

Available online at http://jess.esrae.ru/

# "Journal of Economics and Social Sciences"



# The contract system in agriculture as an instrument for economic security and sustainable development in the region

Tomsk Polytechnic University

Andrew Vlyubchak<sup>a</sup>

<sup>a</sup> School of Engineering Entrepreneurship, Tomsk Polytechnic University

#### Abstract

The paper describes the contract system presented in agriculture as an instrument for economic security and sustainable development of the definite region. The contract system is widely used in the world. The experience of several countries (Thailand, the Philippines, etc.) are analized. A number of factors that affect the success of contract farming are given. Moreover, it is concluded that contracts must be supported by law and effective legal system. Existing laws must be revised to make sure that they do not restrict business. Bureaucratic support should be minimized in the formation of the contract. Author thinks that the contract system in agriculture is a key element of sustainable development because contracts are used to exploit natural resources in tandem with social and economic changes that strengthen current and future capacity to meet human needs

Keywords: Contract system; contracting food; food security; sustainable development; agriculture.

# 1. Introduction.

According to published data presented by Russian Public Opinion Research Center (VCIv OM), 39% of households lack the resources even for food. According to data provided by Rosstat, from January to September in 2015 the number of poor people reached 20,3million, thus, 14% of Russia inhabitants had incomes below the subsistence minimum, which allows us to speak of issues related to food security.

The term "food security" refers to the ability of society to ensure that food is available in quantities necessary for nutritional well-being. Food security issues in Russia causes foreign trade turnover. Thus in January in 2015, trade turnover was decreased by 33.8% of the turnover in January in 2014, moreover, exports dropped by 31,8%.

The Ministry of Agriculture reports that in 2015 Russia reduced exports of agricultural products to \$ 9.7 billion as against \$11.7 billion in 2014. In June 2016 in Tomsk region the output of agricultural products was made for the sum of 11978,2 million rubles, which was 8.2% less than in 2015. From January to June in 2016, the output of agricultural products was made for the sum of 7548,8 million rubles, which was 3% less than in 2015. The production of milk and dairy products dropped and most of these products were transported from neighboring regions. Only 177.1 thousand tons of milk were produced in 2010, in 2011-179.8 thousand tons and only 140.3 thousand tons in 2015, thus, a decrease was more than 20% [3].

Having analyzed these data, it can be concluded that there were preconditions in Russia for the issues of food security support and agricultural development. It can be questioned the State's ability to make food available for the entire population.

### 2. Experience of several countries.

The key tool for promoting agriculture development is the contracting food. The purpose of the contract for agriculture is that small farms work to order and this practically negates the risks of overproduction. The contract stipulates the quantity of raw materials and the price. The farmer is confident that his products will be more likely to be realized due to known price.

Consider local examples of the success of the contract system in agriculture in some countries. The history of the contract system in agriculture has got many positive examples. For example, Kenyan "South Nyanza Sugar Company" has contract relations with 1800 farmers. The company's employees regularly educate farmers about fertilizers as well as sugar cane cultivation, suggesting recent innovations in this type of agriculture [2].

The company "Hindustan Lever" entered into contract relations with 400 farmers in northern India for growing some varieties of tomatoes for pasta. The study and analysis of the results have been made. It has been confirmed that farmers' yields and incomes have increased with new seeds and a guaranteed sales market. In addition, the analysis has showed that the yields of farmers who had grown tomatoes under a contract were 64% higher than those who had grown tomatoes and had implemented them on the open market [4].

The government should be a driver for the agricultural complex through legislation and public policies in certain industries. In the Philippines, for examples, fast food networks imported frozen fries in spite of the fact that a great variety of potatoes could be grown in the Philippines. As a result, the government has imposed restrictions on the import of any type of potatoes, which has resulted in the networks having to conclude contracts for the supply of potatoes with local farmers. Thus, a simple reform has benefited a large number of small farmers. In addition, the Philippine Government, with the assistance of FAO, has allocated land for an agrarian program based exclusively on contracts. Allocating land the Government carried out some activities. One of such activities was a forum where agro-entrepreneurs could meet with farmers to have a discussion between cooperatives or farmers' organizations [2].

By the year 2000, 27 companies had established contract relations with farmers as a result of the agrarian program. There were other activities carried out by the Department of Agrarian Reform, which included the market information, selection of products that had commercial demand and that could be satisfied by Control System in agriculture. The Department also agreed to act as an arbitrator in the case of disputes [2].

Another example of the promotion of the farm contract is India, where the regional department of the State Bank organized the meeting for bankers, agribusiness managers and administrators to explore the possibility of establishing market linkages for agricultural products. This resulted in the conclusion of 2200 agricultural contracts between a large poultry producer and farmers who would grow food for birds. Thus, farmers in 164 villages grow corn and soy beans for poultry farms. Banks with a tripartite agreement between farmers, the company and banks provide funding [2].

In Africa, contracts are often known as "agricultural succession" schemes. For example, Zambia prefer a contract system for cotton-growing. By the end of 1980, more than 15000 small farmers had grown cotton based on the contract for a large cotton company.

In Thailand, sugar cane is grown with the help of contracts and the marketing model of the promotion are common to the entire Thai sugar industry. In Thailand, 46 plants produced 4 080 000 tons of sugar in a 1997/1998, and 57% of this production went to export. More than 200 000 farmers raised sugar cane for these plants in the area of about 914 000 hectares. There are also many farmers who grow cereal crops for big farmers based on the agreements that regulate prices, give quotas and monitor the activities of sugar mills. The government has introduced a clear marginal income for each market participant, where a cane producer receives 70%, and the manufacturing plant receives 30% of total net revenues. In addition, the Government encourages the participation of companies and farmers in research development [2].

In the South Pacific, there were events when local entrepreneurs asked the farmers to grow bananas, squash and papaya for export. In almost all cases, farmers worked due to informal contracts and received seeds and basic technical advice for the cultivation of crops [1].

In northern Thailand, production of frozen vegetables is widely developed. Two large companies collect and freeze vegetables. Such companies in Thailand are called intermediaries or collectors. They do not grow the raw materials for these companies, i.e. frozen beans and corn is supplied by the farmers due to the contract system. In total, the number of farmers with whom the collector contracted is more than 30 000. The supply of frozen goods is carried out in Japan but it is done by a collector not by a farmer. Farmer's liability ends at the moment when he hands in his product for freezing. Employees from these two companies control and manage farmers they are responsible for all activities at the production site from crop to harvest. Intermediaries (sponsors) say what they want, advise farmers with the necessary fertilizers, develop crop production programs and methods of plant growing. Each employee who works directly with the farmers has 200 to 250 controlled farms and this system works well [1].

In this way, the success of contract farming can be demonstrably observed even at the micro levels. I would like to mention the Government of Thailand, which actively promotes the formation of contract farming.

## 3. Conclusion.

There are a number of factors that affect the success of contract farming. They include physical, social, cultural factors as well as the environment condition, the suitability of utilities and communications, weather conditions and the availability of the necessary resources for farming. An essential prerequisite for the formation of contracts in agriculture is that the sponsor should have the necessary competence to manage and administer a project that involves many small farmers. Without this criterion, investment may non-recoup itself. Another important requirement is State's support. Contracts must be supported by law and effective legal system. Existing laws must be revised to make sure that they do not restrict business. Bureaucratic support should be minimized in the formation of the contract. Under effective management, contract farming can be a means to develop agriculture and promote its technological development that benefits the state, sponsors and farmers. The experience of America, Finland, Thailand and some other countries has already made this mode of agriculture effective.

The contract system helps farmers to solve one of the main problems - inequitable distribution of income; in addition it gives rise to important tasks such as assisting the lowest-income members of the chain.

Thus, the contract system in agriculture is a key element of sustainable development because contracts are used to exploit natural resources in tandem with social and economic changes that strengthen current and future capacity to meet human needs. Moreover, the principles of the contract system in agriculture are not contrary to the continued existence and development of mankind; they create essential conditions for the transition to a new form of civilization.

# **References:**

- 1. Beske, P., Land, A., Seuring, S. 2014. Sustainable supply chain management practices and dynamic capabilities in the food industry: A critical analysis of the literature. *International Journal of Production Economics* 152: 131-143
- 2. Charles Eaton, Andrew W. Shepherd (2001).Contract farming Partnerships for growth. FAO AGRICULTURAL SERVICES BULLETIN № 145.
- 3. Federal state statistics service [Available at: http://tmsk.gks.ru] [viewed on 20/10/2017]
- 4. Michael E. Porter and Mark Kramer, Creating Shared Value, Harvard Business Review.2011