



Letter from the Project Coordination...

A message from Bali:

In November, 2005, Parties to the United Nations Framework Convention on Climate Change (FCCC) agreed in Montreal on a 2-year period for the evaluation of accounting of reducing emissions from deforestation and degradation in developing countries (REDD) under the FCCC as a post-Kyoto mechanism. The goal of many of the countries supporting the REDD proposal is to initiate pilot programmes to assess the viability of different methodologies for mapping and monitoring deforestation and degradation. The GSE FM developed a new service in 2006 to contribute to this topical issue with a consortium of users and technical partners from Bolivia and Cameroon. The aim of the pilots is to establish baseline projections of emissions caused by deforestation, combined with regional projections of degradation nested in the wall-to-wall approach for the two countries.

The GSE FM REDD pilot cases were presented at the 13th FCCC Conference of Parties (COP13) in Bali, Indonesia in December 2007. The meeting was instrumental in endorsing a comprehensive process---the Bali Action Plan---to enable the full, effective and sustained implementation of "Policy approaches and positive incentives on issues relating to REDD."

The GSE FM presentation at COP13 received positive feedback from many stakeholders as well as the users from Cameroon and Bolivia. We also participated in several stakeholder meetings at the COP13 to co-ordinate our activities with other on-going programmes supported by UNEP, FAO, the German organization GTZ and the German Federal Ministry for Economic Cooperation and Development. Furthermore the GSE FM REDD case was one of the initiatives included within a REDD working group for the Congo Basin countries. Donor support has been sourced for the further development of the GSE FM REDD case from GTZ and the German Development Bank-KfW.

Several REDD workshops and sessions related to definition of terms, methodologies and policy frameworks will be held in 2008 as a lead up to the COP14 meeting in Poland where results of the pilots will be presented for further review.

Sharon Gomez, GAF-AG, Germany

GSE FM was present at

- ForestSAT2007 – Special side event on GSE FM, Montpellier, France, 5-7 November 2007
- Conference of Parties to the United Nations Framework Convention on Climate Change, Bali, December 2007

Future Events

- GSE FM Annual Review Meeting, EEA Offices, Copenhagen, January 2008
- GMES Network of Users, Kick-off meeting, Vienna, January 2008

For Publication and Editorial Matters Contact:
European Forest Institute
Secretariat, GSE FM UEB,

In this issue:

- Letter from the Project Coordination
- Past & Future Events
- Spotting the users: Forest operations and disturbances monitoring in United Kingdom and Russian Federation

**GSE FM
wishes you a
VERY HAPPY
NEW YEAR !!!**



Terraced rice paddies in Bali,
December 2007 (*photo:*
Sharon Gomez)



UKFC service case validation by User & Service Provider

By Douglas Knox, Forestry Commission, United Kingdom

As a GSE FM User the UK Forestry Commission (FC) has four strategic priorities for the development of remote sensing in UK forestry, which are agreed by the FC Executive Board. These are:

- Compliance monitoring (change detection for clear cutting and planting)
- Storm damage assessment
- Species discrimination broadleaf/conifer (eg for NIWT and surveys)
- Production forecast improvements especially for private sector

Some of these Forestry Commission User priority areas are beginning to be met (in part at least) by working with Metria of Sweden and making use of the forest monitoring services provided by GSE FM.

In August 2007 staff from the Forestry Commission and Metria held a two day meeting in the Northumberland area of England. This meeting allowed FC staff from England, Scotland and Wales to meet with Metria staff to gain a good understanding of the GSE FM service and the technology used. The meeting also allowed FC staff to establish how the use of remote sensing might be sustainably integrated into existing FC business processes over the longer term.

The meeting also involved a day of field visits to validate the results provided by Metria as the service provider. The forest monitoring results were validated using records and spatial data held by the Forestry Commission but also by making field visits to sites in both state managed and privately managed forests. The results were extremely interesting and highlighted some regulatory anomalies on the ground which the Forestry Commission can now investigate further with the forest managers concerned.



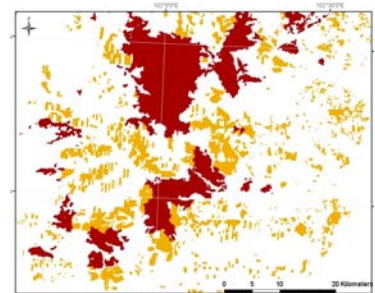
Colleagues of the Forestry Commission of Great Britain & Metria Miljöanalys of Sweden on a field visit to validate results, August 2007 (Photo: Douglas Knox)

Detection and Post-monitoring of Natural and Human Induced Forest Disturbances: The Russian Service Case

By Christian & Carolin Thiel, UNI Jena, Germany

Russia features the largest forestry resources in the world with about 22% of the world's forest. One of the most wooded regions of Russia is the district (Russian: Oblast) Irkutsk that comprises about 10% of Russian forested territory. About 82% of this Oblast is covered with boreal forests. Presently, all forest information is collected at a local level in periodical inventories every 10-15 years. Large changes in forest management due to legal and illegal logging as well as natural disturbances such as forest fires, insect outbreaks or wind damage are very common. Those short termed changes can not be sufficiently captured by the State Forest Service. Spaceborne Earth Observation techniques are suited to overcome these restrictions.

The GSE FM service case in Russia has a large influence on effective forest monitoring and inventory at regional scale. The provided products of this service case include a forest area map, a clear-cut/burned area map and a forest area change map. The forest area map is derived from recently acquired ASAR data. The generation of the other maps comprises archived LANDSAT TM data around year 1990. Specifications of the products require geometric accuracy of an RMS < 30 m and a minimum mapping unit of 1 ha. Both requirements can be fulfilled. The acceptability threshold of the thematic mapping accuracy is 90% for non-change maps and 85% for change maps, respectively. All products will be implemented into the forest inventory of the FA of GSNR and are produced within three years for regions of rapid change in the Irkutsk Oblast, comprising a total area of 200,000 km². In the first year an area of about 50,000 km² has already been processed, the service area will be extended by ~20% each year.



Subsection of clear-cut/burnt area map of year 2006, delivered to Forest Agency of Irkutsk in September 2007. Clear-cuts are shown in yellow, fires scars are shown in red.