

## Virtual Research Org for South America

### USGS International Remote Sensing Research: Provides Basis for Developing Countries Internet/Web Based GIS and Remote Sensing Community Updates

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**Abstract** - The U.S. Geological Survey, (USGS) serves the globe by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect quality of life. Through GMI the USGS funded a comprehensive research study of the African International GIS and Remote Sensing market as follow-on to the NOAA, Satellite and Information Service Division, International GIS and Remote Sensing Study of U.S., Canada, Europe, and Asia in 2005, 2006 and 2007. These studies provided the basis for the development of a virtual research organization providing community-based inputs concerning GIS and Remote Sensing in developing countries.

To promote community-based value-add-ons to the content of the research and in order for the research to remain up-to-date GMI created a web-enabled interactive Google Earth map allowing participants to “click and view” the study highlights by country in South America, or to complete a survey directly from the map site and/or provide updated information on their country. Over 450 participants from the user population have responded through these on-line maps with 25 in-country partners, research institutions and collaborators providing input as well.

The South America GIS and Remote Sensing Research Google Earth Interactive Map can be found at: [www.globalinsights.com/southamericamap/home.html](http://www.globalinsights.com/southamericamap/home.html)

#### Introduction

Through Global Marketing Insights, Inc. the United States Geological Survey funded a remote sensing market study of Africa in order to be able to monitor its needs and ultimately to achieve sustenance throughout the continent. This study was the basis for GMI's similar remote sensing study of South America.

Africa is a huge continent struggling with diverse political, cultural and technological barriers that have prevented a large percentage of the population from reaching an acceptable minimum standard of living. The recent study completed by Global Marketing Insights, Inc. shows an unmet demand for geographic information that could be used to improve the lives of millions of people, by advancing agriculture, urban development, and transportation and communication networks.

Conducted by the United States Geological Survey (USGS), the study included 377 online surveys and 20 personal interviews. The surveys and interviews provided a sample from three remote sensing sectors: Academic, Commercial End User, and Government. Although the survey was primarily answered by remote sensing professionals in Africa, some of the respondents were currently residing in other countries, such as the US and India, but had some connection to African remote sensing.

The survey included a number of questions that, when analyzed together, provide a well-rounded picture of what types of data are preferred, how remote sensing data is being used, and in what areas data is lacking.

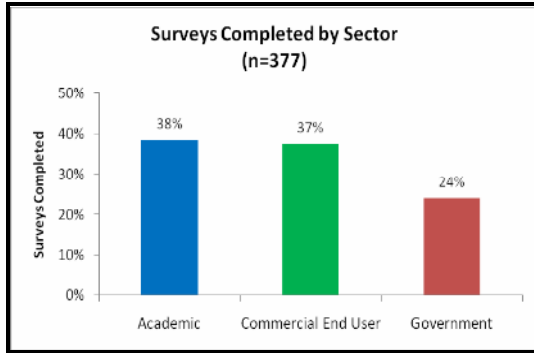


Chart 1: Of the 377 survey responses, 38% came from the Academic sector, 37% from Commercial End Users and 24% from Government agencies.

Responses were received from over 30 countries in Africa, with the largest number coming from Nigeria with 46, South Africa with 37, and Kenya with 28. An additional 42 respondents identified themselves as being from Africa without specifying a country.

In September 2005, Global Marketing Insights released a report titled *Survey and Analysis of Remote Sensing Market—Aerial and Spaceborne* based on 1,547 survey responses and 250 personal interviews from the US, Canada, Europe, Australia, South America and Central America. In February 2007, GMI released another report that concentrated on the Asian Remote Sensing market based on 408 completed surveys and 50 personal interviews.

In addition to general information about the use of remote sensing technology in Africa today, this study also included a 5- and 10-year analysis of the technical advances and the political, economic and environmental trends that will impact the remote sensing industry in the future.

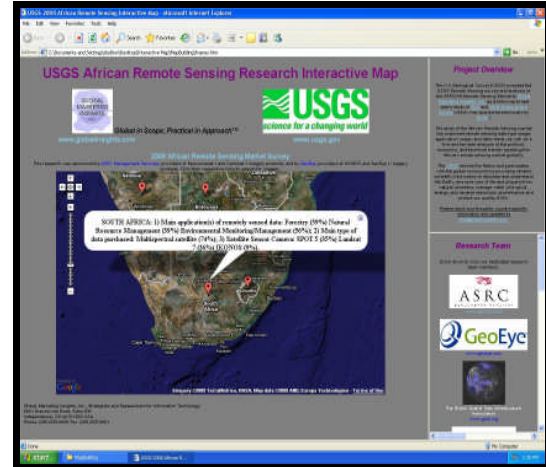
The USGS funded this study because it recognizes the importance of continuously monitoring the needs and potential growth of the remote sensing and geospatial data industry in Africa. Their goal is to better understand the current status of Africa so they can more effectively assist with efforts to achieve sustainable development throughout the continent.

### Interactive Map

Global Marketing Insights, Inc. provides a web-enabled interactive map feature that posts summary statistics by country. This map is hosted on the Global Marketing Insights, Inc. website, which can be found at [www.globalinsights.com](http://www.globalinsights.com). This feature allows a viewer to “click and view” the study highlights by country. If a viewer would like to complete a survey for a country which has not been represented they will be able to complete a survey from the map site.

Project sponsors and Alliance Research Partners are listed in columns to the right of the main page and have links to their websites. The 2008 USGS Africa Remote Sensing Study Interactive Map can be found via

<http://www.globalinsights.com/USGSIMap/results.htm>.



USGS 2008-2018 African Remote Sensing Study Interactive Map

### South America Remote Sensing Study

Global Marketing Insights, Inc. will complete the 2011 South America Remote Sensing research and analysis of the Remote Sensing Market as a follow on to the 2005 and 2006 study of Asia, Australia, North America and Europe that were previously sponsored by U.S. National Oceanic and Atmospheric Administration (NOAA) and the 2008 USGS Africa Remote Sensing Study.

The same as the previous studies the South American study will include a five and ten year analysis of the Political, Economic, Environmental and Technical trends impacting the South America Remote Sensing industry. Academic, Commercial and Government Users will be analysed. A key segment of this research will be completed by collecting information from respondents on-line. The surveys not only collect key trend information impacting the remote sensing industry, but collect applications usage, and user data needs concerning Aerial Film, Aerial Digital, Aerial Sensors, and Satellite data as well.

The South America Remote Sensing Research surveys are available to be accessed via the interactive Google map created by GMI. A respondent simply clicks on their respective

South American country, selects which sector they belong to based on Academic, Government, or Commercial, and begins the brief survey. These surveys are targeted to the commercial end users and producers of these technologies; value added providers and processors of remotely sensed data, as well as academic and government users of remote sensing technologies. The final research project will be publicly available in early 2011.

Global Marketing Insights, Inc. analysts utilize the company database of geospatial contacts in South America as well as work with their existing network of geospatial firms and associations globally to obtain survey participants and research partners. There are over 40 Research Partners who either operated or have business interests in the Remote Sensing Profession in South America who express interest in the study.

### Interactive Map

Global Marketing Insights, Inc., a subcontractor for the USDA, created an Interactive Google Map on the GEOINT Online website, which can be found at [www.geoint-online.net](http://www.geoint-online.net), that will allow a viewer to “click and view” the study highlights by country within South America. The viewer will also be able to complete a survey directly from the map site simply by clicking on the red map pin for that country and then completing the brief survey. Additionally, if a viewer would like to leave commentary about that country they may do so by clicking in the posted website in each country, type in their comments and send them online directly to Global Marketing Insights, Inc.

Sponsors of this project and Alliance Research Partners are listed in columns to the right of the main page and links to their websites can be found there. The 2010 South American Remote Sensing Research Google Earth Interactive Map can be found at [www.globalinsights.com/southamericamap/home.html](http://www.globalinsights.com/southamericamap/home.html)



### References

Global Marketing Insights, Inc. acknowledges the following individuals, companies and agencies for their contributions to this project: Barb Ryan, Director Space Programs, WMO (Formerly with USGS); Tom Cecere, Requirements Coordinator (Land Remote Sensing), USGS FAS (Office of Capacity Building and Development); Brad Doorn, Director Earth Application Sciences, NASA, Robert Tetrault, International Agriculture Development Specialist, USDA; Kay Weston and Katie Vincent, NOAA (Satellite Activities Branch); ESRI and the entire Alliance Partner Network and Team Members that supported and promoted the research collection.

### Authors and Contributors

**Dr. Shawana P. Johnson, President Global Marketing Insights, Inc.** (GMI) since 1997. With over 20 years of experience in working directly in the remote sensing profession, with the USDA, and with agricultural and defense applications she leads GMI in being an industry leader in providing Global Geospatial Business Intelligence™ to both the public and private sectors.

**Sherry Loy, Senior Program Manager Global Marketing Insights, Inc.** Over 14 years of experience in project administration and customer services operations. She completed studies in customer database management, communication methodology, market research principles and has completed a two-year intensive program at Crosby Quality College by Philip Crosby and Associates focused on quality

development and measurement for internal operations and external customer requirements. At Global Marketing Insights, Inc. she is focused on the development of proposals, project coordination and follow-up, while managing cost savings and revenue enhancement programs.

**Angela Toth, College Intern, (GMI)**. Angela is the most recent addition to the GMI marketing research and analysis team. Angela is involved in collecting market research focused on geospatial forensics, aerial imagery (LiDAR), and global remote sensing offshore services. Angela is a sophomore at Butler University, Indianapolis, IN where she is a Pre-Law, Criminology/Forensics and French major, and Business Law minor.

**Global Marketing Insights, Inc. (GMI)** provides Geospatial Business Intelligence Experts™ for federal government and private sector clients. Since 1997, this woman-owned company has assisted government and private sector clients by providing access to globally available commercial remote sensing imagery and geospatial market research to meet their operational needs. Global Marketing Insights, Inc. was the project visionary and USDA coordinator for the RMSC pilot.

#### **For More Information**

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