EU-integration of the Hungarian cereal sector: Feeding whom?

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The impact of EU integration on certain markets has not been unambiguously positive in Hungary. Problems caused by delays in establishing the required infrastructure and institutions have been amplified by record harvests in the first two years of EU membership. The fall of cereal market prices and the late payment of direct aids contributed to serious cash-flow problems of farmers in the 2004/2005 season. Market inefficiencies still exist as regards the infrastructure as well as the standards of production. Due to that on the one hand, and to the expected stagnating of livestock numbers on the other, cereal market prices in Hungary are expected to remain under pressure in the next few years, despite the implementation of the Single Payment Scheme or a likely cut in the intervention price level.

References – 5, language – English.
Key words: *Hungary, EU integration, cereal production, livestock sectors.*

INTRODUCTION

Since the start of the transition to a market economy in the early 1990s, only limited progress has been made towards the market orientation of the agricultural sector in Hungary. Although regulations and the subsidy system played an important role in stabilizing, especially, the livestock sectors, producers got used to national intervention mechanism, and production became rather neutral towards market signals. This, hand in hand with other shortcomings, caused serious problems while opening the domestic markets during the EU integration process. Cereals occupy about 70 % of the arable land in Hungary, and thus play a defining role in crop production. Before accession, a system of guaranteed prices combined with minimum and maximum intervention prices existed for milling wheat and feed maize. However, institutional prices were well below the EU intervention price level, and buy-up quantities were strictly limited. Expectations of arable producers in Hungary were understandably high concerning the guarantees of the EU intervention system as well as the level of direct aids but good weather, the shifting of payments into 2005, infrastructural challenges, and the deepening crisis in the livestock sectors finally led to the collapse of the domestic grain market in the 2004/2005 crop year.

1 DEVELOPMENTS IN THE CEREAL SECTOR

With 15.5 mio ha cereal area, NMS contribute to about 20 % of the EU-25 total cereal production. Poland is the largest cereal producer with a 45 % share in the NMS output, followed by Hungary (27 %), the Czech Republic (14 %), and Slovakia (6 %). As a result of the extraordinarily favourable weather conditions, cereal production in Hungary doubled in 2004/2005 compared to 2003/2004. The 2005/2006 harvest was below the 16.8 mio tons record of 2004/2005 by only 4 % (see Figure 1), thereby Hungary maintained its 4 % share in the EU-25 and its 23 % share in the NMS soft wheat production while slightly increased its share to 19 % in the EU-25 and to 67 % in the NMS maize production. Notwithstanding the bumper harvests, yields of wheat and maize, the principal crops on arable land in Hungary, were still lagging behind the EU-15 average by 17-25 % and 10-20 %, respectively, in the 2004/2005 and 2005/2006 seasons (see Figure 2). In 2004/2005, expectations of market participants regarding the guarantees provided by the EU cereal intervention regime on the one side, combined with the lack of adequate storage capacity for intervention grains, and the high cost of transport on the other, led to serious disturbances in the Hungarian cereal market. Following the 2004/2005 harvest, the outflow of grains slowed down drastically, and prices in the physical market took a dive reaching EUR 70-80 per ton. As the taking over of cereals offered into intervention as well as the payment of area based direct aids (both the Single Area Payment of EUR 70.2 per hectare and the national 'top-up' for arable crops) were delayed considerably, farmers faced increasing liquidity problems, and began to sell out their wheat, maize and barley stocks mostly to well capitalised trading firms at prices lowest in the EU-25. In the last months of the 2004/2005 intervention season, the Hungarian Agricultural and Rural Development Agency (ARDA), acting as the intervention and paying agency, bought 3.9 mio tons of cereals (including 2.2 mio tons of maize and 1.5 mio tons of wheat) into intervention, 21 % of that being given over by only 4 market players.

In the 2005/2006 intervention season, until January 8, 2006, 3.7 mio tons of cereals, including 2.5 mio tons of maize (78 % of the EU-25 maize offers) and 1.1 mio tons

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of wheat (46 % of the EU-25 wheat offers), were already offered into intervention, while less than 350 thousand tons of the 2004/2005 old crop were released from intervention stores to the physical market. Since the existing transport infrastructure allows, under ideal conditions, for not more than 0.5 mio tons of cereals and oilseeds to be shipped out of the country a month, the inevitable accumulation of public stocks may cause a continuous pressure on physical market prices in the coming years.

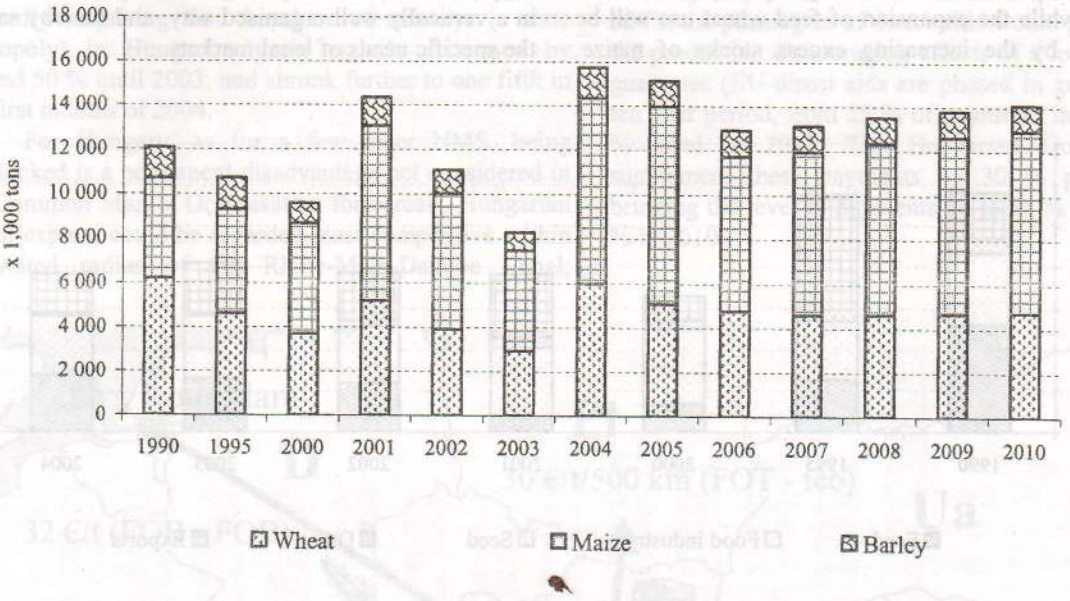


Figure 1 **Development of the production of major cereals in Hungary (1990-2010)**

Source: Hungarian Central Statistical Office and results of modelling work at the Research Institute for Agricultural Economics (Based on the assumption that the Single Payment Scheme was introduced in 2007)

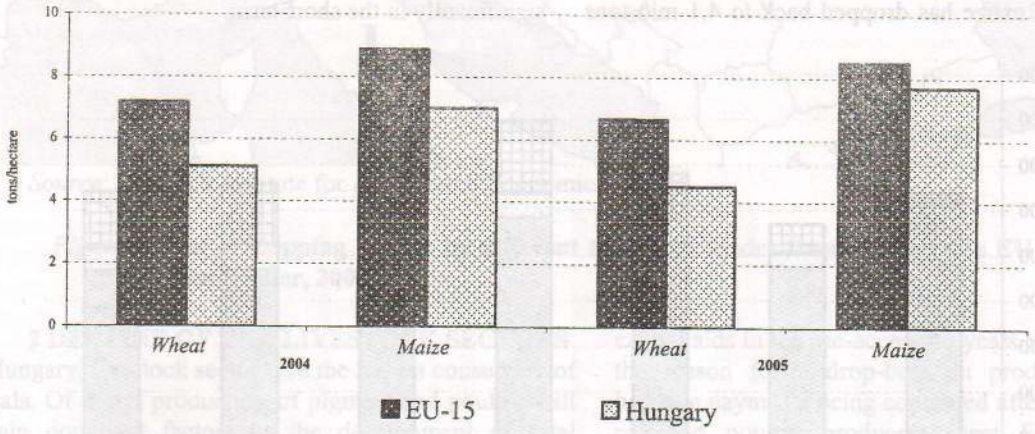
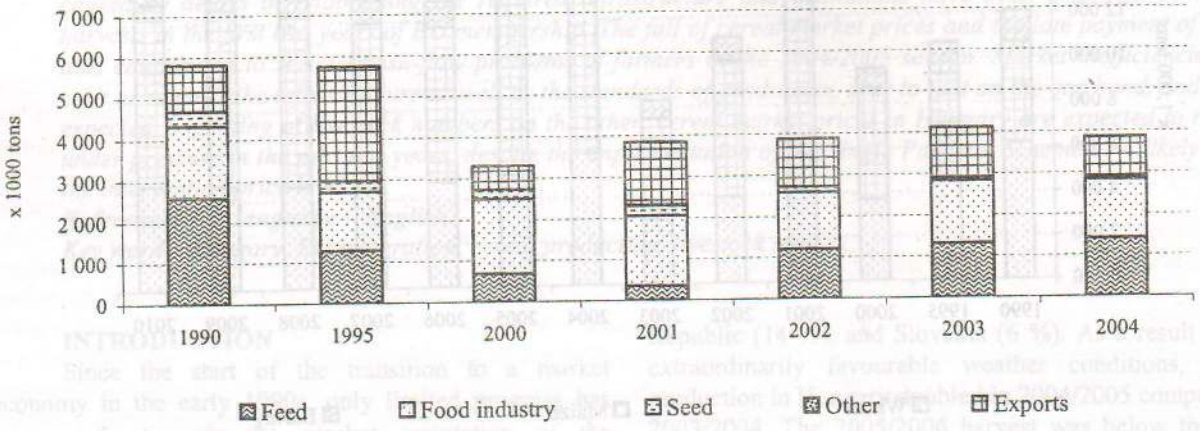


Figure 2 **Yields of wheat and maize in the EU-15 and Hungary (2004-2005)**

Source: Hungarian Central Statistical Office and COCERAL

Market participants with insufficient storage space began to invest into the building of new stores in order to bridge the gap between harvest time and the beginning of the intervention season, and thereby fully benefit from the CAP. To speed up this process, rural development funds were made available, and by August 2005, contracts for the building of 2.4 mio tons of storage capacity were made with the ARDA. The ARDA expects that a total of 4.1 mio tons of new storage capacity will be available for storing intervention cereals by the end of 2006. Unfortunately, these investments are not fitted into an overall infrastructure development strategy, and therefore the whole programme might prove economically

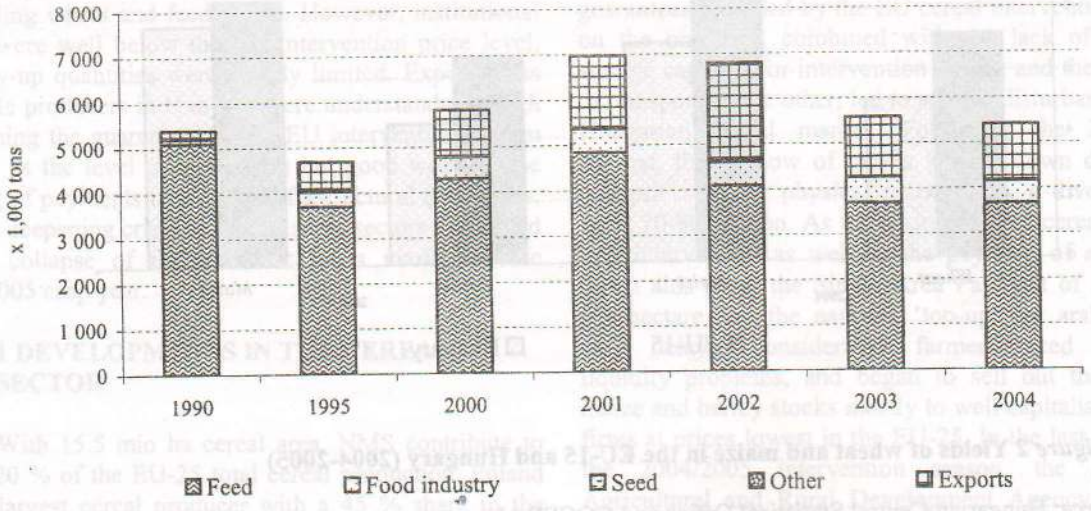
unsuccessful in the longer term. Undoubtedly, Hungary will remain the largest potential exporter of wheat in the NMS: production of wheat is expected to stabilise between 4.5-5 mio tons while domestic consumption is unlikely to exceed 2,5-3 mio tons in the mid-term. As in the years before, demand of the milling industry will stay at around 1.3-1.5 mio tons of high quality wheat (see Figure 3), while the expansion of feed wheat use will be constrained by the increasing excess stocks of maize. Area sown with winter wheat in 2005 exceeded 1.1 mio ha showing virtually no change compared to the sowing area in 2004 or any of the pre-accession years. It should be noticed that after 15 years of the political and economic transition, Hungarian wheat exports still serve as an outlet of internal surpluses rather than the regular supply of wheat to deficit regions (mainly third countries) in a vertically well organised way, and thereby satisfying the specific needs of local markets.



Source: Hungarian Central Statistical Office

***Figure 3* Consumption and exports of wheat in Hungary (1990-2004)**

With some 3.7 million tons used for feeding a year, Hungary is the largest consumer of maize in the NMS. After the bumper harvest of 8.3 mio tons in 2004, maize production reached 9 mio tons in 2005. Total domestic consumption of maize has dropped back to 4.1 mio tons since 2002 (see Figure 4), and demand for feed maize is expected to remain below 4 mio tons in the next few years. Bio-ethanol production is unlikely to increase domestic maize consumption and reduce excess stocks significantly in the short-term.



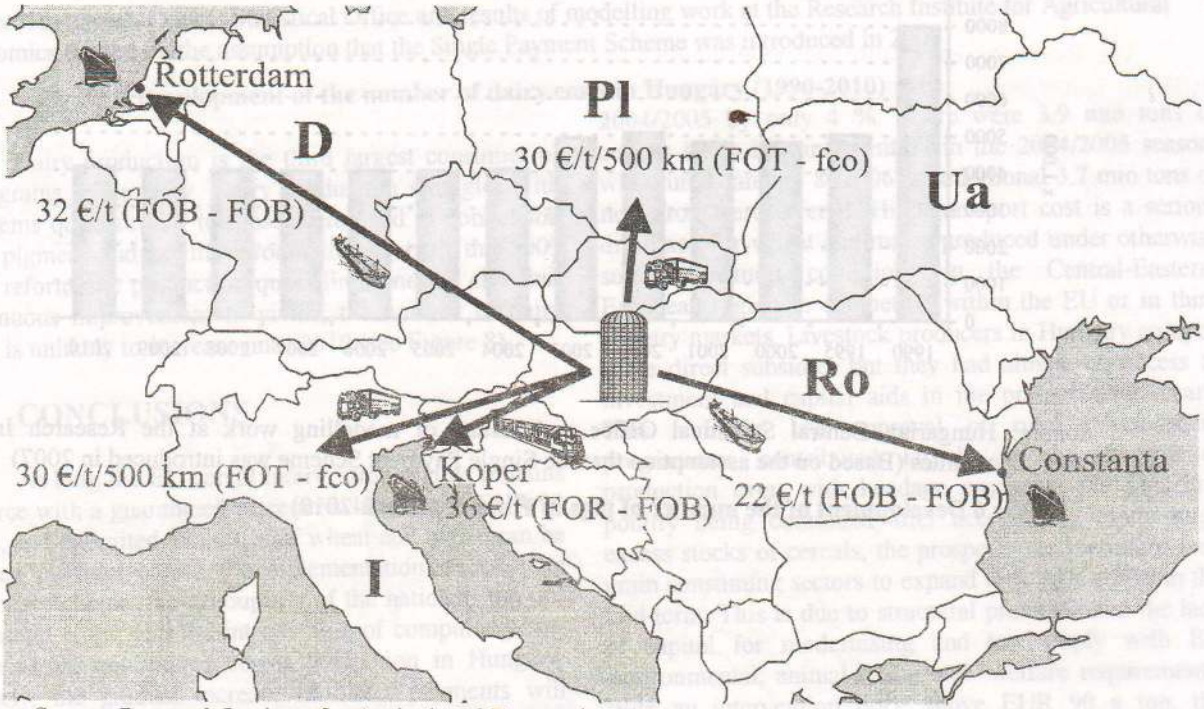
Source: Hungarian Central Statistical Office

***Figure 4* Consumption and exports of maize in Hungary (1990-2004)**

The high transport cost of cereals (see Figure 5) due to, in the first place, the scarcity of shipping capacities and the inefficiency of infrastructure, is a serious drawback for wheat and maize produced under otherwise suitable natural conditions in the Central-

Eastern-European region in competing within the EU or in third country markets. Transport potential of the Danube and its tributaries is unexploited: traffic is held up by undersized and obsolete waterways but the foremost problem is water level fluctuation. Grain transport on rails has been too expensive in the past few years, therefore it is hardly surprising that the share of railways (a state monopoly) in Hungarian grain exports decreased by around 50 % until 2003, and shrunk further to one fifth in the first months of 2004.

For Hungary, as for a few other NMS, being landlocked is a permanent disadvantage not considered in the Common Market Organisation for cereals. Hungarian cereal exports could be regarded most competitive within a limited radius of the Rhine-Main-Danube Canal; however, as regards wheat, practically all regions along this waterway can and will satisfy their own commercial needs. Opportunities for maize exports appear a bit more favourable, especially if the intervention price of EUR 101.31 per ton was cut back – as it may happen in the future because of the WTO commitments – which could certainly impact on EU-15 maize output, while in the NMS, the phasing in of direct aids would probably offset the production discouraging effects of a lower level price guarantee (EU direct aids are phased in gradually over a ten year period, from 25 % of payments in 2004 to a 100 % level in 2013. The Hungarian Government can supplement these payments by 30 % points, thereby bringing the level of payments up to 55 % in 2004 or 100 % in 2010).



Source: Research Institute for Agricultural Economics

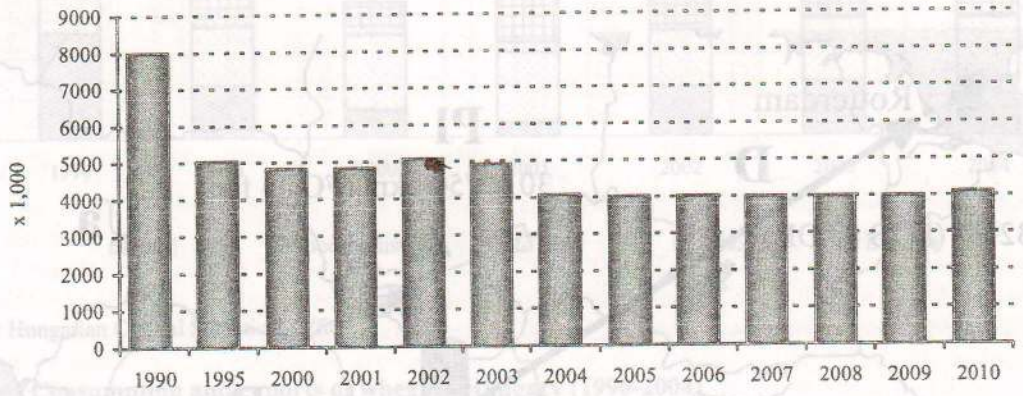
Figure 5 **Cost of shipping cereals by different transport modes from Hungary to EU destinations/exits (September, 2005)**

2 DECLINE OF THE LIVESTOCK SECTORS

In Hungary, livestock sectors are the largest consumers of cereals. Of these, production of pigmeat and poultry will remain dominant factors in the development of total demand for feed grains. Prior to accession, prices for milk, beef and pigmeat were supported by a system of guaranteed, intervention and guidance prices. For these livestock products, output-based payments were used to cover the gap between market prices and guidance prices. In addition, price premiums for high-quality production were paid mainly for milk, beef, pigmeat and poultry. For dairy cows, pigs, sheep and goats, headage payments were provided. Export subsidies constituted an important policy instrument to regulate animal product markets, especially in the case of pigmeat and poultry. Although livestock producers in Hungary enjoyed some direct subsidies, they had almost no access to investment and capital aids in the pre-accession years which was partially the reason for a drop-back in production even with headage payments being continued after accession to help pig and poultry producers meet EU environmental, animal-health and -welfare requirements. Late approval of the Hungarian Special Accession Programme for Agriculture and Rural Development (SAPARD), the Hungarian Agriculture and Rural Development Operational Programme (ARDOP) and the National Rural Development Plan (NRDP) by the European Commission and thus the delay of payments have also contributed to the decline of the livestock sectors (Prior to accession, the SAPARD provided funds for four groups of measures: investments in agricultural holdings; improvement of the processing and marketing of agricultural and fishery products; development and improvement of rural

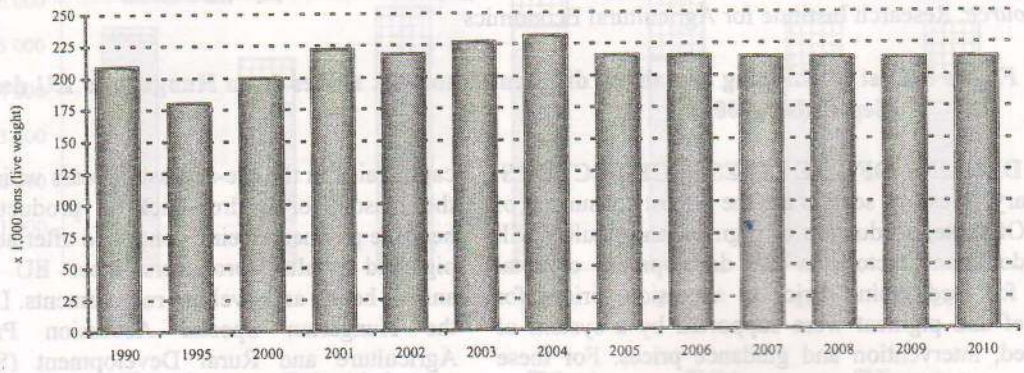
infrastructure; and diversification of activity in rural areas. Due to the late approval of the Hungarian SAPARD by the European Commission (EC), payments to agriculture within SAPARD accounted for only 30 % of the total SAPARD funds in 2004. In 2005, another 30 % of the total SAPARD funds were paid out, and the rest will be made available in 2006. The SAPARD ceased to exist as of May 2004, and was replaced by the ARDOP and the NRDP, both covering the years 2004-2006. However, because the ARDOP and the NRDP were also approved late by the EC, there were no payments in 2004. Payments within these programmes started at the end of 2005, and will not be finished in 2006). In the past two years, Hungarian pigmeat production has decreased at a faster pace than poultry production.

Having huge excess stocks of cheap feed grains, one would expect these sectors to expand again. However, because of structural problems, and because of the lack of capital together with the urging need for modernising and to comply with EU standards, and also because foreign investors are discouraged *inter alia* by the existing land law (legal entities and foreigners are excluded from the land market), the prospects for pigmeat and poultry production in Hungary look rather slim even in the mid-term (see Figures 6 and 7).



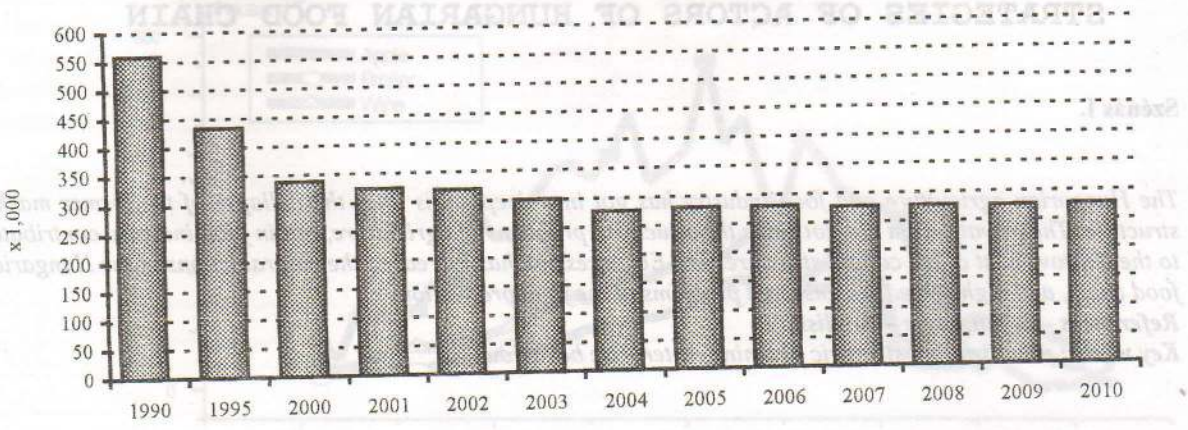
Source: Hungarian Central Statistical Office and results of modelling work at the Research Institute for Agricultural Economics (Based on the assumption that the Single Payment Scheme was introduced in 2007)

Figure 6 **Development of the number of pigs in Hungary (1990-2010)**



Source: Hungarian Central Statistical Office and results of modelling work at the Research Institute for Agricultural Economics (Based on the assumption that the Single Payment Scheme was introduced in 2007)

Figure 7 **Development of broiler production in Hungary (1990-2010)**



Source: Hungarian Central Statistical Office and results of modelling work at the Research Institute for Agricultural Economics (Based on the assumption that the Single Payment Scheme was introduced in 2007)

Figure 8 **Development of the number of dairy cows in Hungary (1990-2010)**

Dairy production is the third largest consumer of feed grains in Hungary. Dairy production struggles with problems quite similar to those mentioned in connection with pigmeat and poultry production. Due to the 2003 CAP reform, the production quota limit and the slow but continuous improvement in yields, the number of dairy cows is unlikely to increase until 2010 (see Figure 8).

CONCLUSIONS

As long the EU cereal intervention regime remains in force with a guaranteed price anywhere above EUR 90 a ton, and unlimited quantities of wheat and maize can be offered into intervention, the implementation of the Single Payment Scheme, the decoupling of the national 'top-up' for arable crops, and the introduction of compulsory set-aside would not reduce cereal production in Hungary. Namely, the gradual increase of direct payments will offset the effects a discreet price cut would have on production value, while producers would obviously set aside land of poorest quality, a good part of that being left idle already. According to AKI estimates, under normal conditions, 14.5-15 mio tons of cereal stocks could be accumulated until 2010. Cereal production in Hungary doubled in 2004/2005 compared to 2003/2004. The 2005/2006 harvest was below the 16.8 mio tons record of 2004/2005 by only 4 %. There were 3.9 mio tons of cereals taken into intervention in the 2004/2005 season, while until January 8, 2006, an additional 3.7 mio tons of new crop were offered. High transport cost is a serious drawback for wheat and maize produced under otherwise suitable natural conditions in the Central-Eastern-European region in competing within the EU or in third country markets. Livestock producers in Hungary enjoyed some direct subsidies but they had almost no access to investment and capital aids in the pre-accession years. This and the late approval of rural development programmes contributed largely to the decline of production even with headage payments for pigs and poultry being continued after accession. Despite huge excess stocks of cereals, the prospects for the major feed grain consuming sectors to expand look rather slim in the mid-term. This is due to structural problems and the lack of capital for modernising and to comply with EU environmental, animal-health and -welfare requirements. With an intervention price above EUR 90 a ton, the implementation of the Single Payment Scheme and the decoupling of the national 'top-up' for arable crops together with the introduction of compulsory set-aside are not likely to reduce cereal production in Hungary. Under normal conditions, 14.5-15 mio tons of cereal stocks could be accumulated until 2010.

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