish and to participating institutions at Makerere University, including the colleges for agriculture and environmental sciences; natural resources; veterinary medicine and animal resources; and others. The deadline for submitting letters of intent is 19 February 2014.

Swiss Commission for Research Partnerships with Developing Countries (KFPE) - Learning Events for Researchers in Developing Countries
With financial support from the Swiss Agency for Development and Cooperation, the KFPE supports the Learning Events Program for researchers from Africa, Asia, and Latin America who are engaged in research partnerships with Swiss institutions. This includes partnerships for research in agriculture, environment, natural resources, and related themes. The program budget of CHF 150,000 allocated to 3-4 projects. Proposals are invited from Swiss institutions and/or their partners in developing countries before 28 February 2014.

World Academy of Sciences - TWAS Prizes for Scientists in Developing Countries 2014
Each year, TWAS awards prizes of US$15 thousand to individual scientists in each of eight fields: agricultural sciences; biology; chemistry; earth sciences; engineering sciences; mathematics; medical sciences; and physics. Candidates for TWAS Prizes must be working and living in developing countries for at least 10 years prior to their nomination. The nomination deadline is 28 February 2014.

World Wildlife Fund U.S. - Educational Fellowships 2014
WWF-US supports the Russell E. Train Education for Nature Program for studies in conservation at masters and doctoral levels anywhere in the world. In the current cycle, applications are invited from Botswana, Cambodia, Dem Rep Congo, the Meso-American Reef (Belize, Guatemala, and Honduras), Myanmar,

Namibia, and Zambia. Guidelines for applicants in each country/region are provided. The closing date for applications (English, French, and Spanish) is 28 February 2014.

Employment Opportunities

Wildlife-TRAPS Project Officer, Yaoundé, Cameroon
TRAFFIC is seeking a Project Officer based in Yaoundé, Cameroon, to help implement a USAID-funded 'Wildlife Trafficking, Response, Assessment, Priority Setting' (Wildlife-TRAPS) initiative. For further details visit http://www.traffic.org/traps-project-officer/.
Specific duties:

- Responsible for ensuring Wildlife-TRAPS work plan activities are successfully implemented and results secured, and that delivery is effectively coordinated with project counterparts in Africa/Asia and others across the TRAFFIC network.
- Assess governments' actions and practical steps towards satisfying commitments to various regional frameworks, declarations, and initiatives such as: Sub-regional action plan for strengthening the implementation of wildlife national laws (PAPECALF) of the Central African Forest Commission (COMIFAC), Marrakesh Declaration, Congo Forest Basin Partnership (CBFP), approved emergency measures of the African Elephant Summit and regional Wildlife Enforcement Networks (WENS).
- Establish where there are needs and opportunities for Asian counterparts to assist African countries to curb illegal wildlife trade.
- Develop activities to inform and increase understanding amongst government, inter-government, private sector and civil society representatives around how trans-continental wildlife trafficking can be relevant to institutions dealing with broader issues; including for example, the wider trade agenda, good governance and corruption and food security.
- Provide technical assistance, data analysis, scientific information and research support to the Wildlife TRAPS Project on illegal wildlife trade in the Central, West and East Africa regions, including formulation of recommendations for TRAFFIC, WWF and IUCN,
- Prepare and submit fundraising concepts and proposals to help leverage the additional resources that will be required in order to ensure the successful delivery of all Phases of Wildlife TRAPS.
- Prepare policy-briefing papers in order to help address illegal wildlife trade issues relevant to trans-continental trade between Africa and Asia in line with the findings arising from delivery of the Wildlife-TRAPS initiative.
- Provide thoughtful input into the production of quarterly/annual reports and work plans and other documents.

Requirements:

- A university degree in a relevant discipline (e.g., biology, political science, social science, international relations, law or economics).
- At least 7 years' experience in wildlife conservation and sustainable development issues, preferably with an international Non-Governmental Organization (NGO) or Inter-Governmental Organization (IGO).
- Strong working knowledge of political and policy making processes within Central/West and East Africa
- National and or regional/international policy advocacy experience including high-level political negotiations preferably within a Central/West and East Africa context.
- Relevant and proven experience in project cycle management, i.e. coordinating larger projects, incl. overseeing consultants, managing project budgets, and reporting.
- Experience in implementing USAID-funded projects a strong advantage.
- Strong research and analytical skills, and an ability to articulate complex issues clearly
- Fluency in spoken and written French and English, with skills in Mandarin an advantage.
- A willingness and ability to travel widely and frequently and to work under pressure.
- Familiarity with standard word processing, spreadsheet, presentation and data base software, and with electronic communication technology.

Application: Apply online at https://hrms.iucn.org/iresy/index.cfm?event=vac.show&vacId=747. Closing date: 16 February 2014.

MIS/GIS Specialist - USAID/Tanzania M&E Services (Tanzanian citizenship required)
The QED Group, LLC is a full-service international development firm that provides practical solutions to social problems through sound analysis, proven management techniques, and creative implementation. The

QED Group is seeking an MIS/GIS Specialist for anticipated work on the three–year M&E Services for USAID/Tanzania. The goal of this project is to provide USAID/Tanzania substantive support with the collection of qualitative, quantitative, and analytical information to assist in assessing and evaluating the newly developed Country Development Cooperation Strategy's (CDCS) development hypothesis through performance monitoring and reporting, annual evaluations of project achievements, and assessments of geographic or sectoral impacts across the Mission's portfolio of projects in health, natural resource management, democracy & governance, and education.

Duties and responsibilities:

- Work with USAID/Tanzania to develop systems to ensure the quality of data and ensure its entry into the new M&E, mapping, and reporting systems.
- Coordinate with country office staff and evaluation teams to collect all field data (survey and GIS data, etc.) and ensure its entry into MIS;
- Provide technical assistance, including the design and integration of the spatial database.
- Identify existing databases and determine how best the information can be displayed using GIS.
- Liaise with implementing partners to collect their GIS data in a usable format.
- Meet with technical office staff as needed to define data needs and project requirements and perform spatial analysis using data from the project and data obtained from Iraq's demographic and socio-economic survey.
- Support communication, and monitoring/evaluation initiatives with GIS information.
- Integrate GIS, performance management, field monitors reporting and projects operational databases to generate tabular and cartographic output for analysis

Key Qualifications:

- Tanzanian citizenship required;
- Bachelor's degree in ICT, Management Information Systems (MIS), Geographic Information Systems (GIS), or related field;
- At least five (5) years of experience in international development with specialized knowledge in information management, database design, and IT systems;
- Several years of experience with GIS data entry, manipulation, and presentation, as well as a familiarity with web-based interfaces in addition to more traditional PC network based systems.
- Thorough knowledge of ArcGIS and database management;
- Demonstrated ability to create and/or manage a large, secure database with multiple parties providing information into that database using diverse means of data input;
- Demonstrated ability to compile and present the results of surveys in English to Mission, Embassy, and Government of Tanzania (GoT) personnel;
- Experience with USAID-funded programs and familiarity with USAID policies and regulations highly preferred;
- Knowledge of U.S. government information management protocols, as well as relevant USAID regulations and procedures, as well as experience on USAID-funded programs highly preferred;
- Good technical training and troubleshooting skills;
- Ability to work on a team or independently, prioritize tasks, and make recommendations at key decision points;
- Fluency in English and proven ability to communicate quickly, clearly and concisely, both orally and in writing, including technical documentation is required.

To apply to this position please follow the application instructions, submit your current resume and cover letter, complete and submit the attached 1420 biodata sheet, and complete and submit the attached Voluntary Self-ID Form. Accessibility Notice: If you need a reasonable accommodation for any part of the employment process due to a physical or mental disability, please send an email to Recruitment@QEDGroupLLC.com. Application closing date: 31 March 2014.

Other

UNEP Invites Nominations for 2014 Champions of the Earth Award

Climate Change Action in Focus as World Works towards New Climate Deal, Nairobi, 29 January 2014 – The United Nations Environment Programme (UNEP) is inviting nominations for the 2014 Champions of the Earth Award, which honours visionaries whose actions and leadership have had a positive impact on the environment.

UNEP's Champions of the Earth - lauded each year in the fields of Policy and Leadership, Science and Innovation, Entrepreneurial Vision, and Inspiration and Action - serve as an inspiration for transformative action as the world transitions to an inclusive Green Economy. Previous laureates have been recognized for their efforts in areas such as the management of natural resources, demonstrating new ways to tackle climate change and food waste, taking uncompromising business decisions based on sustainability models, and raising awareness of emerging environmental challenges. This year, UNEP is particularly interested in individuals who have made a substantive contribution to tackling climate change as the global community works towards the agreement of a new comprehensive climate deal, which will be adopted in 2015 and implemented from 2020. Women and youth nominees are also strongly encouraged.
Google Earth, Brazil's Minister of Environment Izabella Teixeira and Carlo Petrini, the founder of the Slow Food Movement, were among the award winners in 2013. Others winners in 2013 were European Commissioner for Environment Janez Potocnik; Veerabhadran Ramanathan, Professor at the Scripps Institution of Oceanography, UCSD; Jack Dangermond, founder of the Environmental Systems Research Institute (ESRI), and Martha Isabel Ruiz Corzo from the Sierra Gorda Biosphere Reserve in Mexico.
Champions of the Earth is now in its 10th year, and since its inception has seen steady growth in both profile and the number of nominees. It has recognized heads of state, companies, activists, musicians, and many others at award ceremonies in major cities such as Singapore, Paris, Seoul, New York City, and Rio de Janeiro. It was launched in 2005 is the UN's flagship environmental award. To date, it has recognized 59 individuals and organizations for their leadership, vision, inspiration, and action on the environment. The list of previous Champions laureates include Mongolian President Tsakhia Elbegdorj, Mexican President Felipe Calderon, Chinese actress and environmental advocate Zhou Xun, the Women's Environment & Development Organization (WEDO) and global music legend Angélique Kidjo. Visit http://www.unep.org/champions/ to register your nomination.
For more information, please contact: UNEP Newsdesk (Nairobi), on Tel. +254 725 939 620 or e-mail unepnewsdesk@unep.org.

Open data movement faces fresh hurdles

The open-data community made great strides in 2013 towards increasing the reliability of and access to information, but more effort is needed to increase its usability on the ground and the general capacity of those using it, experts say.
An international network of innovation hubs, the first extensive open data certification system, and a data for development partnership are three initiatives launched last year by the fledgling Open Data Institute (ODI), a UK-based not-for-profit firm that champions the use of open data to aid social, economic, and environmental development.
Before open data can be used effectively the biggest hurdles to be cleared are agreeing common formats for data sets and improving their trustworthiness and searchability, says the ODI's chief statistician, Ulrich Atz. "As it is so new, open data is often inconsistent in its format, making it difficult to reuse. There is a great need for standards and tools". Data that is standardized is of "incredible value" he says, because this makes it easier and faster to use and gives it a longer useable lifetime.
The ODI is attempting to achieve this with a first-of-its-kind certification system that gives publishers and users important details about online data sets, including publishers' names and contact information, the type of sharing license, the quality of information and how long it will be available. Certificates encourage businesses and governments to make use of open data by guaranteeing their quality and usability, and making them easier to find online, says Atz.
Although of the 13 nodes, Argentina and the United Arab Emirates host the only two that are based outside the developed world, Atz is confident this will change over the coming year due to the intense interest shown by developing countries such as Indonesia. The "huge potential" for open data in the developing world will further advance through the ODI's cooperation with both the World Bank and the Open Knowledge Foundation on the Open Data Partnership for Development, he adds. This three-year project, which is due to finish its first phase of assessing the current landscape aims to help policymakers and citizens in the developing world understand and reap the benefits of open data.
Tim Davies, the open-data research coordinator for the World Wide Web Foundation, also sees great possibilities for developing nations as the momentum continues to build. Because lower-income countries often lack well-established data collection systems, they have greater freedom to rethink how data are collected and how they flow between governments and civil society, he says.

But there is still a long way to go. Open-data projects currently rely on governments and other providers sharing their data on online platforms, whereas in a truly effective system, information would be published in an open format from the start, says Davies.
Furthermore, even where advances are being made at a strategic level, open-data initiatives are still having only a modest impact in the real world, he says. "Transferring [progress at a policy level] into availability of data on the ground and the capacity to use it is a lot tougher and slower," Davies says.

Giant rats race to eliminate landmines from Mozambique

Can these rats be tagged with GPS to help in spatial mapping of minefields? A small army of landmine-detecting rats is to be re-deployed in Mozambique in a push to meet a deadline to have the country declared free of mines this year. Belgian non-governmental organisation APOPO trains African giant pouched rats to sniff out the explosives in landmines by conditioning them to associate the scent with rewards of food. The rats, which weigh about as much as a small domestic cat, are light enough to move over terrain without setting off the mines. A team of mine removal experts follows them with metal detectors.
Last year, APOPO received international funding of US$4.5 million from various donors and cleared 250 hectares of mined land in Mozambique. This year it is redeploying 78 rats to continue the work. Eradicating all landmines from the country this year would mean Mozambique would fulfil its obligations under the Ottawa Treaty, an agreement the country signed in 1997 and which came into effect in March 1999. Signatories were required to clear all mines from their land within ten years, but Mozambique was given a five-year extension in 2009. In December, the country requested a further ten-month extension, which would allow it to complete the work by New Year's Eve 2014.
Tesfazghi Tewelde, manager of APOPO's mine clearance programme in Mozambique, says he now hopes the country will meet this latest deadline, since there is only an area the size of 1,400 football pitches left to clear. He says Mozambique is in a strong position to complete the demining operation, thanks largely to the country's National Institute for Demining, which coordinates the efforts of several mine-clearing organizations.
Mozambique experienced 16 years of civil war between 1977 and 1992. Although the fighting has stopped, the tens of thousands of landmines left behind continue to claim lives. "Although the number of accidents drops as we get closer to the end, where there are landmines, the threat is real as people are still being killed or maimed," Tewelde says. APOPO has discovered and safely destroyed nearly 2,500 landmines in the country as well as more than 14,000 pieces of unexploded ordnance, small arms and ammunition, and returned approximately 810 hectares to local communities. "The target is not the number of landmines, rather it is to clear the contaminated area and give back to the people," Tewelde says. "Whether [landmines] are few or many, the threat is the same."
The giant rats undergo nine months of training, learning to sniff out the explosives in old landmines buried underground. The rats scratch at the ground to alert their human handlers to mines. The rats are quick learners and "easy to work with," according to Alson Majanzota, a leader of one of APOPO's rat handling teams. He adds that they can check 200 square metres of land for mines in 30 minutes. A human with a metal detector could take up to three days to do the same job, he says.

Conferences, Events

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

Date	Location	Event
February 2014		
10-14 February 2014	Delhi, India	World Congress on Agroforestry 2014 (WCA2014)
24-25 February 2014	Accra, Ghana	Ghana Geospatial Forum
25-28 February 2014	Freising, Germany	Geoinformatics for Tropical Ecosystems - Tools for conservation and management"

March 2014		
17-21 March 2014	Tunis, Tunisia	3rd Geospatial Conference in Tunis (GCT): Building geospatial bridges for the sustained development of North Africa
19-20 March 2014	Dubai, UAE	ICRS 2014: International Conference on Remote Sensing
19-21 March 2014	Berlin, Germany	2014 Global Land Project Open Science Meeting - Land Transformations: Between Global Challenges and Local Realities
Barcelona, Spain	23-27 March 2014	6th International Conference on Advanced Geographic Information Systems, Applications, and Services (GEOProcessing 2014)
24-25 March 2014	Algiers, Algeria	1st International Conference on Information and Communication Technologies for Disaster Management (ICT-DM 2014)
April 2014		
1-4 April 2014	Rabat, Morocco	3rd International Conference on the Use of Space Technology for Water Management
7-10 April 2014	Paphos, Cyprus	2nd International Conference on Remote Sensing and Geoinformation of Environment (RSCy 2014). Abstract deadline: 24 January 2014.
18-21 April 2014	University Park, Pennsylvania USA	International ISCRAM (Information Systems for Crisis Response and Management) Conference 2014: Empowering Citizens and Communities through Information Systems for Crisis Response and Management
23-24 April 2014	Suez Canal University, Ismailia, Egypt	4th International Conference of Botany and Microbiological Sciences
May 2014		
3 May 2014	To be confirmed	Intergraph Southern Africa User Group Meeting 2014
5-9 May 2014	CICG, Geneva, Switzerland	Geospatial World Forum
6-8 May 2014	Cape Town, South Africa	Esri African User Conference
6-9 May 2014	Mauritius	IST-Africa 2014 Conference
21-23 May 2014	Krems, Austria	International Conference for E-Democracy and Open Government 2014 (CeDEM14)
21-23 May 2014	Thessaloniki, Greece	5th International Conference on Geographic Object-Based Image Analysis (GEOBIA 2014)
25-30 May 2014	Cancun, Mexico	46th GEF Council Meeting and GEF Assembly Contact: secretariat@thegef.org
27 May 2014	Hamburg, Germany	Call for Abstracts: International conference: Urban Regions under Change (URC 2014)
June 2014		
2-4 June 2014	Paris, France	Global Space Applications Conference (GLAC)
8-14June 2014	Jeju ICC, Korea	20th World Congress of Soil Science (WCSS)
15-21 June 2014	Riviera, Bulgaria	5th Jubilee International Conference on Cartography & GIS & Seminar with EU cooperation on Early Warning and Disaster/Crisis Management
16-20 June 2014 * NEW *	Aalborg, Denmark	**The 8th INSPIRE Conference**
30 June -3 July 2014	Guimaraes, Portugal	9th International Conference on Geographical Analysis, Urban Modeling, Spatial Statistics (GEOG-AND-MOD 14) Abstract Deadline: 10 February 2014
July 2014		

1-7 July 2014	Cape Town, South Africa	**AfricaGEO 2014 Conference & Exhibition**
12-15 July 2014	San Diego, California USA	**2014 Esri 3D Mapping Forum**
13-18 July 2014	Quebec, Canada	**IEEE International Geoscience and Remote Sensing Symposium (IGARSS) 2014 & 35th Canadian Symposium on Remote Sensing (CSRS)**
14-18 July 2014	San Diego, California USA	**Esri International User Conference**
14-19 July, 2014	Nairobi, Kenya	**7th Conference of the African Association of Women in Geosciences (AAWG): Earth Sciences and Climate Change: Challenges to Development in Africa**
August 2014		
6-8 August 2014	Nairobi, Kenya	**International Workshop on Open Data for Science and Sustainability in Developing Countries (ODDC)** Abstract deadline: 1 February 2014
19-21 August 2014	Lagos, Nigeria	**Africa Geospatial Forum** (formerly known as Map Africa conference)
September 2014		
1-3 September 2014	Gaborone, Botswana	**5th IASTED African Conference on Environment and Water Resource Management (AfricaEWRM 2014)** Abstract deadline: 1 April 2014
8-13 September 2014 * NEW *	Portland, Oregon	**FOSS4G 2014**
October 2014		
22-24 October 2014	Mombasa, Kenya	**Esri Eastern Africa User Conference**
27-31 October 2014	Cape Town, South Africa	**African Association of Remote Sensing of the Environment (AARSE) Conference 2014**
November 2014		
December		
2015	Durban, South Africa	**14th World Forestry Congress for South Africa**
19-20 May 2015	Paris, France	**International Conference on Geographic Information Systems (ICGIS 2015)** Abstract deadline: 31 December 2014
23-28 August 2015	Rio de Janeiro, Brazil	**27th International Cartographic Conference**
1-31 August 2016	Cape Town, South Africa	**35th International Geological Congress**

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