



**International Geographical Union
COMMISSION ON LAND USE/COVER CHANGE**

NEWSLETTER

No 11

May 2009

IGU LUCC STEERING COMMITTEE 2008-2012

A new IGU LUCC steering committee was created after the Tunis IGC 2008 meeting. Current committee members are:

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NEW IGU LUCC WEBSITE

Due to some technical problems with former web hosting and old website, there was created a new IGU LUCC website
– <http://www.luccprague.cz/>

There you can find up-to-date information about IGU LUCC commission activities, planned conferences and meetings,
etc. E-mail address of IGU LUCC secretariat remains the same – igu.landuse@gmail.com.

Jiří Stockmann, Charles University in Prague, jiri.stockmann@gmail.com

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FORTHCOMING MEETINGS

IGU/LUCC NORTH EAST ASIA CONFERENCE 2009

Pacific Institute of Geography, Far Eastern Branch of the Russian Academy of Sciences, Vladivostok, Russia in cooperation with IGU Land Use/Cover Change (LUCC) Commission holds **IGU/LUCC North East Asia Conference 2009** - Land cover and land use changes in North East Asia: problems of sustainable nature management. Conference will be held on **September 6 – 12 2009** in Vladivostok, Russian Federation.

Main Topics of the Conference:

- Theoretical and methodological problems of land use in the context of sustainable development
- Problems of land use in the globalizing and changing World
- Ecological consequences of long-term land cover/land use dynamics in the separate regions of the World
- Natural resources and sustainable land use in North East Asia
- Sustainable land use and food security
- Land cover and land use legends: problems of unification
- Regional development of North East Asia

Programme of the Conference:

6th September (Sunday) – arrival in Vladivostok

7th September (Monday) – registration of participants, Opening, Plenary sessions, Symposium dinner

8th September (Tuesday) – Plenary sessions, Poster sessions, Discussion of results and Closing ceremony, City sightseeing

9th September (Wednesday) – Marine excursion on Peter the Great Bay

10th September (Thursday) – 12th September (Saturday) – Field excursion

13th September (Sunday) – Departure from Vladivostok

More information on <http://509.tig.dvo.ru/lucc.htm>.

(source: Conference official website)

SECOND INTERNATIONAL CONGRESS ON THE GEOGRAPHY OF EUROPE 2009

EUGEO 2009, the second Congress on the Geography of Europe, attracts geographers and related professionals from around Europe. EUGEO meeting forum stimulates discussion about research, education, accomplishments, and developments in geography.

The EUGEO Congress 2009 will be held on **August 13-16 in** Bratislava, Slovakia, a city with a unique cultural, social and economic history. Bratislava, Capital of Slovakia, enjoys a specific location on the borders with Austria and Hungary. Today, Bratislava is a thriving and growing Central European metropolis amazingly reflecting the spectacular development of this region and Slovakia as well.

Congress theme of ‘the Geography of Europe’ should run through all the congress topics.

This could include others' views of Europe and Europe's views of others.

- Geographers and geographical communities/associations – their role, work and influence/relevance
- Geography and ethics – rights, values, justice, responsiveness, care, aid
- Geographical analyses and synthesis – thinking on concepts, approaches, methods, techniques and tools
- Post-Socialism/Post-Communism in geographical research
- Teaching geography - educational geography perspectives
- World by European geographers
- Geographical maps, Cartography, Geoinformatics, Remote Sensing
- Geographical Information Sources and Spatial Information Infrastructures
- Geomorphological processes, modelling, mapping and geomorphometry
- Geography focusing on diversity and relationships
- Natural/technical hazards and risks
- Geographical research in protected areas and Biosphere Reserves (MaB)
- Sustainable regional, urban and rural development
- **Land use/land cover change**
- Geography and economic activities
- Transport networks, information communication technologies, nodes and flows
- Geography of consumption - leisure, tourism, hospitality, retailing/shopping
- Changing cities and their hinterlands
- European population - demographic future, migrations, health
- Regional/local development and European integration
- Poverty and wealth
- Does difference matter? Gender, cultures, religions, ethnicities in geographical research
- Power, democracy, representation, governance in managing territories
- Borders and cross-border cooperation

More information on <http://gis.fns.uniba.sk/eugeo2009/>

(source: Congress official website)

IGU REGIONAL CONFERENCE TEL AVIV 2010

International Geographical Union in cooperation with The Israeli National Commission for Geography will held IGU regional conference Tel Aviv 2010 – Bridging Diversity in a Globalizing World. The conference will take place in Tel Aviv on **July 12-16 2010**.

IGU LUCC commission will organize a pre-conference meeting and a field trip, similar to that in Tunis 2008 on the International Geographical Congress.

Information about IGU Conference can be found at <http://igu2010.com/>. Information about IGU LUCC activities, pre-conference meeting and field-trip will be specified by IGU LUCC secretariat (igu.landuse@gmail.com) and at IGU LUCC website www.luccprague.cz.

Jiří Stockmann, Charles University in Prague, jiri.stockmann@gmail.com

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LAST MEETINGS

31ST IGC TUNIS 2008

IGU LUCC commission activities were divided into two parts during International Geographical Congress in Tunis 2008: (1) pre-congress meeting including a field trip and (2) a scientific program during congress.

Pre-congress meeting was organized by IGU LUCC steering committee together with local organizers. Along with discussions about LUCC agenda and forthcoming activities in 2008-2012, several interesting papers were presented, followed by a fruitful discussion. The meeting continued with a 3-days excursion in areas where different Tunisian land use problems was presented. Thanks to excellent comments by local researchers, there were analyzed e.g. problems of traditional Tunisian agriculture and problems connected with modernised economy as well. Thanks to the local organizers, the excursion and meeting were very well organized; all participants of the pre-congress meeting were very satisfied.

After the pre-congress meeting, activities of IGU LUCC commission continued during the congress. There were presented 24 papers in 5 sessions:

session 1 (session chair: Y. Himiyama): LUCC at micro-regional level,

session 2 (session chair: D. L. Carr): Historical land-use,

session 3 (session chair: D. Balteanu): LUCC and environment,

session 4 (session chair: R.B. Singh): LUCC and the population pressure,

session 5 (session chair: S. Ganzey): Application of GIS and remote sensing in LUCC.

Many scholars from all over the World presented and discussed their papers and they significantly contributed to a high quality of all IGU LUCC activities.

Ivan Bičík , Charles University in Prague, bicik@natur.cuni.cz

PECSRL 2008

PECSRL (Permanent European Conference of the Study of the Rural Landscape) was organized by Lusofónia University in Lisboa (Portugal) between August 31 and September 7 2008. The conference was held for the 23rd time. 350 scholars from different professions involved in discussions on development of rural landscape in the dynamic global World participated in the event. Organization of the conference was excellent. The participants had an opportunity to spend two days in Lisboa, two days in Óbidos, and to attend a one-day field trip). All researchers expressed a big interest into the plenary sessions and about forty thematic sessions. There was enough time both to present the papers and to discuss it consequently. Surprising and very positive was a huge participation of young researchers. Quality of papers there was generally higher than in Tunis.

In my opinion, we should have paid more attention to this conference because it was a particularly beneficial forum. Next, 24th, conference will take place in Latvia 2010.

Ivan Bičík , Charles University in Prague, bicik@natur.cuni.cz

LUCC REGIONAL MEETING IN PRAGUE 2008

IGU LUCC regional Prague meeting – on November 27 to 30 2008 – was organized by IGU LUCC commission in cooperation with Charles University in Prague (Faculty of Science).

A seminar on November 28 constituted the main part of this meeting. It was visited by both foreign (prof. Feranec, Slovakia, prof. Balteanu, Romania, prof. Ganzey, Russia) and Czech researchers. A fruitful discussion after each paper resulted in discussions about including these papers into Atlas of World Land Use, Volume V.

Besides the main seminar, there were also organized three business meetings with members of the steering committee,

and one excursion. During these meetings, there were discussed organizations of commission activities for next four year. The agreed process will be more specified during the EUGEO Bratislava Conference (August 13 to 16 2009), where a commission meeting for European members will be organized. Support and guarantee of this seminar will be realized by prof. Feranec. There was also discussed the structure and content of IGU/LUCC North East Asia Conference 2009 in Vladivostok, Russia. Conferences and meeting for the year 2010 were discussed as well. There are two planned meetings in 2010 – IGC congress in Tel Aviv (the steering committee will organize a pre-congress meeting for IGU LUCC members); the second meeting in 2010 will take place in Bucharest, Romania. All information will be placed on LUCC commission website.

One of the main activities of the commission – publishing next volumes of the Atlas of World Land Use – was broadly discussed and as a result, there were scheduled next procedures to each atlas paper. Some of the papers already obtained were recommended to enlargement of graphical sections (D. Carr, Santa Barbara, USA, E. Milanova, Moscow, Russia). Papers from this Prague seminar were agreed to be published in the following structure: S. Ganzej: East Asia Land Cover, D. Balteanu: Problems of land use and land cover in Romania, J. Feranec: CORINE: Evaluation of land cover in Europe, P. Mareš & I. Bičík: Land use development on different spatial scales, J. Kabrda & I. Bičík & J. Najman: Iron Curtain and land use in Europe. Case study: Czechia borders.

There is also a presumption that there will be published one monothematic publication from each meeting. These publications will be published in prestige publishing houses or at least in geographical prestige magazines. All these activities will be collectively named: **Project of investigation and publication activity of IGU/LUCC in the period 2009-2012.**

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PUBLICATIONS

LUCC ATLAS

On its meeting, IGU LUCC steering committee has accepted the idea of continuation of LUCC Atlas (“Land Use / Cover Changes in Selected Regions in the World”) series. Prof. Himiyama had published three volumes in 2001-2005, and he had agreed with its continuation as a IGU LUCC activity. Atlas of World Land Use, vol. V is going to be published in 2009. Therefore, we call on all colleagues who focus on land use and land cover research to participate in Atlas publishing. All necessary information about forthcoming volumes will be published on IGU LUCC website. If you are interested, you can also use the e-mail address of steering committee members, or you can write to Mr. Jan Kabrda (kabrda@seznam.cz) who is the technical editor of the 5th volume of the atlas series.

Ivan Bičík, Charles University in Prague, bicik@natur.cuni.cz

ATLAS OF LANDSCAPE OF THE CZECH REPUBLIC

The Czech Ministry of Environment, in a close cooperation with many other Czech scientific institutions and universities, is preparing an Atlas of landscape of the Czech Republic. A team of geographers from Faculty of Sciences, Charles University in Prague, led by Ivan Bičík (IGU LUCC chair), participates in creating the atlas, using the Database of long-term land use changes in Czechia (1845 – 2000). Here, some interesting results are presented. They are based on a complex method, called “typology of land use development”.

The map (fig. 1) shows typology of land use changes between the years 1948 and 2000. Three aggregate categories of land use are considered – agricultural land (AL / ZPF in Czech), forested areas (FA / lesy in Czech) and “other areas” (OA / jiné plochy in Czech). Together, these three categories constitute 100 % of area of each of the 8.903 “Basic Territorial Units” (BTUs / ZÚJ in Czech), depicted in the map. The colours represent various combinations of increases /decreases of these three categories in the studied time period (top – down in the legend):

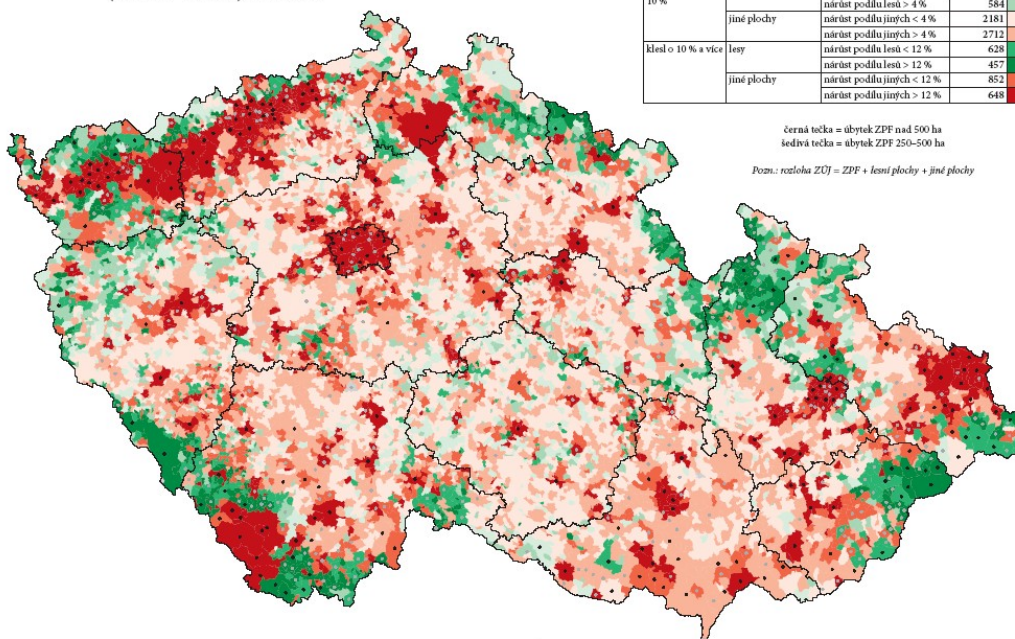
- grey: increase of AL (21 BTUs)
- lightest green: decrease of AL by less than 10 %, FA increased relatively faster than OA, increase of FA by less than 4 % (827 BTUs)
- light green: decrease of AL by less than 10 %, FA increased relatively faster than OA, increase of FA by more than 4 % (584 BTUs)
- light pink: decrease of AL by less than 10 %, OA increased relatively faster than FA, increase of OA by less than 4 % (2.181 BTUs)
- pink: decrease of AL by less than 10 %, OA increased relatively faster than FA, increase of OA by more than 4 % (2.712 BTUs)
- green: decrease of AL by more than 10 %, FA increased relatively faster than OA, increase of FA by less than 12 % (628 BTUs)
- dark green: decrease of AL by more than 10 %, FA increased relatively faster than OA, increase of FA by more than 12 % (457 BTUs)
- dark pink: decrease of AL by more than 10 %, OA increased relatively faster than FA, increase of OA by less than 12 % (852 BTUs)
- red: decrease of AL by more than 10 %, OA increased relatively faster than FA, increase of OA by more than 12 % (648 BTUs)
- black dot: decrease of AL by more than 500 hectares
- grey dot: decrease of AL by 250 to 500 hectares

Typologie vývoje krajiny podle změn jejího využití (1948–2000) var. A

podíl ZPF	co více rostlo (rel.)	míra růstu podílu	počet ZÚ barva
stoupil			21
klesl o méně než 10 %	lesy	nárůst podílu lesů < 4 %	827
		nárůst podílu lesů > 4 %	584
	jiné plochy	nárůst podílu jiných < 4 %	2181
		nárůst podílu jiných > 4 %	2712
klesl o 10 % a více	lesy	nárůst podílu lesů < 12 %	628
		nárůst podílu lesů > 12 %	457
	jiné plochy	nárůst podílu jiných < 12 %	852
		nárůst podílu jiných > 12 %	648

černá tečka = úbytek ZPF nad 500 ha
šedivá tečka = úbytek ZPF 250-500 ha

Pozn.: rozloha ZÚ = ZPF + lesní plochy + jiné plochy



1 : 2 000 000



The map presents a period of significant modernization of the Czech agriculture (mechanisation, chemisation, etc.), but also of radical institutional changes. While the first era (1948 – 90) is typical of substantial changes connected with “socialization” of agriculture (nationalisation, creation of large enterprises, plot amalgamation, etc.) and other similar processes, the second period (1990 - 2000) is characterized by “de-socialization” (restitution of property rights, privatization, transformation). These processes might have brought contradictory land use tendencies in some BTUs in the two monitored periods.

However, most of the trends were similar – at least in their spatial distribution and general pattern. The decrease of agricultural land was general and common for most of the area of the Czech Republic. On the one hand, BTUs in favourable natural and/or socio-economic conditions – especially in metropolitan areas and mining basins – witnessed a massive growth of “other areas” (built-up and other developed areas, unused land, infrastructure, mines, bare land, etc.), connected with urbanisation and industrialisation in the first time period, and with suburbanisation in the second one. On the other hand, BTUs in mountains and peripheral regions saw extensification of land use (land abandonment, afforestation in the first time period, grassing-over in the second one). Land use changes were rather weak in traditional “inner peripheries”, e.g., in the Bohemian-Moravian Highland.

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