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Warehouse receipts as a system for improving the efficiency of rice and corn marketing in the Philippines

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Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas

Warehouse Receipts as a System for Improving the Efficiency of Rice and Corn Marketing in the Philippines

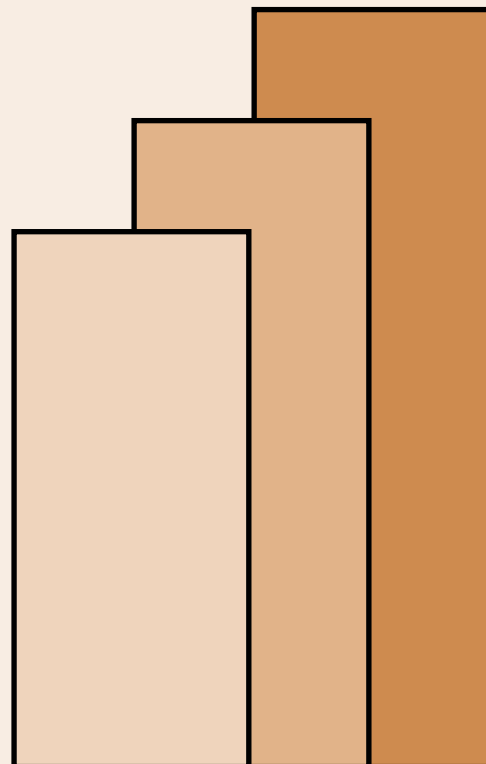
Roehlano M. Briones and Lovely Ann C. Tolin

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WAREHOUSE RECEIPTS AS A SYSTEM FOR IMPROVING THE EFFICIENCY OF RICE AND CORN MARKETING IN THE PHILIPPINES

Roehlano Briones

Lovely Ann Tolin¹

Abstract:

In the Philippines, the rice and corn sectors play an integral role in the agricultural economy in terms of production and employment. However, both sectors suffer from inefficiencies in the marketing chain (e.g. high transaction costs, weak quality assurance). Farmers also find difficulty in obtaining short-term loans from banks; hence they resort to informal loans with high interest rate. This paper explores the warehouse receipt system as platform for transforming the marketing chain in the grains market of the Philippines. Salient features of an effective warehouse receipt system are outlined based on literature review and international experience. Assessment of Philippine experience show that while a legal framework is already in place, a warehouse receipt system in grains is currently non-operational. Likewise, standardization of rice and corn is not practiced. Key recommendations of the study include strict enforcement of grain grades and standards, pilot testing of the warehouse receipt system in a suitable area, and legislative reforms to establish a sound legal and regulatory framework for a warehouse receipt system.

Keywords: warehouse receipts financing, grains sector, marketing chain, risk management tool, grain grades and standards

¹ Research Fellow and Research Analyst II, respectively, of the Philippine Institute of Development Studies. This paper was prepared upon the request of the Regional Agricultural and Fishery Council, Region VI to make a thorough study with regards to the re-engineering/reconstructing of market system. The opinions expressed in this paper are the sole responsibility of the authors and are not representative of organizations to which they are affiliated.

I. Introduction

Rice is the Philippines' main staple, followed by corn, which is utilized both as food and as feed for livestock. The share of rice in agricultural gross value added is 23 percent, while that for corn and livestock are at 6.3 and 23 percent, respectively (PSA, 2015). In 2012, one-fifth of all agricultural workers are in rice cultivation with another one-eighth in corn.

Both sectors are plagued by problems that prevent farmers from earning higher income. Postharvest losses are high at 15 percent, as a consequence of poor handling techniques and lack of adequate facilities and infrastructure (Manalili, Yaptenco and Manilay 2015; Clarete 2012). Farmers receive lower prices due to quality losses. Farmers, especially smallholders also encounter difficulty in borrowing for their working capital needs. Banks are reluctant to provide such financing as they consider farming a risky business. Furthermore, excessive paperwork for short-term loans makes it unattractive for farmers to borrow from banks. In the case of rice, farmers resort instead to informal credit with exorbitant interest rates, reaching up to 24 percent annually (Dawe, et al. 2006).

Efforts to address these problems in the marketing chain are meager. Existing programs of the Department of Agriculture (DA) are more focused on productivity-enhancement and physical interventions (e.g. postharvest facilities, investments in irrigation and R&D). Such programs are undeniably important but neglect underlying causes of high risk and limited financing, such as: inadequate quality assurance, weak incentives to invest in modern marketing infrastructure, lack of risk-mitigation services, and high transaction cost.

A warehouse receipt system is proposed as a mechanism to strengthen quality assurance and reduce transaction costs. This is already practiced in many countries and for various commodities. Warehouse receipts are often used as a risk-management tool and as a way of providing smallholder farmers better access to market opportunities. Such system is also present in nascent form in the Philippines, but remains far from reaching its full potential.

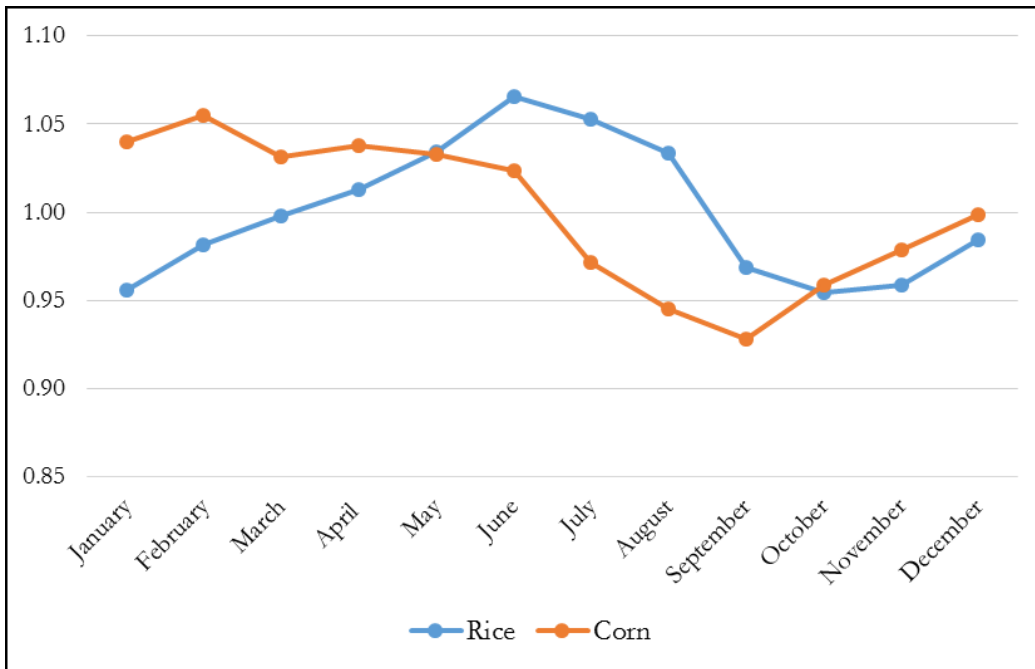
This study explores the warehouse receipt system as a platform for transforming the marketing chain in the grains market of the Philippines. The rest of this paper is organized as follows: Section II briefly presents the economic case for warehousing or storage in the grains market. Section III explains the mechanism and benefits of a warehouse receipt system. Section IV outlines the major elements for a successful warehouse receipt system, with country experiences of Bulgaria and the United States cited as best practice. Section V describes the current legal framework for grains warehouse receipts in the Philippines. Section VI outlines key recommendations and concludes.

II. Storage and seasonal variation in price

Seasonal variation in grain prices provides an incentive for storage.

Harvests are made during peak season when prices are low. In this case, farmers may choose to store their products in warehouses and defer sale of their goods until the lean season when prices go up. Figure 1 presents monthly price index for rice and corn relative to the annual average. For rice, price is lowest in October-November, then rises to a maximum in June, after which it resumes its cyclical downturn. For corn, the low price period is in September-October, after which it starts to rise to its maximum in April, followed by a decline towards the low price period. Hence farmers have the opportunity to store rice and corn during the peak season for subsequent sale in the off-peak (ideally at the height of the lean season).

Figure 1: Seasonal Price Index, 1990-2015



Source of basic data: PSA (2016).

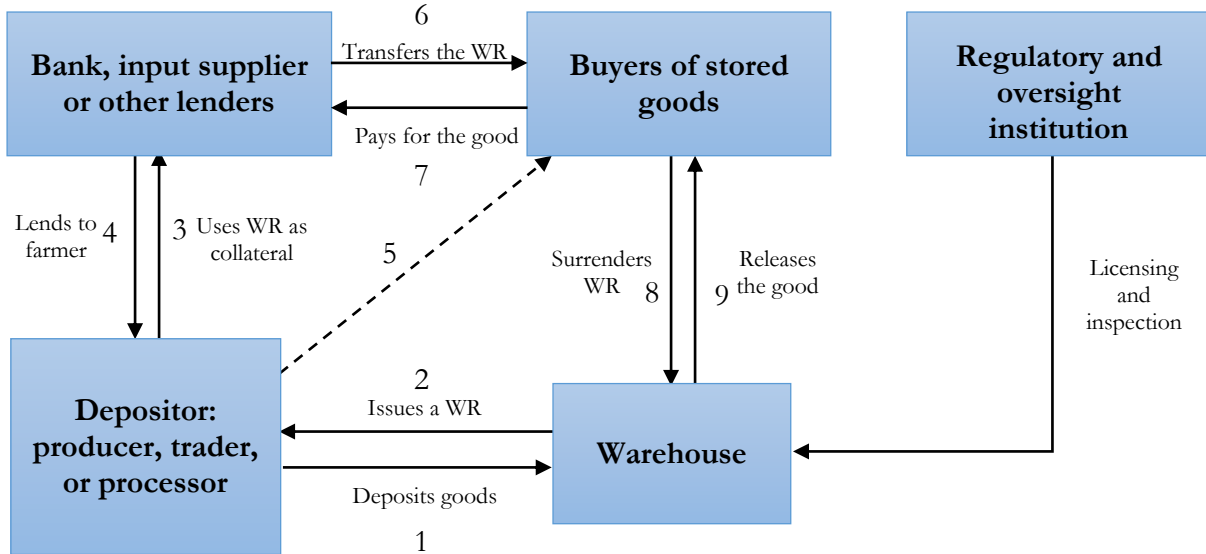
III. Understanding warehouse receipt systems

Warehouse receipts are negotiable instruments issued by warehouses to farmers that secures and guarantees the storage of a perishable commodity for a specific time period.

Warehouse receipts serve as a transferable proof of ownership of a certain good. Under certain conditions these could be swapped, traded, or used as collateral. Warehouse receipt financing is illustrated in Figure 2. First, the farmer deposits his goods in a licensed warehouse. In return, the warehouse issues a warehouse receipt. The farmer transfers the receipt to a bank to obtain loan equivalent to a certain percentage of the stored good (Hollinger, Rutten and Kiriakov 2009)². Upon maturity, the farmer sells the commodity stored in the warehouse. Payment for the loan could either be made directly by the farmer or the buyer of his good. Once payment is settled, the bank surrenders the warehouse receipt to either of the two, depending on the agreement made. The warehouse receipt is later on submitted again to the warehouse for the release of the goods stored. In cases of default, or the inability to repay the loan, the bank can seize and sell the good to recover its losses (Wehling and Garthwaite 2015).

²The percentage depends on the bank's assessment of the level of risk.

Figure 2: Schematic of warehouse receipt financing



Source: Adapted from Wehling and Gathwaite, 2015

A warehouse receipts system facilitates trading logistics.

One of the key advantages of a warehouse receipt system is that it facilitates trade through easier liquidation of a commodity. Since warehouse receipts allow the transfer of right to ownership without actual physical delivery, transaction costs are reduced. It could also help minimize overall logistics and collateral management costs. Since the quality and quantity of the products are ensured by the warehouse operator, postharvest losses are reduced. An effective warehouse receipts system also expands marketing options of farmers. It enables them to directly sell their products to various types of buyers instead of traditional middlemen who usually buy at low farmgate prices (International Finance Corporation 2013).

Warehouse receipts can be used by farmers to obtain short-term loans.

The warehouse receipt issued for the deposited good can be used by the farmer to obtain loans from banks. Access to short-term financing becomes easier since banks are assured of a collateral that can be liquidated quickly and which retains a high commercial value (Bass, Henderson and Weidman Associates, Inc. 2000). Hence, banks can recover losses by selling the collateral goods in warehouses, instead of having to undergo long and costly court procedures. Ultimately the added convenience can reduce the cost of borrowing (Commodity Risk Management Group 2006).

A warehouse receipt system opens the possibility of establishing “commodity exchanges” where the receipts could be traded (Alavi, et al. 2012).

Commodity exchange refer to an organized marketplace where standardized goods are traded. Warehouse receipts play an important role in such exchanges since it allows trade to take place through paper or receipts (Andrews, Munro and Field 2007). A commodity exchange improves farmers’ access to markets and further enhances agricultural trade. Since goods are already standardized, it is also

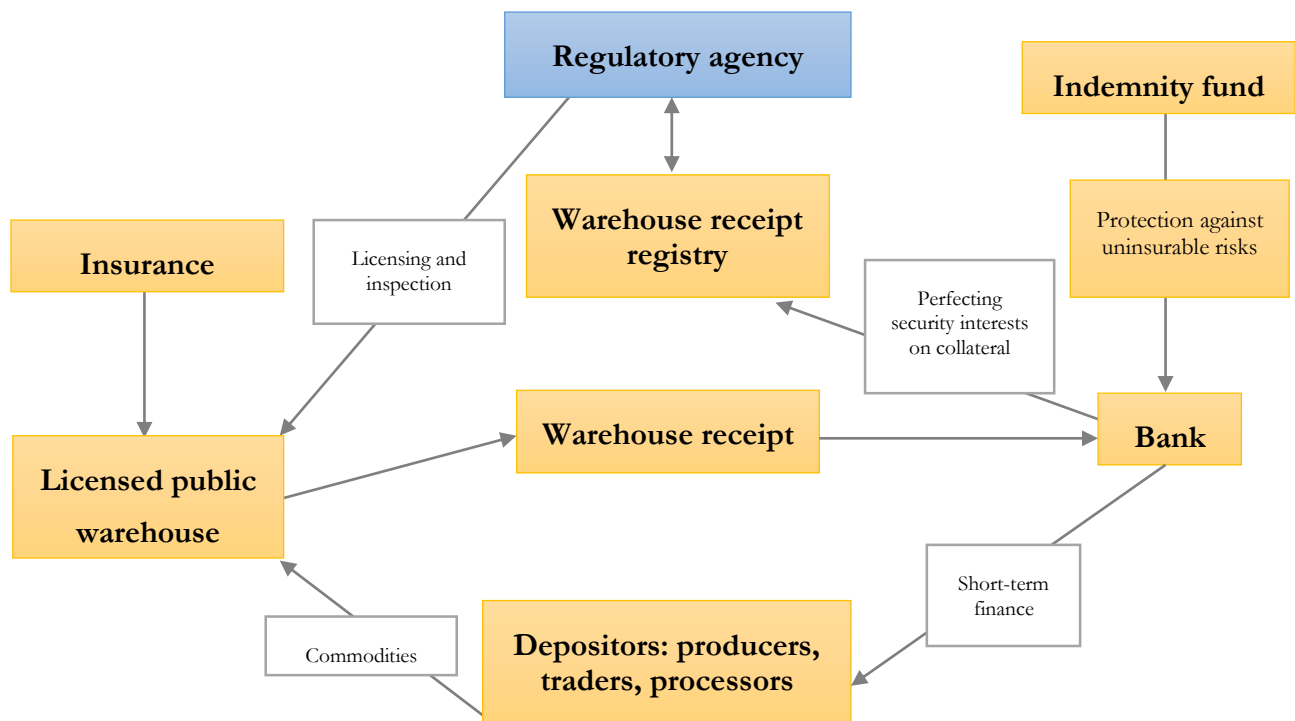
easier for smallholder farmers to pool their crops in the warehouse and sell jointly to larger traders/processors to receive higher prices (Wehling and Garthwaite 2015).

IV. Developing an effective warehouse receipt system

Elements of an effective warehouse receipt system

Legal framework. Figure 3 summarizes the elements of an effective warehouse receipt system (Hollinger et al. 2009). The first element is an enabling legal framework (Wehling and Garthwaite 2015). Warehouse receipt legislation can take the following forms: (1) one comprehensive law for the warehouse receipt system, (2) separate laws for warehouses and warehouse receipts, or (3) laws for the warehouse receipt system already integrated in a general legislation (Wehling and Garthwaite 2015). For most countries, there is one overarching framework for warehouse receipts, supplemented by sector-specific regulations.

Figure 3. Possible elements of well-developed warehouse receipt system



Source: Hollinger et al., 2009

Depending on the country, participation of warehouses in the warehouse receipt system can either be mandatory or voluntary (Wehling and Garthwaite 2015). The enabling legislation must distinguish between two types of receipts, namely negotiable and non-negotiable receipts. Negotiable receipts refer to those that “state that the goods received will be delivered to the bearer or the order of any person named in the receipt”. On the other hand, a non-negotiable receipt “states that the goods received will be delivered to the depositor or to any other specified person”. Whereas transaction with non-negotiable receipt is possible, it is much more costly and cumbersome compared to the negotiable receipt.

Risk mitigation services. Strengthening the integrity of the warehouse receipt system entails further risk mitigation services – (1) inspection and licensing services, and (2) insurance services. The first serves as an assurance for farmers and banks that warehouses meet the standards for storage, while the second serves as a protection from losses in cases of natural disasters and/or criminal activities (Llanto and Badiola 2010).

For licensing, Kiriakov (2007) enumerates the main requirements for public warehouses:

- (1) Minimum required capital
- (2) Minimum storage capacity
- (3) Performance guarantees or an indemnity scheme
- (4) Prohibition on warehouse participation in credit or credit guarantees
- (5) Transparent storage fees
- (6) Submission of sufficient and real-time information to the regulatory agency.

These requirements as well as appointment of an oversight authority must be specified in the enabling legislation. Typically, a government regulatory agency is chosen to perform such tasks, though private surveying companies are another option (Kiriakov 2007).

For transparency, the enabling legislation may require the assigned agency to publish a list of licensed warehouses together with their locations. This must be easily accessible to the public such as through local newspapers and trade registry gazettes. Lastly, penalties for violations must be sufficiently high and adjustable over time.

Central receipts registry. To avoid forgery and duplication of the receipts, a central receipts system must be in place, whether paper-based or electronic. This allows verification and makes claims of ownership clearer. The oversight agency may be the one in charge of such system.

Performance guarantees. Provision of performance guarantees is critical to enhancing trust in the warehouse receipt system. Performance guarantees covers potential losses in cases of bankruptcy, insolvency, theft or mishandling of the commodity (Kiriakov 2007). Such guarantees are either provided through insurance bonds/letters of credit or indemnity funds. Insurance bonds & letters of credit ensures repayment of loans at specified conditions. Meanwhile, indemnity funds are collective contributions of warehousemen taken as part of the fees they charge for their operations (Lacroix and Varangis 1996). Indemnity funds protects for risks not covered by regular insurance. The precise configuration of performance guarantees depends on local market infrastructure, evaluation of the risk, and availability of financial and insurance services and products (Wehling and Garthwaite 2015).

Participation of financial institutions. Willingness of the banks or financiers to take part of the warehouse receipts system is important. Banks that provide warehouse receipt financing usually develop in-house commodity expertise that allow them to assess market trends and valuation of loans (Hollinger, Rutten and Kiriakov 2009). Initial rates of lending may start at 55 to 65 percent of the collateral. This may grow to 80 percent as trust in the system becomes more solid. As knowledge among banks on short-term agricultural financing becomes better, they may resort to more sophisticated forms of financing (Kiriakov 2007).

Grades and standards. Standardization of goods is one of the key elements of a successful warehouse receipts system. Quality standards and grades must be clear enough to ensure that the stored goods satisfy requirements without the need for physical examination of a third-party (Giovannucci, Varangis and Larson 2000). It is best if the local grades and standards applied on the goods are in line with the international market. This also opens up greater opportunity for domestic participants to

engage in international trading, which could lead to greater returns. Grades and standards could be the basis of banks in assessing the good's value and viability as collateral.

Market conditions and information. A certain level of seasonal price variability is vital in warehouse receipt systems to incentivize market participants in undertaking private storage and financing. For instance, price support policies may encourage farmers to rely more on selling to the government instead of using warehouse receipts to ensure they have enough capital for the next cropping season. Hence, heavy government intervention must be avoided to nurture trust in the system (Hollinger, Rutten and Kiriakov 2009). For financiers, there must be a significant demand in the secondary market for warehouse receipts. This is extremely important since it will enable them to easily liquidate collateralized goods by selling to third-party participants.

Alongside favorable market conditions, good market information is also essential, covering prices and conditions of supply and demand. The information must be easily accessible and publicly available. This helps farmers decide when it is best to sell their products, while lenders have a better idea of the value of the commodity.

International experience on warehouse receipts

Bulgaria. The warehouse receipts system in Bulgaria is a model of efficiency and effectiveness. Established in 2000, it is credited with stabilizing the grains market of the country. As of 2009, there are already 47 licensed public warehouses with more than 500,000 tons of licensed capacity, with no recorded loan defaults (National Institute of Public Finance and Policy 2015). The number of banks which extended credit to farmers has grown from 2 banks to 10 within eight years after the establishment of the system (Hollinger, Rutten and Kiriakov 2009). The increased competition in lending has driven initial rates to lower levels, from 16 percent down to 7-8 percent as operations expanded. Success of the warehouse receipts system in the country is attributed to three factors: (1) effective legislation, (2) working market information system, and (3) appropriate government support (Kiriakov 2007).

The guarantee system applies a combination of bank letters of guarantees and an indemnity fund. Indemnity funds are mandatory for participating warehouses. Initial capitalization for the indemnity fund was provided by the Bulgarian Ministry of Agriculture, through a three-year interest-free loan of US \$2.5 million. This move helped in the successful expansion of the system's operations (National Institute of Public Finance and Policy 2015). To further enhance the level of security in the system, the National Grain Service was established (Wehling and Garthwaite 2015). Regulation and control of the performance of warehouses are some of the duties of the agency. Training and set-up of management systems was supported by the United States Kansas City Commodity Office.

Grain marketing information based on direct information collected from a sample group of traders and grain processors is provided weekly. The information is sent to a subscription list which consist of banks, licensed public warehouses, producers, and domestic and international traders (National Institute of Public Finance and Policy 2015). The record of warehouse receipts issued as well as other relevant information are contained in a central registry.

United States. The Warehouse Receipt System in the US is organized under the US Warehousing Act of 1916 (USWA), with subsequent amendments. There are four primary purposes of warehouse receipts in the country: (1) as collateral for standard nine-month loan programs, (2) as inventory documentation for government-owned grains, (3) as a means of making collateral out of crops held

in commercial storage, and (4) as delivery documents that are acceptable for trading on futures exchanges (Reserve Bank of India 2005).

Standard licensing criteria in the US include physical facilities, capital adequacy, liquidity, managerial qualities, insurance and bonding cover. Weighers, samplers and graders in the warehouse must also obtain a license. To ensure that warehouses abide with regulations, unannounced inspections on warehouses are implemented by examiners. Performance guarantees are also mandated; the type of guarantee depends on whether the warehouse has a federal or a state license (Hollinger, Rutten and Kiriakov 2009).

Electronic warehouse receipts (EWR) are widely adopted in the US. It was only in 1993 when the cotton industry was able to push for an amendment of the USWA to “require States to treat electronic warehouse receipts the same as paper receipts” (Andrews, Munro and Field 2007). Later amendments expanded the scope to other commodities. In the EWR system, the private sector issues the receipts while their authorized systems provider facilitates the electronic transactions. Providers must maintain a Central Filing System (CFS) which stores a record of electronic warehouse receipts issued. Complete “dematerialization” of paper warehouse receipts for all commodities has yet to take place, though in the case of cotton, EWR already represents 90 percent of U.S. cotton crop stored (Andrews, Munro and Field 2007).

V. Philippine experience on warehouse receipt financing

Legal and Institutional Framework

In the Philippines, there are separate laws for warehousing and warehouse receipts, namely the Bonded Warehouse Act of 1932 and the Warehouse Receipts Act of 1912 covering all storable goods. For the sugar industry, the Sugar Regulatory Administration is responsible for sugar warehouse receipts (“quedans”). A separate discussion on sugar quedan is provided in Box 1. Specific rules and regulations for the grains industry (rice and corn) were initially outlined in National Grains Authority Act of 1972 (Presidential Decree No. 4). This was further expanded and developed through the Revised Rules and Regulation (RRR) of the National Food Authority (NFA) on Grains Business of 2006.

The RRR provides for either negotiable or non-negotiable receipts. Colored form of serial-numbered receipts for different qualities and quantities of grain products may be issued by warehouses. Bonded warehousemen are compelled to keep a system of accounting and records in the manner and form prescribed by the NFA. They are also required to submit a weekly report on bonded stocks and a monthly abstract of non-bonded stocks. Palay, milled rice and shelled corn shall be sampled in accordance with the NFA Standard for Grain Sampling. Moisture content must not exceed 14 percent on “*as received basis*”. Adjustment on the price of grain will be enforced if the good exceeds the specified moisture content. Grade requirements for palay and corn, as specified in the Revised Rules and Regulations, are presented in Annex 1.

In terms of warehousing arrangements, a two-tier licensing system is mentioned in the legislation. All operators of grain warehouses are required to obtain a license; however, those who wish to issue negotiable warehouse receipts must undertake an additional process to acquire a Certificate of Franchise (Wehling and Garthwaite 2015). The Certificate of Franchise is issued by the National Food Authority (NFA). It determines allowable volume to be granted to the warehouse. This ranges from 500 bags to 20,000 bags, but never the full capacity of the operator.

Quedan and Rural Credit Guarantee Corporation

The Quedan Financing Programme began in 1978, to be later superseded by the Quedan and Rural Credit Guarantee Corporation (Quedancor) in 1992 to include inventory financing and other types of agricultural credit.³ Through the Quedancor, farmers are able to obtain loans as well as avail risk management services. Loans are for 180 days for paddy and up to 90 days for other grains.

Participating banks apply to the Quedancor for guarantee cover. Grain warehouses are also compelled to post a guarantee bond that should cover at least one-third of the current market value of the maximum available grain storage (Coulter and Shepherd 1995). The Quedancor guarantees the existence of stocks and undertakes to pay 80 percent of the loan principal plus accrued interest (Coulter and Shepherd 1995). Upon farmer's repayment of the loan (maturity), the bank issues a certificate of loan settlement which will allow it to remove the palay from the warehouse.

Box 1.

Sugar Quedan in the Philippines

Most sugar in the Philippines is already marketed and produced under the “quedan system”. This is a 30/70 sharing agreement - a farmer allocates 30 percent of his cane harvest as payment to the miller for processing. Once the sugar is processed, a warehouse receipt is issued to the farmer which represents his share (70 percent). The Sugar Regulatory Administration (SRA) later on identifies the proportion of sugar to be designated on different quedan types.

The sugar quedan, which is a negotiable instrument, is used by the farmers to obtain loans from banks. A Sugar Quedan Financing Line (SQFL) is available in some banks. It serves as a credit facility against acceptable raw/refined sugar quedans available to both sugar millers and traders. The sugar quedans can also be traded in a secondary market for certificates. Farmers typically sell their quedans to traders who in turn, collect the receipts and subsequently sell to wholesalers.

Source: (Ang 2015)

Current status of warehouse receipts system in the Philippines⁴

While a well-crafted legislative framework is present in the Philippines, the warehouse receipts system for grains is currently non-operational. NFA only issues a Warehouse Stock Receipt, which is issued for imports done by the government and local procurement. Once the stock is released, a Warehouse Stock Receipt Issued is provided. Both the receipts become the basis for accounting, but are not used as a negotiable instrument.

The marketing program of the NFA nearest in form to a warehouse receipt system is the Farmer's Option to Buy-Back (FOBB) program. It allows the farmer to sell palay to the NFA and to buy back the same volume of stocks sold earlier to the NFA (at the NFA support price), within a cropping

³ Note however that due to operational difficulties, the focus of the Quedancor was shifted to provision of guarantee. The quedan scheme was later on adopted by the LandBank of the Philippines as one of its credit programs (Llanto and Badiola 2010).

⁴ Material based on personal communication with NFA Marketing and Trade.

cycle, in case they have an opportunity to sell the stock at a higher price to traders. However, the program is unpopular among the farmers.

Even the system of grades and standards so essential to the operation of warehouse receipts is likewise not enforced. There is also a lack of knowledge among consumers and retailers of such classification. Most of the time, preference of consumers are determined by the “price”, “whiteness” and “palatability” of the rice variety. There is an apprehension that any regulatory initiatives towards enforcing grades and standards can lead to negative market repercussions, such as increases in grains prices.

Challenges in warehouse receipts system in the Philippines

Why is the warehouse receipt system non-functional for the grains market? The first set of reasons are missing elements in the legal framework, identified by Wehling and Garthwaite as follows: (1) clear out-of-court enforcement procedures; (2) a central receipts registry, and (3) a stronger inspections and penalties system to minimize risk of missing grains.

Second is that the legal framework itself is confounded by multiple overlapping general and sub-sector specific regulations, involving many actors. Assignment of agency roles becomes ambiguous. It is not clear who between the NFA and the Quedancor has the mandate on the issuance of warehouse receipts to grains warehouses. Regulation VIII of the *Revised Rules and Regulations of the National Food Authority on Grains Business in 2006* states that the NFA shall provide negotiable and non-negotiable receipts to franchised bonded warehouses and licensed grains bonded warehouses. Likewise, it was mentioned in Section 11 of the *Quedan and Rural Credit Guarantee Corporation Act (RA 7393)* that the Quedancor shall be responsible in printing and providing uniform negotiable warehouse receipts.

Third, Quedancor itself has run into institutional problems, which has damaged the confidence of banks in the system. One is due to cases of the corporation’s misguided loans, not to millers, but often to politicians (Alavi, et al. 2012). As a consequence, it was reported that banks limited lending against stock among their most trusted customers. Furthermore, a report from the Commission on Audit (COA) in 2013 highlighted the huge losses of the Quedancor since 2006, casting doubts on the capability of the Quedancor to continue with its loan guarantee program (Teves 2014). In the same report, COA suggested the rehabilitation of the corporation or its abolishment so that it could no longer incur unnecessary losses for the government.

VI. Recommendations and conclusion

1. Begin with strict enforcement of grades and standards in rice and corn markets.

The NFA already specifies standards in its Implementing Rules and Regulations, but these are not enforced. A new enforcement regime should be initiated by an educational campaign aimed at consumers and retailers.

2. Conduct supporting research, including pilot-test of a warehouse receipt system in a suitable area of the country.

As discussed previously, the country already has a functional warehouse receipt system in sugar. Lessons from the regulatory system, procedures, organization, and financing of the quedan system in sugar may yield useful lessons for developing a similar system in grains, once the pre-requisite standardization (similar to that in sugar) is attained.

Before nationwide roll-out of a warehouse receipt system, pilot testing in a limited area must be implemented⁵. As one of the country’s top grain producers, Iloilo is the suggested area. This will help policymakers identify an appropriate legal and regulatory framework for warehouse receipts, which will entice banks to participate in the system and traders to agree to set up a secondary market for the receipts.

3. *Put in place other key elements identified by international best practice.*

Based on the literature review, some of these best practices that need to be adopted in the Philippines are as follows:

- **Harmonization of the laws and regulations relevant to warehouse receipts and warehousing:** To avoid duplication of roles, the abolition of the Quedancor, together with the restoration of warehouse receipt authority for grains to NFA, must be affirmed by appropriate legislation. NFA must implement clear policies, including elements mentioned by Wehling and Garthwaite (2015) such as a central registry for covering both paper-based and electronic warehouse receipts, must be established.
- **Public dissemination of comprehensive and timely market information:** The NFA must publish a list of all warehouses and their respective locations. There must also be a daily or weekly release of demand and supply conditions, as well as prices, to serve as reference for farmers and financial institutions in making assessments and decisions. This function can readily be served by PSA which already monitors weekly/monthly prices of grains for 80 provinces/cities, including Metro Manila.⁶
- **Capacity building for stakeholders:** Farmers and cooperatives must be properly equipped with knowledge of how the warehouse receipt system works and how to benefit from it. The same is true for the oversight agency, warehouse operators, and staff.

VII. ANNEX 1

Grade requirements for Palay, Philippines

GRADING FACTORS (% by weight)	PREMIUM	GRADE 1	GRADE 2	GRADE 3
Purity, min.	98.00	95.00	90.00	85.00
Foreign matters, max.	2.00	5.00	10.00	15.00

⁵ This proposal was welcomed by RAFC VI and they have suggested specific modalities of the pilot testing. Refer to their full position paper, which is annexed to this study.

⁶ Prices are posted in this website: <http://agstat.psa.gov.ph/>

a) Weed seeds and other crop seeds, max.	0.10	0.10	0.25	0.50
b) Other foreign matters, max.	1.90	4.90	9.75	14.50
Defectives:				
Chalky and immature kernels, max.	3.00	6.00	12.00	20.00
Damaged kernels, max.	0.50	1.50	3.00	5.00
Contrasting types, max.	3.00	6.00	10.00	18.00
Red kernels, max.	1.00	3.00	5.00	10.00
Discolored kernels, max.	0.50	2.00	4.00	8.00
Moisture content, max.	14.00	14.00	14.00	14.00

Grade requirements for corn, Philippines

GRADING FACTORS (% by weight)	PREMIUM	GRADE 1	GRADE 2	GRADE 3
Foreign matter, max.	0.50	1.00	1.50	2.00
Corn of other colors, max.	2.00	4.00	6.00	8.00
Shriveled and immature kernels, max.	1.50	3.00	5.00	7.00

Damaged kernels, total	3.00	5.00	7.00	10.00
Moldy kernels, max.	0.10	1.00	2.00	3.00
Moisture content, max.	14.00	14.00	14.00	14.00

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ANNEX 2. Comments on the Draft Study for the Adoption of the Warehouse Receipt System for Improving the Efficiency of Rice and Corn Marketing in the Philippines

Prepared by: RAFC VI Chairperson Ricardo P. Provido, Jr.

As you have stated, the Legal Framework is already present in the Philippines. Unfortunately, subsequent laws and regulations have been made thereby creating uncertainties in the implementation of the system. The experience of the NFA and the Quedan Corp. can give us the proper basis on how to correct the deficiencies that occurred. What is needed is a single comprehensive regulation that will cover the establishment of the Warehouse Receipt System on food and agricultural and fishery commodities.

As per our position paper, the NFA should be the sole government agency that will undertake and implement the Warehouse Receipt System. It should be comprehensive and will cover all the activities in the supply chain including warehousing and milling or processing.

The law should make the system mandatory in order to be effective and efficient in order that the banking system and the public develop its confidence on the system. The NFA should properly be capitalized to increase say not lower than Php 50.0 Billion. The only Warehouse Receipt System to be issued should be negotiable so that it can easily be chattel mortgaged to the banking system in order to control the injection of supply to the demand market. The Warehouse Receipt (Quedan) should classify it into categories to manage the injection. It can be classified as: 1. *Domestic which can immediately be injected to the market*; 2. *Reserve or buffer stock which NFA can convert to domestic when needed*; 3. *Export if we have a surplus vat needed by the domestic demand*. In this case, NFA can be freed from its fiscal exposure to keep the reserve or buffer stock. The first-in first-out principle should be observed. NFA should have the sole power to accredit and designate the site of the warehouses, its facilities and specifications. The warehouse should be near the production area. It is recommended that a warehouse be established for every two (2) thousand hectare per production area and should be very accessible to the farmers. The farmer can only deliver to the warehouse designated for them. Any pole-vaulting should properly be penalized both by the farmers and the warehouse that accepts produce not from the designated area. NFA should establish the proper standard for the *palay* under the system such as long grains, medium grains, and short grains. It should also set standards as to the purity of the grains and its average recovery when milled. It should take into consideration the differences in recovery that some varieties has thick hull while others have their hull which affects recovery.

The NFA should operate the system under the Central Receipts Registry. It should establish a system wherein the processed good (rice) can be traced by its origin from the Warehouse Receipt issued for *palay*. Any rice sold in the market whose origin cannot be traced should be considered illegal and therefore confiscated. All imported rice should pass through a bonded warehouse regulated by NFA and issued with proper permits to be sold in the market.

The warehouse though controlled by NFA personnel who is properly bonded can be built and owned by a private investor. Incentives should be given to encourage the investor such as automatic conversion of the land where the facility will be built but not to exceed five (5) hectares and exemption from government taxes such as Real Property Tax for at least seven (7) years from the

start of the operation, simple accreditation system since the location and design of the structure will be in accordance to the NFA specs. The warehouse should be properly bonded in accordance to its size. All bonds should be issued by the PCIC alone. Other incentives can be the availability of soft loans from a government financing institution like Land Bank to build the facility.

Furthermore, importation of equipment needed to operate the warehouse properly such as hauling vehicle, dryers and even rice mill equipment should be tariff free and other government requirements be simplified. Other government taxes should be studied to entice the investors to participate.

PCIC should be the sole insurer of the commodity starting from production to warehousing, to processing, to marketing including the necessary movement of the product until it reaches the ultimate consumer. In other words, the whole supply chain. It should also be the lone issuer of any bond necessary for the operation of the system under this condition. The capitalization of the PCIC should be increased by not less than Php 50.0 Billion. This will encourage the banking sector to trust the system.

The system will be that NFA will hold a formal bidding in different places covering several warehouses every week for proper information as to the total stocks available in the country with their location and the prices of *palay, as well as the* wholesale and retail price of rice in the different areas of the country. Suggested areas will be Isabela, Nueva Ecija and Bulacan in Northern Luzon; Naga and Legaspi in Southern Luzon; Panay Island, Cebu and Leyte in the Visayas and; Northern Cotabato and SOCCSKSARGEN in Mindanao. The cities can be Metro Manila, Cebu, Bacolod, Davao, Gen. Santos and Cagayan de Oro. This will be properly displayed in the place where the bidding is held. This can easily be done if the Information Technology (IT) programs of the Central Receipt System are properly made. This can further be supported by the Philippine Statistics Authority (PSA) and the activation of the National Information Network (NIN) of the Department of Agriculture (DA). The information should be on time covering the last three (3) days preceding the bidding. NFA should be very careful in their statistic as to the per capita consumption in order to properly manage the injection of supply to the demand. This is why we recommend a major program for Sweet Potato as a substitute to our basic diet. If we can induce the consumer to shift 20% of their basic diet, we will be a surplus producer of rice.

Further, study should be made with regards to the Quedan System in the Sugar Industry. Proper data and strategies can be availed at the Sugar Regulatory Administration (SRA) which can be useful. They hold public bidding almost every week and our Planter Associations attend the bidding. The sugarcane farmer can give instruction to their association whether to sell or not or even give a cap to the price they are willing to sell. The sugar is classified as; a. *Export to the U.S which is not anymore being used due to the expiry of our bilateral agreement*; b. *Domestic*; c. *Reserve and*; d. *for the international market*. The average price in the bid is what the farmers get. Due to the standards set by the sugar central, farmers have learned how to produce and deliver in order to maximize their profit. Though the sharing is 70-30%, it is based on the sugar being extracted from the cane which is based on its brix or sugar content. Therefore, the farmers plant the variety that has very high sugar content and follow the technology to produce more sugar. Before cutting, we use the digital instrument to measure the Brix content. We deliver our cane clean and have cut properly the top point to maximize our sugar recovery. This is necessary to reduce the trash reduction and minimize our postharvest cost including cutting and delivery which is based on the

total tonnage delivered to the sugar central. As much as possible, we try to reach a recovery of 1.5/ton of cane delivered to get one 50/ kg sugar as our share on a 70-30% basis.

Finally, as we have recommended, a major program on Sweet Potato should be established. We also recommend that the environment for the practice of Agri-fishery Professional Licensed by Professional Regulation Commission (PRC) should be developed and implemented thereby privatizing extension services. With proper professional and motivated extension servers, farmers can be guided properly to conform to the standards set in order to maximize their profit with varieties that has proper palatability and fully developed grains as set by the standards. A not fully developed grain will lower the recovery and therefore get a lower farm-gate price.

Lastly, we should visit Presidential Decree (PD) 1770 dated January 14, 1981 that changed the National Grains Authority (NGA) to National Food Authority (NFA) wherein one of the division was the Quedan division as issued by the former President Ferdinand Marcos. Unfortunately succeeding administration, the said Quedan division was taken away and was made into Quedan Corp.

Taking into consideration, what has been recommended is a total overhaul of the industry from production to consumption, it will not be easy and should have a timeframe of 7 to 10 years before full implementation. After the proper legal laws have been made, the Agree-Agra law should be extended for at least 10 years so that the banking system will be encouraged to join the system.

Enclosed are the position paper for the implementation of the Warehouse Receipt System and Resolutions submitted to DA through NAFC Secretariat, Resolutions on Sweet Potato with recommendation of the Department of Health (DOH), Resolution of the National Nutrition Council (NNC) and the Resolutions on the Practice of Agri-fishery Professionals. ###