

CULTIVATION CONTRACT AS A FACTOR TO IMPROVE THE ORGANIZATION OF THE FOOD PROCESSING PLANT – LEGAL AND ECONOMIC ASPECTS

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A b s t r a c t. This aim of this article is to determine the importance of the cultivation contract as a way to provide the raw materials for food processing plant directly related to the improvement of production and business operations. The material for investigation originated from the survey conducted among of 105 entities and from the charts of legal basis. The survey covered four groups of producers and the analysis depended on the duration and implementation of the cultivation contracts (within three years, such as: 1987, 2000, 2009) and the lack of its conclusion. The authors observed some important dependences among such factors as: the size of the farm, the labour forces, capital resources and farm's amenities. The conducted research has indicated the significant role of the cultivation agreement in both economic and legal terms, although some lack of economic trust appears among several farmers.

INTRODUCTION

In the era of liberalisation, globalisation and development of the farm and food industry it is crucial to maintain continuity of production. It is not possible without proper organisation of the company, including securing the resource base. Stability and continuity of the supply is a very important link in the food chain, which connects farming, processing and distribution. Their appropriate relationship has a significant impact on the level of economic prosperity, social and environmental situation of consumers [Czyżewski 2001, p. 17].

As Motowidlak [2009, p. 132] noted, business organisation requires, inter alia, centralisation of agricultural production, which is characterised by a high dispersion and diverse quality of agricultural products. It is therefore important to closely connect agricultural holdings with food processing plants. In this case vertical integration is of prime importance. Its main aim is to properly regulate the level and structure of agricultural production, which will facilitate the implementation of technological and biological advances.

The effectiveness of this implementation is related, *inter alia*, to a relevant contractual relation between the main participants of the agricultural market – agricultural producers and food processing plant. The type of contract, which is one of the instruments of vertical integration and at the same time also refers to the production activities in agriculture, is the cultivation contract. Under cultivation contracts there are certain relationships between the parties. They are extremely important for the increase of their competitiveness. Integration through cultivation contracts secures the resource base; moreover, it allows rationalising the use of factors of production, contributing in some cases to reduce the transaction costs.

Polish membership in the European Union and the adopted *acquis communautaire* has a significant impact on the transformation taking place in companies in the farm and food industry, since the compliance with the EU standards requires above all an efficient organisation of the activities of a company, which is also a guarantor of continuous improvement of quality and productivity. In the European Union legislature particular attention is paid to the process of properly developed raw material supply. It affects the organisation of production and the quality of delivered products. In this case, properly formulated cultivation contracts are treated as one of its elements.

The purpose of the article is, therefore, to determine the importance of the cultivation contract as a way to provide starting material for food processing, directly related to the improvement of production organisation and company activities. Cultivation contracts from a legal perspective can also be regarded as agro-industrial contracts, which constitute an important element in the supply chain. Therefore, it was also decided to show the benefits of entering into them by the processing plant and farmer.

MATERIALS AND METHODS

The analyses carried out in the article were conducted on the basis of both primary and secondary material. Economic analyses were based on primary data collected through direct interviews using a questionnaire survey among fruit and vegetable producers in the area of Środa Wielkopolska. Due to the Law on the Protection of Personal Data, as well as the obligation to comply with the obligation of confidentiality, in particular Art. 11 of the Act on Combating Unfair Competition of 16th April 1993 [Dz.U. z 2003 r., nr 153, poz. 1503, as amended] the food processing plant name with which farmers signed cultivation contracts has been changed. In order to determine the cultivation contract as a way to provide the starting material for processing, in the calculations a number of methods included in the descriptive statistics were used. In addition, the primary method used in this study was the descriptive method and dogmatic analysis of normative texts.

JUSTIFICATION OF ENTERING INTO CONTRACTUAL RELATIONS IN THE ECONOMY ON THE EXAMPLE OF CULTIVATION CONTRACTS

Agriculture, including food processing in particular, is a very specific and complex sector of economy. Companies in this sector base their business operations on relatively advanced internal management, while entering into contracts with external entities. Their development is determined by many factors, among which undoubtedly important are transaction costs, which affect the economic viability of the business.

Contracts play an important role not only in the current activities of a company, but also strategically, playing an important role in coordinating and ensuring safety of economic activities in circumstances where social norms which satisfactorily guarantee the realisation of commitments of the parties fail. Cultivation contracts in this case should be regarded as a form of complete contract, which means it is a contract already signed, the parties of which enter into its implementation on agreed conditions, and they pursue their own preferences to a limited extent, then they isolate themselves from each other [Stankiewicz 2012, p. 105].

At the same time the contract necessitates coordination of such elements as time and the dynamics of contracting processes. According to Stankiewicz [2012, p. 105], at the heart of the process of complete contract are commitment and renegotiation. It cannot be only regarded as an obligation, which has a legal format, and its aim is to produce a particular good. Nowadays, it is a complex process, which is divided into several stages (Fig. 1). It should not be forgotten that in a model approach, a food processing plant operates in the market understood as a place of comparison of supply and demand, which, in turn,

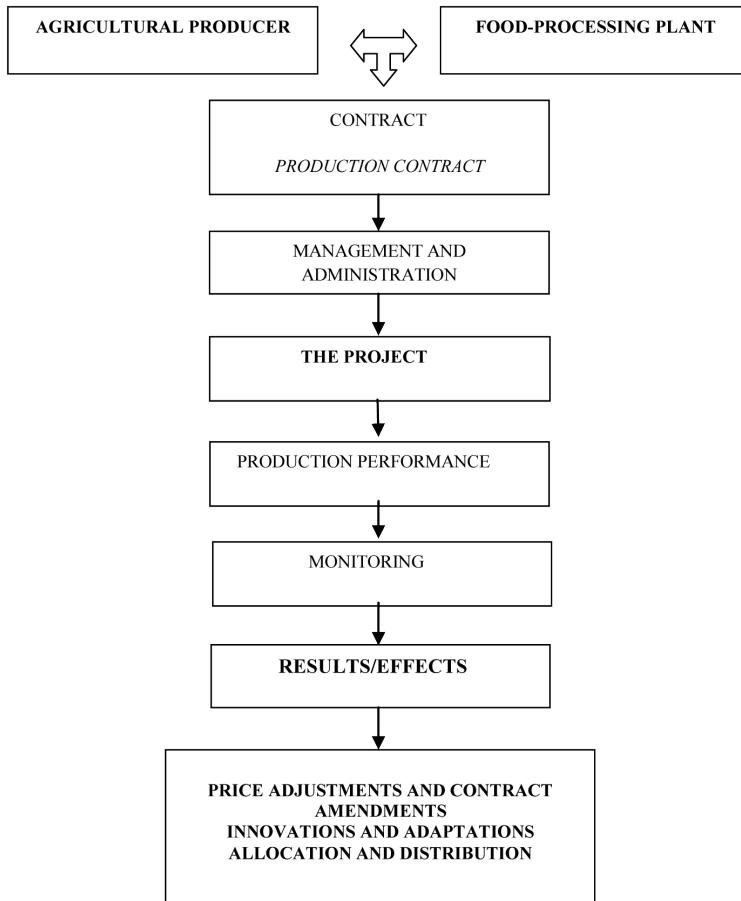


Figure 1. A contract farming framework based on agricultural production contract
Source: self-studies on the basis of [Eaton and Shepherd 2001].

leads to price fixing to ensure market balance. However, apart from these two market factors, market changes are affected by legal regulations, or implemented by the EU rules for operation and organisation of trade, implemented monetary policy guidelines, etc.

According to the basic trends of the new institutional economics, the analysis of processing plant functioning should be expanded to include the so-called transaction cost theory [Stankiewicz 2012, p. 99]. In the neoclassical approach the transaction costs complete the analysis. According to Coase, the presence of transaction costs explains the existence of the company as an organisational and contractual structure allowing reduction of transaction costs (fulfilling the contract) [Łobejko 2011, p. 110].

Williamson [1998, p. 30] distinguishes two types of transaction costs: *ex post* and *ex ante*. The first category includes the cost of designing, negotiating and securing contracts, which concern preparation and negotiation of contracts. Their size in the analysed case depends on the type of goods – that is raw materials for processing, which, under the contract are to be produced. The *ex-post* costs include: 1) failure costs, 2) cost of renegotiation, 3) establishment costs and running costs associated with governance structures to which the dispute shall be submitted, and 4) storage costs securing complying with the obligations. In Figure 1 they occupy the last position, and they are associated with the necessity to create a management structure and operate it in relation to the maladjustment and the need to renegotiate or monitor the process.

As part of the transaction costs there are distinguished search costs and ‘contracting’ and co-ordination costs. The first of these arise as a consequence of actions taken by the company (in this case the food processing plant) to find partners – agricultural producers. They also include the cost of verification (evaluation) of the reliability of potential parties. The next stage is the selection of partner(s) and the conclusion of agreement on cooperation. At this stage of the food processing’s activities there are ‘contracting’ costs covering all business expenses incurred in connection with the conclusion of the final agreement. In the case under examination these include fees of lawyers, costs and time spent on the analysis of tenders and negotiations and as well as the production costs. In the case of long-term cooperation based on recurring contracts, which are usually cultivation contracts, these costs are reduced since part of the activities related to the conclusion of the contract (e.g. analysis of tenders) does not have to be borne. The last group of costs, that is the costs of coordination, include all costs incurred in connection with the cooperation of a business with third parties. At this place the cost of supply chain management and the costs associated with the enforcement of concluded contracts and the fulfilment of the obligations contained therein should be mentioned [Gruszecki 2002, p. 254-255].

Making a correct analysis of the discussed costs is a tool influencing the form of organising a business. In practice, as pointed by Łobejko [2011, p. 112], the food processing plant wishing to develop, to increase its competitiveness, to achieve greater profits, begins to search for innovative forms, including modifying the content of contracts. Therefore, the above mentioned organisational forms should also be analysed through the prism of competitiveness. At this place again a special role play certain contractual relations of cultivation contracts, including the need of both of the parties to compete – the agricultural producer and the food processing plant. Moreover, together with transaction costs there are considered in the analysis of the contract: the type of conditions prevailing in the market, the economic and legal form, ownership, type and size of transaction costs [Łobejko 2011, p. 113].

LEGAL CONSTRUCTION OF THE CULTIVATION CONTRACT

The cultivation contract is one of the agreements which shape the process of obtaining raw materials for the food industry. It influences the stage of production of agricultural raw materials for further processing and, therefore, the agreement is often referred to in the literature as a production contract or agro-industrial agreement [Domenech 2010, p. 33, Janarrelli 2011, p. 422].

The cultivation contract was introduced to the Civil Code as a separate nominate contract (Articles 613-626 of the Civil Code). However, it contains only a model of trade in agricultural products, which is based on a relative autonomy of the parties. In accordance with Art. 613 of the Civil Code, the agricultural producer agrees to produce and deliver to the contracting party the exact quantity of certain types of agricultural products, and the contracting party agrees to collect these products on the agreed time, pay the contractual price and meet certain additional obligations if the contract or special provisions provide for the obligations to comply with. These obligations might include, *inter alia*, providing the producer with the possibility to acquire certain means of production and receive financial aid, agronomic and livestock assistance, cash bonuses and bonuses in kind (Art. 615 CC). It can easily be seen in the cited article that this agreement includes cooperation of both parties, namely an agricultural producer, who can also be a group of agricultural producers, and the contracting party, for example, a food processing plant [Radwanski 2012, p. 8].

The cultivation contract is considered a subtype of the contract of sale, although, apart from the transfer of ownership of the product, it also covers production cycle [Szostak 2012, p. 68]. In the course of it, the contracting party may impose on the farmer an obligation to use certain means of production, rearing method or cultivation of plants. Moreover, it is entitled to perform supervision and control over the implementation of the contract. The producer must allow the contracting party (or an authorised person) to enter the area of agricultural land for the inspection purpose, measurement, soil samples analysis, etc. He or she is also bound by instructions and directions of the contracting party.

The element which connects the cultivation contract with sale is the responsibility of the manufacturer towards the contracting party under the warranty for physical and legal defects of the object of the contract. However, the defects must be relevant, namely, preventing the use of the product for the specified in the contract purpose (e.g. sugar beet with very low sugar content).

The cultivation contract is concluded in very special circumstances which exist in agriculture, since it is more than other areas of business prone to various risks. Therefore, the contracting party may oblige the producer to use certain instruments, limiting its occurrence. For example, the contract may require insuring the production as a whole or its individual stages.

In the event of breach of the cultivation contract or its improper performance, the agricultural producer is liable on general principles contained in Art. 471 of the Civil Code. This occurs when the blame may be assigned to the producer or the persons with the help of which he or she exercised the contract. However, he or she is not responsible for any failure to perform or improper performance of the obligation in the case when he or she notified the contracting party within a specified time about being unable to deliver the object of the contract. Obviously, it is important that the circumstances which prohibit producing and delivering the product were not the result of the actions of the producer.

There are also situations in which neither party is liable for the breach of contract (such as drought, flood, etc.). In such case, the producer is obliged to return the previously received down-payment and bank loans.

It should be noted that the provisions of the agreement in question involve basic core principles and rules which were to facilitate and harmonise the application of different norms relating to it, but placed in many different acts. For many years, the cultivation contract was concluded on the basis of a specific pattern. Only when Poland was preparing to join the Common Agricultural Policy and the gradual implemented the *acquis communautaire*, the cultivation contract was subjected to 'some' influence of the EU legislation in the area of formation and operation of certain agricultural markets. An example may be the sugar or milk market. Accordingly, Regulation No 261/2012 provides for the possibility of imposing by the Member States the responsibility to conclude the contract under national mechanisms affecting the milk market under the implemented so-called 'Milk package' [OJ L 94, 30.3.2012, p. 38-48]. As noted by the European Union legislature, cultivation contracting can help to reinforce the responsibility of economic operators in the dairy chain and raise the awareness of the need of greater sensitivity to signals coming from the market, improving price transmission and adapting supply to demand, as well as helping to avoid certain unfair trade practices. Due to the fact that there is no EU legislation on such contracts, the Member States may decide to introduce a duty to use it within their systems of law of obligations and contracts, provided that this is done in compliance with the EU regulations, and in particular with the proper functioning of the internal market. However, all of these basic conditions should be negotiated on the principle of freedom of contracts [Regulation No 261/2012, paragraphs 9-10].

CULTIVATION CONTRACTS AS A MEANS OF OBTAINING RAW MATERIALS FOR FURTHER PROCESSING

This research was carried out in one of food processing plants in Greater Poland which acquires agricultural raw materials from local producers of fruit and vegetables. Among these a survey was conducted. It took a total of 105 entities, of which 23 were selected for further research¹. There were four groups of producers analysed depending on the duration and implementation of the contracts (year 1987, 2000, 2009) and the lack of its conclusion.

When analysing the research material there were some dependencies noted. First, the area under agricultural producers who entered into an agreement in 1987 and 2000 was enlarged compared to those who entered into a contract only in 2009 or they were not a party to it. At the same time the greatest diversity of the area was observed in the group of entities not signing the agreement. Thus it can be concluded that a long-term performance of the agreement contributes to the concentration of agricultural land under cultivation of fruit and vegetables and rationalisation of production.

Moreover, in the group of agricultural producers who signed cultivation contracts only in 2009 or did not sign it at all, labour force per 1 ha was significantly higher than in the case of producers bound by earlier contracts.

¹ For the research was used primary data contained in the thesis of P. Tomczyk: *The meaning of cultivation contracts in improving the efficiency of production in horticulture*, Poznan UP, 2012. The author has consented to the use of research results.

It was also noted that in relation to the labour force it can be noticed that the greatest diversity of employees on a contract of employment was observed in the case of cultivation contracts carried out since 1987. In the other groups, the standard deviation was minimal. The situation was different in the case of seasonal workers. The largest standard deviation – at the level of 11.9 – was in the non-contracting producer group. This demonstrates a high diversity of employment. The highest number of employed farm owners and their family members was observed in the contracting group after 1987. In their case, the standard deviation reached the value of 7.78.

With regard to the capital expressed in machinery, equipment, the value per 1 ha and per one unit was the largest among entities not being a party to the contract. Thus, it can be concluded that the level of modernisation of farms is in favour of manufacturers producing outside contracting. The situation is much different in terms of the value of buildings and constructions. Here there is a significant advantage to the contracting agricultural holdings since 1987.

Looking through the prism of the capital resources of farms with a division into the number of machines, their market value and the market value of buildings and constructions, it appears that the largest number of machines occurred in the contracting group since 2000 and amounts to 20 units. A similar situation is for the value of their buildings. The study also included additional indicators which are used to determine the role of contracting in the effects of production, namely, the analysis of total costs and revenues. A clear advantage of the revenue occurred in the case of entities which did not enter into the agreement. However, in the 1987 and 2000 groups the increase was small, and in the third group (contracting concluded in 2009) there was a drop in revenue noted. In addition, in the non-contracting group there was a clear cost advantage over the other groups. A clear decrease in costs occurred in the group of entities which entered into agreements in 2000 and among non-contracting entities.

Analysing the effectiveness for various production factors among the entities which signed the agreement and produced outside it in 2010-2011, it should be noted that in the case of land efficiency² there can be noted a clear advantage among the producers who did not enter into contracts; however, in the case of work efficiency – it was larger in the same group³. Moreover, the capital efficiency ratio during the period in question is twice as high in the non-contracting group. In the contracting group for 1 PLN equity capital was 90 groszys (2010) and 89 groszys (2011). The capital efficiency ratio among the non-contracting entities was 1.90 PLN.

CONCLUSIONS

It can be noticed that cultivation contract concluded between the agricultural producer and food processing plant allows for better planning, organising and controlling the flow of raw materials. Definitely on its 'design' depends the efficiency and effectiveness of actions taken by the food processor. However, it cannot be unequivocally stated that in the considered case contracting has a significant role in the production process in economic terms. However, agricultural producers have guaranteed collection of agricultural materials according to a set schedule and they receive a fixed price. It allows at the time of concluding the contract to estimate their income.

² Land efficiency ratio = average revenue/land resources.

³ Labour efficiency ratio = average revenue/labour force.

Proper balance between the elements of the contract must be made with a particular emphasis on the present on the market advantage of supply over demand. Therefore, it should be remembered that in the supply chain this fact places consumers of agricultural products in a privileged position. They have some influence on the decisions taken by the contracting parties. At the same time the weakest link in the chain is the agricultural producer, who needs special protection. This is more and more often expressed in normative acts, as exemplified by the Regulation No. 261/2012 regarding the possibility for Member States to decide on the obligation to conclude cultivation contracts and the milk market.

The research has shown no direct links between the cultivation contracts and production efficiency in examined farms. However, seeing it from the angle of the means of production, long-term performance of the agreement influenced on land enclosure and rise in labour's involvement of the farms' owners and their families. Among the others – the farms without concluded contracts – there was huge diversity of land area, increased labour forces per 1 ha and high level of mechanization and modernization. The work and land efficiency factors reached the highest amounts.

The structure of the conducted contract goes far beyond the framework set out in the Civil Code, since it must be kept adjusted to the objectives of the organisation and functioning of the food processing plant and market's needs. At the same time it should be recognized as an instrument which secures the acquisition of raw materials for further processing. Besides due to its proper structure, it becomes a way to help reduce the risk of agricultural production.

Existing under the cultivation contract certain relations between the parties are extremely important for the increase of both their competitiveness and durability of cooperation. This agreement allows rationalising the use of production factors, including reducing the cost of production. However, from the point of view of the contracting party, a food processing plant, except the quality its timely execution is of prime importance.

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**KONTRAKTACJA JAKO ELEMENT POPRAWY ORGANIZACJI PRZEDSIĘBIORSTWA
PRZETWÓRCZEGO – ASPEKTY PRAWNE I EKONOMICZNE**

Streszczenie

Określono znaczenie umowy kontraktacji jako jednego ze sposobów dostarczania materiału wyjściowego do przetwórstwa, związanego bezpośrednio z poprawą organizacji produkcji i działalności przedsiębiorstwa. Dane do badań zebrano na podstawie ankiety przeprowadzonej wśród 105 podmiotów. Analizowano cztery grupy producentów w zależności od czasu trwania i wykonywania kontraktacji (lata 1987, 2000, 2009) oraz braku jej zawarcia. Stwierdzono zależności pomiędzy zawarciem kontraktu a wielkością gospodarstwa rolnego, zasobami siły roboczej, modernizacją gospodarstw i ich wyposażeniem. Przeprowadzone badania wskazują na doniosłą rolę i znaczenie tej umowy zarówno w ujęciu ekonomicznym, jak i prawnym. Jednakże zauważono także u niektórych producentów rolnych brak zaufania co do skuteczności kontraktacji.

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