GEOSPATIAL INFORMATION TECHNOLOGIES and USAID

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USAID

- Foreign assistance arm of USG
- Assists > 100 countries in 5 regions
- Sectors:
  - Agriculture & trade
  - Conflict mitigation
  - Democracy & governance
  - Disaster assistance
  - Economic growth & urban development
  - Education
  - Environment
  - Health
  - Reconstruction & stabilization
How GIS is Used at USAID

- Geo-Management Information Systems (MIS)

- Program Applications (by Sector)
  - Ag Research: CGIAR + CRSPs
  - Disasters: FEWS-NET, SERVIR, crisis mapping
  - Ed: Schools mapping
  - Env: SERVIR, CARPE, Land tenure/property rights work
  - Health: HIV Mapper, Health GIS Toolkit, SALB
  - R&S: AIMS, Urban development mapping, Iraq infrastructure
  - Trade: Transit Efficiency Mapping

- Building Capacity
  - GEOSS
  - Trainings / Conferences
  - Partnerships (USG, NGO’s, Foundations, Industry, Universities, UN)
Geo-MIS: Mapping USAID Projects by Partner
In Tulkarm, Jenin, Nablus and Tubas education (dark green sector) is 40-60% of total; in Ramallah it is 2% and Salfit 70%.
What is CGIAR-CSI?

The fifteen CGIAR international Research Centers have pioneered the application of Geographic Information Systems (GIS) and Remote Sensing (RS) for sustainable agricultural development for more than a decade. In May 1999 they formed the Consortium for Spatial Information (CGIAR-CSI) which is based on all the CGIAR's Geospatial laboratories, and the many geospatial experts and researchers within the CGIAR system, with scientists and institutions from around the world. Together, these biotechnical scientists and researchers constitute a formidable assemblage of technical ingenuity, scientific expertise, and practical experience in spatial analysis.

They have already developed powerful collection of data on population, poverty, climate, soils, plants, livestock, transboundary and biodiversity and other geospatial Global Public Goods. The CGIAR-CSI researchers are continuing to break new ground in the integration of biophysical and socio-economic data to better target agricultural technologies and resources to farmers' needs, to assess governments' development strategies to alleviate poverty, and to better adapt to a changing global environment.

These powerful spatial technologies have become an integral part of interdisciplinary research within the CGIAR. Through linking geospatial and earth information databases, a whole new range of opportunities for integrating and presenting diverse information has opened up to a diverse set of users to harness these technologies. Users can more readily see and understand interrelationships between, for example, urban and rural areas, markets, ecosystems, development, and other issues.

They can develop more realistic models on density and monitor change more accurately. Ultimately, the increased understanding of the landscape irregularities and uncertainties in land use management, agricultural development, land change analysis, biodiversity conservation, and socio-ecological studies.

The CSI facilitates and structures mechanisms for standardizing data sets within the CGIAR, sharing methodologies and solutions, and providing information collaboration. The Consortium also serves as a platform for joint efforts in CGIAR-based agricultural research at global, regional, and national levels.

Structure and Priorities of the CSI:
GIS for Famine Early Warning: FEWS NET

Latest Headlines: Above-average prices threaten food security in West Africa

Weather & Crop Monitoring

Price Watch

- Most Recent: 01/30/2009
- Previous: 01/05/2009
- More Markets and Trade products

Exec Overview Brief

- Most Recent: 12/31/2008
- Previous: 11/25/2008

Most Recent Alerts

- West Africa 02/17/2009
- Above-average prices threaten food security
- Somalia 02/04/2009
GIS for Forest Monitoring: CARPE

GIS for Forest Monitoring: CARPE

CARPE Data Explorer

0-500-1000-1500-2000 Kilometers
West Africa Land Cover Analysis

Overview

The countries of West Africa are experiencing change at many levels – climatic, agricultural, demographic, political, and socioeconomic. They are endowed with a diverse, yet fragile environment. For centuries, overall human impact on this region was negligible due to low population, but this changed dramatically in the 20th century, particularly in the last 50 years. In the 21st century, environmental changes are predicted to accelerate, with unknown and potentially serious implications for both the people and environment of West Africa. The West Africa Land Use and Land Cover Trends Project represents an effort to document and quantify the impacts, detailed in both time and space, of the environmental and land resource trends that are sweeping across West Africa. The project is being carried out through the AGHYMET Regional Center in Niamey, Niger, with partners from 12 participating countries (Figure 1), the Earth Institute (UNIS), the U.S. Geological Survey (USGS) Earth Resources Observation and Science (EROS), and with major support from the U.S. Agency for International Development (USAID) West Africa Regional Program. USGS ERSC provided AGHYMET and participating countries satellite image coverage from the Corona and Landsat satellite systems of most of West Africa at four periods in time: the 1960s, 1970s, 1980s, and 2000s. The project trained environmental scientists from 12 West African countries in the analysis of this rich image archive, enabling them to map and quantify land use and land cover (LULC) changes that have occurred across the region. The results provide a much better understanding of the LULC patterns and trends in each participating country.
GIS for HIV/AIDS: HIV Mapper

Tanzania: HIV Prevalence Among Population Ages 15-49

**Description:** In Tanzania, 7.7% of women and 6.3% of men are infected with HIV. The highest HIV prevalence, from 10% to 16%, occur in Mbeya, Iringa, and Dar es Salaam. The lowest is in Manyara and Kigoma, where HIV prevalence is around 2%. In general, the prevalence of HIV among women is higher than among men, except in Dodoma where prevalence is slightly higher among men.

Tanzania: Accepting Attitudes Towards People Living with HIV/AIDS

**Description:** The level of acceptance towards people living with HIV/AIDS is low. Less than 50% of Tanzanians have accepting attitudes towards people living with HIV/AIDS. Acceptance is lowest in Kigoma, Shinyanga and Tabora. Acceptance is consistently lower among women than among men. The highest percentages of women who express accepting attitudes are found in Dar es Salaam and Mtwara.
Health GIS Toolkit

The USAID/Yemen Health GIS Toolkit

The USAID/Yemen Health GIS Toolkit is an ESRI ArcGIS extension that allows you to analyze health information and influence factors and visualize results using map outputs. Version 1.0 of the Health GIS Toolkit contains eight applications designed to support evidence-based approaches for facilitating informed health planning, programming, and policy decisions. The tools are comprised of the enabled visual Basic for applications code running directly within the Esri ArcView GIS 3.x environment.

Published: Apr 10 2003

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Categorization

RESOURCE TYPE

Tool

Health Systems 20/20 is funded by the U.S. Agency for International Development (USAID) under cooperative agreement AID-06-SC-00011-00. The information provided in this website is unofficial U.S. Government information and does not necessarily represent the views or policies of the U.S. Agency for International Development or USAID.
Afghanistan Information Management System

AIMS
Afghanistan Information Management Services

Maps

Most AIMS maps are based on sources such as the United States Defense Mapping Agency 1:500,000, Soviet 1:1,000,000, recent satellite imagery of varying resolutions or current survey data provided by different organizations. Additional layers may be created by using GPS data, surveys and assessments, client specific data or remotely sensed information. All maps are checked in-house for errors, and printed and distributed through our customer service section.

Sub Sections

- Standard Maps
- Regional Maps

GeoBase
GeoBase is a mission critical system, which is developed and maintained by AIMS. The objective of the GeoBase is to establish an activity trading database or management information system.

GIS Users Community
GIS Users Community (QUC) in Afghanistan consists of a group of people who focus more on QIS related matters. The QUC is formed to promote data discussions, sharing.

Done
Welcome to USAID's Geospatial Information Technology Web Site

This site provides information on how the Agency is using geospatial information for sustainable development. It provides basic background on what geospatial information is, why it matters for the work we do, and who in USAID is using it.

We look forward to receiving your input to ensure that this site addresses your needs and becomes USAID’s one-stop shop for geospatial information. Contact us at geospatial@usaid.gov.
Geospatial Priorities for USAID

- Coordination internally / externally
- Improving data collection & data sharing
- Promoting standards
- Increasing GIS literacy / awareness
- Increasing affordability / access to tools