

Framework for Warehouse Receipt Financing in Pakistan



*State Bank of Pakistan welcomes your comments and suggestions on this draft.
Please email comments to kamran.akram@sbp.org.pk latest by May 16, 2014*

State Bank of Pakistan

Agricultural Credit & Microfinance Department

www.sbp.org.pk



The Team

Name	Designation	Contact
Syed Samar Hasnain	Director	+92-21 - Samar.Husnain@sbp.org.pk
Kamran Akram Bakhshi	Senior Joint Director	+92-21 - 99217241 – Kamran.Akram@sbp.org.pk
Ikramullah Qadri	Joint Director	+92-21 - 99221182 – Ikram.Qadri@sbp.org.pk
Hasan Murtaza	Deputy Director	(92) –0311 2743570 Hasan.Murtaza@sbp.org.pk
Mustafa Kamal Mufti	Assistant Director	(92) 0311 2745920 – Mustafa.Mufti@sbp.org.pk

Contents

1. Preamble.....	4
2. Review of Systems & Practices	4
2.1. International Best Practices.....	5
2.1.1. Brazil	5
2.1.2. South Africa	5
2.1.3. United States	6
2.1.4. Bulgaria	7
2.2. Value Chain Actors.....	7
2.3. Legal Framework	8
3. Framework for Warehouse Receipt System in Pakistan.....	9
3.1. Contractual framework	10
3.2. Warehouse Receipts: Facilitating Financing and Commodity Markets.....	10
3.2.1. Types of Warehousing Arrangements	10
3.2.2. Pre-requisites for WHR Financing.....	11
3.3. The Roles of Diverse Actors	12
4. Offering of Warehousing Standards & Services by ACE Global Depository	13
4.1. Professional Indemnity and Fraud Insurance.....	13
4.2. Role of AGD Pakistan	13
5. Warehouse Receipt Financing	14
5.1. Basic Transaction Cycle	14
5.2. Potential Market.....	15
5.3. Cropping Calendar	15
5.4. Purpose	15
5.5. Eligibility Criteria.....	15
5.6. Mark-up on Warehouse Receipts Financing	16
5.7. Securities & Collaterals	16
5.8. Risk Management	17
6. Shariah Compliant Financing.....	20
7. Accreditation of warehouses.....	20
8. Advantages:	21
9. Adoption by Banks and other Actors	22



Commodity Physical Trade, Marketing and Warehouse Receipt Financing System in Pakistan

1. Preamble

Commodities, traditionally the Cinderella of the derivative markets, have started attracting tremendous interest during the last years. Among commodities, energy basket has been the first segment to catch the investor attention but metals have not lagged behind. Meanwhile, the rising star in the commodities sector is agriculture. Due to its strategic importance with respect to food and energy stability – agricultural development has been earmarked in many countries as a sector necessitating immediate boost. Investors are following this trend – and we see massive investments in agricultural infrastructure, production, trade and processing.

Pakistan, having a 1/4th share of agriculture sector in the GDP, is not an exception to the global trends. The country produces 45 million tons of wheat, rice, maize and other and around 14 million tons of fruits and vegetables annually. Despite enormous potential, the investors largely shy away from the sector due to its inherent risks including storage capacity which is primarily being provided by the federal and provincial food department to the extent of only around 5 million tons.

As per reliable estimates, the post harvest losses due to lack of proper storage capacity are in the range of 15-18% in case of grains and around 25-40% in fruits and vegetables. The post harvest losses due to lack of storage and cool chain facilities in the country if translated into monetary loss will come out to be in billions of rupees. In terms of consumption, more than 10 million persons can be fed by avoiding these losses.

Grain losses in storage

Province	Aggregate Loss	Threshing	Farm level	Market level	Public Sector	Terminal	Consumer level
Punjab	13.8%	1.9%	1.5%	7.3%	5.5%	---	6.5%
Sind	15.7%	1.7%	1.3%	6.9%	6.2%	1.9%	8.6%
NWFP	14.7%	1.5%	2.7%	3.4%	3.6%	---	8.5%
Balochistan	15.6%	1.5%	1.7%	4.6%	5.2%	---	7.1%
Pakistan	15.3%	1.6%	1.5%	7.8%	6.5%	1.9%	8.0%

(Source : Iqrar A. Khan. 2007. Vice-Chancellor, University of Agriculture, Faisalabad, published on www.dawn.com)

2. Review of Systems & Practices

Pakistan's agriculture commodity sector suffers from a compound problem of a lack of both infrastructure and market structure. The resulting inefficiencies impact all market participants and keep the sector from becoming competitive. On the infrastructure side, there is a lack of warehousing and storage facilities. In the market, there is a lack of standardization,



independent verification, collateral management, commodity financing, and transaction data. The result is an opaque and illiquid market where there is a lack of financing, trading opportunity and significant wastage. At the base of the value chain, farmers are most harmed by wastage, price fluctuations, and an inability to access finance.

In order to address the issue, SBP conducted a study funded by the USAID in collaboration with international consultants and Competitive Support Fund (CSF). The objective of the study was to review **the existing system of commodity warehousing in Pakistan, the international best practices, legal framework in warehousing and feasibility for development of storage, marketing & post harvest financing system.**

The study report prescribed policy and regulatory environment supporting the development of Warehouse Receipt system in Pakistan. The abstract of key findings of the report are as under.

2.1. International Best Practices

2.1.1. Brazil

The Brazilian warehousing structure is mainly controlled by private parties. Large farmers, cooperatives, trading companies (local and international) as well as millers and processors hold very large warehouse capacities. The law obliges each Warehouse manager to issue a receipt to the holder of the grain. This receipt makes the Warehouse manager fully responsible for the product quantity and quality.

Warehouse receipts are not directly tradable or negotiable. However, Sellers may issue CDA/WA (Cédula de Depósito Agrícola / Warrant Agrícola) that can be traded on the Brazilian commodity exchange. The issuance is done through the contracting of a supervision company / WH Manager that holds the physical guarantee against the document.

Financing is also possible on CDA/WA. These documents are directly traded in the local commodity exchange board from seller to buyer without any intervention from the Brazilian Government. Both the issuance and trading is the responsibility of the Board that holds control on the emitting body. This possibility has been a strong developer of the Brazilian agriculture and the main string to harness private investment and private financing.

2.1.2. South Africa¹

South Africa's grain production (around 12 million tonnes) is dominated by about 30,000 large-scale commercial farmers, who until the early 1990s received state support within the framework of a State-controlled marketing system, but at the same time encouraged the private sector to develop alternative institutional structure to support the trade.

1

Review of Warehouse Receipt System and Inventory Credit Initiatives in Eastern & Southern Africa, UNCTAD, 2009

The institutional efforts started with the upgrading of the information service (SAGIS), the issue silo certificates (SCs) and the establishment of future and options contracts for white and yellow maize, wheat, soybean and sunflower on the South African Futures Exchange (SAFEX) – which later became part of Johannesburg Stock Exchange. Cooperative storage complexes started issuing farmers with negotiable SCs, indicating location quantity, grade, to producers who deposited grain with them. The farmers could trade these or use them to raise bank financing.

South Africa has no Warehouse Receipt Act (the Act of 1930 was rescinded during the Apartheid era), so SCs are handled under contractual law. SAFEX provided some regulatory oversight for a large part of this system, approving about 160 silo sites as locations where farmers or others could deliver SCs against expiring contracts.

Starting in 2004, the two leading silo operators, accounting for 60% of grain handled in South Africa, commissioned a software company to develop a system of electronic silo certificates (ESCs). The system first gained the support of banks which saw that it would greatly reduce costs of using paper documentation (the cost is minimal), increase security, speed up handling, and create a clear audit trail of transactions.

2.1.3. United States²

While warehouse receipts have been used since ancient times, it is the opening up the American Mid-West that most stimulated the widespread use of this instrument in the modern world. The Chicago Board of Trade (CBOT) emerged as a commodity trading floor, and grading systems soon had to be established to reward better grain quality. From the late 1860s, the State of Illinois was legislating to regulate elevators, notably over grades, the publication of statistics and to prevent them issuing receipts for stock they did not hold.

In the late 19th century cooperatives started investing in their own elevators, strengthening farmers' negotiating power vis-à-vis large-scale corporate operators. The whole system, covering agricultural warehousing, grades and standards and commodity exchanges, was brought under a Federal regulatory regime during the second decade of the 20th Century. The combination of the US Warehousing Act of 1916 and related State Acts have created a regulatory regime which is to all intents and purposes mandatory, as elevators find they must get licensed by the Federal authorities or by State governments. Of at least equal significance were the steps taken by American monetary authorities, which eventually became the Federal Reserve Bank (created in 1913). These established a special discount window for 'eligible bankers' acceptances' backed by warehouse receipts, making them a very liquid instrument.

Some States have set up Indemnity Funds to which licensed warehouse operators must contribute, and this takes the place of the bond. Grain handling staff at the warehouses (weighers, samplers and graders) must also be licensed to carry on their activities, and commodities are graded to US standards. The oversight system is funded by user fees assessed on the basis of the certified storage capacity of each warehouse and payments from the

Commodity Credit Corporation (CCC). CCC is in effect a grain parastatal that the Federal Government uses for its complex system of price support to farmers. By making use of licensed elevators it avoids the need to invest Federal money in such structures.

2.1.4. Bulgaria³

The warehouse receipt system in Bulgaria is one of a few successful examples that include all the core elements. The first development efforts started in 1997, when the country was just emerging from a very severe financial crisis, with ten private banks bankrupt, hundreds of thousands of depositors losing their savings, and conditions of hyperinflation. Under these circumstances the banks became extremely conservative, and one of the major constraints for grain producers and processors was access to short-term financing for operational capital. The sector was heavily influenced by the grey economy and corruption was widespread.

The concept of developing a warehouse receipt system in Bulgaria was formalized on 29 July 1998, when Parliament passed a new law for the marketing and storage of grain. The grain law regulates two types of business entities involved in the storage of grain: public warehouses and grain storage facilities. Licensed grain storage facilities do not participate in the indemnity fund and are not allowed to issue warehouse receipts. They can only provide storage services for third parties and the performance risk is accepted by the depositor. According to the Bulgarian legislation, a public warehouse licensed for the storage of grain is a sole proprietor (trader) whose main business activity is the storage of deposited grain and issuing of warehouse receipts. These companies should be joint stock or limited liability companies registered under the commercial law. Even Public warehouses are required to comply with set standards as prescribed by the law, to be able to issue WHR. The public grain warehouses are also required to participate in the indemnity fund which ensures performance security to the depositors. Ownership of the grain is transferred only with full endorsement of both parts. These features of warehouse receipts create the third level of security for the system.

The National Grain Service (NGS) is a specialized agency under the Ministry of Agriculture. The major functions of the service are to (i) make recommendations on the licensing of public grain warehouses, and organize, implement and control the licensing process; (ii) keep registers of public grain warehouses; (iii) carry out initial, periodic and special checks of the financial, operational and technical condition of the quality and quantity of the stored grain; and (iv) collect orders for the printing of warehouse receipts. The NGS's operations create the fourth level of security for the system.

2.2. Value Chain Actors

The value chain goes from the purchase of fertilizers to the final sale of raw commodities to the final receiver, who is either a processor or a trading partner. Each of these actors will have a role in the shaping of the new system. These value chain actors are listed below and their inter-

linkages and roles and responsibilities for proper functioning of the system are identified in later sections of this report.

- Farmers
- Input suppliers
- Buyers at farm level (middle men)
- Traders at national level
- Millers and other processors
- Traders at international level (exporters / importers)
- Banks and financing institutions
- Collateral managers (Mukadam)
- Storage companies

2.3. Legal Framework

A review of best practices show that both that the Warehousing Receipt System has been implemented with both the options i.e (a) A WHR system that is stipulated by a dedicated set of laws and supported by WHR Act and (b) covered under existing laws without creation of a separate Act.

Since the implementation of WHR system is a new concept, no Act/law is currently present that completely covers all areas of the WHR financing system. The laws of Pakistan that relate indirectly to the functioning of such a system are found in the statutory legislation that regulates general commercial transactions. These general commercial statutes include:

- Contract Act, 1872;
- Specific Relief Act, 1877;
- Negotiable Instruments Act, 1881;
- Stamp Act, 1899;
- Registration Act, 1908;
- Insolvency Act, 1920;
- Sale of Goods Act, 1930;
- State Bank of Pakistan Act, 1956;
- Securities and Exchange Ordinance, 1969;
- Companies Ordinance, 1984;
- Securities and Exchange Commission Act, 1997;
- Financial Institutions (Recovery of Finances) Ordinance, 2001; and
- Electronic Transactions Ordinance, 2002.

There are certain statutes that relate to warehouses and godowns, such as:

- Agricultural Produce Market Act, 1939;

- Punjab Agricultural Produce Markets Ordinance, 1978; and
- Sindh Registration of Godowns Act, 1995.

However, these statutes do not address the issues this report is concerned with. There is also price control and anti-hoarding legislation such as:

- Price Control and Prevention of Profiteering and Hoarding Act, 1977.

Until a new law is enacted, the existing set of laws can cover various facets of the proposed WHR system including WHR issuance, delivery, title, negotiability and transferability, risk management, cancellation and reissuance etc.

3. Framework for Warehouse Receipt System in Pakistan

In light of benchmarking and research into conditions in Pakistan, it is concluded that the development Commodity Physical Trade, Marketing and Warehouse Receipt Financing System is feasible and would be beneficial in Pakistan.

The actions taken so far include:

- SBP has completed a study in collaboration with CSF, on storage, collateral management, warehouse receipts issuance, financing & trading
- SBP introduced concessional refinance scheme to encourage construction of Silos, Warehouses, and Cold storages etc.
- A working group has been formed for the development and implementation of the said system
- SBP has conducted a survey on banks' awareness and interest in WHR financing system, a roundtable has also been conducted in this regard
- ACE Global has been brought on board by incorporation of its ACE-Pakistan office

Based on the above actions, it is evident that there is no social or market structure that would prevent its development. All actors seemed interested. The **objectives** to be achieved through the implementation of WHR system in Pakistan include:

- Establishment of WHR system
- Regulatory authority and framework for the supervision of warehouses, cold storages and silos
- Regulatory framework for the acceptance of WHR by banks, as a collateral
- Accreditation of warehouses with collateral management company
- Adoption of system by farmers, traders, aggregators, arthis, banks etc



- Development of a centralized database of borrowers/farmer to act as information bureau.
- Real-time inventory monitoring and management
- Preparation of draft act
- Development of secondary market for these receipts by PMEX

3.1. Contractual framework

There is a concern regarding the process of enacting a new law, and following that, establishing a new authority. Therefore, it has been proposed that the EWR system be established by creating a contractual framework in which an attempt is made to capture as many of the elements of a statutory system as possible by obtaining the consent of all the players in the system to those elements. The contractual framework will not enable parties to pass good title where they could not do so under the existing legal framework; however, it is possible for parties to agree that endorsement of Warehouse Receipts or some other agreed method of transfer will effect a valid transfer (provided that the transferor has good title).

3.2. Warehouse Receipts: Facilitating Financing and Commodity Markets

The warehouse receipts system, also known as inventory credits, can facilitate financing for inventory or products held in storage. These receipts, sometimes known as warrants, when backed by legal provisions that guarantee quality, provide a secure system whereby stored agricultural commodities can serve as collateral, be sold, traded or used for delivery against financial instruments including futures contracts. These receipts are documents that state the ownership of a specific quantity of products with specific characteristics and stored in a specific warehouse.

3.2.1. Types of Warehousing Arrangements

Warehouse receipt finance can be provided under different warehousing arrangements:

- In a **private warehouse**, manufacturing and warehousing take place under the same roof, and both activities are controlled by the same company. The warehouse is just a part of the overall company operations, which may be manufacturing, wholesaling or retailing. It is very risky to use commodities in private warehouses as collateral for loans: other than spot checks by the bank, there is little to ensure that the goods are really present.
- A **field warehouse** is an arrangement where a collateral management or credit support company takes over the warehouse of a depositor (producer/ customer) or a public warehouse by leasing it (or part of it) for a nominal fee, and becomes responsible for the control of the commodities to be used as collateral.

- A **public warehouse** is normally a large storage area that serves many businesses, for example in a port or major transit centre. It is owned (or rented for a long period) and operated by a warehouse operator, which stores commodities for third parties for a fee and acts as the commodities' custodian.

Public warehouse operators often issue warehouse receipts that are acceptable as collateral by banks. However, the quality of the receipt as collateral depends on many factors, particularly the legal and regulatory regime in the country, and the financial status and integrity of the warehouse operator.

3.2.2. Pre-requisites for WHR Financing

While a warehouse receipts system can both reduce uncertainty and increase efficiency in agricultural markets, there are some essential critical pre-conditions for its success.

There are some preconditions for an efficient warehouse receipt system.

A viable storage industry: Returns on storing commodities should be market-determined, so that farmers and traders store in expectation of higher prices or rush goods to market when spot markets are especially tight (and prices are high). In practice, two major problems constrain the development of viable storage. Government intervention can reduce incentives for private storage and crowd out private participation. This can happen when, for example, governments offer a fixed price during the crop year or set narrow price bands. Second, the high cost of financing often makes it unattractive for farmers, traders, and speculators to store.

An appropriate legal environment: Warehouse receipts must be functionally equivalent to stored commodities. They must specify the quality and quantity of the goods stored. The rights, liabilities, and duties of each party to a warehouse receipt (producer, bank, warehouse, and so on) must be clearly defined. Receipts must be freely transferable by delivery and endorsement. Holders of receipts must have the right to receive stored goods or their fungible equivalent if the warehouse defaults or its business is liquidated. And the lender should be able to determine, before granting the loan, if there is a competing claim.

Performance guarantees: For warehouse receipts to be accepted by traders and banks there must be a performance guarantee for warehouses. This guarantees that the goods stored exist in quantities specified by the receipt and the quality is the same or better than that on the receipt. Without such guarantees farmers and traders will be reluctant to store crops and banks will be unwilling to accept receipts as collateral for financing agricultural inventories.

Performance guarantees are usually in the form of insurance bonds or letters of credit. These are sometimes supplemented with an indemnity fund, created through contributions from private warehouses, collected as part of the fee charged to customers. Such funds reduce the cost of insurance bonds or letters of credit and make guarantees accessible to smaller warehouses. This broadens the market for warehouse services and increases competition in storage.



Inspection and licensing: Governments should develop a system of warehouse licensing and inspection of warehouse facilities so that they met basic standards, both financial and physical. Through an appropriate agency, governments should also license inspectors. In most cases inspection of warehouses and stored commodities are performed by the private sector under license (usually from the ministry of agriculture). Local or international companies can perform quality determination, grading, and independent verification of stored commodities.

3.3. The Roles of Diverse Actors

A successful warehouse receipts scheme relies on clear division of responsibility and clear co-ordination between the public and private sector.

Role of public authorities: public authorities need to shift their role from intervening in prices through altering supply and demand towards creating the necessary institutional framework. The key steps required of the government in this respect are:

- a. to pass and implement legislation on warehouse receipt law and the standard conditions for licensed warehouses
- b. to set up a licensing and inspection system for the licensed warehouses
- c. to set up a performance guarantee system
- d. to work with the private sector to establish viable quality standards

Such a shift in roles – from guaranteeing stable price levels to guaranteeing efficient markets – is a politically difficult move since food prices are obviously an important and sensitive issue and some farmers are used to having risks covered by the government in the form of market intervention.

Role of farmers and processors: consultation with farmers and processors is essential to ensure that the planned system suits their needs and constraints, and to ensure that they understand and support the new legislation. Ongoing feedback once the scheme has started is also important to help fine-tune its operation. As a result, the scheme should be planned through a bottom-up consultative process, not devised as a top-down bureaucratic proposal.

Role of local banks: when the scheme has been set up, the role of the local banks is critical to ensure that it is operable. This requires training bank staff and establishing clear internal procedures, including a system for weekly monitoring of prices of commodities being used as collateral. Warehouses that already have an established relationship with financial institutions are most likely to be seen as credible participants of the scheme at the outset, with acceptability widening to more warehouses once the scheme is shown to operate reliably.

Role of international institutions: these can greatly accelerate the establishment of warehouse receipts systems by supporting the institutional development to assist in providing technical assistance in establishing quality standards, training to warehouse operators and inspectors, advising on draft legislation, help set up performance guarantee schemes and draw on best practices in other countries.

4. Offering of Warehousing Standards & Services by ACE Global Depository

To address these multiple and interlinked challenges, ACE Global Depository (AGD) Pakistan has offered its products and services to facilitate accreditation and standardization of public and private warehouses and issue Electronic Warehouse Receipts to the depositors of commodities.

AGD Pakistan is a member company of the ACE Global Group of Companies and provides the ACE Global Services to clientele based in Pakistan. ACE Global Group of Companies operates as a leading collateral control institution providing sophisticated collateral control services while using adequate credit support tools relevant in respect of field warehousing, collateral management, secured distribution, certified inventory control, certified accounts receivables, credit facilitation services and related asset protection, and training and advisory services, all to an international clientele.

ACE Global Depository now has more than 4,800 employees worldwide with the requisite technical, operational and legal expertise available in house for the benefit of their clients.

4.1. Professional Indemnity and Fraud Insurance

ACE Global Depository's Professional Liability Insurance (PI) indemnifies the insured against legal liability, costs or expenses arising out of ACE Global Depository's operations worldwide including all ACE Global Depository's affiliates, subsidiaries and associates offices and agents worldwide. PI and fraud insurance provides a cover and indemnity to ACE Global Depository and all its affiliates, subsidiaries and associates offices and agents worldwide up to USD 100 million on a per event per occurrence basis.

So far there has been no instance of any claim under this insurance cover which has been in place for several years now.

4.2. Role of AGD Pakistan

AGD Pakistan, being the first warehouse receipts depository in Pakistan would be responsible to undertake the following:

- Development of warehousing standards for adoption by warehouses and potential Collateral Managers
- Inspection and accreditation of warehouses
- Crop handling (acceptance, handling, testing storage and dispatch of agri-produce)
- Determining weight, quantity and quality of agri-produce being accepted for storage and dispatch
- Issuing Warehouse Receipt
- Monitoring the agri-produce stored
- Release of produce against Bank issued Release Orders
- Provision of periodic information to bank via MIS



5. Warehouse Receipt Financing

Warehouse receipt financing is a collateralized commodity transaction where the goods themselves provide security for the loan. This type of financing allows lenders to immediately sell off a very liquid asset, namely the commodities they grow, if a farmer defaults on the loan. The underlying collateral is usually a soft commodity like wheat, rice, maize, cotton and other grains. Warehouse receipts and other collateralized lending are means of accessing post-harvest finance for working capital needs. As a result, the financing cycle begins after harvesting the commodities (or goods).

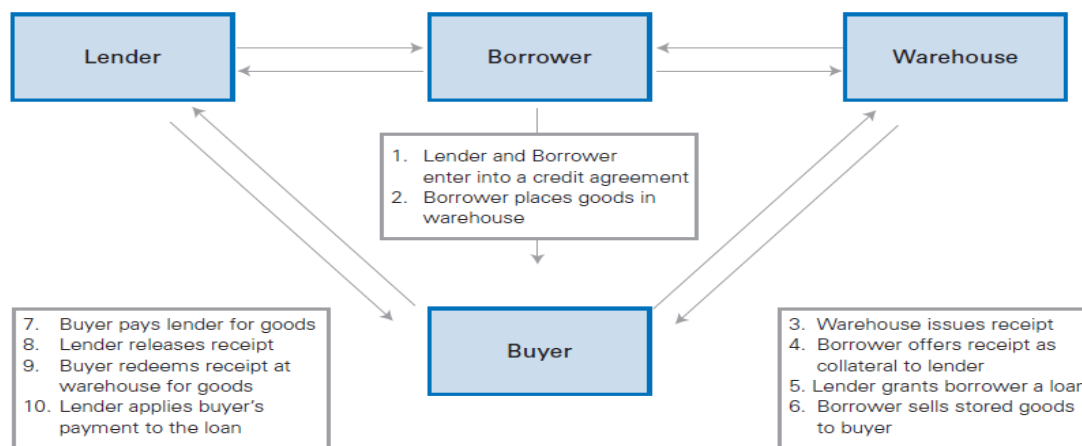
The commodities are stored in a licensed warehouse that issues a receipt proving that the commodities are physically in the warehouse. This receipt forms the basis of the financing.

5.1. Basic Transaction Cycle

The cycle of interactions involved in a typical warehouse receipt scheme involving a two-part receipt contains the following steps:

- After harvest the farmer deposits his crop in a licensed warehouse and receives a Certificate of Title (CT) and a Certificate of Pledge (CP). The warehouse will only release the crop to the owner of both documents.
- The farmer applies to the bank for a loan and in exchange for the money issued he gives the bank the CP as security (and the CT for safekeeping so that the bank knows who is the owner of the crop)
- Before the loan matures (typically up to nine months or depending on the crop), the farmer sells his crop to a processor or (or trader) by selling the CT (on consultation with the bank)
- When the loan matures, or when he needs the crop, the processor repays the loan to the bank and in exchange receives the CP.
- The processor, now owning both the CT (from the farmer) and the CP (from the bank) can collect the crop from the warehouse.

Warehouse Receipt Financing - Flow Chart



5.2. Potential Market

The potential market for warehousing estimated on average market prices during 2012-13 is as follows:-

(In million)

Major Crops	No of Farm Households	Area Under Cultivation (Hec)	Production (Ton)	Est. Value (Rs.)	Available for Storage /Financing
Wheat	6.9	8.7	24.3	753,300	16.0
Paddy	2.2	2.3	5.5	220,000	4.4
Maize	1.2	1.1	5.0	70,000	4.0
Sugarcane	0.9	1.1	63.8	27,000	-
Potato	0.1	3.5	3.5	87,500	3.0
Sub-total	11.3	16.7	102.1	1,157,800	
Cotton	2.2	2.9	13.0	84,500	13.0
Total	13.5	33.1	-	1,242,300	-

* Cotton production is in thousand bales of 375 lbs. each

5.3. Cropping Calendar

Normal sowing and harvest timings of major crops are as under:

Crop	Normal Times of Sowing				Normal Time of Harvesting			
	Punjab	Sindh	KPK	Balochistan	Punjab	Sindh	KPK	Balochistan
Wheat	Oct/Nov	Sept/Nov	Oct/Nov	Sept/Nov	May/June	Apr/June	May/June	Apr/June
Cotton	May/June	Apr/June	Apr/May		Oct/Dec	Sept/Dec	Oct/Dec	
Rice	June/July	June/July	June	June/July	Oct/Nov	Sept/Nov	Oct	Oct
Sugarcane	Feb/Mar	Feb/Mar & Sept/Oct	March & Sept/Oct	Feb/Mar	Nov/Mar	Oct/Apr	Nov/Mar	Nov
Tobacco	Jan/Mar	Sep	Nov/Dec & Mar	May	June	Oct/Nov	May/June Sept/Oct	Oct & Dec
Potato	Oct, Jan, April & May (Autumn Summer & Spring Crop)				Jan, May/June & Aug/Sept			
Onion	Feb-March & Sep-Oct				July/August & Feb/March			

5.4. Purpose

The purpose of financing against warehouse receipts is to:

- protect the farmers from the compulsion to sell their produce immediately after harvest of produce despite an adverse market.
- finance farmers and traders against warehouse receipt.

5.5. Eligibility Criteria

Individual farmers, traders, commission agents, partnership firms, proprietorship concerns, corporate who have stored their agricultural commodities in the accredited warehouses and pledge the warehouse receipts.



All grains, vegetables, fruits and other goods stored in the accredited warehouses can be financed by banks. However, the initial focus is of major grains and crops that are produced in Pakistan which include wheat, rice, maize and cotton, for storage and issuance of warehouse receipt.

All banks, insurance companies and warehouse owners are encouraged to participate in their individual capacities. Insurance companies are encouraged to develop products to help beneficiaries including farmers, aggregators, traders & arthis in hedging price, commodity and other associated risks, and structure indemnity products for warehouses and collateral manage to add a layer of safety for the participants. Similarly, warehouse owners may build/upgrade their facilities and get themselves accredited by authorized collateral management companies to be eligible for participant in WHR system.

However these guidelines aim to sensitize commercial banks to develop in house capabilities for providing financing against warehouse receipts. This may require banks to build products, and build capacity of their staff etc.

All individuals or private businesses like to establish silos or cold storages in their own capacity or under Public-Private Partnership are eligible to avail the financing facility for the purchase of plant & machinery for steel silos or cold storages.

5.6. Mark-up on Warehouse Receipts Financing

A transaction backed by a warehouse receipt allows a financier to shift its risk from the borrower to the asset. Since the lender can sell the liquid collateral asset in case of default, this type of lending lowers risk and reduces typical costs of commodity transactions—e.g., high loan servicing costs due to limited volumes, high information costs, and high supervision costs. In addition, borrowers do not need a strong balance sheet or long credit history because the lender is not relying on the individual or company, but on the value of the commodity.

Since the lending costs for the financier are reduced, the mark-up rate for borrowers could also be reduced. Warehouse receipts are a good mechanism for accessing short-term working capital loans because they do not tie-up fixed assets, which are more appropriate collateral for accessing long-term financing for capital expenditures.

5.7. Securities & Collaterals

In traditional lending, the underlying collateral is only the second source of repayment that needs to be mobilized when something goes wrong. In collateralized commodity lending it is the first source of repayment. Rather than relying on the willingness of the borrower to repay the loan, his balance sheet, or credit history, the lender relies on the ability of the borrower to conduct the underlying commodity transaction and has the possibility to sell off a very liquid asset, namely the commodities, as soon as the loan is in default. In this way, collateralized

commodity transactions provide a structural risk change for the lender. Through innovative approaches in different emerging markets both warehouse receipts and innovative collateralized lending mechanisms could provide opportunities to expand the levels of post-harvest financing being provided to producers, traders, processors, and other agribusinesses.

Warehouse receipts offer the opportunity for borrowers who lack fixed assets altogether to access finance. The warehouse receipt consists of two parts, a certificate of pledge and a certificate of title.

Certificate of pledge: The certificate of pledge is provided to the lender in order to take out a loan, allowing the farmer who has deposited goods in the warehouse to borrow against those goods (e.g., the grain) to cover his working capital needs. Once the certificate of pledge has been issued, the lender usually advances funds as a specified percentage of the value of the commodity. The lender does not give the borrower the full value of the goods in the warehouse to provision for the costs the lender will incur when selling the commodity in case of a loan default, as well as the potential decrease in value of the stored good caused by price volatility in the respective commodity market.

Certificate of title: The farmer then sells the commodities that are stored in the warehouse, either to a trader or primary processor, validating the sale with a certificate of title which is given to the buyer. The buyer pays back the loan plus interest directly to the lender, receiving the certificate of pledge in exchange. Once the buyer has both, the certificate of pledge and the certificate of title, he can release the commodities from the warehouse.

5.8. Risk Management

Following are the risks associated with warehouse receipt system:

Description	Mitigant
Performance risk	
<p>In order to work efficiently, warehouse receipt system requires multiple parties (farmers, collateral management company, warehouses and financial institutions) to work together and perform their duties.</p> <p>Under such requirements, non performance by one party can result in glitches and may have a compound effect on other parties e.g lack of proper quality control by warehouses may result in deterioration of goods which will subsequently effect the entire system by downgrading the collateral value for the</p>	<ul style="list-style-type: none"> • All transactions using Warehouse Receipts between involved parties including depositors adopt contract farming) ,warehouse operators ,Banks and insurance be conducted through legally binding contracts • Establish clear legal framework that guarantee ownership and transfer procedure where warehouse receipt holder for stored commodities in the warehouse should have legal title that is negotiable, transferable and easily convertible into money.

banks, and the goods value for the farmers etc.	<ul style="list-style-type: none"> Establish clear registration and documentation process to facilitate identification of depositors including Next of kin and warehouse operators
Low level of financial literacy and small landholdings	
<p>Low level of financial literacy amongst the farmers can lead to apprehensions in adoption of this new system which will subsequently result in low levels of penetration and would subsequently defeat the objective of financial inclusion.</p> <p>Given that most of the farmers in Pakistan are small landholders with subsistence land holdings, they would be reluctant to switch to the new model.</p>	<ul style="list-style-type: none"> Capacity building for smallholder farmers is paramount for effective participation and support post harvest handling. This will guarantee quality; ensure compliance to standards and other requirements. Create awareness for smallholder farmers to understand the operations of warehouses, benefits and entitlement of the initiative It is imperative to organize smallholder farmers to form groups/economic units registered as legal entities that can transact business
Information asymmetry	
<p>Information sharing is of paramount importance to the proper functioning of this system. Since multiple beneficiaries of this system are involved at each layer of activity, a robust system for sharing of information, training and extension services is necessary.</p> <p>For example, banks need to know about the credit history of the farmers, the performance history of warehouses and operational efficiency of centralized collateral management company in order to mitigate the credit risk.</p> <p>Smooth and timely availability of requisite information is the backbone for occurrence of transparent transactions</p>	<ul style="list-style-type: none"> Create a framework for information sharing, training and extension services. Put in place an elaborate information system that stimulate and nurture commodity exchange operations. The system should provide framework that permit market prices updates, clearing and settlement, market intelligence and surveillance of operations and warehouse. Develop an elaborate information system that facilitate transparent business transaction (banks, insurance, micro finance etc) which is linked to credit information bureau
Commodity risk	
Agriculture commodities are the underlying asset for the warehouse receipts. The receipt is rendered worthless in case the commodity is spoiled. Therefore it is	<ul style="list-style-type: none"> Adequate storage facilities at strategic points to reduce distance travelled and guarantee quality

<p>required that an environment is developed in which the quality and quantity of the commodities can be preserved.</p>	<ul style="list-style-type: none"> • Provide simple technologies- (dryers, moisture tester etc) for pretesting grains/commodities to ascertain quality at farm level and at the warehouse. This will avoid unnecessary disputes • Develop clear guidelines and procedures on utilization of storage facilities and specify weighing, sampling, grading, laboratory tests, inspection and certification procedures • Introduce insurance product, indemnities and performance guarantees to hedge against the risk of commodity deterioration.
<p>Regulatory risk</p>	
<p>Farmers are often socially and financially very weak to stand up against the exploitation at the hands of other parties such as financial institutions. In such a case where there is lack of uniform power amongst the participant, the need for a regulator becomes necessary.</p> <p>Establishment, maintenance and compliances with set standards is a prerequisite for the proper functioning of the warehouse receipt system and this compliance can only to ensure via a central regulatory authority with the power to enforce regulatory compliance with the established law.</p> <p>This is also necessary so that issues that arise from this system (e.g issuance of counterfeit receipt etc) can be dealt with.</p>	<ul style="list-style-type: none"> • Establish a single licensing organ/regulator with up to date data base of licensed warehouses and operators • Establish and maintain central registry/database • All warehouses must be linked to the central registry for effective monitoring transactions, audits and reporting • All operators and regulator must maintain up to date data base and register of depositors • All Warehouse operators should be licensed and registered • All warehouses operators must insure depositor's commodities in their custody and maintain proper records. This is linked to central depository. • Certify warehouses/silos in accordance with the procedures laid down and regulate the operations of both WRS and Commodity exchange

6. Shariah Compliant Financing

Islamic banks cannot use conventional interbank money markets because of Islam's ban on interest, so they have struggled with a shortage of instruments to manage liquidity. The introduction of Warehouse Receipt system can be part of the solution to this problem. Under the system, assets are really owned, really transferred and all contracts are standardized in accordance with the shariah principles. It may also be used by the Islamic banks to enter into murabaha contracts with each other to place their surplus funds.

Commodity murabaha is one of the most common financing structures in Islamic banking; an institution agrees to purchase merchandise from a counterparty which promises to buy it back with an agreed mark-up at a later date. Therefore, Islamic Banking Institutions (IBIs) may develop financing products against the warehouse receipts in line with any of the Shariah compliant mode, however, the commonly used products are:

An IBI would purchase the commodities in its own name and then sell them on to the end buyer at an agreed mark-up.

Using the product based on 'Salam' i.e. sale of agri. produce against full payment in advance but deferred delivery on a specified future date, gives necessary flexibility to the farmer to use the funds to meet farming inputs requirements. The farmers at their discretion may enter into single or multiple salam transactions based on their specific funding needs. On maturity, the IBI would deposit the produce into any of the accredited warehouse and can use the warehouse receipt for onward sale to the buyer or through commodity exchanges/ mandis. Detailed Salam product for agri. financing is available at <http://www.sbp.org.pk/acd/2011/C3-Annx.pdf>.

7. Accreditation of warehouses

For the process of WHR framework would such that firstly warehouse locations will be selected in conjunction with the partner banks. The location of warehouses to be accredited will be based on predefined parameters which would include:

- (a) Cropping pattern: Warehouses in proximity of multiple cropping areas will be preferred.
- (b) Nearness of the warehouses to farmland, agri-processors, millers and agri markets will also be given weightage in the selection process.
- (c) Availability of required infrastructure (road network, electricity, telecommunications, etc)

The selected warehouses will have to get themselves accredited with the Collateral Manger (e.g. AGD Pakistan). Warehouse Owner will upgrade / construct warehouse as per acceptable local / international standards. After the preloading process of warehouse up

gradation/construction is complete, farmers will start bringing their produce to the warehouse. The Collateral Manager will accept agri-produce from farmers at warehouse.

After the completion of the above mentioned procedure, the Collateral Manager will issue Warehouse Receipt ("WHR") to farmer which will contain weight, quantity and quality of the agri-produce being stored. The warehouse receipt will be duly signed and stamped by the authorized Collateral Manager's representative on the basis of agri-produce received. The specimen signatures of the authorized Collateral Manager's representative shall have already been submitted to the Bank for verification and control.

The Collateral Manager will also manage storage and dispatch of agri-produce. The following areas will be taken care of by the Collateral Manager:

- Ventilation (aeration) to ensure that the quality of the agri-produce stored meets the required specifications
- Infest monitoring and control through fumigation (outsourced function)
- Release dispatch of agri-produce stored in warehouse
- Weighing, quantity of agri-produce prior to handing over to Agri-produce to Buyers

AGD-Pakistan will release agri-produce from the warehouse based on Release Order received from the Bank. AGD-Pakistan shall utilise its proprietary software / system, to provide periodic reports to the bank.

Bank will recover following from farmer's account:

- Principal & mark-up on the loan amount disbursed
- Service charges of the Collateral Manager
- Service charges of Warehouse Operator as the Manager of warehouse

8. Advantages

The strength of WHRs hinges upon making agricultural output, eligible good quality collateral, for availing financial credit. Particularly benefiting the small farmers who find it difficult to approach banks for credit to do non availability of basic collateral requirement of banks; this system has the capability of transforming the agriculture sector in the following manner:

- (a) The Warehouse Receipt system will be utilised by banks to extend financing, as it has enabled banks / lenders to create a charge on the commodity balances through the depository; the charged collateral is then immobilized in the warehouse till the lien is lifted.

- (b) Real time access to the location and quantity of the commodity and providing a comfort that the commodity of a stated type, quality and quantity through the Warehouse Receipt system does exist duly charged to it for its financing /credit flow
- (c) The revenue streams will be generated by enabling financial institutions to lower their spreads due to the lower risk attached to individual deals, and therefore necessitating less set-aside from the financiers. This will liberate more capital for the banks, and enable them to increase their business volume, contributing therewith to the global growth of Pakistan's economy.
- (d) Markets transparency is another crucial element that comes along the proposed scheme. Through the incorporation of PMEX and the development of secondary market, all players will be able to know and act on the National Spot Prices. In the future, and with the development of complex derivative products, actors will likely use future pricing, options management and other technical trading tools.

The other element is to separate the physical handling of commodities from their financial and accounting aspects. Banks / lenders could rest assured that a responsible entity is taking care of the physical aspects of the commodity while they need to look after only the financial and accounting aspects. This approach elevates commodities to the same plane as bonds, currencies or stocks and securities and then could be dealt with as such.

9. Adoption by Banks and other Actors

Each actor will enter the new system at its own pace. According to what has been observed, no actor will remain out of the future system. The general benefits expected are positive to all. They improve revenues and margin, ease work, enable development, etc. All the parties do see in such a system the evidence of "what they would have liked to have but could not have so far". As a simple statement, losing 2 million tons of wheat i.e. some 220 Millions USD yearly just because of ad handling is unacceptable to everybody.

The banks are, therefore, encouraged to adopt the Framework for Warehouse Receipt System in the present form or with some adjustments to suit their organizational & operational needs and market characteristics, subject to compliance with SBP's regulations.