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## Issues Limiting the Progress in Negotiable Warehouse Receipt (NWR) Financing in India§

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#### **Abstract**

Although the warehouse receipt system (WRS) has the potential to improve the access to institutional credit of farming community, specially the smallholders lacking acceptable collateral for availing loan from formal channels, the progress of loan against NWR is observed to be slow. The paper has analysed the issues responsible for limited popularity of pledge finance amongst farmers. The agencies having integration with the market like the collateral management service providers, APMCs, Agricultural Marketing Board, etc., have been found to be a better window for disbursement of pledge finance. The physical availability of warehouses, complicated procedure and poor awareness level are some of the factors that limit the use of loan against a negotiable warehouse receipt (NWR). Awareness about advantages of NWR loans needs to be generated by involving banks, Krishi Vigyan Kendras, State Agricultural Marketing Boards, Regulated Market Committees, NGOs, co-operatives, FPOs and even APMCs. In order to inculcate storage habit and promote storage among the producers, warehousing should be encouraged under public-private partnership mode. There is a strong need to push NWR beyond a negotiable instrument as it offers immense potential to trade, short-term loan to farmers, balanced supply of agri-commodities and enhances farmers returns.

Key words: Negotiable warehouse receipt, agricultural finance, agricultural credit, pledge finance

JEL Classification: Q14, Q13

### Introduction

Credit is important for the present time technology-intensive agriculture. The availability of credit can help in enhancing the use of inputs (Mishra, 1994), and adoption of modern technologies (Rajeev and Dev, 1998), cultivation of remunerative crops, and increasing cropping intensity (Rajendra *et al.*, 1995), improving net returns per unit area and generating more capital stock at farms (Baba *et al.*, 2014a;b). Innovations in agricultural credit for its significance

\* Author for correspondence Email: shalendra\_cpsingh@rediffmail.com in agricultural economy have gained importance over the years (Shraddha, 2013). The initiatives like nationalization of commercial bank, setting up of Regional Rural Banks and many other policy interventions like priority sector lending have resulted in increased flow of institutional credit to agriculture over the years. The structure of flow of formal credit to agriculture has also changed over the years, from the cooperatives during 1950s and 1960s to scheduled commercial banks and RRBs as the major sources of direct and indirect institutional credit to agriculture in recent years (Thejeswini *et al.*, 2014).

The development of efficient, sustainable and widely accessible rural financial systems remains a major challenge for factors like high cost of delivering financial services to small and widely disbursed

<sup>§</sup> The paper is based on the primary survey conducted for the in-house research study on analysing the factors responsible for slow growth of Negotiable Warehouse Receipt (NWR) Finance in India

customers and lack of suitable collateral (Onumah, 2003). Only 21 per cent rural households had access to formal credit and the majority of bank loans were collateralized (RBI, 2005). The warehouse receipt system (WRS) has the potential not only to improve the access of farming community to institutional credit but also to work as trade facilitator and thus helping in improving the per capita household income through efficient marketing of the agricultural commodity. Negotiable Warehouse Receipt (NWR) will help in developing an effective tool to take care of short-term post-production credit needs of the farming community. Availability of short-term credit to farmers will provide a real boost to the increase in flow of formal credit. The importance of short-term credit has been reflected by the refinance figures of NABARD for the year 2014-15 which reveal that nearly 75 per cent of the total refinance is for short-term component (NABARD, 2014-15).

In spite of the requirement of credit by producerfarmers and government efforts to promote the use of negotiable warehouse receipt by creating storage infrastructure in the rural area, providing appropriate legal and regulatory environment and initiating various schemes to popularize pledge finance among farmers, the progress in taking loans against NWR has been very slow and confined to a limited geographical area.

With this background, this paper has analysed the issues responsible for the limited popularity of pledge finance amongst farmers and has evaluated the reasons for limited access to benefits available through NWRs like pledge finance. The study has also analysed the perception of key stakeholders like farmers and bankers on the subject.

### Methodology

The study is based mainly on the primary information collected from farmers and bankers considered under the study. The information was collected during the last quarter of 2014 from a sample of 60 farmers spread across 11 districts of Rajasthan and Madhya Pradesh. The farmers were selected randomly from a list provided by the warehouses of beneficiaries availing storage facility. The selection of bank was also made on the same principle. The information was collected through personal interview method using a well-structured questionnaire designed

specifically for the study. The secondary information was accessed from various other publications of the state and central governments. Simple descriptive statistical techniques like averages, percentages and graphical analysis were used to analyse the information collected and draw logical inferences.

### **Results and Discussion**

### Need and Importance of NWRs

Making credit available to the farmers mainly in the agricultural ecosystem dominated by smallholders, has always been a challenge. The lack of appropriate assets to offer as security has further aggravated the situation. The warehouse receipt system has the potential to offer a viable channel to deliver credit to smallholder farmers as it allows the use of stocks as collateral against loan. The same has been the intension of the government behind creation of storage capacity in the country.

Warehouse receipt is the instrument that allows the farmers to extend the sales period of modestly perishable products well beyond the harvesting season. The warehouse receipt can be used as collateral for short-term borrowing to obtain working capital. Collateralizing agricultural inventories will lead to an increase in the availability of credit, reduce its cost, and mobilize external financial resources for the sector. The process of warehousing sector and associated benefits are limited in many developing countries because of institutional and structural shortcomings like lack of incentives for the development of private storage industry owing to government intervention in agricultural sector and lack of proper legal, regulatory, and institutional environment to support a system of Warehouse Receipts (RBI, 2005).

The banks are the major players in fulfilling the objectives of the Government of India as they have to provide pledge loan to farmers against the agricultural produce stored in the warehouses. Despite continuous efforts by the government, the pledge loan against warehouse receipt has not become popular in India as the bankers are not confident with the management and maintenance of the warehouses in the country (RBI, 2005). With the aim to regulate and promote the growth of warehousing sector in India and also to introduce the negotiability of warehouse receipts, the

Warehousing (Development and Regulation) Act 2007 was enacted in October, 2010 by the Government of India.

### Growth and Spread of Pledge Finance

Pledge finance in general is bailment of goods as a security for payment of a debt. In the Indian agricultural scenario, pledge finance has immense importance as most of the small and marginal farmers are resource-poor and lack collaterals to offer as security to the financial institutions for availing loan. The NWRs can be used as collateral. In many Indian states, pledge finance has been introduced in recent past (by pledging stored farm produce).

Among the 28 Indian states, only 12 have availed the benefits of pledge finance scheme for farmers and other stakeholders dealing in agricultural commodities (Table 1). In these states, the scheme has been popularized by agencies such as Central Warehousing Corporation (CWC), State Warehousing Corporation (SWC), State Agricultural Marketing Departments/Boards, collateral management service provider, i.e. National Collateral Management Service Limited and National Bulk Handling Corporation (NBHC). Some of the states like Punjab, Andhra Pradesh, Rajasthan and Haryana, have achieved reasonable progress.

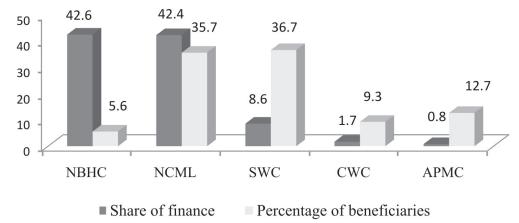
Figure 1, depicting the share of different agencies in pledge finance and the number of beneficiaries, reveals that the major share of pledge finance is being managed by the agencies providing collateral

Table 1. Status of pledge finance in India, 2013-14

State	Pledge finance (in crore ₹)	Per cent share	No. of beneficiaries
Punjab	2915	37.97	358
Andhra Pradesh	1314	17.12	19813
Rajasthan	1169	15.22	612
Haryana	974	12.69	265
Karnataka	450	5.87	13107
Madhya Pradesh	312	4.06	895
Tamil Nadu	241	3.14	5765
Odisha	109	1.42	206
West Bengal	76	0.99	81
Kerala	57	0.74	1516
Maharashtra	39	0.51	390
Gujarat	21	0.27	62
Total	7675	100.00	43070

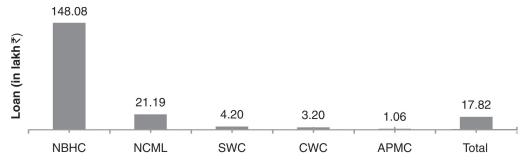
Source: GoI (2014)

management services like National Collateral Management Service Limited (NCML) and National Bulk Handling Corporation (NBHC). However, state level agencies like State Warehousing Corporation (SWC), Central Warehousing Corporation (CWC) and State Agricultural Marketing Board/Agricultural Produce Market Committees (APMCs) are found to be better equipped for extending benefit to a larger number of beneficiaries. The figure of average loan per beneficiary also suggests that the loan disbursed



APMC = Agricultural Produce Market Committee; CWC = Central Warehousing Corporation; NBHC = National Bulk Handling Corporation; NCML = National Collateral Management Services Limited

Figure 1. Share of different agencies in total pledge finance disbursed and number of beneficiaries, 2013-14



APMC = Agricultural Produce Market Committee; CWC = Central Warehousing Corporation; NBHC = National Bulk Handling Corporation; NCML = National Collateral Management Services Limited

Figure 2. Average loan disbursed per beneficiary by different agencies

through collateral agencies is being availed mainly by the traders.

The loan disbursed through State and Central Warehousing Corporations might have gone to the farming community, but mainly to large or medium farmers as suggested by the size of average loan disbursed per farmer. The loan disbursed through APMCs has been found to be most suitable for small and marginal farmers, as suggested by the size of loan per beneficiary (Figure 2).

The agencies integrated with the market have proved to be a better window for disbursement of pledge finance like the collateral management service providers. The collateral management service agencies for their business structure seem to be giving preference to traders over farmers. Marketing facilitating public agencies like APMC seem to be more focused on distributing loans to smallholder farmers.

### Perception of Farmers about Different Sources of Credit

The perception of farmers about different means of credit available to them was analysed in terms of understanding of procedure, convenience in availing and ease of documentation (Table 2). The findings suggest that the convenience of farmers for KCC and cooperatives is due to their understanding about the necessary procedure and documentation required to avail the loan from these sources. The pledge finance has not been found popular among the farming community due to poor awareness about the documentation required to avail the loan. The farmers also found Kissan Credit Card (KCC) better in terms of interest rate charged. Based on this perception, the majority of farmers have shown preference to the KCC with the remaining showing their interest in cooperatives.

### Rationale behind Farmers Decision to Utilize Warehousing Facilities

In order to understand the limited success of credit against NWR, it is important to identify the factors that encourage the farmers to store the commodity. The analysis suggests that the majority of farmers stored an agri-commodity with the expectation of reaping benefits of favourable price movement. However, this depends on the availability of warehouse near the

Table 2. Perception of farmers about different means of credit

Credit source	Perce	eption of farmers (	Interest rate	Preference	
	Understanding of procedure	Convenience	Awareness on documentation	(%)	
KCC	96	96	41	4	93
Cooperatives	87	76	30	8	7
Pledge	20	17	22	8	0
Moneylenders	57	24	_	_	
Commission agents	13	2			_

Table 3. Reasons behind farmer's decision on storing agricultural commodity

Reasons	Perception of farmers (%)
For storing commodity	
To reap benefits of price movement	66
Availability of warehouse nearby	21
Economic capacity to retain commodity	14
For immediate disposal of commodity	
Urgent cash need	23
Absence of warehousing facilities in the vicinity	75
Good price during harvest time	2

farmer's field and his capacity to retain the commodity (Table 3). The farmers opined that to encourage storage and pledge finance, such facilities should be made available within a radius of 5-10 km of production centre.

The absence of warehousing facilities near the production centre was reported as the major factor behind immediate disposal of agricultural produce by around three-fourth farmers. Immediate need for

money was another reason for not retaining the harvest by them. Only 2 per cent of the farmers found prices at harvest time favourable in comparison to prices expected after storage.

### Analysis of Gains Realized by Farmers

The storage decision of farmers varied from crop to crop. For storage, the most popular crop was rice (60%), followed by bajra (27.27%), soybean (25%), mustard (14.29%) and mung (14.29%).

The percentage of quantity stored in relation to total production of a crop was also analysed and is presented in Table 4. The percentage of total production of a commodity stored was recorded maximum for rice (43%), followed by *rabi*-mustard (41%), chana (40%), bajra (37%), mung (31%) and soybean (25%). The commodities which were stored in small quantities were *kharif*-mustard (6%), guar (3%) and wheat (3%). It was interesting to find that guar growers stored it in either house or field. However, the period of storage in the case of guar was high. Guar being a storage-friendly crop, many farmers store the seed for more than a year. In the case of cotton, barley, coriander and cumin, farmers are yet to come forward for storage.

Table 4. Benefits accrued on utilization of warehousing facilities

Commodity	Commodity sold immediately after harvest (%)	Commodity stored (%)	Average price realized immediately after harvest (₹/q)	Average price realized after storage (₹/q)	Average storage cost* (₹/q)	Accrued benefit out of storage over harvest period price (%)	Percentage of farmers availing storage facility (%)	
	Kharif crops							
Bajra	63	37	1108	1500	72	28.9	27.27	
Guar	97	3	4272	5500	163	25.0	5.56	
Mung	69	31	6433	5000	178	-25.0	11.11	
Mustard	94	6	2843	3200	106	8.8	14.29	
Rice	57	43	1300	1917	76	41.6	60.00	
Soybean	75	25	3250	4000	115	19.5	25.00	
Rabi crops								
Chana	60	40	2733	2600	104	-8.7	14.29	
Mustard	59	41	2900	3500	108	16.9	14.29	
Wheat	97	3	1465	1983	76	30.1	23.08	

*Note:* Here the cost included transportation, storage and interest opportunity. Interest opportunity was calculated by assuming that a farmer sales immediately after harvest and puts the amount for a term-deposit at interest rate of 8 per cent per annum.

The benefit accrued on storage was found maximum in rice (41.62%), followed by wheat (30.12%), bajra (28.87), guar (25.00%), soybean (19.54%) and *rabi*-mustard (16.94%). The commodities for which farmers could not reap the benefit of storage or suffered price loss were mung (-25.05%) and chana (-8.7%).

### Perceived Reasons for Slow Progress in NWR Finance

Various reasons for limited popularity of NWR, as perceived by farmers, are presented in Table 5. It reveals that farmers in general are not aware about NWR facility and its various benefits. The use of storage facilities among farmers may be enhanced by educating them on the importance and benefits of warehousing in terms of price enhancement and liquidity available under NWR. The lack of scientific warehousing was another reason for poor response to the initiative. High transportation cost to distant warehouses and complex documentation also limited the use of NWR. Immediate cash requirement was also observed as an important reason for the limited success of NWR facility.

Table 5. Reasons for not availing NWR facilities (Responses of non-beneficiaries of NWR)

Reason	Response (%)
Lack of awareness	92
Lack of storage facilities	100
Transportation cost	100
Documentation involved	100
Immediate need of money	100

### **Perception of Bankers**

It was observed that most of the leading private banks offered loan against NWR. This business though was skewed towards traders, as only around 8 per cent applications were received from the farming community. The loan against NWR was available to producer-growers which varied in the range of 50-70 per cent. Such a variation was observed more in the case of private banks where it was in the range of 40-50 per cent based on the trade acceptance of the commodity and extent of price fluctuations witnessed during the past three years. In addition, high degree of

variation was observed for factors like poor availability of relevant information on marketing components like prices, arrivals and national and international trade scenario of a particular commodity. Also, the decision was primarily based on the local trade conditions considering the impact on transportation expenditures and other logistic arrangements required for marketing the produce in case of default. The study reveals that before extending loan against NWR, the banks considered factors like ownership of warehouse (public/private sector), business relationship, accreditation by WDRA and insurance of the commodity in that order.

### Conclusions and the Way Forward

The finance against NWR is related not only to warehousing and banking but also to the market. Likewise, the agencies having integration with the market have been found better equipped for disbursement of pledge finance like the collateral management service providers, APMCs and warehousing corporation. The collateral management service agencies, for their business structure, seem to give preference to traders over farmers, while marketing facilitating public agencies like APMC seem to be more focused on smallholder farmers. The farmers' understanding about the necessary procedure and documentation required to avail the loan, has made means like KCC and cooperatives more popular across the farming community.

The expected favourable price movement over time is the factor encouraging farmers to store the produce, but is contained by unavailability of warehouses near the production area. The foodgrain and oilseed crops have been found to be more popular from storage point of view and maximum benefits on storage have also been observed in these crops. The availability of warehouses, complicated procedure and poor awareness are some of the reasons limiting the use of loan against NWR. There is a strong need to establish warehousing infrastructure within the production area to popularise the use of warehousing and enhance availing of loan against NWR. Awareness about advantages of NWR loans needs to be generated by involving banks, Krishi Vigyan Kendras, State Agricultural Marketing Boards, Regulated Market Committees, NGOs, co-operatives, FPOs and even APMCs.

The facility of loan against the stored produce is being utilized mainly by the traders as reflected by the higher number of applications received by the Banks from traders. It may be an outcome of limited use of warehouse facility by the farming community. In order to inculcate storage habit and promote storage among the producers, warehousing should be encouraged under public-private partnership mode. All the leading banks do offer loans against NWR though it is skewed towards traders with wide variations in the percentage of loan disbursed against the market value of the commodity stored. The reasons for degree of variation have been cited as poor availability of relevant information on marketing components like prices, arrivals and trade scenario of a particular commodity and decision being based primarily on the local trade conditions. There is a strong need to push NWR beyond a negotiable instrument as it offers immense potential to trade, short-term loan to farmers, balanced supply of agri-commodities and enhances farmers returns.

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