



The approved methodologies are :

ARNM002 – Moldova Soil Conservation Project, Moldova

ARNM003 – Assisted Natural Regeneration of degraded land of Albania

Both the Projects were financed by World Bank Bio-Carbon fund.

## **INFORMATION ON A & R TECHNOLOGY TOOL**

ENSIS (Joint Forces of CSIRO Australia and Scion NZ) have contributed towards development of the Australian Greenhouse Office's National Carbon Accounting System (NCAS) and National Carbon Accounting Toolbox (NCAT) ([www.greenhouse.gov.au/ncas/](http://www.greenhouse.gov.au/ncas/)). The NCAT can be used for predicting carbon sequestration at the project level, whilst the NCAS accounts for LULUCF (land use, land use change and forestry) carbon at the sub-hectare level at the national scale. The NCAS is a proven fully operational system providing national coverage at reasonable cost for a very large country. The NCAT CD and DVD can be availed free from the Australian Greenhouse Office (AGO). ENSIS can also provide training in their use.

Details of the NCAS and NCAT are included in the proceedings "Carbon Accounting in Forests" available as a 710 kb download from <http://www.ffp.csiro.au/fap/Carbon%20Accounting%20in%20Forests.htm>

## **WORLD'S KEY DESERTS IN DANGER FROM CLIMATE CHANGE**

*5<sup>th</sup> June 2006, LONDON (Reuters)*

Far from being barren wastelands, the deserts that occupy one quarter of the earth's land surface could be key sources of food and power, a United Nations release said on Monday, 5<sup>th</sup> June. These vast open spaces, home to rare and useful plants and animals, are at risk from climate change and human exploitation, the UN's Environment Programme said in a report published on World Environment Day.

Deserts are prime potential locations for solar power generators that do not pollute the atmosphere with greenhouse gases, and plants that can thrive in desert conditions could provide food when water runs short. One such, plant called Nipa found in the Sonoran desert of western Mexico, produces grains the size of wheat which is drought resistant and even thrives on seawater.

## **THAWING PERMAFROST COULD UNLEASH TONS OF CARBON**

*15 June, 2006, Reuters*

Ancient roots and bones locked in long-frozen soil in Siberia are starting to thaw, and have the potential to unleash billions of tons of carbon and accelerate global warming. This vast carbon reservoir, contained in permafrost soil in northeastern Siberia, contains about 75 times more carbon than the amount released into the atmosphere each year by the burning of fossil fuels, the researchers said in a statement.

Siberia isn't the only place on Earth with massive lodes of permafrost – parts of Alaska, Canada and northern Europe have them too. The Siberian area is possibly the world's largest,

covering nearly 400,000 square miles, with an average depth of 82 feet, and probably holds about 500 billion metric tons of carbon.

## **AMERICANS CONCERNED OVER CLIMATE CHANGE**

*June 20, 2006, Angus Reid Global Scan : Polls & Research*

Many citizens in the United States are worried about global warming, according to a poll conducted by Hart / McInturff released by the Wall Street Journal and NBC News. 29 per cent of respondents think climate change is a serious problem that requires immediate action, and 30 per cent feel there is enough evidence that global warming is taking place and some action should be taken.

Conversely, 28 per cent of respondents believe that we currently do not know enough about climate change and more research is necessary before any action is taken, while nine per cent feel the concern over global warming is unwarranted.

# ICFRE NEWS

## 21<sup>ST</sup> ASIA PACIFIC FORESTRY COMMISSION MEETING – 2006

The 21<sup>st</sup> Asia Pacific Forestry Commission meet was organized by the FAO & MoEF, Government of India at ICFRE, Dehradun from 17<sup>th</sup> – 21<sup>st</sup> April 2006. It was inaugurated by Shri Namo Narain, Hon'ble Minister of State for Environment and Forests, Government of India. Total 180 delegates representing 29 member countries participated in the session alongwith observers and representatives from 2 non-member countries, the European Union, 21 international organizations and 7 international non-governmental organizations.

Mr. He Changchui, Assistant Director General and Regional Representative for Asia and the Pacific, welcomed participants on behalf of the Director General of FAO; Mr. Wulf Killmann, Director of the Forest Products and Economic Division represented the FAO Forestry Department.

Shri J. C. Kala, Director General of Forests and Special Secretary, Ministry of Environment and Forests, Government of India addressed the participants; Shri G. K. Prasad, Additional Inspector General, Ministry of Environment and Forests, Government of India and Director General, Indian Council of Forestry Research and Education, Dehradun welcomed the participants on behalf of Government of India.

Dr. R. K. Pachauri, Director General, The Energy and Research Institute (TERI) and Chairman, Intergovernmental Panel on Climate Change, presented the Keynote Address.

Shri Narayan Dutt Tiwari, Hon'ble Chief Minister of Uttaranchal, delivered the Presidential Address; Shri Namo Narain, Hon'ble Minister of State for Environment and Forests, Government of India, delivered the Inaugural Address and Vote of Thanks was delivered by Dr. Shashi Kumar, Director (Research), ICFRE & Chairman, Organizing Committee.

The APFC meeting held a special session on “Toward Sustainable Forest Management” where the findings of the 2005 Forest Resources Assessment were examined, and the accomplishments of APFC and FAO in the region were reviewed alongwith major forestry developments in APFC member countries. The key focus of the special session was on approaches for financing sustainable forest management. A final element of the special session was to address the role of regional mechanisms in supporting efforts to achieve sustainable forest management. An in-session seminar on payment for environmental services probed deeper into the prospects for these newly emerging mechanisms for funding forest management and protection. The codes of practice for planted forests, forest harvesting and wildland fires were also considered. Consideration was also given to whether a broader regional code for sustainable forest management standards is needed in the Asia and the Pacific. Information was shared on a joint FAO / ITTO effort to develop guidelines for forest law enforcement, activities of the Asia-Pacific Forest Invasive Species Network, and for a Asia-Pacific Forest Sector Outlook Study.

## ISO 9001:2000 IMPLEMENTATION FOR ICFRE

Regarding finalization of ISO 9001:2000, ISO implementation Training for ICFRE was conducted from 6<sup>th</sup> June to 9<sup>th</sup> June 2006 by CDC Consultants, New Delhi.

## UPCOMING EVENTS

### **LIVING WITH CLIMATE VARIABILITY AND CHANGE: UNDERSTANDING THE UNCERTAINTIES AND MANAGING THE RISKS**

*17 July 2006 - 21 July 2006. Espoo, Finland.*

This conference will review opportunities and constraints in integrating climate risks and uncertainties into the mainstreams of decision-making, where sensitivity to climate variability and change is one among many factors to consider. It will draw on the experiences of public and private organizations worldwide that have been engaged in managing risks including those of a climatic origin. The Conference is sponsored by the World Meteorological Organization, the Finnish Meteorological Institute and the International Institute for Climate and Society. For more information, contact: wmo2006@fmi.fi; fax: +358 9 1929 3146; Internet: <http://www.livingwithclimate.fi>

### **INTERNATIONAL SYMPOSIUM ON CRYOSPHERIC INDICATORS OF GLOBAL CLIMATE CHANGE**

*21 - 25 August 2006, Cambridge, England*

The cryosphere, consisting of snow cover, sea-, lake- and river-ice, glaciers, ice caps and ice sheets, and frozen ground including permafrost, is a fundamentally important part of the global climate system. In situ observations, remote sensing, the analysis of proxy records and numerical modeling all contribute to understanding the dynamics of cryospheric change and cryosphere/climate interactions. Building on the foundation laid by the 1st Climate and Cryosphere (CliC) International Science Conference, held in Beijing in April 2005, this symposium will promote discussion of the evidence for changes in all components of the global cryosphere, their interdependence and causes, our current ability to model these changes, and what they tell us about changing global climate.

Internet: <http://www.antarctica.ac.uk/igs/>

### **6<sup>TH</sup> ANNUAL MEETING OF THE EUROPEAN METEOROLOGICAL SOCIETY & 6<sup>TH</sup> EUROPEAN CONFERENCE ON APPLIED CLIMATOLOGY**

*Ljubljana, Slovenia, 4 – 8 September 2006*

From 4 – 8 September 2006, the 6th EMS annual meeting will be held in Ljubljana, Slovenia in the Cankarjev Dom. It will consist of a broad and open scientific conference with oral and poster presentations as well as symposia and special lectures.

As part and partner of the EMS there will be the 6th European Conference on Applied Climatology (ECAC) which has been set up by the European Climate Support Network (ECSN) and which will be organizing all the climate-related sessions.

Internet: <http://meetings.copernicus.org/ems2006/>

**INTERNATIONAL WORKSHOP ON THE CLEAN DEVELOPMENT MECHANISM (CDM) : OPPORTUNITIES AND CHALLENGES FOR FOREST SECTOR IN SUB-SAHARAN TROPICAL AFRICA**

*2-5 October 2006 / Accra, Ghana*

ITTO, the Ghana Forestry Commission (GFC) and the Forest Research Institute of Ghana (FORIG) are hosting this event, which will cover a wide range of issues related to investment opportunities in natural forest ecosystems and renewable energy in Sub-Saharan Africa.

The workshop will be interactive, and will bring together international experts, potential investors and a wide range of stakeholders, to discuss and develop strategies to assist Sub-Saharan Africa's effective participation and involvement in forestry-related CDM projects and activities to mitigate the impacts of climate change.

To be held in the attractive and relaxing Busua Beach Resort near Takoradi in Ghana, the workshop will consider background to the development of CDM forestry in the UNFCCC and the Kyoto Protocol, as well as current trends in research in CDM forestry models.

The models of best practice mitigation projects including renewal energy projects, opportunities and challenges for private and public sector investments in climate change mitigation projects and the prospects for establishing a greenhouse gas emissions market for Sub-Saharan Africa will also be discussed.

Internet: <http://www.itto.or.jp/live/PageDisplayHandler?pageId=223&id=1136>

**TRAVELING WORKSHOP: REGIONAL FOREST RESPONSES TO ENVIRONMENTAL CHANGE**

*6 October 2006 - 13 October 2006. Massachusetts, New Hampshire and New York, United States of America.*

To assess the state of knowledge of regional forest responses to global change, this traveling workshop will introduce researchers and students to the breadth of research and the regional characteristics of forests in the northeastern USA. The workshop will focus on assessing the state of knowledge of the tools and experimentation needed to predict regional responses of forests to global and regional environmental change. For more information contact: Nathan Phillips, Boston University; e-mail: [nathan@bu.edu](mailto:nathan@bu.edu);

Internet: [http://people.bu.edu/nathan/iufro\\_info.htm](http://people.bu.edu/nathan/iufro_info.htm)

**CONFERENCE ON HOW TO MAKE MARKETS WORK FOR CLIMATE**

*16 October 2006 - 17 October 2006. Amsterdam, Netherlands.*

This conference, to be hosted by the Dutch State Secretary for Housing, Spatial Planning and the Environment, will focus on how to make markets work more effectively to combat climate change. This will include discussions how to create new grant and loan mechanisms at the international level, possibilities to blend public and private financial resources through carbon finance, and potential to make emission trading schemes compatible between parties that have quantified targets, and those that do not. For more information contact: Dutch Ministry of Housing, Spatial Planning and the Environment; tel: +31-70-339-3939;

Internet: <http://www.vrom.nl/makemarketswork>

## **TWELFTH CONFERENCE OF THE PARTIES TO THE UNFCCC AND SECOND MEETING OF THE PARTIES TO THE KYOTO PROTOCOL**

*6 November 2006 - 17 November 2006. Nairobi, Kenya*

UNFCCC COP 12 and Kyoto Protocol COP/MOP 2 will take place from 6-17 November 2006. These meetings will also coincide with the 25th meetings of the UNFCCC's subsidiary bodies. For more information contact: UNFCCC Secretariat; tel: +49-228-815-1000; fax: +49-228-815-1999; e-mail: [secretariat@unfccc.int](mailto:secretariat@unfccc.int); Internet: <http://www.unfccc.int>

### **RECENT STUDIES**

#### **CLIMATE CHANGE WILL BE SIGNIFICANT BUT NOT EXTREME, STUDY PREDICTS**

*Washington Post, Thursday, April 20, 2006*

Earth will experience significant climate change in the coming century as a result of greenhouse gas buildups, but the more extreme estimates of global warming generated by some studies are unlikely to occur, according to newly published research. "This still commits us to quite a bit of climate change, but it leaves the door open to avoiding the largest and most devastating consequences," said Gabriele C. Hegerl, a Duke University climate expert who led the study.

The new work extends a difficult line of research that uses historical climate data and computer models to predict the impact of atmospheric carbon dioxide levels, which are increasing as a result of human activity, such as burning fossil fuels. Specifically, the research aims to refine a value known as "climate sensitivity," which is defined as the global average temperature change that can be expected to occur in response to a doubling of carbon dioxide levels.

The new work, reaches back 700 years. It recalculates the relationship between atmospheric composition and climate, taking into account the climate-affecting impacts of sun-blocking volcanic eruptions; carbon dioxide levels derived from air bubbles trapped in Antarctic ice; and temperature data derived from tree rings.

The result: Climate sensitivity almost certainly falls within the more conventional range of current predictions, with only a 5 percent chance that it will exceed 11 degrees Fahrenheit. Even a few degrees increase can have significant environmental and economic impacts, but by downgrading the worst-case scenarios the new work may convince governments that it is not too late to take action, carbon dioxide levels could reach double the pre-industrial levels between 2050 and 2100. Peak temperatures would occur decades later, as the planet's climate system settled into a new balance.

## **STUDY RECONCILES DATA IN MEASURING CLIMATE CHANGE**

*Washington Post*, May 3, 2006

A government study has undermined one of the key arguments of climate change skeptics, concluding there is no statistically significant conflict between measures of global warming on the earth's surface and in the atmosphere.

For years some global warming critics had pointed to the fact that satellite measurements had recorded very little warming in the lower atmosphere, while surface temperature readings indicated that the earth is heating up. Now the U.S. Climate Change Science Program, an interagency body, has concluded the two data sets match.

The report also concluded that humans are driving the warming trend through greenhouse gas emissions, noting in the official news release, "the observed patterns of change over the past 50 years cannot be explained by natural processes alone, nor by the effects of short-lived atmospheric constituents such as aerosols and tropospheric ozone alone."

## **RECENT, RAPID CLIMATE CHANGE IS DRIVING EVOLUTION OF ANIMAL SPECIES**

Rapid climate changes over the past several decades have led to heritable, genetic changes in animals as diverse as squirrels, birds and mosquitoes, according to University of Oregon evolutionary geneticists.

Writing in the "Perspectives" section of the June 9 issue of *SCIENCE*, William E. Bradshaw, professor of biology, and Christina Holzapfel, biology research associate, show that diverse animal populations have changed genetically in response to rapid climate change. These genetic changes are in response to altered seasonal events and not to the expected direct effects of increased summer temperatures.



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