

### **GSDI Small Grants Program 2015-2016 Awards**

Since its launch in 2003, the GSDI Association's Small Grants Program has supported more than 100 projects around the world. Support for the program comes from a partnership between the GSDI Association, the U.S. Federal Geographic Data Committee, Canada's GeoConnections Program, and the GISCorps of URISA. Three types of awards are available: a cash award of up to US\$ 2500 per project; SDI/GIS consulting services up to the value of US\$ 2500; or a combination of cash award and SDI/GIS consulting services. The consulting services are offered through the GISCorps.

In 2015, GSDI secured additional funding from the GeoConnections Program within Natural Resources Canada for four more GSDI Small Grant projects which were selected from highly rated 2014 proposals, and come from Ecuador, Jamaica, Indonesia, and South Africa.

# **Title: GeoCommunity Galapagos: Creating a Community-Based SDI for the Galapagos Islands**

### Institution: GeoCentro - Universidad San Francisco de Quito (USFQ), Ecuador

*Project summary:* This project supports the development of a community-based SDI Galapagos (GeoCommunity Galapagos) that will allows local authorities and communities in the Galapagos Islands to take informed actions in meeting the challenges of sustaining a vulnerable and unique island ecosystem in the 21st century. Project deliverables include:

- A conceptual framework for the community-based SDI Galapagos including a GeoCommunication framework focusing on citizen participation in spatial planning
- A system architecture and design of the SDI Galapagos.
- Implementation of flagship projects that are simple and easy-to-use GIS-applications based on shared spatial data and information.
- Publications in scientific media/conferences and local media and an online tutorial for designing and implementation community-based SDIs.

### Title: Survey of SDI Readiness in Indonesian Local Government

### Institution: Research Centre for Spatial Data Infrastructure Development (PPIDS), Universitas Gadjah Mada, Yogyakarta, Indonesia

*Project summary:* This project will complete a comprehensive survey of SDI readiness at the local government level. The survey will obtain evidence-based information required to devise appropriate strategies for SDI development. The project deliverables include:

- Web-based self-assessment tools for SDI Readiness.
- Interactive maps of Indonesian Local Government's SDI Readiness. The map will also present an interactive analysis of SDI components and roles.
- A workshop for validation and analysis as well as launching the web-based tools and maps.



### Title: Upgrading in the National Metadata Portal

# Institution: National Spatial Data Management Division, Ministry of Water, Land, Environment, Climate Change, Jamaica

**Project summary:** This project supports upgrading the current metadata portal that is used by Land Information Council of Jamaica (LICJ) member organizations. The portal will enable discovery and use of geospatial resources including datasets, rasters, and Web services and will support a standards-based clearinghouse and metadata discovery applications. The GSDI Small Grant supports this deliverables:

- Creation and publication of user guide for the platform.
- Creation and publishing of metadata records on the upgraded platform.

### Title: Developing a Framework for South African SDI Education and Training

# Institution: Committee for Spatial Information (South Africa), Sub-Committee on Education and Training

*Project summary:* The project will initiate a discussion on GIS market sector demand in Southern Africa with academics, researchers, and industry representatives. In addition, a survey of GIS user needs will be conducted in order to better inform education and training curricula. These are the planned deliverables for the project:

- A workshop to prepare a framework for South African SDI education and training, at the University of Pretoria.
- A survey of tertiary education sector curricula (SDI contact) in South Africa.
- A database of currently available SDI education and training material that will be published on a central web page.

Summaries and final reports of these projects can be downloaded from the GSDI website at:

http://gsdiassociation.org/index.php/projects/small-grants/324-projects-selected-for-2015-gsdi-small-grants-support.html



## 2014 GSDI Association Small Grants Program Update

Since its launch in 2003, the GSDI Association's Small Grants Program has supported more than 100 projects across the globe. Through 2012, the program was sponsored via a partnership between the GSDI Association, the U.S. Federal Geographic Data Committee, and the GISCorps of URISA. Three types of awards are available: a cash award of up to US\$ 2500 per project; SDI/GIS consulting services up to the value of US\$ 2500; or a combination of cash award and SDI/GIS consulting services. The consulting services are offered through the GISCorps.

In 2014, GSDI secured funding for four Small Grants projects from GeoConnections, a national collaborative initiative led by GSDI Association member Natural Resources Canada. GeoConnections supports the integration and use of the Canadian Geospatial Data Infrastructure (CGDI), an on-line resource that improves the sharing, access and use of open geospatial information. The CGDI helps decision-makers from all levels of government, the private sector, non-government organizations and academia make better decisions on social, economic and environmental priorities. The infrastructure itself consists of data, standards, policies, technologies and partnerships that are in place to allow the sharing and visualization of information on the Internet. (See: http://www.geoconnections.nrcan.gc.ca.)

With the GeoConnections contribution, a Call for Proposals was issued in March 2014, resulting in 40 proposals, which were reviewed by volunteers from six continents from organizations in over 20 countries. The proposals selected for funding, from Ghana, Uganda, Belize and Armenia, are listed below:

# Title: Establishing standards-based web mapping and data access services using open source geospatial software technologies for CERSGIS

**Institution:** Centre for Remote Sensing and Geographic Information Services (CERSGIS), University of Ghana, Legon.

**Project summary:** The project is focused on the development of a clearinghouse for spatial data for CERSGIS and is a case study for the full-scale implementation of recommendations and activities for the National Spatial Development Framework for Ghana. Project activities include:

- Develop data policies and standards.
- Develop metadata for the datasets based on the defined standards.
- Implement web-based spatial data infrastructure portal for public access to the datasets.
- Workshop to present the SDI portal to stakeholders.

## Title: Towards GIS Interoperability for Environmental Protection and Sustainable Development

Institution: Makerere University, Kampala, Uganda.

**Project summary:** Develop a structured organization of geodata and geographic information based on internationally accepted OGC and ISO standards to guarantee interoperability in Uganda. Planned activities include:

- Evaluate the existing spatial datasets and value of geoinformation.
- Document spatial data according to the ISO 19115 standard.
- Develop a one-stop gateway to discover, access and evaluate spatial data.

# Title: Developing a reliable agriculture GIS database for Belize through partnership with key stakeholder

**Institution:** Land Information Center, Ministry of Natural Resources and Agriculture, Belmopan, Belize.

**Project summary:** Develop a reliable agriculture GIS database in collaboration with agriculture stakeholders in the country:

- Establish an Agriculture GIS data integration working group consisting of key stakeholders from governmental, private sector, and other relevant stakeholders.
- Identify the types of agriculture related data and data gaps that exist for large farms (and commercial farms) within the country.
- Establish standards for data integration exercises based on identified needs of stakeholders, best practices, and international standards.
- Develop and provide accessibility of the final database through the Belize NSDI geoportal to enable improved decision-making within this sector.

### Title: Introducing EnviroSDI for Armenia: Piloting publicly accessible online platform

**Institution:** Institute of Archaeology and Ethnography, National Academy of Sciences, Republic of Armenia.

**Project summary:** The proposed project will create an online SDI open-source based platform (Ushahidi may be one option), enabling the non-profit sector and the wider public to access a wide range of geographic data including base maps and sector specific thematic maps. The main components of the project are:

- Designing the the online SDI platform concept, with specifics of it use (users) in mind;
- Developing (customizing an existing open-source platform) and rolling out the SDI (online);
- Populating it with base maps; and
- Populating the platform with geographic (environmental, conservation) thematic data collected during the field fieldwork over a pilot area.

There were **many** additional, very worthy proposals received, but to support those, GSDI needs more funding! We hope that other GSDI Association members, or organizations who are not members but appreciate the value of the Small Grants Program, would consider supporting some of the unfunded proposals this year.

To see details, including final project reports, from all the proposals funded by GSDI Small Grants since 2003, please visit the GSDI website at gsdiassociation.org.

Anyone wishing to support GSDI's Small Grants Program is encouraged to contact Dr. David Coleman, GSDI President, (president@gsdi.org), Secretary-General Roger Longhorn (secgen@gsdi.org) or Small Grants project leader, Brigitta Urban-Mathieux (smallgrants@gsdi.org). The Small Grants Program has been one of the most successful initiatives of the Association since its founding. For information on how to donate, download the program flyer at this link:

http://gsdiassociation.org/images/projects/smallgrants/GSDI\_Small\_Grants\_Flyer\_2016.pdf

### For further information, contact:

**GSDI Association,** PO Box 213, Gilbertville, IA 50634, USA phone +1 508-720-0325, fax +1 703-852-7917 Business Contact: Roger Longhorn, secgen@gsdi.org President/Executive Director: Dr David Coleman, president@gsdi.org Small Grants Project Leader: Brigitta Urban-Mathieux: smallgrants@gsdi.org

"The Global Spatial Data Infrastructure Association - Advancing a Location Enabled World"



## GSDI Small Grants Program Awards 2010-2011 and 2011-2012

The Global Spatial Data Infrastructure (GSDI) Small Grants Program has been contributing to international geospatial efforts since 2003 by supporting member organisations in fostering partnerships, developing in-country technical capacity, improving data compatibility and access, and increasing political support for spatial data infrastructure (SDI) and earth observations application development. Priority in funding is given to projects in developing nations and countries with economies in transition.

The program results from a partnership between the GSDI Association, the U.S. Federal Geographic Data Committee and the <u>GISCorps</u> of <u>URISA</u> - The Association for GIS Professionals - a multidisciplinary association where professionals from all parts of the spatial data community come together to share concerns and ideas. Three types of awards are available: a cash award of up to US\$ 2500; SDI/GIS consulting services up to the value of US\$ 2500; or a combination of cash award and SDI/GIS consulting services are offered through the GISCorps.

The goals for typical projects awarded cash or services include:

- convening national or sub-national seminars or workshops related to SDI,
- producing SDI and Earth Observation System (EOS) training manuals and modules,
- establishing metadata and spatial data clearinghouse nodes,
- establishing web mapping services and applications,
- conducting geodata and/or SDI surveys or building inventories,
- producing and disseminating newsletters and awareness-raising materials about SDI, and
- drafting policy and legislation related to SDI.

The **GSDI Societal Impacts Committee** manages the program. For more information on current and past projects (from 2003 up to the present) please visit the GSDI Small Grants Program on the GSDI website at: http://gsdiassociation.org/index.php/projects/small-grants.html

### 2011-2012 SMALL GRANTS

Awards were announced in February 2012. Access the official announcements on the GSDI website at the link above.

#### **C**ASH AWARDS

Albania - Increasing the Understanding of SDI within the Albanian Geo-society by Promoting and Distributing SDI Cookbook 2009 in the Albanian Language

Contact: South-East European Research Association on Geo Sciences (Geo-SEE); Bashkim Idrizi.

**Colombia** - *Linked Data and Spatial Data Infrastructures* Contact: Research and Development for Geographic Information Centre (CIAF), Geographic Institute Agustín Codazzi; Elena Posada.

Ecuador - Training in the Field of Metadata for the Implementation at National Level of Ecuadorian Metadata Profile (EMP)

Contact: Sección Nacional del Ecuador del IPGH

(Ecuadorian National Section of IPGH), Consejo Nacional de Geoinformación Conage - Senplades (National Council of Geoinformation); Miguel Ruano, Alejandra Repetto, María Gabriela Erazo.

### El Salvador, Honduras, and Nicaragua - *Gulf of Fonseca Surveying and Nautical Charting Stand Up and Planning Meeting*

Contact: Pan American Institute of Geography and History Institutional; Paul Cooper.

Ethiopia - Establishment of Geoportal (Metadata and Clearinghouse Node) with Open Source Solutions for Environment Resources Management and Conservation Contact: Horn of Africa Regional Environment Centre and Network (HoAREC/N); Melakeneh Gelet.



#### Macedonia - Non-Governmental Organizations for Spatial Data Infrastructure - NGO4SDI

Contact: Association for Geospatial Information in South-East Europe (AGISEE ); Luka Jovičić.

## Rwanda - Use of GIS and SDI in promoting Coffee Quality in Maraba Sector South Province of Rwanda

Contact: Center for Geographic Information Systems and Remote Sensing Research, National University of Rwanda; Jean Pierre Hitimana.

## South Africa - Developing a Framework for South African SDI Education and Training

Contact: Centre for Geoinformation Science, Dept of Geography, Geoinformatics and Meteorology, University of Pretoria; Victoria Rautenbach.

Tajikistan - Introducing Cadastral Maps into National SDI of Tajikistan: Designing and Implementing a Pilot Project Contact: Design and Research Institute, FAZO (DRI FAZO); Foteh Kurbonov and Armen Asryan.

CASH AWARDS AND OFFER OF PROFESSIONAL SERVICES FROM GISCORPS

#### China - Multilingual (Four Languages) Place Name Data Base for Regional SDI

Contact: Xinjiang Institute of Ecology and Geography of Chinese Academy of Sciences; Alishir Kurban.

# Southern Africa - Knowledge Management System and Geographic Information System Project

Contact: The Endangered Wildlife Trust; Brenda Daly.

Uzbekistan - Stakeholder Analysis of Institutions in Uzbekistan Involved State Cadastres in Order to Increase Awareness on Implementation of Spatial Data Infrastructure

Contact: National Center of Geodesy and Cartography of Uzbekistan; Nodir Mirzaev.

### Zimbabwe - Strengthening the National Spatial Data Infrastructure (NSDI) Effort in Zimbabwe Through the Establishment of Requisite Institution and Technological Structures

Contact: The NSDI steering committee - Department of Geoinformatics and Surveying; T. P. Masarira.

### Zimbabwe - Zimbabwe Standards-based Web Mapping and Data Access Services Online Platform/Portal

Contact: Savetech Solutions, Dept of Sustainable Environment & Development; Tawanda Manyangadze.

AWARDED THE OFFER OF PROFESSIONAL SERVICES FROM GISCORPS

Russia - An Interregional Seminar "Creation of Infrastructure of Spatial Data for the Southern Urals (Russia)"

Contact: South Ural State University; Valentina Maksimova and Olga Dyachenko.

Sudan - Estimating Genocide: Using Satellite Data and Image Processing to Determine the Impact of Human Rights Violations

Contact: Columbia University in the City of New York; Grant Gordon.

Tanzania - Modeling Fragmentation in Vulnerable Ecosystems Using Remote Sensing in Morogoro Region Contact: University of KwaZulu-Natal; Mercy Ojoyi.

### 2010-2011 Award Winners

### **CASH AWARDS**

Ethiopia - Establishment of Geospatial Metadata and Clearinghouse Node Using Open Source Solutions

Contact: Information Network Security Agency (INSA); Temesgen Alemayehu.

#### Ethiopia - The 2nd General Congress of the GIS Society of Ethiopia Promoting the need for National Spatial Data Infrastructure of Ethiopia

Contact: Geographic Information Systems Society of Ethiopia (GISSE); Dr. Dagnachew Legesse.

### India - Ecologically Sensitive Areas (ESA) of Western Ghats of India-Capacity Building for stake holders for developing Spatial Data Infrastructure (SDI)

Contact: Open Source Geospatial - India (OSGeo-India); Santosh Gaikwad.

### Indonesia - Tailor-Made SDI Workshop & Training: Use of GeoPortal for Integrating Community Data and SDI Layers in Support of Collaborative Efforts in Urban Disaster Reduction in Yogyakarta, Indonesia

Contact: Gadjah Mada University; Dr. Trias Aditya. Jamaica - NSDI Awareness Campaign



Contact: Office of Prime Minister, Land Information Council of Jamaica, National Spatial Data Management Division; Ms. Cecille Blake.

#### Kyrgyz Republic - SDI Awareness Training – Central Asia (SDIaware.CA)

Contact: Kyrgyz GIS Association (KgGISA); Dr. Ainura B. Nazarkulova.

### Philippines - Workshop for the Harmonization of Spatial Data Infrastructure and Application to the Ancestral Domain Database Information System

Contact: Ancestral Domains Office, National Commission of Indigenous Peoples (NCIP); Director Myrna Caoagas.

## Southeast Europe - Workshop for Building Network Related to the South Eastern European Spatial Data Infrastructure

Contact: Hungarian CASCADOSS Association; Géza Péter Juhász. (see story to the right)

## Ukraine - The Development of the Thematic Component of Spatial Data Infrastructure in Ukraine

Contact: Institute of Geography of the National Academy of Sciences of Ukraine; Dr. Putrenko Victor.

### Zimbabwe - Zimbabwe National Spatial Data Infrastructure (ZNSDI): Making NSDI a Reality by Raising Awareness through National Workshops and Publication of an NSDI Newsletter

Contact: University of Zimbabwe; Mr. L. T. Buka and Mr. Neddie Mlambo.

### CASH AWARD AND THE OFFER OF PROFESSIONAL SERVICES FROM GISCORP

## Nigeria - Integration of Web Map Services with the current Nigeria NGDI Portal

Contact: National Space Research and Development Agency (NASDA); Dr. Ganiyu Ishola Agbaje.

### Nigeria - Sensitization Program for the GRDC Metadata Clearinghouse Node and the Extension of its Present Capabilities

Contact: Geographical Resources for Development Centre (GRDC); Anthonia Ijeoma Onyeahialam-Okoro.

### **URISA GISCORPS SUPPORT**

Two projects were offered support, in Cameroon and Indonesia, but were not initiated by the beneficiaries.

### Workshop for Building Network Related to the South Eastern European Spatial Data Infrastructure Project

University of Szeged, Hungary, 2-3 June 2011 The Hungarian CASCADOSS Association and University of Szeged, Department of Physical Geography and Geoinformatics



In the opening speech Gábor Mezősi (left photo) presented the importance of Open Source Software (OSS) in GIS, indicating that the problem is that the decision makers don't know about OSS, so the purpose of the meeting was to organise a network.

Géza Juhász followed with "Aims of the Hungarian CASCADOSS Association", introducing us the Cascadoss project, the Hungarian Cascadoss Association and the SEE project. He was followed by Ulrich Boes with "AGISEE, the Association for Geospatial Information in South-East Europe and its role in spatial data infrastructure building in the region" and Luka Jovičić on "The situation of the spatial data infrastructure and GIS market in Serbia", who provided an overview of past, current and planned activities in the Serbian NSDI domain. The final presenter of the first session was Ilona Csortán from Romania with "The situation of the spatial data infrastructure and GIS market in Romania".

The second session began with Maria Nikolova with "The situation of the spatial data infrastructure and GIS market in Bulgaria", followed by Kenan Okul on "The situation of the spatial data infrastructure and GIS market in Turkey". The session concluded with Dániel Kristóf with "The situation of the spatial data infrastructure and GIS market in Hungary".

Gábor Remetey-Fülöpp (right photo) led off the third session with "HUNAGI and GSDI", followed by Vlado Cetl with "The situation of the spatial data infrastructure and GIS market in Croatia". The Bashkrim Idrizi presented "The situation of the spatial data infrastructure and GIS market in Macedonia" and concluded with Arnaud Deleurme from Greece on "The situation of the spatial data infrastructure and GIS market in Greece".

The final session started with Béla Hegyesi on "Possibilities in the South East Europe programme", considering the eligibility of the partners in European Territorial Cooperation programmes in South-East Europe. He was followed by Gábor Barton looking at "INSPIRE readiness in the UK - Tools and solutions" and Titusz Bugya concluded the session with "Spatial data and OS GIS".

The second day focused on developing the proposal "Open Source Software for the South Eastern European Spatial Data Infrastructure", led by a presentation from Ádám Podolcsák, followed by a 2-hour debate on Objectives, Activities, Resources and Schedule; Project Organisation & Management; Partnership & Target Groups; and Proposal Development.



### Geospatial Metadata Clearinghouse Node (GMCN) Establishment Information Network Security Agency (INSA), Ethiopia

The Geospatial Metadata Clearinghouse Node project was launched on 4 August 2011 and successfully achieved its objectives, with eight stakeholders attending training, where they were briefed on concepts of metadata and benefits of creating, keeping and sharing metadata. Practical training was given and a discussion was held on how to work together and on what should be done to sustainably use the system.

Geonetwork was found to meet all criteria and is used for the current system. The Ethiopian Quality and Standards Authority adopted ISO TC 211, Geographic Information System standards. Based on ISO Metadata Standards, a draft metadata profile was developed to be used in the metadata cataloguing service. The service is hosted on the web at http://ethiogmen.insa.gov.et, running on INSA's web server from the networking department.

A detailed training manual that describes every function of the system on a step-by-step basis was prepared and distributed to trainees (also online). Training was organized into three parts: (1) lectures on the concepts of metadata, benefits of creating and sharing metadata, and metadata standards; (2) introduction to the web site; and (3) practical training. The training was successful, but further support will be needed in the future during wider implementation.

### Workshop for the Harmonization of Spatial Data Infrastructure and Application to the Ancestral Domain Database Information System

Ancestral Domains Office (ADO) and National Commission on Indigenous Peoples (NCIP), Philippines

On 7 June 2011, NCIP, through the ADO, conducted the workshop partfunded by the GSDI Small Grants Program. The aim was to discuss technical and institutional issues and concerns related to the harmonization of the NCIP SDI with the National Spatial Data Infrastructure (NSDI), convening key technical officers for an inter-agency technical workshop on SDI and related components. Objectives were:

- 1. Identify common standards and interoperable systems to collect, archive and distribute geospatial data and information for adoption.
- Identify key technical officers who will form part of a Technical Working Group that would assess and advise NCIP in the harmonization of its SDI and related components with the National SDI.
- 3. Develop training modules for the orientation of NCIP personnel involved in generating spatial data.
- 4. Identify gaps that can be addressed in future projects with SDI.

The NCIP, through ADO, reached its goals in finding a venue and mechanism for assessing the current capacity and capability of its existing database information system compared with the Philippine National SDI. Through this exercise, NCIP identified the technical and institutional issues for enhancement of its system and can now examine ways forward.







