# The changes of rural space in Czechia in the period of transformation 1990–2015

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#### **Abstract**

Basic political changes after 1990 year formed preconditions for the transition of Czech and Slovak societies. The processes of transformation have influenced also the state of Czech agriculture and the rural landscape, which will be analysed in the following contribution according to individual developmental stages. The change of political system at the beginning of the 1990s presented itself with particular processes that can be called overall the transformation of agriculture. In this period those were predominantly the change of the ownership of land and means of production. The process of giving land back to its initial owners – the process of restitution – began. The decrease of agricultural intensity has presented besides other also at the changes of structure of Czech landscape. The land use structure of agricultural land has been changed while occupying the same area in numerous regions.

Key words: rural geography, Czechia, process of transformation

#### Introduction

At the turn of the 1980s and the 1990s the political situation in Czechoslovakia then changed. Basic political changes formed preconditions for the transition of Czech and Slovak societies. A range of processes in industry, society and gradually in thoughts of population, connected with the transition from centrally operated economy to market environment i.e. back to capitalism, were initiated. These processes overall called transformation represent exceptionally interesting period in development of the society for the concerned phenomena and processes are completely unique from time as well as territorial points of view. That is why also geography, primarily economic and social (in the narrow sense of a word) but physical too, besides other scientific disciplines, deals with these processes because a number of impacts of transition influence fundamentally land use and land cover. The processes of transformation have influenced also the state of Czech agriculture and the rural landscape, which will be analysed in the following contribution according to individual developmental stages. A series of research projects and publications in Czech geography have been devoted to these issues (e.g. Hampl et al 1996, 1999, 2001; Bičík 2001-2003; Jančák, Havlíček, Chromý, Marada 2001; Jančák et al 2003 and others).

Two essential changes have been the main impulse for starting-up of the transformation of Czech agro complex. Above all the equalisation of different forms of ownership (state, co-operative, private), connected with the effort to compensate

(by the process of restitution) main injustice and thievery committed by communist regime, has been dealt with. Restitution has led to considerable consolidation of private ownership. The process of restitution itself has represented a huge transfer of possession resulting from mostly fierce proceedings of involved parties and various negotiators with occasional excesses of participants or other partakers who have more or less enriched themselves or at least have been aiming to. The second fundamental change was represented by a totally different agrarian policy and predominantly its impacts on the system of subsidies, which started at the beginning of the 1990s. Existing blanket subsidy of production functions of Czech agriculture ended then. In the period before 1989 the state subsidised as greatest production of agricultural commodities as possible. Agriculture then was substantially subsidised with the system of so called differential weighting. Farming enterprises in less favoured areas received weighting for a production unit (under certain conditions they could receive nearly double price than farming enterprise run in areas with quality conditions). On the contrary farming enterprises in quality areas paid state land tax, which was quoted by area and quality of agricultural land run by the given farming enterprise. Thus the state positively subsidised on the one hand productive functions of agriculture and on the other hand markedly influenced growing of some agricultural commodities in areas with unsuitable, poor natural conditions. The policy of subsidy in accordance with communistic ideas about the organisation of society then "drew from richer to add to poorer" influenced substantially this way as high intensity of agricultural production generally as in less favoured areas. Thus it indirectly contributed to ecologically unsuitable way of farming and fundamentally influenced little regional differences in the structure of agricultural production not corresponding with differences in natural conditions (Bičík, Jančák 2002a, b; Doucha 2001, 2002).

High employment in primary sector impacted by a different way of taxation of farming and other enterprises represented next particularity of the previous regime. This led to the situation that non-agricultural activities became more and more important in co-operative and state farms. These activities had several functions and two of them were the most important. Firstly they enabled to employ seasonally less exploited workers of "socialist sector" or countryside on the whole. Secondly they brought interesting means from non-agriculture activities into risky agricultural undertaking and made results of farming itself better. This fact, in exceptional cases, resulted in such a state when some biggest farming enterprises realised up to 90% of gross agricultural production in non-agricultural activities (building teams, repair shops, assembling of industrial products, small closing workrooms and so on). This was also one of the reasons why at the beginning of the 1990s there were about 7% of economically active inhabitants - i.e. less than 600,000 - employed in the primary sector. Agricultural co-operatives, farming over 60% of total area of agricultural land, positively predominated in the structure of agricultural enterprises. State enterprises farmed about one third of agricultural land particularly in borderland alongside the "iron curtain" at that time. Main reasons of that situation were political; they enabled the state to keep certain control of the territory. Private farmers worked only small area (about 4% of agricultural and only about one percent of arable land) before the year 1989 and their share in produced agricultural commodities was in fact insignificant (Fig. 1).

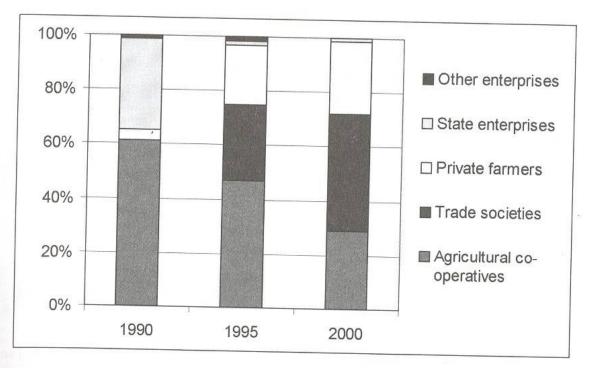


Fig. 1 The change of proprietary structures in Czech agriculture in the period of transformation Source: Agrocensus 1990, 1995 and 2000

## The processes of transformation in agriculture and rural space

The change of political system at the beginning of the 1990s presented itself with particular processes that can be called overall the transformation of agriculture. In this period those were predominantly the change of the ownership of land and means of production. The process of giving land back to its initial owners - the process of restitution - began. Only few "new" owners started to farm the returned land; during the preceding forty years the relation to land was severed and most farmers lacked experience and courage to start business in this branch where the rate of return on investment is very long. Furthermore it is necessary to realise that a farmer working individually is forced to accomplish a range of specific activities from physical work to planning, managing, selling products and other. Naturally total majority of people engaged in agriculture lack such experience for individual workers were markedly specialised and the responsibility for narrowly specialised activities was divided in "socialistic sector" of agriculture in the course of forty years (actually two generations). Most restituents (a number of them live in towns and distant places from their restituted land) therefore have handled the situation by renting the land either to transformed agricultural co-operatives (co-operatives of land owners) or privatised firms arisen from former state farms. Most state farms and some other agricultural productive enterprises mostly with minimal ownership of land (factory farming, poultry farms) have gone through the process of privatisation similarly to a range of industrial enterprises (Ptáček 1996; Bičík, Götz 1996; Jančák, Götz 1997).

At the beginning of the 1990s the initial number of economically active in agriculture decreased roughly to one third (Fig. 2). Such a great fall of economically active in this branch in the course of decennium however didn't bring any dramatic increase of unemployment or production decrease or neither the shortage of agricultural

commodities. This was caused mainly by administrative transfer of a number of workers registered as workers of agricultural enterprises but in fact they were working in affiliated businesses in non-agricultural activities.

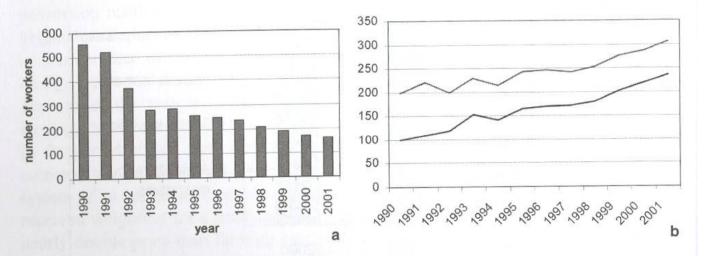


Fig. 2 The development of the number of employed in agriculture: the increase of productivity (a) and the decrease of intensity (b) of Czech agriculture in the period 1990–2001 Source: Statistical yearbook of the Czech Republic 1996, 1997, 2002

The restrictions of subsidies into agriculture and the transition to market prices not regulated by the state have presented significant decrease of the demand for food and agriculture commodities (Tab. 1). The decrease has been partially influenced also by lessening the possibility of export of agricultural commodities abroad. This resulted in substantially lower demands for agriculture which production decreased of one fourth at the beginning of the 1990s. The decrease of interest in agricultural products caused by a quick and sharp change of agrarian policy brought a lack of money in agricultural enterprises, which situation resulted in sharp fall of investment (above all to artificial fertilizers and chemicals but also to machine equipment, buildings and so on, which price by transition to market prices markedly increased) and significant decrease of intensity of agriculture. The decrease of intensity of agriculture has naturally the impact on the rate of return on investment put into higher intensification steps and that is why farmers asked the government for certain compensations, which they however in the frame of implemented radical return to market relations without any compensations at the beginning of the 1990s, did not get. Unlike the industrial enterprises owned (fully or partly) by the state and artificially maintained for a long time.

Tab. 1 Per capita consumption of the most important aliments in the years 1990-2000

Index	Unit	1990	1995	2000	Index 2000/1990*
Meat, total <sup>1)</sup> out of which:	kg	96.5	82.0	79.4	82.3
– pork	kg	50.0	46.2	40.9	81.8
- beef	kg	28.0	18.5	12.3	43.9
– poultry	kg	13.6	13.0	22.3	164.0
Fish, total	kg	5.4	4.9	5.4	100.0

Fats and oils <sup>2)</sup>	kg	25.2	22.7	22.8	90.5
Lard and bacon	kg	6.9	5.2	4.8	69.6
Butter	kg	8.7	4.5	4.1	47.1
Vegetable edible fats and oils	kg	12.8	15.4	16.3	127.3
Milk and dairy products <sup>3)</sup>	kg	256.2	187.8	214.1	83.6
Milk	1	91.5	64.6	57.8	63.2
Cheese	kg	7.7	6.5	10.5	136.4
Curd and cottage cheese	kg	4.6	2.8	3.4	73.9
Eggs	Pieces	340.0	290.0	275.0	80.9
Cereals <sup>4)</sup>	kg	155.5	160.8	136.3	87.7
Wheat flour	kg	85.8	88.1	86.6	100.9
Roll, pastries, cakes and biscuits, of wheat	kg	32.5	42.1	42.8	131.7
Pasta	kg	3.5	3.8	6.5	185.7
Bread	kg	54.4	58.5	56.0	102.9
Rice	kg	4.3	4.4	4.6	107.0
Sugar	kg	44.0	38.9	36.1	82.0
Potatoes	kg	77.9	76.5	77.0	98.8
Pulses	kg	1.7	1.9	2.0	117.6
Fresh vegetables	kg	66.6	78.0	82.9	124.5
Fresh fruit	kg	59.7	72.1	75.0	125.6
Coffee (roasted)	kg	1.8	2.3	2.4	133.3
Tea	kg	0.2	0.3	0.3	150.0
Alcoholic beverages <sup>5)</sup>	In Paris	8.9	9.4	9.9	111.2
Beer	40 1	155.2	156.9	159.9	103.0
Wine	1	14.8	15.4	16.1	108.8
Non-alcoholic beverages	1	110.1	121.3	206.0	187.1
- mineral water	1	16.0	18.0	47.0	293.8

in terms of milk, excl. butter

in terms of pure ethanol (100%)

Coloured are those commodities, the consumption of which has registered significant changes (of more than

the decrease of over 25% in the years 1990-2000 the increase of over 25% in the years 1990-2000

Source: Statistical yearbook of the Czech Republic 1996, 2002

## The main changes in agriculture and rural space in the period of transformation

The decrease of agricultural intensity has presented besides other also at the changes of structure of Czech landscape. The land use structure of agricultural land has been changed while occupying the same area in numerous regions. The development of total structure of land in Czechia shows the increase of permanent grass areas for the first time after 150 years. It is evident primarily in the uplands and highlands thus

Note: \* Index  $2000/1990 = 1998/1990 \times 100$ 1) beef, veal, pork, mutton, goat, horse and rabbit meat, poultry and game in terms of carcass weight, incl. offal 2) in terms of net fat

in regions where, after the change of state financial support (the system of subsidies to agriculture), it was impossible to farm profitably even in the period characterised by marked slump in consumption of agricultural commodities. Grassing of slope and non-fertile lands over has been supported partly by the policy of subsidies realised by the Ministry of Agriculture of the CR, partly it has resulted from the return of fallow land and partly from spontaneous process of land cover change. First arable land has been covered with grass later also with self-sown shrubs and trees. These processes are partially registered by the statistics; part of them nevertheless has not been recorded because these land use changes of agricultural land can be registered not earlier then after four years. This delay, often furthermore illegally prolonged, causes the situation that the registered state to some extent lags behind the real state of the structure of agricultural land. The difference is estimated at several percent of arable land (about 5%). The above-mentioned processes have undoubtedly positively influenced the ecological stability of the landscape and contributed to the better environment of submontaneous and slope regions generally.

Statistical analyses however don't evidence the fact directly visible when observing the country. That is the reappearance of fallow, thus not cultivated areas, statistically registered as arable land. They are spontaneously grassed areas often with self-sown shrubs or trees of a poor quality. Another noticeable phenomenon in the country there is cattle grazing in the pastures, non-cut meadows or spontaneously grassed arable land. So the phenomenon we could see in subsidised agriculture only very rarely because most of cattle were dairy or dairy-beef cattle kept in stalls with the minimum share of grazing in their fattening. Such mountainous regions specific by extensive grassland like Kysuca and Orava in Slovakia, or Šumava mountains and submontaneous region of Orlické hory were characterised primarily by cattle stalled breeding not by cattle grazing. Nowadays for the rural landscape in Czechia a number of grazing cattle is typical again, for some breeds even all year round. This is connected to the change of breeds to higher share of beef and beef-dairy breeds in the total structure of cattle breeding. Besides that the crop area of oilseed rape has increased which is evident as from brightly yellow fields in the period of its blossom in the middle of May as from the statistics of sowing and harvest of this crop in Czechia in the last decade (Tab. 2).

Tab. 2 The development of sowing areas of selected farm crops in the years 1989-2002

	1990	1995	2000	Index 1990-2001
Cereals	1652.2	1581.3	1647.5	99.7
Pulses	56.6	60.7	40.6	71.7
Root crops	246.8	185.1	138.8	56.2
Industrial crops	161.3	353.0	426.7	264.5
rape	105.1	252.3	325.3	309.5
Arable forage crops	1099.9	872.5	725.3	65.9
Vegetables	33.7	35.0	32.3	95.8
Sowing area, total	3271.0	3104.2	3020.6	92.3

Source: Statistical Yearbook of the Czech Republic 1996, 2002

Besides the changes of agricultural landscape some other processes, leaving visible changes in the landscape, were typical for the last period of the development of Czech society. The process of suburbanisation, evident mainly from considerable land use changes in the hinterland of big agglomerations as through family houses building as through newly constructed vast service grounds firstly of supermarkets, is characteristic primarily. The building of new communications – arterial roads, bypasses of some towns and cities and so on, participates on the increase of built-up and other areas.

The above-mentioned changes in the structure of agriculture (accompanied by generally higher economy of production enforced by predominantly economic reasons) and the use of rural landscape are related to constantly increasing share of state territory under various levels of conservation. At the same time however distinct social differentiation of rural and "the country using" population occurs on several levels. Just for orientation we can speak about the following differentiation:

- restituents and enterprisers versus labourers and unemployed
- residents in the country versus the owners of cottages and weekend houses
- fertile regions versus submontaneous, mountainous and poor soils regions
- core areas providing jobs out of the country and accessible for weekending i.e. utilisable regions versus peripheries only with agriculture or just limited possibilities for jobs out of agriculture.

## The prospects of Czech rural regions after the accession to the EU

Our farmers must be influenced by the subsidies provided by the EU although their amount will be hardly comparable to that given to their colleagues in Member States At first subsidies at only 25% of the value of the EU are expected, mainly due to the fact that our farmers have lower costs compared with the EU framers. After all a purchase or a rental of land reached only about 5% of the EU average in 2001. The level of subsidies is to increase by about 8% per year. These means will represent an interesting stimulus for a number of farmers. Some farms will no doubt exist any more, however businesslike farmers who are able to acclimatise under new circumstances by creating interesting product programmes and to orient themselves in demanding documents providing subsidies, will survive. Generally further decrease of agricultural and arable land (estimations vary about 10%) is expected because the share of agricultural land in Czechia and especially the percentage of arable land is substantially higher than in the countries with similar natural conditions (the influence of subsidies from totalitarian regime is still perceptible). This will be connected with further increase of pastures and the growth of ecologically pure production (bio production), agro tourism and mainly the landscape conservation. Even though we surely cannot expect the mass expansion of these new forms of farming, they can be interesting for some farmers notably under some regional particular circumstances. They can represent an interesting part of total income of a farm supposing that the society will not only demand the rise of landscape conservation but also bear the cost.

Probably the share of forest will increase (similarly to other developed European countries) particularly in slope and, from the quality of soils point of view, below average regions. If Czech rural regions realised a number of changes in the last 14 years, we can suppose that these changes have not been finished yet and they will continue

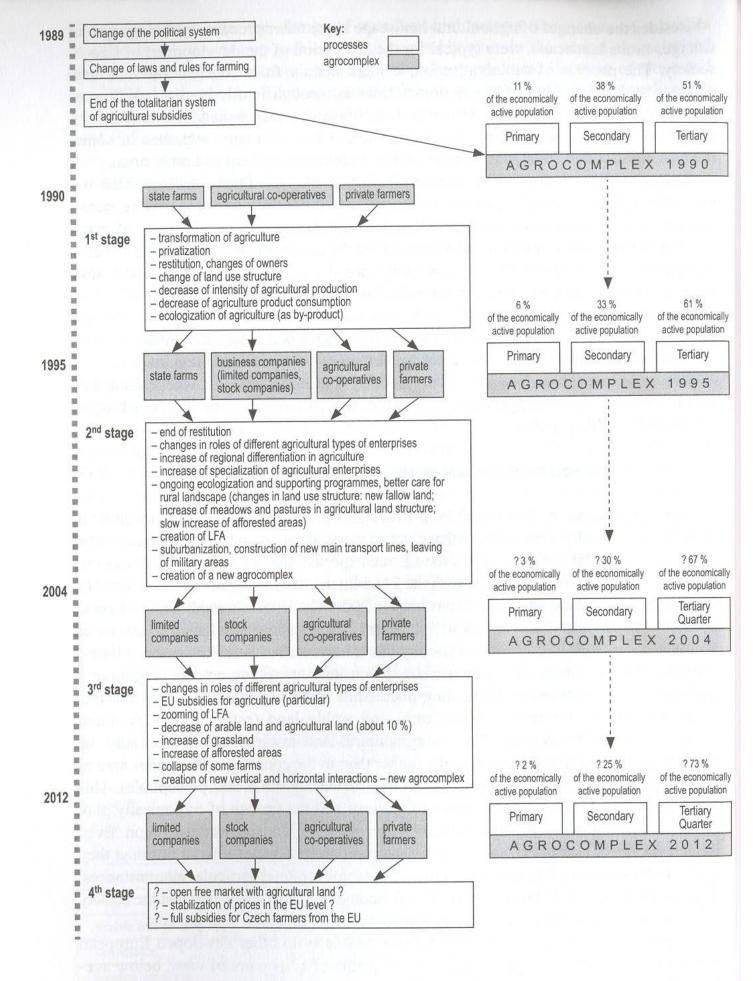


Fig. 3 The phases of transitional period and its characteristic processes and issues Source: Bičík, Jančák (2004)

for some time after the accession of Czechia to the EU. It means that agro complex as a system formed in totalitarian regime has changed fundamentally not only recently but will be changing further in future at least for ten years. This corresponds not only to similar experience in neighbouring countries but also to the process of globalisation in progress affecting increasingly even those branches which proved to be relatively closed in the past. Additionally new vertical and horizontal relations among primary agricultural producers, processors and sellers will be formed. Annual increase of subsidies by 8% starting in 2005 might be an interesting benefit for most producers. This waiting for the EU markedly influences generally fractional move at the market with agricultural land and other activities connected to agricultural production. Can be expected that just the accession to the EU will be the mechanism, which releases this move at the market with properties. More distinct implement of production quotas for individual regions or producers can be awaited in consequence of the accession of Czechia to the EU. Czech primary producers (farmers) anticipate the profit to be split among the components of the chain (higher share for primary producers at the expense of processors and merchants) in more righteous way. The release of the market with agricultural land should be realised in the time horizon about 2012 and agricultural land in Czechia could be in fact negotiable even for foreigners then.

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