

APRIL 2010

Submitted to Infrastructure Development Department, Government of Karnataka



Infrastructure Development Corporation (Karnataka) Limited

Infra House, 39, 5th Cross, 8th Main, RMV Extension, Sadashivnagar, Bangalore – 560080

Ph: 91 - 80 - 43448000; Fax: 91 - 80 - 23613016



Foreword

Karnataka is one of the states' in the country witnessing rapid economic growth due to various central and state level policy initiatives that have facilitated the development of industrial and allied infrastructure. In order to attract investments from other parts of the country and abroad, the Government of Karnataka has announced setting up of various industrial zones, the Suvarna Karnataka Corridor Project to provide connectivity to the proposed industrial zones, development of roads across the state, development of regional airports, development of ports at Tadri and Haldipur and setting up of food parks at various places across the state.

The logistics sector, comprising of the transportation, storage and distribution components is a key driver of a state's competitiveness in the national and international markets. Hence, all components of the logistics business need to be examined for opportunities to improve efficiencies. In this context, Infrastructure Development Department (IDD), Government of Karnataka, has commissioned a study on the logistics architecture in the state, with special focus on the transportation, storage and distribution aspects of business and trade.

The Report is presented in two volumes, Volume I addresses the transportation component and Volume II addresses the storage and distribution components of the logistics architecture.

This Report (Volume II) examines the storage and distribution components of the logistics sector in the state. Existing storage capacities vis-à-vis the utilization levels have been studied to assess the gaps and requirements in storage infrastructure. Indicative locations for setting up Inland Container Depots (ICD) / Container Freight Stations (CFS) in the state, to strengthen the distribution network have been identified and presented in the report.



Table of Contents

1.	INTE	RODUCTION	6
1	.1	Scope of Work	6
1	.2	Approach and methodology	7
2.	STO	RAGE AND DISTRIBUTION LOGISTICS	8
2	2.1	Function of storage facilities / warehouses	8
2	2.2	Review of key industries and their storage requirements	10
3.	EXIS	STING AGRICULTURE / HORTICULTURE STORAGE FACILITIES & CAPACITY ANALYSIS	12
3	3.1	Agencies providing storage facilities	13
	3.1.	1 Central Warehousing Corporation (CWC)	13
	3.1.2	2 Karnataka State Warehousing Corporation (KSWC)	14
	3.1.3	3 Food Corporation of India (FCI)	20
	3.1.4	4 Karnataka State Co-operative Marketing Federation Ltd (KSCMF)	21
	3.1.	5 Karnataka State Oil Seed Federation (KOF)	23
	3.1.	6 Karnataka State Food and Civil Supplies (KSF&CS)	24
	3.1.	7 Agricultural Produce and Marketing Committee (APMC)	25
3	3.2	Key issues in storage	26
3	8.3	Proposed Food Parks in Karnataka	26
4.	PRO	POSED PROJECTS FOR IMPROVEMENT	29
2	l.1	Agri Logistics Hubs cum Terminal Market Centers	29
2	1.2	Storage Units – APMC	31
2	1.3	Distribution centres – ICD / CFS	32
	4.3.	1 Indicative locations for setting up ICD / CFS	32
	4.3.2	2 Estimated Cost	39



List of Tables

Table 1: storage requirements by industry type	10
Table 2: Production details of key crops in 2006 - 2007	12
Table 3: Warehouses of CWC	13
Table 4: Region-wise crops stored in the KSWC warehouses	15
Table 5: KSWC region-wise capacity utilization levels	17
Table 6: Warehouse units based on utilization / occupancy levels	18
Table 7: location of warehouses where capacity utilization is between 85 and 99%	18
Table 8: location of warehouses where capacity utilization is between 75% and 84%	20
Table 9: Storage depots of FCI in Karnataka	21
Table 10: Exports of KSCMF	22
Table 11: Imports of KSCMF	22
Table 12: Proposed projects of KSCMF	23
Table 13: Location of godowns of KSF&CS	24
Table 14: Total warehouses of APMC	25
Table 15: Indicative locations for agri logistics hubs	31
Table 16: Zone 1 details	35
Table 17: Zone 2 details	35
Table 18: Zone 3 details	36
Table 19: Zone 4 details	37
Table 20: Zone 5 details	38

List of Figures

Figure 1: Logistics network diagram	8
Figure 2: Location KSWC warehouses in Karnataka	15
Figure 3: Region wise warehouse distribution	16
Figure 4: Percentage of warehouse in regions	16
Figure 5: Proposed Food Parks in Karnataka	27
Figure 6: Integrated Supply Chains	28
Figure 7: Agri Logistics Hub	30
Figure 8: Indicative zoning and the catchment regions	



Abbreviations

GoK	Government of Karnataka
IDD	Infrastructure Development Department
iDeCK	Infrastructure Development Corporation (Karnataka) Limited
APMC	Agriculture Produce Marketing Committee
CWC	Central Warehousing Corporation
KSWC	Karnataka State Warehousing Corporation
FCI	Food Corporation of India
KSCMF	Karnataka State Co-Operative Marketing Federation Ltd
KSF&CS	Karnataka State Food & Civil Supplies
KOF	Karnataka Oilseed Federation
ICD	Inland Container Depot
CFS	Container Freight Station
TEU	Twenty-foot Equivalent Unit
Km	Kilometer
MT	Metric Tonnes
IT	Information Technology
ВТ	Bio Technology
Kg	Kilogram
STD	Standard
PDS	Public Distribution System



1. INTRODUCTION

Karnataka is India's eighth largest state in terms of geographical size. The state comprises of 27 districts covering an area of 474.44 lakh acres (1.92 lakh sq km). Karnataka's share of 5.31% of the nation's total population in 1991 has reduced to around 5% in 2008. The state's decadal growth rate of population has also been declining, though it is higher than the neighbouring states. The population density of the state at 275 per sq km is relatively low compared to other states. A significant growth is expected in the urban population, which is likely to reach 2.82 crore in 2026 from the current 2.08 crore. Industry and trade are also gowing at a steady pace and are likely to see more investments and growth in the future. According to the Annual Survey of Industries 2004-05, the share of Karnataka in net value added in India was 7.90 per cent and the State occupies the seventh place in the country.

With the expected development programs on the anvil, providing logistics support and necessary infrastructure is of vital importance to attract and retain investors. Infrastructure Development Department (IDD), Government of Karnataka (GoK) intends to develop an architecture for logistics across the state of Karnataka and identify suitable places for setting up of Logistic hubs to facilitate transport, storage and distribution linkages. IDD has requested Infrastructure Development Corporation (Karnataka) Limited (iDeCK) to assist them in carrying out a pre-feasibility study for the logistics architecture of the state. This Report pertains to the storage and distribution components of the logistics architecture.

1.1 Scope of Work

The key objectives of the Study are as follows:

- Identify the key storage players in the sector.
- Assess the storage facilities available in the state vis-à-vis their capacity utilization levels.
- Assess the need for establishing additional storage and distribution centers in the state.
- Identify suitable locations for setting up storage/ distribution centers in the state based on the need assessment.



1.2 Approach and methodology

The methodology adopted for the study is explained below:

- a) The storage and distribution requirements of key industries in the state were reviewed, to identify the industries/ sectors that are most dependent on state provided storage and distribution facilities.
- b) The major storage providers in these sectors were identified and data pertaining to the location and capacities of storage facilities for each of these providers were obtained.
- c) The storage capacities available were then assessed vis-à-vis the utilization levels, to estimate the additional storage requirments.
- d) The requirement of distribution centers was assessed keeping in mind the existing location of transshipment centers, and the distances from key industrial areas of the state.
- e) Indicative locations for setting up Inland Container Depots (ICD) / Container Freight Sations (CFS) were identified to provide efficient and cost effective logistics infrastructure for the industrial development in the state.



Infrastructure Development Corporation (Karnataka) Limited



2. STORAGE AND DISTRIBUTION LOGISTICS

Storage / warehousing and distribution components form an important link in the entire logistics chain. Before the goods can be dispatched, they are required to be stored temporarily, before they can be further transported to the end customers. Storage facilities are usually required for a short period of time to ensure faster delivery to customers and to reduce the overall logistics costs.

The figure below describes the activities that form an integral part of the logistics network.



Figure 1: Logistics network diagram

2.1 Function of storage facilities / warehouses

The key functions of warehousing facilities is described below:



<u>Creation of time utility</u>: There are products which are produced continuously throughout the year while consumption is seasonal. Storage enables goods to be made available to buyers whenever they are in demand.

<u>Creation of place utility</u>: Another function of storage is to make goods available to a buyer at his place of business when he needs them. It creates place utility by warehouses location, e.g., a retailer can obtain goods within a few hours or minutes by contacting the wholesaler's storage.

<u>Finance function</u>: Storage helps to obtain or raise loans by providing collateral security of the goods stored.

<u>Creation of form utility</u>: Certain commodities improve in quality or desirability while in storage, e.g., curing of tobacco, liquor etc. Thus, storage creates form utility in certain goods.

<u>Stabilizing prices</u>: Another functions of storage is to stabilize price by making the goods available in the market whenever there is demand.

<u>Regular production</u>: Storage performs the function of smoothing out irregularities in production, and to make available a free supply in the market at all times.

<u>Ability to face natural calamities</u>: Storage enables the society to face natural calamities such as floods, famine, drought, etc. In such emergencies, commodities can be made available from the storage facilities.

<u>Reduction of Risk</u>: Storage reduces the risk of the owner of the goods as the owner of goods can store merchandise with reputed warehouses which absorb a part of the risk.

<u>Saving in Transportation Costs</u>: Storage allows accumulation of stock to be transported in bulk quantities thereby reducing the transportation costs.

<u>Economies of large-scale</u>: Storage enables a concern to achieve the economies of large-scale production, large scale buying and selling, etc. as the goods may be kept in stores.



2.2 Review of key industries and their storage requirements

The storage/ warehousing requirements vary with the nature of industry and the type of commodities. In this context, the storage requirements of key industries of the state were examined. An industry-wise summary of storage requirements is presented in the table below.

Table 1. Storage requirements by madding type				
Industry	Storage details			
Iron ore	Temporarily stored in stockyards near the mines and later transported by road / rail to the ports for export or sent to steel plants			
Cement	Usually stored at the production factories and directly transported by road/ rail to end destinations			
Sugar	Usually stored at the factories and directly transported by road/ rail to end destinations			
Automobiles	There are three big automobile manufacturers in the state who use their own storage facilities and directly send the goods to the distribution centers by road / rail			
Agriculture / Horticulture	Crops that are produced at different regions in the state, require to be temporarily stored and brought to specific locations in the state for distribution / export. This industry is heavily dependent on storage and distribution facilities			
Textiles	Silk and cotton are generally exported for weaving and later imported as fabric. Cotton is generally stored in godowns at the region of production			

Table 1: storage requirements by industry type

As can be seen from the table above, except for agriculture and horticulture, the other industries have their own storage facilities and distribute the commodities to end customers directly or are taken to the transshipment centers for export.

It is the agriculture and horticulture industry that is heavily dependent on good transportation, storage and distribution facitlites. This is mainly because:

- The commodities produced in different regions of the state need to be consolidated before they can reach wholesale markets for further distribution.
- The commodities being perishable by nature need to be handled in a controlled manner under suitable temperature conditions.
- Time is key in agriculture / horticulture logistics. Commodities need to move fast along the logistics chain to ensure they do not get damaged or perish in transit.



In this context, the storage facilities available in the state for handling agriculture/ horticulture and related industries have been assessed in detail. The same is discussed in the next Chapter.



3. EXISTING AGRICULTURE / HORTICULTURE STORAGE FACILITIES & CAPACITY ANALYSIS

The agri and related industries in the state contribute significantly to the state's GDP. At the national level, Karnataka stands first in floriculture and second in production of spices and plantation crops. The state is ranked third in coconut production and occupies the fifth place with respect to production of fruits and vegetables. The production details of the key crops in the state are provided in the table below.

Principal Crops	Units	Production
Flowers	Lakh Tonnes	1.92
Spices	Lakh Tonnes	6.04
Plantation crops	Lakh Tonnes	4.70
Coconuts	Million nuts	1653
Fruits	Lakh Tonnes	47.36
Vegetable	Lakh Tonnes	70.15

Table 2: Production details of key crops in 2006 - 2007

Due to the large scale production of crops at different locations and the distribution to end customers/ markets being very dispersed, the sector has the largest requirement for proper storage facilties. Also, the crops produced are sensitive to climate and have a shorter shelf life. The local small farmers in the interior regions of the states, have limited capabilities to transport the produce over longer distances. These farmers have no adequate storage facilities and hence need to carry the produce to the nearest market at the shortest time in order to realize their gains.

There are seven key agencies in the state providing storage facilities for agricultural crops besides private godowns. These agencies are:

- Central Warehouse Corporation (CWC)
- Karnataka State Warehouse Corporation (KSWC)
- Food Corporation Of India (FCI)
- Karnataka State Co-Operative Marketing Federation Ltd (KSCMF)



- Karnataka State Food And Civil Supplies (KSF&CS)
- Karnataka Oil Seed Federation (KOSF)
- Agricultural Produce and Marketing Committee (APMC)

3.1 Agencies providing storage facilities

The storage facilities provided by each of these agencies in Karnataka are discussed in the following sections.

3.1.1 Central Warehousing Corporation (CWC)

A premier warehousing Agency in India, established during 1957 providing logistics support to the agricultural sector, is one of the biggest public warehouse operators in the country offering logistics services to a diverse group of clients.

CWC provides scientific storage and handling services for more than 400 commodities which include agricultural produce, industrial raw-materials, finished goods and variety of hygroscopic and perishable items.

CWC warehouses are located in the following districts in Karnataka:

District	Name of the warehouse	Total capacity in '000 Tonnes
Bangalore	Bangalore I	25.54
	Bangalore II	5.93
	Bangalore V	5.02
	Bangalore X	1.66
	Whitefield	5.90
	Hoskote	4.28
	Bangalore MSIL premises	
Bellary	Amarapura	22.39
Bidar	Bidar	10.00
Chitradurga	Chitradurga	27.52
Davangere	Davangere	25.93
Dharwad	Dharwad	13.33
Gadag	Gadag	48.25
Gulbarga	Gulbarga I	9.78

Table 3: Warehouses of CWC



District	Name of the warehouse	Total capacity in '000 Tonnes
	Gulbarga II	35.00
Dharwad	Hubli I	11.44
	Hubli II	9.31
Koppal	Koppal	1.48
Mandya	Maddur	4.67
	Mandya	5.19
Dakshin	Mangalore I	18.72
Kannada	Mangalore II CFS	14.70
Gadag	Nargund	10.69
Raichur	Raichur	4.68
Gulbarga	Sedam	3.60
Shimoga	Shikaripur	8.02
	Shimoga II	13.75
	Shimoga III	19.13
	Shimoga IV	68.23
	Shimoga V	17.34
Belgaum	Soundatti	9.00
Tumkur	Tumkur	23.93
Bellary	Toranagallu	121.83
	Hospet	12.22
	Bellary	15.30
Raichur	Munirabad	6.01
Chikmagalur	Chikmagalur	29.52
Hassan	Hassan	8.66
Coorg	Kushalnagar	12.06

Source: CWC

The total capacity of these warehouses is about 7 lakh Metric Tonnes.

3.1.2 Karnataka State Warehousing Corporation (KSWC)

KSWC is a wing of the CWC. CWC has a 50% stake in KSWC, but functions independently with respect to the warehouses in the state.

KSWC was incorporated with the following objectives:

• To acquire and build godowns and warehouses in the state.



- To run warehouses in the state for the storage of agricultural produce, seeds, manure, fertilizers, agriculture implements and other notified commodities.
- Arrange facilities for the transport of agricultural produce, seeds, manure, fertilizers etc.
- Arrange for disinfestations service to the farmers, Government offices, public libraries, hostels, theaters, public buildings, private establishments, apartments etc., Rodent control, insect control, cockroach control are a few specialized services undertaken.

KSWC is currently operating 123 warehouses in Karnataka in mainly seven regions – Bangalore, Mysore, Shimoga, Gulbarga, Davangere, Hubli and Raichur.



Figure 2: Location KSWC warehouses in Karnataka

The major crops which are stored in each region is provided in the table below:

Regions	Crops	
Bangalore	Maize, Paddy, Ragi and Groundnut	
Mysore	Maize, Paddy and Ragi	
Shimoga Maize and Paddy		
Hubli	Maize, Pulses (Greengram, Bengalgram), Paddy and Sunflower	



Regions	Crops	
Gulbarga	Pulses (Tur, Greengram, Bengalgram, Blackgram), Maize, Sunflower and Paddy	
Raichur	Paddy, Sunflower, Maize and Pulses (Greengram, Bengalgram)	

The region-wise distribution of warehouses is indicated in the figures below.

Figure 3: Region wise warehouse distribution



Figure 4: Percentage of warehouse in regions





Capacity Analysis

To understand the adequacy of the storage locations, the capacity utilization levels of the warehouses in each region were analysed. The region-wise capacity utilization levels are summarized in the table below.

	Average from 01.04.2009 to January 2010			
Region	Capacity (lakh MT)	Occupancy in weight (lakh MT)	Occupancy in percentage	
Mysore	1.42	1.01	71.2	
Bangalore	1.00	0.86	86.3	
Davanagere	1.43	1.13	79.1	
Shimoga	0.91	0.69	76.1	
Hubli	1.36	1.00	73.2	
Gulburga	2.07	1.40	67.3	
Raichur	2.11	1.62	76.6	
Total	10.31	7.71	74.8	

Table 5: KSWC region-wise capacity utilization levels

Source: Karnataka State Warehousing Corporation



Further, the units in each region have been grouped into three categories based on the utilization / occupancy levels. The number of units in each of the categories is given in the table below.

Table 6: Warehouse units based on utilization / occupancy levels.

Average percentage of occupancy	Number of units
100 and above	7
85 > 99	30
75 > 84	20

There are 7 units that are running at full capacity and require immediate capacity augmentation. These units are located at.

- Bangarpet + Mulbagal
- Tumkur II
- H.B.Halli
- Hirekerur
- Harihar
- Belgaum I
- Annigeri

Thirty units have an average occupancy level between 85 and 99% which could be considered in the next phase of capacity augmentation. The location of these units is given in the table below:

Table 7: location of warehouses where capacity utilization is between 85 and 99%

Location of Units	Capacity utilization over 85>99
Mangalore	99.2
Chitradurga	98.2
Mundargi	97.3
M.K.Hubli	97.2
Hanagal	96.5
Machenahalli	95.8
Hospet	95.5
Dharwad	94.5
Whitefield	94.1
Tumkur I	93.7



Karatagi	92.4
Bidar	92.3
Kundagola	92.2
Mysore III	92.1
Maddur	90.4
Chickmagalur	90.4
Mysore I	90.3
Koppal	89.4
Davanagere- I + Jagalur	88.8
Mandya	88.5
Bagalkot + Bilagi	88.5
Ranebennur	87.8
Hadagali	87.2
Gokak	86.8
Haveri	86.8
Gangavathi	86.4
Belgaum II	85.6
Siraguppa	85.4
Davanagere - II	85.3



Location of Units	Capacity utilization over 75>85			
Honnali	83.9			
Bijapur I	80.8			
Bhadravathi	79.8			
Bijapur II	79.8			
Sindhanur	79.7			
Hubli	79.3			
Athani	79.2			
Mysore II	78.9			
Bellary	78.8			
Sagarpet	78.1			
Karwar + Sirsi	77.9			
K.R.Nagara	77.6			
Byadagi	77.1			
Raichur I	76.6			
Gulburga - I	76.0			
Jamakhandi	75.9			
Koralur	75.3			
Hassan	75.3			
Gadag + Mulgund	75.3			
Bhalki	75.2			

Table 8: location of warehouses where capacity utilization is between 75% and 84%

The detailed region-wise analysis of capacity utilization is enclosed in **Annexure 1**.

3.1.3 Food Corporation of India (FCI)

The Food Corporation of India was setup under the Food Corporation Act 1964, in order to fulfill the following objectives of the Food Policy :

- Effective price support operations for safeguarding the interests of the farmers.
- Distribution of foodgrains throughout the country for public distribution system ; and
- Maintaining a satisfactory level of operational and buffer stocks of foodgrains to ensure National Food Security.



FCI has about 52 storage depots in Karnataka and a network of more than 20,500 Public Distribution System (PDS) shops (commonly called Ration Shops). The utilization of the godowns is almost 90%. The major crops stored are rice, wheat, maize and ragi.

Table 9: Storage depots of FCI III Karnataka			
Storage Depots	Number of warehouse		
Owned	21		
Hired	31		
Total	52		
No of PDS Shops	20546		
Capacity of PDS shops in lakh MT	596.31		

Table 9: Storage depots of FCI in Karnataka

Source: FCI

FCI along with other Government agencies provide effective price assurance for wheat, paddy and coarsegrains. FCI and the State Govt. agencies in consultation with the concerned State Governments, establish large number of purchase centres throughout the state to facilitate purchase of foodgrains

The centres are selected in such a manner that the farmers are not required to travel more than 10 km to bring their produce to the nearest purchase centres. Foodgrains are procured according to the Government - prescribed quality standards. The foodgrains are transported from the surplus States to the deficit States.

FCI moves about 250 lakh tonnes of foodgrains over an average distance of 1500 km. An average of 12,00,000 bags (50 Kg) of foodgrains are transported every day from the producing States to the consuming areas, by rail, road, inland waterways etc. FCI has called for tender to develop new depots on PPP mode at various locations in the state for a total capacity of 2,05,000 MTs. The proposed locations are Belgaum, Bagalkot, Bijapur, Karwar, Yadagiri, Hassan, Koppal, Maddur, Mandya, Chamrajnagar, Mangalore and Haveri.

3.1.4 Karnataka State Co-operative Marketing Federation Ltd (KSCMF)

The Karnataka State Co-operative Marketing Federation Ltd is the:

- Apex co-operative institution of the state for distribution of chemical fertilizers, pesticides, seeds and agricultural implements.
- Apex co-operative institution for the procurement and marketing of agricultural commodities.



- Nodal agency for agricultural commodities procurement under MSP and MIS Schemes.
- Apex cooperative institution undertaking export and import of agriculture commodities.
- Also distributes certain consumer products.
- Production unit for the formulation and production of pesticides.

The main objectives of KSCMF are as follows:

- Distribution of agricultural inputs, fertilizers, pesticides
- Distribution of other agricultural inputs, seeds, agricultural implements
- Import & Export Activity

KSCMF has a wide distribution and retail sales network through 40 branch offices / marketing outlets and 54 godowns. The godowns are located at Mangalore, Hubli, Belgaum, Chickmagalur, Uttara Karnataka and Mysore.

The federation also has 2 cold storages, in Hassan and Kolar with a capacity of 2500 MT each. Onion is the major commodity exported by KSCMF. The export details for 2006-07 and 2007-08 are provided in the table below.

Table 10: Exports of KSCMF						
Year	Product	Quantity in MT	Value (Rs.Lakhs)			
2006 – 07	Onion	97615	43.39			
2007 – 08	Onion	28830	26.29			

Source: www.kscmfltd.in

The imports by KSCMF have been gradually decreasing over the last few years in quantity terms. The commodities imported between 2004 and 2008 is provided in the table below.

Year	Product	Quantity Quintals	in	Value in Lakhs Rs.
2004 – 05	Cloves		10	9.83
	Paraffin		40	
	Karpoora		49	
	Cinnamon	1	.21	
	bark	36	600	
	Condensate	20	000	
	Oil			
	Bio-Ethanol			
TOTAL		58	876	9.83
2005 – 06	Bitumen	12	.54	6.09

Table 11: Imports of KSCMF



Year	Product	Quantity in Quintals	Value in Lakhs Rs.		
	Spices	31			
	Others	2475			
TOTAL		3760	6.09		
2006 – 07	Yellow Peas	5600	6.05		
	Spices	220	4.73		
2007 – 08	Yellow Peas	3000	407.00		

Source: www.kscmfltd.in

While the usage of the godowns at present is for storage of farmer's produce, KSCMF contemplates future usage for marketing activity.

KSCMF has called for tenders to construct godowns at eight locations. The proposed locations along with the capacities envisaged to be developed are provided in the following table.

Name of the Center	Capacity (in MT)
Kolar	1000
Shimoga	1000
Channarayapatna	1000
Pandavapura	1000
Bellary	1000
Raichur	1000
Haveri	1000
Hubli - III	2000
Hubli - IV	2000

Source: KSCMF

3.1.5 Karnataka State Oil Seed Federation (KOF)

The Karnataka Co-operative Oilseeds Growers Federation Limited (KOF), is an agency registered under the Karnataka Co-operative Societies Act, to create an integrated co-partite system of production, procurement, processing of oilseeds and marketing of edible oil and its bi-products. The key objective of the agency is establishing a direct link between the producer and the consumer by eliminating middlemen.



The Area Agronomic & Training Centre (AATC) & Seed Activity of KOF is located at Haveri. The AATC has four functional units:

- AATC Farm
- Training Centre
- Seed Production Activity (Outside the farm)
- Seed Cell Co-ordination Unit

3.1.6 Karnataka State Food and Civil Supplies (KSF&CS)

The Karnataka Food and Civil Supplies Corporation Limited is a Government of Karnataka undertaking established with the primary objective of procurement, lifting and distributing food grains under the Public Distribution System (PDS). It has a total number of 187 wholesale points and about 194 retail points in twenty six districts of the state.

Karnataka Food and Civil Supplies Corporation Limited, plays its role as a market stabilizer by purchasing paddy and other coarse grains from the growers under the Minimum Support Price Operations (MSP).

The main objectives of KSF&CS is as follows:

- Procurement of essential commodities like rice, wheat, sugar etc., and distribution of the same to consumers through Public Distribution System.
- To make available other essential commodities like edible oil, dal, spices, kerosene etc., to common man at reasonable prices.
- Provide a network of wholesale and retails outlets to ensure smooth functioning of the distribution system.
- Market intervention to stabilize the prices so as to provide protection to the growers of paddy and other coarse grains through the MSP.

The KSF&CS has godowns at the following locations:

Table 13: Location of godowns of KSF&CS	
Place	District
Machenahalli	Shimoga
Hassan	Hassan



Place	District
Kadirenahalli, Lingarajapuram, Vijinapura, Yeshwanthpur	Bangalore
Aurad, Bidar Town	Bidar
Afzalpur, Aland, Chittapur	Gulbarga
Sindgi	Bijapur
Chamarajnagar	Chamarajnagar

Source: KSF&CS

The detailed list of wholesale and retail points of KSF&CS in the state is enclosed in **Annexure 2**.

3.1.7 Agricultural Produce and Marketing Committee (APMC)

The Special Agricultural Produce Marketing Committee (APMC), established under the provisions of the Agricultural Produce Marketing Act 1966, has been established to provide marketing assistance, including development of markets, for agricultural produce specifically for fruits and vegetables. The Special APMC is the licensing authority for all wholesale trading of fruits.

Most of the APMC's have market yards where traders and other marketing agents are provided godowns and shops for purchase and storage of agriculture produce from farmers.

The warehouses of APMC in the state is given in the table below.

Table 14: Total warehouses of APMC			
Warehouse	Capacity in cubic metre		
State Warehouse Corporation	1478867		
Central	750334		
Private	478003		
Total	2707205		

Source: Karnataka State Agriculture Marketing Board

The locations of APMC warehouses in the state under Central Warehousing Corporation, State Warehousing Corporation and private godowns are enclosed in **Annexure 3**.



3.2 Key issues in storage

The key issues with respect to agriculture / horticulture storage in the state are summarized below:

- The storage facilites are spread out in almost all districts and taluks of the state. Most of these facilities are either running to full capacity or the utilization levels are more than 75%. The capacities at such units could be augmented as a first step towards improving the storage facilities in the state.
- The condition of the storage facilities is poor and needs better maintenance and higher hygiene standards. Arrangements need to be made for disinfestations services, rodent control, insect control, cockroach control and specialized services.
- Lack of an integrated cold storage chain is leading to a lot of wastage of the produce or most often the produce is sold in the nearest market at a cheaper price. For the farmers to realize higher gains, a network of cold storage chains are required to be developed, so that the produce can be transported to far off places or exported which would command a higher price and better returns to the farmers.
- Absence of integrated agri logistics hubs in the state are resulting in higher transportation costs and wastage of produce. The development of these hubs at suitable locations in the state would go a long way in improving the logistics of the agri sector. The concept of agri logistics hub and an indicative list of locations for setting up the hubs are discussed in section 3.4.

3.3 Proposed Food Parks in Karnataka

Government of Karnataka has proposed 12 food parks in the following locations of the state:

- Bagalkote
- Malur
- Jeewargi
- Maddur
- Belgaum
- Chitradurga
- Tumkur



- Rural Bangalore
- Shimoga
- Davangere
- Kolar
- Bijapur

The bid process for selection of private developer for the food parks at Bijapur, Belgaum, Davangere, Tumkur and Shimoga is currently under way. The RFP document has been issued

to the market.

Concept

A food park constitutes a system innovation, involves several links of the production chain, and crosses the borders of different agricultural and industrial sectors. The services provided by these parks range from soil testing, nursery, farm machinery, fertilizers, crop protection, storage and processing to market linkages, farm credit and exports.



Figure 5: Proposed Food Parks in Karnataka

It can be defined as an industrial park exclusively for the food processing industry. A food Park offers tiny and medium scale entrepreneurs a range of facilities such as:

- A product development center
- Pilot plant with machinery for the food processing industry
- Warehouse for incoming and finished goods
- Cold storage facility
- An effluent treatment plant
- Water, electricity and diesel powered generator

The food parks offer a well-defined agri / horticultural-processing zone containing state of the art processing facilities with support infrastructure and well established supply chain networks.







4. PROPOSED PROJECTS FOR IMPROVEMENT

For improving the overall logistics efficiency in the state, the storage and distribution components of the supply chain are key areas requiring improvement. This Chapter presents the identified projects for improving the storage and distribution logistics architecture in the state.

4.1 Agri Logistics Hubs cum Terminal Market Centers

In addition to the food parks proposed in the state and the available storage facilities by various agencies, the feasibility of setting up agri logistics hubs in the state could also be explored to strengthen the agri and food processing market linkages in the state.

Concept

The concept of agri logistics hubs aims at developing the backward and forward linkages, streamlining the supply chain from farm to market and also to provide value added services to the stakeholders in the value chain. This is to encourage the farmers to move up the value chain by diversifying to higher margin products and ensure that the produce meets end user and market requirements of quality, grades and standards apart from ensuring reliable and un-interrupted supply of adequate volume of produce.

Agri-logistics is an efficient integration of transportation, warehousing, food processing and other value added services enabling value addition at each level of the agri-supply value chain. Warehousing is an important part of this whole system and comprises approximately 20-25% of logistics. The facilities that would need to be developed for setting up agri logistics hubs (ALH) are as set out below.

Components of agri logistics hubs

The agri logistics hubs consist of a Terminal Market Centre (TMC) and a Collection Centre. Terminal Market Centre essentially comprises warehousing, food processing, logistics services and other relevant value added services. The collection centres could be located at key production centres to allow easy farmer access and the catchment area of each collection

centre is to be based on meeting the convenience needs of farmers, operational efficiency and effective capital utilization of the investment. Further, by adopting the hub and spoke mechanism, these collection centres could be connected directly to the agri logistics hub. As illustrated in the figure below, every node in the supply chain i.e. collection centres, large hold farmers, and village panchayats storage house are connected directly to the ALH.

This mechanism would help transporting the farm produce directly to the ALH from the nodal centres through a fleet of transport systems and Information Technology (IT) support systems in place.



Figure 7: Agri Logistics Hub

Indicative locations for agri logistics hubs (ALH)

The parameters that have been considered for identification of the locations for development of ALH includes (a) yield in the catchment area (b) catchment population to be served and (c) total irrigated land available in the catchment area. Scores were calculated for each district under each parameter mentioned above. The top three districts ranked on the basis of the scores are provided in the table below.



		Parameters		Individual score				
Rank	Rank Location	Irrigated Area (lakh hectares)	Population (lakh)	Yield (per hectare)	Irrigated Area	Population	Yield	Composite score
1.	Kolar	3.6	25.4	6.1	72.0	38.8	66.8	63.3
2.	Belgaum	1.1	42.1	9.2	21.3	64.5	100.0	61.4
3.	Haveri	5.04	14.4	2.7	100.0	22.0	29.3	56.1

Table 15: Indicative locations for agri logistics hubs

Source: iDeCK Analysis

The project cost estimated for the proposed agri logistics hub in Belgaum is approximately Rs.32 crore. However, detailed feasibility studies would need to be carried out to assess the viability of the above locations for development of agri logistics hubs.

4.2 Storage Units – APMC

Based on discussions with APMC officials, five locations in the state were identified for setting up new storage facilities depending on regional demand. The locations along with the commodities for storage, estimated capacities and costs are presented in the table below.

S No.	Location	Commodities for storage	Estimated Capacity (Lakh MT)	Estimated Cost (Rs. Crore)
1.	Shimoga	Paddy	1.0	55.0
2.	Davanagere	Maize	0.5	27.5
3.	Koppal	Paddy	0.5	27.5
4.	Hubli	Maize	0.5	27.5
5.	Haveri	Cotton	0.5	27.5

The above locations are well connected to different parts of the state through a network of National / State Highways and railway links.

Land for setting up the storage units at the above locations would however, need to be identified and detailed feasibility studies would need to be carried out to assess the viability of the locations for development of storage units.



4.3 Distribution centres – ICD / CFS

Currently the transshipment centers (other than airports and ports) i.e. Inland Container Depots (ICDs) and Container Freight Stations (CFSs) handling bulk of the import and export cargo are all concentrated at Bangalore. CFSs have been established at Mangalore and Belgaum also by the Central Warehousing Corporation. While the CFS at Belgaum is functioning to 80% of its capacity, the traffic at the Mangalore CFS is neglible.

In the current scenario the entry and exit points for export and import cargo being largely concentrated at Bangalore, the commodities from different parts of the state need to brought to these centres for export and need to be transported from these points to different parts of the state in the case of import cargo. The transportation costs are hence very high in the whole logistics chain. The transportation to these transshipment centers happens largely by road, which increases the congestion on the roads and also the time taken for transportation.

Establishing a network of ICDs / CFSs closer to important industrial centers in the state would facilitate efficient and cost effective movement of the export import and domestic containerized cargo across the country.

The primary functions of ICD/CFS may be summed up as under:

- Receipt and dispatch/delivery of cargo.
- Stuffing and stripping of containers.
- Transit operations by rail/road to and from serving ports.
- Customs clearance.
- Consolidation and desegregation of LCL cargo.
- Temporary storage of cargo and containers.

4.3.1 Indicative locations for setting up ICD / CFS

To arrive at the indicative locations for setting up ICD / CFS centers, the industrial corridors in the state have been identified and the entire state has been carved out out into five zones. The identified zones and the catchment regions are described below.



- Zone 1 Bangalore, Kolar, Tumkur, Mandya
- **Zone 2** Mysore, Mandya, Hassan, Kodagu, Chamrajnagar, Dakshin Kannada, Chikmagalur
- Zone 3 Shimoga, Chikmagalur, Udupi, Uttar Kannada, Chitradurga, Davangere, Haveri.
- **Zone 4** Hubli, Davangere, Bellary, Koppal, Bagalkot, Belgaum, Dharwad, Uttar Kannada, Haveri, Gadag
- Zone 5 Gulbarga, Bidar, Raichur, Bijapur

Some districts are indicated in more than one zone, as they are almost equidistant from two or more centers. Depending on the commodities and the connectivity options, these districts could choose their transshipment centers.



Figure 8: Indicative zoning and the catchment regions





Zone 1 - Bangalore

The catchment region falling in zone 1 consists of 4 districts, namely, Bangalore, Tumkur, Kolar and Mandya. The distance of the catchment regions from Bangalore and the existing and proposed industries in the zone are provided in the following table.

Existing and proposed				
Distance from Bangalore	Distances in km	industries		
Tumkur	70	Food processingApparel		
Kolar	73	AutomobileIT-BTSugar		
Mandya	99	PharmaceuticalIron Ore		

Zone 2- Mysore

The catchment region falling in zone 2 consists of 7 districts, namely, Chamarajnagar, Mandya, Kodagu, Hassan, Dakshin Kannada and Chikmagalur. The distance of the catchment regions from Mysore and the existing and proposed industries in the zone are provided in the following table.

Table 17: Zone Z details			
Distance from Mysore	Distances in km	Existing and proposed industries	
Chamrajnagar	61	• IT-BT,	
Mandya	44	Pharmaceutical	
Kodagu	120	• Sugar	
Hassan	127	 Automobile Apparel 	
Dakshin Kannada	252		
Chikmagalur	178		

Infrastructure Development Corporation (Karnataka) Limited



Zone 3 - Shimoga

The catchment region falling in zone 3 consists of 8 districts, namely, Udupi, Chikmagalur, Uttar Kannada, Chitradurga, Haveri, Davangere and Dakshin Kannada. The distance of the catchment regions from Shimoga and the existing and proposed industries in the zone are provided in the following table.

Distance from Shimoga	Distances in km	Existing and proposed industries
Udupi	152	• IT-BT
Chikmagalur	98	SugarAutomobile
Uttar Kannada	244	Apparel
Chitradurga	116	• Steel
Haveri	126	 Power Generation Food Processing
Davangere	91	Iron Ore
Dakshin Kannada	197	

Table 18: Zone 3 details

Zone 4 - Hubli

The catchment region falling in zone 4 consists of 10 districts, namely, Hubli, Dharwad, Haveri, Uttar Kannada, Davangere, Bellary, Gadag, Bagalkot, Belgaum and Koppal. The distance of the catchment regions from Hubli and the existing and proposed industries in the zone are provided in the following table.



Distance from Hubli	Distances in km	Existing and proposed industries		
Haveri	75	• Steel		
Dharwad	22	Cement		
		Apparel		
Uttar Kannada	165	• IT-BT		
Davangere	145	Automobile		
		Power Generation		
Bellary	212	• Sugar		
Gadag	57	Iron Ore		
Bagalkot	121			
Belgaum	99			
КорраІ	119			

Table 19: Zone 4 details

Zone 5- Gulbarga

The catchment region falling in zone 5 consists of 4 districts, namely, Gulbarga, Bidar, Bijapur and Raichur. The distance of the catchment regions from Gulbarga and the existing and proposed industries in the zone are provided in the following table.





Table 20: 20he 5 details			
Distance from Gulbarga	Distances in km	Existing and proposed industries	
Bidar	121	Cement	
		● IT-BT	
Bijapur	156	 Food processing 	
		Power Generation	
Raichur	160	- Tower Generation	
		• Steel	
		 Sugar Apparel 	

The key benefits from an ICD/CFS facility are as follows:

- Concentration points for long distance cargoes and its unitisation
- Serves as a transit facility
- Customs clearance facility available near the centres of production and consumption
- Reduced level of demurrage and pilferage
- No Customs required at gateway ports
- Issuance of through bill of lading by shipping lines, hereby resuming full liability of shipments
- Reduced overall level of empty container movement
- Competitive transport cost
- Reduced inventory cost
- Increased trade flows

The land requirements and other details pertaining to ICD / CFS and the procedure for setting up an ICD / CFS is enclosed in **Annexure 4**.



4.3.2 Estimated Cost

The indicate cost for setting up an ICD facility on an approximate area of 100 acres would be about Rs. 50 crore, excluding the land cost. Facilities within the ICD could include rail lines, cranes, covered warehouses, etc.

The proposed ICD/ CFS facilities has to be economically viable for the operator and must ensure certain minimum traffic. It must also be attractive to users, to the railways for full train load movements, to other transport operators, seaports, shipping lines, freight forwarders etc. Therefore, the viability of setting up ICDs CFSs at the above mentioned locations would need to be assessed carefully from the TEU traffic availability point of view.

In the background of growing international trade, the infrastructure facility may have to precede the actual generation of demand. This is particularly important as such facilities have a long gestation period for being fully operationalised. Though it is not proposed to lay down any minimum TEU figures as part of the criteria for approval of ICDs/CFSs, following are suggested indicative norms in the guidelines provided by Government of India:

- For ICD 6,000 TEUs per year (Two way)
- For CFS 1,000 TEUs per year (Two way)

On finalizing the locations for setting up ICDs / CFSs a detailed market and financial feasibility analysis would need to be undertaken to assess the viability of the locations.



Annexure 1

Region-wise capacity utilization analysis of KSWC warehouses

The following figure shows the region wise number of warehouses running over 75% capacity utilization levels.



Region wise warehouse over 75% of capacity utilization

Bangalore region

Total 12 warehouse units in Bangalore region in the district of Bangalore, Tumkur, Chikballapur, Kolar, Ramnagar

Name of the unit	Average Capacity utilization in 2009-10 (Till Jan) (%)
Bangarpet + Mulbagal	112.6
Tumkur II	107.1
Channapatna	100.0
Whitefield	94.1
Tumkur I	93.7
Koralur	75.3

Units over 75% of capacity utilization in Bangalore region

Source: Karnataka State Warehouse Corporation



Warehouses over 75% capacity utilization in Bangalore region



Mysore region

Units over 75% of capacity utilization in Mysore region

Name Of The Unit	Average Capacity utilization in 2009-10 (Till Jan) (%)
Mysore III	92.1
Maddur	90.4
Mysore I	90.3
Mandya	88.5
Mysore II	78.9
K.R.Nagara	77.6
Hassan	75.3

Source: Karnataka State Warehouse Corporation

Warehouses over 75% capacity utilization in Mysore region





Shimoga region

Total 10 warehouse units in Shimoga region in the districts of Shimoga, Chikmagalur and Dakshin Kannada.

ver 75% of capacity utilization in Shimoga		
Nam	ne Of The Unit	Average Capacity utilization in 2009-10 (Till Jan) (%)
Manga	alore	99.2
Mache	enahalli	95.8
Chickr	nagalur	90.4
Bhadra	avathi	79.8

Units over 75% of capacity utilization in Shimoga region

Source: Karnataka State Warehouse Corporation





Hubli region

Total 27warehouse units in Hubli region in the district of Belgaum, Gadag, Bagalkot, Dharwad, Uttar Kanada



Name Of The Unit	Average Capacity utilization in 2009-10 (Till Jan) (%)
Belgaum I	105.6
Annigeri	105.2
Mundargi	97.3
M.K.Hubli	97.2
Dharwad	94.5
Kundagola	92.2
Bagalkot + Bilagi	88.5
Gokak	86.8
Belgaum II	85.6
Hubli	79.3
Athani	79.2
Karwar + Sirsi	77.9
Jamakhandi	75.9
Gadag + Mulgund	75.3

Source: Karnataka State Warehouse Corporatin

Warehouses over 75% capacity utilization in Hubli region



Davangere region

Total 16 warehouse units in Davangere region in the district of Davangere, Chitradurga and Haveri .



Name Of The Unit	Average Capacity utilization in 2009-10 (Till Jan) (%)
Hirekerur	102.2
Harihar	101.4
Chitradurga	98.2
Hanagal	96.5
Davanagere-I+	88.8
Jagalur	
Ranebennur	87.8
Haveri	86.8
Davanagere - II	85.3
Honnali	83.9
Sagarpet	78.1
Byadagi	77.1

Units over 75% of capacity utilization in Davangere region

Source: Karnataka State Warehouse Corporation

Warehouses over 75% capacity utilization in Davangere region



Raichur region

Total 16 warehouse units in Raichur region in the district of Raichur, Koppal and Bellary





Name Of The Unit	Average Capacity
	utilization in 2009-10
	(Till Jan) (%)
H.B.Halli	113.7
Hospet	95.5
Karatagi	92.4
Koppal	89.4
Hadagali	87.2
Gangavathi	86.4
Siraguppa	85.4
Sindhanur	79.7
Bellary	78.8
Raichur I	76.6

Units over 75% of capacity utilization in Raichur region

Warehouses over 75% capacity utilization in Raichur region



Gulbarga region

Total 20 warehouse units in Gulbarga region in the districts of Gulbarga, Bidar and Bijapur.

Units over 75% of capacity utilization in Gulbarga region

Name Of The Unit	Average Capacity utilization in 2009-10 (Till Jan) (%)
Bidar	92.3
Bijapur I	80.8
Bijapur II	79.8
Gulburga - I	76.0
Bhalki	75.2
a	

Source: Karnataka State Warehouse Corporation

Source: KSWC





Annexure 2

List of wholesale and retail points of KSF&CS in the state as on 30th July 2008

District	No. of Wholesale points	No. of Retail points
Bagalkot	08	19
Bangalore (North)	10	77
Bangalore (South)	06	25
Belgaum	07	02
Bellary	11	
Bidar	06	
Bijapur	10	03
Chamarajanagar	06	
Chikkamagalur	06	06
Chitradurga	04	05
Davangere	11	
Dharwad	07	05
Gadag	06	01
Gulbarga	09	
Hassan	11	06
Haveri	04	19
Karwar	04	12
Kodagu	02	04
Kolar	10	
Koppal	05	01
Mandya	04	04
Mangalore	05	
Mysore	09	01
Raichur	05	01
Shimoga	09	03
Tumkur	09	
Yadgir	03	
Total :	187	194

Source: KSF&CS



Annexure 3

Locations of APMC warehouses in the state under Central Warehousing Corporation, State Warehousing Corporation and private godowns

District	Capacity in cubic metre
Bangalore Urban	115482
Bangalore Rural	7628
Chitradurga	44397
Davangere	35916
Shimoga	148435
Tumkur	37755
Dakshin Kannada	48114
Mandya	18779
Belgaum	46902
Hubli/ Dharwad	64119
Gadag	62633
Gulbarga	89869
Bidar	19510
Raichur	8044
КорраІ	2949
Total	750334

Warehouse locations of Central Warehousing Corporation (2008-09)

Source: KSAMB



Private godowns (2008-09)

District	Capacity in cubic metre
Bangalore	12706
Gadag	69855
Chitradurga	5561
Kodagu	5290
Haveri	24604
Gulbarga	181580
Bellary	23253
Raichur	120691
Koppal	34459
Total	478003

Source: KSAMB

Warehouse locations of State Warehousing Corporation (2008-09)

District	Capacity in cubic metre
Bangalore Urban	9249
Bangalore Rural	1614
Chitradurga	51259
Davangere	133697
Kolar	28574
Shimoga	67742
Chikballapur	1757
Tumkur	39462
Mysore	93092
Chamrajnagar	8340



District	Capacity in cubic metre
Dakshin Kannad	13269
Kodagu	3903
Chikmagalur	13898
Hassan	54861
Mandya	59679
Belgaum	24802
Bijapur	51664
Bagalkot	41214
Dharwad	21586
Gadag	73090
Haveri	46723
Uttar Kannada	8930
Gulbarga	204039
Bellary	128765
Bidar	79814
Raichur	164494
Koppal	53340
Total	1478867

Source: KSAMB



Annexure 4

Details of ICD / CFS & Procedure for setting up an ICD / CFS

Land requirements

The minimum area requirement for a CFS would be One Hectare and for ICD Four Hectare. However, a proposal could also be considered having less area on consideration of technological upgradation and other peculiar features justifying such a deviation.

Design and lay-out of ICD/CFS

The design and layout should be the most modern state-of-art equipped with mechanical/electrical facilities of international standards. Key to a good lay-out is the smooth flow of containers, cargo and vehicles through the ICD/CFS. The design and lay out should take into account initial volume of business, estimated volume in 10 years' horizon and the type of facilities exporters would require. The initial lay out should be capable of adaptation to changing circumstances. The design broadly should encompass features like (rail) siding, container yard, gate house and security features, boundary wall (fencing), roads, pavements, office building and public amenities. The track length and number of tracks should be adequate to handle rakes and for stabling trains where relevant.

- The perimeter fencing and lighting must meet the standards required by Customs authorities. The gate being the focal point of site security should be properly planned.
- The administration building is the focal point of production and processing of all documentation relating to handling of cargo and containers and its size will be determined by the needs of potential occupants. Fixed provisions should be made for sanitation facilities and possibly a food service facility.
- A good communication system and computerization and EDI connectivity is essential. Following Infrastructure should be available at the ICDs/CFSs
- Provision of standard pavement for heavy duty equipment for use in the operational and stacking area of the terminal. In cases where only chassis operation is to be performed, the pavement standard could be limited to that of a highway.
- Office building for ICD, Customs office and a separate block for user agencies equipped with basic facilities.

- Warehousing facility, separately for exports and imports and long term storage of bonded cargo.
- Gate Complex with separate entry and exit.
- Adequate parking space for vehicles awaiting entry to the terminal.
- Boundary wall according to standards specified by Customs.
- Internal roads for service and circulating areas.
- Electronic weighbridge.
- Computerized processing of documents with capability of being linked to EDI.

Equipping the ICD/CFS

The ICD/CFS would select most modern handling equipment for loading, unloading of containers from rail flats, chassis, their stacking, movement, cargo handling, stuffing/destuffing, etc. Following minimum equipment should be made available at ICDs/CFSs (Reach stacker may not be mandatory:

- Dedicated equipment such as lift truck (front end loader, side loader or reach-stacker), straddle carrier, rail mounted yard gantry crane, rubber tyred yard gantry crane, etc. of reputed make and in good working condition (not more than 5 to 8 years old) and equipped with a telescopic spreader for handling the 20 ft and 40 ft boxes. The equipment must have a minimum residual life of 8 years duly certified by the manufacturer or a recognized inspection agency. An additional unit of equipment should be provided when the throughput exceeds 8000 TEUs per annum or its multiples for lift truck based operations.
- Terminals resorting to purely chassis-based operations do not require dedicated box handling equipment. However, chassis-based operations should be restricted to CFSs proposed to be set up near ports.
- Small capacity (2 to 5 tonnes) forklifts must be provided for cargo handling operations in all terminals.

Rail head ICDs

The parties will be required to provide at their own cost all infrastructure facilities including land, track, handling equipment for containers, maintenance of assets including track, rolling



stock, etc. as per extant railway rules applicable to private sidings. The cost of the railway staff would be borne by the party as per the prevailing Government policy.

<u>Tariff</u>

Tariff structure and costing should be worked out along with the feasibility study and information provided with the application.

General

The main function of an ICD/CFS being receipt, despatch and clearance of containerised cargo, the need for an up-to-date inventory control and tracking system to locate containers / cargo is paramount. Each functional unit of the facility (e.g. siding, container yard gate, stuffing/destuffing area, etc.) should have up-to-date and where possible on-line, real time information about all the containers, etc., to meet the requirements of customers, administration, railways etc. As far as possible, these operations shall be through electronic mode.

PROCEDURE FOR APPROVAL OF ICD/CFS AND ITS IMPLEMENTATION

1. Proposals for setting up ICD/CFS will be considered and cleared, on merits, by an Inter Ministerial Committee for ICDs/CFSs, which consists of officials of the Ministries of Commerce, Finance (Department of Revenue), Railways and Shipping. Views of the State Governments as necessary would be obtained.

2. Application 10 copies in enclosed form should be submitted to the Infrastructure Division in the Ministry of Commerce, Udyog Bhavan, New Delhi. Application must be accompanied by 10 copies of feasibility reports mentioned in the guidelines.

3. The applicant should also send a separate copy of the application to the jurisdictional Commissioner of Customs. The Commissioner of Customs will send his comments to the Ministry of Commerce and the Central Board of Excise & Customs (CBEC) within 30 days. In case, the project is planned in a port town, a copy of the proposal should also be sent to the concerned Port Authority who would furnish their comments within 30 days to the Ministry of Surface Transport and the Ministry of Commerce.



4. The applicants are also requested to familiarise with the statutory Custom requirements in relation to Bonding, Transit Bond, Security Insurance and other necessary procedural requirements and cost recovery charges payable before filing the application.

5. On receipt of the proposal, the Ministry of Commerce would take action to obtain the comments from the jurisdictional Commissioner of Customs and other concerned agencies within 30 days. Wherever necessary, a copy of the proposal should also be sent to Zonal Railway Manager, under intimation to the Ministry of Railways One copy of the proposal would also be made available to the IMC Members for advance action. The decision of the IMC would be taken within six weeks of the receipt of the proposal under normal circumstances.

6. On acceptance of a proposal, a Letter of Intent will be issued to the applicant, which will enable it to initiate steps to create infrastructure.

7. The applicant would be required to set up the infrastructure within one year from the date of approval. The Ministry of Commerce may grant an extension of six months keeping in view the justification given by the party. Thereafter, a report would be submitted to IMC to consider extension for a further (final) period of six months. The IMC may consider extension or may submitted to IMC to withdraw the approval granted.

8. The applicant, after receipt of approval, shall send quarterly progress report to Ministry of Commerce. Three formats (given as annexure I to III) for sending the quarterly/ annual report shall have to be submitted to Department of Commerce through electronic mode as well as through hard copy.

9. After the applicant has put up the required infrastructure, met the security standards of the jurisdictional Commissioner of Customs and provided a bond backed by bank guarantee to the Customs, final clearance and Customs notification will be issued.

10. The approval will be subject to cancellation in the event of any abuse or violation of the conditions of approval.

11. The working of the ICD/CFS will be open to review by the Inter Ministerial Committee.