## IMPROVEMENT OF RESEARCH – CONSULTANCY – PRODUCTION RELATION, ONE OF THE WAYS TO INCREASE COMPETITIVENESS OF ROMANIAN AGRICULTURE

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Romanian agriculture experiences a reduced competitiveness compared with the results obtained within the European Union and the main agricultural countries in the area. This feature may be seen both from the average productions of the main agricultural cultures and from the average yield of zootechnics.

The causes are multiple, ranging from the excessive land crumbling, agricultural exploitations that produce mainly for self-consumption, the lack of professional training of many farmers and the insufficiency of agricultural consultancy and of implementation of research results into production.

Keywords: agricultural competitiveness, average productions in the vegetal sector, agricultural consultancy and research.

Romanian agriculture experiences today a very important phenomenon, namely a reduced competitiveness made obvious particularly through the low productions obtained from 1 cultivated Ha. in vegetable production, but also by zootechnical production, especially in the case of milk cows.

In the vegetable sector, total productions yielded by the main culture are below the potential offered by pedoclimatic conditions in Romania, even during favourable years; during draughty years, that are more and more frequent, the productions decrease significantly.

In theory, Romania still is one of the great European powers from the point of view of its agricultural potential illustrated by the agricultural area and by the number of population working in agriculture.

Romania's agricultural area, namely its 14.8 million Ha., make up 8% of the total agricultural area worked within the European Union. One should also keep in mind the fact that Romania has an important percentage of arable area comprised in the total agricultural area (approximately 64%) and important resources represented by over 220 thousand Ha. of vineyard and viticultural nurseries and by almost 220 thousand Ha. of orchards and fruit tree nurseries.

However, Romania relies very little on the European agricultural market, first of all because of small agricultural productions, that in many cases do not meet the requirements of domestic consumption, thus resorting to food product imports.

Compared with the main agricultural countries in the European Union, Romanian agriculture yields average productions in almost every agricultural culture and in many zootechnical fields, especially in the field of milk cows.

In order to provide a clearer image of this reality, we have selected some of the agricultural crops that have an important percentage in our country and we have carried out a comparison with the productions yielded in two developed countries – France and Germany – as well as in two East European countries, whose membership was accepted by the European Union in 2004, namely Poland and Hungary. We have not selected the European countries that hold the records with respect to the analysed agricultural cultures on purpose since in many cases the cultivated areas of these countries are too small compared with those of Romania; as far as milk cows are concerned, the material base, veterinary assistance services, fodder etc. may not be compared, as in countries such as Denmark, England, the Netherlands etc. they have reached standards which are difficult to be met by our country in the subsequent years.

A situation of the basic components of agricultural production is presented. The analysis begins by considering the wheat and maize crop – crops with a strategic significance for the food of the population, and the zootechnics which is a time-honoured activity in Romania, favoured by the pedoclimatic conditions.

The wheat-cultivated area in Romania in the past 3 years (2005-2007) amounted in average to 2131 thousand Ha, thus making up 8.4% of the total cultivated area in the European Union -27.

But if one analyses the total average productions yielded in the past 3 years, these represented only 4.2% of the wheat production of the European Union, which is not at all flattering for an agriculture deemed to be in the old days the "granary of Europe".

The wheat-cultivated area in Romania are almost equal to those cultivated in Poland, twice as large as those in Hungary, are approximately equal to 2/3 of the wheat cultivated surfaces in Germany, but are twice as little as the ones cultivated in France.

As far as the average production per hectare is concerned, the situation is serious compared with all the countries taken into account and compared with the European average.

Thus, the wheat average production amounted only to 24.3 q/ha, making up 48.5% of the average production of the 27 European countries. If one refers to developed European countries such as Germany (that obtains an average of 72.1 q/ha) or France (that obtains 66.6 q/ha), the average production obtained in Romania represents only 33.7%, and 36.5% respectively.

Based on the comparison with two East European countries, Poland and Hungary, one may notice that the wheat average crops are much higher than those yielded in Romania (40.5 q/ha in Hungary, and 37 q/ha in Poland respectively). The average production of the last three years yielded in Romania represented 60% compared with that obtained in Hungary and 65.5% compared with that obtained in Poland.

The situation is not different as far as the maize crop is concerned; the maize represents an extremely important cereal for Romania and is ranked first for the cultivated areas.

In the last 3 years, Romania yielded average productions twice as little as the ones generally obtained within the European Union.

At the same time, developed countries such as Germany or France yield average productions 2.8-2.9 times higher than those obtained in Romania, while Poland and Hungary obtained within the same time frame average productions 1.8-1.9 times higher.

With respect to these crops, one may point out the fact that the year 2007 was extremely unfavourable. In fact, the maize crop yielded in 2007 was one of the lowest productions obtained in the last 40 years (15.5 q/ha). Still, during the favourable year of 2005, when the average production in Romania amounted to 40.1 q/ha, Hungary yielded 75.6 q/ha, Germany yielded 92.1 q/ha, while the average of the European Union (70.1 q/ha) was 75% higher than the average production obtained in Romania.

The analysis continues and the situation of the sunflower is considered; it is an industrial crop of great importance and Romania ranks as European leader as far as the cultivated areas are concerned, in the last years they have amounted to 1 million hectares. Unlike other crops, the sunflower occupies small areas in Europe (approximately 3.6 million Ha in 2005) and one quarter of the crops is cultivated in Romania (between 800 thousand and 1 million Ha annually). Significant areas, amounting to over 500 thousand Ha are cultivated in Bulgaria, Spain, France and Hungary, countries taken into account with a view to carrying out the comparison.

One may notice that although the sunflower has long been cultivated in our country, although we have achieved important results in obtaining high performance hybrids and although we have enjoyed relatively favourable pedoclimatic conditions, the average production yielded in our country is systematically surpassed by that obtained by our neighbours, Hungary and even Bulgaria, whose average crops surpassed in the last three years the crops yielded in Romania by 82,6 and by 10% respectively, while France obtains an average production twice as large as the one obtained in Romania.

Regarding the potato crop, the situation is quite similar. Romania cultivated annually an area amounting to approximately 275 thousand Ha, which makes up 11% of the potato cultivated area of the European Union, but since the average production of the European Union is 86.7% higher than that obtained in Romania, the total potato production yielded in Romania represents a mere 6.3% of the total production of the European Union -27.

If as far as the vegetable production is concerned, the situation is quite similar with respect to other crops, we have tried to give an account of the situation in the zootechnical production. In order to simplify the task, we have analysed one indicator, namely the milk quantity delivered per milch cow.

This quantity is not the total produced quantity since a part of it is retained for family consumption or for the food of calves, but it represents an important indicator depicting the commercial capacity of the farms.

From a commercial standpoint, zootechnical farms in Romania do not succeed in delivering more than 700 l of milk for each milked cow - the equivalent of 2.25 l daily during lactation (310days) during the course of one year.

During the same time frame, in Hungary, that has a live stock 3 times smaller than Romania, the annual total quantity of milk delivered is higher, it amounts to 4.5 t annually per milch cow, while in France or Germany the production delivered annually amounts to 6 t per year per cow.

Additional analyses may be carried out with respect to other agricultural fields, but we believe that based on what has already been pointed out it clearly results that in Romania the obtained productions are mostly inferior to those obtained in developed European countries and to the average of all he countries that compose the European Union.

This triggers price increases for domestic food products and a weak competitiveness of Romanian farmers that compete with the farmers in the other European countries.

For this situation one must find the explanations and the rectifying solutions. A first explanation is connected to the excessive land crumbling in exploitations that cannot use the benefits of mechanisation and of high performance technologies.

The average area of an agricultural exploitation in Romania amounts to 3.3 ha, but the largest surface, amounting to 9.1 million Ha is divided in 4.24 million individual exploitations, namely 2.2 Ha per exploitation. Although there is also a small number of companies or large associations (1630 exploitations with an average surface of 263 Ha), they have a total of 742065 Ha and are not able to decisively influence the level of average productions, even if the productions yielded here are higher, as a result of modern technologies applied.

The result is that in order to increase the level of average productions, of the total production and of the product quality with a view to meeting the national level, the safest way is to take actions aiming at modernising the technologies used in individual exploitations, simultaneously with the support given to the voluntary association of small farmers.

Within this framework, a special part is held by some basic agricultural bodies such as the scientific research establishments and the agricultural consultancy establishments. Only through intense cooperation between research, that must offer optimal solution specific to each farm – and the consultancy offices, that must get involved in the practical application of solutions – the current negative situation of small private agriculture may be overcome.

Unlike the previous periods, specific to traditional farming, when the working methods and knowledge were automatically passed on from parents to children, at present farmers have to work with hybrids, fertilizers, complicated equipment etc.

In this context, role of National Agricultural Consulting Agency must be increased.

Permanent education, the acces to public agricultural advisory services, as well as to financial consultancy services, gain an increasingly great importance.

The low adjustment of public advisory and consultancy services, in a early stage of development, to the specificity of rural areas, as well as the lack of financial resources, so that farmers can ask for such services, make these services non accessible in reality, which has a negative impact upon agricultural production quality and competitiveness.

The current Agricultural Consultancy Agency, although it carries out an outstanding activity, it cannot find solutions to all necessities because of insufficient funds and staff, but also because of failure to adapt the staff structure to the specific of the production corresponding to each area.

Notwithstanding, in 2007, the National Agricultural Consultancy Agency (A.N.C.A) organised, among many others, 989 training courses and approximately 33 thousand trainees took part; over 130 thousand farmers participated a series of instructions; 1128 demonstrative lots, symposiums, round tables etc. were organised.

Although the figures seem high and they mirror an intense activity carried out by these bodies, in reality they only address to a segment of 5-10% of the total of over 4 million agricultural exploitations.

The situation is also difficult, if considered from the point of view of the research activity and the research – production relation. It is a well known fact that the agricultural research was highly represented in all sectors of the Romanian agriculture, supplying seeds, planting material and high quality pure breed animals.

Nowadays, following the earmarking of smaller and smaller funds for research, many institutes or research establishments reduced their activity or have even ceased to operate.

Still, the ones that are still operating continue to supply varieties, hybrids and animal breeds, to produce seeds and high quality planting material, but the implementation in production is more and more difficult.

The use of planting material and in general of biological material (varieties, breeds) of doubtful quality, not adapted to regional pedoclimatic conditions, the failure to apply improvement measures and the reduced use of fertilizers and of herbicides, of the irrigation systems, the lack of strategies regarding the preservation and improvement of animal breed quality and of use of fodder with nutritious value are only a few of the causes that lead to important decreases of quantity and quality of the Romanian agricultural products.

For example, one of the causes of the maize production drop is connected to the large-scale use in peasant households of seeds obtained on their own lots instead of hybrid, high performance seeds, adapted to each ecological area.

This is the reason why measures with a view to relaunching the scientific research and of territorial establishments should be taken, having as starting point the tradition and the results of the Romanian agricultural research results and the guarantee of conditions needed in order to value the results under market conditions.

The Agricultural Consultancy Agency must cooperate more intensely with the research institutes and establishments, set forth the training requirements, organize joint demonstrative lots and recommend to producers the plant varieties, animal breeds and technologies adequate to each ecological area.

## **Bibliography:**

- Scurtu I., Economia şi tehnologia culturilor agricole mari, Ed. Independenţa Economică, Piteşti, 2002
- 2. www.insse.ro Statistical yarbook 2006
- 3. www.epp.eurostat.economic.europe.eu/portal Agriculture and fisheries
- 4. www.consultanteagricole.România/Raport de activitate pe anul 2007
- 5. www.maap.ro