# AGRÁR-EGYÜTTMŰKÖDÉSEK MAGYARORSZÁGON

# AGRICULTURAL CO-OPERATIONS IN HUNGARY

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***Kulcsszavak:***

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***Összefoglalás***

*A piacgazdaságban a versenyképesség egyik alapvető feltétele az együttműködésre való képesség. Ebből kiindulva a cikk az Agrárgazdasági Kutató Intézetben végzett kutatás alapján a mezőgazdasági együttműködéseket értékeli, a már működő formák gazdasági teljesítményét, az együttműködés nyújtotta előnyöket, fejlesztésének lehetséges irányait mutatja be.*

***Abstract***

*In market economies the main factor of the competitiveness is the capability for co-operation. Therefore, in this paper the agricultural co-operation by discussing the economic performance of the various existing organisations, the advantages of the co-operation and the development opportunities is analysed based on the research carried out at the Research Institute of Agricultural Economics.*

## 1. Introduction

In market economies the willingness to co-operate provides the basis for the competitiveness of the market players. In the Common Agricultural Policy of the European Union strengthening the co-operation is a main priority in the 2014-2020 programming period and for this if provides assistance by integrated measures. In relation to this the present paper – based on the research carried out in the Research Institute of Agricultural Economics – analyses the agricultural co-operation by discussing the economic performance of the various existing organisations, the advantages of the co-operation and the development opportunities.

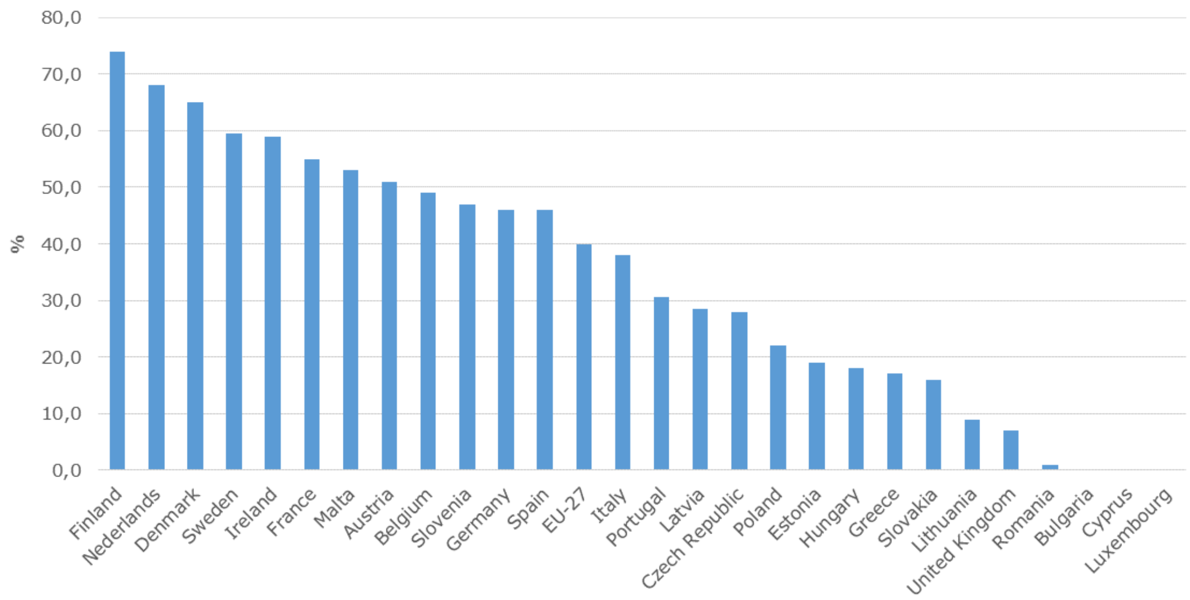
## 2. Material and Method

Our study involved integrated research methods. Our review of the economic and sociological characteristics of cooperation was based on the Hungarian and international literature. The results of cooperation were realised through processing data requested from organisations and by estimating statistical data. The stimulating and constraining factors were identified using structured interviews made with a representative sample of farmers and with representatives of organisations in the agricultural. The willingness to cooperate among farmers, the nature of their cooperation and the characteristics were examined by means of a survey of a representative sample of organisations in agriculture and by using econometric models. The cooperative directions appearing in agricultural economy were identified through the analysis of development policy documents, Hungarian and European Union law concerning the period after 2014.

## 3. Tendencies in the European Union

One of the main conclusions of the international and Hungarian research analysing the agricultural economic co-operation is that the efficiency of the co-operation is determined by both economically and socially. The market players prefer verifiable co-operation based on confidence and in addition to decreasing the risks they can increase their market share too. The role of horizontal co-operation is significant in stabilizing the market relations, decreasing the transaction costs, improving the production standards and in disseminating the new technologies. The co-operations of high level vertical integration ensure to reach a favourable negotiation position.

*Based on the research [2] initiated by the European Commission's Directorate General for Agriculture and Rural Development in 2012 the agricultural co-operations vary significantly by countries (Figure 1). In the Member States with a long history of co-operation this form is operational in the whole of the commodities. Such co-operations covering the whole commodity can be seen in The Netherlands, Sweden and Austria in milk co-operations or in Denmark, Ireland in pork processing. The main characteristics of producers' organisation are the joint procurement and the joint sale of the products of high processing level, in large volumes and of standard quality as well as the joint implementation of investments. It is characteristic for the large organisations to establish subsidiary companies operating as economic organisations and to found conglomerates covering the whole commodity. Market share of cooperatives in value terms in the EU-27*




**Source:** Bijman *et al.* (2012)

In most former socialist countries co-operations can be considered as a traditional form of production; however, their role is decreasing continuously due to the liquidation or transformation of the earlier co-operations into economic organisations [3]. The high-level co-operation such as operating in the Western-European and Scandinavian countries can be seen to be re-organised just recently in the Central Eastern European counties [4]. One of the conclusions of the research is that the main obstacle of disseminating the co-operation is the black and grey economies, the lacking recognition of the benefits as well as the market players of the business transactions are not verifiable and accountable.

## 4. Hungarian experience

In Hungary the role of the 70 organisations operating in the main commodities and organising the production in a concentrated way is extremely decisive. The advantages of the common procurement and sale, the pre-financing of the production costs and the tailored quality services increase the willingness for co-operation. The advantages of the most well-known forms of agricultural *co-*

*operation* (in 2013 - 554 co-operation) can be seen in the procurement of inputs and in the direct business contacts in terms of sales and processing. Direct beneficiaries of the cooperation are the members, but their services usually reach other non-member farms in their neighbourhoods. In Hungary the role of *Producers' Organisations* (POs) supported also by subsidies financed by the European Union (in 2014 201 POs) and in the vegetable and fruit sector the *producer and sales organisations (PSO)* (in 2014 90 organisations) is more than to profit from the direct membership of immediate environment. These organisations not only improve the negotiation position of the members contribute to the development of the fresh product markets, they also supply good quality raw material in required quantity to the Hungarian food processing companies [5]. Looser forms of co-operation are the mainly *informal machinery circles* established for utilising the free machinery capacities, which, based on our survey, independent of the size category characterise the Hungarian farms. In Hungary the clusters (in 2014 there were 37 such operational clusters) are a new form of concentrated co-operation; in spite of their wide range of activities at present provide opportunity only for a few producers to co-operate. Opportunities can only be seen in the clusterisation of the short supply chains and of local economic developments.

In the Hungarian agriculture the economic role of the 1500 co-operations, which cannot be separated by organisations, is shown by the fact that the net income generated by them reaches almost the total output of the Hungarian agriculture (2313 billion HUF in 2013) (Table 1). Their total assets account for one third in the total assets of farms engaged in commodity production and one fourth of the profit before tax of the same. The investments of agricultural co-operations account for one third in the total of agricultural investments and provide employment for 10 per cent of the total employment of the agricultural and food sector. The main organisational forms of agricultural co-operations (85 per cent) are integrators and cooperatives. Regarding the financial indicators (net income, total assets, profit before tax, investment) and the number of employees the role of integrators is outstanding.

*Table 1: Main indicators of agricultural co-operations by organisational form (2013)*

| **Organisational form** | **Number of organisations** | **Net income** | **Total assets** | **Profit before tax** | **Investment** | **Number of employees** |
|---|---|---|---|---|---|---|
| | **no.** | **billion HUF** | | | | **thousand** |
| Co-operation[1] | 597 | 118.1 | 159.7 | 7.6 | 13.0 | 6.3 |
| POs[2] | 79 | 54.7 | 50.1 | 0.04 | 5.6 | 0.6 |
| PSO[2] | 201 | 273.6 | 68.1 | 1.0 | 1.4 | 1.0 |
| Integrator[3] | 615 | 1662.4 | 1190.1 | 43.9 | 72.7 | 29.3 |
| Total[4] | 1422 | 2064.9 | 1431.2 | 50.2 | 90.1 | 36 |
| | **Distribution. per cent** | | | | | |
| Co-operation | 42.0 | 5.7 | 11.2 | 15.1 | 14.4 | 17.5 |
| POs | 5.6 | 2.6 | 3.5 | 0.1 | 6.2 | 1.7 |
| PSO | 14.1 | 13.3 | 4.8 | 2.0 | 1.6 | 2.8 |
| Integrator | 43.2 | 80.5 | 83.2 | 87.5 | 80.7 | 81.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Remark: 1) Agricultural co-operation registered by the National Tax and Customs Administration of Hungary (NTCA), 2) Subsidised organisations, 3) Organisations registered according to the regulation of the Hungarian Ministry for Agriculture and Rural Development No. 25/2004, 4) Without aggregation.

Source: Prepared by AKI based on the data of the National Tax and Customs Administration of Hungary (NTCA)

The concentration of the co-operations can be illustrated by the fact that while the number of organisations with less than half a billion HUF net income decreased by 20 per cent between 2007-2013, the number of organisations generating more than HUF 1 billion increased by more than 10 per cent (Table 2). *There are 7 organisations with more than HUF 5 billion and accounting for 5 per cent in the total of agricultural co-operations, which are dominating in the sector.* These account for two-third in the income of the co-operations *(HUF 1289.7 billion) and account for 45.2 per cent in the total assets, 36.6 per cent in the profit before tax, 33.4 per cent in the investments, 41.7 per cent in the employment.* The rate of development is shown by the fact that the number of these organisations increased by more than 10 per cent, their net income by 11.8 per cent, their total assets by 5.8 per cent, their investments by one fourth, their profit before tax by almost 20 per cent between 2007 and 2013.

The number of the integrated members shows also the importance of agricultural co-operations. Our estimation based on registered members of the National Federation of Agricultural Co-operators and Producers shows that the agricultural co-operation, which is a traditional form of formal producers' co-operation includes 40-45 thousand producers. The POs have 15 thousand and the PSOs have 14 thousand members, while the enterprises contracting for production – based on the statistics of the Department of Agricultural Markets of the Ministry of Agriculture – coordinate the production of almost 100-120 thousand farms. The machinery circles operating as formal organisations provide opportunity for 1300-1500 farms to utilise their free capacities. The cluster is a new form of co-operation; at present there are about 40 clusters engaged in agriculture and including about 2500-3000 producers in the network.

*Table 2: Main data of agricultural co-operations (2007-2013)*

| ***Categories by net income*** | ***Number of organisations*** | ***Net income*** | ***Total assets*** | ***Profit berfore tax*** | ***Invest-ment*** | ***Number of employees*** |
|---|---|---|---|---|---|---|
| ***billion HUF*** | ***no.*** | ***billion HUF*** | | | | ***thousand*** |
| | **2007** | | | | | |
| <0.5 alatt | 1111 | 137.6 | 149.5 | 8.5 | 9.8 | 8.6 |
| 0.5-1.0 | 169 | 120.5 | 107.1 | 4.5 | 7.3 | 4.7 |
| 1.0-5.0 | 217 | 432.3 | 356.3 | 11.3 | 20.5 | 13.7 |
| 5.0< | 64 | 1153.4 | 612 | 15.7 | 23.4 | 18.3 |
| Total | 1561 | 1843.7 | 1224.9 | 40 | 61 | 45.3 |
| | **2013** | | | | | |
| <0.5 | 908 | 113.7 | 164.6 | 6.24 | 10.4 | 5.8 |
| 0.5-1.0 | 202 | 147.3 | 137.6 | 5.4 | 12.7 | 4.2 |
| 1.0-5.0 | 241 | 514.2 | 481.5 | 20.2 | 36.9 | 11 |
| 5.0< | 71 | 1289.7 | 647.5 | 18.4 | 30.1 | 15 |
| Total | 1422 | 2064.9 | 1431.2 | 50.24 | 90.1 | 36 |
| | **Change: 2007=100%** | | | | | |
| <0.5 | 81.7 | 82.6 | 110.1 | 73.4 | 106.1 | 67.4 |
| 0.5-1.0 | 119.5 | 122.2 | 128.5 | 120.0 | 174.0 | 89.4 |
| 1.0-5.0 | 111.1 | 118.9 | 135.1 | 178.8 | 180.0 | 80.3 |
| 5.0> | 110.9 | 111.8 | 105.8 | 117.2 | 128.6 | 82.0 |
| Total | 91.1 | 112.0 | 116.8 | 125.6 | 147.7 | 79.5 |

Source: Prepared by AKI based on the data of the National Tax and Customs Administration of Hungary (NTCA)

On the basis of the econometric analysis of the database of a representative survey based on a sample of 1000 farmers and of the investigation carried out by in-depth interviews with the representatives of relevant Hungarian agricultural organisations it can be stated that the procurement and sales integration improves the negotiation position definitely, decreases the transaction costs, the market and technology risks. The continuous development can be ensured by organisations, with long-term strategy, providing quality services, focussing on the information flow within the organisation and assisting the change of the attitude by training, good practices and selective incentives. A further statement of the econometric analysis of main component, factor and correlation is that the willingness to co-operate is directly proportional to successful tenders and to the information provision of the partners; that is, the cooperating producers are more capable for the development. Our investigation confirmed that the aim and content of the sectorial co-operations are in relationship with the size and type of the farms of the organisation. Despite of the competitiveness improving characteristic of co-operation only one third of the producers surveyed are members of organisations operating in formal organisational forms; sectorial co-operations are dominated by mainly short-term, bilateral contracts and by informal relationships based mainly on confidence and by utilising the unused capacities. The establishment of formal relationships is encumbered by the risk avoiding attitudes and illegal activities.

The rural development measures of the 2014-2020 programming period provide subsidies for many agricultural co-operations. In the cases of subsidies provided to Producers' Organisations a larger emphasis is put on the condition that the organisations supported should stay operational also independently. The co-operations to be financed should also cover the relationships between market players and inter-professional bodies. The efficiency of the coordination can be improved by assisting the producers' councils of fundamental role in the interest representation of the market players of the commodity in becoming acknowledged inter-professional organisations; by establishing umbrella organisations covering several segments of the commodities and by developing the domestic and international relationships.
The European Agricultural and Rural Development Fund (EARDF) provides subsidies in the frame of the European Innovation Partnership for forming and also for operating Operation Groups, which aim to improve agricultural productivity and improve sustainability as well as to establish a platform for the market players of the agricultural sector for dissemination and transmission of innovations. In the cases of small farms lacking resources launching joint projects can be considered as a new form of co-operation; these are based on the partners' voluntary co-operation, on new practices, processes, products and services as well as on joint investments. The market access of small farms can be facilitated by financing the shortening of the distance between producers and consumers and forming, organising, promoting Short Supply Chains (SSC) in the frame of the thematic sub programme of the Rural Development Programme of the period 2014-2020. The Short Supply Chain (SSC) is more than a usual co-operation; it not only has a significant role in community-building and rural development; but it also supports the dissemination of conscious consumers' behaviour.

## 5. Conclusions, recommendations

By evaluating the Hungarian agricultural co-operations we can see that in market access the organised, concentrated vertical relationships are dominating. In these organisations the accessible procurement advantages, tailored quality services and attainable innovations enhance the willingness of the producers. Other wide-spread forms of co-operation are the mainly informal relationships providing assistance in accessing the agricultural basic services and utilizing the free capacities; these are independent of the commodity and size and are characteristic for the Hungarian farms. The intervention measures of the period 2014-2020 aiming to encourage the co-operation might lead to make their relationships formal and extend their targets and content.

In the cases of existing horizontal integrations co-operating, due to risk avoiding attitude and lacking confidence, only in the fields of joint procurement and sale, the developments, which aim to increase the value added by keeping also in mind the economies of scale, can only be implemented by joint investments, knowledge transfer and by disseminating the innovations. In the organisations the most important would be to increase the efficiency of the information flow and change the attitude; this can be reached by training courses and forums organised for both the management and members as well as by introducing good practices and incentives to increase the confidence and loyalty of the members. For creating the confidence and decreasing the operational risks it is indispensable to develop a long-term strategy, which was discussed by the members.

The foundation of federations or associations might be a breaking point for the producers' organisations; such a federation not only provides benefits from the market concentration but could also increase the efficiency of knowledge dissemination and extension. By concentrating the organisations and strengthening their relationships their innovation capacity can also be increased. For developing the co-operations integrating the market players of the commodity a long-term co-operation concept is required for harmonising the calculable and transparent operation of the inter-sectorial bodies, representing the contractual relationships and the development requirements as well as the subsidies and interventions.

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