

Development of Czech Agriculture in the European Context

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Abstract: The paper deals with production and economic context and consequences of changes in the business environment of the European Union agriculture induced by both the expansion of the internal market and the acceleration of globalization processes. The main features of the competitiveness on the European and world market since the early nineties of the twentieth century are evaluated there. Based on the results of analysis of the structural development and the performance of agricultural production in the Czech Republic and international comparisons of main plant and animal commodities production specify the impact of agricultural policy and its concrete realization in terms of differentiated conditions and approaches in the original and the new member countries in terms of their position within the common market.

Key Words: agriculture, agricultural policy, commodity market, competitiveness, structural change

Introduction

The most noticeable processes affecting development of world economics as well as individual segments these days are without question the *globalization processes*. They are

connected with a number of quality changes in the society as the mutual dependency of individual subjects of internal as well as international relations that go beyond the limits of the systems and rules originally formed by national states, grows very rapidly. Although we encounter this term usually in connection with establishment and ever-growing influence of transnational corporations, world chains and networks, the globalization processes themselves relate not just to economic but also to political, social and cultural changes in the society. They interfere in the already existing relations and form a qualitatively new social environment due to their positive as well as adverse effects.

These changes quite logically prove also under *the development conditions of the current agriculture and the agricultural sector as a whole* in its horizontal as well as vertical context. They overcome the formerly typical relative closeness of basic-industry segments. They affect the whole segment of economics connected with production, processing, distribution and realization of agricultural products and services related thereto. They change the size, rules as well as criteria of forming the offer and demand on agrarian markets, namely in whole verticals that these days frequently take the form of global networks.

In their context, they may even interfere in the production and out-of-production relations of agriculture and complicate fulfilment of the segment's multi-functional role within development of whole world regions. In this context, issues reappear concerning not just the amount of income redistribution for the benefit of agriculture in all dimensions of its mission, but these are also issues concerning effectiveness of the regulation forms and expedience of economic support for development of individual segments and increasing their competitiveness.

In the current model, the importance of the agricultural production role is growing in terms of meeting its function within development of the rural area as well as the society as a whole. Under the current conditions, the success or the failure of solutions within the production

sphere is ever more markedly reflected by all dimensions (economic, ecological, technological as well as human and social) of regional development.

Also the concept of a balanced European model of multi-function agriculture and its implementation under the European Union (hereinafter referred to as CAP) for as many as 27 current member states, which differ in terms of their bases, reach as well as productivity, is ever more frequently confronted with new challenges arising from accelerated globalization processes (Boehlje et al., 2002, Connor, 2003). The environment of agrarian markets is changing, Europe's position at these markets is changing, new priorities are assigned the criteria of competitiveness and demands on their provision. The quantity as well as the quality context and the effects of these changes pertain not only to the producers or processors or agricultural products respectively and consumers but the whole (and not just the rural) population. The need for interdisciplinary solutions when selecting strategies of agricultural development has been objectively growing, reflecting the context of the changing market environment. In the last decade, the risk has been growing of negative effects of asymmetric information as well as biased decision-making preferring short-term and frequently particular interests, namely in a much wider social context and effects.

Since the turn of the millennium, with the progressing CAP reforms, individual member states have been getting ever more space for their own strategy and decision-making about the form and size of their own agriculture (e.g. Bečvářová, 2007,a). Decentralization increases the powers but also the responsibility for the strategy, concept and meeting of tasks connected with fulfilment of the role of agriculture and the agrarian sector within development of the concerned territory under the current considerably harder conditions of world competitiveness. Hence it may not be expected in the long-term either that sustainability and further development of regions will be financed on the basis of extensive redistribution of income. Even though this community policy is a "common" one, its application depends on

each of the member states. They make decisions on why and how specifically they will meet the general framework, current limits as well as general rules of CAP under the given conditions of countries in individual regions. Hence it is much more urgent than ever before to assess the situation, to consider options as well as preconditions of development of agriculture and its segments in a wider European and world context.

1. General Conditions of European Agriculture and its Development

Since the Czech Republic's accession to the European Union in 2004, the overall framework, philosophy as well as level and form of support and degree of regulation in agriculture and in the agrarian sector are generally subject to the rules and limits of the CAP. Since as early as of the beginning of the 1990s, we have been witnessing and these days also playing a part in changes of this, one of the oldest European community policies, which is forced to react to the changing internal as well as external economic and social environment.

As early as during the pre-accession period, the Czech Republic, just like other members of the ten countries of Central and Eastern Europe acceding to the EU in May 2004, was in practice coping with conditions other than those set for the European farmers in the original model. At the same time, it was adopting certain different conditions of financing following particularly from application of compensation mechanisms of price support reduction after 1992 and the subsequent reform steps¹ for EU15 countries.

The economic environment has significantly changed and it also changed the demands on orientation of CAP. The original concept reacting to the requirement for coverage of demand and reinstatement of food certainty in European countries in the postwar years motivated the accelerated growth of production within the whole agrarian sector. In the mid-1950s, the original concept of CAP preferred tools with theoretical relatively high market deformation

¹ 1992 CAP I – McSharry's reform, 1999 Berlin summit and Agenda 2000 – CAP II, 2002 Brussels summit, Mid-term review and Luxembourg summit 2003 – Fischler's reform

effect, which however transparently (reflecting the revenues in the growing proceeds of the producer) motivated an increase in the offer of requested commodities. It was only logical that a strategy founded on great support of prices paid to farmers was adopted. In addition, under the conditions of the then lacking self-sufficiency of European countries (i.e. importing ones), no other tools with a right for significant pension redistribution had to be applied.

The great price support really got the production growth started in the thirty years to come. At the same time, however, it caused that the level of European agricultural commodity prices was isolated from the real price and other conditions on the world agrarian market where it was ever more difficult to break through. This resulted in gradual growth of costs of removing the effects of growing surpluses of basic commodities on the unbalanced home market as well as the costs of other (already budgeted) expenses on support for export, storage and liquidation of surplus production. They required implementation of other regulating market interventions in the form of quantity restrictions, whether in the form of production quotas or set-aside.

Hence not only *internal factors* connected with development of the home market situation but in particular *external factors* accompanied by growing pressure on market liberalization in particular after the Uruguay round of GATT and the subsequent negotiations at WTO, and last but not least also the prepared accession of countries from Central and Eastern Europe to the common market naturally *had to launch the reform processes* of CAP as early as in the 1990s and this process has not been completed yet. It concerns both the production sector as well as other fields of the multi-functional role of agriculture.

The process of *market enlargement* in general brings along a number of changes that should have a positive effect on development of the concerned economy generally in three areas

- *expansion to a larger market*, supports differentiation of producers, it results in regional transfers of production capacities and growth of production of the (most) more effective

entities; thereby it accelerates specialization including the potential of volume-related savings making use of innovations,

- *the increased competitiveness* at a larger market allows better allocation of production factors towards the (most) more effective activities and entities, thereby establishing a better starting point for growth of competitiveness at the globalised market,
- the larger common market and the growing competition require but at the same time allow *faster scientific-technical development*, development of new products, processes, technologies and procedures via the common (internationally connected) research of its immediate application in practice in all national economies integrated in this market.

All these changes should result in growing performance of the economy, increased productivity of factors and growing effectiveness. At the same time, however, it is necessary to take into consideration that other manifestations are connected with this process, in particular:

- *decrease of effectiveness of regulating interventions and policies* designed on the principles of market protection and isolation of specific market segments in individual segments or sectors,
- *growing market force* of decisive entities on the world market, in the concerned sector in particular the finalizing stages of agribusiness, types of supranational organizations and networks making use of various forms of connection determining the structure and development of the global markets.

These tendencies strongly collide in practice. On the larger markets, the interests of the most important commodity chains are furthered. Models of agrarian *markets significantly driven by the demand* when the consumer model is usually interpreted in various ways by policies of the entities within the whole vertical chain down to the basic industry, represent another cause of

restricting the option of choice of the production structure and its scope (e.g. Goldberg, 1998, Kinsey, 2003, Bečvářová, 2007,b)

Generally positive effects on extension of the agricultural-food markets are modified by processes connected with integration of new member states into the EU. The different development of the scope of the agrarian sector and changes of its structure in the stage of transformation of economies of the "European Ten" in the 1990s as well as the differences in the focus of their agrarian policies including the differentiated level of support of the agrarian sector, modify in particular the allocation effect and benefits of the expanding market.

The necessity of an adequate reaction to changes in the environmental environment was substantiated in quite a complicated way as well as pursued into the *strategy* of European agriculture development and the related changes of *tools of support and regulation with CAP*.

Nevertheless, there were gradual changes in the area of common market organization, *restrictions of tools* affecting the agrarian market (in particular reduction of price support by orders of magnitude and removal of foreign trade barriers). At the same time, however, there was a clear effort to compensate the reduced support by means of the amber box tools (price support allocated by commodities, first pillar of CAP) in the form of a payment meeting the requirements of the blue or even the green box. Hence the system of price support was gradually replaced with a system that has lower market deformation effects. In this context, the requirements were established for *accelerated decoupling* in farm support, making use of *cross compliance* and *modulation* in the transfer of finances from the first to the second pillar of CAP.

A common *concept of rural area development as a second pillar of the CAP* was introduced by the *Agenda 2000*. In this context, agriculture is understood as a decisive factor of environmental formation, shaping the landscape in rural areas as well as the provider of public domains. The policy of rural area development support became a part of the CAP

strategy also for the period of 2007-2013 as in addition to the permanent objective of growing competitiveness of the agrarian sector and restructuring support, it involves in particular the protection of nature and the landscape, by means of supporting the care for the landscape (including the common financing of rural area development measures), increased living standard in rural areas and support of economic diversification by means of measures focused on the agrarian sector and other concerned entities in rural areas. The policy of rural area development has to face several problems pertaining to:

- *The economic situation:* when rural areas have markedly below-average revenues and they are more strongly dependant on the primary sector.
- *Social aspects:* when higher unemployment is documented in rural areas than in city districts; the risk of problems, such as a bad approach to the basic supply infrastructure, social exclusion and restricted options of employment, may be even increased by the low residential density and depopulation of certain areas.
- *Environment:* the necessity to make sure that agriculture and forestry may have a positive effect on the landscape and environment in a wider context, as a bearer as well as a factor of balance within sustainable development.

The development of basic industry as well as the subsequent activities is hence one of the decisive preconditions of developing and making use of the territory. It is necessary for effective management of natural resources and also as a platform of economic diversification in rural areas of the EU.

These represent 87 % of the territory of EU-27, where more than half of its population lives, which is another serious argument for complex understanding of the task as well as the benefit of agriculture and the agrarian sector. Hence in terms of the economic approach, the importance may not be estimated only on the basis of a direct interest in the outcome of

economy. It applies to the overall relations including the benefits for employment in rural areas, namely including the developed and transition economies.

A growing importance and a new dimension in the global context is experienced also by the *factor of food certainty*. In the context of the current model, it is becoming one of the key factors of national safety, in terms of securing access to a sufficient volume of food of necessary quality and nutritional value as well as in terms of the growing risk of national and international crises.

Hence issues of the future of this segment do not lose their production dimension. They pertain both to the position and competitiveness of European agriculture on the world market and to the development of individual member countries. In this context, they are newly becoming one of the key problems of successful realization of CAP reform steps also for the period after 2013.

2. Evaluation of the Czech Agriculture Development

When we apply the basic statistical indicators describing the segment's position in the economy, i.e. the share in generation of the gross domestic product and the share in employment, then we may observe a provable decrease of both of these relative indices in the development of Czech agriculture from the mid-twentieth century (e.g. Bečvářová and Vinohradský, 2006, Záhorka, 2008)

- ✓ the share of agriculture in generation of gross domestic product has been decreasing in the long-term: in 1948, it accounted for 17.6 %, in 1987, it was only 7.1 %, and in 2007 it was 2.11 % of GDP;
- ✓ the number of employees in agriculture as well as their share in the total number of permanently active members of the population fell from 1,319 thousand employees (33 %) in 1948 to 528 thousand (10 %) in 1987; in 2007, only 182 thousand people worked in

Czech agriculture, which is 2.87 % of the total number of employees in the economy of the Czech Republic and the number of farmers keeps declining.

This development is nevertheless typical for overall development of agriculture in individual EU prime member states. Although the Czech Republic is "optically" in the upper half of the said scale of countries within both indicators, the different order of other countries in both indicators only confirms the diverse nature of European agriculture. This applies not only to the structure but also to the production focus and overall conception of the policy affecting agricultural development in individual countries.

It is clear *that the problem is not just the decline* of the said *indices*. It only confirms one of the natural relations of agrarian market development that are manifested in particular in developed economies². The issue is the *basis and dynamics of development*, from which these indices start. The concerned matter is the development of scope and final production of the segment, i.e. the effects of the production aspect development as well as the effectiveness of making use of the production factors.

In this context, the view is far from being unambiguous. The decrease of the relative indices in relation to the Czech agriculture sector was accompanied by a permanent reduction of the size of the segment. Just like in other transit economies, the transformation of the Czech economy after 1989 brought along significant changes both in the business structure and in the volume of agricultural production. The issue fundamental for the future development of Czech agriculture was in particular the decrease of demand caused in particular by cancellation of consumer subsidies (the negative turnover tax) for foodstuffs in 1990. The option to make use of the subsequent price liberalization was minimised thereby. With a growing imbalance on the agrarian market and restricted budget transfers since 1991, the

² The decrease is caused by an objectively faster growth of other segments of the economy, the growing work productivity in agriculture connected with speedy implementation of technologies and innovations and basically stagnating demand for foodstuffs.

production factors (in particular the workforce and capital) were subsequently released from the segment and an overall decrease of performance was experienced.

In terms of the volume of production, *the development of Czech agriculture* may be documented by data about development of the total gross agricultural production (GAP) and the plant and animal production in prices constant (p.c.) and current prices (c.p.) since 1990.

The comparison of gross agricultural production development of both basic agricultural segments in prices constant and current allows, in addition to estimation of development of the plant and animal production development, a general assessment of the price development effects too. As it is clear from the two following charts documenting development of the plant and animal production in the CZ since 1990, they reflect also individual phases of the economic policy.

As concerns development of the plant production, greater fluctuation of current prices is typical, the current prices being reflected by the overall segment output in current prices much more noticeably than changes or fluctuation respectively of the very production volume (i.e. development in p.c.).

Figure 1. Plant Production Output in CZK billion

In particular the first significant growth of plant commodity prices in the years 1995 – 1996 is obvious. The next price growth, considerably affected by the global market development, was experienced only at the end of the monitored period, i.e. in 2007. Nevertheless, it follows from the comparison of a longer-term development of the last almost twenty years that even this price fluctuation in 2007 in principle does not exceed the scope of growth from the first half of the nineties. In terms of assessing the effect of the CZ's accession to the EU, the said comparison confirms that the accession to the EU in 2004 had basically no reflection in the growth of agricultural producers' prices with plant commodities.

In terms of their structure, areas of cereals stay roughly at the level of 1990, with smaller fluctuations. A reduction is experienced by areas of row crops, namely not just sugar beet but also potatoes. On the other hand, the areas of oleaginous material enlarged rapidly, in particular of rape. The volume of rape production has tripled in comparison with 1990.

The animal production has however experienced *a significant and permanent decrease*. As it follows from the comparison of development of this production in prices constant and current prices, the decrease that was marked in particular in the first years of the economic reform did not stop completely even in the pre-accession period at the turn of the millennium. The risk for the future development is posed by the fact that the size of animal production has been decreasing even after accession to the EU (even more markedly in comparison to the previous 5 years).

Figure 2. Animal Production Output in CZK billion

A certain "correction" role when assessing the animal production development is in this case played by the price factor that makes the effects of reducing the actual size of this segment relative when assessing the overall output of the segment in current prices. Nevertheless, the reality is that the decrease during the monitored period is considerable to such an extent that it changes the original proportion of both basic segments. The traditionally higher share of the animal production understood also as a certain factor of higher finalization of plant production with a higher standard of added value in basic-industry segments is no longer maintained. The overall production volume fell; a significant decrease is experienced both by products of beef-raising (milk, beef) as well as pig-breeding (pork).

The reduced size of animal production is reflected also by *changes in numbers of livestock*.

While the level of cereals production remains almost the same, in addition to the structural imbalance between almost 1 million ha of perennial crops and the decrease in numbers of

ruminants, another discrepancy emerges between the numbers of pigs as well as poultry (monogastric animals) and production of cereals. The home *consumption* of feeding cereals gradually fell by more than 1.5 million t, i.e. by one third as against the initial period.

The *negative effect of high intensity* of agricultural production on the agricultural landscape is one of the arguments used to document the necessity of reducing the size of agriculture (in particular in the extensive manner of using the land).

3. The European Union as a Producer of Agricultural Commodities and the Czech Agriculture Position

Some Methodical Comments

An analysis of the European agriculture development, its comparison with world production development as well as more detailed analyses allowing assessment of development of the production of the most important commodities that profile the group of old and new member states, which had been executed before preparation of the analyses, offer quite extensive factual material.

The authors faced a certain *methodical problem* of how to make use of the processed data and comparisons in order to upgrade the knowledge basis connected with assessment of issues of the current as well as future development of the Czech agriculture in the European context while respecting a wider structural, economical or time-related context. In particular in the environment as heterogeneous in terms of scope, structure as well as dynamics of production of individual commodities as the agriculture of EU 27 concededly is these days, it comes to light that comparisons of results of individual countries based only on relative indicators (often only on the basis of year-on-year changes of the production growth, revenues from agriculture etc.) might be very contingent in terms of economic interpretation.

The period of 1993-2007 was selected for assessment of the development of production of the most important commodities. This makes it possible to notice even certain trends of

development of the agricultural production of the original EU 15 countries in reaction to the first reforms of CAP in the nineties as well as to assess the development of transition EU 10 or EU 12 countries before and after accession to these Communities.

On the whole, the *results of analyses* are arranged so that they allow:

- ✓ a more complex view of the development and changes in the position of agriculture in the EU as one of the most important segments of agrarian markets under globalization in the context of world production of selected commodities,
- ✓ assessing the development of production of selected commodities within the Communities as a whole, in the group of countries of the original EU 15 and the newly acceded countries of EU 10 before and after 2004,
- ✓ assessing the development of production of selected commodities in the selected EU member states focused on the most important producers, drawing attention to the states with the most striking change of development and assessing the development in the CR in this context,
- ✓ examination of preconditions of member states on the basis of indicators describing the share of agriculture or the share of output of agricultural segments respectively per 1 citizen in individual EU member states.

The analyses, in which one used in particular the data of EUROSTAT, FAO and DG AGRI EK were focused on 8 main commodities (*out of the plant production*: wheat, potatoes, sugar beet and rape, *out of the animal production*: cows' milk, beef, pork and chicken meat), representing more than 80 % of the whole agricultural production of today's EU.

Basic Features of Development with International Comparison

Certain more general context and information follow from the results of analyses of the Czech agriculture development in terms of its production aspect as well as from comparisons of development of the production of the most important commodities from the plant and animal

production with the other member states of today's European union³ and the share in the world production in the last fifteen years.

The fact that the issue of *production effectiveness and added value growth* (with a suitably selected intensity and technology as a way of reducing the unit production costs) may be solved while optimally using the production factors, is proved by comparison of the level of *final agricultural production* (total output) and *added value* realization per 1 ha of agricultural land in the countries of the EU 27. From the comparison, in which the member states were specified in the order according to the standard of agricultural output per 1 ha of registered land and which at the same time also specifies the amount of gross added value, one may identify in the EU framework *both countries with high intensity of using the land and the special structure of production and countries that are more markedly focused on animal production with a corresponding focus of the plant production structure.*

In terms of the overall position of the EU in the competition of global markets, the clue is the result from assessment of output of countries of the *most important producers* of European commodities, in particular Germany, France and Italy. Application of this criterion brings along not just the issue of comparability of conditions in the old and new countries, but also of the *ability of individual countries* to make use of their own sources and production factors within the current development intentions.

From this point of view, the position of the Czech Republic is alarming as it is shown both by the level of end production per ha of agricultural land and in particular by the low rate of output usage in terms of added value realization. Within this comparison, causes can not be attributed to the different level of direct payments or other forms of settlement respectively in

³ The development of the production of EU member states in the course of time was assessed in aggregates for the EU 25, i.e. without Bulgaria and Romania, where it is still not possible to make general conclusions and compare the effects of accession and the effects of CAP application.

the old and new member states. It concerns also production effectiveness and the ability to withstand the wider competition on the common EU market also in relation to third countries.

In terms of the overall as well as commodity development of our agriculture in the European context for the monitored period, the following can be mentioned as the most important:

a) *In comparison with other regions of the world, the EU 25 agriculture production growth pace is generally slower, the share in the world production has mainly decreased. The development is differentiated in terms of commodities, with more significant effects of the size and structure of animal production in the European countries.*

As concerns plant commodities, the position of today's EU 25 remains roughly at the same position with an approximately 20% share in the ever-growing world wheat production. The position of the EU is more significant in relation to the world production of rape. The overall increase of the world production reflects in particular the growing production in this region. This is also reflected in the increased share of the EU 25, which provides more than one third of the world production of this commodity (growth from 29 to 36%).

On the contrary, *the European production of row crops has been decreasing* on the whole, which is reflected in a significant decrease of EU shares in the world production. As concerns sugar beet, a decrease was recorded from 51% to 45% of the world production, in relation to potatoes, the decrease is much more striking, from 31% to 18%.

As concerns all animal commodities, the share of the EU in the world production has been decreasing too, the accompanying characteristics being the following: due to a stagnation in the volume of milk production in the EU, the position of European producers is getting worse as concerns their share in the growing volume of world milk production, which has been declining from the original 31% to today's 25%. Nevertheless, the declining production of beef is even more significant. In this connection, the share is not

only reduced from the original 15% to today's less than 12%, but the volume of production decreases too (from 9.5 million tons to 7.9 million tons).

No significant aspect of a growing (even though differentially in individual EU countries) production of monogastric animals was recorded. The world production of *pork* growing by almost one third, *the share of EU decreases* (with a slight growth of production) from the original 26% to the current 18.4% of the world production. The relatively significant increase in the production of *chicken meat* in the European countries (the production having doubled in the EU 10 states) was not reflected by an increase of the share either. On the contrary, in the monitored period, this commodity also experienced a decrease of the EU 25 share in the world production from the original 16% to the current 11%.

b) *The above-mentioned development trends are manifested quite differently within the EU 25 itself. In general, there are differences in the development of agricultural production in the original and the new member states; a significant decrease was experienced by the production of EU 10, i.e. in the group of new member states, namely in relation to both animal and plant commodities, except for rape and chicken meat.*

Although the most significant decrease in the production of EU 10 states was experienced as early as in the first half of the nineties and then during the pre-accession period, this decrease has generally not stopped even after joining the EU.

c) *As concerns structure of the plant production, an important decrease seems to be the overall decrease in production of both of the most important row crops (potatoes and sugar beet) in the EU 10, where there is a potential for substantially higher increase in value in the subsequent processing phases, including their non-food use, as basically the whole decrease in the production of potatoes is caused by the EU 10 states.*

In this group of countries, the production of potatoes decreased to 40% of the initial state, in Poland and the CZ even to a third of the original size of 1993. The decrease in the sugar

beet production in the EU 10 meant a decrease to 70% of the initial volume; in the CZ, it is even a decrease to 60% of the production of 1993.

On the contrary, the most important producers of the original member states have generally retained their original scope of production of the said commodities and they even slightly increase the overall volume of production of wheat (France, Germany, Great Britain), sugar beet (France, Germany) as well as potatoes (France, Belgium, the Netherlands).

The actually provable growth of production in the group of EU 10 states applies only to the rape, namely as of the end of the millennium and then after accession to the EU. Within this competition, it is a positive fact that the rape production is increased also within Czech agriculture even though in relation to this commodity, an accelerated production of the neighbouring Poland has been breaking through. Nevertheless, a significant increase in the production is experienced also *by the largest producers* of the original EU 15 states, in particular in France, which almost tripled its volume of the original production; almost double the production volume has been registered by Germany and Great Britain in the monitored period.

d) The development of the production of animal commodities is nevertheless much more complicated. The volume of production has been gradually decreasing in the group of the original as well as the new members states, i.e. in EU 15 as well as in EU 10. In particular the milk production and the beef production connected with beef-raising represent one of the most important problems not only in relation to production in terms of interconnection and making use of feeding crops of the plant production but also in terms of benefits of positive external agricultural effects in relation to making use of TTP and meeting the multi-functional role in the development of rural areas.

Also in this case, the more significant decrease in *milk production* is evident in the EU 10 states and this decrease did not stop even after 2004. In comparison with other countries of the European Ten, the *production decrease in the Czech Republic* was the *most striking* just in relation to this commodity. Although the specific problem of the CZ in relation to milk production decrease dates back to the 1990s, upon two significant reductions of production (1994, 1997) in reaction to the reduced demand upon simultaneous opening of the market with milk and dairy products with a negative effect on numbers of the livestock, this is not a typical course of action in other countries, for example like Poland the support for beef-breeding stabilization was generally not reflected in a decreased production. The other most important European producers like France, Germany and the Netherlands also manage to keep approximately the same standard in the volume of production for the whole period.

A similar development in the structure of the member states applies also to the *beef production*. Also in this case, the most important position is occupied by France, followed by Germany. Nevertheless, an important position in beef-raising for TTP is occupied by other countries like Italy, Spain and both countries of the British Isles - Great Britain and Ireland. A higher volume in the production in comparison with the CZ is shown even by a number of small countries.

On the other hand, the development of production with the most important pork producers proves its permanent growth, namely both in Germany and in particular in Spain, which together with Poland has a significant share in the worldwide agribusiness networks of this commodity. However, the development in the CZ is the opposite. From the point of view of the Czech Republic, it is another one of the commodities that have experienced a decrease in the order of magnitude to almost a half of the initial production volume in the monitored period. *Also in this case, a serious problem is posed in particular by the*

development since 2004. The permanently decreasing domestic production no longer covers the domestic consumption. While in 2004, the self-sufficiency expressed in this way (production/consumption) amounted to 96.7%, in 2008, there was coverage by only 75%.

A more significant acceleration of production in the EU 10 states is experienced by *chicken meat*. Just like with pork, however, the world production is much more affected by non-European producers and firms of global agribusiness networks. According to the volume of chicken meat production in individual members states of the EU in 2007, the most important position is retained by Great Britain, followed by Spain, Poland and France. Having performed a more detailed analysis of the development, however, one has to point out also the changes in the last period, for example *significantly bigger growth of the chicken meat production for example in Poland and Germany in comparison to the stagnation of this production in the CZ after its accession to the common market in 2004.*

4. Conclusion

The issue of causal connections related to this development, in particular in terms of development of the old and new member states is nevertheless more complex than the analysis of the current development in the production context of the size of agriculture.

To a substantial extent, it is connected with the problem of strategy and compliance with general rules of the Common Agricultural Policy including the formation and fulfilment of the segment development concepts in individual EU member states. In this context, however, the CZ lacks systematic research focused in this direction that would provide background documents for creation of a strategy and its implementation in specific areas of effective support for development of agriculture and the segments related thereto. For this reason, we state only certain conclusions herein, the conclusions having rather the form of presumptions.

In particular the following areas of causal connections may be considered:

- ✓ Insufficient reflection and catching up with the challenging changes of the business environment connected with the globalization processes in this sector including the underestimation of interconnection in the context of connected phases of commodity verticals and global networks (legislative as well as economic context)
- ✓ Underestimating the different level of agriculture structural development in the old and the new countries including the necessary phasing of priorities aimed at directing and controlling the effectiveness of restructuring support and modernization in order to make use of the production potential
- ✓ Different concept of preconditions of competitiveness while with the most important producers of the EU 15, the key aspects are innovations and modernization of technologies including the creation of preconditions for compliance with the Best Practices criteria and the cross-check, which is related to the directing of support in the area of investments
- ✓ Different level and specifics in allocation of operation support including national envelopes with a possibility that a significant portion of the capital gets away from the segment and is used in the consumption of non-agricultural entities, with subsequent financial problems in financing of agricultural production
- ✓ Still unsettled specific problems and liabilities of the transition economies connected with transformation of the segment, in addition the deepening effects of gradual equalization of the level of agriculture support in the old and the new EU states
- ✓ Significant differentiation in support of businesses dependent on agri-ecological conditions (LFA) including an inconsistent approach to securing a priority use of the production factors in these areas

The trend of substantial reduction of the scope of agricultural production in the CZ which continues even after joining the EU, and in particular the significant decrease of volume of the

production of beef-raising and pig-breeding are alarming signals in particular for those creating and implementing our economic policy.

The continuing reduction of the scope of the Czech agriculture already adversely affects not just the standard of the required production use of natural sources in agriculture but also the scope and quality of its non-commodity functions. In this context, research of the suggested causal connections of the adverse development is urgently needed in particular in order to form the future approach of agrarian policies of the CZ while complying with the general principles of the agricultural policy of the EU.

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References:

Bečvářová, V. (2007), *Koncepce a vývoj agrární politiky EU a USA [Concept and Development of EU and USA Agricultural Policies]*, Brno, MZLU, 94 pp. ISBN 978-80-7375-133-3

Bečvářová, V. (2007), "Shaping agribusiness and its impact on the competitive environment of agricultural enterprises". *104th (joint) EAAE-IAAE Seminar Agricultural Economics and Transition: "What was expected, what we observed, the lessons learned."* Budapest: Corvinus University of Budapest (CUB), pp. 81—92

Bečvářová, V., Vinohradský, K. (2006),:The concept of agrarian subsidies and criteria of diverse natural condition in agriculture. *Annals of the Polish Association of Agricultural and Agribusiness Economists*. 2006. vol. VIII, No. 6, pp. 16--20. ISSN 1508-3535

Boehlje, M.D., Akridge, J.T., Kalaitzandonakes, N.G.(2002),: Preparing for Success in the Agribusiness Marketplace. *Journal of Agribusiness*, 20 (1)

Connor, J.M. (2003), "The Changing Structure of Global Food Markets: Dimensions, Effects, an Policy Implication" *Changing Dimension of the Food Economy*, Conference paper, The Hague.

Goldberg, R.A. (1998): "Why the International Agribusiness Management?" *Global Agribusiness for the future*, Boston, IAMA 1998

Kinsey, J. (2003): "Emerging Trends in the New Economy: Consumer, Firms and Science". *Changing Dimension of the Food Economy*, The Hague,

Záhorka, J (2008), *Analýza vývoje cen v zemědělství v širších souvislostech [Analysis of Price Development in Agriculture in a More Extensive Context]*, AKČR

Internet sources:

CZECH STATISTICAL OFFICE [online]: Brno [quoted on 11/12/2008] Available on internet <<http://www.czso.cz/>>

EUROPEAN COMMISSION DG-AGRI [online]: Brno [quoted on 11/12/2008]. Available on internet http://ec.europa.eu/agriculture/index_en.htm

EUROSTAT [online]: Brno [quoted on 11/12/2008]. Available on internet http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1090,30070682,1090_33076576&_dad=portal&_schema=PORTAL

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS [online]: Brno [quoted on 11/12/2008]. Available on internet www.fao.org/corp/statistics/en/

Classification of member states by applied evaluation:

EU 10 Czech Republic, Cyprus, Estonia, Hungary, Lithuania, Latvia, Malta, Poland, Slovenia, Slovakia (new member states since 2004)

EU 15 Austria, Belgium, Germany, Denmark, Spain, France, Finland, Great Britain, Greece, Italy, Ireland, Luxembourg, Netherlands, Portugal, Sweden. (original member states)

EU 25 EU 15 + EU 10

EU 27 EU 25 + Bulgaria + Romania

Figure 1

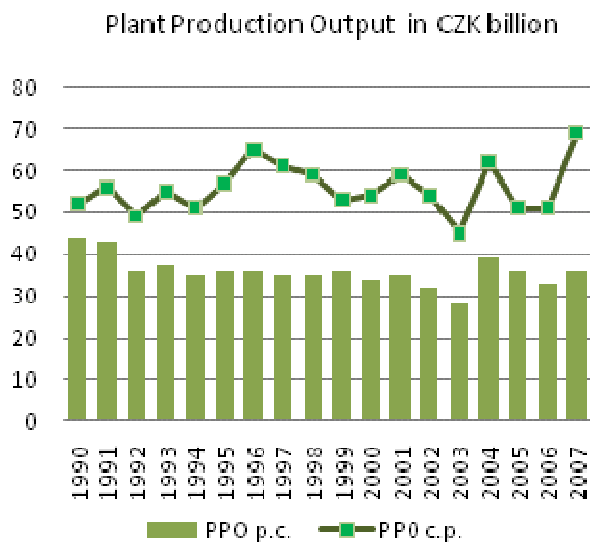
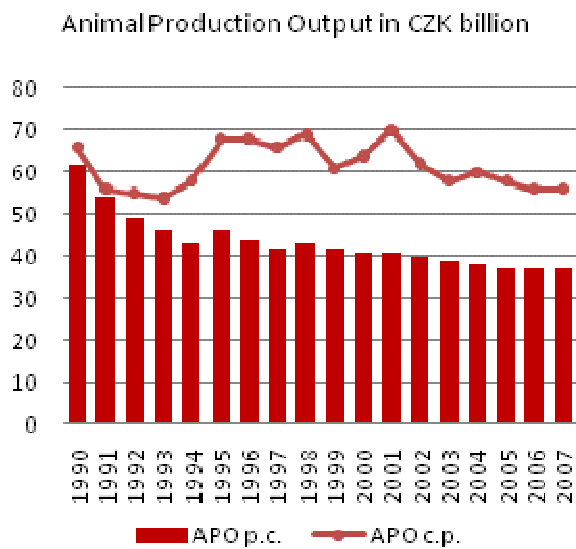


Figure 2



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