

PRESS RELEASE

Comprehensive new global monitoring system to track deforestation and forest carbon

Governments, space agencies and organizations team up through GEO to integrate data and methodologies

London, 19 October 2009 – Recognizing the need to reverse deforestation, which contributes almost a fifth of humanity’s carbon dioxide emissions, an international partnership of governments and organizations is building the first global monitoring system for producing annual assessments of forest carbon stocks (compared to the current five-yearly cycle).

This emerging system will monitor changes in any particular area of forest more accurately than ever before. As a result, it will be possible to ensure that data on carbon content are credible and comparable from one country to another.

“A highly accurate and fully operational global forest carbon tracking system is now possible due to the combination of high-tech instruments, advanced science and international collaboration,” said José Achache, Director of the Group on Earth Observations (GEO), which serves as the framework for the partnership.

“In addition to its contribution to scientific research, this operational system will be available to support the work of national policymakers, the Climate Change Convention, and the emerging carbon markets,” he said.

The GEO forest carbon monitoring system is being advanced here this week (19-20 October) at a working meeting of the partnership. The meeting is being hosted by The Prince’s Rainforests Project.

The development of the system is being led by governments with a strong interest in forest carbon monitoring; they are Australia, Canada, Japan and Norway.

Seven governments have agreed to serve as “national demonstrators” for the project in 2009-2010. They are Australia, Brazil, Cameroon, Guyana, Indonesia, Mexico and Tanzania; Colombia, Peru and others have also expressed interest in participating. The demonstration phase aims to show that global monitoring can respect national conditions while providing consistent and credible outcomes.

The partnership also engages the world’s space agencies, which have pledged to collaborate through the Committee on Earth Observation Satellites (CEOS) to provide the necessary space data. They include the European Space Agency and the national agencies of Brazil, Canada, Germany, India, Italy, Japan and the USA.

Other key contributors include the Food and Agriculture Organization of the UN (FAO) and GOFCC-GOLD (Global Observation of Forest and Land Cover Dynamics).

Space data are key to the success of the GEO forest carbon monitoring system. They consist mainly of mid-resolution (20-30m) satellite images. CEOS is also working to secure the interoperability of the necessary optical and radar (SAR) sensors and to ensure the long-term continuity and availability of satellite data.

Models and methodologies are the other critical elements in the system. A number of different methodologies for estimating forest carbon content on the basis of remotely sensed images have been developed by governments and organizations. The GEO system has been designed to allow countries to choose which of the methodologies is best suited to their needs. The system will ensure that the results are fully comparable and interchangeable no matter which of the agreed methodologies is used.

In situ, or ground-based observations, are being gathered at the test sites in each of the national demonstrators to calibrate and verify the models.

In addition to providing carbon estimates, this operational monitoring framework can be used for other practical purposes, such as land-use mapping and the monitoring and control of illegal logging.

It is widely recognized that healthy forests are critical for human well-being. They support local communities and provide numerous essential ecosystem services, including clean air, flood control, biodiversity protection, food and medicines, materials and of course carbon storage.

The Group on Earth Observations was established in 2005 after the World Summit on Sustainable Development (WSSD), the Group of Eight leading industrialized countries (G8) and three ministerial Earth Observation Summits all called for improving existing observation systems.

Its membership now includes 80 governments and the European Commission; 54 international organizations also contribute to its work. GEO's next annual plenary meeting will be held in Washington DC on 17-18 November.

The forest carbon monitoring system will be part of the Global Earth Observation System of Systems that GEO is building on the basis of a 10-Year Implementation Plan, which runs through the year 2015. GEOSS addresses nine priorities of critical importance to the future of the human race: it will help countries to protect themselves against natural and human-induced disasters, understand the environmental sources of health hazards, manage energy resources, respond to climate change and its impacts, safeguard freshwater resources, improve weather forecasts, manage ecosystems, promote sustainable agriculture, and conserve biodiversity.

For more information: Please contact Michael Williams at +41-22-730-8293 or +41-79-572-9628 (cell from 19-21 October). See also the following resources on line:

- GEO web site – www.earthobservations.org
- CEOS communiqué – www.ceos-sit23.com/pdfs/CEOS%20Forest%20and%20Carbon%20Communique_FINAL_V4.pdf