

Sector

IT/ITeS

Project Title:

Computerization of State Warehouses

Project Description

Modern IT integrated warehousing management systems (WMS) have redefined the storage function and are integral part of logistics and distribution network. WMS is a software program designed to direct the flow of material both into and out of specific storage locations in an ordered sequence, based upon a predetermined set of operational parameters. They provide directed stock rotation, intelligent picking directives, automatic consolidation and cross-docking to maximize the use of valuable storage space. The system directs and optimizes stock put-away based on real time information about the status of bin utilization.

Warehousing management systems utilize auto ID Data Capture technology, such as Barcode scanners, mobile computers, wireless LAN and RFID to efficiently monitor the flow of products.

The key advantage of WMS are :

- ✓ Cost effectiveness
- ✓ Capacity optimization
- ✓ Capacity planning
- ✓ Data capture
- ✓ Reduces labour cost
- ✓ No need of physical inventory

To increase the efficiency and optimize the functioning of warehouses in Madhya Pradesh (MP), the Government of Madhya Pradesh (GOMP) is keen to facilitate the computerization of all the State's warehouses. The project wishes to integrate the functioning of all the warehouses via a virtual intra-State web network by employing high end WMS software, hardware and other peripherals. The System would streamline the functioning of all the warehouses and would enable optimum capacity allocation and utilization which is a key requirement, keeping in view the huge gap between demand and availability of the present warehousing space in the State.

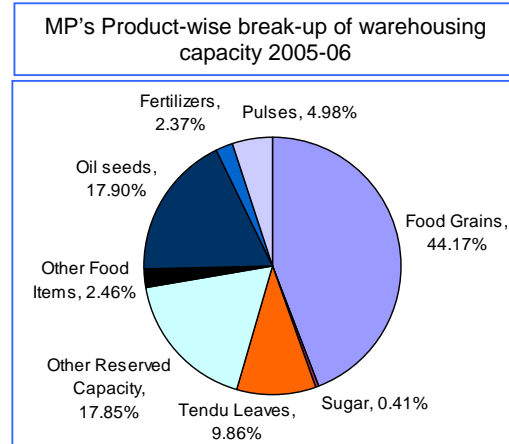
For the envisaged project the Government is willing to partner with the leading IT firms in the Country. The private player will design, implement and maintain the entire network and will also be responsible to provide adequate training to the warehousing staff regarding operation, handling and other critical functions.

Project Rationale

Warehousing is an integral component of supply chain of all companies.

Adequate storage capacity at various strategic locations is key towards maintaining a healthy supply and distribution network especially for agriculture, food processing, auto and FMCG sectors. With Indian economy on fire and industrial production breaking new records there is an ever increasing demand for more storage space. Therefore it's necessary to add new warehousing capacities and also to utilize the available capacity in an efficient an optimal manner as this leads to significant cost reduction in logistics function.

The employment of WMS hold special significance for MP as large storage space is required for agriculture products which is a key contributor to the State economy. Further, the State is poised to become the key logistics hub of the Country especially for industries such as auto components, FMCG, consumer electronics, textiles and apparels, radial tyres, pharmaceuticals and herbals. There would be high demand in future for quality storage space and other logistics functions from these upcoming industrial sectors.



Already the FMCG major Proctor & Gamble has established its central warehouse for its entire FMCG product portfolio at Bhopal. Several other companies are evaluating various potential locations in the State to establish or outsource their logistic functions. Thus in future there would be significant demand for storage space in the State.

A high end WMS by interlinking all the warehouses would facilitate availability of storage capacity information to the Government and other prospective industry customers on a real time basis. Further, streamlined data management would assist in forecasting of future capacity requirement by various sectors and industrial segments. This would aid in capacity allocation to various industries and reservation of adequate capacity for agriculture goods.

Market Potential and Demand Dynamics

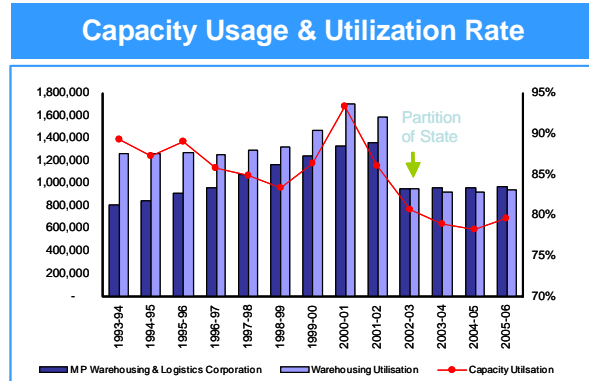
India spends around 13% of its GDP on logistics, compared to a global average of 10-11 %. Globally better supply chain management has reduced logistics costs by nearly 1% over the last 10 years. However Supply Chain

Estimated Cost Saving by Reducing Logistics Cost by 1%			
Functions	At 13% of GDP (US\$ bn)	At 12% of GDP (US\$ bn)	Amount Saved (US\$ bn)
Transportation	32.45	29.95	2.50
Inventory	23.18	21.40	1.78
Packaging	10.20	9.41	0.78
Handling and Warehousing	8.34	7.70	0.64
Others	18.54	17.12	1.43
Total Logistics Costs	92.72	85.58	7.13

remains an elusive concept for Indian industries which are increasingly looking to gain competitive edge by adopting advanced logistics solutions.

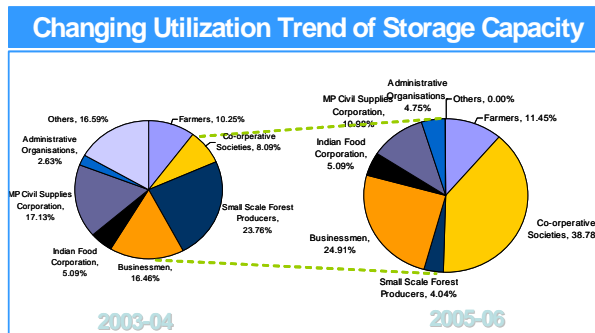
The total warehousing capacity in the Country is pegged around 30 million MT in 2006, out of which the total storage capacity contributed by State and Central Warehouses is 10.04 million MT and 19.7 million MT respectively.

The total storage capacity in MP is estimated around 1.8 million MT out of which the capacity contributed by Central Warehousing Corporation (CWC) is around 0.6 million MT while 1.2 million MT is contributed by State Warehousing Corporation (SWC). The State offers lucrative utilization rates of 80-85%, which can be as high as 90-95% at strategic locations.



The changing utilization trends indicate towards increasing storage capacity demand from the industries and other businesses while the demand from the forest and Government departments such as civil supplies are decreasing.

Based on estimated demand an additional capacity of 2.16 million MT was to be generated during 2002-06. However, only ~ 1 million MT was created during the same period. Hence, there is a shortfall of 1.6 million MTs in capacity in the State.



The division of MP has severely hampered the State's storage capacity. Post partition, MP has lost nearly 32% its storage capacity to Chattisgarh. The State requires an immediate addition in capacity at strategic locations to ensure quality services to the target market.

There is an urgent requirement to streamline the functioning of all the warehouses in the State. Integrating it by employing high end IT solutions such as WMS would be a key towards it.

Why Madhya Pradesh?

Strategically located at the heart of the Country, the State has enviable value proposition to be positioned as key logistic and distribution hub of the Country.

- Central location of MP facilitates equidistance connectivity with major cities. The strategic location is the key incentive for various industries to establish their logistics hub in the State.
- MP is the key connecting link between the northern & southern, eastern & western States of the Country. All major highways and rail routes passes through the State.
- MP has a well developed transport infrastructure of roads, rails and airports. 5200 km of National Highway runs across the State with total length of the roads in the State estimated around 67,600 km. The State also has 5000 km of rail networks with 425 trains passing through the State daily.
- Under the National Highway Development Programme of NHAI, 1254 km of the existing roads are being converted into four lane highway.
- MP has 5 operational domestic airports. The Indore airport has the capability to handle international flights. The mammoth transport infrastructure of the State provides connectivity with all the key cities and major ports.
- On completion, the North-South and East-West corridor passing through the State will provide further impetus to the logistics sector due to improved connectivity with key metro cities.
- Ample availability of cost effective manpower in the State. The cost of labour in the State is US\$ 2.3 per day as compared to US\$ 3.5- 4 per day in metros.
- The peaceful labour environment in the State makes MP a favorable business destination. Man days lost due to strikes & lockouts is less than 0.5% of the total available man days.

Proposed Investment

The total investment is estimated around USD 1.1 mn or INR 5 crores.

Returns

The private player has the opportunity to build and maintain the WMS on the basis of Build-Own-Operate (BOO) model or it can charge a fixed annual amount from the Government for maintenance.

Coordinating Agency

- ✓ Madhya Pradesh Agency For Promotion of Information Technology
- ✓ Department of Information Technology
- ✓ Madhya Pradesh State Warehousing Corporation

