

USAID Knowledge Management Inventory

1. Describe your knowledge sharing activity - what did you do? – how did you do it?

Overview: The *Geographic Information for Sustainable Development* initiative (**GISD**), a **-U.S.** led “public-private” international alliance, aims to apply a new generation of earth observation data, state-of-the-art geographic information systems-linked technologies, and field-tested geographic knowledge, to address sustainable development problems such as disaster mitigation, natural resource management, trade competitiveness, and poverty reduction. USAID and the State Department are the lead U.S. agencies for the GISD partnership. The partnership initially focused on four target regions in Africa for testing specific applications and for delivering new data products, specifically the exciting new SRTM (Shuttle Radar Topographic Mission) datasets. The four “target” regions were: the Upper Niger River Basin, East African Great Lakes, Kenya-Tanzania Coast, and Limpopo/Zambezi River Basin. GISD has now expanded to include other regions, countries, and partners in and outside of Africa from local to regional and global scales. (See: <http://www.opengis.org/gisd>)

Major Events and Activities: During 2002 GISD sponsored several regional workshops and meetings that helped “build the network”: meetings with partners occurred in Bamako, Mali (March 13-14); Asmara, Eritrea (April 3-6); Nairobi, Kenya, (April 9-10); London, United Kingdom (June 10-13); USGS-EROS Data Center (EDC) with Consultative Group on International Agricultural Research (CGIAR) Centers, Sioux Falls, South Dakota (May 19-31) (<http://edcintl.cr.usgs.gov/gassia.html>); San Diego, California (July 8-12) with the ESRI User’s Conference, and it carried out a major side event and exhibition at the World Summit on Sustainable Development (WSSD) itself, August 14 – **September** 7, 2002.

GISD also sponsored an Africa-wide scientific panel (a “knowledge-management” effort to identify opportunities, obstacles and to make recommendations) by the U.S. National Research Council (NRC). The NRC released a major study entitled: ***Down to earth: Geographic Information for Sustainable Development in Africa***. It’s goal is to lay a foundation for Agenda 21 on opportunities for and obstacles to the use of geographic information tools and technologies to promote sustainable development (<http://www.nap.edu/books/0309084784/html>).

2. Describe your motivation / rationale / value proposition / business case for the initiative – why did you do it? – for whom?

Partners and Rationale: Much of the effort was focused on the recent WSSD (World Summit for Sustainable Development) and the opportunity that event provided for forming partnerships that could increase the access to and more effective use of geospatial tools and resources for monitoring, assessing, and mitigating global environmental problems—particularly in Africa. It was also recognized that only an “alliance” approach that brought in the private sector could truly make these tools cost-effective and sustainable over the next ten years. So from the beginning, GISD focused heavily on linking private sector capacity and technologies to users on the ground who need those solutions.

Some of the most active partners within the GISD alliance today include: the United States (USAID and the State Department), the Government of Italy’s General Directorate of Development Cooperation (GDDC), France (IGN), United Nations Institute for Training and Research (UNITAR), Observatoire du Sahara et du Sahel (OSS), Environmental Systems Research Institute (ESRI), World Resources Institute (WRI), the United Nations Environmental Program (UNEP), Food and Agriculture Organization (FAO), the Open GIS Consortium (OGC), European Space Agency (ESA), and US space technology and application agencies such as NASA, NOAA, USGS, USDA. Most important it includes as key partners, selected African countries and institutions such as Senegal’s CSE (Centre de Suivi Ecologique), Tanzania’s National Environmental Management Council (NEMC), South Africa’s Agricultural Research Council (ARC), Benin’s Ministry of Environment (SISE Network) and other members of AMCEN (African Ministerial Conference on the Environment), and NEPAD (New Partnership for African Development)—see <http://www.opengis.org/gisd> for the complete list of partners.

3. Describe the results of the effort – who and/or what was impacted and how? – what are the benefits?

Accomplishments: GISD efforts to date have focused on enhancing the work of existing programs and compiling “lessons-learned” that can be shared with partners and clients (primarily those within USAID) but also with many of its partners outside of USAID—if not the whole world. For instance, GISD has helped apply the use of GIS to the medical research community in the Horn of Africa as well as to the coastal zone management policy planning community in Tanzania. In addition, via its private sector partners within the OGC (OpenGIS Consortium), it has begun to establish an Africa-wide network of “web-mapping” portals that will increase access to needed geographic “core datasets”—and they will do this following common standards that are “interoperable” and open-access.

Among some of its accomplishments, in 2002 GISD funded 12 specific case studies and projects in the four target regions noted above. It also co-funded some activities with others—for example, a major regional meeting in Asmara, Eritrea was done jointly with FAO’s Africover Project. By working together with other donors,

multilateral agencies and the private sector we have "learned from each other" and have increased the potential for future cooperative action that avoids duplication and increases harmonization of data products, tools, and analysis. Many partner activities--both successes and failures--are described in a CD released at the Summit along with a 25-page booklet entitled "Selected Cases". See the document online at:
http://www.opengis.org/gisd/docs/GISD_booklet_02_bf.

GISD has leveraged many resources and technologies during the first phase of GISD (the 2001-2002 period). By "leveraging" we mean, that minimal resources appropriated from government sources are being matched (doubled or tripled in value in most cases) through in-kind, direct or indirect contributions by others, particularly from the private sector--this includes direct hardware, software donations, technical assistance and training, and even some direct cash contributions. In 2002, USAID and the State Department contributed more than \$2 million directly to GISD. In turn, these USG funds "leveraged" between about \$6-10 million of resources not counting the value of other investments by large agencies such as NASA worth billions of dollars. Contributors of products, services, technical support, and direct cash included: the Environmental Systems Research Institute, the OpenGIS Consortium, and many of its private sector members, as well as U.S. Government agencies (i.e., NASA, NIMA, USGS, NOAA, U.S. Forest Service).

4. Describe any future implications or issues related to the initiative, e.g., what plans are in place? What current constraints or challenges are you facing? How is the initiative being sustained / maintained? How can it be replicated or scaled up?

Post-WSSD Plans: Since the Summit GISD partners have begun to lay plans for establishment of an **African Forum on Geographic Information for Sustainable Development** which will serve as the primary coordinating mechanism for implementing the Type II partnership **goals and vision** (see draft **concept document** http://www.opengis.org/gisd/docs/AGIS_Summary_09-01-02.doc). The Forum's goal is to facilitate collaboration, integration, and harmonization between donors, users, technologies, applications, and technology implementers involved in Spatial Data Infrastructure (SDI) work in Africa. See **Annex A. Guiding Principles (DRAFT)** included in the FORUM Document above.

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GISD website = <http://www.opengis.org/gisd/>