# The Position Losing of Animal Husbandry in Agriculture

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**Abstract:** The author in the presentation deals with the fact that what caused the decline of animal husbandry in contrast with plant production; how this unfavourable ratio of 60:40 could evolve when comparing plant production and animal husbandry

What the reason is for the decreasing animal stock; and how the effect of changes in the elements of the economic efficiency such as yields, prices, subsidies, production value, inputs, costs, profits can be evaluated in case of more important animal husbandry enterprises highlighting several significant animal products.

Key words: Hungary, animal husbandry, economic efficiency, prices, subsidies, profit

#### Introduction

The ratio of agriculture in the nation economy changed for several times during the past 30 years. In contrast with the "golden age" of the 1970'ies, the wage of agriculture decreased to 3 to 4%, but according to optimistic calculations and defining the agribusiness in an expanded way, this ratio is about 13 to 14% comprising the relating branches (*Kapronczai*, 2007).

On the basis of the latest statistical data, the gross output of the agriculture is about 50 thousands billion HUF, from which the share of agriculture is 2 thousands billion. The added-value (GDP) is 20 thousands billion HUF at the nation economic level, from which that of agriculture is 850 billion HUF. These figures are only understandable if it is known that for example the yearly subsidization of the agriculture (from national and EU-sources) is about 400 billion HUF, constituting half of the GDP produced by the agriculture and one fifth of the whole production value.

In the presentation I deal with the fact that what caused the decline of animal husbandry in contrast with plant production; how this unfavourable ratio of 60:40 could evolve when comparing plant production and animal husbandry (*Figure 1.*).

### **Reasons of Position Losing of Animal Husbandry**

If we take a look at the world's agriculture, there are countries which are stronger in animal husbandry and others where plant production is dominant. *Table 1*. lists several examples.

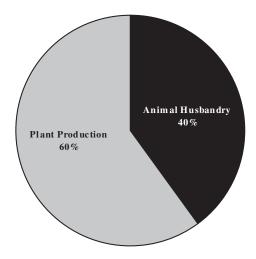


Figure 1.: The Share of Plant Production and Animal Husbandry from the Production

Hungary's natural conditions, its tradition in agricultural and animal husbandry and food consuming habits do not explain the decline of animal husbandry. However, the figures reflect that the country, having a strong animal

Table 1.: The Share of Animal Husbandry from Production Value

Animal Hus	sbandry	Plant Production					
Share of Animal Husbandry							
Ireland	75%	France	42%				
Denmark	66%	Hungary	40%				
USA (Iowa)	55%	Spain	33%				
Germany	51%	Greece	25%				

Source: processing Kapronczai I.'s data by own supplementation

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husbandry earlier, declines increasingly after the change of regime and EU accession.

The low share of animal husbandry from the production value comes from the decrease of the animal stock, as well as from the specialization of enterprises in plant production. *Table 2.* shows the decline of animal stock, while *Figure 2.* reflects the changes of ratio of the farms' structure.

*Table 2.:* The Decline of Animal Stock (Animal stock on December 31, 1000 animal)

Denomination	1986- 1990	1991- 1995	2003	2004	2005	2006
Cattle altogether	1650	1083	739	723	708	702
From which: cow	658	468	350	345	334	322
Hog altogether	8178	5149	4913	4059	3853	3987
From which: sow	658	424	327	296	277	290
Sheep altogether	2165	1347	1296	1397	1405	1298
Poultry altogether	55093	33582	37502	32814	31902	30303

Source: Hungarian Central Statistical Office (HSCO)

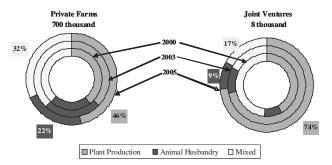


Figure 2.: Distribution of Farms on the Basis of Structure

Source: HCSO, 2006

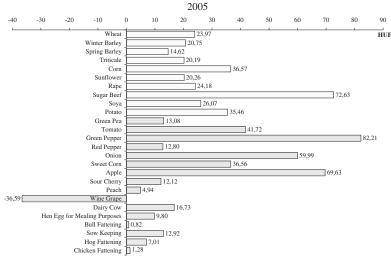


Figure 3.: Enterprise Profit on Production Cost of 100 HUF in case of Products in Plant Production and Animal Husbandry (Average of farms determining the market) 2005

Source: Béládi-Kertész, 2006

The drastic decrease of animal stock endangers even the nation economic balances. The structural change may cause irreversible processes.

The structure of large-scale farms, co-operations and state farms before the change of regime was characterized by the "mixed" adjective. By the year 2000, specialization became significant in farms. According to the farm structure report of the HCSO, by 2005 the specialization grew further by the relevant change between the ratios of main branches (HSCO, 2006).

Figure 2. reflects clearly that the number of private farms and joint ventures dealing with plant production increase, the ratio of farms specialized in animal husbandry decrease, and altogether the number of farms of mixed structure is less and less.

# If this trend continues, animal husbandry will cease in Hungary

The structural distortion of farms do not favour for the utilization of advantages in enterprise connections. One hundred years ago, Hensch (1906) also introduced farms which ignored animal keeping, if "farm animal keeping did not provide reasonable profit". His opinion on this kind of farming was that "greater significance must not have been paid to this system as, firstly, conditions become better for animal husbandry in general, and secondly, ignoring animal husbandry makes the production one-sided, increases risks, decreases the certainty of profit, and gives a rigid feature to the whole farming". Iván Gönczi (Gönczi-Kádár-Vadász, 1967) also shared the suggestion that "Producing more kinds of plants and animals!" This structure considered to be traditional satisfies saving the land condition, decreases the seasonality of labour work and mechanical work, the utilization of by-products within the farm, the realization of expertise and ensures the quicker and more even return of current assets. All these are supplemented as follows "our

> farms should create opportunities for carrying out processing, preparing, serving activities relating to agriculture, such as processing and smoking meat products, skimming cow milk and ewe milk, producing cottage-cheese and cheese, etc."

> Even the American school does not deny the advantages of enterprise connections. It is doubtless that most of the farms in the long-range geographical belts of the United States are specialized in horizontal and vertical ways, "losing the traditional advantages of the diversification" (Nemessályi, 1992).

The number and combination of the branches depend on the fact that what connection exists between the branches. On the basis of these connections, there are competitive, associate and supplementary branches. Two branches are considered as competitive if the product growth of one of them results in the decrease of the other. They compete for the resources. The associate branches

make the better utilization of the resources possible. In case of supplementary connection, one of the branches helps in developing the other. The construction, connections and enlacement of branches result in the chain-type connections and production chains in the cited Gönczi-scheme such as "manure chain", "feed chain", "litter chain", "processing chain" and in the end the vertical and horizontal connections.

The decrease number of animal stock, the shift of farm structures to plant production, the low share of animal husbandry from the production value are just effects. The reason should be looked for in the unfavourable profit condition of animal husbandry.

The decline of the interest in animal husbandry may be explained by several reasons in Hungary, but the weakening profit conditions of animal husbandry enterprises are outstanding from them. This tendency accelerated after the EU accession as the subsidy system favoured for plant production in a better way than for animal husbandry.

*Béládi-Kertész* (2006)'s figure comparing enterprises justifies this fact squarely. The profitability of producing products in plant production exceeds significantly the profitability of products in animal husbandry (*Figure 3*.).

#### Supporting the enterprises is a clue issue

It is worth knowing that the profit of enterprises in plant production largely comes from subsidies.

More than 70% of the arable land of 4.5 million hectares is covered by cereals, corn and sunflower. Without the arable area payment these enterprises would show a deficit. This is indicated in *Table 3*.

Table 3.: Results of Producing the Most Important Plant Products (Average of farms determining the market)

2005

Enterprise	Profit	Subsidy	Profitability
	F	%	
Wheat	-3.159	9.031,4	23,97
Corn	1.963	5.110,6	36,57
Sunflower	-7.628	18.943,8	20,26

Source: constructed table from the database of Béládi-Kertész

Comparing the figures in *Figure 3*. and *Table 3*., it is clear that wheat and sunflower production would show a deficit without any subsidy, and 70% of the profitability in corn comes from subsidies.

Contrary to this, enterprises in animal husbandry are under-subsidized. The production of porker, egg and broiler is hardly or not subsidized at all, that of milk production is minimal; more significant subsidy goes to the beef sector and sheep branch, which would otherwise show a deficit.

Figure 4. reflects the profit and the ratio of deficit of the more important enterprises in animal husbandry during the past 10 years. There were years showing deficit in every branch, but beef and broiler have the negative record. The profit of milk production exceeds that of porker, but both of the branches touched the bottom during the past five years.

The EU wishes to introduce the single payment scheme (SPS-system) instead of the presently used subsidy system in the next five years. This system may be excellent for Western-European farmers, but will become sources of further strains for the newly-joined member states, so for Hungary as well.

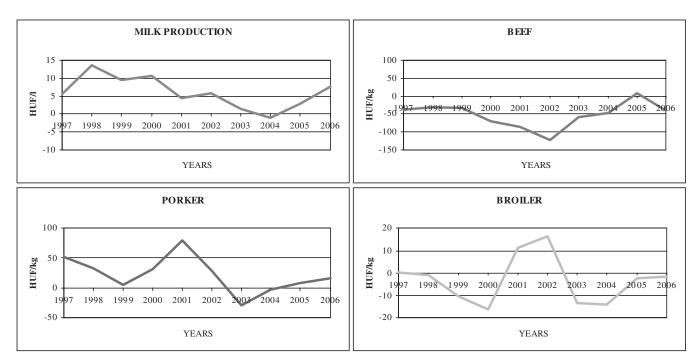


Figure 4.: Profit in Animal Husbandry

Source: constructed figures from the database of Béládi-Kertész (Research Institute of Agricultural Economics)

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The lower subsidy rate has drifted the Hungarian farmers into competitive disadvantage. Although the total sum of subsidy from EU sources and national supplementation increased to more than 400 billion HUF, the rigid EU regulation did not make its most reasonable utilization of national interests possible. The biggest loser of the regulation is the animal husbandry. If the agricultural government do not get the opportunity for spreading the whole sources of the subsidy in a reasonably way, focusing on the Hungarian conditions, the future of the Hungarian agriculture including the future of the animal husbandry, even the system of subsidizing agriculture will become battles among parties without limitation.

#### References

**Béládi K.–Kertész R. (2006):** A főbb mezőgazdasági ágazatok költség- és jövedelemhelyzete 2005-ben a tesztüzemek adatai alapján. Agrárgazdasági Információk, 7. sz. AKI, Budapest, 1–206. p.

**Gönczi G.–Kádár B.–Vadász L. (1967):** Mezőgazdasági vállalatok és üzemek gazdaságtana. Közgazdasági és Jogi Könyvkiadó, Budapest, 1–551. p.

**Hensch Á. (1906):** Mezőgazdasági üzemtan I. Vitéz A. Gazdasági Szakkönyvkereskedés, Kassa, 1–460. p.

**Kapronczai I. (2007):** Információs rendszerek a közös agrárpolitika szolgálatában. Szaktudás Kiadó Ház Rt., Budapest, 1–152. p.

Nemessályi Zs. szerk. (1992): Farmgazdálkodás. A mű eredeti címe: Castle, E. N.-Becker, M. H.-Nelson, A. G.: Farm Business Management. Mezőgazda Kiadó, Budapest, 1–480. p.

**KSH** (2006): Magyarország mezőgazdasága, 2005 (Gazdaságszerkezeti összeírás – Előzetes adatok). Budapest (Internet)