# **IGU-LUCC Conference 2010**



# "Land Use and Land Cover Changes in a Globalised World"

June 28 – July 1, 2010, Czech Republic

Second circular

#### Organisers and contacts

#### **IGU-LUCC Commission**

Faculty of Science, Charles University in Prague, Czech Republic

Faculty of Science, J.E. Purkyně University in Ústí nad Labem, Czech Republic

Conference Committee: Ivan Bičík (chair of the IGU-LUCC Steering Committee), Jana Kozáková,

Jan Kabrda, Pavel Raška, Tomáš Oršulák

Web pages: <a href="http://www.luccprague.cz/">http://www.luccprague.cz/</a>

E-mail: kabrda@seznam.cz

#### **Topics**

- 1. Land use transformations in a globalised world
- 2. Current landscape changes
- 3. Agricultural landscape in Central Europe during the period of transformation
- 4. Historical changes of land use and their driving forces
- 5. Regional differentiation of LUCC on various spatial levels
- 6. Impacts of agricultural and environment policies on land use
- 7. New functions of rural space
- 8. Suburbanisation and its impacts on rural landscape

#### Term

June 28 (Monday) – July 1, 2010 (Thursday)

#### Place

Conference venue: Faculty of Science, Charles University in Prague, Albertov 6, 12843 Prague 2, Czech Republic (for more information see <a href="https://www.natur.cuni.cz/">https://www.natur.cuni.cz/</a>)

Field Excursion (optional): North Bohemia (J.E. Purkyně University in Ústí nad Labem, Krušné hory Mountains, North-Bohemian brown-coal basin, České středohoří Mountains, Poohří – Ohře River table) – see photos in Appendix IV

#### Important dates

April 30, 2010: deadline for final application, abstract submission and payment

May 31, 2010: third circular

#### About the conference

The conference will be focused on land use, landscape and countryside in Europe. However, any papers not concerning Europe are appreciated too. A paper has to fit one of the topics above. Participants can either hold an oral presentation of their papers, or display their posters. Posters will be displayed during the first two days of the conference; however, no special poster-session is intended. Of course, it is possible to participate in the conference without presenting a paper or displaying a poster.

An Abstract Book will be given to the participants at the registration. When the conference is over, the papers will be published in Proceedings on a CD-ROM (peer-reviewed and with an ISBN). The papers will be collected via e-mail only after the conference. These CD-ROM Proceedings will be published during the year 2011.

After the conference, the authors will also have an opportunity to display their presentations and posters in an electronic form on the IGU LUCC web-pages (<a href="http://www.luccprague.cz/">http://www.luccprague.cz/</a>). If you wish to put your presentation on the web, give it to us in the PDF or PPT format on a CD-ROM during the conference (posters should be in high-res).

Please, send us final application, an abstract of your paper/poster and payment until **April 30**, 2010 (see details bellow).

#### **Presentations**

A presentation of your paper should not exceed 15 minutes (30 minutes for invited key-note speakers). A data projector will be available. Use PDF or PPT formats for the electronic version of your presentation.

#### Abstract submission

Abstracts must be prepared according to the instructions below and submitted by e-mail to <u>kabrda@seznam.cz</u>, as an attachment in the DOC format (for MS Word), until **April 30**, 2010. An example of an abstract is attached at the end of the circular (Appendix III).

Length of abstract: Max 1.800 characters (incl. spaces) with no figures.

Heading:

Title – brief, in 12/bold/Times New Roman/capital letters.

Author(s) – full first name, middle names and surname in 12/bold/small capital letters/Times New Roman (presenting author's name underlined).

Name(s), address(es) of institution(s) and e-mail(s) – in 10/italics/Times New Roman.

Abstract body: Abstract should be written in Times New Roman, 12, single-spaced.

#### Preliminary programme

#### June 27 (Sunday)

Arrival of participants to Prague

#### June 28 (Monday)

(Faculty of Science, Charles University in Prague, Albertov 6, 12843 Prague 2)

09:00 – 10:00: registration of participants

10:00 – 10:30: opening of the conference (Bohuslav Gaš – dean of the Faculty, Ivan Bičík – chair

of the IGU-LUCC Steering Committee)

10:30 – 12:00: three invited keynote speakers

12:00 – 13:00: light lunch

13:00 – 15:00: conference session, block I

15:00 – 15:30: coffee break

15:30 – 17:30: conference session, block II

18:00 – 22:00: conference dinner, welcome party (optional)

#### June 29 (Tuesday)

(Faculty of Science, Charles University in Prague, Albertov 6, 12843 Prague 2)

09:00 – 12:00: conference session, block III

12:00 – 13:00: light lunch

13:00 – 16:00: conference session, block IV

16:00 – 16:30: coffee break

16:30 – 18:00: plenary session of the IGU-LUCC Commission

#### June 30 (Wednesday)

(field excursion to North Bohemia, day I; see photos in Appendix IV)

09:00: departure from Prague to Ústí nad Labem in our own bus

10:00 – 12:00: excursion to J.E. Purkyně University in Ústí nad Labem (http://www.ujep.cz/en/welcome.html)

12:00 - 13:00: light lunch

13:00 – 18:00: excursion to the Krušné hory Mountains and the České středohoří Mountains

18:00: arrival to the town of Úštek, accommodation in a hotel (<a href="http://www.hotelpatriot.cz">http://www.hotelpatriot.cz</a>),

dinner

#### <u>July 1 (Thursday)</u>

(field excursion to North Bohemia, day II; see photos in Appendix IV)

09:00: departure from Úštěk

09:00 – 18:00: excursion to the České středohoří Mountains, North-Bohemian brown-coal basin and Poohří (Ohře River) table, with a light lunch, departure back to Prague

18:00: arrival to Prague

The excursion includes field-trips. Therefore, we recommend participants to take the standard walking outdoor equipment.

#### July 2 (Friday)

Departure of participants from Prague

#### Accommodation

If you wish, we can arrange accommodation for you in **Park Inn Hotel** in Prague. The hotel is situated only ca 100 metres from the premises of the Faculty where the conference will take place and it is also close to several tram-stops from where you can get to the city centre in about 20 minutes. For more information about the hotel, see <a href="http://www.prague.parkinn.cz/">http://www.prague.parkinn.cz/</a>.

The prices of accommodation (per room per night) in the hotel are shown in the table bellow. You can choose either a one-bed room or a double-bed room:

Term	One-bed room	Double-bed room
April 29 – June 30	1.990 CZK	1.990 CZK
July 1 – October 3	1.560 CZK	1.560 CZK

No meals are included in the prices. We might get some discount depending on the final number of accommodated participants. Please, if you want us to arrange this accommodation for you, mark your choice in the Final Application Form (one-bed room for 1.990 / 1.560 CZK per participant per night; or a double-bed room for 995 / 780 CZK per participant per night).

The accommodation will be paid by the participants individually at the hotel (this is the easiest way for us given the relatively low number of accommodated participants – perhaps not more than 40 – and the fact that our institution would take significant "overheads" if we tried to arrange the payment centrally via our bank account).

#### **Prices**

The conference costs consist of the following items:

1) Conference fee (compulsory): either 1.500 CZK (includes the abstract book, light lunches and coffee breaks on June 28 and 29, organisation and other expenditures, and the CD-ROM Proceedings after the conference); or 1.800 CZK (includes also the conference dinner and welcome party on June 28).

- 2) Field excursion fee (optional): 2.000 CZK (includes one day accommodation in Úštěk, transport by our own bus, two light lunches, one breakfast and one dinner, excursion guide and other expenditures).
- **3) Accommodation in Prague:** see above. It will be paid by the participants individually at the hotel.
- **4)** Other meals than those listed above (ca 300 CZK per day): paid by the participants individually.

Note: 1 EUR = ca 27 CZK.

#### Payment details

The conference fee (1.500 or 1.800 CZK) and excursion fee (2.000 CZK, for those who want to take part in the excursion) must be paid by **April 30**, 2010. The only possible form of payment is a bank transfer:

#### • Bank draft in Czech crowns (CZK) or US dollars (USD):

Bank name: Komerční banka, a.s.

Bank address: Václavské nám. 42, 110 00 Praha 1, Czech Republic

Account number: 38533021/0100

IBAN: CZ76 0100 0000 0000 3853 3021

SWIFT: KOMBCZPP

Beneficiary: Univerzita Karlova v Praze, Přírodovědecká fakulta Beneficiary address: Albertov 6, 128 43 Praha 2, Czech Republic

Detail of payment: 910 602 and your name

#### • Bank draft in Euro (EUR):

Bank name: Komerční banka, a.s.

Bank address: Václavské nám. 42, 110 00 Praha 1, Czech Republic

Account number: 34956-921457021/0100 IBAN: CZ25 0100 0349 5609 2145 7021

SWIFT: KOMBCZPP

Beneficiary: Univerzita Karlova v Praze, Přírodovědecká fakulta Beneficiary address: Albertov 6, 128 43 Praha 2, Czech Republic

Detail of payment: 910 602 and your name

It must be ensured that all bank charges are for the account of the sender (OUR). Please, add the name(s) of the participant(s) on all bank documents and notify the organizers by e-mail on the details of payments when the transfer is made (we will send you a reply once the payment is visible on our account).

#### Visa

The non-EU participants may require visa to enter the Czech Republic. The conference fee does not cover visa, and the responsibility of obtaining visa lies only on the participants. We advise you to contact our local embassy or Foreign Office in advance. We can send an invitation letter approved by local authorities to those participants who need it to obtain visa – please, let us know via e-mail if you need it.

## Appendix I: Final Application Form

First name, surname							
Institution/Address							
E-mail							
Oral presentation – title:							
Poster – title:							
Conference fee including a dinner on June 28 (+ 300 CZK) YES NO							
Field excursion to North Bohemia (June 30, July 1)			YES	NO			
Accommodation in Park Inn Hotel in Prague							
27/28 June	28/29 June	29/30 June	30 June / 1 July *	1/2 July			
3				3 3			
(please, mark with $X$ th	(please, mark with X the nights for which you need an accommodation)						
* accommodation in Úštěk during the field-excursion							
Accommodation in Park Inn Hotel in Prague (mark your choice):							
One-bed room (1.990 / 1.560 CZK per night per person)							
Double-bed room (995 / 780 CZK per night per person)							
Bouble sed from (770 / 700 GETT per inght per person)							
Vegetarian	YES	NO					
Other requests or requirements:							

Please, complete and mail this form to <u>kabrda@seznam.cz</u> until **April 30, 2010.** We will confirm by e-mail that we have received your application.

#### Appendix II: Preliminary list of participants and papers (as of February 28, 2010)\*

ARIS PONIMAN, HARTONO, SUPRAJAKA (National Coordinating Agency for Survey and Mapping, Indonesia): Land use changes identification for study of the agricultural land. Fragmentation model in East Java Province, Indonesia.

BRŮNA, J. (Charles University in Prague, Czech Republic): Modelling of land cover change in abandoned landscape using time series of aerial photography.

CARR, D. L. (University of California, Santa Barbara, California): Population, Agriculture, and Land use/cover change in Guatemala: Evidence from multi-spectral time series remote sensing imagery and census data.

DAVIS, J. (University of California, Santa Barbara, California): Land Use/cover change in Highland Guatemala following International Migration and Remittances.

FERANEC, J. (Slovak Academy of Sciences, Slovakia): Artificial areas spreading in Slovakia 2000-2006 using CORINE land cover data.

FRANK, E. (University of California, Santa Barbara, California): Climate risk, coffee, and corn: Small farmer adaptation to climate change and implications for land use and land cover change.

GABROVEC, M. (Geografski inštitut Antona Melika ZRC SAZU, Republic of Slovenia): Slovenia: the less changed rural landscape in central Europe since 19th century?

GANZEY, K. (Pacific Institute of Geography FEB RAS, Russia): Landscapes of the zone "ocean-continent" on Far East of Russia.

GANZEY, L. (Pacific Institute of Geography FEB RAS, Russia): Grasslands of natural and anthropogenic origin on the South Kuril Islands (North-Eastern Asia). (with Razzhigaeva N.G. and Mokhova L.M.)

GANZEY, S. (Pacific Institute of Geography FEB RAS, Russia): Driving forces and land use features in the Southern part of the Russian Far East in the beginning of the 20th century.

GEIST, H. (University of Aberdeen, United Kingdom): The collapse of tobacco farming in Europe: reality and myths.

JANSKÝ, B. (Charles University in Prague, Czech Republic): Land use changes influence on sedimentation dynamics in the Mladotice Lake (western Czechia).

KABRDA, J. (Charles University in Prague, Czech Republic): Changing regional distribution of grasslands in the Czech Republic in the years 1960 – 2010.

KOPECKÁ, M. (Slovak Academy of Sciences, Slovakia): Arable land utilization in Slovakia and Bulgaria during the transformation period. (with Vatseva, R., Feranec, J., Ot'ahel', J. Stoimenov, A., Nováček, J.)

KOROS, W. (International Institute for Geo-Information and Earth Observation Science (ITC), The Netherlands): Ontology Mapping for Geoinformation Integration-(Use case-Land Cover/ Use).

KOWE, P. (University of Twente, The Netherlands): Quantitative measures of urban land cover change: The case of Sancaktepe district of Istanbul metropolitan city, Turkey.

KOZÁKOVÁ, J. (Charles University in Prague, Czech Republic): Influence of land use changes on the provision of ecosystem services in the Cezava region.

KRASNOYAROVA, B., SHARABARINA, S. (Institute for Water and Environmental Problems SB RAS, Russia): Post soviet processes of transformation land use system in Siberia.

KUPKOVÁ, L. (Charles University in Prague, Czech Republic): From cadaster to raster unit - transformation of Czechia long term land use dataset.

KURZ, P. (Land&Plan, Austria): Hedges in alpine landscapes – Indications of historical and current changes in agricultural land-use and landscape.

MARJANOVIČ, M. (Palacky University in Olomouc, Czech Republic): Mutual impacts between mass movements and land use.

MILANOVA, E. (Lomonosov Moscow State University, Russia): LUCC different spatial levels study: cognitive and practical value.

MRÁZKOVÁ, H. (Mendel University Brno, Czech Republic): Forest management capacity in South Moravia region in long-term perspective.

OPRŠAL, Z. (Palacky University in Olomouc, Czech Republic): Historical changes in land use in three selected cadastres in Moravia.

OŤÁHEĽ, J. (Slovak Academy of Sciences, Slovakia): Dynamics and stability of land use: analysis on the basis of the natural landscape and CORINE land cover data. (with Feranec, J., Husár, K., Kopecká, M., Nováček, J.)

PERLÍN, R. (Charles University in Prague, Czech Republic): The role of public administration in LUCC.

PONDĚLÍČEK, M., ŠILHÁNKOVÁ, V. (TIMUR Prague, University of Pardubice, Czech Republic): Land Use Changes and Urban Dynamics. How to Measure?

POSOVÁ, D. (Charles University in Prague, Czech Republic): Growth of residential suburban settlements and its impact on spatial pattern of landscape.

RAŠÍN, R. (Charles University in Prague, Czech Republic): Landscape memory in Czech-Austrian borderland.

RYPLOVÁ, R. (University of South Bohemia, Czech Republic): Trees and their volatile organic compounds emission - an important factor for land use transformation in Czech Republic (poster).

SPILKOVÁ, J. (Charles University in Prague, Czech Republic): New Retail Development and Land Use Changes on the Urban Fringe of Prague.

SUTER, L. (University of California, Santa Barbara, California): Predicting cattle adoption on the agricultural frontier: Factors influencing agricultural extensification in Guatemala's Maya Biosphere Reserve.

VEGA, A. (University of California, Santa Barbara, California): Conservation planning using land use/cover change and biodiversity distribution: A case study of Michoacán, Mexico.

VEPŘEK, K. (Czech Technical University in Prague, Czech Republic): Land use of Czech towns in last 40 years.

VOROTNIKOV, A. (State University Of Land Use Planning, Russia): Land use planning in the Republic of Belarus.

<sup>\*</sup> titles of papers received later were not included in this list; but they were accepted, of course

### Appendix III: Abstract - example of layout

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# SPATIAL STRUCTURE OF AGRICULTURAL LAND USE IN THE CZECH REPUBLIC

#### Jan Kabrda

Charles University in Prague, Faculty of Science Department of Social Geography and Regional Development Albertov 6, 128 43 Praha 2 kabrda@seznam.cz

The objective of my presentation is to assess spatial structure of agricultural land use (SALU) in the Czech Republic. I did this study for Czech territorial units at two hierarchical levels and for different time horizons: for (i) districts (n = 77, average area of 1.020 km sq.) for the years 1960, 1970, 1980, 1990, 2000 and 2008; and for (ii) "basic territorial units" (BTU's, n = 8.903, average area of 8,9 km sq.) for the years 1845, 1948, 1990 and 2000. To assess SALU, I adopted a quantitative approach using two indicators – share of agricultural land on total area (SAGL) and share of arable land on agricultural land (SARL). Their combination, based on median values, leads to a classification of the territorial units into four types of SALU: intensive (high both SAGL and SARL), sharply intermediate (low SAGL, high SARL), moderately intermediate (high SAGL, low SARL) and extensive (low both SAGL and SARL).

I found that each SALU type creates compact zones lying in specific natural conditions. The intensive type occupies lowlands and lower highlands whereas the extensive type is found in mountains and higher highlands. The two intermediate types create a transition, but the pattern of their occurrence is less obvious, compact and stable. During the development, the occurrence of intermediate types was decreasing, and all SALU types tended to separate spatially to create more compact zones. It was a result of modernisation of Czech economy – particularly of agriculture, and of consequent growth of regional specialisation and division of labour.

Appendix IV: Where the Field Excursion is going to take place



Brown-coal mine in North Bohemia

(source: <a href="http://geologie.unas.cz">http://geologie.unas.cz</a>)



Landscape reclamation / restoration after brown-coal mining

(source: <a href="http://www.dts-as.cz">http://www.dts-as.cz</a>)





Abandoned agricultural land and the "new wilderness" (source: authors)



Centre of 3D Modelling and Virtual Reality, J.E. Purkyně University in Ústí nad Labem (source: <a href="http://geography.ujep.cz/geo\_s/3dlab.html">http://geography.ujep.cz/geo\_s/3dlab.html</a>)



The  $\bf D8$   $\bf Highway$  (Prague – Ústí nad Labem – Dresden)

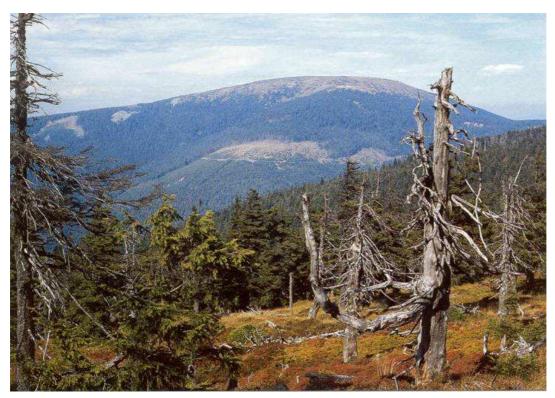
(source: <a href="http://www.dalniceza20let.cz">http://www.dalniceza20let.cz</a>)







The town of **Úštek** – the Urban Monuments Reservation area (source: <a href="http://mesto-ustek.cz">http://mesto-ustek.cz</a>)



Krušné Hory Mountains (source: <a href="http://www.sustainable.cz">http://www.sustainable.cz</a>)



České středohoří Mountains (source: <a href="http://data.czechtourism.com">http://data.czechtourism.com</a>)