

## Chapter III

# Storage Management

### 3.1 Status of storage capacity for the Central Pool

The primary policy objective of the GOI is to ensure food security in the country through timely and efficient procurement, and distribution of food grains. This involves procurement of food grains, building up and maintenance of food stocks, storage, movement and delivery of food grains to distributing agencies. Storage management is an important link in the whole system from procurement to distribution of food grains to the consumers.

Under the existing operational framework for ensuring food security in the country, FCI is the main Government agency entrusted with management of food grains in the Central Pool held by SGAs and DCP states. FCI is also responsible for storage of the Central Pool stock by taking over the food grains procured by SGAs; whereas the food grains procured by DCP states are stored and directly distributed by them under TPDS and OWS.

FCI, however, had to hire space from various agencies such as CWC<sup>4</sup>, SWCs<sup>5</sup>, SGAs and private parties as its own storage capacity was insufficient to accommodate the Central Pool stock of food grains. The stock of food grains is normally stored in covered godowns, silos and uncovered godowns called Covered and Plinth (CAP). The total storage space that was available with the main Government agencies in the country as on 31 March of 2007 to 2012 was as under:

**Table 3.1**  
**Total storage capacity available with FCI, CWC and SWCs**

(Figures in LMT<sup>6</sup>)

As on 31 March	FCI (Owned covered and CAP)	CWC	SWCs	Total Storage Capacity
2007	152.33	102.20	191.86	446.39
2008	151.54	98.78	187.32	437.64
2009	151.40	105.25	196.82	453.47
2010	154.77	105.98	209.26	470.01
2011	156.07	102.47	211.27	469.81
2012	156.40	100.85	234.61	491.86

Source: FCI – Annual Reports of FCI and CWC

<sup>4</sup> Central Warehousing Corporation

<sup>5</sup> State Warehousing Corporations

<sup>6</sup> Lakh Metric Tonne

The total storage capacity for the Central Pool available with FCI including the capacity hired from all sources (State Government Agencies, CWC, SWCs and private parties) ranged from 238.94 LMT to 336.04 LMT at the end of March 2007 to 2012 as shown in the table below:

**Table 3.2**  
**Storage capacity available with FCI (including hired)**

(Figures in LMT)

As on 31 March	Covered			CAP			Grand Total
	Owned	Hired	Total	Owned	Hired	Total	
2007	129.41	93.42	222.83	22.92	6.32	29.24	252.07
2008	129.48	87.13	216.61	22.06	0.27	22.33	238.94
2009	129.67	101.24	230.91	21.73	0.15	21.88	252.79
2010	129.69	128.90	258.59	25.08	4.69	29.77	288.36
2011	129.91	154.59	284.50	26.16	5.44	31.60	316.10
2012	130.03	172.13	302.16	26.37	7.51	33.88	336.04

Source: Monthly Performance Reports.

The position of hired capacity from various agencies at the end of March 2009 to 2012 was as under:

**Table 3.3**  
**Details of capacity hired by FCI from various agencies**

(Figures in LMT)

As on 31 March	Total Hired Capacity	Share of various agencies in hired capacity			
		CWC	SWCs	State Govt.	Others (including Private)
2009	101.39	22.04 (22%)	62.21 (61%)	5.46 (5%)	11.68 (12%)
2010	133.59	28.85 (22%)	76.69 (57%)	6.28 (5%)	21.77 (16%)
2011	160.03	36.37 (23%)	93.91 (59%)	6.23 (4%)	23.52 (14%)
2012	179.64	39.88 (22%)	107.99 (60%)	5.85 (3%)	25.92 (15%)

## 3.2 Gap in storage capacity for the Central Pool

### 3.2.1 Shortfall in storage capacity with FCI against the Central Pool stock

Audit observed that from 2008-09 onwards, there was a sharp increase in procurement of food grains which resulted in severe strain on storage capacity available in the country for the Central Pool stock. With the increasing food grains stock in the Central Pool held by FCI and State Government Agencies (excluding food grains procured by Decentralised

Procurement states)<sup>7</sup>, the storage gap with FCI showed an increasing trend from 59.95 LMT in 2007-08 to 331.85 LMT in 2011-12 as indicated below:

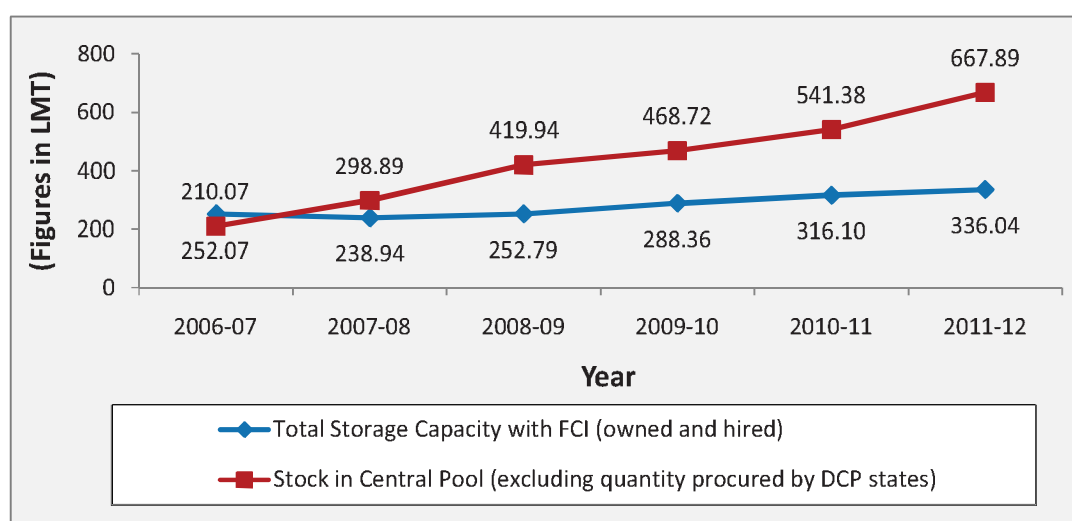
**Table 3.4**  
**Gap in storage capacity with FCI**

(Figures in LMT)

Year	Stock of Food grains in the Central Pool as on 1 June*	Food grains procurement by DCP states	The Central Pool stock minus Food grains procured by DCP states	Total storage capacity (owned and hired) available with FCI as on 31 March	Gap in storage capacity with FCI
(1)	(2)	(3)	(4) = (2)-(3)	(5)	(4)-(5)
2007	259.27	49.20	210.07	252.07	-
2008	363.67	64.78	298.89	238.94	59.95
2009	548.26	128.32	419.94	252.79	167.15
2010	608.79	140.07	468.72	288.36	180.36
2011	655.95	114.57	541.38	316.10	225.28
2012	824.11	156.22	667.89	336.04	331.85

\* As the Central Pool stock is at its peak on 1 June due to procurement of wheat in Rabi Marketing Season (April to June), the position of the Central Pool stock as on 1 June has been considered for identifying the extent of gap in storage capacity available with FCI.

**Chart 3.1**  
**Gap in Storage Capacity with FCI**



<sup>7</sup> As the Central Pool stocks with DCP states are issued directly to TPDS and OWS in the respective states, the food grains stock procured by these states is not taken into consideration for the purpose of calculating storage gap with FCI.

As would be seen from above, against the stock of food grains in the Central Pool, the available storage space operated by FCI was largely inadequate. The available storage capacity of FCI including hired capacity was only 336.04 LMT as against the stock of 667.89 LMT (excluding food grains procured by DCP states) at the end of March 2012 thus leaving a gap of 331.85 LMT. Due to such gap in the availability of storage capacity, huge stock of wheat was being left with the SGAs of procuring states even after the prescribed time frame (i.e., 30 June) for taking over by FCI, causing severe strain on their available storage capacity for the Central Pool. Further, though the total food grains stock in the Central Pool recorded an increase of 457.82 LMT between 2006-07 and 2011-12, FCI increased its storage space through hiring or owned space only to the extent of 83.97 LMT (18 per cent) which was not commensurate with the increase in food grains stock level. Its owned storage capacity increased by a mere 4.07 LMT during the period 2006-07 to 2011-12.

Despite several initiatives to resolve the above storage constraints, capacity addition under various augmentation programmes of the GOI could not meet the shortfall. As against the envisaged capacity addition to the extent of 163.38 LMT during the six year period from 2006-07 to 2011-12 under various augmentation programmes, only 34.36 LMT was completed at the end of March 2012.

#### Augmentation programmes

- i) Construction of owned storage capacity by FCI
  - XI Five Year Plan
  - scheme for North-east
- ii) National Policy on Handling, Storage and Transportation of Food grains
- iii) Private Entrepreneurs Guarantee (PEG) Scheme, 2008

(refer para 3.5)

Further, even if the total storage capacities of 491.86 LMT available with the main agencies in the country (FCI, CWC, SWCs) at the end of March 2012 were used for storing only food grains, it would not be able to accommodate the entire food grains stock level of 824.11 LMT in the Central Pool and the shortfall in storage capacity on the whole would be to the extent of 332.25 LMT.

*While accepting that capacity addition was not commensurate with increase in procurement and storage of food grains, the Management stated (November 2011 and July 2012) that total storage capacity available in the country was 645.44 LMT out of which 169.38 LMT was in the form of CAP capacity. To bridge the gap, 151.96 LMT of capacity was approved under Private Entrepreneurs Guarantee (PEG) Scheme, and further 30 LMT was under consideration for approval, and 28.17 LMT was constructed by 31 March 2012.*

*The Ministry in its reply stated (January 2013) that 181.10 LMT capacity had been approved by GOI and 32.30 LMT capacity had been constructed under PEG Scheme. In addition, 20 LMT of silo capacity in various states had been approved.*

The contention of the Management that 645.44 LMT of storage capacity was available in the country is not tenable as the total storage capacity of FCI arranged from all sources for the Central Pool stock was only to the extent of 336.04 LMT as on 31 March 2012. Mere availability of storage capacity in the country as stated by the Management is not a correct assessment unless the actual additional storage space is identified and arranged by FCI. In fact, despite accumulation of huge unlifted food grains stock of the Central Pool already lying with the SGAs, FCI could increase its storage space only to the extent of 83.97 LMT during the period under review.

Further, even if the anticipated capacity addition to the extent of 163.38 LMT planned under various augmentation programmes is implemented in future, the shortfall in storage capacity with FCI would persist unless remedial measures are initiated by FCI/ GOI.

### 3.2.2 Inadequate owned storage capacity of FCI

The position of owned and hired storage capacity with FCI at the end of March 2007 to 2012 is indicated in the table below:

**Table 3.5**  
**Total storage capacity available with FCI**

(Figures in LMT)

As on 31 March	Owned	Hired	Total
2007	152.33	99.74	252.07
2008	151.54	87.40	238.94
2009	151.40	101.39	252.79
2010	154.77	133.59	288.36
2011	156.07	160.03	316.10
2012	156.40	179.64	336.04

Source: Monthly Performance Reports

Audit analysis of the storage capacity with FCI revealed the following:

- The owned storage capacity with FCI remained more or less constant ranging between 151.40 LMT and 156.40 LMT during the period 2006-07 to 2011-12 and was not enough even to accommodate minimum buffer stock of 212 LMT to 319 LMT.
- Due to shortage of owned storage space, FCI had to go in for hiring space to accommodate

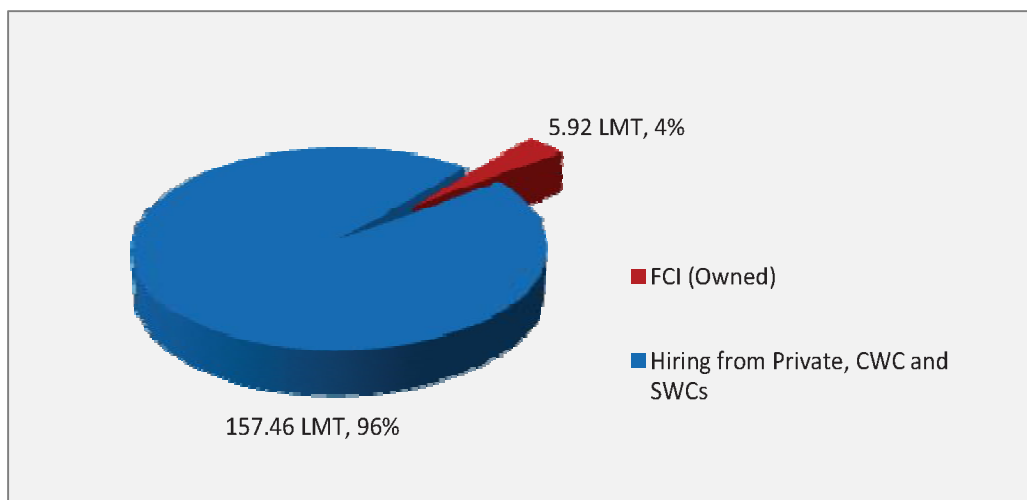
- The minimum buffer stock to be maintained: 212 LMT to 319 LMT, whereas owned capacity of FCI was 156.40 LMT.
- Hired capacity of FCI would reach 337.10 LMT after augmentation.
- Owned capacity would remain at 162.32 LMT only.

the increase in stock in the Central Pool. As a result, the hired capacity of FCI increased by 80 *per cent* from 99.74 LMT in 2006-07 to 179.64 LMT in 2011-12. This contributed to substantial increase in hiring charges of storage space incurred by FCI from ₹ 321.51 crore in 2006-07 to ₹ 1,119.03 crore in 2011-12.

- Due to constraints in available storage capacity, FCI could not take over stock of wheat procured by SGAs for the Central Pool within the prescribed time frame of June each year. The left over stock of wheat which remained with the SGAs after June each year was in the range of 36.75 LMT to 244.34 LMT during the period 2006-07 to 2011-12. Even till the end of March of the following years, as much as 8.49 LMT to 120.86 LMT of food grains remained unlifted by FCI. As a result, FCI has to incur expenditure for holding cost of food grains by the State Government Agencies which is referred to as carry over charges. This led to increase in payment of carry over charges made to SGAs from ₹ 175 crore in 2006-07 to ₹ 1,981 crore in 2010-11 which remained at ₹ 1,635 crore in 2011-12.

Despite severe constraints on owned storage capacity of FCI, only 5.92 LMT out of a total capacity of 163.38 LMT envisaged was planned for own construction during the period 2006-07 to 2011-12. The remaining capacity of 157.46 LMT was planned for augmentation through private and public sector agencies for guaranteed hiring by FCI as can be seen from the chart below:

**Chart 3.2**  
Storage capacity augmentation through different agencies



It is pertinent to mention that as owned capacity of FCI remained almost constant during the six year period, FCI had to increase its hired capacity to meet the shortfall. The hired storage capacity of FCI was 65 *per cent* of owned capacity during 2006-07 which had increased to 115 *per cent* during 2011-12. This had a substantial financial impact on the corresponding expenditure incurred by FCI on hiring of storage space. The average annual expenditure incurred on hiring (including carry over charges) from 2008-09 to 2011-12

was to the extent of about ₹ 2,265 crore. In addition, if capacity addition of 157.46 LMT envisaged for augmentation for guaranteed hiring by FCI is taken into consideration, the hired storage capacity of FCI in future will reach 216 *per cent* of the owned capacity of March 2012. The gap between owned and hired storage capacities will reach a critical proportion. This also indicates that hiring charges of FCI would continue to go up substantially in future unless owned storage capacity is augmented proportionately as against creation of storage capacity for guaranteed hiring by FCI. Thus, the position needs serious consideration.

*While accepting the audit observations, the Management stated (November 2011 and July 2012) that hired capacity was more flexible and could be hired/de-hired as per requirement. It was prudent to rely on hired capacity along with the creation of owned capacity. FCI had identified a gap of 89.42 LMT for own construction and a requirement of ₹ 4,000 crore was estimated under Eleventh five year plan (2007-12). The Ministry, however, earmarked only ₹ 125 crore against which capacity augmentation of 1.39 LMT was envisaged and 0.45 LMT was completed under five year plan upto March 2012.*

*The Management further stated that FCI recognised the fact that own godowns become valuable assets because it was easier to make long term strategic planning, effect changes in the infrastructure with the changing requirements, reap the advantages of administrative convenience and flexibility in managing them and secure the benefits of value appreciation with the passage of time. In view of the reduced allocation of funds in the Eleventh Five year plan, it was necessary to look for alternative resources to create such a huge capacity. With the creation of additional 180 LMT under PEG Scheme, the Corporation would be in a position to take over the stocks from the SGAs.*

*The Ministry stated (January 2013) that in the absence of adequate plan assistance for creation of huge capacity to the extent of 180 LMT, FCI had to look for an alternative route like PEG for hiring of additional storage space for safe storage of valuable food grains. Though an equitable mix of owned and hired capacity would be an ideal situation and might bring down the hiring cost, but till its own capacity was created, FCI had to rely on hired capacity to meet the requirement.*

### **3.2.3 Imbalance and shortfall in storage space with FCI**

The storage policy of the GOI aims to achieve availability of storage capacity to meet the storage requirements for holding operational stock of food grains (four months requirement for TPDS and OWS) and buffer stock in different states as a measure of food security. It also aims at creation of storage capacity for storing procured food grains stock in procuring states and for evacuation of food grains from procuring and surplus regions to deficit regions. Audit analysis revealed serious imbalances in availability of storage capacity and huge shortage of storage space in consuming states as indicated below:

- There was concentration of storage capacity in the states undertaking large procurement such as Punjab, Haryana, Andhra Pradesh, Uttar Pradesh and Chhattisgarh. Out of total storage capacity of 336.04 LMT available with FCI at the end of 31 March 2012, capacity of 214.33 LMT, i.e., 64 *per cent* was located in the above states.
- Consuming states such as Rajasthan and Maharashtra together had a storage capacity of 42.92 LMT (13 *per cent* of the total capacity of FCI). The remaining capacity (23 *per cent*) was being shared by the other 24 states/UTs.
- On the basis of records of 31 states/UTs available at FCI headquarters, it was observed that only six states/UTs<sup>8</sup> had the storage capacity to hold the required operational stock of food grains for four months during the period 2006-07 to 2011-12, while another eight states<sup>9</sup> could hold the stock at the required level at periodical intervals only. In the balance 17 states, 12 states<sup>10</sup> could hold stock for a period ranging between 60 days and 120 days; and the remaining five states<sup>11</sup> had storage capacity to hold the stock for less than 60 days (*Annex-V*). The state-wise position of storage capacity available with FCI (in days) at the end of March 2012 is depicted in chart 3.3.

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<sup>8</sup> Andhra Pradesh, Chandigarh, Chhattisgarh, Haryana, Puducherry and Punjab.

<sup>9</sup> Delhi, Goa, Gujarat, Kerala, Maharashtra, Rajasthan, Uttar Pradesh and Uttarakhand.

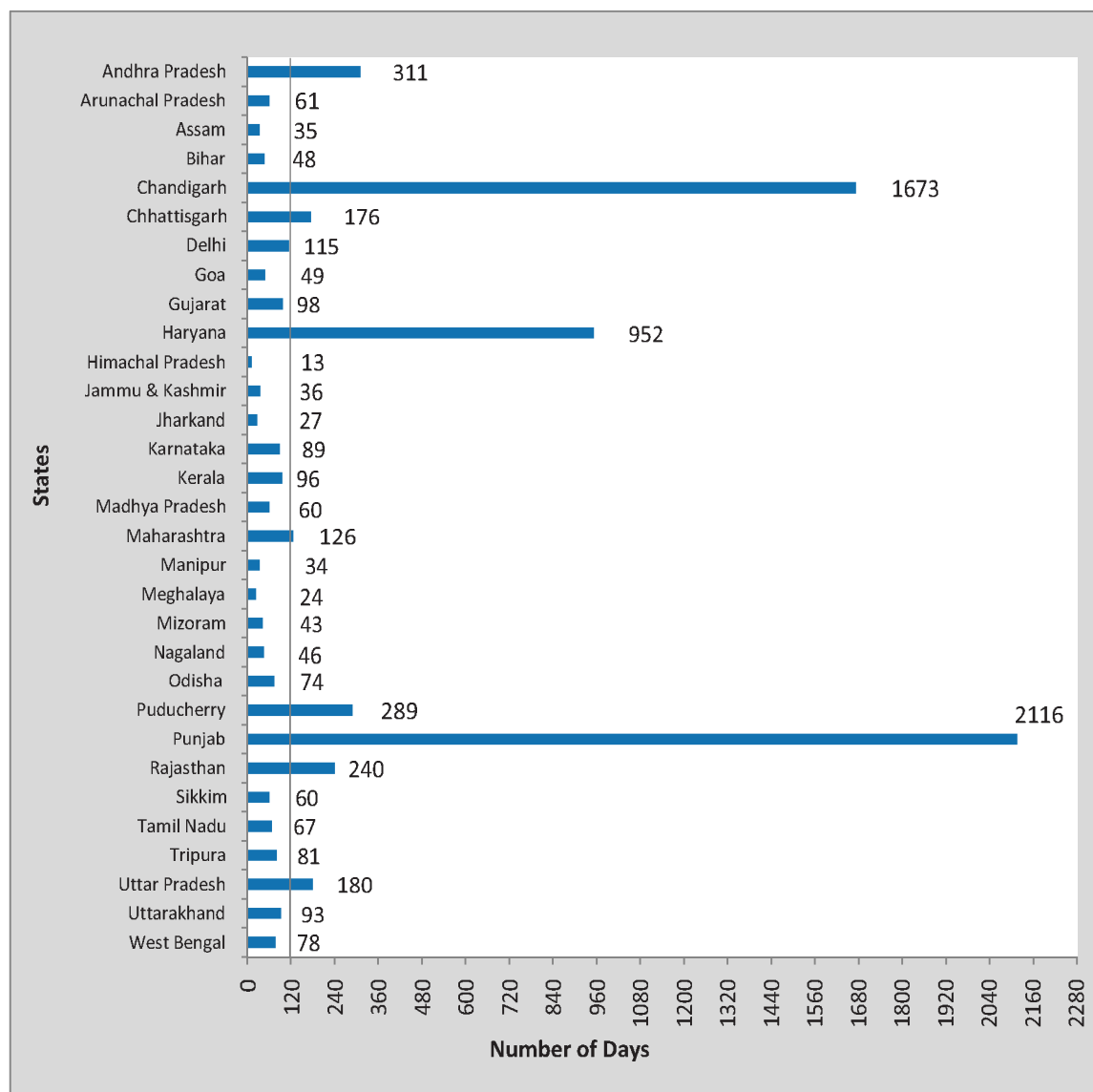
<sup>10</sup> Arunachal Pradesh, Karnataka, Madhya Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Sikkim, Tamil Nadu, Tripura and West Bengal.

<sup>11</sup> Bihar, Jharkhand, Assam, Himachal Pradesh and Jammu & Kashmir.



Chart 3.3

State-wise position of storage capacity (in days) vis-à-vis the requisite 120 days (four months) for operational stock as on March 2012



*The Management accepted (December 2011) the audit observations and stated that the GOI introduced PEG – 2008 scheme to reduce imbalances in state-wise storage capacity. The Ministry endorsed (January 2013) the view of the Management.*

Audit, however, observed that upto March 2012, only 28.17 LMT of storage capacity was constructed out of the envisaged capacity of 151.96 LMT under the PEG scheme indicating slow progress in the augmentation activities.

### 3.3 Deficiencies in storage of the Central Pool food grains

One of the most important aspects of storage management is maintenance of food grains quality at the time of storage and distribution. For ensuring quality of food grains during storage, it is essential to ensure storage worthiness of the storage space and storability of food grains.

Audit has also selected for detailed analysis, two SGAs each in Punjab<sup>12</sup> and Haryana<sup>13</sup> being the large procuring states in the country. The audit findings on the deficiencies in storage of the Central Pool stock of food grains are discussed in succeeding paragraphs:

#### 3.3.1 Storage of food grains in open space

According to the storage guidelines of FCI, the food grains should be stored in covered godowns and silos. Normally, storage capacity in the form of Covered and Plinth (CAP) should be resorted to for storing wheat during peak procurement seasons. Subsequent storage should be in the covered godowns as storage in Covered and Plinth for long duration exposes the food grains to the risk of deterioration in quality. In view of the risks involved, this type of storage should be taken recourse to as a last resort.

Audit, however, observed that even after the procurement seasons, substantial amount of food grains was kept in the CAP due to insufficient covered storage capacity. The quantum of food grains kept in Covered and Plinth by FCI and SGAs in the country at the end of March 2010 and March 2011 was 66.43 LMT and 50.87 LMT respectively. This rose to 87.86 LMT at the end of March 2012.

**Picture 3.1**  
**Food grains stock in Covered and Plinth in FCI, Punjab**



<sup>12</sup> Punjab State Warehousing Corporation (PSWC) and Punjab State Civil Supplies Corporation (PUNSUP).  
<sup>13</sup> Haryana Warehousing Corporation (HWC) and Haryana Food and Supply Department (F&SD).

Audit observations on shortfall in covered storage capacity available for the Central Pool with selected SGAs in Punjab and Haryana are discussed below:

- In Punjab region, FCI and five SGAs<sup>14</sup> procured wheat ranging between 67.80 LMT and 109.64 LMT during the period 2006-07 to 2011-12.

PUNSUP Sangrur stored 81 *per cent* to 92 *per cent* of wheat stocks available at the end of the procurement seasons in open/Covered and Plinth storage during the period 2006-07 to 2011-12. The quantum ranged between 1.20 LMT and 2.46 LMT. PUNSUP Ferozpur stored 92 *per cent* to 99 *per cent* of wheat stock available at the end of the procurement seasons in open/Covered and Plinth storage. The quantum ranged between 0.43 LMT and 2.56 LMT. PUNSUP Ludhiana likewise stored 0.51 LMT to 1.42 LMT of wheat which was 61 *per cent* to 89 *per cent* of wheat stock available at the end of the procurement seasons in open/Covered and Plinth storage. In PUNSUP Amritsar, 82 *per cent* to 96 *per cent* of wheat stock available at the end of the procurement seasons was stored in open/Covered and Plinth storage. Hence, substantial food grains were stored in the Covered and Plinth storage.

The total wheat stock with SGAs in Punjab was 61.55 LMT, of which 15.68 LMT was in covered godowns and 45.87 LMT was under Covered and Plinth as on 31 March 2012. Hence, most of wheat stock was held in Covered and Plinth godowns.

**Picture 3.2**  
**Storage of food grains in CAP in SGA, Punjab**



<sup>14</sup> Pungrain, Punjab State Warehousing Corporation (PSWC), Punjab Civil Supplies Corporation (PUNSUP), Punjab Agro and Markfed.

- In Haryana region, all five SGAs<sup>15</sup> and FCI procured wheat ranging between 22.29 LMT and 69.28 LMT during the period 2006-07 to 2011-12. The total wheat stock with SGAs was 42.38 LMT, of which 12.09 LMT was in covered godowns and 30.29 LMT was under Covered and Plinth as on 31 March 2012. Hence, most of wheat stock was held in Covered and Plinth godowns.

*While accepting the audit observations, the Management stated (July 2012) that due to inadequacy of covered space, stock of wheat was stored in CAP and not shifted to the covered godowns even if it fell vacant in between to make way for the rice to be received which could not be kept in the open.*

*While agreeing with the audit observations, the Ministry stated (January 2013) that in order to reduce dependence on CAP storage, FCI had taken up construction of 181.10 LMT of covered capacity under the PEG scheme against which 32.30 LMT had been completed by November 2012.*

### 3.3.2 Poor condition of storage facilities

Audit observed that poor conditions of storage facilities for the food grains stock of the Central Pool maintained by SGAs in Punjab and Haryana resulted in damage of food grains as indicated below:

#### (a) Punjab Region

- PUNSUP failed to maintain the food grains stock in proper health due to which stock of 17,423 MT of wheat relating to the years 2008-09 to 2010-11 was damaged. The damaged food stocks worth ₹ 20.39 crore were not disposed of till March 2012. The Company obtained approval from FCI for disposal of 8,930 MT in October 2011. Failure to ensure early disposal of wheat stock led to loss due to blockage of storage space.

**Picture 3.3 – Food grains damaged in SGA, Punjab**



<sup>15</sup> Hafed, Haryana Warehousing Corporation (HWC), Haryana Food and Supply Department, Haryana Agro and Confed.

- PSWC failed to take remedial measures to maintain the stock in proper health which resulted in damage of 666 MT wheat pertaining to crop years 2008-09 to 2010-11 valuing ₹ 77.80 lakh. Out of the above stock, wheat of 138.53 MT at Moonak was damaged due to flood.

## (b) Haryana region

- Wheat procured by Haryana Warehousing Corporation (HWC) for the Central Pool valuing ₹ 9.01 crore was damaged and subsequently disposed of by way of public auction/inviting tenders. The disposal of damaged wheat resulted in loss of ₹ 6.65 crore to HWC as detailed below:

**Table 3.6**  
**Details of wheat damaged and consequent loss as on 31 March 2012**

Name of Centre	Crop year	Quantity damaged (in MT)	Value (₹ in lakh)	Amount obtained through auction/tender (₹ in lakh)	Loss suffered (₹ in lakh)	Reasons for damage
<b>Bani</b>	2008-09	71.60	10.83	1.02	9.81	Occurrence of sudden and unprecedented flood due to several major breaches in Ghagger River.
	2009-10	2,023.70	293.57	23.23	270.34	
	2010-11	3,033.15	386.08	41.64	344.44	
<b>Palwal Unit-II</b>	2008-09	1,260.00	173.47	143.09	30.38	Unseasonal and continuous rains at the time of procurement in mandi and receipt of stocks at storage point from 19.5.2008 to 26.5.2008.
<b>Tauru</b>	2008-09	289.36	37.34	27.86	9.99	-----do-----
<b>Total</b>		<b>6,677.81</b>	<b>901.29</b>	<b>236.84</b>	<b>664.96</b>	

- In Food and Supply Department, Haryana, ₹ 11.96 crore worth of wheat stock was damaged. The damage of wheat occurred mainly due to storage of wheat in open plinths. The loss suffered by SGAs in the disposal of damaged stock was ₹ 6.44 crore as shown below:

**Table 3.7**  
**Details of wheat damaged and consequent loss as on 31 March 2012**

Name of Centre	Crop year	Quantity damaged (in MT)	Value (₹ in lakh)	Amount obtained through auction/ tender (₹ in lakh)	Loss suffered (₹ in lakh)	Reasons for damage
<b>Kurukshetra (Ismailabad Centre)</b>	2010-11	1,547.35	223.39	37.85	185.54	Flood in July 2010.
<b>Sonepat</b>	2009-10	1,467.00	190.51	103.80	86.70	Heavy rain in September 2009.
<b>Palwal (Bhagola Centre)</b>	2008-09	4,582.65	724.27	352.15	372.12	Unprecedented rain in May 2008.
<b>Palwal (Faridabad)</b>	2009-10	159.00	19.47	Yet to be disposed of	-	Heavy rain.
<b>Babain (Kurukshetra)</b>	2009-10	248.93	37.99	Yet to be disposed of	-	Stocking at low lying area without drainage system and delay in segregation of stock.
<b>Total</b>		<b>8,004.93</b>	<b>1,195.63</b>	<b>493.80</b>	<b>644.36</b>	

The Management accepted (July 2012) the audit observations that the main reason for damage of the stock was storage in CAP and stated that FCI was increasing the storage capacity as storage of wheat in covered godowns in proper condition would minimise the damage.

The Ministry stated (January 2013) that the quantum of food grains damaged with SGAs in Punjab and Haryana during the period 2007-08 to 2010-11 was quite insignificant as compared to total procurement by SGAs.

The value of 32,772 MT damaged food stock amounting to ₹ 42.14 crore is based on audit of selected SGAs of Punjab and Haryana. The observations of Audit were based on sample selection and to that extent the amount involved is significant.

### 3.3.3 Storage of old crops leading to damage of food grains

According to the existing instructions of FCI, for issuance of food grains stock on priority, the principle of First-In-First-Out (FIFO) should be strictly followed with respect to the crop year as well as within crop year during which the stocks are accepted.

Audit, however, observed that the FIFO principle was not adhered to as a total of 125.99 LMT of food grains (including paddy) pertaining to crop years 2008-09 to 2010-11 was lying in the Central Pool as on 31 March 2012. Audit further noticed that during 2011-12,

FCI and SGAs in the country procured 283.35 LMT of wheat (FCI 39.74 LMT and SGAs 243.61 LMT) out of which 133.44 LMT of wheat were issued at the end of 2011-12, while 38.06 LMT of wheat pertaining to crop years 2008-09 to 2010-11 were lying in the Central Pool.

Further, in respect of wheat, 103.94 LMT of the Central Pool stock pertaining to crop years 2007-08 to 2011-12 were lying in the custody of SGAs in Punjab and Haryana as on 31 March 2012. Audit observed that due to non-adherence to FIFO principle, 1.06 LMT of wheat worth ₹ 121.93 crore under the custody of SGAs in Punjab and Haryana were damaged.

*The Management accepted the audit observations and stated (December 2011) that main reason behind FIFO violation was that stocks remained infested, pocket damaged, and formation of atta due to poor preservation of stocks by the agency and their failure to render the stock despatch worthy.*

*While endorsing the view of the Management, the Ministry stated (January 2013) that as at December 2012, FCI was having only 2.34 LMT old stocks of wheat pertaining to the crop year upto 2009-10.*

Scrupulous adherence to FIFO principle is essential to ensure that old crops stock with FCI and SGAs does not pile up in the future, particularly in view of the substantial increase in procurement effort in the recent years.

### 3.4 Inefficiencies in storage operations

#### 3.4.1 Status of capacity utilisation

Efficient storage management involves ensuring optimum capacity utilisation of the existing capacity and minimising cost of storage. This can be effected through timely and proper planning of movement and distribution of food grains. Utilisation of storage capacity is determined by inflow and outflow of food grains for buffer stock and intermediary storage for distribution under TPDS. Moreover, storage capacity in the consuming states has also to be utilised for easing pressure on the procuring states and large stocks have to be moved to deficit and consuming states irrespective of consumption requirements.

The storage capacity utilisation on the basis of monthly stock level as indicated by FCI ranged between 33 per cent and 57 per cent during 2006-07, and 30 per cent and 66 per cent during 2007-08. During 2008-09 to 2011-12, the capacity utilisation was in the range of 57 per cent to 91 per cent.

Audit findings on the utilisation of existing storage space are discussed below:

**(i) Norms for capacity utilisation not specified**

Norms for utilisation of storage capacity are essential for assessing the level of utilisation in different depots and for providing inputs for performance evaluation. Audit, however, observed that FCI had not specified standard norms for determining optimum capacity utilisation. Instead, a number of suggested norms<sup>16</sup> given by various agencies were being used for assessment of the level of utilisation of storage capacity. Without any specified standard norms, FCI would not be able to effectively evaluate and uniformly monitor the desired level of storage capacity utilisation in all the godowns across the country.

*The Management accepted (February 2012) the audit observations on the need for fixing of norms for evaluation of optimum utilisation of capacity in various regions of FCI.*

*The Ministry stated (January 2013) that the criteria for optimum capacity utilisation of owned and hired godowns of FCI had been kept at 80 per cent for Memorandum of Understanding (MOU) signed between FCI and the Department of Food for the year 2011-12.*

The reply of the Ministry is not acceptable as the criterion of 80 per cent for optimal capacity utilisation of storage space given in the MOU for the year 2011-12 was with reference to a target fixed for a particular year which cannot be considered as specified standard norms of FCI applicable for all godowns across the country.

**(ii) Low utilization of existing capacity in various states/UTs**

Based on records at FCI headquarters, the utilisation of existing storage capacity of 31 states/UTs was reviewed in audit by taking the most conservative norm of 75 per cent prescribed by Bureau of Industrial Costs and Prices amongst other suggested norms.

Audit observed that despite storage constraints in FCI, utilisation of existing storage capacity in various states/UTs was less than 75 per cent in majority of the months during the period 2006-07 to 2011-12. The month-wise capacity utilisation on the basis of monthly stock level during the six year period in various states/UTs examined in Audit was as indicated in the table below:

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<sup>16</sup> *The Buffer Stock Committee (85 per cent); Bureau of Industrial Costs and Prices (75 per cent) and PEG - 2008 (80 per cent).*



**Table 3.8**  
**State-wise utilization of storage capacity (monthly) during six year period**

Sl. No.	Name of state	Storage Capacity Utilization (in percentage) in number of months out of total 72 months		
		Up to 50 per cent	50 per cent to 75 per cent	75 per cent and above
1	Andhra Pradesh	13	23	36
2	Arunachal Pradesh	46	23	3
3	Assam	22	42	8
4	Bihar	22	41	9
5	Chandigarh	6	29	37
6	Chhattisgarh	15	17	40
7	Delhi	26	32	14
8	Goa	13	36	23
9	Gujarat	14	16	42
10	Haryana	9	24	39
11	Himachal Pradesh	21	27	24
12	Jammu and Kashmir	4	52	16
13	Jharkhand	9	22	41
14	Karnataka	18	33	21
15	Kerala	20	17	35
16	Madhya Pradesh	12	18	42
17	Maharashtra	27	29	16
18	Manipur	47	15	10
19	Meghalaya	21	32	19
20	Mizoram	35	31	6
21	Nagaland	20	19	33
22	Odisha	16	36	20
23	Puducherry	15	34	23
24	Punjab	15	24	33
25	Rajasthan	25	9	38
26	Sikkim	22	24	26
27	Tamil Nadu	7	25	40
28	Tripura	22	32	18
29	Uttar Pradesh	26	41	5
30	Uttarakhand	15	23	34
31	West Bengal	25	23	24

The details of capacity utilization of 75 per cent and above and below 50 per cent in different states are as shown below:

**(a) Capacity utilization of 75 per cent and above (in months)**

<b>More than 36 months:</b>	Chandigarh, Chhattisgarh, Gujarat, Haryana, Jharkhand, Madhya Pradesh, Rajasthan and Tamil Nadu.
<b>25 to 36 months:</b>	Andhra Pradesh, Kerala, Nagaland, Punjab, Sikkim and Uttarakhand.
<b>13 to 24 months:</b>	Delhi, Goa, Himachal Pradesh, Jammu & Kashmir, Karnataka, Maharashtra, Meghalaya, Odisha, Puducherry, Tripura and West Bengal.
<b>Upto 12 months:</b>	Arunachal Pradesh, Assam, Bihar, Manipur, Mizoram and Uttar Pradesh.

**(b) Capacity utilization below 50 per cent (in months)**

<b>More than 36 months:</b>	Arunachal Pradesh and Manipur.
<b>25 to 36 months:</b>	Delhi, Maharashtra, Mizoram, Rajasthan, Uttar Pradesh and West Bengal.
<b>13 to 24 months:</b>	Andhra Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Himachal Pradesh, Karnataka, Kerala, Meghalaya, Nagaland, Odisha, Puducherry, Punjab, Sikkim, Tripura and Uttarakhand.
<b>Upto 12 months:</b>	Chandigarh, Haryana, Jammu & Kashmir, Jharkhand, Madhya Pradesh and Tamil Nadu.

The utilization of storage capacity of FCI in some states was particularly poor. The data also point to the need for considerable improvement in the case of Arunachal Pradesh, Manipur, Mizoram, Uttar Pradesh, Delhi, Maharashtra and West Bengal.

*The Management accepted (December 2011) the facts and explained that the capacity utilisation might go down due to sudden unanticipated increase in offtake for a particular region. Similarly, the capacity utilisation might also go down due to unanticipated decrease in procurement for a particular region in a particular year. However, for the years 2008-09 to 2010-11, all the non-NE states with the exception of Maharashtra during the year 2008-09 were able to achieve a maximum capacity utilisation level which was more than BICP norm of 75 per cent.*

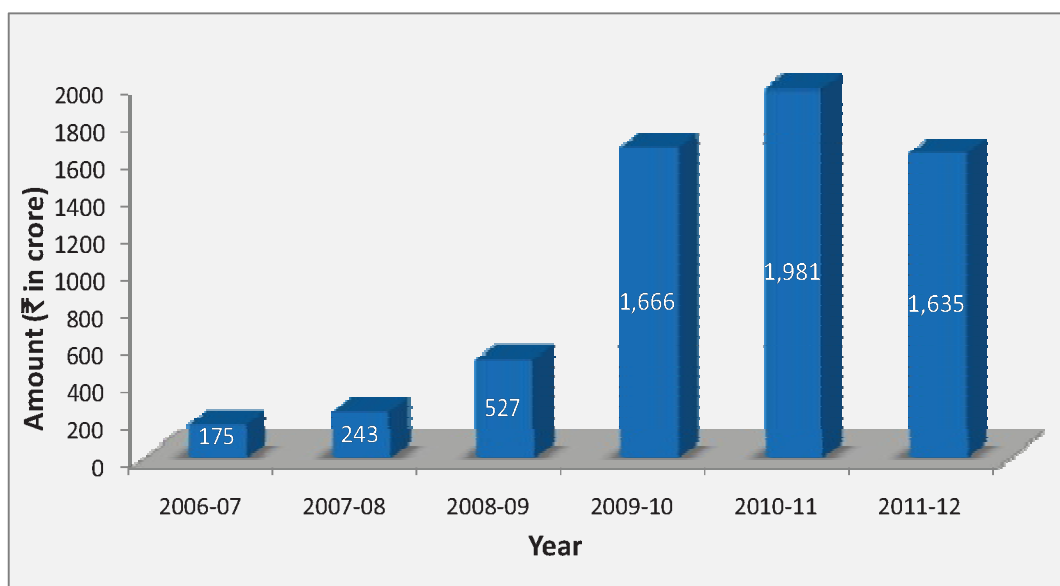
The fact, however, remains that no standard norms had been prescribed so far for evaluation of optimal level of capacity utilization in various godowns. In the absence of such specified standard norms, strict enforcement of optimal capacity utilization uniformly

across the states would remain doubtful. Further, storage capacity utilisation upto 75 per cent was not sustained during the major part of the six year period 2006-07 to 2011-12.

### 3.4.2 Non-utilisation of vacant space and payment of avoidable carry-over charges

SGAs procure wheat for the Central Pool which they have to deliver to FCI immediately after procurement. For any quantity of wheat not taken over after June 30 each year, FCI has to pay carry over charges to SGAs for holding the stock. Where FCI is not in a position to accept the wheat, it has to pay carry over charges in the form of storage and interest cost to the SGAs till the month of actual takeover. The carry over charges paid during the period 2006-07 to 2011-12 is depicted in the chart below:

**Chart 3.4**  
**Carry over charges paid to SGAs by FCI**



Audit observed that the balance stock of wheat with SGAs remaining unlifted by FCI after the prescribed time frame, i.e., June 30 was in the range of 36.75 LMT to 244.34 LMT during the period 2006-07 to 2011-12. Even at the end of March of the following years, as much as 8.49 LMT to 120.86 LMT remained unlifted during the same period. Due to such delays in lifting of stock, payment of carry over charges to SGAs increased substantially over the years. FCI paid to SGAs as much as ₹ 6,227 crore during the period 2006-07 to 2011-12. The last three of the six years accounted for 85 per cent of this expenditure on carry over charges.

Audit further observed that FCI incurred carry over charges in respect of SGAs in Punjab and Haryana for not taking over the balance Central Pool stock within the prescribed time frame due to failure to utilise vacant storage space. Audit also observed that payment of

carry over charges to SGAs in Punjab and Haryana could be reduced by optimal utilization of existing storage space in wheat procuring and consuming states as highlighted below:

**(i) Non-utilisation of available storage capacity for surplus stock of wheat**

The SGAs of Punjab and Haryana procured wheat ranging from 78.47 LMT to 153.94 LMT during procurement seasons of 2006-07 to 2011-12. Out of this, 12.08 LMT to 31.18 LMT of wheat was directly taken over by FCI during the same period. The balance quantity ranging from 47.29 LMT to 135.98 LMT was left with the SGAs at the end of each season during the review period.

Audit observed that no movement of stock was planned by FCI to utilise storage capacity available with wheat consuming states during these procurement seasons for evacuation of stocks left with SGAs. At the end of June of each year during the six year period 2006-07 to 2011-12, storage capacity ranging from 12.63 LMT to 49.98 LMT was vacant in some of the major consuming states such as Delhi, Maharashtra, Gujarat, UP, MP, Rajasthan and Bihar. This vacant capacity could have been utilised to store the substantial quantities of stock lying with SGAs of Punjab and Haryana at the end of each procurement season during the period 2006-07 to 2011-12 to reduce the carry over charges.

The aggregate wheat stock available with the SGAs of Punjab and Haryana at the end of each procurement season during the six year period was 609.83 LMT, and against which the aggregate vacant storage space available in the major wheat consuming states was 164.82 LMT. FCI could have increased direct delivery of wheat from the SGAs to that extent and utilized the vacant space. The quantity of direct delivery of wheat during procurement seasons could also be increased by utilizing available vacant space in other consuming states as the effective utilization of available space in various states during the six year period was less than 75 per cent in majority of the months.

Thus, utilisation of vacant storage space through timely and systematic evacuation planning could minimise payment of carry over charges to SGAs. Payment of carry over charges should be done only in exceptional circumstances rather than a regular practice as is being followed in FCI.

**(ii) Short delivery of wheat from SGAs in Punjab and Haryana to utilise available storage capacity of FCI**

During each procurement season, FCI takes direct delivery of wheat procured by SGAs at the mandis depending upon availability of storage space. Audit, however, observed that after taking over 5.39 LMT to 17.36 LMT in April to June each year during the period 2006-07 to 2011-12, vacant storage space available in FCI regional office, Punjab ranged from 5 LMT to 26.67 LMT at the end of procurement season (April to June). The available storage capacity could have been used by direct delivery of additional quantity of wheat from SGAs. FCI, however, did not take direct delivery of wheat to utilise the

vacant space within the state and incurred an avoidable expenditure of ₹ 316.52 crore on carry over charges reimbursed to SGAs.

Similarly, in RO Haryana, storage space ranging from 0.24 LMT to 7.28 LMT was vacant at the end of procurement season during the period 2006-07 to 2011-12 after taking over of 6.69 LMT to 17 LMT in April to June each year. But due to short planning of direct delivery of wheat, an avoidable expenditure of ₹ 59 crore was made towards carry over charges to SGAs.

Thus, failure to utilise the vacant storage space due to short planning of direct delivery of wheat resulted in avoidable expenditure of carry over charges of ₹ 375.52 crore during the period 2006-07 to 2011-12.

*The Management accepted the facts and stated (July 2012) that entire stock procured could not be taken over and FCI had to pay carry over charges to SGAs for keeping the food stock. Even if the stock had been taken over from the SGAs and stored in FCI hired godowns (assuming they were available) the resultant savings would have been one per cent higher rate of interest being paid to SGAs as compared to the rate of interest on cash credit which FCI would be paying to SBI. Moreover, the available space was kept vacant for storage of rice. Stocks taken over from the SGAs for storing in FCI godowns would involve multiple handling cost. Thus, for stocks holding up to four months with the SGAs, FCI did not incur any additional cost as the storage and interest charge for holding of stock remained lower than the handling cost which would have been incurred had the stocks been taken over in FCI godowns from the SGAs.*

*While endorsing the views of the Management, the Ministry further stated (January 2013) that larger quantity of food grains was held by SGAs for a longer period with the increase in procurement of wheat and due to constraints on the part of Railways in providing rakes. Had the Railways provided rakes as requisitioned by FCI, an additional 25 LMT could further have been moved in each of these years.*

The contention of the Ministry that stocks from SGAs could not be moved solely due to constraints on the part of Railways is not acceptable as FCI should have adequately planned well in advance for evacuation of wheat stock each year keeping in view the prescribed time frame in order for the Railways to provide rakes as per requirement. In many instances, FCI requisitioned more rakes from Railways than initially planned with open dates leading to shortfall in supply of rakes. Huge accumulation of unlifted stocks with SGAs after the prescribed time frame is indicative of deficiency in movement planning.

The justification advanced by the Management and the Ministry for storage of wheat with SGAs for prolonged periods after 30 June each year needs to be viewed in the context of the types of storage capacity available. As brought out in Para 3.3.1, in the case of Punjab and Haryana, which are major procuring states, out of 103.93 LMT wheat stored at the end of March 2012, 76.16 LMT was kept in open/Covered and Plinth (CAP) by SGAs. The

storage in open/CAP should be restricted to the peak procurement season and only for a short span of time. Prolonged storage in open/CAP exposes the food grains to the risk of deterioration in quality.

Audit observed that payment of carry over charges to SGAs could be minimised by optimum utilisation of existing storage space with FCI in wheat procuring and consuming states through proper planning of direct delivery of wheat from SGAs in procuring states. The surplus stocks have to be evacuated sooner or later from the procuring states to consuming states to make the food grains available for distribution by incurring handling expenses.

Thus, allowing a large balance of food stock to remain with SGAs after June 30 every year for a long period of time by FCI on the ground that (a) if the stocks were taken over, it would save only marginal cost of one *per cent* higher rate of interest charged by SGAs for the food stock held by them and (b) that more expenditure on multiple handling would have to be incurred if the stocks were taken over, is not justified.

### 3.4.3 Silos storage capacity lying unused despite storage constraints

For the purpose of scientific storage of food grains in bulk form and for minimizing handling cost and saving of storage space, FCI stored food grains in silo system apart from conventional godowns in bagged forms. Of the total storage capacity of 156.40 LMT at the end of 2011-12, FCI had a total silo storage capacity of 4.62 LMT (constructed during the period 1960 to 1982) in different parts of the country. The state-wise silo storage capacity and their status is shown in the table below:

**Table 3.9**  
**Total capacity of own silos available with FCI**

Sl. No.	Name of state	Year of construction	Total Storage Capacity (in MT)	Storage Capacity of Unused silos/ Center (in MT)	Year (since not in use)
1	Delhi	1970-71	21,000	21,000 (Maya Puri)	2003
2	Haryana	1971	20,000		
3	Punjab	1979 to 1982	60,000		
4	Uttar Pradesh	1967 to 1980	1,22,000	92,000 (Chanderi and Khurja)	1982 and 2004
5	Maharashtra	1960-64	1,88,000	1,88,000 (Manmad and Borivli)	2000 and 2004
6	Bihar	1976	32,000	32,000 (Gaya)	1987
7	West Bengal	1968	19,000	19,000 (Kolkata Port)	1995
<b>Total</b>			<b>4,62,000</b>	<b>3,52,000</b>	

Source: Storage and Contract Division of FCI.

Audit observed that out of the total 4.62 LMT of silo storage capacity, 3.52 LMT was lying unused for a period ranging from eight to 30 years despite shortage of storage capacity in FCI. Further analysis of the unused silos of 3.52 LMT revealed deficiencies in maintenance and disposal of the silos as indicated below:

- Lack of proper maintenance and shortage of skilled staff resulted in 3.12 LMT silo capacity remaining unutilised. FCI stated that the idle silos had become unusable and were beyond economical repairs. No cost-benefit analysis was, however, conducted to assess the actual position so as to put the silos to economical use.
- Silos at Mayapuri, Delhi of 21,000 MT capacity were lying unutilised due to non-installation of thermocouple and hygrometer since 2003.
- In case of silos of 19,000 MT capacity at Kolkata Port, FCI had decided on dismantling of silos and handing over the land to the Kolkata Port Authority which was also yet to be completed. Due to delay in dismantling and disposal, the Corporation incurred an avoidable expenditure of ₹ 4.62 crore by way of idle wages to labour (₹ 2.54 crore from 2001-02 to 2005-06), lease rent (₹ 2.04 crore from 2001-02 to 2011-12), and rent of office building (₹ 4 lakh from 2001-02 to 2010-11).

*While accepting the audit observations, the Management stated (July 2012) that feasibility of utilising these concrete silos alongwith the cost benefit analysis for making those silos storage worthy, was under review and decision would be taken accordingly. The Ministry endorsed (January 2013) the reply of the Management.*

#### **3.4.4 Short hiring of space offered by Central Warehousing Corporation**

One of the important components of operational expenditure of FCI is the rent of godowns arising out of hiring storage space from various agencies. The expenditure on hiring has also witnessed a sharp increase from ₹ 321.51 crore in 2006-07 to ₹ 1,119.03 crore in 2011-12. One of the main agencies from which storage space is hired by FCI is the Central Warehousing Corporation, a public sector entity under the Ministry of Consumer Affairs, Food and Public Distribution. FCI also hires storage space from State Warehousing Corporations, State Government Agencies and private parties for storage of food grains of the Central Pool stock. The trend of the capacities hired during 2008-09 to 2011-12 is depicted in the chart 3.5.

**Chart 3.5**  
**Capacity hired by FCI from CWC, SWCs, SGAs and private parties**



With substantial increase in procurement from 2008-09 onwards, the storage gap with FCI widened steadily from 167.15 LMT as on 31 March 2009 to 331.85 LMT as on 31 March 2012. The increase in total storage space through owned (5 LMT) and hired (78.25 LMT) capacity, however, was only to the extent of 83.25 LMT during the same period.

Though space hired from CWC showed a consistent increase during 2008-09 to 2011-12, there was availability of additional space with CWC that could have been hired to reduce the storage gap with FCI.

Audit observed that CWC had offered space for hiring in various regions in the range of 1.45 LMT to 11.36 LMT during various months from May 2009 to March 2012, but FCI hired storage space only upto 3.16 LMT against the offer and did not avail the opportunity to hire more space from CWC to reduce the storage gap for the Central Pool stock. Region-wise and month-wise vacant space offered by CWC for the period from May 2009 to March 2012 is given in *Annex-VI*.

*The Management stated (July 2012) that the decision to hire the space was essentially taken in a decentralised manner based on evaluation of felt need for storage in the field. In certain cases, storage capacity offered by CWC was not hired generally due to (i) capacity not being storage worthy, (ii) arrangement of handling & transportation not being available, and (iii) capacity not being physically available.*

*The Ministry endorsed (January 2013) the reply of the Management.*



The Management needs to examine specific reasons for not hiring substantial storage capacities offered by CWC by different FCI Regional/Zonal offices and review the procedure of hiring storage space being followed by them. There is also a need for the Ministry to review the matter since vacant space of over a million tonnes in CWC entails a huge opportunity cost.

### 3.5 Augmentation of storage capacity

To meet the shortfall in storage capacity, the GOI had initiated augmentation activity under various programmes. The augmentation programmes undertaken during the period under review include (i) construction of owned storage godowns by FCI (ii) National Policy on Handling, Storage and Transportation of Food grains, and (iii) Private Entrepreneurs Guarantee Scheme (PEG) 2008.

Storage capacity of FCI including space arranged from main agencies, viz., CWC, SWCs, SGAs was sufficient to accommodate stock of food grains of the Central Pool till 2007-08. However, with the substantial increase in procurement of food grains from 2008-09 onwards, there was severe strain on available storage capacity for the Central Pool stock. The available storage capacity of FCI including hired capacity was only 336.04 LMT as against the stock of 667.89 LMT (excluding stock of 156.22 LMT procured by DCP states for the Central Pool) at the end of March 2012 thus leaving a gap of 331.85 LMT. Further, even if all the storage capacities of 491.86 LMT available with the main agencies, viz., FCI, CWC and SWCs are put together, there was shortfall in storage capacity of 332.25 LMT in 2011-12 as against the entire Central food stock of 824.11 LMT.

The capacity addition envisaged by the GOI under various augmentation programmes was 163.38 LMT. Details of storage capacity envisaged under various programmes and the status of construction during the period 2006-07 to 2011-12 was as under:

**Table 3.10**  
**Schemes for storage capacity augmentation**

(Figures in LMT)

Sl. No.	Name of the Scheme	Storage capacity envisaged	Storage Capacity constructed
1	Owned capacity addition plan of FCI		
	i) XI Five year Plan scheme	0.52	0.45
	ii) Construction of storage capacity in North-East	<u>5.40</u>	<u>0.24</u>
	Total:	<u>5.92</u>	<u>0.69</u>
2	National Policy on Handling, Storage and Transportation of Food grains (June 2000) capacity was to be created by June 2008	5.50	5.50
3	Scheme for construction of godowns through private entrepreneurs (PEG) - July 2008	151.96	28.17
	<b>Total</b>	<b>163.38</b>	<b>34.36</b>

Audit observed that though the storage gap for the Central Pool stock was 331.85 LMT as against the available storage capacity of FCI including hired capacity, the GOI/FCI envisaged capacity addition of only 163.38 LMT during the period 2006-07 to 2011-12 under various augmentation programmes including 5.92 LMT for own construction by FCI. Out of this, only 0.69 LMT by FCI and 33.67 LMT under other schemes were actually constructed as on 31 March 2012. Only in the case of the National Policy on Handling, Storage and Transportation of Food grains was the augmentation of storage capacity in conformity with what was envisaged. Even if the targeted capacity addition of 163.38 LMT is achieved in future, the shortfall of storage capacity with FCI will persist to the extent of 168.47 LMT.

Audit observations on the augmentation of capacity under various schemes are indicated below:

### 3.5.1 Owned capacity addition plan of FCI

#### (i) XI Five Year Plan scheme

Under the XI Five Year Plan (2007-12), a total of 1.39 LMT storage capacity was envisaged initially in different states/UT,<sup>17</sup> but 0.15 LMT for Jammu and Kashmir and 0.72 LMT was later transferred to PEG - 2008 scheme and construction of storage capacity in the North-East scheme respectively. Out of the remaining 0.52 LMT, 0.45 LMT capacity was completed till March 2012.

*The Ministry stated (January 2013) that construction of 0.52 LMT storage capacity had been completed.*

#### (ii) Construction of storage capacity in North East

To meet the storage gap of four months operational stock requirements in North East region, a special package plan was formulated (November 2010) for creation of 5.40 LMT storage capacity (including 0.72 LMT capacity taken under XI Five Year Plan) with a financial outlay of ₹ 568.17 crore. The target date of completion of the projects under this plan is March 2015. The state-wise details of the capacities envisaged were as under:

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<sup>17</sup> Assam, Mizoram, Karnataka, Tripura, Odisha, Lakshdweep, Nagaland, Manipur, Sikkim, Bihar, Himachal Pradesh and Jammu & Kashmir.

**Table 3.11**  
**Details of storage capacity envisaged for augmentation in North East**

(Figures in MT)

Sl. No.	Name of state	No. of approved centers	Storage capacity
1	Arunachal Pradesh	10	20,280
2	Assam	14	3,45,000
3	Manipur	9	45,000
4	Meghalaya	4	35,000
5	Mizoram	2	20,000
6	Nagaland	2	15,000
7	Sikkim	2	15,000
8	Tripura	4	45,000
	<b>Total</b>	<b>47</b>	<b>5,40,280</b>

Audit observed that out of the proposed 47 centers, construction had been completed in only one center (5,000 MT in Assam) while work was in progress in 11 centers. In 17 centers, the land had been identified whereas in the remaining 18 centers, land was yet to be identified (January 2012).

*The Ministry informed (January 2013) that land for construction of 1.54 LMT capacity had been taken over, land for 3.41 LMT capacity had been identified but not yet handed over by the State Governments and land for 0.40 LMT was yet to be identified.*

### 3.5.2 National Policy on Handling, Storage and Transportation of Food grains

In the year 2000, the GOI formulated National Policy on Handling, Storage and Transportation of Food grains to reduce storage and transit losses and to modernise the system of handling, storage and transportation of food grains. Under the policy, the GOI's main emphasis was modernization and upgradation of bulk grain handling infrastructure which, *inter alia*, includes encouraging private sector for development of infrastructure for integrated bulk handling, storage and transportation of food grains, and transportation of food grains from farm to silos by specially designed trucks.

Audit analysis on implementation of the above policy revealed the following:

**(i) Integrated bulk handling, storage and transportation of food grains by private sector**

To implement the above policy, FCI entered into a service agreement with a private developer-cum-operator, i.e., M/s Adani Agri Logistics Limited (AALL) in June 2005 on 'Build, Own and Operate (BOO)' basis for integrated storage depots (silos) and bulk

handling and transportation of food grains between depots (silos). The service agreement included creation of silos storage capacity of 5.50 LMT by the private developer for guaranteed hiring by FCI and for procurement and supply of special rail wagons for transportation of food grains in bulk from designated silos in procuring states of Punjab and Haryana to silos located in the consuming states such as Tamil Nadu, Karnataka, Maharashtra and West Bengal. While the augmentation of 5.50 LMT storage capacity by the private developer was achieved, the following deficiencies were observed in audit:

**(a) Non-fulfilment of terms under service agreement**

Audit observed that as against the requirement of 400 rail wagons having capacity of 55 tonnes each as specified in the service agreement (June 2005), 260 wagons having capacity of 63 tonnes each were to be procured by AALL. Out of this, 210 wagons were supplied (February 2009) and the remaining 50 wagons were yet to be procured by AALL (March 2012). Due to the above deviation in number of wagons to be procured, an estimated capital cost savings of ₹ 25.85 crore had accrued to FCI which was yet to be recovered from AALL (March 2012).

Further, in respect of one of the silos at Bengaluru, Audit observed that construction was completed only in July 2010 though scheduled in June 2008. Liquidated damages (LD) on account of the delay to be recovered from AALL as per directions of Senior Level Monitoring Committee (SLMC) was ₹ 5.21 crore (March 2012).

*The Management accepted (July 2012) the audit observations and stated that ₹ 29.01 crore with net present value of insurance premium would be passed on to FCI as capital cost savings and ₹ 5.21 crore as LD would be recovered from the firm as per decision of SLMC.*

*While acknowledging the audit observations, the Ministry stated (January 2013) that AALL has agreed for payment of LD of ₹ 5.21 crore on account of delay in construction of silos at Bengaluru. In response to the advice of the Board, AALL has agreed for purchase of residual number of wagons instead of making upfront payment of ₹ 29.01 crore to FCI and reduction of storage-cum-handling charges on proportionate basis till the wagons are acquired and certified by the Railways. Accordingly, the revised proposal of AALL has been approved by the Board in its meeting in December 2012. Since the levy of LD and acquisition of full capacity of wagons are inter-linked, the recoveries of LD could not be effected pending a decision on the acquisition of wagons.*

**(b) Shortfall in provision of rakes and under-utilisation of silos**

Under the service agreement between FCI and AALL, Storage cum Handling Charges (SCHC) for Agreed Annual Guaranteed Tonnage (AGT) of each depot was fixed at a rate of ₹ 415 per MT on 66,700 MT in respect of field depots (Silos) in consuming states. Audit observed that in three field depots (silos) at Chennai, Coimbatore and Bengaluru, AALL provided two rakes which could carry 2,995 MT consisting of 49 wagons each with

a maximum of 1,55,740 MT per year against the envisaged silos capacity of 2,00,100 MT (66,700 MT each for three depots) resulting in shortfall against the envisaged volume of work.

Audit also analysed the actual utilisation as against the AGT in terms of volume of food grains stock. The position of actual utilisation of silos capacity against the AGT in three centers and payment of SCHC during the review period is indicated in Table 3.12.

**Table 3.12**  
**Details of actual utilisation against the AGT and payment of SCHC**

Name of the depot	Commencement	Year	SCHC paid	AGT as per agreement (MT)	Actual receipt in Depot (MT)	Percentage of achievement	SCHC paid for unutilized silo capacity (₹)
(a)	(b)		(c)	(d)	(e)	(f)	(g) = ((100 - Col f) x Col. C)
<b>Chennai</b>	April 2009	2009-10	2,76,80,232	66,700	24,355	36	1,77,15,348
		2010-11	2,76,80,232	66,700	21,147	32	1,89,05,598
<b>Coimbatore</b>	Nov 2008	2008-09	1,09,18,314	48,900	24,334	49	55,68,340
		2009-10	2,76,80,232	66,700	0	0	2,76,80,232
		2010-11	2,76,80,232	66,700	11,339	17	2,29,74,592
<b>Bengaluru</b>	Sept 2009	2009-10	87,01,321	38,908	24,012	62	33,06,502
		2010-11	2,67,07,901	66,700	21,209	32	1,82,14,788
<b>Total</b>			<b>15,70,48,464</b>	<b>4,21,308</b>	<b>1,26,396</b>		<b>11,43,65,400</b>

Audit observed that utilization of silos against the AGT ranged between 0 per cent and 62 per cent only indicating under-utilisation of capacity provided under the service agreement. This resulted in payment of SCHC amounting to ₹ 11.44 crore for the silos capacity not utilised.

*While acknowledging the audit observations, the Ministry stated (January 2013) that silos were now being utilised by FCI only on actual utilisation basis and storage-cum-handling charges wrongly paid on guaranteed tonnage had already been recovered along with the penal interest on excess payment made to AALL.*

#### **(ii) Non-implementation of transportation of food grains from farm to silos**

Under the national policy, transportation of food grains from farm to silos by specially designed trucks was one of the important elements for modernization and upgradation of bulk grain handling infrastructure. Audit, however, observed that FCI had not taken any steps for bulk handling and transportation of food grains from farm to silos by specially designed trucks as envisaged under the policy. Further, it is pertinent to point out that though the service agreement entered into with a private developer (AALL) had the

provision for receipt of food grains at silos point in bulk upto 80 *per cent*, FCI did not operationalise transportation of food grains from farms or mandis to designated silos. FCI continued to have the food grains transported from mandis to the silos by conventional method of gunny bags (March 2012).

Consequently, FCI had to incur expenditure of ₹ 13.14 crore towards the cost of gunnies, stitching and handling charges, etc., during Rabi Marketing Seasons 2008-09 to 2011-12 in Punjab and Haryana which could have been avoided had FCI operationalised transportation of food grains in bulk from farms/ mandis to silos as envisaged in the policy.

*On being pointed out, the Management stated (October 2009) that all out efforts were made to accept wheat stocks to the tune of 80 per cent in bulk. For this purpose, separate tenders for transportation of wheat in bulk from mandis to silos were also floated, but no contractor came forward. Hence, it was decided to transport wheat in gunny bags and the costs incurred by FCI were inevitable.*

*While endorsing the reply of the Management, the Ministry stated (January 2013) that due to lack of response from transporters, FCI was compelled to move the stock of wheat for delivery at the silos, in bags.*

The Ministry reply is not acceptable as the Ministry/FCI had not taken any steps for bulk handling and transportation of food grains from farms or mandis to designated silos in an integrated manner as envisaged by GOI in its policy. Instead, FCI floated tenders in an isolated manner, for transportation of wheat in bulk from mandis to silos in its regional offices of Punjab and Haryana, which did not evoke any response from the transporters.

Thus, the objective of transportation of food grains from farms to silos for integrated bulk grain handling as envisaged under the National Policy on Handling, Storage and Transportation of Food grains remained to be achieved.

### 3.5.3 Private Entrepreneurs Guarantee Scheme (PEG) 2008

To create storage capacity required for storing food grains stock of four months requirements for TPDS in consuming states and for procured food grains stock in procuring states, the GOI formulated a scheme for construction of godowns through CWC, SWCs and private entrepreneurs in July 2008. Audit observations on the implementation of the scheme are discussed below:

- i) As on March 2012, HLC approved 151.96 LMT storage capacity only after nine months to 32 months (April 2009 to March 2011) since introduction of the scheme in July 2008 which led to delays in the implementation of the scheme (*Annex-VII*).
- ii) Of the approved capacity of 151.96 LMT, 107.04 LMT had been sanctioned under the scheme leaving a balance of 44.92 LMT at the end of March 2012. Out of the

sanctioned 107.04 LMT capacity, 87.03 LMT was allocated to private entrepreneurs and the remaining 20.01 LMT storage capacity was sanctioned to CWC (5.40 LMT) and SWCs (14.61 LMT).

- iii) Out of 28.17 LMT capacity completed at the end of March 2012, 18.03 LMT storage capacity was added through private entrepreneurs since introduction of the scheme in July 2008. In respect of CWC and SWCs, 3.24 LMT and 6.90 LMT respectively was constructed under the scheme.

*The Management stated (July 2012) that 28 LMT storage capacity was constructed by end of March 2012 under PEG Scheme and another 83 LMT storage capacity was expected to be completed by March 2013.*

*While accepting the audit observations on delay in implementation of the scheme, the Ministry stated (January 2013) that the delays were due to substantial time taken for assessment of storage space requirement, review for enhancement of guarantee period from initial five years to ten years and modification in model tender form/specification of godowns, etc.*

#### **Audit recommendations and responses of the Ministry**

Sl. No.	Recommendations of Audit	Ministry's replies
5	The GOI/FCI should take a strategic view/conduct a detailed cost benefit analysis to decide the mix of owned and hired storage capacity and augment the storage capacity accordingly instead of solely depending on outside agencies.	Accepted to conduct the required detailed cost benefit analysis. However, Government has already decided to augment the storage capacity only through short-term and long-term hiring of godowns, except for North-Eastern states including Sikkim and certain special cases.
6	FCI should ensure optimal utilization of existing storage capacity for timely evacuation of food grains from procuring states to consuming states to reduce the carry over charges payable to SGAs.	Accepted.
7	In view of dismal storage capacity addition during last five years, GOI/FCI should expedite the ongoing augmentation plan under various programmes (PEG 2008/PEG 2009 and Plan Scheme for NE and other states) to overcome the bottlenecks/constraints faced in various states in consultation/collaboration with respective State Governments.	Accepted.