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LUCC in East Central and Southeast Europe post-communist countries from 1960s to the end of the 20th century and its historic-geographical roots

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Abstract

This article assesses and compares Land Use changes in eastern regions of Europe: East Central Europe (ECE) and South East Europe (SEE). This part of the continent has to a certain extent common historical experience: multinational empires, ethic nationalism, peripheral position to markets and the communist experiment within 1940s–1980s. All these developments, complemented by specific environmental characteristics, different from each other, have affected the evolution of Land Use structure over the last fifty years. Considerable differences in LU structure of SEE and ECE had existed undoubtedly already in pre-war period. Here we try to on the basis of FAO LU database reveal how geographical and historical contexts shaped Land Use structural changes in both regions and led to important distinctions.

Key words: Land Use, East Central Europe, Southeast Europe, Communism, Transformation, 1960s–2000s

1. Introduction

Former communist Eastern European regions – East Central Europe (abbr. ECE) and Southeast Europe (abbr. SEE) – have experienced common historical destiny. The First World War marked the end of the centuries-long period of multinational empires, which were substituted by newly constituted national states. However, the epoch of independence was rather short-lived and during and after the Second World War both regions became a part of the Soviet bloc and their sovereignty was subsequently considerably limited. Installation of centrally planned economy (CPE) and enforced orientation towards the socialist countries market, represented by COMECON, created in both regions almost identical conditions for intensive Land Use changes.

The core of the historic divergence of East Central Europe and the Balkans from western Europe and from each other lies in its geographical position, which has casted a profound effect on the historical evolution of specific forms and conceptions of Christianity (Orthodox in SEE), feudalism (second serfdom in ECE), and nationhood (illiberal ethnic nationalism), which had developed in the context of multinational imperial policies in both SEE and ECE). Furthermore, the development of asymmetrical

"core-periphery" relations between western and Eastern Europe was significantly strengthened by the late modernization and consequently delayed start of Industrial Revolution (IR) in the latter (Bideleux, Jeffries 2007). All these factors undoubtedly affected the evolution of the LU patterns in both regions.

Nonetheless, Eastern as well as Western Europe has never been an absolutely homogenous entity. Regardless all just mentioned similarities, societal driving forces influencing the developments of the Land Use structure in both regions have often followed divergent trajectories. Although these diverse tendencies might be to certain extent ascribed to considerable differences in physical geographic characteristics and socio-economic geographical position of both regions, prominent cause behind these differing developments has roots in the distinctive evolution of civil society under the Ottoman (SEE), respectively Austrian (ECE) Empire.

In order to determine the role of certain socioeconomic factors in the historical process of the evolution of specific Land Use patterns, we apply a comparative analysis. This method should enable us to compare and contrast the trends in Land Use (LU) developments in two different periods: 1) under the communist regime (1961–1990) and 2) during the period of transition (1990–2002). Simultaneously, we try to reveal how different geographical and historical contexts shaped LU developments in both regions and led to important differences.

The scope of inquiry is limited to the post war period partly due to the limits of available data sets and partly due to the imperative of cost-efficiency, which restricts the range of exploitable sources. The data used in the presented LU analysis comes from the FAO Land Use database, which covers the second half of the 20th century. Another drawback arising from the almost exclusive use of the FAO database is a disputable positioning of Slovenia within the SEE. Unfortunately, the databases contain only data for the whole territory of former Yugoslavia *en masse*. For that very reason, we have to incorporate Slovenia into the SEE region, although other characteristics, especially historical development and its recent state of socio-economic development, would lead to its inclusion into ECE.

East Central Europe (ECE) we grasp as a part of standard definition of Central Europe (CE), usually delineated according to its historical evolution. Its area is app. 550,000 km^2, and comprises 5.3% of the total area of Europe. Region comprises of the ECE's largest and most populous country Poland (39 mil. inhabitants) and landlocked countries of Czechia, Hungary (both about 10 mil.), Slovakia (5.5 mil.), and Slovenia (2 mil. inh.). The density of populations is 102 inh./km^2, and the GDP of these 5 countries was 685,7 billion USD in 2006 (The World Bank data and statistics – http://web.worldbank.org/). The area used in ECE for settlement, transportation and industry recently covers about 12% of the total area (in case of Czechia only 4% in 1900 yr) and permanently continues to grow. For more on ECE physical-geographical features (see Jeleček 2006, pp. 188–193, Král 1999).

"Southeast Europe" (SEE) encompasses the whole Balkan Peninsula excluding Greece. After disintegration of Yugoslavia in the early 1990's, SEE comprises seven countries on the total area of 600,000 km^2, i.e. about 6% of Europe's area. In 2002, SEE had about 55 million inhabitants, which was 8.5% of the European population. The population density was some 88 inh./km^2, i.e. significantly less than in ECE. Five

countries (including Slovenia) were in 2002 post-Yugoslavian republics. Among them, the most populous country was the still-united Serbia and Monte Negro (10 million inhabitants), and the least populous was Macedonia (2 mil.). Bosnia-Herzegovina and Croatia had each some 4.5 mil. of inhabitants. Within the whole SEE, the most populous country is Romania (22 mil.). Bulgaria and Albania hold populations of 8 and 3 mil. respectively. Due to the above-mentioned structure of FAO statistics, SEE, as used in this paper, consists of former Yugoslavia, Romania, Bulgaria and Albania.

2. Common Destiny

Former Czechoslovakia (Czechia and Slovakia), Hungary, Slovenia and the south-western part of Poland belonged in the past to Austro-Hungarian (abbr. A-H) Empire and its predecessors, Holy Roman Empire (till 1806) and then Austrian Empire (till 1867). Poland in the period 1796 to 1919 did not exist as an independent country and whose territory was divided between three Empires (besides A-H also Russian and Prussian Empire).

The western and more developed part of the dual monarchy, so called Cisleithania (Czechia, Galicia, Austria, Slovenia), is generally considered to be the core area of Central Europe (together with Germany and also Switzerland). Analogically, it forms also a basis of our delimitation of the ECE. The eastern part of the Empire was called Transleithania. After the abolishment of the Habsburg realm after the World War I (1918), Hungary lost about two thirds of its historical territory in favour of newly created nation states. While Slovakia, (formerly Upper Hungary), and Hungary itself are widely considered as a part of ECE, the rest of Transleithania belongs to SEE – it differs from ECE not only in physical-geographical characteristics (hilly and rocky Balkan Peninsula, see below), but above all historically – in a way of economic-societal and cultural character (strong Ottoman influence, Orthodox Church etc.).

European Turkey comprised in the mid-19th century the remaining area of the SEE: Romania, Bulgaria, Albania and eastern part of former Yugoslavia. Although the extent of European territories of the Ottoman Empire had been on decline since the 17th century, most of the Balkans was under its control till the end of the First World War (1918).

In the SEE industrialization and the ensuing spill-over of mechanization and scientific knowledge into agriculture has been promoted mainly in Slovenia, Croatia and Serbia since the close of the 19th century. Nonetheless, the whole SEE preserved a remarkably agrarian character. Centuries-long occupation by the Ottoman Empire (from 14th to 19th century) cut the Balkans out of European enlightenment and modernization. Even after the First World War, Yugoslavia remained an underdeveloped agrarian country with insignificant industry and underdeveloped agriculture in comparison with Czechia, Hungary or Slovenia. The same applies to Romania and Bulgaria. However, due to the extensive cereal cultivation in the fertile Walachia lowland, Romania became the fifth biggest producer of corn and the ninth largest producer of wheat in the world before World War II. Today we expect that this role of Romania will probably be renewed – see conclusion.

Due to the more favourable geographical position and more opened economic environment of the Austrian Empire the modern societal driving forces of Land Use changes began to affect the ECE earlier than SEE and have been more powerful in the former. The comparative Ottoman isolation from the centres of modernization and subsequent economic advance (reflecting the shift of Europe's commercial and political centre of gravity towards the western Atlantic coast), the Balkans has been the least developed part of Europe. SEE altogether has been lagging behind ECE in the onsets and completion of fundamental historical processes of Industrial Revolution (abbr. IR), Agricultural Revolution and Technological-Scientific Revolution (called more rather 2nd IR). Also after the World War II, Scientific-Technological Revolution (3rd IR) has been introduced here later and less efficiently (For more on the notions of IR, see Jeleček 1995, 2006).

Analogical processes were responsible for the lagging of both regions behind Western Europe. However, general underdevelopments have had more historical reasons in the past. For instance, the ECE and SEE states possessed no colonies, in contrast to the Western European states such as the United Kingdom, France or the Netherlands. This reality was one of the reasons of the at least 40–50 years delay of the climax of Industrial Revolution in ECE and SEE.

After the Second World War, the sharp demarcation line of the Iron Curtain divided Europe into two antagonistic parts. The whole area of ECE and SEE ended up under Soviet rule until 1989, except for Yugoslavia (1948) and Albania (1961), which fell out with the Soviet bloc structures (such as COMECON) despite being under communist governments. The ECE and SEE countries generally have copied the Soviet way of "socialist" industrialization (again except Yugoslavia), which was basically less suitable and convenient especially for ECE countries more or less experienced with pre-war, democratic regimes and with higher levels of economy. In this way, fundamental political and economic history has been imprinted into the different trends in Land Use changes after 1945 (Bičík et al. 2001, Bičík, Jeleček, Štěpánek 2001, Bičík, Jeleček 2004, Milanova et al. 2004)

Common "destiny" of ECE and SEE within 1948–1989 period, i.e. communist regime, was of course not experienced as completely uniform. We can mention several important particularities, such as: 1) locally different versions of "state-socialism" among ECE and SEE countries within the Soviet bloc; 2) with regard to the Land Use structure it is important to single out relatively low level of agriculture collectivization in Poland; 3) preceding points implies uneven level of socio-economic development among the regions.

After the collapse of the Soviet bloc and its protected market, agricultural production of ECE and SEE has become fully exposed to the much more competitive environment of heavily subsidized EU agriculture and cheaper commodities from overseas (e.g. USA, also characterized by its equally subsidized agriculture). Simultaneously, mechanisms of differential land rent II started working again after 1989. As a consequence, less fertile soils have been abandoned and subsequently transformed into permanent grasslands or forests. In the 1990's the permanent grasslands began to increase for the first time in 150 years, the forest areas have been permanently increasing from the middle of 19th century.

Current situation of ECE and SEE economies, the latter representing the least-developed region in Europe, might be ascribed mainly to specific 'historical developments' combined with the impact of the Soviet-type, centrally planned economy, based on the exhaustion of all natural and human resources.

3. Different Landscapes

General comparison of the landscapes of the ECE and SEE can be derived easily from the Land Use data for the 1960–2002. Significantly, ECE has a much higher share of arable land than SEE (49.2% and 35%, respectively – see Table 1 and Table 2). On the other hand, SEE shows a higher proportion of permanent grasslands, is much more afforested and also shows a higher share of the other areas (e.g., lakes and denudated karstic areas). The LU data thus correspond with the general geomorphic character of both regions. In Hungary and especially Poland lowlands or plains prevail. The landscapes of SEE, to the contrary, are predominately hilly. Plains and lowlands comprise only about 20% of its total area. Large lowlands are situated in eastern Croatia and central northern Serbia (surroundings of Beograd and Vojvodina) and also in Romania and Bulgaria along the Danube (for more on SEE physical-geographical features see Král 1999 and Jeleček 2006, pp. 557–560).

Table 1 Southeast Europe: Land Use Changes 1961–1990–2002 (in %)

Land Use Category	**Share in total area**			**Change in period**		
	1961	**1990**	**2002**	**1961–1990**	**1990–2002**	**1961–2002**
Arable land	35.1	33.0	31.4	–6.0	–4.7	–10.4
Permanent cultures	2.6	2.7	2.3	5.4	–14.9	–10.3
Permanent grassland	19.9	21.3	19.7	7.2	–7.3	–0.6
Agricultural land	***57.5***	***57.0***	***51.9***	***–0.9***	***–9.0***	***–9.8***
Forests-wodlands	31.6	31.9	31.7	0.9	–0.5	0.3
Other areas	10.9	11.1	14.8	2.2	33.1	36.0
TOTAL	**100.0**	**100.0**	100.0			

Sources: Statistical database of the UN Food and Agricultural Organization (http://www.fao.org)

However, the geomorphologic relief cannot be hold responsible for social developments in the old deterministic way – especially the remarkably high share of permanent grasslands in SEE (20%; 14% in ECE) indicates less developed agricultural sector and thus might be interpreted as a result of Ottoman rule and a sign of general socio-economic backwardness of the region (together with relatively high afforestation: 31.6%; 25.2% in ECE). These data also show positive environmental impact on the landscape.

Table 2 East Central Europe: Land Use Changes 1961–1990–2002 (in %)

Land Use Category	Share in total area			Change in period		
	1961	1990	2002	1961–1990	1990–2002	1961–2002
Arable land	49.2	45.3	43.2	–7.9	–4.7	–12.3
Permanent cultures	1.8	1.8	1.6	–1.7	–9.4	–10.9
Permanent grassland	14.0	12.9	13.1	–8.0	1.6	–6.5
Agricultural land	***65.0***	***60.0***	***56.8***	***–10.9***	***–3.51***	***–11.0***
Forests-wodlands	25.2	28.0	29.6	11.2	5.4	17.2
Other areas	9.8	12.0	12.5	22.5	5.1	28.7
TOTAL	**100.0**	**100.0**	**100.0**			

Sources: Statistical database of the UN Food and Agricultural Organization (http://www.fao.org)

Also within the regions historical differences affected formation of locally specific Land Use patterns. After the fall of feudalism different ways of introducing capitalism into agriculture during the 2nd half of the 19th century have influenced its productivity and efficiency. Diverse trends in the farm structure according to their area might be understood as one of the most distinctive outcomes of such developments (see Table 3).

In countries such as Czechia or Hungary, large feudal estates formed about 40 percent of total area (i.e. including forests) even before the Industrial Revolution; and the numbers of small farms with area up to 20 ha (in 1850 app. 80% of all farms on the remaining 60% of the area) tended to diminish under the socio-economic pressures. This trend was accelerated after 1948, when Hungarian, but also Czech and Slovak agriculture was forcibly collectivized or nationalized and transformed into large co-operatives or state farms. The transition and land reform in 1990s did not change the situation significantly here. The co-operatives and state estates generally survived by merely updating, or modernizing their organizational form of capital.

On the other side Poland, following the French example, retained the structure of very small farms. Lowland Poland is typical for its large agricultural specialization. Even during the communist period, the private sector had almost fully preserved its characteristic, atomized structure consisting of a huge number of small, unproductive farms. This situation considerably fragmented cultivated land, i.e. field patterns, and has led to a high proportion of employment in agriculture (about 20% in contrast to 4% in Czechia – Turnock 2001). Currently it signifies a problem for the common EU market and agricultural policy.

Contemporary share of agricultural land (AgL) in ECE is highest in Hungary (70%) and does not drop below 50% (Slovakia). In the SEE only in Romania exceeds 60% (62%) and in Albania covers less then 40% of total area. The situation in each country is described in the Table 3 (see the end of the article).

The period under inquiry (1961–2002) is further divided into shorter periods by inclusion of the data for the year 1990, a historical turning point for the wave of revolutions that swept the Soviet hegemony over the Eastern Europe. This enables us to separate the trends of LU changes under the socialist centrally planned economy and during the transitional decade of the 1990s.

The area of arable land has been on the decline in all examined countries since the end of the Second World War. In some of them the decline started even earlier (Czechia, mainly in its border regions due to transfer of Czechoslovak Germans to Germany, then as a result of intensive industrialization, Chromý 2003, 2004). Such a considerable decrease, which exceeded 12% in the ECE between the years 1961 and 1990, happened mainly to the benefit of so called "other areas" (OA) – particularly the various types of urban and industrial sprawl (built-up areas, transport areas, etc.). However, while in the ECE this development negatively affected the extension of "agricultural land" (AgL) *en masse* and was accompanied by analogical decrease in "permanent grasslands" (PG) and "permanent cultures" (8% and 2% respectively), in SEE "arable land" (AL) were transformed into permanent grasslands. This could be explained as an effect of the delayed modernization and mechanization of agriculture, executed here on a mass-scale as a part of soviet-style socialist modernization only after the World War II. Paradoxically, socialist economy led to the same effects as mechanisms of differential rent in capitalist countries (see below the post 1990 period).

Another important difference in LU trends in the socialist times (clearly apparent from the chart in Figure 1) was comparatively extremely slow increase of "other areas" in SEE (only 2%; ECE witnessed rapid growth of OA reaching almost 25%). Given the famous projects of socialist urbanism, such as Dimitrovgrad in Bulgaria, and the fast tempo of socialist industrialization marked by construction of huge plants, transport hubs, and water-dams, the almost unchanged share of "other areas" over the whole period of communist rule seems a bit suspicious and hard to explain. In Romania and Bulgaria

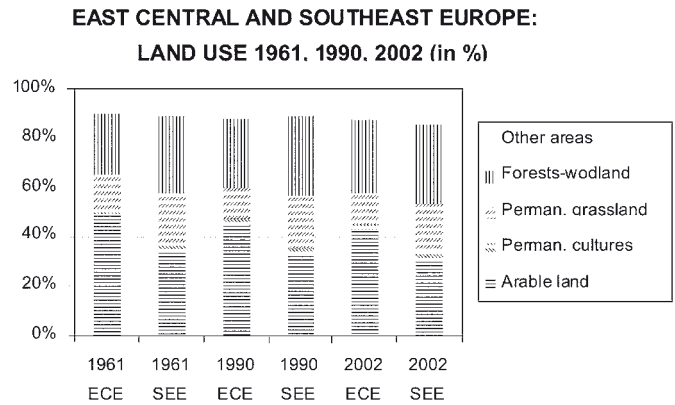

Fig. 1 East Central and Southeast Europe: Land Use 1961–1990–2002 (in %)
Sources: Statistical database of the UN Food and Agricultural Organization (http://www.fao.org)

this category of LU even suffered rather dramatic drop of almost 5%. The bulk of this decrease was the result of soil reclamation programs of the socialist governments, executed in the 1960s and 70s on the large scale into the image of the soviet model.

The trends of Land Use changes in SEE countries after 1989 again differs considerably from the development in ECE ones. Although the crucial category of arable land continued to fall in both regions (by 5%), the pattern of redistribution among other LU categories changed significantly. The collapse of COMECON market led to heavy drop in fruit production in the SEE and corresponding decline of permanent cultures (–15%). This development has been paralleled by, although remarkably slower, decrease of permanent grasslands. Altogether, during the return to the capitalist market economy in the transformational decade SEE has lost about 9% of agricultural land, almost completely in favour of the outburst of other areas, which rose in this period by the annual rate of 3.5%.

Such development may be ascribed to the revived mechanisms of differential land rent, which lead to abandonment of less fertile soils and their transformation into OA (in SEE) or permanent grasslands (in ECE). Permanent grassland increased during 1990–2001 in ECE by 2% and thus was the only component of agricultural land which was there not on decline. In contrast, "other areas" increased considerably after 1990 especially in SEE, also as a consequence of its less intensive growth in the socialist times. From the point of view of Land Use and environment, there are many negative aspects. For instance, the fields lying alongside highways or crossings of major roads are built over by many huge stock halls (called "for one use") with goods for hypermarkets located in the outskirts of big cities.

No changes occurred in forest areas and woodlands in SEE, but in ECE these increased appreciably. Stability of the share of forested areas in SEE over the whole forty years long period has specific historical-geographical explanation. Forests, covering altogether about one third of the SEE territory, are located in the inland mountainous parts of the SEE with low population density and underdeveloped infrastructural networks. Thus, they are not exposed to economic pressures. The other potentially de- or re-forested regions in the Mediterranean had been almost entirely deforested as early as the medieval period. Ensuing significant soil erosion and surface denudation, especially on steep slopes of the Dalmatian coast and its islands, makes any reforestation in certain areas almost impossible. The Balkan as well as the Apennine peninsulas are examples of longest human impact on landscape configuration in Europe.

5. Conclusions and Implications for the Future

In 2003, the average gross domestic product (GDP) in purchasing power parity per capita in SEE was about half that of East Central Europe (i.e., about $ 6,390 – see The World Trade Book). These differences are reflected also in the share of agricultural sector in the total GDP. On average it reaches almost 12%, which is four times more than in the ECE. Together with the low technological and organizational level of agriculture, these data indicate the prevailing rural character of SEE.

Undoubtedly, contemporary LU structure is going to be significantly altered in coming years. After 1989, free impact of differential rent II was restored and agricultural investments were directed mainly to more fertile soils. Under the pressure from foreign producers (EU, USA, etc. – more intensive and more subsidized, "unfair" competitors) significant areas of arable land have been abandoned and turned either into permanent grasslands, forests or other areas (Bičík, Jeleček 2009). Current global economic recession will probably reverse this trend and we suppose that the share of arable lands will start to grow because of rising food demand and therefore increase of agricultural products process.

Such consideration is also supported by the comparison of societal forces influencing the LU developments in both regions. Current rapid growth of "other areas" in SEE, fuelled by the need to quickly develop so far insufficient housing-, transport- and economic infrastructures will be probably saturated in foreseeable future and the quality of SEE and ECE lowland soils will redirect the pressures generated by differential rent towards the reclamation of agricultural and especially arable land.

Futhermore, recent dramatic developments in production and also in an international trade with cereals and oil plants for food and feed production are fuelled by economic boom in the most populated countries, accompanied by growing popularity of mass-production bio fuels. These processes brought about rapid increase in demand for edibles (including structure and quality).

Table 3 ECE and SEE countries: Land Use 1961–1990–2002 (in %)

Southeast Europe – Land Use in 1961 in %							
State	**AL**	**PC**	**PGL**	**AgL**	**FL**	**OA**	**Σ**
Albania	15.0	1.6	26.2	*42.9*	44.6	12.5	**100**
Bulgaria	38.3	3.3	9.5	*51.1*	30.1	18.7	**100**
Romania	41.3	2.3	17.7	*61.2*	27.5	11.2	**100**
Yugoslavia	30.1	2.7	25.7	*58.5*	34.5	7.0	**100**
SEE	**35.1**	**2.6**	**19.9**	***57.5***	**31.6**	**10.9**	**100**
Southeast Europe – Land Use in 1990 in %							
State	**AL**	**PC**	**PGL**	***AGL***	**FL**	**OA**	**Σ**
Albania	20.1	4.3	14.5	*39.0*	36.3	24.7	**100**
Bulgaria	34.7	2.7	18.0	*55.5*	30.1	14.4	**100**
Romania	39.6	2.5	19.8	*62.0*	28.0	10.0	**100**
Yugoslavia	27.4	2.8	24.8	*55.1*	35.6	9.3	**100**
SEE	**33.0**	**2.7**	**21.3**	***57.0***	**31.9**	**11.1**	**100**

Southeast Europe – Land Use in 2002 in %							
State	**AL**	**PC**	**PGL**	***AGL***	**FL**	**OA**	**Σ**
Albania	20.1	4.2	15.3	*39.7*	34.5	25.9	**100**
Bulgaria	30.2	2.1	15.7	*48.0*	33.2	18.8	**100**
Romania	39.4	2.1	20.7	*62.2*	27.0	10.7	**100**
Yugoslavia	25.8	2.4	21.0	*49.3*	35.0	15.7	**100**
SEE	**31.4**	**2.3**	**19.7**	***53.5***	**31.7**	**14.8**	**100**

East Central Europe – Land Use in 1961 in %							
State	**AL**	**PC**	**PGL**	**AgL**	**FL**	**OA**	**Σ**
Czechia*	42.7	2.6	12.6	*57.9*	32.7	9.3	**100**
Hungary	55.8	4.6	15.7	*76.1*	14.3	9.5	**100**
Poland	51.0	0.7	13.3	*65.0*	24.8	10.2	**100**
Slovakia*	35.7	1.9	18.0	*55.6*	36.5	7.9	**100**
ECE	**49.2**	**1.8**	**14.0**	***65.0***	**25.2**	**9.8**	**100**
East Central Europe – Land Use in 1990 in %							
State	**AL**	**PC**	**PGL**	***AGL***	**FL**	**OA**	**Σ**
Czechia	41.0	3.0	10.5	*54.5*	33.3	12.2	**100**
Hungary	54.3	2.5	12.7	*69.6*	18.0	12.4	**100**
Poland	46.0	1.1	13.0	*60.1*	27.7	12.2	**100**
Slovakia	30.8	2.7	16.5	*49.9*	40.8	9.3	**100**
ECE	**45.3**	**1.8**	**12.9**	***60.0***	**28.1**	**12.0**	**100**
East Central Europe – Land Use in 2002 in %							
State	**AL**	**PC**	**PGL**	***AGL***	**FL**	**OA**	**Σ**
Czechia	38.9	3.0	11.9	*53.8*	29.6	16.6	**100**
Hungary	49.6	2.0	11.4	*63.1*	19.8	17.2	**100**
Poland	44.5	1.0	13.2	*58.7*	28.9	12.4	**100**
Slovakia	29.2	2.6	17.8	*49.6*	44.4	6.0	**100**
ECE	**43.2**	**1.6**	**13.1**	***57.9***	**29.6**	**12.6**	**100**

Sources: Statistical database of the UN Food and Agricultural Organization (http://www.fao.org)

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Résumé

LUCC v post-komunistických zemích střední a východní Evropy v letech 1960–2000 a jeho historickogeografické kořeny

Předkládaný článek zachycuje v komparativní perspektivě změny ve využití půdy v regionech jihovýchodní (SEE) a středovýchodní (ECE) Evropy. Část kontinentu, dnes vnímaná především jako postkomunistická, má mnohem širší společné novověké dějiny: periferní pozici vůči světovému trhu, opožděný nástup industrializace, mnohonárodnostní impéria před a nevelké národní státy v době meziválečné. Zatímco tyto historickogeografické faktory vytvořily předpoklady pro analogický vývoj využití půd v obou regionech, rozdílné fyzickogeografické podmínky naopak posilovaly jeho specifické stránky. Na základě statistik Organizace OSN pro výživu a zemědělství (FAO) jsou v článku sledovány a zhodnoceny hlavní trendy ve využití půdy v obou regionech a jejich dominantní příčiny.

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