NECESSARY CONDITIONS FOR AN EFFECTIVE WAREHOUSE RECEIPTS ACTIVITY

CONCEPT PAPER

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INTRODUCTION
One of the most important aspects of market-oriented development activities over the last decade has been the intro-
duction of new agricultural commodities market infrastructure. The development of new enabling legislation and the
transition to transparent and liberal markets were focal points for international donor organizations such as USAID, EBRD, and the World Bank. One of the fundamental efforts was the introduction of Warehouse Receipts (WHR) systems as an alternative solution for commodity producers, processors and traders to access short-term financing for operations, take advantage of price fluctuations, and secure the storage of their produce. The framework for estab-
lishment of a WHR system focuses on structural components, including legislation, registration, licensing and inspec-
tion of public warehouses; and development of financial instruments for collateralized loans, insurance and indemnity
funds. This paper will describe the necessary conditions of the commodity market infrastructure that enable imple-
mentation of successful WHR systems. This paper will also present lessons learned from countries in which com-
modity-based finance systems are used. There are no “off-the-shelf” approaches for implementation of WHR sys-
tems. Each market should be carefully assessed and the implementation design should be targeted to the specific con-
ditions in the country.

BACKGROUND
Commodity markets in economies in transition often share the same problems and challenges. Commodity-based systems for financing provide alternative solutions for producers, processors and traders to acquire secure storage for their goods and improve their access to credit. The historical development of such systems shows that they are effec-
tive in times of market disturbances and transitional reforms. Once the market is stabilized, WHR systems become part of the regular commodity market infrastructure and play a role in facilitation of commodity trade and financing. The use of warehouse receipts in the United States, and the modifications of the systems in Central and South Europe after accession to the European market, exemplify these trends.

Agricultural commodity markets, which require the development of WHR systems as a remedy to various drawbacks, are characterized by the following features:

- Lack of trade rules and a strong domestic and international commodity market infrastructure
- High price of agricultural inputs
- Lack of reliable storage facilities in smaller production units and limited access to reliable storage in collection points and terminals
- Lack of reliable commodity quality standards
- Lack of access to organized commodity markets (exchanges)
- Very limited access to short-term financing
- Lack of access to reliable commodity market information

A well developed system of licensed public warehouses and the use of warehouse receipts for storage and marketing of agricultural commodities provide the following advantages that contribute to the overall development of the industry and mitigate the above-mentioned defaults of commodity markets:

- Uniform and well regulated system for storage of commodities
• Protection for the depositors of the commodity with guarantees for the quality and quantity of the deposition
• Introduces the use of warehouse receipts, official documents for ownership that can be used as collateral for short-term financing
• Creates an opportunity for the owners of the commodity to take advantage of price fluctuations

The concept of the WHR system is based on the use of storage facilities, licensed as public warehouses, which receive the right to store grains of third parties and issue warehouse receipts. The public warehouse bears the responsibility to provide a high level of technical and financial performance. This gives depositors the confidence that their commodities will be stored with guaranteed quality and quantity. Public warehouses should be situated in large production areas, important marketing centers or near import-export terminals.

The warehouse receipts are used as collateral for short-term financing. The producers, processors and traders have the opportunity to use the commodity they own as collateral and to determine the best time to market it. The warehouse receipts make the transfer of ownership easier and quicker, avoiding the need for physical relocation of the commodity.

The financial institutions, which accept warehouse receipts as collateral, are able to reach a higher level of liquidity of the pledge, because commodities always have clear market prices and gain the right to claim the collateral before other creditors. The banks also receive a higher level of protection of the collateral enforced both by the good management practices of the licensed public warehouse and the supervision of the regulatory agency. Simple out-of-court resolutions of disputes should be guaranteed by the system.

STRUCTURAL COMPONENTS
All structural components of the WHR system should be developed in parallel and reflect the specifics of the commodity market in each country. Government institutions and market participants should form a consensus on the necessity of the system and commit to be involved in the process. Without the political will and understanding of the benefits that the system brings to participants, there is a high probability for failure. It is imperative that the WHR system be developed in full structural capacity and cover all aspects of licensing, inspection, supervision and performance guarantees. Implementation of parts and subcomponents of the system lead to very limited success and in most cases the whole effort remains at the level of pilot attempts or “private” collateral management schemes, which are insignificant for the overall improvement of the commodity markets.

A well-functioning WHR system is based on appropriate legislation that enables a regulatory agency to execute control over the key components of the system. The existence of clear and secure licensing procedures contributes to the creation of trust in the system. The legal framework should be designed in such a way that provides clear definitions for the rights and responsibilities of all participants in the system.

LEGISLATION
An appropriate legislative framework is the first step in the creation of a functioning WHR system. While proper legislation is equally important for all the participants in the system, the financial institutions have a special concern. The financial community must have a high degree of confidence in the system before undertaking lending activities. Banks usually feel comfortable when they see strong legislation in place protecting the rights and interests of depositors in public warehouses; a legal basis for the recognition and claim of collateral; and the negotiability of the instrument.
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 WHR legislation. Specialized WHR 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. The primary legislation (laws) needs to be simple and clear and provide the structural framework. The secondary legislation (ordinances and regulations) needs to be detailed and comprehensive and deal with the technical specifics of the system and the commodity.

The integrity of the system is guaranteed by well-functioning mechanisms for control and oversight of the public warehouses. There are several approaches that provide appropriate regulatory framework for the public warehouses. The most common and accepted system for control is the creation of a Government Regulatory Agency, which is responsible for the licensing, regulatory and inspection procedures of the public warehouses and creates one of the principal levels of security of the system. Experience in Bulgaria and Kazakhstan proves that focused efforts in creation of a well structured and efficient government regulatory agency contributes to overall trust in the system among depositors, warehouse operators and financial institutions. These agencies play an important role as sources of reliable information for banks as they execute due diligence on the participating warehouses and obtain market information necessary for negotiation of credit conditions. In countries where there is no proper legal framework, but the financial institutions still see potential in commodity-based financing, alternative approaches can be put in place. There are working models that substitute the regulatory functions of the government agencies with utilization of private surveying companies. This approach has been used by financial institutions in countries where there is insufficient political will for the creation of enabling legislation or where the marketing infrastructure is underdeveloped. EBRD’s experience in Slovakia in the mid 1990s and several pilot efforts in Africa shows that this approach provides a working solution. This approach is more widely known as collateral management agreement (CMA). Experience shows that the more complex approach with the creation of a reliable government regulatory agency is more attractive for the financial institutions. In this way, the system is able to attract a larger number of participants and protect the interests of all parties involved. This approach also creates an environment for country-wide system implementation that goes beyond any “private” arrangements and demonstrates overall transparency and consistency of the commodity market.

The U.S. regulatory legislation on a federal and state level provides a good model that has been successfully used in several countries. Appropriate modifications of the U.S. system, based on the market specifics and infrastructure in each country, are necessary for successful operation of WHR systems. The major functions of the regulatory agency are:

- Organizes and implements the licensing process
- Maintains public registers of the public warehouses
- Executes initial, periodical and special exams of the financial, operational and technical condition of public warehouses as well as quality and quantity of the stored grain
- Collects orders for printing of warehouse receipts

The legal framework that regulates the WHR system should also provide appropriate correspondence with the Commercial Code and other primary legal acts which protect the interests of lenders and borrowers. There should be a
The legal framework should also provide a clear definition of the **public warehouses** with their rights and obligations. The companies that apply for a license as a public warehouse need to be obliged under the country legislation to provide information to the authorities about their financial performance. In most cases these are limited liability companies or joint stock companies. The major licensing requirements for a public warehouse are:

- **Minimum required capital** (for example, US$ 50,000 in Bulgaria)
- **Minimum storage capacity** (for example, 1500 metric tons [MT] in Bulgaria)
- **Provide the necessary performance guarantees or participate in indemnity fund** (for example, US$ 10 per MT of licensed capacity in a form of a bank guarantee and US$ 0.15 per month per MT of actual commodity stored under WHR as a contribution to the indemnity fund)
- The public warehouse should not be a creditor or provide guarantees for loans for third parties
- The public warehouse is required to insure assets against fire, flood and earthquake
- The public warehouse is required to announce in a public place the storage fees
- The public warehouse is required to provide to the regulatory agency information about its business operations in a timely manner

Besides the above-mentioned major requirements, the public warehouse has to meet several technological standards as well as prove its financial stability. The warehouse should have a laboratory for grading of the commodity or have access to one. The producers and the warehouse operators should have access to an independent laboratory for dispute resolution. One of the most logical places for arbitration is within the structures of the national regulatory agency.

All these requirements create conditions under which the licensed public warehouses become reliable participants and provide guarantees for appropriate storage of commodities with respective quality and quantity. This is very important for the depositors and for the financial institutions that will accept the commodity as collateral. The performance of the public warehouse is critical for the smooth operation of the system. Banks that accept warehouse receipts should trust the public warehouses that have issued them and feel comfortable with the technical and financial conditions for storage of the commodity used as collateral. Until the system is implemented on a large scale and all participants have proved their performance, banks can come up with ways to execute parallel control of the public warehouses using their own specialists for informal inspections.

The **warehouse receipt** is the next important component of the system. Warehouse receipts vary in different countries by format and structure but they should be a comparatively simple document based on strong legislation. If they provide a straightforward mechanism for transfer of ownership or initiation of a pledge, they become an accepted and commonly used tool. Warehouse receipts are special security papers issued by a public warehouse that proves that the commodity has been deposited; its ownership; and the obligation of the warehouse to deliver it to the legitimate holder of the receipt. There are several important specifications added to this description:

- **Location of and amount in storage**
- **Year, harvest and quality of the commodity**
• Information about the insurance
• Information about the endorsements of the receipt
• Any other important information related to the contractual agreement between the depositor and the warehouse operator

International experience shows the use of two general types of warehouse receipts, one part and two parts. The concept of two parts receipts, which originates from the Napoleonic Code, is more common in Europe, and has been adopted in other places as well. The idea behind the two parts receipt is to provide an opportunity for trading both on commodity and stock exchanges, as one of the parts is related to the ownership of the commodity and the other to the pledge. In the U.S., the warehouse receipt is a single document. The most current trend in some markets is the introduction of electronic warehouse receipts. The selection of the type of receipt should again be based on the evaluation of the commodity market situation in each specific case. Experience shows that in developing markets, the users of the system should start with more simple transactions and use more advanced applications of warehouse receipts as the system expands and matures.

The WHR should be protected against fraud. The system should also develop a reliable mechanism for keeping track of the warehouse receipts both at the licensed warehouse level and for the overall system. Some recent efforts focus on creation of a central electronic registers of warehouse receipts.

FINANCIAL PERFORMANCE GUARANTEES
The financial performance guarantees used in WHR systems have an important dual effect and are one of the major structural components. They are targeted to satisfy potential losses of the depositors in licensed warehouses in cases of bankruptcy, theft or mishandling of the commodity, and they play a significant role in the overall integrity of the system. They are usually one of the main requirements that banks have for commodity-based lending. There are two major approaches in establishment of a system for financial performance guarantees: either a requirement for insurance bonds or letter of guarantees, issued on behalf of the licensed public warehouses or the creation of indemnity funds. The selection of the method used is based on an analysis of the local market infrastructure, evaluation of the risk, and availability of financial and insurance services and products. In economies in transition, there is much higher risk related to financial performance of warehousing facilities. This leads to lack of appropriate insurance products and a higher cost of bank guarantees. In countries like Kazakhstan this problem was resolved by development of an indemnity fund. In Bulgaria, the system is guaranteed by a combination of bank letters of guarantees and an indemnity fund. In the U.S., the financial performance guarantees are chosen depending on the federal or state license. On a federal level, insurance bonds are widely used for performance guarantees and on a state level there are fourteen indemnity funds.

The establishment of these mechanisms is an absolutely necessary condition, because without the trust of the financial institutions in the system, all other efforts become pointless. In all countries with well functioning systems, this aspect has been addressed. In Ukraine, the system began to operate without performance guarantees. Although the first two years of operation generated a substantial amount of financial resources targeted to the grain sector through warehouse receipts, the integrity of the system was challenged by several cases of default not covered by performance guarantees. Now the country is making a serious effort to create an indemnity fund.
FINANCIAL INSTITUTIONS
The establishment of functioning WHR systems is a substantial contribution to resolving the problem of access to agricultural credit because of lack of collateral. As all the components of these systems fit together and start to operate, an increasing level of confidence among the financial institutions towards this type of lending begins to emerge. Banks gradually start to increase the percentage of the commodity value they accept as collateral (starting levels at 55-65 percent and reaching 75-85 percent; even higher in the U.S., where markets are well defined), decrease interest rates for qualified borrowers (for example 15-16 percent initially and down to 7-8 percent as the system matured in Bulgaria), and begin to compete for new clients. For the agricultural producers, obtaining this type of credit becomes a convenient, faster process, with reduced paperwork. When Bulgaria put its WHR system in operation eight years ago, only two commercial banks provided credit against receipts in the first year. There are now more than ten banks competing on the market. Once banks develop expertise in WHR lending and implement good internal procedures, the mechanism becomes quite simple with comparatively low administrative costs. After the banks gain experience in making short-term loans to producers against receipts, they tend towards more complex commodity trade financing for large warehouse operators and domestic and international traders. The advantage for the exporters is that they can get access to substantial revolving capital without any other assets used as collateral.

Banks that understand commodity-based financing and are open to using warehouse receipts are another important condition for the success of the system. Such banks develop in-house commodity expertise which allows them to follow the market trends and properly value the loans.

GENERAL COMMODITY MARKET CONDITIONS
In addition to the above-mentioned structural components, any successful effort to establish a WHR system should pay serious attention to the overall commodity situation in order to determine the applicability of the system. This type of analysis should cover several market components and evaluate their role for successful implementation. The commodity assessment is crucial because international experience shows many different commodities appropriate for warehouse receipts like grains, cotton, cocoa, coffee, rubber, crude palm oil, and even olives in brine in Turkey. Each of these commodities has special features related to storage, price volatility, marketing chains and standards and grades. The production structure of these commodities varies substantially from country to country. The marketing channels through which commodities go to domestic, regional and global markets also differ. The features of a successful WHR application as described above only provide the general framework, and each country-specific case should be evaluated based on collection of sufficient baseline data and analysis of all factors.

COMMODITY FEATURES
There needs to be a critical mass of primary commodity production for WHR to be used, and to carry the administrative overhead related to the use of the system. The users of the system should be aware of the related costs and be prepared to pay them. The WHR system take the market links to a more transparent and secure level, which requires additional costs. Ultimately, a cost benefit analysis must prove the viability of the effort. In general, markets that are net exporters of a specific commodity are suitable for WHR. The commodity should be suitable for storage and prices should maintain enough volatility to justify delayed marketing.

Government interventions are another important concern when evaluating commodity specifics. Government intervention does not necessary limit or stifle the development of a WHR system, but it is important to assess the degree of intervention and the extent to which “free trade” is limited. In situations where government sets only a floor price for a commodity which is of strategic importance and does not interfere on the market in a more radical way, warehouse receipts can be used. A much bigger negative impact on the WHR system is observed when governments in-
Introduction:
Export/import restrictions driven by political agendas. In the best case scenario, liberal commodity markets support the benefits of the warehouse receipts to the greatest extent.

**COMMODITY EXCHANGES**

In many countries, the development of WHR systems is closely linked with initiatives to create new or improve the operations of existing commodity exchanges. While viable commodity exchanges are an important component of the overall marketing infrastructure and may have a positive impact on the development of the system, they are not a necessary precondition for a successful WHR system. There are successful WHR activities not necessarily linked to strong commodity exchanges (Bulgaria, Slovak Republic, Kazakhstan). Even in Hungary, with the most developed commodity exchange in central Europe, the volume of WHR traded at the exchange is nominal. On the contrary, viable warehouse receipts may enhance the development of functional futures commodity exchanges, both on a domestic and regional level, by being used as a guarantee for delivery.  

**GRADES AND STANDARDS**

The question of grades and standards is of serious importance for the successful implementation of a WHR system. In the best case scenario, the local grades and standards should reflect the international markets and be a solid base for negotiation of terms and conditions between the depositor and the warehouse operator. They are also necessary for the bank’s evaluation of the collateral and determine the value of the commodity which is pledged. Introduction of a reliable grading system is necessary so all disputes related to quality have a reference base. The question of standards should also be reviewed in relation to the export markets of the commodity. In some cases, the introduction of “trading standards” makes more sense because various export markets have different requirements. For example, milling quality wheat for the Middle East markets differs on specifications from other regions. In any case, the WHR system should be backed by clear grades and standards that correspond to market demands and are accepted by all players.

**MARKET INFORMATION**

Access to a system of reliable market information is of utmost importance for proper operation of a WHR system. The benefits of using warehouse receipts can be achieved to their highest extent only if the participants in the system are well informed about the domestic and international markets situation and price trends. WHR are not a magic solution to inherited problems in the commodity system. They can improve the situation only when users are able to plan their business well and make decisions according to the expectations of the market.

Market information is also important for banks when they determine the value of the collateral. In cases in which there is no reliable spot or futures market for price discovery, financial institutions should find alternative ways to acquire such information. One of the ways to resolve this is by establishing a price discovery network that includes major domestic buyers. Buyers can quote daily purchasing prices to banks, and banks can use these prices to determine the commodity value for collateral.

An integrated marketing information system can disburse information for:

- Domestic prices by region or province
- Export prices for the markets from the region

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1 One of the most detailed proofs for this concept could be found in the “Black Sea Regional Commodity Exchange Study” commissioned by USAID in 2002-2003 under the “Bright Ideas Competition.”
• Global markets
• Information about domestic and export transport infrastructure and prices
• Information about licensed warehouses and available storage capacity
• Quarterly commodity situation analysis
• Information about export/import tariffs and duties
• Information about yields and remaining stock by regions and for the overall domestic market
• Regional and global commodity balance and forecast

**SUMMARY**

All of the above-mentioned structural components can be summarized and measured against quantitative and qualitative parameters in a best case scenario as follows:

**I. The Commodity**

*Necessary:*

• Suitable for storage, without changing its physical condition for long periods of time
• Enough price volatility to justify delayed marketing: price increases over time should be a minimum of 20 percent for a 3-6 month period
• Critical production volumes that justify administrative costs: over 1,000,000 MT
• Grades and standards in place
• Minimum storage capacity in excellent condition: not less than 30 percent of the total production for the country

*Desirable:*

• Commodity is typically exported
• Government intervention limited to floor price for commodities of strategic importance
• Storage and handling costs and interest for the duration of the loan should not be more than 50 percent of the price increase for the same period
• Minimum storage quantities: must be commercially significant and appropriate for the storage technology and specifics of the commodity
• Developed domestic transportation system and easy access to export terminals

**II. The Borrower**

*Necessary:*

• Commercially viable production and processing units: over 100 MT of output
• Application of the appropriate agricultural practices
• Located close to warehousing facilities
• Available critical volume of produce so it can be divided for immediate sale and delayed under warehouse receipts

Desirable:
• Ability to analyze marketing information
• Ability to plan production and marketing activities at least one year ahead
• Ability to purchase the agricultural inputs on the cash market, not pre-selling future crop

III. The Lender

Necessary:
• Financial institutions with good liquidity
• Understanding of warehouse receipts
• Interested in agricultural lending
• Knowledge of the commodity
• Developed WHR internal manual
• Established WHR procedures
• Financial performance risk management skills and tools (insurance bonds, letter of guarantee, indemnity funds)

Desirable:
• Ability to analyze marketing information
• Specialized WHR department and credit officers
• At least 30 percent of the portfolio in agricultural loans
• Availability of credit lines from international financial institutions familiar with WHR and able to transfer skills (if liquidity is an issue)

IV. The Loan Product

Necessary:
• At least 3 months of duration
• Loan sizes larger than micro loans available
• Availability of regional branches close to the producers
• Loan amount at least 55 percent of the value of the commodity pledged

Desirable:
• Competitive interest rates below the average for the industry because of the higher liquidity of the collateral
• No penalties for early repayment of the loan
• Dedicated credit line for lending against WHR

V. The Warehousing Industry

Necessary:
• Meet appropriate licensing criteria
• Provide sufficient financial performance guarantees
• Apply good management practices

Desirable:
• Have grading laboratory on the site
• Even geographic distribution in all important production areas
• Close to collection centers or export terminals

VI. The Enabling Environment

Necessary:
• Proper legislation
• Structured licensing and inspection service
• Political support
• Consensus within the industry
• Access to reliable marketing information

Desirable:
• Functioning commodity exchanges
• Well established industry associations
• Electronic register for warehouse receipts
• Harmonization of the domestic grades and standards with the international grades and standards