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STUDY ON POLICIES AND PRACTICES OF GRAIN WAREHOUSING SYSTEM IN AKOLA DISTRICT MAHARASHTRA

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ABSTRACT

This research shows how warehouse should manage planning and control related activities in warehouse systems in today's world of rapidly changing customer's demand, small internet orders, tight delivery schedules and high service level requirements. The post-harvest losses in India amount to 12 to 16 million metric tons of food grains each. The monetary value of these losses amounts to more than Rs. 50,000 crores per year so there is need of proper policies and practices in grain warehousing. This warehouse survey describes current, traditionally planning and control policies in warehouse systems, subsequently with new approaches to manage planning and control policies more efficient and to reduce response time in order to maintain warehouse performances in today's world of rapidly changing customer's demand. This research shows the study of present policies and practices of grain warehousing in Akola Maharashtra. The present policies and practices were according to the WDRA. The analysis of necessary policies and practices is done by survey of the grain warehouses. The suggestions were given for the better management of the grain warehouse. It can be concluded that the main savings can be derived in planning related activities and recommended to put more effort in the development of new models instead of optimizing existing ones.

Key words: *Model, Policies, Service, Traditional, Warehouse.*

1. INTRODUCTION

Warehousing involves the storage of raw material, work-in-process inventory or finished goods in a covered space in the most suitable way for a specific time period. With the growing importance of logistics and supply chain management throughout the world, warehousing has emerged as one of the vital component of the supply chain. Globally, USD 100 billion warehousing industry has undergone significant changes in the last decade owing to the growth in world trade and expansion of international markets as well as increasing application of new technology. Internationally, warehousing industry is classified into three different type's viz. public warehousing, private warehousing and Contract warehousing **Recto (1980).** In India, warehousing industry is mostly dominated by public sector undertakings viz., Central Warehousing Corporation (CWC), State Warehousing Corporations and others. The total covered capacity available with FCI for storage of Food grains including the capacity hired from Central Warehousing Corporation and State Warehousing Corporations was 261.21 lakh tonnes as on 1.3.2005. The hired capacity with the Food Corporation of India was 109.80 lakh tonnes as on 1.3.2005. Warehousing activities of CWC include food grain warehouses, custom bonded warehouses, container freight stations, inland clearance depots and air cargo complexes. , the risk of loss or damage to goods in storage is borne by the warehouse keeper. Since it is bound to return the goods in good condition, the warehouse becomes responsible for any loss, theft or damage, etc. Thus, it takes all precautions to prevent any mishap. When goods are deposited in any warehouse, the depositor gets a receipt, which acts as a proof about the deposit of goods. The warehouses can also issue a document in favor of the owner of the goods, which is called warehouse-keeper's warrant. This warrant is a document of title and can be transferred by simple endorsement and delivery. So while the goods are in custody of the warehouse-keeper, the businessmen can obtain loans from banks and other financial institutions keeping this warrant as security. In some cases, warehouses also give advances of money to the depositors for a short period keeping their goods as security **(Borkar *et al.* 2014)**

2. METHODOLOGY

Warehousing is the concept related to collection, storage and distribution of the grains, fruits and vegetable at timely intervals. Warehouses are composed of mainly CWC (central warehousing corporation) and MSWC (Maharashtra state warehousing corporation). Besides these, there are privately owned warehouses which are available on rent for the purpose of agricultural commodity storage. Government warehouses are generally owned by FCI. Methodology is the strong foundation for systematic and scientific research or investigation. It is imperative to give the details of investigation and methods adopted by the investigator in finding out the fact or problems. In this desertion studied warehousing system in Akola and policies followed by warehousing management.

2.1 MATERIALS

- Selection of study area
- Collection of data
- Primary data collection
- Secondary data collection

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- Study the policies and practices warehousing system in India
- Analysis of all data
- Report writing

1. A review of warehouse system.
2. A survey comprises with the storage facilities and functioning of the warehouses.
3. Follow up interviews with retailers and owners of warehouses in akola Maharashtra;
4. Analysis and report writing.

3. RESULTS AND DISCUSSION

Survey was done on the current status of grain warehousing system in India as well as Akola. Agriculture is the backbone of Indian economy and the agricultural productivity is increasing day by day. It is being achieved due to implementation of modern techniques in agriculture. The storage of agricultural produce is most important. So to facilitate this, warehouses are constructed and operated by CWC and MSWC. The present status of warehouse in India is given below in Table.

Sr. No	Name of Organization/ Sector	Storage Capacity LTs
1	Food Corporation of India (FCI)	33.60
2	Central Warehousing Corporation (CWC)	10.13
3	State Warehousing Corporations (SWCs)	23.00
4	State Civil Supplies Departments	11.30
5	Cooperative Sector	15.37
6	Private Sector	18.97
	Total	112.37

3.1 PRESENT GRAIN WAREHOUSING POLICIES AND PRACTICES IN AKOLA DISTRICT MAHARASHTRA

3.1.1 Practices

Fumigation

Fumigation is a method of killing pests, termites or any other harmful living organisms to prevent transfer of exotic organisms. fumigation is done for wood material used for packing of goods to be exported. In some cases, empty container before stuffing of cargo is fumigated. Most of the cases, fumigation is done after completion of stuffing of cargo and closing the door of container. The result of such fumigation is more effective, as the gases used for fumigation circulates all spaces in the container without spreading gas outside, as the container is closed. Methyl Bromide is commonly and widely used as fumigants for fumigation all over world. Other widely used fumigants are Chloropicrin, Phosphate, Dichloropropene, Methyl isocynate, hydrogen cyanide, sulfuryl fluoride, formaldehyde etc.

Stock rotation

The primary motive for stock rotation is that a warehouse positions older items so they sell more quickly than newer inventory. Rotating stocks reduces the potential for throwing out inventory that have pending expiration dates. By rotating and selling through older inventory first the business may avoid constant discount on items that impede profits.

Separation of different commodities

The separation of commodities is done to separate the different varieties stored in the warehouse so that it is easy to handle the different commodities.

Ambient Aeration

Aeration is a process of forcing air through grain to reduce its temperature. It is a very useful storage management tool which can preserve grain from deterioration, especially where the moisture content of the grain is above its safe level. Aeration can be used as effectively in sealed stores as in unsealed ones - sealed stores merely requiring the provision of an air-exhaust ventilator which can be sealed whenever fumigation is to be carried out.

Frequent sampling and inspection for insect infection

The objective of any sampling and inspection is to formulate the basic for future planning and action it forms an important base for determining its monetary value and whether the condition and quality of grain will satisfy requirement of potential buyer. For the detection of light infestation, a more detailed examination is required. The following techniques may prove rewarding.

- Agitation of bags
- The feel of grain in bulk
- Traps
- Traps
- Dead insects
- Repellents

Grain warehousing policies

- The Warehousing (Development and Regulation) Act 2007
- Pricing policy
- Construction policy
- Manpower policy

The warehouseman shall maintain a record of manpower in the warehouse for effective management of the same. Manpower requirement is to be decided based on commercial transactions and technical considerations.

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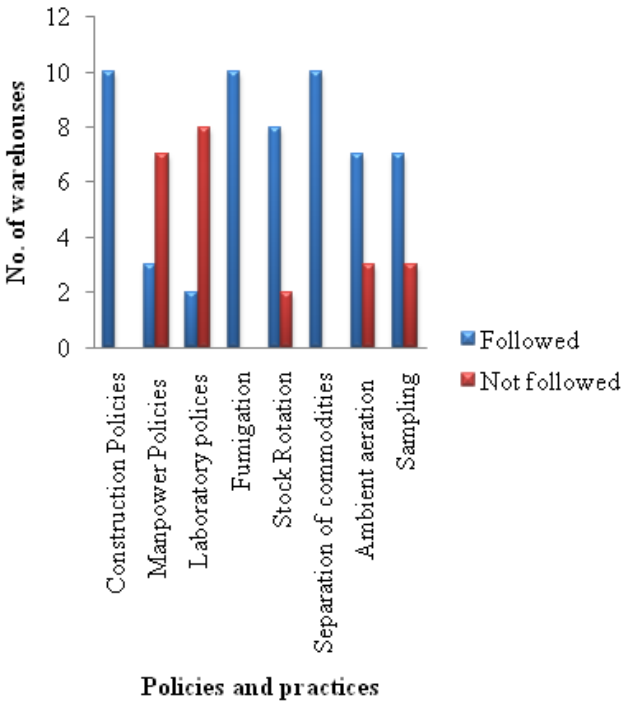
Storage Capacity of Warehouse (in MTs)	Up to 5000	5001-10,000	10001-25000	Above 25000
Warehouse Head	1	1	1	1
QC Inspector (Technical Asst.)/Jr. QC Inspector (Jr. Technical Asst.)	1	1	2	3
Warehouse Asst.	1	2	4	5
Security Guards	4	4	6	8

Present followed policies and practices in warehousing system in Akola

This dissertation done in 10 warehouses survey in Akola. In this survey observed that in Akola warehousing system mainly WDRA polices and fumigation, stock rotation, sampling, ambient aeration, pest control practices are followed.

Table 3.1 Present followed policies and practices in Akola warehousing system

Policies and practices	Followed	Not followed
Construction Policies	10	0
Manpower Policies	3	7
Laboratory polices	2	8
Fumigation	10	0
Stock Rotation	8	2
Separation of commodities	10	0
Ambient aeration	7	3
Sampling	7	3



Suggestions for better management of warehouses

- Keep the godown neat and clean.
- Policies must be followed strictly
- Insure "no smoking" and display "no smoking" boards.
- Practices regarding to warehouse system must be followed
- There must not be any tree near to warehouse to avoid entrance for rodents
- There must be proper aeration in the warehouse
- There must be well skilled and educated staff in warehouse
- Regular inspection of warehouse must be done
- Use appropriate fire extinguishers
- Do not store/ keep mats gunnies in loss condition
- Do not store hazardous and non-hazardous goods together
- Do not carry naked fire lamp or lighted candles in the premises
- Do not allow losses or temporary connection or pendant electric lights
- Do not allow accumulation of wastages or growth or grass in the vicinity.
- Do not miss use fire extinguishers, hydrants and buckets.
- Do not use water or fires or electrical origin (shock hazard) or inflammable liquid fires (will splatter)

4. SUMMARY

This chapter deals with the description of summary and conclusion used to accomplished the survey done to attain the desired objectives of the study entitled study on policies and practices of grain warehousing system in Akola district, Maharashtra. Warehouses of Akola were selected for the Survey *viz.,* Buldana urban, CWC Akola, MSWC Akola, BGK, Ambika, Maroti nandan, Salasar, Atco, Usha and NCML. The storage of Grain produce is most important. So to facilitate this, warehouses are constructed and operated by CWC and MSWC while rest are privet warehouses.

- The study of present policies and practices was done according to the WDRA manual in which all the requirements of grain warehousing are given for the better management of grain warehouse.
- The warehouses were analysed on the basis of storage capacity and facilities being provided in the warehouses. Modern facilities such as proper fumigation, fungicides spray and all the modern amenities were checked for the study purpose. It was found that MSWC, BGK and NCML warehouses have modern facilities and rest need to adopt the modern storage facilities. The storage capacity and wastage in warehouses of Akola was studied and effort was made to understand the reasons for the wastage. Besides wastage in warehouses, the overall policies and practices were studied.
- After analyzing the overall conditions of policies and practices in warehouses, suggestions like keeping warehouses clean, policies must followed strictly, practices in warehouses must be followed and other were given for the better management of overall warehousing system in Akola.

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5. CONCLUSION

At the end of present study, it can be concluded that present warehousing system in Akola is satisfactory in the sense of capacity to fulfill the requirement of population but the facilities being provided were not modern. The management system of warehouses was studied and it was found that, there is lacking of implementation of modern warehousing storage facility to facilitate the proper functioning of warehouse management system. Modern warehousing storage facilities include the Fumigation, insecticide spray and proper preventive facilities. It can be also suggested to adopt modernization of receipts and overall record keeping of warehouses along with preventive measures implementation for betterment of warehousing system in Akola.

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