2. THE ORGANIZATION AND OWNERSHIP STRUCTURE OF HUNGARIAN AGRICULTURE

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1. Introduction

Strongly export-oriented, Hungarian agriculture plays an important role in the country's economy. Agricultural products make up 25 percent of Hungary's exports ; trade balances of the past 50 years have benefited from this export. Of course in many ways, the success of Hungary's integration into the Europeon Community also depends on this export-potential.

In fact, based on the natural endowement of the country, and the present development of agriculture, exports could be greatly increased, even doubled, if current restrictions by the EC would be eased. Until then, however, the comperative advantages of Hungarian agriculture will remain rather limited.

2.1. The charasteristics and comparative advantages of Hungarian agriculture

In comparison with the rest of Europe, Hungary possesses very good ecological and other conditions for agriculture.Its climate is generaly free from extremes; there is plenty of sunshine (some 2300 hours/year), and the vegetation period is relatively long, too. And, of course, one should add to this an abundance of well educated agrarian professionals, which, together with the given natural conditions, should explain the successes of Hungary in this area.

Also, the high percentage of arable land is coupled with great flat surfaces. Two-thirds of the country is easily cultivated flat land, under 200 m sea level. In Europe similar areas can be found only in the Netherlands and in Denmark.

The ratio of agricultural land vs the population is also favourable. Only Ireland, Greece and Spain has more agricultural land per 1000 persons than Hungary. At the same time, some two-thirds of the arable land is good-to-excellent in quality, providing opportunities for a large number of crops and produce.

Big (state) farms, cooperatives with big blocks of land were formed many years ago, allowing for modern, mechanised technology, with relatively low costs and high efficiency. The continually improving yields of wheat, maize or sunflower seeds are only some of the proofs of this.

Compared to Western Europe, the price of land is still low in Hungary, which, in turn, also has a favourable effect on the costs of production.

Starting price at the land auctions presently going on was HUF 1000 per"Gold Crown" (GC), but only in areas close to towns and holiday resorts. Average price around the country was HUF 500 per GC. As "Compensation Bonds" currently sell for about 75 percent of their face value, Bond owners at the auctions can obtain average arable land for about 12.000-to-15.000 HUF per hectare. Thus, the land-market in Hungary is still quite "deformed", at the least.

With prices of land so low, rent prices stay low, too, HUF 1000 - 1500 per hectares.

(So far, however, cooperatives have paid even less than that to their former land-owner members. The introduction of Compensation Bonds, as well as privatisation will most likely push up prices for both who want to buy or rent land, but even so, the Hungarian terrain remains highly competitive.)

Of course, natural endowments, however great, can be really taken adventage of it they are coupled with other advantages, One such factor is low wages in a country, e.g. in Greece, Ireland, Portugal, etc. But, at least for the time being, we do not have to worry about our competitiveness here either; based on some recent estimations, average wages in Hungarian agricultural state owned enterprises (SOEs) are even lower than in Portugal.

(Hungarian wages are generally low, less than half of the wages in the EC. Those in agriculture fare even worse - average wages here are around one quarter of those in the Community. At the same time, it must be admitted that productivity is also lower. This can be partially explained by the lack of modern technology, and equipment. For instance, in number of tractors per unit we are way behind European average. EC-countries use 4-to-7 times more tractors per 1000 hectares than Hungarian farmers; e.g. 124 in Germany, 71 in Italy, 49 in France, 19 in Greece, as opposed to a mere 8 in Hungary. And this clear disadvantage is only partially balanced by some special equipment, etc. the Hungarians have devised.)

Another advantage - and this has also internationally been recognised - are the many well trained professionals in agriculture. Modern, plant and animal production, many successes in animal breeding, and hybridisation are the direct result of this, and - with continous education - will guarantee further successes in the 1990s and so on for Hungarian agriculture.

In fact, with proper market demand, Hungarian agricultural products will remain competitive for a long time to come.

But a relative weak point in the chain must also be noted; while Hungarian food products are excellent, technology, packaging, etc. in the food industry as well as service standards in the food trading industry are less than perfect if compared to larger EC-food producers. It is only hoped that the current privatisation process, the injection of new capital, etc. will bring some positive changes also here.

2.2. Some economic and structural problems of the transition

We have arrived at a critical stage, the pace of economic and social change has quickened. The market is the key item in Hungary's new economic policy. It must coordinate, integrate the whole economy of the country, including, of course, agriculture and the food industry.

But a market economy will work only if ownerships, inte-

rests of the market players are clearly represented. The legal and institutional system and financial regulations must also support this process.

It is well known, of course, that ownerships, the interest of owners which moves the market economy. While real owners strive for maximum profits, using all opportunities the market will demand or allow them, it is also natural for them to minimise losses, to keep costs down.

Thus, the very first task of transformation should be the orderly settlement of ownerships. The new types of cooperatives, farms owned privately or rented out on an economic basis, will speed up the process. Also - besides the natural long-term interest of someone in his or her own property - these types of agricultural units are "moved" by the market, so, they will also be more flexible in their response to changes in demands, etc.

The "adjusting" role of the market can already be observed in certain areas. There are for instance, a great number of new agricultural producer, processor and trading companies who, produce, process and trade exactly the products the markets demand.

(In Hungary - similarly to the highly developed Western countries - the agricultural market must be regulated. The difference is that subsidies are very low or non-existent in Hungary if compared to the EC. That is market regulation or "market regime", is basically just that: regulation. To level off production cycles, to avoid chaos for example with former

COMECON partners, etc. But there are very little funds for serious interventions, subsidies for export. In short, Hungary can compete in quality agricultural produce, but it cannot compete in giving more and more subsidies to its farmers, for it wants to make a living from exports.)

Present Hungarian agricltural policy - even in these difficult times of transitions - forces the agricultural sector to continue to bear its share in the economy. Hungarian agriculture pays more into the national budget than it receives from it. Export-subsidies are just over 10 percent, a fragment of Western countries. In fact, Hungarian agriculture is punished by taxes, etc. rather than supported.

But whatever support Hungarian agriculture receives, it is used for infrastructure, to get new agricultural entrepreneurs, started to reorganise agricultural, agro-industrial ventures replacing former state farms and other large SOEs. In this context, export subsidies are secondary, all the more important, however, the support of depressed areas.

Similarly to Western countries, Hungary has also recognised the closed relations between environmental protections and agriculture. This, of course, does not only mean sensitivity to the environment, but also the creation of new, better quality products. More concretely, we are working on an integrated quality control system that covers the whole process of production and not just the final product. This, in environmental terms, means better protection for both the environment and the consumer.

The transition into a modern market economy is an enormously difficult task. With the dissolving of COMECON we gained more economical independence but we lost important markets. Unfortunately, we cannot join the other economic community, the EC as fast as we had hoped in 1989-1990. While possibilities for exports are greater than ever - getting a bigger share of EC-markets means hard work and more hard work in areas of marketing and quality for Hungarian agrculture and agro-industry.

Heartening is the growing number of farmers who do not look to the Ministry of Agriculture anymore to "show the way". In a true market economy the Ministry should not "direct" or interfere in agriculture, but it should definitely establish favourable economic conditions for production. Then let the agricultural producer, the farmer decide what he wants to produce and for whom. And farmers must know what the market wants.

It is a basic rule in market economies that producers who do not know the markets for their product(s), generally cannot sell them either, and even it they can, they might be taken advantage of by big trading organisations, etc., as it used to be the case often prior to 1989-1990. But market informations are even more important today. Sadly, the real importance of this is rarely recognised, at least it is not considered as one element of the production process. Unfortunately, those who recognise the importance of market information - cannot pay for it today.

2.3. Structures, forms of ownership

Prior to the current transformation process, even in 199(more than 80 percent of the arable land was cultivated by co-operatives (some 70 %) and state farms. Small producers worke(on some 14 percent of the land.

But cultivation and ownership are two different things; for example, coop lands were largely owned by the coops themselves (some 60 percent), but there was also some 36 percent privately owned land and some 4 percent of their land was in state hands.

With the change of the system and with the effects of privatisation and Compensation, state ownership decreased sharply, while the elusive "cooperative ownership" simply disappeared. In 1992 the old cooperatives were dissolved and they - with the approval of their members - had to form "new type" of cooperations, with free elections of their leaders, etc. Interestingly, some 30 percent of the former coops opted for a holding type organisation that gives free movement to sub-units. This, in fact, is the market economy version of the former system of small farms - big farms symbiosis.

The law let every member decide whether he/she wants to stay in or leave the coop, taking his/her share of assets, but in practice sometimes this latter was (is) hard to fulfill.

Following the change, 80 percent of the State Farms were opened up for full privatisation, in the rest the State will

retain majority and or at least some shares. Some 24 State Farms will secure the strategical production, the biological bases for the population.

The Cooperatives have been going through some drastic changes in the past two years. Big, traditional coops are being replaced by new types of cooperations between members, but working on generally significantly smaller areas (average 300 Ha) than their predecessors. But the breakups and reorganisations also mean that 10-15 percent of former members, some 30-to-40 thousand persons will try their luck as part of a smaller entrepreneur group.

Not surprisingly, those who left coops as a group, orientate towards industrial-service activities. These latter generally have large share in the total value of the business but little land. It is expected that out of the 260 billion HUF total coop value, 50-70 billion will go to new type coops.

As to individuals getting out of coops, this is expected around 6-10 percent of the total, i.e. 25-30 thousand members. They, on the average, receive 5 Ha own land, and some 400-500 thousand HUF in "shares", generally in the form of equipment, etc. Statistics show that 60 percent of these people will farm full time, while 40 percent commit themselves part time only.

It is estimated that the new formations and the individual farmers who leave the coops, some one-third of the total, are also "taking with them" 25-30 percent of the total cooperative assets.

Thus, it is clear, that Hungarian agriculture will remain to be divided into many sectors for some time to come.

As regards actual farming, even today, 80 percent of the land is cultivated by big farms and coops. The reason, of course, is that most new owners do not have the tools and equipment to work their plot, so they rent it to the big farms and/or coops. Consequently, renting out land is expected to spread further in 1993.

(Interestingly, former coops also rented 60-70 percent of the cultivated land but it was a peculiar arrangement; it was mandatory for the owner to rent his or her land to the coop and the rate was set by the State...)

Today, with Compensation Law, the land is being returned to the original ewners and/or their successors. Elderly beneficiaries living in cities can and most likely will rent out their plots to cooperatives, State Farms and even to younger entrepreneurs.

While there will be more small farms and on larger plots than before, but on the average they will be less than half the size of the small farms of pre-World War II years.

Projections call for 1.4 million small farmers on some 1.6 million Ha by the end of 1993. Privatisation and the compensation process are, of course, greatly "responsible" for the increase.

It should be mentioned here, that in labour-intensive areas such as gardening and vegetables, wine- and fruit growing, small producers were responsible for the bulk of production.

According to 1991 statistics, there are 35,000 small farms that have production values over 500 thousand HUF. Their number is expected to increase, but it probably won't exceed 100 thousand in the next few years.

But transformation, however desirable, should not mean leaving large areas uncultivated. Presently, temporary users of a piece of land can not or do not want to cultivate it, if they do not know what will happen to that piece in the future. (Will the future owner pay for their labour, or even if he/she pays for it, will that only cover their costs, etc. etc.) Until the reassuring settlement of these questions (guarantees to temporary users, etc.) uncultivated areas will remain and probably keep growing too.

The production structures of big farms won't change significantly.

Grain and sunflower-seeds will have to be continued to be produced in large, machineable plots. Smaller farms will continue to concentrate on more labour-intensive products.

But, at the same time, we have finally recognised that with the loss of Eastern markets the times of mass production are over; the market economy does not finance hopes and mere wishes. The market economy - we are learning the hard way - is cool and calculating, but there is no choice, one must adapt to its rules. But as stated before, the country's ecological, economical and intellectual potential keeps us competitive in food production in the world market.

2.4. Sizes of land

In 1990 out of the total land area of Hungary the State owned 31 percent, cooperatives 55 percent and private producers 14 percent. However if we investigated arable land, we saw that the State's share dropped to a mere 14 percent, collective ownership (coops) dropped to 73 percent, while private ownership remained basically the same, 13 percent.

The often forced and thoughtless joining of plots resulted in tremendous increases in the average size for State Farms (7608 hectares) and cooperatives (3802 hectares). At the same time an average piece of land owned by private farmers was less than 0,6 Ha.

When the current transformation process will end, more than 80 percent of the total land area and more than 90 percent of the arable land will be privately owned. But estates might be more fragmented than following land distribution after the War. At the same time, some 40 percent of new private land will be rented out to cooperatives.

Basic principles in land ownership

The key element in Hungarian land policy is private ownership of land. It is governed by three principles ;

1.) land should remain a national asset (i.e. non Hungarian citizens cannot buy arable land),

2.) There should be an economic aspect of land ownership (i.e. set maximum size of land, but also limit fragmentation as much as possible, etc.),

and finally

3.) land also has to have a social function (i.e. by providing plots for houses and gardens for the needy, for part-time small farmers, etc.)

Structure of the various farms

Competitive agriculture, and the various farm types within, must be supported by appropriate legal, -financial, -credit, -subsidy and tax-policy, in harmony with EC regulations. Another important factor in competitiveness, of course, is the proper ratio between and the distribution of the various farm types.

If one wants to set categories for the various farm-types then optimal size of the farm, of the land is, of course, of vital importance. But economically speaking, the size of a farm unit is optimal if it can produce maximum profits. Yields and costs (inputs) gross margins, will provide us with that optimal point. Naturally prices, conditions of production (technical development) also play an important role in finding the optimal size.

Formulators of national policy in this regard usually do not select big agricultural units with favourable conditions as samples; they rather look at average farms, where farmers

earn at least as much as employees in other sectors. But "optimal size" also changes continually, with technical development, prices, etc. Prices are also usually strong motivators in animal breeding part-time and/or full time.

Further starting points for categories are gross income and productivity and the provision of jobs, so small farmers can make a living with reasonable working hours, and part-time farmers can earn enough to reasonably supplement their income. As to the actual number of hours spent with work; researchers generally agree that 4000 hours per year is the minimum for a family farm. Out of this, the lead worker, usually the head of the family works some 2400 hours per year. Gross income has been set at 750 thousand HUF minimum in 1993.

Farm categories

- Family farm

  (full time agricultural activity; farming families are the cheapest and most adaptable producers because they have to make a living from this activity; little is spent for administration, etc.)

  Minimum size is cca 30 hectares here; it is sufficient for a family to cultivate various plants, to keep animals, and to reach at least 750 thousand HUF gross income.

- Small plot or farm

  (while can remain independent, it cannot support a family)

- Integrated farm

  (they produce for processing and/or trading companies who direct and also partially finance their activities.)

- Specialised farm

  (one of their branches is responsible for over 50 percent of their total production.)

- Mixed production farm

  (none of their branches reach 50 percent of their total production.)

Present agrarian policy has set a limit on owning and/or renting arable land. Private persons, fundations and local government cannot own more than 200 hectares. Private persons, agricultural companies and cooperatives - with the exception of "land renting coops" - may rent only 500 Ha. Land renting coops can rent as much as 2500 hectares.

Categories for economically <u>not</u> independent, <u>part-time</u> contributors to agriculture are as follows :

- special cooperatives
- small farms integrated by special cooperatives,
- independent small farms

The special cooperatives are formed voluntarily by a num-

ber of small producers, for individually they do not have the land, capital or the equipment to produce profitably.

Farmers in less favourable, depressed areas are a separate category, for their income must be supplemented by various subsidies (social policy, environment, etc.), and - if possible - by country tourism.

Conditions for private ownership

Family farms, new types and special cooperatives, and integrated small farms should have priorities within this policy. One of the most urgent tasks is the establishment of a suitable credit system, one that "understands" the peculiarities (e.g. the cyclic nature) of agriculture. Without such system, without credit available when needed, cooperatives and private farms cannot operate. One of the problems here is that, for example, cooperatives rent and do not own their land, thus it cannot be used as collateral. Well run savings cooperatives could, of course, solve this situation - at least until the development of a wide ranging mortgage system.

This policy should, of course, also "remember" agricultural taxation and trade, the introduction of a land law (maximizing land ownership, inheritance of land, renting of land, etc.), agricultural aducation, extensionists (special advisers to farmers), a broad information system, and the assistance of newcomers into agriculture.

To sum up, any policy for land ownership and use must facilitate competitiveness which will form optimal sizes and healthy distribution of activities anyhow, and must, of course, curtail extremes with legal tools.

From economical and employment point of view, agricultural policy should concentrate on bringing together small land owners who have little capital and possibility to work on their own.

Family farms should be big enough to introduce top technology; this will be the only way to keep them competitive in the future. Also, while "keeping the family busy", these farms must provide a decent standard of living to family members.

Ideal or optimal farm sizes can be assisted and stabilised by a well functioning credit and mortgage system, which, of course, also helps avoiding serious crisises in production.

2.5. Structures of activity(main branches and products in the food industry)

In Hungarian agriculture (about since the freeing of peasants) extensive grain production was traditionally competing with intensive vegetable and fruit production.

But looking back a little less, - from the second wave of cooperatives - it is evident that Hungarian agriculture was (is) quite different from the market economy countries, but even from the former communist countries,in its structure.

The main characteristics of this structure are the symbiosis between the animal keeping part-time farm and the mammuth farms producing fodder and breeding animals. In this type of division of labour, production of the small farm was based on the feed provided by their bigger brothers. Thus, without the collaboration, technological advise of the integrating large farms, these small, mainly part-time farms could not have remained viable, could not sell most of their products. But together they were strong.

Looking at the 1981-1985 buying up data, one can see that nearly 20 percent of the pigs, poultry and sheep came from small (part-time and full time) farmers. Their share in milk and egg-production was even higher; 50 and 35 percent respectively. But they "left" wheat and maize productions to bigger farms and coops,delivering less than 1 percent of these crops to buyers. This, of course, is strongly connected to the administrative restrictions on the size of plots and not to some kind of aversion to these traditionally Hungarian plants. In vegetable and fruit production the size of land plays a less decisive role, so, here the weight of small producers can be felt again. And they usually produced more than the State Farm or cooperative had picked up from them.For own consumption (even if it means more labour than buying for instance broiler chicken from big chains),to save on expenses, but also because supply of such products are still less than satisfactory in many villages.

The production structure for big farms, but especially for the cooperatives was even more peculiar, from 1975 on. (This was the year when Bela Biszku, powerful but arch-conservative member of the Politbureau, lost out to his more liberal comerades about questions of farm economics...) To improve their cash positions, cooperatives were allowed to do farm industrial divisions; soon building works, processing lines, various maintenance and service units, etc. popped up. And they were not just some "side activities" supplementing income; in over 50 percent of the coops these shops had brought in more than their basic activity. These activities were also some form of "compensation" for the people living in the country. But after some initial successes, most of these shops by now have either been divested from the coops or they had gone bankrupt because of lagging demand.

Researchers know that concrete agricultural policy decision are usually tied to some foreign trade difficulty or boom. This was true many years ago and it is true today. For example, in 1974 the EC-ban on beef nearly ruined the Hungarian beef industry. On the other hand, the 1976 "grain and meat for oil"-programme with the Soviet Union resulted in a strong economical upturn,which has lasted until the US grain embargo. These were also the years when Hungary became one of the main meat producers in the world.

But this agricultural boom had also brought about some structural changes. Farms and farmers concentrated less and

less on meat cattle and more and more on pigs and poultry.

Consequently, the demand for protein-rich fodder has rocketed, sharply increasing imports of soya and fish-meal. But in spite of ever rising prices of these products, imports had to be kept on to provide proper feed to these high quality and demanding animals.

Animal production and exports of same are highly developed in Hungary. Biological bases and genetic capacities are internationally recognised.

Ninety-to-ninety-five percent of the animals produced here are from the four main branches: pigs, poultry, beef and sheep. Pigs and poultry are especially numerous. The growth of pig raising can best illustrated by the fact that while in 1965 there were less than 7 million heads, after 1985 they had reached 10 million - the population of Hungary ! While they have gone down in numbers in recent years, pigs and pork meat are the most important meat product in Hungary. During the same period the number of poultry has also increased by some 25 million, beef and sheep continued to decrease.

Poultry in Hungary means more and more water fowl. Hungarian goose liver and feather are world renown. Demand for chicken has also lessened in recent years.

Once also world famous, horse breeding has not received the support it deserved in the past 40 years, although exports of sports and race horses was kept up throughout these years, too. There are new development and investment programmes today to stop the deterioration of these valuable national assets.

Hungarian fish breeding-farming (especially carp) has been a traditional activity for centuries. The largest such gene-bank is in the Szarvas Research Institute.

Small animals such as rabbits and bees are montly handled by small farms. Honey made from Hungarian acacia and flower are of excellent quality. This latter is underlined by the fact that Hungary is responsible for 8 percent of the world production of honey.

While plants provide one third of the total production value of agriculture (60-65 percent of arable land is covered by grains, mainly wheat and maize) there are many other cultures, too.

Sunflower-seed-production is also significant, and in recent years it has also been more profitable to produce than grains. Peas, colza and potatoes are also standard crops for Hungarian farms.

Among rough fodder, lucerne, red clover should be mentioned. Hungary also produces a great deal of silo-corn, because pastures are not strong enough to fully support animals, especially in drier areas.

On 2-to-3 percent of the arable land vegetables; green peas, tomato, green and red pepper, carrots, cabbages and onions are produced.

Seeds are produced on 300-330 thousand hectares. Hungarian plant breeders have introduced several new breeds used throughout the world.

The specially selected and classified seeds are a 10 billion Forint (cca USD 100 million) business at home and they bring i nearly as much in exports.

Rough fodder has been exported for decades. Production of hybrid maize seed has been increasing every year.

One of Hungary's outstanding product is the hybrid sunflower-seed which is now produced in many European countries, on several thousand hectares.

Hungarian seeds are competitive on the world market, so their exports should be increased. This would, of course, also provide much needed additional income to agriculture.

After 1985, with more and more subsidies to Western agriculture, a "war" for markets has started. As a "result" of this, Hungary had to decrease production of almost every agricultural product. Increasing EC-orientation since 1989 has yet to set off this imbalance.

2.6. Regional structuring

Regional structure primarily depends on the soil and its configurations, climate and human activity in the area. If these conditions are more or less even in a region, yield for plants there will be higher, too. One such example is potato in Szabolcs-Szatmar-Bereg County (N.E. Hungary), where there are lower temperatures and more rain during the season for this important food item.

Hungary is a small country - 93 thousand square kilometer - yet there are 2 degrees difference in latitude between the northern and southern parts of the country. This, of course, also means 2-3 degrees deviation in temperatures in the spring and/or 10-12 days in the cooling down period in the autumn. This, producers know, can make a difference for certain cultures (fruits, primeur vegetables, specific maize-types, cotton, etc.).

Depending on sea level; measured from the ground, temperature decreases circa by one degree every 200 meters. Our highest mountain, the 1000 meter "Kékestető" is at least 5 degrees colder than at the Plains, around 100 meters above sea level. In fact, average temperature at the Plains is 9-11 grades Celsius. In winter, the north-eastern part of the Great Plains is the coldest in Hungary, so obviously sensitive fruits or maize cannot be planted here. Temperatures are somewhat more balanced in the "Dunántúl" (Transdanubia) where several cultures do very well.

Southern slopes are generally favoured by farmers, but flat land has advantages too; even climate on large areas, which means even quality for their products.

Needless to say that precipication is a major factor in agriculture, and fortunately, Hungary has a sufficient level of it to have good results in production. The problem is with the distribution of the 120-150 "wet days". Out of these on

20-25 days we have snow, and on the rest of days rain. Unfortunately, most of this rain comes during the summer when it largerly evaporates and cannot be fully utilised by agriculture. There is also a tendency for draught which we try to counter with irrigation and protecting forest belts.

Relative humidity is 70-80 %, suitable for favourable plant production, but the air may get too dry (10-12 %) which for example could hurt soya plants.

Velocity of wind is 10.8 km per hour average, during the year.

Until now Hungarian agricultural policy has mainly concentrated on quantity, frequently resulting in production structures that were far from traditions. Also, uniform, normative regulations for everyone, as a matter of course, also had meant slipping behind for regions that did not, do not have the natural resources.

Current policy intends to make everyone competitive but only in relation to local endowments and traditions.

Regional structuring may be devided into micro-, agro-, and macro regions. Plant production is, of course "agro", while propagation materials, gardening. medicinal plants, cumin, etc. belong to the micro-regions.

There are 205 main types of soil in Hungary. Divided climatically there are 75-135 agricultural production areas. The country has 35 middle-sized and seven major agricultural regions.

"Regional maps" made in Hungary assist us in the analysis of markets, quality, production capability, yields and inputs versus population, tradition, processing capabilities and infrastructure. As to plant production, the following is worth mentioning.

Big wheat producing areas are far from maximum capacity, they could easily produce more - and competitive - wheat. Optimally, maize can be produced on 1 million hectares. Many areas would be perfect for tobacco - growing could be increased up to 60 percent.

Potato needs cool, rainy areas; 50 thousand hectares would be sufficient to supply domestic demand - but there is less than that with potato today.

Peas-fodder could largerly set off expensive imports of protein-rich feed. Soil conditions are favourable for this plant, it could be produced economically on large areas.

Soya is a different matter, for we are on its northern limit. This is shown on yields and costs, 30 percent worse than imports. Main reasons are the lack of relatively high humidity soya needs and rain around its blooming period.

Lucerne production could be increased to 8-to-10 percent of the total arable land (twice the current size). An increase is all the more justified, for besides excellent conditions for it, lucerne also plays key roles in protein supply, seed production and soil-protection.

The present restructuring of agricultural production will probably also leave 15-20 percent of arable land out of culti-

vation, as production there would bring only losses under market economy conditions. For these areas the planting of forests is strongly suggested.

Turnover for horticulture is about five times higher than that of traditional plants. Hungary is a great producer of onions (Mako region), red pepper (Kalocsa), cabbage (Vecsés), water melon (Heves), wine (Tokaj, Badacsony, Csopak, Mor, Sopron, Somló, Villány) - specialities. The Romans of one time "Pannonia" had already made references to the valuable herbs, fine wines and succulent fruits of the area.

Unfortunately, onesided export orientation distorted fruit production structures, too. Rather than basing it on the potentials of the location, some of these fruits were more of an "industrial" product than agricultural. The fruit producing cadaster based on ecological surveys was compiled in 1986. Since then new orchards have been planted only on those bases.

Hungary is also an exporter of produced (not collected) drogs. Medicinal herbs endure so called "extreme" - stony, sandy - areas. Marjoram and basil are produced near Kalocsa, while one finds plenty of mustard, coriander and crocus in the hills of Nográd and Gödöllő.

Békés county is famous for its melilot, anise, cumin and garden sage. While ergot is found almost only in the Bakony mountains, poppy seeds are produced in a number of places, but mostly around Tiszavasvár.

Keeping and breeding animals means full time jobs for 0,4 million people, while another 1-2 million people work with animals part-time. These numbers, of course, also show the permeation of this activity in the country. Actually, out of the total production value of Hungarian agriculture, animal breeding used to make up 50-55 percent, but it is lower today.

In this context cattle stands for 27, pigs 40 and poultry for 26 percent, while other animals represent 7 percent.

Cattle and sheep are found near grazing fields, mostly in Transdanubia, but to a less extent almost everywhere in the country. The most pigs are in the Plains, but in fact there are pigs in every village in Hungary.

Cattle holding seems to move towards more milk cows, especially near big towns and cities.

Horse breeding remains in traditional areas; the famous "Nonius" in deep, muddy grounds, the "Furio..o" and the "Arabian" on sandy areas like Kisbér, while the "Lippizan" and the Hungarian cold blooded enjoy the hills of Transdanubia best.

Raising poultry in small farms is getting more and more popular around the world. More attention should be directed to this trend also in this country.

Bio-production has got off to a strong start. The only obstacle to its further development is a solvent domestic market for these products.

To worsen things, conditions for agricultural production

are worst in economically depressed areas. But in most of these places people have little opportunities for employment but agriculture. Thus, the Government, rather than subsidising agriculture in these areas, provides modest support to the whole region, in forms of village development programmes, etc., which, of course, by e.g. keeping people there, etc., also means a form of assistance to agriculture. This kind of support is part of social policy and must be maintained, for more than three quarters of the population lives in the country, in towns and villages.

The forming of regions based solely on agricultural potential, does not only makes more sense and more economical, but it also protects the environment by "fitting" " more a given product to a given area. This, of course, in turn, should further imporve our chances in Western markets.

Prior to the present transformation, agricultural policy, general guidelines, were set by the Ministry of Agriculture, the associations of cooperatives and state farms, and the so called 'production systems' within the latter.

The associations, while acted as "representatives" of their members, were not really independent from the State.

The production systems ("termelési rendszerek") were much more effective and played a key role in the adaptation of modern methods and technology. They thrived even under central direction through many contacts in crucial areas and they usually had the cash too, to realise their ideas. This was, indeed, a useful, progressive period for agriculture that is still felt today.

In spite of the many successes, agricultural trading and its infrastructure was quite underdeveloped in pre-1990 years. The producers were totally dependent on the various, monopolistic "purchasing agencies". Trade was regulated administratively rather than by the market. Export subsidies were given to the monopolies with "export licence", while the amounts of the subsidy was set behind the back of the small producers.

Production of animals for slaughter and production of meat was dictated by the processors - prices and market demand had little "say" in the operation.

Today, with transformation in many areas completed (e.g. Cooperative Law, etc.) and in others strongly on the way, the role of "coop associations" was taken over by newly

formed, county-level "Agricultural Bureaus" (Földmûvelésügyi Hivatal). The Ministry of Agriculture (MA), among other its Department of Agriculture was also reorganised, and a new, coordinating 'Agricultural Bureau' was also established in the MA. They assist agricultural tasks and development in the counties, "watch over" the difficult transformations of cooperatives. They also oversee the budding "extensionist" (agricultural advisory) service, the distribution of various funds, issue and verify documents, etc. necessary to the day-to-day operation of agriculture.

To assist Parliament, a 19-member 'Agricultural Committe' was recently set up in the House of Representatives. They prepare and review laws, regulations, and various actions that affect agriculture. They also try to speed up key legislation concerning agriculture (land law, etc.), so far with little success..

But regarding this latter, we also must be fair: there are numerous laws (Compensation. The Mandatory Restructuring of State Owned Enterprises to assist privatisation, the Law on Cooperative Transformations, the Market Regime Law, amendments to the ownership and use of arable land, the regulations concerning state owned forests, the Committes controlling Compensation, etc., etc.) that shows the serious attention of the legislature in this area, too.

According to the economic/agricultural policy of the Government, agricultural producers are fully independent now; no one tells them what and how much to produce. The decision is theirs, based of course only on economic sense, marketing possibilities. Naturally, after so many years of directions and/or "guidelines", it is not easy just to "change over" to a market economy, to do a professional job at once at producing quality products and to obtain excelent marketing skills of same...So, again, the State must remain "nearby", provide the necessary professional assistance, however modest, and consider the interest of each producer, at least until they are strong enough tó do it alone.

After some debate the Law Regulating Agricultural Products and Markets - "Market Regime"- was recently enacted by Parliament. The goal, of course, is not new interference by the State; it serves only - like in Western Europe - to regulate the market, to secure free competition for all players in the market. This, however, will function well only, if both the producers and the State's interests are observed maximally. For the time being this is not always the case...

Also, in 1993 Hungary wants to introduce a unified emblem for quality foods. This will mean guarantees to all buyers of Hungarian food products, including the EC, for our integration into the Community depends primarily on the export potential of agriculture.

Conclusions

The introduction, changing to market economy means a great deal of problems too. On the other hand, luck of information holds back the Government to make rapid decisions in strengthening the market, to invest in the "right" areas.

There is little "creative cooperation" between the pertaining ministries and institutions. Economic and agrarian regulations still often serve only the various lobbies and special groups, and are not always the result of wide consultations.

Also, there is disproportionately too much energy is being put into administration - at least part of that should be channeled into concrete steps that would improve the situation of farmers, serve their and the consumers interests.

Until this is not done, real transformation and the emergence of a renewed Hungarian agriculture will remain hindered.