Deficiencies in the Quantity of Paddy to be stored in the collection centers of Balod District of Chhattisgarh State and its Redressal

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ABSTRACT – *There are four collection centers and one marketing association in Balod District. As per the data received, the storage facilities in the collection centers are inadequate because of which the storage is done in unscientific method and under the open sky. There is a lack of platforms and sheds. Sensitive food grains like paddy should not be stored for a long time. Since the storage system in Balod District is inadequate, it is true. The main reason for the reduction in yield in the collection centers is due to the lack of timely transportation because storage is arranged according to the capacity in the storage centers. But due to not lifting at the right time, the stock increases, due to which the yield decreases due to dryness, rain, and insect-pests, which leads to Qualitative and Quantitative loss in the yield and the Officer Employee have to bear that loss. Is. The main reason for the decrease in yield is due to non-availability of Transportation Facility. There is also inadequacy of Storage System because of the amount of Expenditure. In Chhattisgarh, storage is done by unscientific method. From the above research it comes to the conclusion that my research Hypotheses is true. A successful attempt can be made to rectify this by making the Government aware of the findings and suggestions of this study, so that adequate storage arrangements can be done, which will reduce the yield reduction or come within the criterion so that the Officers and Employees can be benefited.*

Key words - *yield, main crop, storage system, storage centre, unscientific method.*

1. Introduction:-

Paddy is the major crop of Chhattisgarh, therefore it is referred as the Rice Bowl of Chhattisgarh. Paddy is procured from farmers by marketing associations through committees. It is then stored so that it can be used properly. There is one Marketing Union and four

Collection Centers in Balod District. The Collection Centers work under the control of the Marketing Federation. Paddy comes from the committees in the Collection Centers, when the storage of Paddy exceeds the capacity in the committees, then there is a provision of lifting by the Marketing Association within 72 hours. Paddy is sorted out by the Millers from the Collection Centers. The Millers are divided into two parts, Arva and Usna. At present 53 Arva Millers and 26 Usna Millers are registered, which do the work of lifting Paddy from Collection Centers and Societies.

First of all, the Millers have to register with the Headquarters then after getting permission from there, a Contract is made with the District Marketing Association. Bank guarantee is taken from the Millers at the time of Contract. The millers have the right to lift the paddy as much as is written in the Bank Guarantee. The whole process is computerized.

Since the purchase of Paddy from the farmers is done by the Service Cooperative Societies through the District Marketing Federation. At present there are 122 Service Cooperative Societies and 4 sub-centers in Balod district. There are total 126 procurement centers where the work of buying paddy from farmers is done.

If the storage capacity of paddy in Service Cooperative Societies exceeds, then 4 more collection centers have been set up by the District Marketing Federation:-

1. Jagtra Phad - 70000 Tons
2. Dhobanpuri Phad - 70000 Tons
3. Phundabhatha Phad - 50000 Tons
4. Malighori Phad - 50000 Tons

There is no fixed time of pickup at the Collection Centers. The lifting takes place as per the orders of the Government. The Headquarters of the Collection Centers are located at Atal Nagar, Naya Raipur (Chhattisgarh). According to his instructions, Paddy is lifted by the custom millers of the district, which goes through the following process: -

1. Registration is done at the headquarters.
2. After obtaining the permission certificate, the DMO of the district. (District Marketing Officer) Contract is done with the District Marketing Association as per rules.
3. The contract is for one year. Millers Bank Guarantee DMO after contract in which a certain amount is written, they have the right to lift paddy from committees or collection centers up to that amount.
4. Millers lift the paddy from DMO after D.O receipt. This process is computerized, when the paddy is lifted up to the guaranteed amount, the computer is automatically locked.
5. Bank Guarantee DMO (District Marketing Officer) District Marketing Association keeps it for its own safety, so that no problem is faced.
6. On the demand of rice by the millers government (Chhattisgarh government and central government), paddy is lifted, rice is divided into two parts: - Arva and Usna.
7. Then it is sent to Non (Civil Supplies Corporation) c.g. Government and FCI (Food Corporation of India) have to give 67 percent per quintal of Arva and 68 percent of Usna rice to the central government.
8. All kinds of expenses are paid by the government to the millers.
9. At the end of the season (1st October to 31st September financial year) complete rice is received from the millers and their bank guarantee is withdrawn.
10. Presently there is contract with 79 millers in Balod district. Assessment of deficiencies in collection centers is done every year in one season. The loss is recognized by the government up to 1 percent, more than that the collection centers and committees have to bear the loss. The present research paper has been prepared by reviewing the literature. It has been found from the reviews that no work has

been done in Balod district and even in Chhattisgarh on the shortcomings in the storage system and quantity of produce in the collection centers and committees. The importance of the selection of the present research paper is that with this, the government will try to make adequate and safe arrangements for storage in the collection centers and efforts will be made by the government to solve the problems like shortages in yield due to insufficient storage. By which the beneficiaries (collection centers, societies and farmers) will be benefited. The purpose of the present research paper is to find out the adequacy and inadequacy of storage and the deficiencies in the produce due to storage and make the government aware and submit suggestions for redressed.

Arrangement for storage of paddy in the collection centers: - The work of purchasing paddy in the state at support price is done by the marketing association through cooperative societies. Paddy procured in support price is disposed of through millers. Paddy is supplied directly to the millers from the procurement center, in case the paddy exceeds the buffer limit in the procurement center, and it is stored in the collection centers. After the paddy is finished in the committees, the millers are supplied paddy from the collection center. The transporter is appointed by Markfed to transport paddy from the committee to the collection center. For proper maintenance of paddy, the collection centers are prepared as follows:-

1. Stake plan in the collection center: - Before collecting paddy, on the basis of area and storage capacity in the collection centers, separate stack plan is prepared for new and old gunny bags for thick, thin and sarna paddy, so that there is no inconvenience in storage. That is, last year 03 stake plans of thick, thin and sarna were prepared but at present 06 stake plans will be made.
2. Verification of Dharamkanta: - Before bringing the paddy to the collection centers, the Dharamkanta from which vehicles and paddy are weighed, it is first verified from the Measurement Department, so that the situation of any kind of dispute with respect to the weight may arise. Don't be If there is any kind of dispute regarding the weight, then immediately after contacting the measurement department, the verification of Dharmakanta is done.
3. Adequate arrangement of hamals: - According to the storage capacity in the collection centers, adequate hamals are arranged for the incoming and outgoing of paddy, so that at the time of arrival and outgoing of paddy, emptying and filling work can be done by trucks easily. Also, after the end of the stake, arrangements are made for the necessary laborers for filling and cleaning the swept paddy received.
4. Dunnage arrangement: - Paddy is kept above the dunnage for storage, so the arrangement of dunnage should be good so that moisture does not come in the paddy even in rain. A stake in the collection center contains 3000 bags 1200 quintals and is 32 feet in length and 22 feet in width. It takes 700 sacks of straw to make a steak. Which is of two layers. Drains are constructed around the collection center for shifting drainage.
5. Hygrometer device: - Moisture is observed at the time of inward and outward movement of paddy in the collection centers. The maximum moisture content of paddy is fixed at 17 percent by the government, so the percentage of moisture at the time of arrival of paddy should not be more than 17 percent. If the moisture is more than 17 per cent, the paddy is returned to the respective procurement center. Otherwise the quantity of paddy gets spoiled and dried.

Table 1

Average Good Variety (FAQ) Parameter of Paddy

No.	Description	Percentage
1	Other inorganic substances	1 %
2	Organic	1 %
3	Rotten, Rotten Powdered Grits and Weevil	5 %
4	Undercooked shrunken grains	3 %
5	Low Grade Mixtures	6 %
6	Moisture	17 %

(Food Civil Supplies and Consumer Protection Department, Government of Chhattisgarh)

6. Arrivals of Paddy at the Collection Center:- According to the type of gunny bags and the variety of paddy received in the collection center, the receipt of paddy is done. At the time of receipt of paddy, from which committee, how many new, one recruitment, old and PDS. The amount of gunny bags received will be mentioned, which has to be maintained from the stock register.

7. Outgoing of paddy from collection centers:- First in, first out rule is followed for supply of paddy from collection centers to the millers, so that the dryness in the collection centers can be kept under control. It should be kept in mind that supplying paddy by opening all the stakes is likely to increase the sweep and dryness of paddy. Therefore, the steak should be opened as needed. If the paddy is more than the buffer limit in the committees, it is sent to the collection centers. Variety wise paddy is supplied to the miller in 50 percent new gunny bags and 50 percent in old gunny bags.

8. Provision of Cap Cover:- For proper maintenance in the paddy stored in the collection centers, the stored problem stake has to be covered with a cap-cover so that there is no damage to the paddy due to sudden rain and sun. Therefore, it is necessary to keep adequate arrangement of cap cover in the collection center before storage.

9. Security system:- There are security guards in the collection centers for safe keeping of paddy so that paddy can be kept safe from animals and arson and theft etc. Fire-fighting arrangements have to be made in the collection centers for protection against fire.

2. Review of Research Literature:-

Bhardwaj Sandeep (2020) Challenges of Grain Storage – A Study, CCS. Haryana Agricultural University Haryana (India). The deficiencies in the quantity of paddy stored have been told in the ShandhPatra. Aggarwal Madhu, (2008) Organization and marketing role of KrishiUpajMandi Committees – What should be the process of storage and marketing process has been explained. Kumar Vijay (2000) Effect of Agriculture on Economic Growth – The shortfalls in economic growth have been pointed out due to lack of warehousing process.

3. Objective of research:-

To analyze the problems related to the storage of agricultural produce (paddy) and the deficiencies in the quantity of paddy collected and conclude and submit suggestions for redressal.

4. Hypothesis:-

H0 :- The problems related to storage in collection centers and the shortcomings in the quantity of paddy collected are favorable.

HA1 :- The problems related to storage in collection centers and the shortcomings in the quantity of paddy collected are unfavorable.

5. Limitations of the study:-

- The study area has been taken with special reference to Balod district of Chhattisgarh state.
- Balod district has taken over 4 collection centers and one marketing association.
- Data from the study period 2013-2014 to 2019-2020 years has been taken.

6. Research Methods:-

The present study in the present research paper is based on secondary data. The report has been collected from the Project Secondary Data District Marketing Association, Balod (Chhattisgarh) for the session 2013-2014 to 2019-2020. The research paper does not require a sample as it is limited in totality. Survey research and post-facto method have been used in the research paper. The analysis of the data will be done on the basis of statistical methods, percentage and drug method and after reaching the result through the graph, conclusions will be presented and suggestions will be presented.

7. Data Analysis:-

Data analysis secondary data in Balod district, information related to paddy procurement / farmer registration and paddy disposal in the last years has been taken from District Marketing Association Balod. Based on the data from 2013-2014 to 2019-2020, the number of collection centers, the quantity of paddy stored therein, the quantity of total dismantled paddy and the amount of shortage received in the collection centers have been analyzed.

Table-2

Year wise number of paddy collection centers in the district

Year	Number of paddy collection centers in the district
2014-2013	3
2016-2015	4
2017-2016	4
2018-2017	4
2019-2018	4
2020-2019	4

(Information related to paddy procurement/farmer registration and disposal of paddy in Balod district in the past years, District Marketing Association Balod CG.)

Table-3

Total quantity stored in collection centers and total disposal quantity (in tonnes)

Year	Total Stored Quantity at Collection Centers (in Tonnes)	Total Disposal Quantity at Collection Centers (in Tonnes)
2014-2013	2,45,282.98	2,29,708.01
2015-2014	2,29,601.13	2,25,140.37
2016-2015	2,18,160.28	2,17,378.61
2017-2016	2,30,048.83	2,26,656.37
2018-2017	1,42,359.31	1,41,016.77
2019-2018	2,35,071.85	2,30,553.55
2020-2019	2,36,898.72	2,29,492.95

(Information related to paddy procurement/farmer registration and disposal of paddy in Balod district in the past years, District Marketing Association Balod CG.)

Graph – 01

Total Stored Quantity at Collection Centers (in Tonnes)

Total Disposal Quantity at Collection Centers (in Tonnes)

Table 4

Quantity and percentage of shortfall received in collection centers

Year	Quantity of Shortage Received at Collection Centers (in Tonnes)	Percentage of Shortage
2014-2013	9,374.98	3.82Percent
2015-2014	4,460.75	1.94Percent
2016-2015	781.67	0.36Percent
2017-2016	3,392.46	1.47Percent
2018-2017	1,342.55	0.94Percent
2019-2018	4,518.30	1.92Percent
2020-2019	7,405.77	3.13Percent

(Information related to paddy procurement/farmer registration and disposal of paddy in Balod district in the past years, District Marketing Association Balod CG.)

Graph -03

Decrease of percentage = $X/Y \times 100$

X = Quantity of shortfall received

Y = Total Stored Quantity

Percentage of drug reduction = $\frac{\sum X}{N}$

X = percentage of reduction

N = number of years

8. Conclusion, Reasons and Suggestions -

Since the storage system in Balod district is inadequate, it is true. The main reason for the reduction in yield in the collection centers is due to the lack of timely transportation. Because storage is arranged according to the capacity in the storage centers. But due to not lifting at the right time, the stock increases, due to which the yield decreases due to dryness, rain, insect-pests, due to which there is a qualitative and quantitative loss in the yield, that loss should be borne by the officers. Does matter. The main reason for the decrease in yield is due to non-availability of transportation. Also there is inadequacy of storage system. Because the amount of expenditure is not enough, they only arrange storage according to their capacity, some rules are also the reason for the shortage. In Chhattisgarh, storage is done by unscientific method. From the above research it comes to the conclusion that my research hypotheses are true.

Reason – 1. The main reason for the shortage in the collection centers is due to non-timely lifting. 2. The reason for the deficiency is temperature (humidity), insects – rodents, rain, rats and ants. Because the pickup is not done on time. 3. There is no fixed time for lifting. 4. Delay in the demand of rice from HQ which leads to delay in paddy lifting as millers lift paddy only on demand of rice. 5. Due to delay in time, there is more reduction in the quantity of produce, due to which necessary action is also taken on the manager. The percentage of shortfall accepted by HQ is 1%. 6. Use of only unscientific method in storage is also the main reason for shortage. 7. Not resolving the grievance letter from time to time by the centers to the government.

Suggestion – 1. In the storage centers, maximum number of pucca platforms, seeds should be constructed for adequate storage. 2. The offtake should be at the right time so that the percentage of shortfall does not increase. 3. The demand of rice from the headquarters should be on time so that the millers can lift the paddy at the earliest. 4. To avoid temperature, insects, rodents, rats and ants, both scientific and unscientific methods should be used. 5. The State Government and the Central Government should explore the market so that the demand of rice increases in the states and districts so that the offtake of paddy can be maximized. 6. Action is taken on officers and employees due to shortage in excessive quantity, due to proper management, action situation will not arise. 7. To solve the problem expeditiously when the complaints letter is handled by the centers to the government from time to time. So that by making adequate arrangements, the shortfall can be found.

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