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HOW GRAIN MOVEMENT IN BULK CONTAINER WILL HELP INDIA?

– PK Bhardwaj



EDIBLE OILS: NEED TO BOOST DOMESTIC PRODUCTION

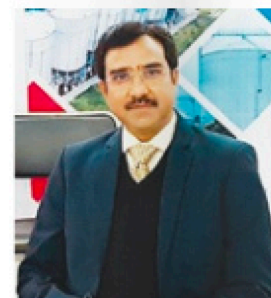
– G Chandrashekar

EDIBLE OILS: MYTHS & FACTS

– Dr. R. B. N. Prasad



HOW GRAIN MOVEMENT IN BULK CONTAINER WILL HELP INDIA?



— PK Bhardwaj

Bagged Storage of Food grain is the most expansive method to store Food grain owing to its high cost of operation and spoilage of food grain, which is a big loss to the nation. Food Corporation of India (FCI) has recognized this and since 2006 taking steps to convert bagged storage to bulk storage. World over the grain storage happens in bulk in grain storage silos as it is the most scientific and cost effective methodology.

Grain storage in silos ensures long term & high speed storage and handling of grains with least losses.

FCI Plans

FCI currently has more than 750 lakh tonnes of bagged storage and out of which approximately 175 lakh tonnes is CAP (Cover and Plinth) storage. Since CAP storages are open storages hence most of the losses occur only in CAP storages. FCI has now decided to convert about 100 lakh tonnes of this CAP storage into modern and scientific Grain Silo Storage under PPP Mode in VGF and Non-VGF formats.



Slow Moving Plan

FCI has plans to build this 100 lakh tonnes of Grain Silo Storage by 2020. Most of the Grain Silo Terminals are proposed to be of 50000 MT Capacity and all would be having Rail Siding so that grains could be moved in bulk by rail. However, owing to various reasons the work is going a little slow. The biggest hurdle is buying and acquisition of land to build Grain Silo Terminals.

FCI in all their tenders has asked for Railway Siding, as the idea is carry food grain in Food Grain Wagons of 62 tonnes each. Construction of Railway Siding requires a long 1.5 km x 15 m strip of land. Buying of land and its

acquisition is in the scope of Concessionaires as per Concessionaire agreement and this is the main reason that there is delay in construction of Grain Terminal.

Finding such a long land strip close to railway station is a difficult process as nobody wants to sell his land in such narrow strips, and concessionaires eventually end up buying 3-4 times the plot of land that is required which delays the project a lot and makes the complete project unviable sometimes.

Due to this constraint Grain Terminals of FCI are moving very slow and if it continues then probably FCI won't be able to complete

its target of building a Silo Storage capacity of 100 lakh tonnes by 2020.

If the railway siding provision is removed from the specifications of upcoming FCI Silo Storage terminals, all the projects will move very fast and also there would be a lot of capital saving.

And, this is only possible if FCI specifications accept the movement of food grains in Bulk via Food Grain ISO Containers.

How Food Grain Containers Can Help?

Once the containers are introduced in FCI Silo Storage Terminal Specifications, things will become much easier and economical.

ISO Containers are universally accepted mode of transport due to its standard design and flexibility of movement via Rail, Road and Sea.

Besides since ISO Containers are being used universally, systems related to its Design, Manufacturing, Operation, Inspection & Maintenance etc. all are standardized and in place.

With the introduction of Food Grain Movement

via containers FCI will get following direct benefits;

1. Containers have flexibility to be moved by Rail as well as via Road, the necessity of Railway siding will no longer be there. The concessionaire can move the containers to nearest ICD and rail it out from there.
2. Concessionaires can get land at a much cheaper price, as now they don't have to necessarily search for land closer to railway station. Now their choices will increase and thus their bargaining power too.
3. No railway siding means big railway infrastructure like railway siding, special tools, maintenance spares etc. is not required and this also means that much lesser land is required which will save overall project cost.
4. Construction of railway siding is not easy, as one has to coordinate with more than 30 railway officials to get the railway siding approvals, which delays the railway siding construction and thus the whole project gets delayed.
5. Since the overall Land requirement will decrease with the absence of Railway Siding smaller players too can enter into this business at a very competitive price. This fact again will save more FCI money.
6. Food Grain Wagon rake is 3 times more expensive than the general Flat Freight Car rake, this will further save Govt's money as containers are much less expensive than Food Grain Wagons.
7. Moreover, 3PL (Third Party Logistics) service

Hydraulic Arrangement to load / unload containers is much simpler and economical than wagon loading and unloading system. This hydraulic arrangement can be easily installed at Grain Terminal and Grain Mandi to handle containers

is very easy to deploy for container movement, which will make the grain movement operation very economical due to stiff competition between 3PL service agencies.

8. There are more than a dozen private freight car operators in India who can move freight at much cheaper rate than Indian Railways. They will all want to capture this grain movement business as volume wise it is a big business. This will further decrease the cost of grain movement.
9. Food grain in Containers System eventually will get advantage of double stacking in upcoming Dedicated Freight Corridor where double stacking will be allowed.
10. Food grain in container system will reduce the overall Grain Silo Terminal cost by approximately 50%, as then following equipment of grain silo terminal will no longer be required.

4000 MT Silo is not required

700 TPH Elevators and Conveyors are not required

700 TPH Bulk Weighing System is not required

120 T underground rail hoppers are not required

- Expansive Wagon Loading System along with its Structural platform is not required
 - Static Rail weighbridge is not required
11. Fumigation of Container is very easy, which means chances of infestation of grain too is very low in containers
 12. Containers can be easily deployed in Mandi too from where the grains can be easily transported in same containers to Grain Silo Terminal in Bulk.
 13. Since containers are fully closed, current

overloading problem of Trucks will also get totally reduced.

14. Hydraulic Arrangement to load / unload containers is much simpler and economical than wagon loading and unloading system. This hydraulic arrangement can be easily installed at Grain Terminal and Grain Mandi to handle containers.
15. Containers can be used to carry other non-toxic commodities also in their return journey, which will reduce the food grain carrying cost further.
16. Individual containers carrying grain are best suitable for last mile delivery.
17. Also, containers are very easy to clean and hence a perfect choice for food grain movement.

In view of all above advantages if food grain movement is carried out in Bulk Containers, it will save a lot of capital cost as well as operation cost. Besides, FCI will then be able to complete its target of building 100 lakh tonnes of Silo storage much faster. ■

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