



GLOBAL CLIMATE CHANGE

MAY 2008



The climate change activities of USAID/West Africa seek to promote sustainable agricultural practices and minimize harmful environmental impacts as the 21 participating countries increase their economic growth and agricultural production. Climate change activities also include environmental monitoring of land use and land cover in the Sahelian countries.

BACKGROUND

USAID/West Africa Mission (USAID/WA) addresses development obstacles that can be most effectively met through actions taken at a regional level. The Mission's strategic objectives include economic integration, health (with a focus on HIV/AIDS prevention), food security/agriculture, and conflict prevention. The Mission is managed out of Accra, Ghana, with a satellite office in Dakar, Senegal, which manages Office of Foreign Disaster Assistance and Food for Peace activities. Countries include Benin, Burkina Faso, Cameroon, Cape Verde, Cote d'Ivoire, Equatorial Guinea, Gabon, the Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Chad, Togo, and Sao Tome and Principe.

SECTOR-SPECIFIC CLIMATE CHANGE ACTIVITIES

The Mission's climate change activities include environmental monitoring of land use and land cover (LU/LC), as well as energy activities.

REGIONAL ENVIRONMENTAL MONITORING

The West Africa Land Use and Land Cover Trends project is an effort to help quantify the impacts of both human and climate driven changes of the last 35 years across the Sahel region. Creating greater public awareness of the environmental issues and land resource changes taking place presently and into the future will help to change behaviors that might have potentially damaged the limited resources currently available.

The project is monitoring major trends in natural resources and makes long-term projections to support regional and national environmental analysis and policymaking. The effort also provides technical assistance for image processing, using satellite imagery for land productivity monitoring, and staging geographic data on the Internet. The complete collection of historical and current satellite imagery also permits West African scientists to document the profound transformations of the region's natural resource base, including improved understanding of desertification, and linkages between land use/land cover trends and biogeochemical cycling, with special emphasis on carbon systems dynamics in soils and vegetation. The project's outputs will be provided to political leaders, environmental decision makers and the broader scientific community, for making informed decisions.

PARTNERS

Partners in USAID/West Africa's climate change and environmental monitoring program include:

- Energy ministries of member states
- Environment ministries of member states
- EROS Data Center, US Geological Survey (USGS)
- National Aeronautics and Space Administration (NASA)
- Permanent Interstate Committee for the Control of Drought in the Sahel (CILSS)

Because partners change as new activities arise, this list of partners is not comprehensive.

For more information, visit:
<http://www.usaid.gov/missions/west-africa/>.

The following major activities were completed over the last four years:

- Assisted 12 countries compile maps and complete national level analyses of land-use and vegetative cover changes during the past 35 years;
- Developed a LU/LC monitoring analysis prepared by the U.S. Geological Survey (USGS) EROS Data Center, working with the Agrhymet Regional Centre and Institute of the Sahel of the Permanent Interstate Committee for the Control of Drought in the Sahel (CILSS). The analysis was then validated in two workshops where the data results were presented by national teams, including Benin, Cote d'Ivoire, Ghana, Guinea, Liberia, Nigeria, Sierra Leone, and Togo;
- Compiled a comprehensive archive of Landsat and Corona satellite image data covering all the CILSS and Economic Community of West African States (ECOWAS) regions, comprising most of the countries. The data was transferred to nearly all national governments;
- Trained 140 managers and scientists from Burkina Faso, Ghana, Mali and Benin in four workshops, on mapping and monitoring techniques, enabling them to identify trends, and elaborate viable statistics of LU/LC changes in their respective countries;
- Produced a regional environmental awareness poster to showcase environmental changes (Benin);
- Identified 14 sites in Niger to carry out biophysical and socioeconomic surveys; and
- Processed an entire (12-year) archive of AVHR1 Km resolution vegetation index image data with collaboration between AGRHYMET, NASA and EROS Data Center.

SUSTAINABLE COCOA PRODUCTION

USAID/WA supported the adoption of sustainable agriculture and new natural resource management (NRM) practices through a public private partnership that promoted sustainable cocoa production in Cote d'Ivoire. During 2007, the project helped producers plant over 22,000 indigenous shade trees while improving NRM on 13,618 hectares. Over 1,200 farmers were trained in sustainable cocoa production using a Farming Field Schools approach. The farmers were trained on methods of sustainable cocoa production according to the internationally accepted standards of the Rainforest Alliance (RA). A total of 350 of these farmers had their cocoa production certified by the RA. Similar efforts are already being applied in Ghana, and will be extended to cocoa growing regions in Liberia, Sierra Leone and Nigeria. Such hands-on projects have contributed to the sustainable protection of natural resources at both the farm and regional level, thus promoting future carbon sequestration while increasing farmer incomes from the sale of certified sustainable cocoa.