

**Forest cover changes in mountainous regions
– drivers, trajectories and implications (FORECOM)
Opening conference, 6-8 March 2013, Kraków, Poland**

Objectives

FORECOM (<http://www.gis.geo.uj.edu.pl/FORECOM/index.html>) is a project awarded in the “Environment” pillar of the Polish-Swiss Research Programme (<http://www.swiss.opi.org.pl/>) and carried out by research teams from the Institute of Geography and Spatial Management (IGSM), Jagiellonian University, Poland, and Swiss Federal Research Institute for Forest, Snow and Landscape Research (WSL), Research Unit Landscape Dynamics.

FORECOM aims at improving the understanding of past, present and future forest cover changes in the Swiss Alps and the Polish Carpathians in the context of land use and climate changes. Over the past decades agricultural land in Europe has declined and forest area has expanded considerably. Recent trends of land abandonment have been most pronounced in marginal areas, for example in the mountains, like the European Alps and the Carpathians, where agriculture became economically inefficient resulting in a decrease in cropland or grassland area followed by an increase in forest cover. At the same time, the potential upper tree line has shifted upward as a consequence of global warming. Despite their importance, spatially accurate large-scale and long-term reconstructions of forest cover changes in the Swiss Alps and the Polish Carpathians so far have been missing for both mountain regions, and underlying driving forces of the forest cover change trends are still insufficiently understood.

The Opening Conference of the FORECOM project intends to:

- bring together scientists working on land use change in the mountain regions, especially in the Carpathians and in the Alps to pool expertise, identify synergies and complementarities, and to inform on the progress and goals of the FORECOM project;
- to identify good practices and recent key developments in various fields of Land Change Science, in particular remote sensing and change detection, historical cartography, land change modeling, global change and land use scenarios.

Date and venue

The Opening Conference of the FORECOM will take place between 6-8 March 2013, at the Institute of Geography and Spatial Management of the Jagiellonian University, 30-387 Kraków, Gronostajowa 7, Poland (see: <http://www.gis.geo.uj.edu.pl/FORECOM/contact.html>)

Registration information

We would like to invite scientists working in the Land Change Science to take part in the conference. **Participation is free of charge, yet the number of places is strictly limited.** The organizers reserve themselves a right to retain only the best applications. Applications of scientists actively involved in land use change research (in particular in mountain areas) will be preferred.

There is no conference registration form. The application should include:

1. the affiliation and contact address
2. information on current research interest
3. motivation to take part in the FORECOM opening conference
4. short abstract proposal of the oral presentation to be held at the conference (max. 500 words)

Please send the registration information via e-mail by 31st December 2012 to:

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The information on acceptance will be sent by 20th January 2013. The accepted oral presentations will be a part of the parallel workshop session. Oral presentations should not exceed 15 minutes.

Submitted abstracts will be formatted and compiled into an open-access pdf file (available at the project website).

Preliminary programme

Wednesday 6th March

18.15 – Registration and ice-breaker

Thursday 7th March

09.00 – 09.30 Conference opening and introduction to the FORECOM project (*Jacek Kozak, Institute of Geography and Spatial Management, Jagiellonian University, Poland; Urs Gimmi, Swiss Federal Research Institute for Forest, Snow and Landscape Research WSL*)

09.30 – 10.15 Key note lecture (*Martin Price, Centre for Mountain Studies, Perth College, UK*)

10.15 – 11.00 Coffee break

11.00 – 12.15 Long-term land use and land cover change in Central and Eastern Europe (*Volker Radeloff, University of Wisconsin, USA*)
Land use and land cover change in mountain areas: a remote sensing perspective (*Patrick Hostert, Humboldt University, Germany*)

12.15 – 13.15 Lunch

13.15 – 14.00 Land use and land cover change research in the Carpathians (*Tobias Kuemmerle, Humboldt University, Germany*)

14.00 – 15.30 Parallel workshop session 1

15.30 – 16.00 Coffee break

16.00 – 18.00 Parallel workshop session 2

19.00 – Short walk in the city and dinner

Friday 8th March

09.00 – 09.30 Parallel workshop session 3: towards wrap-up

09.30 – 10.30 Workshop group 1 & 2 wrap-up

10.30 – 11.00 Coffee break

11.00 – 12.00 Workshop group 3 & 4 wrap-up

12.00 – 12.30 Closing ceremony

12.30 – 13.30 Lunch

Layout of parallel workshops

We plan that each workshop will gather from 7 to 12 participants:

- 1-2 experts invited for the input talk (30 min.)
- 1-2 session leaders (FORECOM)
- 3-5 guests with presentations 15 min. each
- 2-3 participants from host institutions

Each workshop topic will be discussed in 3 sessions:

- Session 1 (Thursday, 14.00-15.30): expert's keynote + discussion, 1-2 presentations
- Session 2 (Thursday, 16.00-18.00): 2-3 presentations + discussion
- Session 3 (Friday, 9.00-9.30): towards wrap-up

The invited experts will outline state-of-the-art in the field and new trends that could be discussed in workshop groups.

Workshop leaders (FORECOM project team members) will lead discussion and report outcomes of the workshop during session 3 (Friday).

Workshop topics

1. Land use and land cover change reconstruction based on historical maps (opportunities and challenges, automatic feature extraction, creating homogenous time series from heterogeneous sources)
2. New remote sensing approaches to identify forest succession processes on former agricultural land (focus on LIDAR)
3. Drivers of land use and land cover change and developing land use change scenarios
4. Land use and land cover change and climate effects on ecosystem services (biodiversity, carbon sequestration)