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Araştırma
Research

THE EVALUATION OF THE WAREHOUSE RECEIPT SYSTEM FOR AGRO-FOOD PRODUCTS IN TURKEY

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ABSTRACT: Turkey has some flaws and challenges in the functioning of agricultural products markets. The receipt warehouse system, which is used for various agricultural products and in many countries around the world is important in terms of proper functioning of agricultural products markets. Therefore, in recent years, creating a legal infrastructure for a receipt warehouse system has gathered speed in Turkey. The study is focused on the functioning of the receipt warehouse system which has existed in developed countries for a long time and recently put into practice in Turkey. The aim of the study is to evaluate the system in terms of Turkish agricultural products, discuss the potential advantages of the warehouse receipt system for farmers, agro-industry, traders, exporters, and more and the problems encountered in the improvement of the system. This review was performed based on domestic and international literature. According to the results of evaluation, primary advantages of the system are availability of high-quality products at desired times in sufficient quantities, price stability, decreasing the cost of stocking and offering farmers eligible loans and credit. In spite of its advantages, it seems that the development of the warehouse receipt system in agricultural markets will not be easy in Turkey because of small-scale enterprises in agriculture sector, the absence of a specialized commodity exchange and the high cost of establishing a licensed warehouse.
Keywords: Warehouse receipt system, agro-food trading, food marketing, Turkey

TÜRKİYE'DE TARIM VE GIDA ÜRÜNLERİ İÇİN LİSANSLI DEPOCULUK SİSTEMİNİN DEĞERLENDİRİLMESİ

ÖZET: Türkiye'de tarım ve gıda ürünleri piyasalarının işleyişinde bir takım aksaklıklar ve sorunlar ortaya çıkabilmektedir. Başta gelişmiş ülkeler olmak üzere dünyada birçok ülkede ve üründe yaygın bir şekilde uygulanan lisanslı depoculuk sistemi, Türkiye'de belirli tarım ve gıda ürünleri piyasalarının düzgün bir biçimde işlemesi açısından önemli görülmektedir. Nitekim Türkiye'de de lisanslı depoculuk sisteminin yasal altyapısının hazırlanması çalışmaları son yıllarda hızlanmıştır. Bu çalışmada, lisanslı depoculuk sisteminin Türk tarım ve gıda ürünleri açısından genel bir değerlendirmesinin yapılması amaçlanmaktadır. Çalışmada, lisanslı depoculuk sisteminde yer alan ana unsurların sistemden sağlayacağı avantajlar ve lisanslı depoculuğun gelişmesinin önünde duran sorunlar için alınması gereken önlemler tartışılmıştır. Bu çalışma yerli ve uluslararası literatürden yararlanılarak hazırlanmıştır. Yapılan değerlendirmeye göre, kaliteli ürünün istenilen zamanda ve miktarda elde edilmesi, fiyat istikrarı sağlaması, stok maliyetinin azaltılması ve üreticilere uygun kredi olanaklarının sağlanması lisanslı depoculuk sisteminin başlıca avantajlarıdır. Bu avantajlarına rağmen, Türkiye'de lisanslı depoculuk sisteminin gelişimi, tarımsal işletmelerin küçük ölçekli olması, ürün ihtisas borsalarının mevcut olmayışı ve lisanslı depo kurma maliyetlerinin çok yüksek olması gibi nedenlerle kolay görülmemektedir.
Anahtar Sözcükler: Lisanslı depoculuk sistemi, tarım ve gıda ticareti, gıda pazarlama, Türkiye

1. INTRODUCTION

The agricultural sector has substantial potential in Turkey and contributes greatly to the national economy. Meeting the population's foodstuff needs, providing raw material for the agro-industrial sector, creating demand for industrial products, and contributing to the national income and export earnings are among these contributions.

The warehouse receipt system has a number of advantages for the agricultural sector, such as introducing agricultural products into the market in accordance with quality standards, warehousing the products in the proper conditions, maintaining product pricing during periods of high supply, ensuring products against hazards, protecting producers from price discrimination and market risks, the possibility

of receiving loans in return for product notes, and keeping records of the economy (Ünal, 2011). The warehouse receipt system is applied to specific products in many countries around the world, including developed and undeveloped countries, and is noteworthy in the proper functioning of agricultural products markets.

The warehouse receipt system has been in operation for more than one hundred years in the USA and Canada, one of the reasons for its establishment being price stability (Lyimo, 2009). The development of the warehouse receipt system in agricultural marketing systems in Africa following liberalization in the 1980s (Onumah 2010) and it is gaining popular in Zambia, Uganda and Tanzania. The warehouse receipt system was introduced in Tanzania in 2005 and the system working well with coffee, cotton and cashew (Coulter, 2009). Some of the benefits of the system include increased efficiency, reduced post-harvest losses, and rewards for quality; it provides transparency and price discovery, empowers the farmer to evolve from price-taker to price-setter, give him access to bank credit by using the warehouse receipt as collateral, and reduces operating and other costs (Pascal, 2010). In Zambia, prospects for a regulated system rest with the Zambian Agricultural Commodity Exchange (ZAMACE) and is in the process of establishing exchange-linked warehouses where smallholders can deposit grains they wish to sell. Uganda has launched a regulated system involving the use of electronic warehouse receipts which have so far been well received by farmers, and even more so by bankers. East African banks have been reluctant to fund against grain warehouse receipts, but recent developments in Kenya and Uganda suggest that this is changing; the adoption of electronic documentation may provide further encouragement (Coulter, 2009).

Countries with an advanced warehouse receipt financing system are Bulgaria, Kazakhstan, Hungary, Slovakia, and Lithuania. Countries with a partially developed warehouse receipt system include Poland, the Russian Federation, Turkey, Ukraine, Romania, Moldova, Serbia and Croatia. A considerable number of European and Central Asian countries do not yet have warehouse receipt legislation in place and have received little or no support from international donor agencies in this regard. These include smaller countries in the Balkans, the Caucasus and Central Asia (Höllinger and Rutten, 2009).

There are different approaches in the development of legislative frameworks. In some cases, legislators build upon existing laws, but usually the effort begins with new legislation. In countries such as Poland, Ukraine, and Indonesia, legislation has been developed on a broad base, encompassing various commodities and different commercial practices. In other countries, such as Hungary, Slovakia, Bulgaria, and Kazakhstan, there is specialized warehouse receipt system legislation. Specialized warehouse receipt system legislation, focusing on the main commodities that will be used as collateral, is more appropriate because it takes into account the specifics in the commodity related to storage and marketing and better reflects these specifics into the legal text (USAID, 2007). In Turkey, the Licensed Warehousing Law of Agricultural Products, accepted in 2005 and the objectives of the associated regulations include several goals as follows; facilitation of the trade of agricultural products, creation of a widespread system for warehousing, ensuring the protection and quality of the producers' products, providing an opportunity for assessing products' class and degree through certified classifiers and issuance of product notes and merchandise agricultural products to the standards determined (Official Journal. 2005a).

It can be said that warehouse receipt system is a new system in Turkey. Although it has a potential, it's not uncommon yet. Because of that reason, the studies are limited in this issue. Some important studies in Turkey are as follows: Tektaş (2008) investigated the trade boards in Thrace Region and discussed the importance of the trade boards for warehouse receipt system. Taşkesen and Kaban (2009) discussed the warehouse receipt system in terms of hazelnut sector. Karabaş and Gürler (2010), reported the processes, advantages and disadvantages of the licensed warehousing system and its application in Turkey. Ünal (2011), reported the application of the warehouse receipt system's process in Turkey and discussed the system in terms of apricot sector.

The main objective of this study is to evaluate the potential of the warehouse receipt system for Turkish agricultural products. The other objectives of the study are to reveal the current situation of the warehouse receipt system in Turkey, to evaluate the potential advantages of the warehouse receipt system for farmers, agro-industry, traders, exporters, and more to discuss the problems encountered in the development of the system.

2. CURRENT SITUATION OF AGRICULTURAL PRODUCTS WITHIN THE CONTEX OF WAREHOUSE RECEIPT SYSTEM IN TURKEY

Agricultural and processed agricultural products such as cereals, legumes, cotton, tobacco, nuts, oil seeds, vegetable oils, and sugar that could be standardized have been identified as products subject to the warehouse receipt system within the scope of the Licensed Warehousing Law of Agricultural Products that was accepted in 2005. However, Licensed Warehousing Regulations have already been issued about cereals, legumes, oil seeds, nuts, cotton, olives, and olive oil. For that reason, the current situations of these products are given in this section.

The share of total crop production value of cereals, legumes, oil seeds, nut, cotton, and olives is 44.5% according to the averages of 2005-2007 in Turkey. Cereals one of the products for which licensed warehousing regulations have been approved alone

Table 1. Production values of products for which licensed warehousing regulations are approved in Turkey (in millions of dollars)

Products	2005	2006	2007	2005-2007 (Average)	(%)
Cereals	9248	8184	9020	8817	24.9
Legumes	1196	1049	1070	1105	3.1
Oil seeds	805	819	712	779	2.2
Hazelnuts	1541	1734	1543	1606	4.5
Cotton	1197	1349	1288	1278	3.6
Olive	1951	2590	1979	2173	6.1
Crops Total	15937	15723	15612	15757	44.5
Value of Crop Production	37993	31802	36414	35403	100.0

Source: TUIK (several years)

provide 24.9% of total crop production value (Table 1). In the total cereals production value, the share of the wheat is 60.8% and barley is 22.1% (TUIK, Several Years). Turkey has a significant position in the production of these products globally. According to the averages of the years 2008–2010, Turkey is tenth in the world in wheat production (17.4 million tons), sixth in barley production (6.0 million tons), third in olive oil production (157.000 tons), fourth in olive production (1.4 million tons) and eighth in cotton production (420.000 tons), while it places first in nut production (634.000 tons) globally (USDA, 2012; FAOSTAT, 2012).

3. DEVELOPMENTS OF THE WAREHOUSE RECEIPT SYSTEM IN TURKEY

As mentioned previously, the Licensed Warehousing Law of Agricultural Products was enacted on February 17, 2005 within the context of structural reforms and regulations carried out during the European Union harmonization process in Turkey (Official Journal, 2005a; Karabaş and Güler, 2010). In accordance with this law, eight application regulations were issued so far. The first of the eight regulations that have gone into effect, the Licensed Warehousing Regulation of Cotton, was accepted on September 8, 2005. As a part of these regulations and laws, the Licensed Warehousing Incorporated Company of Aegean Agricultural Products (ELİDAŞ) established cotton as eligible for the warehouse receipt system on January 13, 2011 in Izmir (General Directorate of Domestic Trade, 2011).

The following are among the nineteen shareholders of ELİDAŞ: İzmir, Balıkesir, Şanlıurfa, Gaziantep, Manisa, Ödemiş, Söke, Salihli, Turgutlu and Alaşehir Commodity Exchanges, Turkish Derivatives Exchange, Denizbank, Business Investment and Industrial Development Bank of Turkey, Takasbank, İzmir Chamber of Commerce, Tariş Cotton and Oil Seeds Agricultural Sales Cooperatives Union, Tariş Sultana Raisins Union, and the Aegean Exporters' Association (a foundation of EDAKATAŞ Incorporated Company). ELİDAŞ was established under the leadership of the Izmir Chamber of Commerce with 4.5 million dollar[1] (8 Million Turkish Lira) in capital funds (Izmir Commodity Exchange, 2011). The establishment of ELİDAŞ was initiated at the beginning of 2011, and its infrastructure (a foundation of laboratories and warehouses, preparing data processing infrastructure and so on) has advanced swiftly. This company initially plans to focus on cotton warehousing. In addition, other agricultural products will be added in accordance with emerging developments in the near future. The reason the company will start with cotton warehousing is because it is more advantageous in terms of standardization when compared with other agricultural products; furthermore, the Izmir Commodity Exchange is the center of cotton trading (Izmir Commodity Exchange, 2011).

After Agricultural Products Licensed Warehouse Act. No. 5300 was enacted, interest in the warehouse receipt system in olives and olive oil products-along with many other agricultural products-started to mobilize. On December 04, 2010, Licensed Warehousing Regulation of Olives and Licensed Warehousing Regulation of Olive Oil were issued by the Ministry of Industry and Commerce, and the first warehouse receipt system in olives and olive oil was founded on May 30, 2011 (Official Journal, 2005a; Official Journal, 2010; Anonymous, 2011). Fifty percent of this investment-established with $17 million capital fund under the coordination of Marmarabirlik with a stock capacity of 13,000 tons of olives and 4,000 tons of olive oil—was met by the sources of the World Bank and Secretariat of Treasury. The other 50% was met by the resources of Marmarabirlik. Within the context of this project, Başköy Licensed Olive Warehouse (5,000 ton capacity), Erdek Licensed Olive Warehouse (8,000 ton capacity), and Başköy Licensed Olive Oil

[1]Convert to USD dollar using the yearly average exchange rate for the year 2012.

Warehouse (4,000 ton capacity) were established (Anonymous, 2011).

In addition, on July 12, 2011 a corporation of TMO, TOBB, Ordu Special Provincial Administration, Umat Inc., and Customs Tourism, Inc., provided 28.5 million dollar[1] (51 million Turkish Lira) venture capital to establish the TMO-TOBB Agricultural Products Warehouse Receipt Inc. The company began operations in warehouses with a capacity of 120 thousand tons and branches in the first place in seven different cities (Anonymous, 2012a).

Table 2. Warehouse receipt enterprises authorized, established and licensed

1*	2*	3*	4*	5*	6*	7*	8*
TMO-TOBB AP WRI**	grain, pulses, oil seeds	Ankara	Polatlı	40.000	26/02/2010 7510	12/07/2011	CE** Polatlı
			Lüleburgaz	20.000			CE** Lüleburgaz
			Ahiboz/ Gölbaşı	30.000			CE** Ankara
	hazelnut		Ünye/Ordu	25.000			CE** Ünye
			Düzce	5.000			CE** Düzce
Aegean AP WRI**	cotton	Izmir	Belevi Torbalı	20.000	13/01/2011 7729		
Yayla AP WRI**	grain, pulses, oil seeds	Mersin	Mersin	50.000	28/01/2011 7740		
Marmara Birlik AP WRI**	table olive	Bursa	Erdek	8.500	03/06/2011 7829		
			Bursa	5.000			
	olive oil		Bursa	4.000			
Tiryaki AP WRI**	grain, pulses, oil seeds	Gaziantep	Edincik Bandırma	30.000	25/10/2011 7928	12/07/2011	CE** Bandırma, CE** Çorum
			Çorum	40.000			
			Mersin	38.000			
Özova AP WRI**	grain, pulses, oil seeds	Hatay	Kırıkhan	40.000	10/05/2012		
Bursa AP WRI**	grain, pulses, oil seeds	Konya	Akçapınar Bandırma	30.000	25/05/2012 8076		
Anadolu Selçuklu AP WRI **	grain, pulses, oil seeds	Konya	Karatay Konya	100.000	16/09/2012 8135/73		

*1:Company name, 2: Nature of activities, 3: Center, 4: Offices, 5: Capacity (tons), 6: Establishment authorized date and the number of the Official Journal, 7: Licensed date, 8: Contracted classifier

**AP: Agricultural Products, WRI: Warehouse Receipt Incorporated, CE: Commodity Exchange

Source: Anonymous (2012b)

4. POTENTIAL CONTRIBUTIONS OF THE WAREHOUSE RECEIPT SYSTEM FOR AGRICULTURAL PRODUCTS IN TURKEY

4.1. Potential Contribution to Farmers

A possible consensus on future prices in agricultural products could be attained through the warehouse receipt system, and this process is substantially important for markets to foresee the future and minimize risk. In this system in which long-term agreements could be achieved, meeting farmers' input needs in time is more possible. Through this system, the products are classified according to their quality, and keeping records build a significant source data to determine output gaps. The warehouse receipt system is of high importance since it could reduce the risk of products spoiling or being stolen (Saran et al., 2005).

The warehouse receipt system could develop trade-transparency shares and shorten the chain

between farmers and merchants. In addition, it might be of interest in making deferment of product sales possible (Coulter and Onumah, 2002).

Farmers can store their products in licensed warehouses so they do not face underpricing following harvest time, and they could sell products at the most affordable time for them. Agricultural products are standardized in accordance with their quality in objective laboratories, and higher-quality products can be sold at higher prices. Therefore, farmers are encouraged to produce quality products (Karabaş and Güler, 2010).

Moreover, farmers could be eligible for loans and get credit in return for product documents, which are given to them on the condition that their products are stored in licensed warehouses (Erbay, 2007). The certain warranty claim system and operative compensation fund offered by the warehouse receipt system is credit-worthy for banks and provides a legal infrastructure for intervention (Martin and Bryde, 1999).

4.2. Potential Contribution to Agro-Industry

Turkey could preeminently benefit from natural resources on the way to industrialization, as many other developing countries do. For that reason, the agricultural sector contributes greatly to the national economy of Turkey. Agro-industry, which makes use of in-country production as a consequence of its contribution to agricultural sector, employs a great number of people and provides considerable added value that is highly significant for the manufacturing industry (Demirbaş, 2004; Tosun et al., 2013). It is a matter of fact that the share of food and beverage industry in the gross domestic product is 20% according to the average of the years 2008-2010. There are approximately forty thousand enterprises in the sector in 2009. Nearly 11% of the employees in industrial enterprises in Turkey are employed in the food and beverage sector (TÜİK, 2013). One crucial problem seen in industry and agriculture integration is the inability to supply raw materials at desired times and at sufficient levels. It is difficult to provide integration between agricultural sector and agro-industry because there is at lack of farmers who are well-organized and production structure (Demirbaş and Tosun, 2005). At this point, it should not be overlooked that sufficient raw material quantities for the industry could be obtained through the warehouse receipt system (Taşkesen and Kaban, 2009). Therefore, the function of the warehouse receipt system in providing sufficient raw materials for agro-industries should not be overlooked.

Because products are analyzed through laboratory test results and stocked in accordance with their quality (Karabaş and Gürler 2010), the possibility of selling products at higher prices at proper times will enable agro-industries to find raw materials at desired levels. Agro-industrial enterprises could sustainable purchase high-quality raw materials to carry out their activities in a more profitable way.

It is crucial that wheat and barley, which are a large part of the total cultivated area of Turkey, become subject to the warehouse receipt system. These grains' usage area in agro-industry is substantially broad (Yücel 2011). As the raw material of the flour industry, wheat is produced in sufficient quantity; however, it does not fulfill the needs of this sector in terms of quality. An increase in the population of Turkey, along with an increasing demand for grain products, makes wheat products strategically important (Atlı et al., 2010). Other sectors-such as pasta, cracked wheat, and biscuits-have gained in significance, and this makes the warehouse receipt system even more vital. The systems will solve problems of supplying high-quality raw materials of these products and help develop these sectors.

4.3. Potential Contribution to the Other Stakeholders

Current licensed warehousing law covers agricultural products that occupy important positions in production and export, such as cereals, legumes cotton, nuts, oilseeds, olives, and olive oil. For that reason, proper functioning of the warehouse receipt system will make a major contribution to the national economy.

There is not already a properly functioning warehousing infrastructure that covers many agricultural products in Turkey. Agricultural products are marketed at lower prices during harvest time when supply of products is at its peak. As a consequence, farmers, traders, and exporters face direct economic loss. The warehouse receipt system offers warehousing and stocking warranties in accordance with the quality of products, enabling farmers to market their products even after harvest time. This also provides traders an opportunity to export products at higher prices during off-production season, increasing competitive capacity and contributing to the national economy. Another contribution of the warehouse receipt system is that exported agricultural products would be kept under control through a properly functioning recording system.

Additional advantages of the warehouse receipt system for traders and exporters are quality and safety of the products. Classifying agricultural products in harmony with their quality and pricing these products according to their classifications and standardization will encourage farmers to deliver high-quality products so that traders and exporters could attain high-quality products at the desired time. Meanwhile, the cost of stocking will decrease, to the benefit of traders and exporters. Moreover, the warehouse receipt system is perhaps the answer as it also helps to improve food security through a "buy back" function that allows rural farmers to collect their products during vulnerable periods after they have paid the finance and storage (Chanza, 2012). Although

according to FAO Food Balance Sheets, food security is not an important issue in Turkey, the decrease of wheat production per capita has caused a risk for food security (Keskin and Demirbaş, 2012). The warehouse receipt system may reduce the risk of food security in some strategic products in Turkey, like wheat.

The warehouse receipt system also benefits traders and exporters for financing. Traders and exporters could obtain loans and credit from bank in return for product documents.

Specialized product exchanges are another aspect that secures the proper functioning of the warehouse receipt system. Specialized product exchanges are responsible for conducting trades of future contracts and standardized agricultural product documents issued by licensed warehousing enterprises. Product documents and future contracts could be processed in local, national, and international specialized product exchanges. Further, commodity exchange markets could become partners in specialized product exchanges or operate as agents in accordance with contracts (Official Journal, 2005b). By establishing the specialized product exchanges, it will be possible to increase in the value of agricultural products better in the markets since the real price of the products delivered to licensed warehouses could be determined through laboratory measuring (Tektaş, 2008). Furthermore, the state would not be swamped with support and stocking expenses and price stability could be sustained through proper marketing strategies (Mızrak, 2007).

However, a stock market tradition has not yet been created. Farmers and recipients are aloof to stock markets (Erbay, 2007). Moreover, there is not a specialized product exchange in service or a foundation that has been completed in Turkey. Infrastructure problems in current commodity exchange markets could negatively influence the success of this system (Mızrak, 2007).

An essential infrastructure for commodity exchange markets is an important component of specialized product exchanges, and such a foundation should be completed so that a more robust the warehouse receipt system could be implemented. There are nearly 120 commodity exchange markets in Turkey, and this could cause challenges in pricing and quality differences among regions, along with some different purchase implementations. In addition, many stock markets are not in service (Erbay, 2007). Specialized product exchanges should be founded not on local or regional levels but on a national scale so agricultural markets could be developed and the warehouse receipt systems could gain functionality. Moreover, stock markets in Turkey should be equipped with modern communication tools and mass media, and an essential network should be provided; stock markets in Turkey could be integrated throughout the country and with international stock markets (Karabaş and Gürler, 2010).

5. CONCLUSIONS AND RECOMMENDATIONS

Agricultural products have been marketed directly or processed by taking the consumer preferences into consideration. However, there might be some deficiencies and challenges to the proper functioning of agricultural products markets in Turkey. These include price fluctuations related to the supply-and-demand imbalance in agricultural products, difficulties while trying to supply high-quality and sufficient raw materials in agro-industrial enterprises, and small-scaled agricultural enterprises that make marketing difficult. The warehouse receipt system includes products such as cereals, legumes, cotton, nuts, oil seeds, olives, and olive oil, which are important both in domestic and international markets. Further developments in the warehouse receipt system will influence the advance of the specialized product exchange, and this will contribute greatly to farmers, traders, and exporters, along with the national economy.

On the other hand, the opportunities of the system are; producers (including small farmers) receive a price premium for producing quality products, to aggregate products in secure and accesible sites, to allow small farmers to become commercial through quality and quantity certification, products can be store in planned, products specific and tailored warehouse to reduce post harvested losses due to poor storage, products can be weighed before sold so producers are not cheated on the weight, producers can take advantage of price rises during the low supply season, producers isolation to only farm gate buyers can be removed, producers (including small holders) can access national and regional markets at a lower cost, produce has change of raising short term finance with stored commodity, farmers become a price-setter instead of price-taker (Anonymous, 2014).

Some advantages of the warehouse receipt system are as follows: to analysis, standardization, and stocking of agricultural products in licensed warehouses, encouraging farmers to yield high-quality products, price stability through marketing products during off-production season and marketing them in specialized product exchanges, providing traders and exporters an opportunity to attain high-quality products at desired times in sufficient quantities, decreasing the cost of stocking, offering farmers eligible loans and credit.

In spite of its advantages, the development of the warehouse receipt system in agricultural markets will not be easy because of the structural properties. The agricultural structure in Turkey includes small-scaled enterprises and it is difficult for such enterprises to make use of this system. Small-scaled enterprises sell their products directly to the markets instead of making use of specialized product exchanges. Therefore, the proper functioning of the warehouse receipt system could be sustained through agricultural

cooperatives' efficiently playing a part in this system.

The absence of a specialized commodity exchange in service in Turkey is another difficulty for the development of the system. Moreover, there is an infrastructure problem in current commodity exchange markets. In Turkey, the World Bank initiated a pilot project in 1996 that aims to support the development of the marketing systems for cotton and grains. The project seeks to support the modernization of grain and cotton exchanges and the development of trading and financing institutions and systems for these commodities. This latter area includes the revision of regulations and the initiation of the implementation of a warehouse receipt system (Varangis and Larson, 1996). The establishment of seven specialized commodity exchanges for grain and cotton was planned within the context of the project (Doğan, 2010). However, the establishment of the specialized product exchanges could still not be achieved. A specialized commodity exchange should immediately be founded, and infrastructure problems of the current commodity exchange markets should be handled so proper functioning of a warehouse receipt system could be sustained.

Proper functioning of this system could succeed only through the establishment of licensed warehouses. According to the data of General Directorate of Domestic Trade, establishment licenses for licensed warehousing were issued to eight companies between 2005 (when the Licensed Warehousing Law was enacted) and December 2012. The establishment of such warehouses requires paid-in capital, which is determined in relation to the warehouse's standardization capacity and not less than 557.9 thousand Dollar [2](One Million Turkish Lira), as stated in the regulation requirements.

The cost of founding a licensed warehouse is so high that it is nearly impossible for most companies to single-handedly establish such a warehouse. For that reason, commodity exchange markets, public organizations and institutions, along with non-governmental organizations, should come together to found licensed warehouses. Licensed olives and olive oil warehouses, established by Marmarabirlik and ELİDAŞ are good examples of this.

Warehouse Receipt System is a system which has been applied and has confirmed positive results from developed and developing countries for years. However, the reasons why Turkey did not take advantage from this system lay underneath the failure to found a warehouse receipt system in parallel with the developments in the world economy, the insistence in using traditional storing habits and the failure in forming various assurance mechanisms.

It is of crucial importance that warehouse receipt systems are founded in Turkey as soon as possible. The system urgently requires specialized commodity exchange markets in order to function properly. Even though the law regarding the warehouse receipt of agricultural products was passed, there are no active warehouses functioning at the expected number and capacity. Since investment in the warehouse receipt system has a high cost level, especially the private sector needs to be encouraged to build warehouses. It is important to provide small-scale enterprises to organize for making the system efficient and to support the farmers who deliver their products to these warehouses. All actors within the system, especially farmers, agro-industrialists and exporters, need to be trained and educated in terms of all issues integrated in the system if the system is to function properly. It is considered that the development of the warehouse receipt system depends on the efforts of all the actors within the sector who work together.

[2]Convert to USD dollar using the yearly average exchange rate for the year 2012

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