Performance of Agri-warehousing in India

Abstract

Warehouses are scientifically designed storage structures that protect the quantity and quality of stored products with necessary preservation methods. The study assessed the growth and performance of warehouses, Negotiable Warehouse Receipt (NWR) and electronic Negotiable Warehouse Receipt (e-NWR) in India. Percentage analysis indicated that there is 102.42 per cent growth in the number of Central Warehousing Corporation (CWC) warehouses with the average storage capacity of 106.78 lakh MT and that of State Warehousing Corporation (SWC) warehouses has growth of 105.25 per cent with 439.12 lakh MT average storage capacity. In 2017-18, Warehouse Development and Regulatory Authority (WDRA) issued total 6447 NWRs for Rs. 313.66 crores value of deposited commodities and farmers got sanctioned the loan of Rs. 90.35 crores against NWRs. In 2019-20, WDRA issued total 134939 e-NWRs for Rs. 5303.44 crores value of deposited commodities and farmers got sanctioned the loan of Rs. 405.01 crores against e-NWRs which indicates that progress of e-NWR is faster than NWR. Study suggested that proper capacity building and awareness programs to farmers, higher tenure of loan and reducing warehouse rental cost will help the farmers to get the maximum benefit out of e-NWR.

Key words: e-Negotiable Warehouse Receipt, Negotiable Warehouse Receipt and Percentage Analysis.

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1. Introduction

Warehouses helps in minimization of post-harvest losses of stored products and plays an important role in implementing the agricultural price policy of the Government by way of price stabilization. Warehouses meet the financial requirements of the farmers for storing the product as nationalised banks provide credit to the extent of 75% to 80% of the value of the stored products based on the security of the warehouse receipt. Under Warehousing (Development and Regulation) Act, 2007, the Government of India has introduced Negotiable Warehouse Receipt (NWR) system in the country which came into force from the 25th October, 2010 through Warehouse Development and Regulatory Authority (WDRA). The WDRA is a Statutory Authority under the Department of Food and Public Distribution, Government of India. The Authority has its Headquarters in New Delhi. As per the section 11 of this Act, a warehouse receipt can either be in physical or in electronic form. The main objective of the WDRA is to implement NWR system in India is to encourage farmers not to sell their produce immediately after harvest when prices tend to be the lowest in the year and can seek pledge loans from banks. But the progress of loan against NWR is notified to be slow because of more paper work, losses in the form of theft and lack of accuracy etc.,

UNDER PEER REVIEW

(Dwivedi and Diwakar, 2006). So, the WDRA has launched electronic Negotiable Warehouse Receipt (e-NWR) on 26th September, 2017 but from August 2019, it has notified that registered warehouses shall issue only e-NWR and no one should issue NWR.

e-NWR is an electronic warehouse receipt issued by the WDRA through repositories namely National Electronic Repository Limited (NERL) and Central Depository Services Limited (CDSL) Commodities Repositories Limited (CCRL). e-NWR has a time validity depends on shelf life of commodity and it can be traded, transferable and can be auctioned under certain conditions like non-repayment of loan. There has been decline in the growth of e-NWR issued from 2019 (134939) to 2021 (88480) and facing the problems like poor awareness and complicated procedure. So, there is a need to strengthen the e-NWR mechanism. With this background, the aim of present study is to assess the performance of agri-warehousing in India with special reference to e-NWR system.

2. Data and Methodology:

The data for study were taken from the published reports of CWC, SWC and WDRA etc., The percentage analysis and mapping techniques were carried out by using simple statistical tools.

3. Results and Discussion:

i. Growth of warehouses in India:

From the graph 1 and below table 1, we can observe that, In 2021, Tamil Nadu has the highest number of WDRA registered warehouses in India (1120), followed by Madhya Pradesh (572), Maharastra (274), Rajastan (271), Uttar Pradesh (195), Gujarat (154), Andhra Pradesh (103), Chattisgarh (95), Haryana (70) and Bihar (70). There is a positive growth in number of warehouses in Tamil Nadu from 2011-12 to 2021 and more number registered in 2019-20. Andhra Pradesh is in 7th position with 103 WDRA registered warehouses including private warehouses. There is a negative growth observed in the A.P in the number of warehouses.

Table: 1. showing the growth of warehouses in India:

S. No	State	No. of warehouses registered										Cumulative	Present as on 2021
		201	201	201	201	201	201	201	201	201	202		

UNDER PEER REVIEW

		1-12	2-13	3-14	4-15	5-16	6-17	7-18	8-19	9-20	0-21		
1	Tamil Nadu	52	0	14	128	71	5	3	126	757	81	1237	1120
2	M.P	17	20	10	53	153	102	41	197	66	46	705	572
3	Maharastra	22	14	0	8	56	40	35	66	32	32	305	274
4	Rajastan	48	4	14	10	116	28	67	59	46	35	427	271
5	U.P	20	5	0	1	6	1	2	27	5	30	197	195
6	Gujarat	3	5	2	10	145	22	85	61	53	55	441	154
7	A.P	45	16	15	19	9	0	3	20	28	8	163	103
8	Chhattisgarh	0	1	0	0	0	0	0	0	0	95	96	95
9	Haryana	15	0	30	0	8	0	2	8	6	4	73	70
10	Bihar	10	0	21	10	12	1	2	24	5	6	74	70

Source: www.wdra.gov.in

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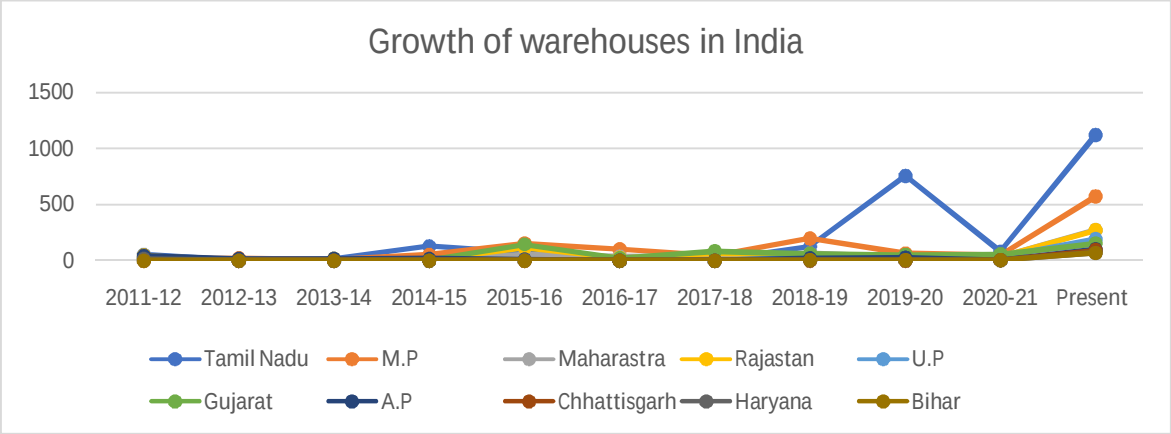
Graph 1 showing the growth of warehouses in India:



Source: www.wdra.gov.in

ii. Growth of warehouses under Central Warehouse Corporation (CWC):

From the table 2 and graph 2, there is a negative growth in the number of warehouses under Central Warehouse Corporation (CWC). From 2012 to 2014, there is 100 percent

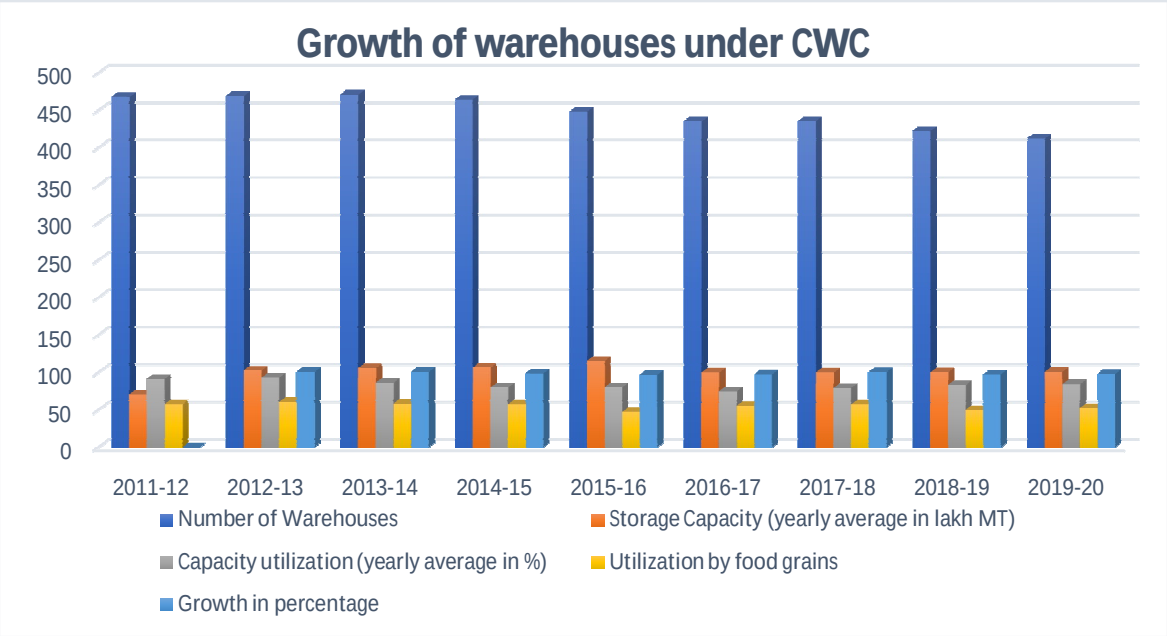
growth in the number of warehouses but from 2014 to 2020, there is a 97 percent of growth. In 2021, there is 102 percent growth in the number of warehouses. Yearly average storage capacity and capacity utilization was increased from 2011 to 2021. We can also observe that there are 422 warehouses are present under CWC but only 240 warehouses are registered under WDRA.

Table: 2. showing the growth of warehouses under (CWC):

S. No	Year	Number of Warehouses	Storage Capacity (yearly average in lakh MT)	Capacity utilization (yearly average in %)	Utilization by food grains	Growth in percentage
			(yearly average in %)			
1	2011-12	468	70.48	91	57	-
2	2012-13	469	102.34	93	60	100.2137
3	2013-14	471	105.54	86	58	100.4264
4	2014-15	464	106.21	80	57	98.5138
5	2015-16	448	115.11	80	47	96.55172
6	2016-17	435	99.65	74.53	55	97.09821
7	2017-18	435	99.69	79	57	100
8	2018-19	422	99.8	83.08	49.7	97.01149
9	2019-20	412	100.18	84.35	52.22	97.63033
10	2020-21	422	106.78	87.09	49.92	102.4272

Source: www.wdra.gov.in

Graph 2 showing the growth of warehouses under CWC:



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Source: www.wdra.gov.in

iii. Growth of warehouses under State Warehouse Corporation (SWC):

From the table 3 and graph 3, we can observe that there is 101 percent growth in number of warehouses from 2012 to 2014 and is continued till 2018. In 2018-19, there is a highest growth observed in number of warehouses under SWC i.e 111. 19 percent. There is positive growth observed from 2012 to 20120 and average storage capacity also has increased in the same period. Like CWC warehouses, there are 2203 warehouses are present under SWC but only 97 warehouses are registered under WDRA.

Table: 3. Showing the growth of warehouses under SWC:

S. No	Year	Number of Warehouses	Storage Capacity (in lakh MT)	Growth in percentage
1	2012-13	1659	250.93	-
2	2013-14	1689	266.96	101.8083
3	2014-15	1699	270.95	100.5921
4	2015-16	1723	270.03	101.4126
5	2016-17	1820	270.04	105.6297
6	2017-18	1929	308.77	105.989
7	2018-19	2145	340.83	111.1975
8	2019-20	2093	397.24	97.57576
9	2020-21	2203	439.12	105.2556

Source: www.wdra.gov.in

Graph 3 showing the growth of warehouses under SWC:

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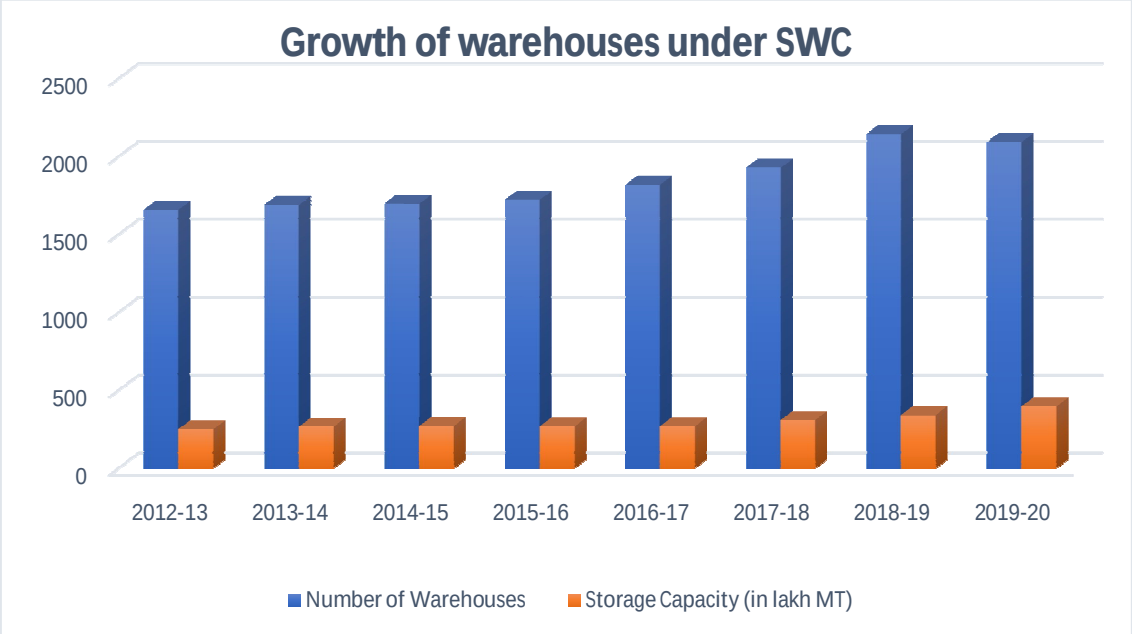

Source: www.wdra.gov.in

iv. Growth and performance of Negotiable Warehouse Receipt (NWR):

From the table 4, we can observe that there is 102 percent increase in number of warehouse receipts issued from 2011-12 to 2012-13. There is 74.27 decrease 2013-14 and there is highest growth observed in 2014-15 i.e 277.62 percent. Highest number of warehouse receipts (19350) are issued in 2016-17 and highest loan amount taken against NWR is taken in 2014-15. In 2017-18, the growth of warehouse receipts has decreased to 33.32 percent.

Table: 4. Growth of NWRs issued in India

Sl No.	Year	No. of NWRs issued	Total value of commodities deposited against NWRs (Rs. In cores)	Total loan against NWRs (Rs. In crores)	Growth in percentage
1	2011-12	8056	1356.32	591	
2	2012-13	8242	416.26	105.65	102.31
3	2013-14	6121	583.02	108.02	74.27
4	2014-15	16993	1160.66	388.42	277.62
5	2015-16	15178	845.05	203.47	89.32
6	2016-17	19350	719.13	148.4	127.49
7	2017-18	6447	313.66	90.35	33.32
	Total	**80387**	**5394.9**	**1635.3**	

Source: www.wdra.gov.in

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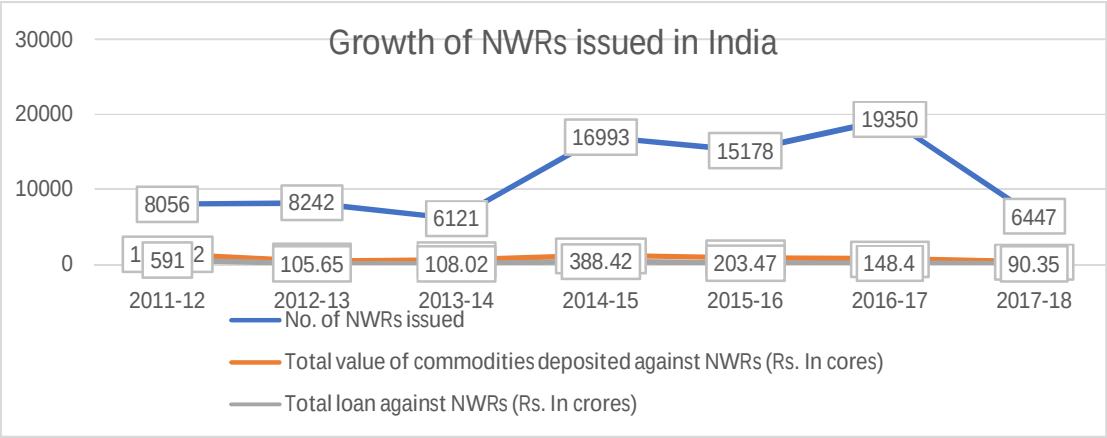
Graph 4 showing the growth of NWR in India:



Source: www.wdra.gov.in

v. Growth and performance of electronic Negotiable Warehouse Receipt (e-NWR):

Table: 5. showing the growth of e-NWR in India:

S. No	Particulars	2019-20			2020-21		
		NERL	CCRL	Total	NERL	CCRL	Total
1	No. of e-NWR issued	125011	9928	134939	76582	11898	88480
2	No. of warehouses issuing e-NWR	236	121	357	311	38	349
3	Quantity of stocks deposited against e-NWR (in lakh MT)	8.55	4.43	8.98	7.26	0.54	7.8
4	Value of stocks deposited against e-NWR (Rs. In crore)	3972.06	1331.38	5303.44	3044.21	771	3815.21
5	Pledge/Loan against e-NWR (Rs. In crore)	320.66	84.35	405.01	713.27	17.45	730.72

Source: www.wdra.gov.in

Graph 5 showing the growth of e-NWR in India:

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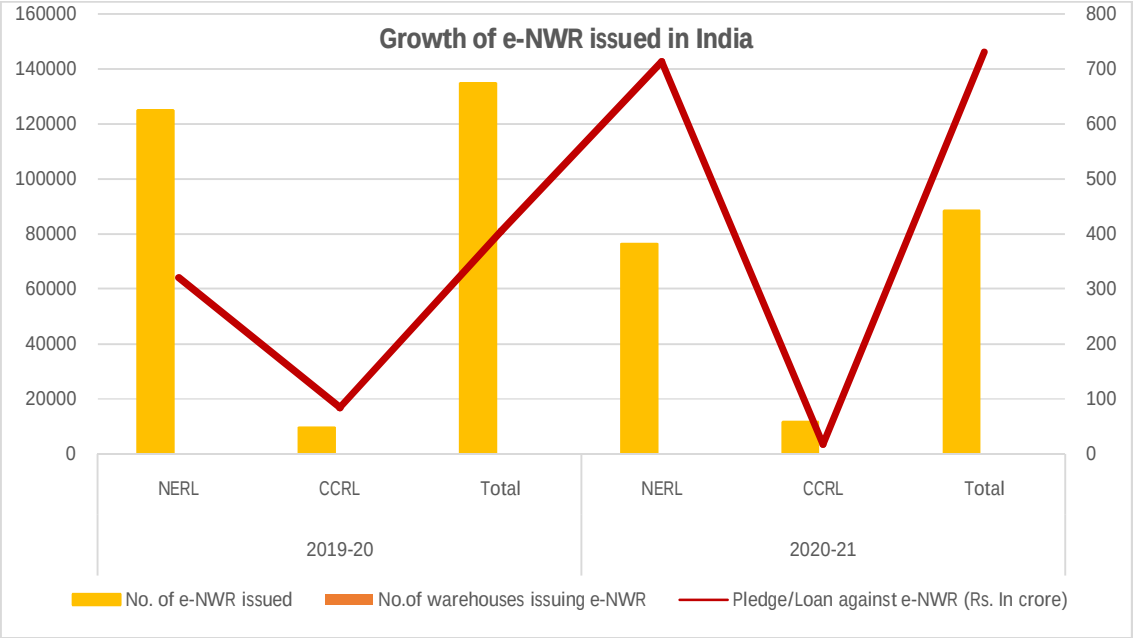

Source: www.wdra.gov.in

From the table 5 and graph 5, we can observe that most of the e-NWRs issued by NERL than CCRL. There is decrease in number of e-NWR issued in 2020-21 (88480) than 2019-20 (134939) and increase in loan against e-NWR 2020- 21 (Rs. 730.72crores) than in 2019-20 (Rs. 405.01 crores). The reduction in e-NWRs transaction was due to seasonality (heavy deposit), as well as due to COVID.

4. Conclusion and Suggestions:

Empirical results revealed that there is 102.42 per cent growth in the number of Central Warehousing Corporation (CWC) warehouses with the average storage capacity of 106.78 lakh MT and that of State Warehousing Corporation (SWC) warehouses has growth of 105.25 per cent with 439.12 lakh MT average storage capacity. In 2017-18, Warehouse Development and Regulatory Authority (WDRA) issued total 6447 NWRs for Rs. 313.66 crores value of deposited commodities and farmers got sanctioned the loan of Rs. 90.35 crores against NWRs. In 2019-20, WDRA issued total 134939 e-NWRs for Rs. 5303.44 crores value of deposited commodities and farmers got sanctioned the loan of Rs. 405.01 crores against e-NWRs which indicates that progress of e-NWR is faster than NWR. There are certain challenges facing in usage of e-NWR which include rejection by banks to sanction loan against e-NWR, non-availability of repository participants in the near vicinity of

UNDER PEER REVIEW

warehouse, low capability of warehouseman in adoption of technology especially in PACS, limiting issuance of e-NWR to agricultural commodities, high transportation and warehouse rental cost, non-availability of warehouses, complicated procedure and poor awareness, reluctant to store the commodity in warehouse, prior advances taken from traders and accreditation with WDRA.

Suggestions:

There is a need to strengthen the e-NWR mechanism with some measures like registration of warehouses under WDRA, modification of norms for registration of smaller warehouses, warehouses near production centres will reduce transportation costs and popularizing the pledge finance by publicity campaign to increase the participation of farmers in e-NWR. A deliberate intervention from the government is needed to strengthen the capacity e-NWR & reducing the cost of transportation and warehouse rent by linking the roads of remote villages and warehouses, proper guidance to banks through warehouses by WDRA and availability of RP near every registered warehouse will help the farmers to get the maximum benefit out of e-NWR.

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