

AfriGEOSS

An Initiative to Reinforce GEOSS in Africa

1 STRATEGIC CONTEXT

The AfriGEOSS initiative seeks to identify challenges and put in place measures to enhance Africa's participation in, and contribution to, GEOSS. This participation will support the continent's efforts to bridge the digital divide and build a knowledge-based economy using GEO networks and GEOSS infrastructure. The Group on Earth Observations (GEO) currently includes 21 Member states and three Participating Organisations from Africa. As the number of African Members has reached a critical threshold in recent years, it would be useful to assess the progress they have made thus far in implementing and using the Global Earth Observation System of Systems (GEOSS) as well as in other Earth Observation and environmental management initiatives. AfriGEOSS will be dedicated to linking current GEO activities with existing capacities and initiatives in Africa in order to enhance capacity for producing, managing and using Earth observations.

The GEOSS in Africa (AfriGEOSS) initiative will:

- coordinate and bring together relevant stakeholders, institutions and agencies across Africa that are involved in GEO and other Earth observation activities;
- provide a platform for countries to participate in GEO and to contribute to GEOSS;
- assist in knowledge sharing and global collaborations;
- identify challenges, gaps and opportunities for African contributions to GEO and GEOSS;
- leverage existing capacities and planned assets and resources; and
- develop an appropriate strategy and participatory model for achieving the above goals.

2 INITIAL ACTIONS

AfriGEOSS will establish the following initial actions:

2.1 Engage with appropriate regional agencies and training centres.

Collaboration on establishing or strengthening regional capacity building networks has already taken place through the GEO Capacity Building Committee (which from January 2012 is being integrated into the Institutions and Development Board) and the Committee on Earth Observation Satellites (CEOS) Working Group on Capacity Building and Data Democracy. These mechanisms complement the ability of the GEOSS Common Infrastructure (GCI) to ensure that end users have access to data, information, products and services. The provision of education and training programmes focusing on the development of open-source software and open systems, and the development of acquisition and dissemination mechanisms, need to take into consideration the challenges of limited bandwidth in many developing countries.

The UN Economic Commission for Africa (UNECA), the Regional Centre for Monitoring of Resources for Development (RCMRD, Kenya) and the Environmental Information System (EIS-Africa), each with extensive experience in geospatial activities, will assist by using their networks to ensure that effective and well coordinated education and training activities are established; they will also support the creation of networks amongst other relevant agencies.

There are a number of existing regional training centres that will play significant roles in GEOSS regional coordination, such as the African Centre of Meteorological Information for Development (ACMAD, Niger), the Regional Centre for Training in Aerospace Surveys (RECTAS, Nigeria), the Regional Centre for Training and Application in Agrometeorology and Operational Hydrology (Centre Régional de Formation et d'Application en Agrométéorologie et Hydrologie Opérationnelle -- AGRHYMET, Niger), the African Regional Centre for Space Science and Technology Education (CSSTE, Morocco), the African Regional Centre for Space Science and Technology Education (CSSTE, Nigeria), and others. These institutions will use their existing regional networks, infrastructures and programmes to promote GEOSS.

2.2 Identify areas relevant for coordinated infrastructure pilot projects that focus on societal benefits.

Proposed areas are ground stations to support a coordinated data acquisition strategy for Africa, the African Resources and Environmental Management Constellation (ARMC), AfricaGeoSat-1, among others.

- **Coordinated data acquisition strategy for Africa.** The ability to downlink data directly for processing will strongly support the development of timely downstream applications, products and services. This will substantially expand access to, and the use and application of, Earth observation data for policy- and decision-making. Such services will provide significant societal benefits, particularly in the areas of disasters (fires, floods), disease outbreaks and natural resources management. Several ground stations already exist, but because they are not interoperable their full potential for supporting research, applications and human capital development has not been realised. To remedy this situation, GEO can provide a coordination mechanism for promoting interoperability involving interfaces, common file formats, common dissemination standards, etc. The first step will be to engage the ground stations in Kenya (Malindi), Egypt (NARSS), South Africa (SANSA), Nigeria (NARSDA), Gabon and Algeria (ASAL). Implementing this strategy will complement the data policy of the African Resources and Environmental Management Constellation (ARMC).
- **African Resources and Environmental Management Constellation (ARMC).** The ARM constellation initiative will provide Africa with timely, free, open and unrestricted access to medium to high resolution data over Africa for natural resources management applications. The countries involved (currently Algeria, Nigeria, Kenya and South Africa) are collaborating on sustaining and expanding indigenous human capital to support space programmes in Africa.
- **AfricaGeoSat-1 Project.** The AfricaGeoSat-1 Core Team as outlined in the GEO 2012-2015 Work Plan will work on promoting the AfricaGeoSat-1 project (for a dedicated African geostationary imaging space system) to regional agencies and key role players across Africa. It will also finalize the technical specifications of the space system by consolidating requirements (e.g. for capacity building). The project's scope also covers identifying synergies with existing and planned systems and linking AfricaGeoSat-1 unique applications with ongoing activities (e.g. in forestry, agriculture and water management).
- **African Monitoring of the Environment for Sustainable Development (AMESD) and Monitoring of Environment and Security in Africa (MESA).** AMESD has improved access to Earth observation data, established operational information services and

strengthened political and policy frameworks for environmental monitoring and sustainable management of natural resources. MESA is expected to be funded by the 10th European Development Fund (EDF) and will start this year. It will ensure that there is continuity in the work done at the conclusion of AMESD.

2.3 Identify areas relevant for coordinated pilot projects that focus on societal benefits.

Proposed areas are agriculture and food security, forestry, renewable energy (biomass, solar), health, the GEOSS African Water Cycle Coordination Initiative, and African Monitoring of Environment for Sustainable Development (AMESD), GEO Forest Carbon Tracking (FCT), among others. For example:

- **Bio-Energy Atlas for Africa.** This project aims to develop a Bio-Energy Atlas for Africa to provide information on the quantity distribution, uses and quality of biomass.
- **GEO Forest Carbon Tracking (FCT) and Global Forest Observations Initiatives (GFOI).** An operational global network of national forest monitoring systems is needed, inter alia, in support of reducing greenhouse gas emissions from deforestation and forest degradation (REDD+). Three countries, namely Cameroon, Tanzania and Democratic Republic of Congo that are currently serving as “National Demonstrators”.
- **The Meningitis Risk and Information Technology project (MERIT).** This collaborative effort of the World Health Organization (WHO) and members of the environmental, public health and epidemiological communities focuses on the Sub-Saharan region of Africa.

2.4 Promote data democracy and data sharing.

GEO is involved in the reconfiguration of the CEOS Working Group on Capacity Building and Data Democracy (WGCBDD), which will be fully aligned with the GEO 2012-2015 Work Plan (Institutions and Development chapter). The intention is to engage African agencies in implementing GEO's Data Democracy and Data Sharing tasks. These tasks will improve access to data by strengthening the understanding of individuals and institutions of technology limitations, proper dissemination methods and relevant software tools. They will emphasize the development of open-source software and open systems. They will encourage academic institutions to collaborate, and they will also support education and training for the China Brazil Earth Resources Satellites (CBERS) programme, GEONetCast and SERVIR.

2.5 Organize sessions on GEO and GEOSS at premier African conferences such as those of the African Association of Remote Sensing for the Environment (AARSE), AfricaGIS and other relevant forums.

GEO made a plenary presentation at AfricaGIS2011 in Abuja, Nigeria, and it plans to make another one at AARSE 2012 in Morocco and to host the session on AfricaGeoSat-1 and GEOSS. The focus will be on encouraging African countries to become GEO Members and to actively participate in GEO tasks.

2.6 Organize regional workshops.

The workshops will focus on coordinating and strengthening existing regional capacities. The aim is to provide support for regional agencies to conduct workshops that will identify priority societal benefit areas and that can demonstrate how regional coordination can be enhanced to ensure active participation in implementing GEOSS and building AfriGEOSS.

The following actions for regional agencies have been identified:

- The RCMRD will host a workshop that will focus on the development and implementation of the BioEnergy Atlas for Africa and on discussions on the pilot project on Agriculture;

- The Ghana Space Science and Technology Centre together with the Nigerian National Research and Development Agency (NARSDA) will host the workshop in Accra for the western region of Africa;
- The National Authority for Remote Sensing and Space Sciences (NARSS) Environment Department, in consultation with the Moroccan Meteorological Agency, will host the workshop for the northern region of Africa;
- South African GEO, in consultation with the Department of Science and Technology (DST), will host the Southern African Development Community (SADC) workshop; this can also include Madagascar, Mauritius and others;
- The engagement with the Central African region still needs to be developed.

These two-day workshops are planned to be held during the April – August 2012 period. The focus will be on existing regional activities and priorities, discussions on the GEO Work Plan and GEOSS, and the identification of areas for coordination via pilot projects.

3 PROGRESS TO DATE AND NEXT STEPS

GEO has taken the following steps over the past year to launch work on AfriGEOSS:

- GEO has already made good progress in engaging with RCMRD, which will provide the springboard for launching this initiative. RCMRD will coordinate the participation of its 21 members for the implementation of pilot projects or showcases on data acquisition, agriculture, food security and other priority areas;
- The development of a BioEnergy Atlas for Africa has been included in the new GEO 2012-2015 Work Plan. The next step is to raise the necessary resources; South Africa has made a ZAR2 million initial funding. Engagements with the International Renewable Energy Agency (IRENA) on collaboration and possible funding are underway; discussions with German Space Agency (DLR), National Renewable Energy Laboratory (NREL), Brazilian Space Agency (INPE) are also underway;
- The AfricaGeoSat-1 project is incorporated into the Global Earth Systems task in the GEO 2012-2015 Work Plan;
- Coordinated data acquisition strategy (creating a “virtual network” of ground stations): The GEO Secretariat has launched this process by requesting a meeting with the Gabonese Agency for the Study and Observation of Space (Agence Gabonaise d'Etude et d'Observation Spatiale -- AGEOS) to discuss the planned ground station; and by visiting Kenya in late 2011 to explore how the Malindi ground station can be used. The GEO Secretariat Director met with Gabonese President and the Director General of AGEOS in September 2011 to discuss the development of the ground station. The Secretariat has also worked to further engage space agencies, namely, the South African National Space Agency (SANSa), the Algerian Space Agency (ASAL), NARSDA, and NARSS, at the September 2011 African Space Leadership Conference and the November 2011 International Astronautical Conference. Building on these initial steps, GEO will promote the establishment of a continent-wide collaborative mechanism to build the AfriGEOSS Coordinated Ground Network;
- The Secretariat contributed to the organization of the 3rd Crop and Rangeland Monitoring Workshop (CRAM), which was held in September 2011 in Nairobi, Kenya;
- The Secretariat is supporting the organization of the 3rd GEOSS African Water Cycle Symposium in February 2012 in Gabon as well as supporting the participation of African experts. This follows the Secretariat's support to the 2nd GEOSS African Water Cycle Symposium convened at the United Nations Conference Centre in Addis Ababa, Ethiopia, on

23-25 February 2011, aimed to develop a plan for an “African Water Cycle Coordination Initiative and the GEO-UNESCO Joint Workshop on Earth Observations and Capacity Development for IWRM for River Basins in Africa held at UNESCO on 12-14 January 2012 in Nairobi, Kenya. This will be linked to the TIGER initiative, which focuses on the use of space technology for water resource management in Africa. It is aimed at assisting African countries to exploit the advantages of Earth Observation (EO) technology and build independent African capacity whilst setting up sustainable water observation systems;

- The GEO Forest Carbon Tracking task includes a total of eleven countries, which are acting as “National Demonstrators” and three of them are African, Cameroon, Democratic Republic of Congo and Tanzania. The concept of National Demonstrators (ND’s) was introduced in the GEO FCT task since the beginning to define the reference demonstration areas for developing and testing approaches and methodologies for forest monitoring, carbon tracking and addressing the REDD+ scheme which is being negotiated within the UNFCCC. The annual review of the GEO FCT activities was performed from 6-10 February 2012 in Arusha, Tanzania. This meeting offered an opportunity for African countries other than NDs to attend and be exposed to GEO initiatives including the support that GFOI is planning to provide in the near future. Representatives from eight African countries attended this meeting; and
- Australia has recently launched an International Centre for Food Security that will be led by the Australian Centre for International Agricultural Research (ACIAR). The centre will be based in Canberra and will have an office in Africa. It will aim to address under-investment in agriculture and focus on supporting emerging farmers. The centre will provide farmers, government agencies and the private sector access to the research and technical expertise of a large network of Australian, African and international research bodies. A scoping meeting between representatives of GEO Agriculture community and ACIAR was held on 13-17 February 2012 in Canberra, following a workshop on crop monitoring and yield forecast, which is aligned to GEO GLAM objectives. The meeting focused on the process of understanding how to optimise the development of capacity in Africa.

African governments and organizations should now consider taking action to supplement the initial funding from South Africa. Active participation in GEO activities will expose African experts to global collaborations and improve their access to data and open-software tools for applications development. This will generate huge benefits to society, help to sustain existing capacities, bring in new knowledge and, most importantly, provide a large return in investment.

4 ACKNOWLEDGEMENTS:

We wish to express our indebted appreciation and recognition to the Member States and Participation Organizations for their support and contributions to GEO initiatives in Africa. Our sincere gratitude to:

- South Africa for the seed funding and continuous support for GEO initiatives in Africa;
- European Commission for funding various Earth Observation projects in Africa such AMESD (MESA), DevCoCast; GEONETCAB amongst others;
- Brazil and China for CBERS data dissemination and ground stations support in Africa;
- Japan, UNESCO for supporting African Water Cycle Initiative;
- Norway, Australia, US for supporting FCT and NDs in Africa; and
- All Member States and Participating Organizations that have contributed to GEO and GEOSS activities in Africa.

ANNEX

BACKGROUND INFORMATION: AFRICA IN GEO

As of November 2011, the GEO membership includes 87 countries plus the European Commission. The 21 members from Africa are: Algeria, Burkina Faso, Cameroon, Central African Republic, Republic of the Congo, Egypt, Ethiopia, Gabon, Ghana, Guinea-Bissau, Republic of Guinea, Madagascar, Mali, Mauritius, Morocco, Niger, Nigeria, South Africa, Sudan, Tunisia, and Uganda.

Three of GEO's 61 Participating Organisations are based in Africa: the African Association of Remote Sensing for the Environment (AARSE), the African Centre for Climate Monitoring and Applications Development (ACMAD), and the Regional Centre for Monitoring and Remote Sensing Development (RCMRD).

Three of the GEOSS Strategic Targets are particularly relevant to the AfriGEOSS initiative:

- **Capacity building:** Enhance the coordination of efforts to strengthen individual, institutional and infrastructure capacities, particularly in developing countries, to produce and use Earth observations and derived information products.
- **Architecture:** Achieve sustained operation, continuity and interoperability of existing and new systems that provide essential environmental observations and information, including the GEOSS Common Infrastructure (GCI) that facilitates access to, and use of, these observations and information.
- **Data Management:** Provide a shared, easily accessible, timely, sustained stream of comprehensive data of documented quality, as well as metadata and information products, for informed decision-making.

Project Call Identifier	Project Acronym	Project Title	Project Funding Scheme	Project Research Thema	Project Total Cost
FP7-ENV-2007-1	AEGOS	African-European Georesources Observation System	CSA	ENV.2007.4.1.4.1.	2,415,392
FP7-ENV-2007-1	AEGOS	African-European Georesources Observation System	CSA	ENV.2007.4.1.4.1.	2,415,392
FP7-ENV-2007-1	AEGOS	African-European Georesources Observation System	CSA	ENV.2007.4.1.4.1.	2,415,392
FP7-ENV-2007-1	AEGOS	African-European Georesources Observation System	CSA	ENV.2007.4.1.4.1.	2,415,392
FP7-ENV-2007-1	AEGOS	African-European Georesources Observation System	CSA	ENV.2007.4.1.4.1.	2,415,392
FP7-ENV-2007-1	AEGOS	African-European Georesources Observation System	CSA	ENV.2007.4.1.4.1.	2,415,392
FP7-ENV-2007-1	AEGOS	African-European Georesources Observation System	CSA	ENV.2007.4.1.4.1.	2,415,392
FP7-ENV-2007-1	AEGOS	African-European Georesources Observation System	CSA	ENV.2007.4.1.4.1.	2,415,392
FP7-ENV-2007-1	AEGOS	African-European Georesources Observation System	CSA	ENV.2007.4.1.4.1.	2,415,392
FP7-ENV-2007-1	AEGOS	African-European Georesources Observation System	CSA	ENV.2007.4.1.4.1.	2,415,392
FP7-ENV-2007-1	EBONE	European Biodiversity Observation Network; a project to design and test a biodiversity observation system integrated in time and space	CP	ENV.2007.4.1.1.2.	3,435,300
FP7-ENV-2007-1	GEONETCAST	GEONETCast for and by Developing countries	CSA	ENV.2007.4.1.4.3.	2,141,516
FP7-ENV-2007-1	DEVCOCAST	GEONETCast for and by Developing countries	CSA	ENV.2007.4.1.4.3.	2,141,516
FP7-ENV-2007-1	DEVCOCAST	GEONETCast for and by Developing countries	CSA	ENV.2007.4.1.4.3.	2,141,516
FP7-ENV-2007-1	DEVCOCAST	GEONETCast for and by Developing countries	CSA	ENV.2007.4.1.4.3.	2,141,516
FP7-ENV-2007-1	EUROSITES	Integration and enhancement of key existing European deep-ocean observatories	CP	ENV.2007.4.1.3.2.	4,753,779
FP7-ENV-2007-1	E-SOTER	Regional pilot platform as EU contribution to a Global Soil Observing System	CP	ENV.2007.4.1.3.3.	3,345,875
FP7-ENV-2007-1	E-SOTER	Regional pilot platform as EU contribution to a Global Soil Observing System	CP	ENV.2007.4.1.3.3.	3,345,875
FP7-ENV-2008-1	EUROGEOSS	European approach to GEOSS	CP	ENV.2008.4.1.1.1.	7,905,318
FP7-ENV-2009-1	EO2HEAVEN	Earth Observation and ENVironmental modelling for the mitigation of HEAlth risks	CP	ENV.2009.4.1.3.1	8,731,216
FP7-ENV-2009-1	EO2HEAVEN	Earth Observation and ENVironmental modelling for the mitigation of HEAlth risks	CP	ENV.2009.4.1.3.1	8,731,216
FP7-ENV-2009-1	EO2HEAVEN	Earth Observation and ENVironmental modelling for the mitigation of HEAlth risks	CP	ENV.2009.4.1.3.1	8,731,216
FP7-ENV-2009-1	EO-MINERS	Earth Observation for Monitoring and Observing Environmental and Societal Impacts of Mineral Resources Exploration and Exploitation	CP	ENV.2009.4.1.3.2	4,062,877
FP7-ENV-2009-1	EO-MINERS	Earth Observation for Monitoring and Observing Environmental and Societal Impacts of Mineral Resources Exploration and Exploitation	CP	ENV.2009.4.1.3.2	4,062,877
FP7-ENV-2009-1	GEONETCAB	GEO Network for Capacity Building	CSA	ENV.2009.4.1.4.1	1,207,861
FP7-ENV-2009-1	GEONETCAB	GEO Network for Capacity Building	CSA	ENV.2009.4.1.4.1	1,207,861
FP7-ENV-2009-1	GEONETCAB	GEO Network for Capacity Building	CSA	ENV.2009.4.1.4.1	1,207,861
FP7-ENV-2010	GMOS	Global Mercury Observation System	CP	ENV.2010.4.1.3-2	9,165,458
FP7-ENV-2010	GMOS	Global Mercury Observation System	CP	ENV.2010.4.1.3-2	9,165,458
FP7-ENV-2011	AGRICAB	A framework for enhancing EO capacity for Agriculture and Forest Management in Africa as a contribution to GEOSS	CP	ENV.2011.4.1.4-1	4,119,543
FP7-ENV-2011	AGRICAB	A framework for enhancing EO capacity for Agriculture and Forest Management in Africa as a contribution to GEOSS	CP	ENV.2011.4.1.4-1	4,119,543
FP7-ENV-2011	AGRICAB	A framework for enhancing EO capacity for Agriculture and Forest Management in Africa as a contribution to GEOSS	CP	ENV.2011.4.1.4-1	4,119,543
FP7-ENV-2011	AGRICAB	A framework for enhancing EO capacity for Agriculture and Forest Management in Africa as a contribution to GEOSS	CP	ENV.2011.4.1.4-1	4,119,543
FP7-ENV-2011	AGRICAB	A framework for enhancing EO capacity for Agriculture and Forest Management in Africa as a contribution to GEOSS	CP	ENV.2011.4.1.4-1	4,119,543
FP7-ENV-2011	AGRICAB	A framework for enhancing EO capacity for Agriculture and Forest Management in Africa as a contribution to GEOSS	CP	ENV.2011.4.1.4-1	4,119,543
FP7-ENV-2011	AGRICAB	A framework for enhancing EO capacity for Agriculture and Forest Management in Africa as a contribution to GEOSS	CP	ENV.2011.4.1.4-1	4,119,543
FP7-ENV-2011	AGRICAB	A framework for enhancing EO capacity for Agriculture and Forest Management in Africa as a contribution to GEOSS	CP	ENV.2011.4.1.4-1	4,119,543
FP7-ENV-2011	AGRICAB	A framework for enhancing EO capacity for Agriculture and Forest Management in Africa as a contribution to GEOSS	CP	ENV.2011.4.1.4-1	4,119,543
FP7-ENV-2011	AGRICAB	A framework for enhancing EO capacity for Agriculture and Forest Management in Africa as a contribution to GEOSS	CP	ENV.2011.4.1.4-1	4,119,543
FP7-ENV-2011	AGRICAB	A framework for enhancing EO capacity for Agriculture and Forest Management in Africa as a contribution to GEOSS	CP	ENV.2011.4.1.4-1	4,119,543
FP7-ENV-2011	MEDINA	Marine Ecosystem Dynamics and Indicators for North Africa	CP	ENV.2011.4.1.4-2	4,195,232
FP7-ENV-2011	MEDINA	Marine Ecosystem Dynamics and Indicators for North Africa	CP	ENV.2011.4.1.4-2	4,195,232
FP7-ENV-2011	MEDINA	Marine Ecosystem Dynamics and Indicators for North Africa	CP	ENV.2011.4.1.4-2	4,195,232
FP7-ENV-2011	MEDINA	Marine Ecosystem Dynamics and Indicators for North Africa	CP	ENV.2011.4.1.4-2	4,195,232
FP7-ENV-2011	GEOCARBON	Operational Global Carbon Observing System	CP	ENV.2011.4.1.1-1	8,672,736

Project Call Identifier	Project EC Contribution	Participant Short Name	Participant Legal Name	Participant Role	Participant Total Cost	Participant EC Contribution	Participant Country	Participant Country Name
FP7-ENV-2007-1	1,930,996	DNG	Ministere des Mines et de la Geologie	Participant	39,253	35,000	GN	Guinea
FP7-ENV-2007-1	1,930,996	MMI	Ministere des Mines et de l'Industrie	Participant	39,253	35,000	SN	Senegal
FP7-ENV-2007-1	1,930,996	IRA	UNIVERSITY OF DAR ES SALAAM	Participant	39,253	35,000	TZ	Tanzania (United Republic of)
FP7-ENV-2007-1	1,930,996	SEAMIC	The Southern and Eastern African Mineral centre	Participant	61,682	55,000	TZ	Tanzania (United Republic of)
FP7-ENV-2007-1	1,930,996	GSM	Geological Survey and Mines	Participant	39,253	35,000	UG	Uganda
FP7-ENV-2007-1	1,930,996	GSD	Geological Survey Department	Participant	39,253	35,000	GH	Ghana
FP7-ENV-2007-1	1,930,996	CGS	COUNCIL FOR GEOSCIENCE	Participant	176,479	148,037	ZA	South Africa
FP7-ENV-2007-1	1,930,996	UEMOA	UNION ECONOMIQUE ET MONETAIRE OUEST AFRICAINE	Participant	61,682	55,000	BF	Burkina Faso
FP7-ENV-2007-1	1,930,996	GSE	Geological Survey of Ethiopia	Participant	50,468	45,000	ET	Ethiopia
FP7-ENV-2007-1	1,930,996	GD-SOM-UNZA	UNIVERSITY OF ZAMBIA	Participant	39,253	35,000	ZM	Zambia
FP7-ENV-2007-1	2,701,985	CSIR	CSIR - COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH	Participant	72,098	54,073	ZA	South Africa
FP7-ENV-2007-1	1,852,527	ACMAD	AFRICAN CENTRE OF METEOROLOGICAL APPLICATION DE	Participant	30,001	30,000	NE	Niger
FP7-ENV-2007-1	1,852,527	AGRHYMET	CENTRE REGIONAL AGRHYMET	Participant	50,000	50,000	NE	Niger
FP7-ENV-2007-1	1,852,527	CSIR	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH	Participant	50,000	50,000	ZA	South Africa
FP7-ENV-2007-1	1,852,527	MARE - UCT	UNIVERSITY OF CAPE TOWN	Participant	187,471	168,461	ZA	South Africa
FP7-ENV-2007-1	3,482,600	INDP	INSTITUTO NACIONAL DE DESENVOLVIMENTO DAS PESCA	Participant	310,739	233,052	CV	Cape Verde
FP7-ENV-2007-1	2,599,914	INRA-Maroc	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	Participant	122,530	92,701	MA	Morocco
FP7-ENV-2007-1	2,599,914	ENA	ECOLE NATIONALE D'AGRICULTURE DE MEKNES	Participant	0	0	MA	Morocco
FP7-ENV-2008-1	6,035,566	UNEP-WCMC	UNITED NATIONS ENVIRONMENT PROGRAMME	Participant	172,000	129,000	KE	Kenya
FP7-ENV-2009-1	6,273,262	MakCHS	MAKERERE UNIVERSITY	Participant	52,349	40,320	UG	Uganda
FP7-ENV-2009-1	6,273,262	CSIR	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH	Participant	412,789	298,866	ZA	South Africa
FP7-ENV-2009-1	6,273,262	UKZN	UNIVERSITY OF KWAZULU-NATAL	Participant	154,800	108,060	ZA	South Africa
FP7-ENV-2009-1	3,120,838	AOL-ATD	ANGLO OPERATIONS LIMITED	Participant	88,269	0	ZA	South Africa
FP7-ENV-2009-1	3,120,838	CGS	COUNCIL FOR GEOSCIENCE	Participant	375,225	282,407	ZA	South Africa
FP7-ENV-2009-1	999,988	UMVOTO	Umvoto Africa (pty) ltd	Participant	48,701	38,600	ZA	South Africa
FP7-ENV-2009-1	999,988	CSIR	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH	Participant	63,533	61,799	ZA	South Africa
FP7-ENV-2009-1	999,988	CRASTE LF	CENTRE REGIONAL AFRICAIN DES SCIENCES ET TECHNOLOGIE	Participant	102,728	91,599	MA	Morocco
FP7-ENV-2010	6,882,068	SAWS	South African Weather Service	Participant	94,860	71,000	ZA	South Africa
FP7-ENV-2010	6,882,068	INMG	INSTITUTO NACIONAL DE METEOROLOGIA E GEOFISICA	Participant	195,920	131,000	CV	Cape Verde
FP7-ENV-2011	3,499,234	OSS	OBSERVATOIRE DU SAHARA ET DU SAHEL	Participant	151,550	126,180	TN	Tunisia
FP7-ENV-2011	3,499,234	DRSRS	MINISTRY OF ENVIRONMENT AND MINERAL RESOURCES	Participant	163,738	136,259	KE	Kenya
FP7-ENV-2011	3,499,234	INAM	INSTITUTO NACIONAL DE METEOROLOGIA	Participant	131,642	91,581	MZ	Mozambique
FP7-ENV-2011	3,499,234	GEOSAS	GEOSAS CONSULTING SERVICE PLC	Participant	46,775	46,405	ET	Ethiopia
FP7-ENV-2011	3,499,234	RCMRD	Regional Centre for Mapping of Resources for Development	Participant	180,574	180,574	KE	Kenya
FP7-ENV-2011	3,499,234	ILRI	International Livestock Research Institute	Participant	348,268	300,800	KE	Kenya
FP7-ENV-2011	3,499,234	UEM	UNIVERSIDADE EDUARDO MONDLANE	Participant	109,995	93,286	MZ	Mozambique
FP7-ENV-2011	3,499,234	AGRHYMET	CENTRE REGIONAL AGRHYMET	Participant	176,040	176,040	NE	Niger
FP7-ENV-2011	3,499,234	CSE	CENTRE DE SUIVI ECOLOGIQUE	Participant	130,283	110,414	SN	Senegal
FP7-ENV-2011	3,499,234	CSIR	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH	Participant	246,613	202,397	ZA	South Africa
FP7-ENV-2011	3,454,575	CNL	COMMISSARIAT NATIONAL DU LITTORAL	Participant	136,000	123,200	DZ	Algeria
FP7-ENV-2011	3,454,575	NIOF	National Institute of Oceanography and Fisheries	Participant	255,040	229,760	EG	Egypt
FP7-ENV-2011	3,454,575	UAE-FPL	UNIVERSITE ABDELMALEK ESSAADI	Participant	115,669	106,297	MA	Morocco
FP7-ENV-2011	3,454,575	ACRI-EC	ACRI ETUDES ET CONSEIL	Participant	389,408	312,898	MA	Morocco
FP7-ENV-2011	6,648,530	CBCS	CAMEROON BIODIVERSITY CONSERVATION SOCIETY	Participant	76,000	57,000	CM	Cameroon

5,827,438 4,737,065

Project Call Identifier	Country Group Description	Contact person	project website
FP7-ENV-2007-1	ICPC - ACP - Africa	Fatoumadata CAMARA; Ibrahima Sory Sylla	www.aegos-project.org
FP7-ENV-2007-1	ICPC - ACP - Africa	Moussa SYLLA; Ousmane CISSE; Abdoul Aziz NDIAYE	
FP7-ENV-2007-1	ICPC - ACP - Africa	Simon Mwansasu	
FP7-ENV-2007-1	ICPC - ACP - Africa	Ketema Tadesse; Mesfin Wubeshet Gebremichael	
FP7-ENV-2007-1	ICPC - ACP - Africa	John Odida; Grace Nassuna; Agnes Alaba	
FP7-ENV-2007-1	ICPC - ACP - Africa	John Agyei Duodu; Kwame Odame Boamah	
FP7-ENV-2007-1	ICPC - ACP - Africa	Luc Chevallier; Susan Frost-Killian; Ian Gerald Haddon	
FP7-ENV-2007-1	ICPC - ACP - Africa	Abdoulaye KONE; Yann ITARD	
FP7-ENV-2007-1	ICPC - ACP - Africa	Shiferaw Ayele	
FP7-ENV-2007-1	ICPC - ACP - Africa	Imasiku Nyambe	
FP7-ENV-2007-1	ICPC - ACP - Africa	Ladislav Mucina	http://www.ebone.wur.nl
FP7-ENV-2007-1	ICPC - ACP - Africa	Ali Abani; Abdoulaye Kignaman-Soro	http://www.devcoast.eu
FP7-ENV-2007-1	ICPC - ACP - Africa	Dr. Sidibe Brahim; Alfari Issifou	
FP7-ENV-2007-1	ICPC - ACP - Africa	Philip Frost	
FP7-ENV-2007-1	ICPC - ACP - Africa	Stewart Bernard; Christo Whittle	
FP7-ENV-2007-1	ICPC - ACP - Africa	Oscar David Fonseca Melicio	http://www.eurosites.info
FP7-ENV-2007-1	ICPC - Mediterranean Partner Countries	Mohamed Badraoui; Riad Balaghi	http://www.esoter.net
FP7-ENV-2007-1	ICPC - Mediterranean Partner Countries	Rachid Bouabid	
FP7-ENV-2008-1	ICPC - ACP - Africa	Lynn Kisielowski	http://www.eurogeoss.eu/
FP7-ENV-2009-1	ICPC - ACP - Africa	Paul Teefe; Mpungu Steven Kiwuwa	www.eo2heaven.org
FP7-ENV-2009-1	ICPC - ACP - Africa	Anwar Vahed; Graeme McFerren; Terence Van Zyl	
FP7-ENV-2009-1	ICPC - ACP - Africa	Maurice Mars; Rajen Naidoo;	www.eo-miners.eu
FP7-ENV-2009-1	ICPC - ACP - Africa	Fatima Ferraz	
FP7-ENV-2009-1	ICPC - ACP - Africa	Danél van Tonder; Daniel Sebake; Dettlef Eberle	http://geonetcab.espace-dev.fr/
FP7-ENV-2009-1	ICPC - ACP - Africa	Andiswa Mlisa; Chris Hartnady	
FP7-ENV-2009-1	ICPC - ACP - Africa	Alex Fortescue; Naledzani Mudau	
FP7-ENV-2009-1	ICPC - Mediterranean Partner Countries	Abderrahmane TOUZANI; Abdelhak TRACHE; Anas EMRAN	
FP7-ENV-2010	ICPC - ACP - Africa	Ernst Brunke	www.gmos.eu
FP7-ENV-2010	ICPC - ACP - Africa	Luis Mendes Neves	
FP7-ENV-2011	ICPC - Mediterranean Partner Countries	Nabil Ben Khadra; Mourad Briki; Djamel Latrech; Mohamedou Ouldababa	www.agricab.info
FP7-ENV-2011	ICPC - ACP - Africa	Charles Situma; Henry Roimen; Jacob N. Kimani; Lucy Njino	
FP7-ENV-2011	ICPC - ACP - Africa	Domingos Mosquito Patrício; Mário Basilio; Berino Silinto	
FP7-ENV-2011	ICPC - ACP - Africa	Teshome Erkinch; Getachew Gebreyesus; Woldeamlak Bewket; Tesfai Hagos	
FP7-ENV-2011	ICPC - ACP - Africa	Hussein Farah; Tesfaye Korme; Erick Khamala; Vincent Mtaroni	
FP7-ENV-2011	ICPC - ACP - Africa	Mario Herrero; Abisalom Omolo; An M.O. Notenbaert	
FP7-ENV-2011	ICPC - ACP - Africa	Francisco Tauacale; Paulo Covele; Sérgio Adriano; Silene Bila	
FP7-ENV-2011	ICPC - ACP - Africa	Brahima SIDIBE; Issifou ALFARI; Karim OUEDREAOGO	
FP7-ENV-2011	ICPC - ACP - Africa	Gora Bèye; Malick Diagne; Abdoulaye Faye; Ousmane Bocoum	
FP7-ENV-2011	ICPC - ACP - Africa	Renaud Mathieu; Konrad Wessels; Nebo Jovanovic; Sally Archibald	
FP7-ENV-2011	ICPC - Mediterranean Partner Countries	Aomar Khaber	N/A
FP7-ENV-2011	ICPC - Mediterranean Partner Countries	Suzan E.A, Kholeif; Mohamed Shredah; Ebessam El-sayed; Amany El Sikaily	N/A
FP7-ENV-2011	ICPC - Mediterranean Partner Countries	Driss Nachite; Bouchta el Moumni; Larbi Sbai; Amal Bergam	N/A
FP7-ENV-2011	ICPC - Mediterranean Partner Countries	Antoine Mangin; Abdellatif Orbi; Houda Ouazzani	N/A
FP7-ENV-2011	ICPC - ACP - Africa	Sonké Bonaventure	N/A