VERTICAL COORDINATION: CONTRACT PRODUCTION METHOD TO SOLVE MARKETING PROBLEMS IN THE RURAL AREAS

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ABSTRACT

Contract production, which has many advantages, is one of the methods of vertical coordination in the market to solve marketing problem and provide necessary inputs for small scale producers in agricultural sector. But it has some problem because of features of producers like dependency to authority and primary groups and market structure.

INTRODUCTION

Agriculture is one of the basic elements of economy in developing countries due to gross domestic product which is obtained from agricultural sector and great employment opportunity which is created by it in rural area. Also it provides requirement of nutrition for people, assure row material for agricultural and other sectors and contribute to income of foreign trade. But, it has some serious problems about production and marketing because of expanding trade and globalization.

In an age of market liberation, globalization and expanding agribusiness, there is a danger that small-scale farmers will find difficulty in fully participating in the market economy. Attempts by governments and development agencies have tended to emphasize the identification of “income generation” activities for rural people. Unfortunately, to reach the aims, the necessary backward and forward market linkages are rarely in place, i.e. rural farmers and small scale entrepreneurs do not have enough accessibility to reliable and cost efficient inputs such as extension advice, mechanization services, seeds, fertilizers and credit and guaranteed and profitable markets for their output. Well-organized market structure provides such linkages, and would appear to offer an important way in which smaller producers can farm in a commercial manner [1]. At this point, in recent years some people have focused on concept of vertical coordination.

MATERIAL AND METHODS

Basic material of the study has consisted of secondary data which are prepared by domestic and foreign organizations.

In this study, firstly, some basic properties about vertical coordination and its methods have been given and secondly definition of contract production, positive and negative affects and currently statement in Turkey have been explained. Finally, reasons which are obstacles to farmers for vertical coordination have discussed from the socio-economic and societal point of view.

RESULTS

Vertical Coordination

Vertical coordination refers to the synchronization of successive stages of production and marketing, with respect to quantity, quality, and timing of product flows. Methods of vertical coordination include open production (also referred to as open or spot market), vertical integration and contract production [2].

Reasons of vertical integration among agriculture, industry and commerce sectors are basically;

1. Complication of organization of production and consumption,
2. Small production scale, some features of agricultural products such as being storeageable and spoilable,
3. Different growth possibilities of the agricultural sector from other sectors,
4. Efforts of increase market shares of agricultural industry and industry based on agriculture [3].

In open production, a firm does not commit to selling its output before completing production. Open (or spot) markets provide the traditional means of transferring products and determining prices in agriculture. In spot markets, producers are paid for their products at the time ownership is transferred off the farm, with prices based on prevailing market prices at the time of sale, under agreements reached at or after harvest. Buyers may pay premiums for products of superior quality, based on factors observable or agreed to at the time of sale. Farm operators participating in spot markets control production decisions, such as the types of farm inputs to buy, as well as when and how to apply them. Operators also make financing decisions (often in concert with their bankers) and arrange for selling their products, including finding a seller, determining a price, and delivering the product. Spot market exchanges continue to govern most transactions for farm products [4].

In vertical integration, a single firm controls two or more successive stages of vertical coordination. In vertically integrated firms, management directives dictate the transfer of resources across stages. Movement along the continuum of vertical coordination from open-market production to vertical integration represents the degree to which control of production has shifted to the contractor or integrator as more functions are transferred from the producer [5]. In traditional marketing system, producer, wholesaler and retailer act independently and each of them try to maximize its own profit. Whole system's profit can be reduced during this process. In the system, marketing actors generally bargain with and can not control to each other. If we can give a broader definition that vertical integration is controlling under only one ownership all activities from producer to consumer for a production [6].

Contract production is the production of goods and services for future delivery. Before completing production, producer commits to deliver a particular good to a particular buyer. Contract production involves more interaction between buyers and sellers than open production. Production contracts vary in control allocated and risk transferred across stages. In market-specific production contracts, the contractor and producer may negotiate delivery schedule, pricing method, and product characteristics. The contractor usually provides a market for the goods but engages in few of the producer's decisions. In *resource-providing contracts*, the contractor provides a market for the goods, engages in many of the producer's decisions, and retains ownership of important production inputs [5].

Development and Features of Contract Production

Contract production is not a very new approach that it was used for producing of sugar in Taiwan after 1885 and producing of banana in Central America at the beginning of 20th century. It was applied to get seed in Europe and North America during this century. In recent days it has became a critical element of food industry in west Europe, North America and Japan. In this model, vegetable and fruit have been produced densely and after then beef cattle, broiler, diary cattle, sugar cane and sugar beet have been produced. Also, it is generally important for row materials of industry.

In Turkey, the first sugar plant was established by government and cooperation between producer and industrialist in food industry began with this attempt in Turkey. Contract sugar beet production has become a good sample between producer and industrialist from the point of view acceptance of new technology and modern agriculture by farmers and contributed to development of sugar beet industry.

After sugar beet, contract production was made for industrial type of tomatoes. Now, market has many buyers which have different characters in the food industry. The model has developed in seed production and row materials in the industry since 1965. Recently, especially in the west of Turkey, there has been vertical coordination between industrialist and producers who has produced tomatoes, pea, bean, other vegetables, fruit juice and tinned good.

Since 1985, Hop has been produced with contract production that today harvest area of hop is 850.900 da, production of it is 120-140 ton and this production meets 40% of demand of beverage [3].

It can be defined as an agreement between farmers and processing and/or marketing firms for the production and supply of agricultural products under forward agreements, frequently at predetermined prices. The arrangement also invariably involves the purchaser in providing a degree of production support through, for example, the supply of inputs and the provision of technical advice [1].

Marketing contracts focus on the commodity as it is delivered to the contractor, rather than on the services provided by the farmer. They specify a commodity's price or a mechanism for determining the price, a delivery outlet, and a quantity to be delivered. The parties in a marketing contract agree to its terms before harvest or, for livestock, before removal.

In this model, generally, a producer can directly arrange with an industry and commerce firms but in some cases they can arrange with producer organizations and cooperatives to sell their products at certain quantity, quality and price.

Basic elements of contract production for producers and buyer firms,

a) Structure of products: Basic properties for accepting contract about products are usage opportunities of product, wear of them, and socioeconomic properties of producers. Currently, contract production is commonly applied for certain products which are sugar-cane, sugar beet, fruits, vegetables, broiler, meat, milk production in the world.

b) Price and price policies: it is a good tool for manager of the firm to control the contract and setting the price depends on market structure. We have four kinds of contract according to price; 1) Contracts at determined prices, 2) Contracts based on market prices 3) Contracts based on production cost 4)contracts at undetermined prices

c) Macroeconomics and institutional policies: Paying system of production for producer and buyer and being monopoly or monophony are the basic determinant for the contract in the market. It can be supported by government since it can seem as a tool of national and international agriculture, industry and commerce sectors.

d) Contract duration: It has to be clearly defined to reach main aim of making contract which provides conformity between producer and buyer.

e) Partnership between producer and buyer firms: In this model, producers should support with some capital to industry and commerce firms to increase success of the application [3].

Contract farming has significantly benefits for both farmers and sponsors (investors). However, contract farming has some problems together with these advantages. We will ring both advantages and problems from the standpoint of farmer and sponsor.

Advantages and Problems for Farmers and Sponsors

Advantages for farmers

1. Inputs and production services are often supplied by the sponsor
2. This is usually done on credit though advances from the sponsor
3. Contract farming often introduces new technology and also enables farmers to learn new skills
4. Farmers' price risk is often reduced as many contracts specify prices in advance,
5. Contract farming can open up new markets which would otherwise be unavailable to small farmers and provides market guarantee for them.

Problems faced by farmers

1. Particularly when growing new crops, farmers face the risks of both market failure and production problems,
2. Inefficient management or marketing problems can mean that quotas are manipulated so that all contracted production is purchased,
3. Sponsoring companies may be unreliable or exploit a monopoly position,
4. the staff of sponsoring organizations may be corrupt, particularly in the allocation of quotas,
5. Farmers may become indebted because of production problems and excessive advices

Advantages for sponsors

1. Contract farming with small farmers is more politically acceptable than, for example, production on estates,
2. Working for small farmers overcomes land constraints,
3. Production is more reliable than open market purchases and the sponsoring company faces less risk by not being responsible for production,
4. More consistent quality can be obtained than if purchases were made on the open market.

Problems faced by sponsors

1. Contracted farmers may face land constraints due to a lack of security of tenure, thus jeopardizing sustainable long term operations,
2. Social and cultural constraint may affect farmers' ability to produce to managers' specifications,
3. Poor management and lack of consultation with farmers may lead to farmer discontent,
4. Farmers may sell outside the contract (extra-contractual marketing) thereby reducing processing factory throughput,
5. Farmers may divert inputs supplied on credit to other purposes, thereby reducing yields.

Except all of these problems which are mentioned above there are also two important societal features [7] which are obstacles for contract production from the point of view farmers and sponsors. These can summarize as below:

1. Dependency to authority and primary groups: It is mean that people do not have any effort or struggle to establish any organization like contract production if there is not a leader. Mostly, they do not do anything themselves. Generally farmers see the governments (authority) as a main responsible institution for everything and they do not trust foreign people except primary groups like their own family, relatives or friends. Because of these they are generally selfish, skeptic and introverted persons. These features provide problems for development of contract production.
2. Religious structure: Farmers generally have strong religious structure. This feature makes the farmers fatalistic persons, in other words passive persons to overcome the agricultural production and marketing problems. Generally they accept their life as it was. Therefore they can not make any effort to establish new organization like contract production.

As a result, in agricultural sector, seasonal fluctuations in basic economical factors such as supply, demand and price affect on producer, consumer and industrialist negatively related to natural and economical conditions. In this case, contract production provides market guarantee for producers, supply of production continuously, row material requirement of industrialist and gives opportunity to consumer to consume production with suitable prices [8].

DISCUSSION

Globalization and expanding agribusiness gets important in these days, there is some dangers for small scale farmers because of their structure and market economy. Governments struggle to increase income level for them in rural area. At this point vertical coordination can be a good way to reach for this aim.

Contract production is a new approach that it has been applied since 1885. Now, it has being commonly used for producing beef cattle, broiler, diary cattle, sugar cane and sugar beet in west Europe, North America, and Japan. In Turkey, this model was used for sugar beet in 1926, after then it has spread in a short time. Today many products such as tomatoes, pea, bean, fruit juice and tinned good are produced.

In agricultural sector, seasonal fluctuations in basic economical factors such as supply, demand and price affect on producer, consumer and industrialist negatively related to natural and economical conditions. In this case, contract production provides market guarantee for producers, supply of production continuously, row material requirement of industrialist and gives opportunity to consumer to consume production with suitable prices (Tan, 2003). As a result of these kinds of organization like contract production have very good examples in the world, but because of the sociological reason mentioned above it can not be developed sufficiently in the developing and underdeveloped country.

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