



REPORT

Of

**THE TASK FORCE ON COLD CHAIN
PROJECTS**



MINISTRY OF FOOD PROCESSING INDUSTRIES
GOVERNMENT OF INDIA

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Abbreviations

- 1.** AICRP: All India Coordinated Research Project
- 2.** CII: Confederation of Indian Industries.
- 3.** CIPHET:Central Institute of Post-Harvest Engineering and Technology
- 4.** DAC : Department of Agriculture and Cooperation
- 5.** EMC : Empowered Monitoring Committee
- 6.** HMNEH: Horticulture Mission For North East And Himalayan States
- 7.** IASRI : Indian Agricultural Statistical Research Institute
- 8.** IMAC: Inter Ministerial Approval Committee of Scheme of Cold Chain Ministry of Food Processing Industries
- 9.** IQF: Individual Quick Freezing
- 10.** MIDH: Mission for Integrated Development of Horticulture, Department of Agriculture and Cooperation
- 11.** MoFPI : Ministry of Food Processing Industries
- 12.** NABCONS : NABARD Consultancy Services
- 13.** NCCD: National Center for Cold Chain Development
- 14.** NHB: National Horticulture Board
- 15.** NHM : National Horticulture Mission
- 16.** NMFP : National Mission on Food Processing
- 17.** NSEL: National Spot Exchange Ltd.
- 18.** PHM : Post-Harvest Management
- 19.** PHT : Post-Harvest Technology
- 20.** SFAC: Small Farmers Agri Business Consortium
- 21.** SLEC: State Level Executive Committee
- 22.** TSG : Technical Support Group
- 23.** TC : Technical Committee of Scheme of Cold Chain, Ministry of Food Processing Industries
- 24.** VCA : Venture Capital Assistance
- 25.** WDRA: Warehousing Development and Regulatory Authority

REPORT OF THE TASK FORCE ON LOSSES BEING INCURRED FOR PERISHABLE AGRICULTURE/ HORTICULTURE PRODUCE DUE TO SHORTAGE OF COLD CHAIN CAPACITY

1. In a meeting taken by the Principal Secretary to Prime Minister on 02.09.2014, it was decided to set up a Task Force under the chairmanship of Secretary (FPI). NHB and NHM of the Mission for Integrated Development of Horticulture (MIDH), Department of Agriculture and Cooperation, Central Institute of Post-Harvest Engineering and Technology (CIPHET) & ICAR, Department of Agriculture Research and Education were also made members of the Task Force. The following Terms of Reference were identified:

- ❖ Re-visit the strategies, financials and incentives of all schemes.
- ❖ Recommend institutional mechanism for enhancing capacity under the cold storages and other components for integrated development of cold chain.
- ❖ Identify the role of the state governments in post-harvest management for preserving the harvested horticultural crops.
- ❖ Intervention required regarding VAT, excise duty and tax exemption.
- ❖ Delineation of the role of public and private sector interventions for achieving the targeted cold storage capacity.

1.1 The Task Force held its meetings on 15.09.2014, 01.10.2014, 17.10.2014 and 27.10.2014 and held extensive consultations with state chambers, CBEC, NCCD, CIPHET, APEDA, NHB, ICAR, Central Warehousing Corporation, IL&FS Clusters Development Initiatives etc. The Task Force studied the existing literature on wastages of horticulture produces, various reports on cold chain, guidelines of Mission for Integrated Development of Horticulture (MIDH) of DAC and scheme for cold chain of MoFPI for finalizing the report.

2. Assessment of post-harvest losses

2.1 ICAR had conducted a study on post-harvest losses of major agricultural and horticultural crops as well as livestock products. The report was submitted by CIPHET in 2010. The study covered 46 crops and allied commodities which constituted major portion of food produce in the country. 14 out of 15 agro climatic zones were covered in the study. Data were collected from 10,600 farmers spread across 106 districts of the country. In addition data were also collected

from wholesalers, retailers, processed food industry, slaughter houses, dairy plants, poultry units and fish farmers. Major findings of the study are as under:

- a. The losses for selected cereals, constituting 94% of the national cereal production, were assessed to be in the range of 3.9 % - 6.0 %.
- b. Pulses exhibited higher losses as compared to cereals, range being 4.3% - 6.1%. The higher losses in pulses were mainly due to higher storage loss. Of all the selected pulses, black gram exhibited the highest harvesting (1.1%), collection (1.0%) and threshing (1.6%) losses.
- c. In case of oilseeds, the losses were in the range of 2.8% - 10.1%. Average loss for oilseeds was estimated to be 6.0%.
- d. Losses in farm operations in cereals, pulses and oilseeds constituted about two-thirds of the total losses.
- e. The losses in selected fruits and vegetables were found to be in the range of 5.8% - 18.0%.
- f. The losses in inland and marine fisheries were found to be 6.9% and 2.9%, respectively. On board losses were not recorded in case of marine fisheries.
- g. The assessed loss in milk sector was 0.8%.
- h. The losses in meat and poultry sectors were 2.3% and 3.7%, respectively.
- i. The economic value of estimated harvest and post- harvest losses of major agricultural produce at national level has been computed based on wholesale prices of 2009 and was estimated to be about Rs.44,000crore per annum.
- j. The losses evaluated in case of perishables include those incurred inside cold warehouses and the study did not clearly differentiate between the losses incurred within and without the cold-chain. Assessment of loss incurred due to lack of integrated cold-chain was not specifically done.

3. Assessment of gap in the cold chain capacity for farm produce

3.1 A study conducted by National Spot Exchange Limited (NSEL) in December 2010 estimated the need for cold storage capacity of about 61.13 million metric tonnes in the country. The study estimated existing capacity of cold storage at that point at around 23.51 million metric tonnes indicating a gap of about 37 million metric tonnes.

3.2 There are following infirmities in the assumptions made by NSEL study:

- a. It has been assumed in the study that all fruits and vegetables which do not go into market are stored in cold store. Some commodities like banana, pumpkin, brinjal, ginger, melon, water melon, pineapple etc. are not generally stored in cold store.
- b. Cold storage point has been considered as the primary market point from where all the trade shall follow. This may not be true in view of the APMC mechanism.
- c. The study has not covered the cold storage requirement of the processed food, spices and pulses.
- d. The existing cold storage capacity has been taken from data in public domain without considering the capacity under -utilization and type of commodity stored.

The study did not have access to any base line data from any primary research on the actual usable cold storage capacity available in the country. The analysis assumed that all cold storage infrastructures created, as on record, continued to be operational, irrespective of technology or ageing.

- e. The analysis did not segregate cold storage capacity by technical parameters and assumed the capacity created is viable for storage across all produce types.
- f. The analysis was limited to cold storages and did not refer to other correlated infrastructure which is integral to the holistic application and operational model of cold-chains, such as pack-houses, refrigerated transported etc.
- g. The analysis presumed all surplus inventories of perishable foods, sourced during peak production periods, could directly enter cold storages for unlimited storage period, without any other necessary interventions such as pre-coolers and packaging systems.
- h. NSEL reportmodelled on storage price arbitrage model and was not aligned with infrastructure needs of market linked supply chain.
- i. The study assumed cold storages to be the sole infrastructure component needed for integrated cold-chain operations. Critical components such as pre conditioning source points (pack-houses with pre-coolers), reefer transportation (road/rail) etc. were not factored.

3.3 The Planning Commission had set up a Committee on 07.03.2011 on encouraging investment in Supply Chains including Cold Storage for more efficient distribution of farm produce. Shri Saumitra Chaudhuri, Member, Planning Commission was Chairman of the Committee. The Constitution of the Committee is at Annexure I.

The Terms of Reference (ToR) of this Committee were as under:

- a. To assess the existing framework of supply chains, including cold storages, in respect of farm products;
- b. To make an assessment of the future requirements over the next 6 years i.e. up to the end of the Twelfth Five Year Plan;
- c. To lay down a policy framework by which the supply chains can be dovetailed with the organized retail chains to achieve quicker and more efficient distribution of farm products and minimize wastage;
- d. To recommend policy initiatives, suitable schemes and investments required for this purpose.

3.4 The Committee submitted its report in May 2012. The major recommendations of this Committee are as under:

- a. Visualizing and encouraging both farmer co-operatives/producer companies and private enterprises to establish the cold chain network. Private enterprise would include all manner of outside investors – from standalone investors to processing companies and retail chains. The policy would actively encourage existing commission agents to set up cold chain facilities. FDI in cold chain must be encouraged.
- b. The business model of the cold chain system would expressly not be pure price arbitrage. The objective should be to help smoothen out the episodic and concentrated arrival that is characteristic of the combination of a seasonal output and regular demand in the retail market. The result must be to ensure that the farmer receives a good price especially at the peak of the season, and that the consumers buy at a steady price. The return on investment in this cold chain system should be on a cost-plus basis, not on a price arbitrage model.
- c. Reduction of wastage, rationalization of margins and larger volumes would generate the economies to sustain the revenue model of the cold chain system.

- d. It is necessary to reduce the business risk involved in investing in a cold chain system and that can only be achieved by providing a dynamic linkage of the cold chain system to the final retail market. This can be achieved by the tie-up between an anchor customer and the investor-provider of the cold chain rental space.
- e. There must also be framework for direct marketing linking the farmer to the cold chain.
- f. The Warehousing Development and Regulatory Authority (WDRA) can be brought in to link up the cold chains into a network and create conditions where the farmer can obtain Negotiable Warehouse Receipts that can raise funds from the banks, thereby gaining financial flexibility.
- g. This would need changes in the way APMC legislation works. It is felt that the best way to achieve it would be to remove perishable agricultural produce from the aegis of the APMC acts. Farmers must be given freedom to sell directly to food processing companies, aggregators and retailers in addition to selling in mandis.
- h. The cold chain supply system for horticulture and other fresh farm produce should be treated as infrastructure and they should qualify for the corresponding financing and tax incentives.
- i. There is a need for simplification of the clearances and licenses required for setting up of cold storages.
- j. The committee recommends the Public Private Partnership (PPP) model with Viability Gap Funding as an appropriate device to catalyze large scale investments in cold chain. However, the details will have to be worked out. In the interim, investment in cold chains would have to depend on capital grants and some access to a concessional line of finance.
- k. The Ministry of Food Processing Industries operates a scheme for capital subsidy of supporting cold chains. This should be a scheme that is on-tap with clearly set out budget limits so that eligible projects within the budgeted limit get the required support. The scheme of subsidy support may be reworked/and sufficient resources provided so that this objective can be achieved.
- l. There is a need to promote introduction of newer varieties of vegetables with a longer shelf life.

3.5 The Committee in its report referred to the study published in December 2010 by National Spot Exchange Ltd. (NSEL) in which the requirement of the cold storage capacity was assessed. In this study, the requirement was calculated on the basis of highest arrival of fruits

and vegetables in a month and the storage capacity available. According to NSEL report, the requirement of cold storage capacity was assessed to be 61.13 million tonnes. The gap in 2010 was estimated to be 37 million tonnes. This report noted that the cold storage capacity in the country was grossly inadequate and there was positive outlook for the growth in agri-business, food processing, retail and pharmaceutical sector. The report also pointed out that there is an urgent need to create additional cold chain facility in the country.

3.6 According to data available, since the submission of the report by NSEL, a capacity of about 8 million tonnes has been added, by various Ministries. Therefore, the present gap in the storage capacity as per NSEL report may be around 29 million tonnes.

3.7 The NHB had commissioned a study to assess the operational capacity of cold storages established in the country so far. Draft report was submitted by Hansa Research Group on 23.12.2013. According to the study, there are 6256 cold storages (31.28 million tonnes capacity) across the country out of which 1030 cold storages (5.15 million tonnes capacities) were found to be permanently closed. This study is yet to be accepted by the NHB. It is recommended that lessons drawn from the study may be shared with state government and central ministries so that suitable measures can be taken to prevent closure of cold storages.

3.8 Confederation of Indian Industry (CII) had formed a Task Force on development of cold chain in 2007. The report of the Task Force was submitted to the Ministry of Agriculture and on its recommendation, the National Center for Cold Chain Development (NCCD) was created in 2011 and it was operationalized after Cabinet approval in 2012.

3.9 MoFPI has suggested to the Ministry of Agriculture (DAC) to mount a fresh study to assess the gap under cold storage capacity. NCCD has prepared Terms of Reference (ToR) for this study ([Annexure-II](#)). The study has been sanctioned and awarded to NABCONS on 31st October, 2014. It will take 4-6 months to complete the study.

4. Present schemes of various Ministries for setting up of cold chain projects:

4.1 The Mission for Integrated Development of Horticulture (MIDH) is operating a centrally sponsored scheme under which GoI contributes 85% of total outlay. In the North-Eastern and Himalayan States, the GoI contributes entire 100% of outlay. One of the objectives of the Mission is to promote post-harvest management processing and marketing of horticultural

products. The General Council of the Mission is headed by the Minister of Agriculture while the Executive Council is headed by Secretary, Ministry of Agriculture (DAC). A Technical Support Group has also been set up to provide technical expertise to the Mission. The Technical Support Group visits various States regularly and conduct studies on various aspects of horticulture including cold chain.

4.2 In the 11th Plan, the total assistance under NHM was used as under:

Table – 1: Component wise financial achievement and GOI share under NHM during 11th Plan Period.		
Component	Financial Assistance	GOI Share
a. Plantation Infrastructure and Development	4,82,640.74	4,18,346.46
b. Integrated Post -Harvest Management	40,025.68	34,021.82
c. Establishment of Marketing Infrastructure for horticultural produce in Govt./Private/Cooperative sector	6,323.60	5,425.11
d. Special Interventions	886.85	753.82
e. Mission Management	23,088.50	20,360.29
f. Misc. / Innovative Components not covered above	16,297.58	13,980.45
Total	5,69,262.95	4,92,961.51

4.3 In the 11th Plan, 36.4 lakh tonnes capacity was sanctioned under NHM towards creation of cold storage capacity in the country. Under this scheme, maximum numbers of cold storages were sanctioned in UP followed by Punjab and Gujarat. No cold storage projects were sanctioned in Assam, Delhi, Goa, Himachal Pradesh, Kerala and Tamil Nadu.

Table - 2: State wise cold storage projects sanctioned under NHM scheme during 11th Plan (2007 to 2012)				
Sl.No.	State	Number of Projects	Financial Assistance* (Rs. in Lakh)	Capacity (MT)
1.	Andhra Pradesh	54	5,126.39	3,16,034
2.	Bihar	28	1,431.40	1,47,533
3.	Chhattisgarh	5	372.13	24,410
4.	Gujarat	74	7,040.30	4,37,108
5.	Haryana	10	745.85	35,682
6.	Jharkhand	2	330.00	10,000
7.	Karnataka	6	399.29	22,884
8.	Madhya Pradesh	28	2,191.83	1,39,995
9.	Maharashtra	14	513.03	31,798

10.	Orissa	4	241.19	15,100
11.	Punjab	93	6,879.76	3,85,329
12.	Rajasthan	20	1,121.24	89,267
13.	Tamil Nadu	0	0.00	0
14.	Uttar Pradesh	169	8,177.03	17,49,287
15.	West Bengal	47	2,221.55	2,44,845
	Total	554	36,790.99	36,49,272

* including State share of 15%

4.4 In the 12th Plan, a capacity of 9.93 lakh tonnes has been sanctioned under NHM. Maximum numbers of projects have been sanctioned in Gujarat followed by Punjab. No capacity has been sanctioned in the 12th Plan in Bihar, Delhi, Goa and Kerala. Similarly, only one project each has been sanctioned in Jharkhand and Tamil Nadu. From the above, it is clear that there is huge regional imbalance in the creation of cold storage capacity across the states.

Table- 3: State wise cold storage projects sanctioned under NHM scheme 12th Plan (2013 to 2015*)

Sl. No	State	Number of Projects	Financial Assistance (Rs. In Lakh)	Capacity (MT)
1.	Andhra Pradesh	37	4,285.40	2,41,328
2.	Bihar	0	0.00	0
3.	Chhattisgarh	3	348.77	15,853
4.	Gujarat	46	4,087.70	2,27,341.55
5.	Haryana	15	1,346.85	65,191
6.	Jharkhand	1	113.32	4,775
7.	Karnataka	4	350.73	16,145
8.	Madhya Pradesh	19	1,907.70	82,655
9.	Maharashtra	13	869.14	30,104.57
10.	Orissa	11	1,329.00	50,500
11.	Punjab	40	2,752.19	1,34,087
12.	Rajasthan	4	280.15	13,525
13.	Tamil Nadu	1	108.63	6,000
14.	Uttar Pradesh	17	1,473.31	81,581.12
15.	West Bengal	5	510.36	24,900
	Total	216	19,763.25	9,93,986

* upto August 2014

4.5 Very few projects of reefer vans, cold rooms, ripening chambers and pre-cooling were sanctioned under NHM in the 11th Plan. State wise details are as under:

Sl.No	State	Reefer Van		Cold Room etc.		Ripening Chamber		Pre-Cooling		Rs. In Lakh
		Number of Projects	Financial Assistance	Number of Project	Financial Assistance	Number of Project	Financial Assistance	Number of Projects	Financial Assistance	
1.	Andhra Pradesh	4	17			42	525.78			
2.	Bihar	0	0			0	0			
3.	Chhattisgarh	0	0			0	0			
4.	Delhi	0	0			0	0			
5.	Goa	1	5			2	31			
6.	Gujarat	5	40	3	35.6	31	737.33	3	20.8	
7.	Haryana	0	0			0	0			
8.	Jharkhand	1	13			0	0			
9.	Karnataka	23	88			10	313.06			
10.	Kerala	0	0			0	0			
11.	Madhya Pradesh	1	3			0	0			
12.	Maharashtra	1	5	15	886.32	14	438.61	12	44.85	
13.	Orissa	14	157			0	0	6	30.23	
14.	Punjab	1	4			3	125.6			
15.	Rajasthan	9	46	1	0.24	6	123.8			
16.	Tamil Nadu	2	11	104	33.28	0	0			
17.	Uttar Pradesh	2	9			4	173.72			
18.	West Bengal	3	18			1	30			
	Total	67	416.11	123	955.44	113	2,498.9	21	95.88	

4.6 In the 12th Plan, NCCD has been giving more emphasis on creation of facilities such as modern pack house with pre-coolers, ripening chambers, cold rooms, reefer transport and mobile processing units. A small country like France has 1,40,000 reefer vans while India has only 10,000 reefer vans actively refrigerated vehicles as estimated by NCCD. However, despite provision of the subsidy by the Government under NHM, the private sector has not shown substantial interest in creation of these facilities and only 45 reefer vans, two cold room projects and 89 ripening chambers have been sanctioned under NHM in the 12th Plan. It may be noted that refrigerated vehicles are not separately recorded under existing rules of vehicle

registration. Registration fee for reefer vehicle for national permit also needs to be reduced. NCCD has recently launched a toll free number as an e-governance initiative and to create an enabling atmosphere for refrigerated transportation. The toll free number allows reefer transporter to record any specific bottlenecks in transit and allow for planning of further remedial interventions. The following table gives details of reefer vans, cold room, ripening chamber and pre cooling facilities sanctioned by NHM in various States.

Table -5: State wise other cold chain projects sanctioned under NHM during 12th Plan								
Reefer van, cold room, ripening chamber and Mobile processing Components								
Sl.No	State	Reefer Van		Cold Room etc.		Ripening Chamber		Rs. In Lakh
		Number of Projects	Financial Assistance	Number of Projects	Financial Assistance	Number of Projects	Financial Assistance	Number of Projects
1.	Andhra Pradesh	4	34			15	374.15	
2.	Bihar	8	77			0	0	9 54
3.	Chhattisgarh	1	4			0	0	
4.	Delhi	0	0			0	0	
5.	Goa	0	0			0	0	
6.	Gujarat	3	28			12	341.2	5 26.87
7.	Haryana	1	6			4	309.32	
8.	Jharkhand	1	10			0	0	1 6
9.	Karnataka	3	21			2	14.86	
10.	Kerala	1	9			0	0	
11.	Madhya Pradesh	0	0			1	95.11	
12.	Maharashtra	4	31	1	42.67	29	556.5	
13.	Orissa	10	82	1	10.5	3	41	
14.	Punjab	1	5			9	378.13	3 18
15.	Rajasthan	7	60			8	274.6	
16.	Tamil Nadu	0	0			0	0	3 14.72
17.	Uttar Pradesh	1	10			6	117.36	1 6
18.	West Bengal	0	0			0	0	
	Total	45	377	2	53.17	89	2,502.23	22
								125.59

4.7 Cold chain infrastructure assistance under the Mission for Integrated Development of Horticulture is available for setting up of all kinds of cold storages, modern pack-houses, pre-coolers, refrigerated vehicles, ripening chambers as well as related energy efficient technologies. Cold storages of upto 10,000 tonnes capacity are provided support under MIDH. The NHM and

HMNEH sub-components provide support to cold stores of upto 5000 tonnes capacity whereas cold storages having capacity from 5001tonnes to 10,000 tonnes are assisted through NHB sub-component under the ambit of MIDH.

4.8 The Technical Guidelines used as standards are prepared by National Center for Cold Chain Development (NCCD) which was set up in the year 2011 under the Horticulture Division of DAC. The pattern of financial assistance is Credit linked back-ended subsidy @ 35% of the cost of project in general areas and 50% of cost in case of Hillyand ITDP notified areas.

4.9 Assistance under the MIDH is available to individual group of farmers, partnership/proprietary firms, self-help groups, farmer producer organizations, cooperatives, local bodies, APMCs and State Governments. In the 12th Plan, various revisions to cost norms and associated components have been made to include additional infrastructure items, alternate energy sources (solar, thermal, bio-mass, etc), modern pack-house infrastructure, multi-modal refrigerated transport containers and other specialized items so as to develop future ready infrastructure. Projects are invited from beneficiaries at State level and promoters are allowed to pick and choose relevant components as per business plans under the action plan allocations of each State.

4.10 In addition to assistance for above cold chain infrastructure, funds are also made available to State Governments for improving infrastructure for wholesale marketing. However, this is only available to those states which have modified their APMC Act.

4.11 In the 11th Plan, an amount of Rs. 94.60 crore was sanctioned by NHM for improving the wholesale marketing infrastructure in the States of Andhra Pradesh, Chhattisgarh, Gujarat, Haryana, Karnataka, Madhya Pradesh, Punjab, Tamil Nadu and Uttar Pradesh. An amount of Rs. 8.41 crore was sanctioned during the same period under NHM for setting up Rural Primary Markets in the States of Andhra Pradesh, Goa, Gujarat, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Tamil Nadu and West Bengal.

4.12 Though NHM is being implemented since 2005-06, from 2010 DAC linked NHM assistance for improving market infrastructure is available only to states that have modified APMC Act.

4.13 Subsidy to food processing units under HMNEH for Himachal Pradesh, J&K, Uttarakhand and NE States was available in the 11th Plan as per the following norms:

- a. Under Mini Mission-IV of HMNEH, for setting up of new fruit and vegetable processing units in these States, grant-in-aid upto Rs. 4.00 crore was available. For modernization of existing units, the amount of grant-in-aid for these States was Rs. 1.00 crore under MM-IV.
- b. For other parts of the country, the grant-in-aid for food processing units was only Rs.50.00 lakh under Technology Upgradation Scheme (TUS) of MoFPI
- c. Investors setting up new units preferred MM-IV component of NHM in the 11th Plan due to higher subsidy of Rs. 4 crore as against Rs.50.00 lakh under TUS of MoFPI.

4.14 In the 12th Plan, assistance under scheme for North-Eastern States was not clearly mentioned in the original MIDH guidelines. As a result grant-in-aid of Rs. 4.00 crore is not available to new food processing units in NE States under MIDH, while grant in aid of Rs. 4.00 crore is available for processing units in the States of J&K, HP and Uttarakhand. DAC now proposes to continue with the above provisions in North Eastern States also, and draft CCEA Note has already been circulated by DAC to continue the grant mentioned above in the North-Eastern States also.

5. Scheme of cold chain under MoFPI

5.1 The objective of the scheme operated by MoFPI is to provide integrated cold chain and preservation infrastructure from farm gate to consumers. The Ministry sanctions integrated cold chain projects which include facilities for pre-cooling and minimal processing at production site, mobile cooling units, reefer vans, cold storages, IQF, Ripening chambers etc. Grant-in-Aid is provided for plant and machinery and technical civil work @ 75% of bank appraised cost in the special category States i.e. North-Eastern States and J&K, Himachal Pradesh and Uttarakhand. In other States, Grant-in-Aid is limited to 50% of the bank appraised cost of plant and machinery and technical civil work. The maximum amount of grant is Rs. 10.00 crore per project.

5.2 The scheme operated by MoFPI is not open ended. In the past, the following no. of projects were sanctioned by CCEA:

Table 6: Details of phase wise cold chain projects sanctioned by CCEA under the Cold Chain Scheme of MoFPI		
Phase	Date of approval by CCEA	No. of Projects approved by CCEA
I	11.09.2008	10
II	11.06.2010	39
III	23.03.2012	30
IV	08.08.2013	75*
	Total	154

* includes 11 cancelled projects of earlier phases

5.3 Under the National Mission on Food Processing (NMFP), the State Governments have been allowed to sanction cold chain projects for non-horticulture sector. The pattern of funding under the NMFP is as follows:

- a. **Cold Chain for Non-Horticultural Produces:** i.e Dairy, Meat, Poultry, Fish, etc. Financial assistance is provided upto Rs.5.00 Crore per project in form of grant-in-aid and interest subsidy @ 6%, subject to maximum Rs.2.00 Crore
- b. **Primary Processing Center/Collection Centers (PPC/CC)** for both horticulture and non-horticultural produces: Financial assistance is provided @50% eligible project cost limited to maximum of Rs.2.50 cr.
- c. **Reefer Vehicles for carrying horticultural/food products:** Back ended grant in aid of Rs.50 Lakh.

5.4 Under this Mission, a State Level Empowered Committee under the chairmanship of Chief Secretary sanctions the cold chain projects. The Mission was launched during 2012-13. Twenty Eight (28) Cold chain projects have so far been sanctioned under the Mission. The state wise details of the cold chain projects sanctioned are at [Annexure-III](#). It may be seen that no cold chain projects have been sanctioned in more than half of the states including North Eastern (NE) region under the Mission

6. Procedure for sanction of projects

6.1 Mission for Integrated Development of Horticulture (MIDH): MIDH adopts a guiding strategy by allocating outlay to development sectors and in the 12th Plan has declared Post-Harvest Management [PHM] infrastructure as a thrust area with 25% share of budget

outlay. Every State prepares an annual action plan integrating with other production linked development in their region. The MIDH guidelines provide that such plan will be prepared for each district and they should clearly show the crops having the comparative advantage. The guidelines also provide cluster approach which is to be followed for sanction of projects so that the areas of surplus production are prescribed for creation of post-harvest infrastructure. Ministry of Agriculture communicates the tentative outlay for the year to each State.

6.2 The MIDH scheme is open ended and powers have been delegated to State Level Executive Committee (SLEC) for sanction of Post-Harvest Management (PHM) projects up to Rs. 200.00 lakh cost and projects beyond that are sanctioned by the Empowered Monitoring Committee (ECM) and Executive Committee (EC) at the central government level.

6.3 NHB under the ambit of MIDH, supports development of projects of large capacity (5001 tonnes upto 10,000 tonnes of cold storage capacity). This is done to offer special focus on large projects so as allow scope to align them with commercial horticulture development undertaken by NHB. Through NHB, MIDH also supports the development of rail mode of transport for horticultural produce. NHB provides financial assistance to projects which have been sanctioned term loan by the bank(s). The applications to NHB are not routed through the State Government and the grant-in-aid is provided by NHB on the basis of sanction of term loan by the bank to the project. All proposals where grant is more than Rs.50.00 lakh are sanctioned by a Committee constituted under the chairmanship of Managing Director, NHB.

6.4 All schemes under MIDH provide credit linked back-ended support provided basic technological guiding norms are followed. The MIDH scheme is open ended and advertisements inviting applications from investors are issued by State Horticulture Missions in local language for wide publicity. The applications can be submitted round the year and the same are sanctioned depending on the techno-economic viability of the projects which have been assessed and sanctioned loans by nationalized banks. To avail credit linked incentive a project must be fully funded through banks and promoters contribution. As per the MIDH guidelines, the subsidy shall not exceed the term loan amount sanctioned by the lending bank. The credit linked incentive is then released to approve projects through the lending bank. Projects are approved by the EC/EMC only after receiving recommendations from SLEC and the time taken for EMC approval is normally 02 to 04 months. Currently MIDH has an outlay of Rs. 4200crore for PHM and marketing infrastructure for the 12th Plan (25% of Rs.16834crore). On an average, 15 cold chain projects are approved every quarter. Funds are released to sanctioned projects. However,

NHB has been facing shortage of funds in the recent years. According to information provided by NHB, the estimated requirement of funds over the next two years is estimated to be Rs. 365.00 crore per annum. However, the budget provision for NHB is only Rs. 190.00 crore for 2014-15. Thus, there is a shortfall of Rs. 175.00 crore in this year alone, for the projects which are currently being sanctioned by NHB. NHB has been in existence since 1984 and more than 13 million tonnes of cold storage capacity has been created with their assistance. Since the large capacity in excess of about 3,000 tonnes is required only for potato, most of the cold storages now being sanctioned by NHB are only for potato. This is because NHB can now take up only those projects in which capacity is more than 5,000 tonnes.

6.5 At present, NHB is mandated to sanction cold storage projects of above 5,000 tonnes capacity under MIDH scheme. This restriction comes in the way of promoting establishment of high tech cold chain infrastructure such as IQF, CA/MA storage, Deep freezer, Blast Freezer which are highly capital intensive and generally are of smaller capacities in terms of tonnage. As a result NHB has been able to support only low technology cold storages of capacity of above 5,000 tonnes which are essentially meant for storage of potato and onion to the exclusion of promoting high tech cold storage capacity for fruits, vegetables but are of low tonnage capacity. Given the experience of NHB in the area of supporting cold storage projects since 1984, it is necessary to allow them to go into high technology area by waiving this restriction. This will permit NHB enter into high tech area commensurate with their experience and expertise and also help in achieving the target not only in terms of overall capacity but also in terms of appropriate blend of technology as per the market demand. This will help in creation of capacity for storage of fruits and vegetable which are more perishable than potato, onion etc.

7. Procedure for sanction of projects – MoFPI

7.1 Since a specific number of projects for cold chain are sanctioned by the CCEA, selection of projects is done through a transparent process of advertisement by inviting proposals against Expression of Interest (EOI). The applications received in response to the advertisement are appraised by the Ministry with assistance of Project Management Agency (PMA) i.e., M/s IL&FS Cluster Development Initiative Ltd. which was appointed as PMA in Oct. 2010. Recently, it has been decided to appointment new PMA.

7.2 The major conditions for sanction of grant from MoFPI are as under:

- (a) The net worth of the applicant should be at least 1.5 times of the grant applied for.
- (b) Availing term loan from the Bank/Financial Institution for an amount not less than 10% of the project cost. Final term loan sanction letter alongwith appraisal note should be submitted.
- (c) Minimum two components [from (a), (b) and (c) mentioned in para 3 of revised guidelines of scheme]
- (d) Irradiation facility can be treated as a stand-alone project for the purpose of availing grant.
- (e) No second proposal from the same applicant / company.
- (f) Date of commercial production should not be prior to the date of submission of application.

7.3 The integrated cold chain scheme of MoFPI aims at creation of uninterrupted cold chain infrastructure from the farm gate to the retail outlets. The scheme envisages setting up of minimal processing cum collection centers also. The minimal processing centers may have facilities for sorting, grading, packaging, cutting, etc. It may also have pre-cooling and ripening chambers, cold storages, IQF, etc. The distribution hub served by multiple collection centers is normally the main location of the cold chain project. The distribution hub may have facilities of cold storages, Controlled Atmosphere (CA) storage, primary chamber, etc. Minimal processing centers are linked to the farm gate and to the distribution center, which in turn, is linked to the retail point of sale. All these linkages are through refrigerated vans/reefer carriers/mobile pre-coolers.

7.4 In comparison to the integrated cold chain scheme of the MoFPI, the schemes of the NHB, NHM, NCDC and APEDA aim mainly towards creation of cold storage facilities only. NHB has now started giving the stress towards creation of modern processing and storage facilities such as Ripening Chambers and Controlled Atmosphere (CA) storages. However, their main thrust remains on creation of cold storage facilities. Many of these cold storage facilities created under these schemes are stand-alone cold storages

7.5 The scheme being operated by MoFPI has received good response from investors in the past. In the case of applications received in response to last advertisement (issued on 2.12.2013) for which last date of applications was 31.1.2014, 153 applications were received for filling up 15 slots available at that time. Appraisal of these applications was completed on 10.9.2014 and the recommendations of IMAC were submitted on 15.9.2014. However, it has been decided that these projects may be again given to new PMA for re-appraisal.

7.6 The Ministry has also made it compulsory vide decision taken by the Approval Committee in its meeting held on 27.9.2013 that every project should get term loan sanctioned by the bank. This condition was not imposed in the EOIs issued before this date.

7.7 The Ministry does not follow any cost norms for items of building or equipment. In fact the Ministry depends on the appraisal done by the bank for sanction of term loan.

7.8 The Ministry has so far sanctioned 120 projects in various sectors as shown in the table given below:

Table 7: Sector wise distribution of MoFPI supported cold chain projects			
S. No.	Sector	No. of cold chain projects sanctioned	No. of cold chain projects commissioned
1.	Fruits and Vegetables	85	32
2.	Dairy	20	6
3.	Fisheries/Meat/Poultry	7	4
4.	Irradiation	4	3
5.	Mixed product line, Ready to eat etc.	4	3
Total		120	48

7.9 In the meetings of Task Force, a view was expressed by DAC that in order to bring uniformity to various schemes being operated by the two Ministries, it would be prudent to follow similar norms of grant-in-aid and cost norms of equipment. This suggestion was accepted by MoFPI and accordingly, it is proposed that the cold chain scheme of Ministry of Food Processing Industries will be modified accordingly. For the cold chain components which are common to both MIDH and MOFPI cold chain schemes, the cost norms of MIDH will be applied. For components which are not covered under the MIDH scheme, the bank appraised cost will be taken into account. The scheme may be made open ended and the proposals may be accepted round the year. Since the projects sanctioned by MoFPI are integrated projects, it is proposed that the existing limit of Rs. 10.00 crore subsidy may be continued. The projects sanctioned by MoFPI so far are generally large projects which provide substantial backward and forward integration. A statement showing the cost of projects and the amount of grants-in-aid sanctioned by the Ministry as grant is at **Annexure-IV**.

8. Availability of technical manpower

8.1 MoFPI does not have any professional cadre to deal with the cold chain projects. The Cold Chain Division has the following manpower:

- (i)** Director
- (ii)** Under Secretary
- (iii)** Inspector

8.2 In the NHM Division of DAC, the following manpower is in position:

- (i)** Asst Director DAC – 1
- (ii)** Chief consultant (DAC) – 1 (Retired Chief Director, NCDC)
- (iii)** Consultants - 7
- (iv)** Joint Inspection Teams comprising of TSG (DAC)
- (v)** State Horticulture Missions
- (vi)** Nodal Officers for Cold-chain Development at 18 States to liaise with NCCD
- (vii)** Technical teams for cold-chain development in Arunachal Pradesh, Chhattisgarh, Tripura, Punjab and Orissa

MIDH makes it mandatory that each project is fully funded through promoter's contribution and with a bank loan after financial feasibility is appraised by a nationalized bank. The subsidy amount does not exceed the term loan. The subsidy is not provided as a grant but is back ended to credit account of banks to reduce the credit burden of the beneficiary. The subsidy is sanctioned on the basis of specific technical norms being complied with, which are designed so as to incentivize critical infrastructure requirements, energy efficient and future ready technologies. The EC/EMC of MIDH is the final approving authority after projects are appraised by Project Appraisal Committee of MIDH. In the 12th Plan, MIDH is promoting all aspects of cold-chain infrastructures such as pack-houses, reefer transport, cold stores, ripening chambers, solar power, alternate energy systems, multi-modal transport, packing lines with farm code labeling, street carts and display cabinets as individual components so that each beneficiary can select relevant infrastructure components for integrating the farm to market logistics activities. A maximum cap on subsidy is enforced on each infrastructure component.

8.3 In the NCCD, the following manpower is available (outsourced on contract basis)-

- (i)** CEO - one
- (ii)** 1 Technical officer (from private sector)
- (iii)** 1 Finance officer (ex-govt. employee)
- (iv)** 1 HRD manager (from private sector)
- (v)** 3 executive managers (from private sector)

Except for CEO, none of the staff has any previous hands on experience in Cold-chain operations.

NCCD provides support as an advisory think tank on policy development, applied research, industry interface, undertakes capacity building/training, harmonization of concepts and knowledge dissemination to promote development of market linked cold-chain logistics. NCCD does not have capacity or authority to directly undertake project appraisal or implementation.

8.4 The details of Technical Officers in NHB having knowledge of Cold Chain Infrastructure is given below:

- (i)** Addl. Managing Director : 01
- (ii)** Joint Director : 05
- (iii)** Deputy Director : 29
- (iv)** Sr. Horticulture Officer : 18
- (v)** Horticulture Officer : 07
- (vi)** Consultant Agencies : 03

8.4 MoFPI uses assistance of PMA for technical and financial appraisal of the project. Moreover, as mentioned above, MoFPI has made it compulsory for projects to avail term loan for an amount not less than 10% of the project cost from bank/financial institutions in order to become eligible for grant of assistance from the Ministry. Therefore, the appraisal of the projects has already been done by the bank and financial viability has been ascertained.

8.5 From the above, it becomes clear that NHB (existing since 1984) has the highest number of staff and also largest experience of sanctioning cold storage projects. Moreover, NHB has 36 field offices across the states.

9. Coordination between DAC and MoFPI

9.1 The General Council of MIDH under DAC has Agriculture Minister as its Chairman. Secretary (FPI) is a member of the Governing Council. There is an Executive Committee of MIDH under the chairmanship of Secretary, DAC. Secretary (FPI) is a member of this body.

9.2 The processing units under erstwhile HMNEH scheme for the States of J&K, HP and Uttarakhand are also supported under MIDH. Further, the support by MIDH for processing units from North Eastern States is under consideration. A sub-committee i.e. Empowered Monitoring Committee of MIDH has Joint Secretary, MoFPI as its member. The Project Appraisal Committee of MIDH has Director, MoFPI as its member for coordination between the two Ministries.

9.3 In the MoFPI, there is a Technical Committee (TC) which examines/appraises proposals of Grant-in-Aid received from private investors. It is headed by Additional Secretary/Jt. Secretary. Representatives of DAC and NHB are members of the Technical Committee. The proposals appraised by TC are finally put up to IMAC which is headed by Secretary (FPI). Representative of DAC is a member of IMAC. Thus, coordination between the two Departments is not a matter of any concern. In NHB's Project Approval Committee, there are representatives of DAC and MoFPI.

10. State-wise distribution of sanctioned projects

10.1 Under NHM, the cold storage projects have been sanctioned in the 11th Plan and 12th Plan in various States as per the following details:

Table - 8: State wise distribution of cold storage projects sanctioned under NHM during 11th and 12th Plan					
Sl.No	State	Capacity (in Tonnes)		Amount: (In Rs. Lakh)	
		Projects sanctioned in the 11th Plan	Projects sanctioned in 12th Plan	Capacity	Amount of grant
1.	Andhra Pradesh	3,16,034	5,126.39	2,36,328	4,147.00
2.	Bihar	1,47,533	1431.40	0	0
3.	Chhattisgarh	24,410	372.13	15,853	349.00
4.	Gujarat	4,37,108	7,040.30	2,04,945	3,722.58

5.	Haryana	35,682	745.85	65,191	1,346.85
6.	Jharkhand	10,000	330.00	4775	113.32
7.	Karnataka	22,884	399.29	16145	350.73
8.	Madhya Pradesh	1,39,995	2,191.83	69,182	1,557.78
9.	Maharashtra	31,798	513.03	30,105	869.14
10.	Orissa	15,100	241.19	20,500	519.00
11.	Punjab	3,85,329	6,879.76	1,34,087	2,752.00
12.	Rajasthan	89,267	1,121.24	13,525	280.15
13.	Tamil Nadu	0	0	6,000	108.63
14.	Uttar Pradesh	17,49,287	8,177.03	81,581	1,473.31
15.	West Bengal	2,44,845	2,221.55	24,900	510.36
	Total	36,49,272	36,790.99	9,23,117	18,099.85

10.2 NHB has sanctioned cold storage projects in various States in the 11th and 12th Plan as per the following details:

Table-9: Statement showing details of cold storages sanctioned by NHB during 11th and 12th Five Year Plan					
Sl.No.	State/UT	Projects Sanctioned in the 11th Plan		Capacity(in lakh Tonnes)	
		Capacity	Amount of grant	Capacity	Amount (in Rs. Lakh)
1.	Andhra Pradesh	2.361	1,835.83	0.241	349.033
2.	Arunachal Pradesh	0	0	0	0
3.	Assam	0.203	122.13	0.1	330
4.	Bihar	1.794	1,226.82	0.262	268.55
5.	Chandigarh	0	0	0.002	24.6
6.	Chhattisgarh	0.345	256.545	0.332	544.894
7.	Delhi	0.026	6.41	0.037	135.98
8.	Goa	0	0	0	0
9.	Gujarat	1.817	1,503.13	0.041	268.234
10.	Haryana	0.164	78.62	0.972	2,949.17
11.	Himachal Pradesh	0.198	1,613.83	0.032	570.76
12.	Jammu and Kashmir	0	0	0	65.75
13.	Jharkhand	0.784	550.871	0.046	19.34
14.	Karnataka	1.985	993.769	0.115	50

15.	Kerala	0.096	72.342	0	0
16.	Madhya Pradesh	0.673	389.561	0.207	256.52
17.	Maharashtra	0.806	385.836	0.597	1,726.88
18.	Meghalaya	0	0	0.05	28.275
19.	Mizoram	0.035	46.28	0	0
20.	Nagaland	0	0	0	0
21.	Orissa	0.193	166.305	0	0
22.	Punjab	2.244	2,002.05	0.664	1,178.17
23.	Rajasthan	0.332	251.87	0.464	820.344
24.	Tamil Nadu	0.611	308.01	0.246	355.34
25.	Tripura	0.047	27	0.05	165
26.	Uttar Pradesh	32.75	16,408.2	6	9,700.28
27.	Uttarakhand	0.036	14.67	0	0
28.	West Bengal	0.665	395.689	0.026	41.82
	TOTAL	48.165	28,655.768	10.484	19,848.94

10.3 MoFPI has sanctioned cold chain projects in various States in the 11th and 12th Plan as per the following details:

Capacity (in Tonnes)
Amount (Rs. in lakh)

Table-10: Statement showing details of cold chain projects sanctioned by MoFPI during 11th and 12th Plan

Sl.No	State	Projects sanctioned in the 11 th Plan		Projects sanctioned in 12 th Plan	
		Capacity	Amount of grant	Capacity	Amount of grant
1.	Andhra Pradesh	1450	1,162	10,000	582.16
2.	Assam	0	0	1,250	234.24
3.	Bihar	0*	935	0	0
4.	Chhattisgarh	0	0	875	350.7
5.	Gujarat	10,500	1,072	3,250	1,048.21
6.	Haryana	11,000	984	1,500	373.51
7.	Himachal Pradesh	1,400	871	8,975	2,010.18
8.	Karnataka	11,250	834	625	377.01
9.	Kerala	4,750	397	10,500	1,173.37
10.	Madhya Pradesh	0	0	1000	572.9
11.	Maharashtra	12,797.5	3,244.5	15,647.1	3,901.95
12.	Manipur	0	0	2175	750
13.	Mizoram	62.5	76	397.5	952.1
14.	Punjab	5,550	738	7,140	2,083.17
15.	Rajasthan	80	705	0	0
16.	Tamil Nadu	300	606	0	0
17.	Uttar Pradesh	9,450	1,197	5,450	829.75
18.	Uttarakhand	6,168	1,534	6,350	1,129.15

19.	West Bengal	22,375	1,136	18,932.1	1,839.4
	Total	97,133	15,491.5	94,066.7	18,207.8

*The project belongs to Dairy sector therefore cold storage capacity in Tonnes cannot be quantified.

11. Cold Storage capacity sanctioned/ added since 2007

11.1 In the last 7 years, 10.58 million tonnes of cold storage capacity has been added with assistance from various central government agencies as per details given below:

Table 11 : Cold Storage capacity added with assistance from Central Government agencies during last 7 years		
Sl.No	Government Agencies	Capacity (In million tonnes)
1.	MoFPI	0.19
2.	NHM	4.57
3.	NHB	5.82
	Total	10.58

11.2 State-wise details of the cold storages and capacity added by various central government agencies viz. NHB, NHM and MoFPI as on 31.3.2014 is at [Annexure-V](#).

12. Rationalisation of service tax on cold chain services

12.1 Section 66D (d) (iii) of Chapter 5 of Finance Act 1994 and Chapter VA of Finance Act 2003 relating to service tax provides for a Negative list. Under the aforesaid provision, processes carried out at an agricultural farm including tending, pruning, cutting, harvesting, drying, cleaning, trimming, sun drying, fumigating, curing, sorting, grading, cooling or bulk packaging and similar operations which do not alter the essential characteristics of agricultural produce but make it only marketable for the primary market do not fall in the ambit of service tax.

12.2 From the express provisions under the Act, it is clear that as long as there is no change in the essential characteristics of agricultural produce and the services are only to enhance the marketability of the primary produce; it is not the intention of Act to impose service tax on such processes.

12.3 Section 65B(5) of the Act, defines “agricultural produce” to mean any produce of agriculture on which either no further processing is done or such processing is done as is usually

done by a cultivator or producer which does not alter its essential characteristics but makes it marketable for primary market. The narrow interpretation of the provision is that if the defined process is carried out only by a cultivator or producer and the essential characteristics of agricultural produce remain un-altered, such processes are to be covered within the meaning of “agricultural produce”. However, different entities like agri-entrepreneurs, supply chain services, cooperatives, FPOs and farmers“ groups who undertake backward integration with cultivators in organizing and facilitating such processes are not covered under the present definition even though such process undertaken by them does not alter the essential characteristics of agricultural produce. Imposition of service tax on these processes facilitated by agri entrepreneurs may result in taxing of these services thus discouraging investment in agricultural supply chain. It also adds to the cost of agricultural produce in retail market, thus adding to inflationary trends.

12.4 Moreover, there are certain necessary processes of agricultural commodities in the supply chain such as pre-conditioning (e.g. washing, waxing, de-sapping), pre-cooling, ripening, waxing, retail packaging and labelling, climate controlled storage and transportation which do not alter the essential characteristics of agricultural produce. These processes make it possible for agricultural produce to be marketed more efficiently. The processes reduce losses in supply chain and prolong the freshness of produce. There are reports that officers in-charge of Service Tax (Customs and Central Excise) are not treating these processes as usually done by cultivator or producer. Such processes are essentially not undertaken at the agricultural farm in India as most holdings are very small and farmers do not show much interest in undertaking these activities. These are done at the level of aggregator or cold-chain facilities as part of the supply chain to enhance the shelf life and transportability of the agricultural produce to market. It is, therefore suggested, that necessary clarification may be issued by CBEC to exempt these services from the ambit of service tax as long as the character of produce does not change.

12.5 It is, therefore, suggested that clarification be provided by CBEC so that all processes undertaken on agricultural commodities, especially horticultural produce (fruits and vegetables), which does not result in a change of the essential characteristics of the produce, within the temperature controlled logistics chain are exempted from service tax.

12.6 While the aforesaid suggestions may be immediately brought about through issue of circulars/ notification to bring out clearly the intention of the provision of the law, there is a necessity to bring about certain structural changes in the provision of service tax itself. In order

to promote food processing industry, Government has extended a number of fiscal concessions from time to time. Main objective of these concessions is to encourage the level of processing of agricultural and related products so that the wastages which are currently very high, particularly in perishable products such as fruit and vegetables, milk, fish and meat is minimized. Some of these incentives are given as under:

- a) Under Section 80 IB(11A) of the Income Tax Act, 1961, new units (i.e. units not formed by splitting up or by way of reconstruction of an existing business) in the business of processing, preservations and packaging of fruits or vegetables, meat and meat product, poultry, marine or dairy products are permitted tax holiday for five years. For promoting cold chain facility, under Section 35-AD of the Income tax Act 1961, deduction is permitted for 150% of the expenditure incurred on investment.
- b) In relation to food products, there are three slabs of Excise Duty for different categories of products. The three slabs are nilrate of duty, merit rate of 2% without CENVAT and 6% with CENVAT and Standard excise duty of 12 %. Milk, Milk Products (Chapter 49 of Central Excise Tariff classification), Vegetables (Chapter 7), Nuts and Fruits, fresh and Dried (Chapter 8) are exempted from excise duty. As against standard excise duty of 12%, processed fruits and vegetables (Chapter 20), soya milk drinks, flavored milk of animal origin carry a merit rate of 2% without CENVAT or 6% with CENVAT. Only high value products like chocolates, carbonated drinks carry higher excise duty of 12%.

12.7 However, under the service tax notification No. 25/2012-service tax, dated 10-6-2012, exemption has only been extended for construction, erection, commissioning or installation of cold storages. Services of Cold store/ chain have been covered under service tax. Imposition of service tax on cold chain/storage services completely nullifies the incentives given under various provisions of Income Tax and nil or lower excise duty on a range of food products. If government wishes to minimize wastages, promote storage of commodities for off seasons in cold storage/ chain, reduce price spike of essential commodities and promote investment in cold storage/ chain, such services should be exempted from service tax, even if primary characteristics of agricultural produce undergoes a change. It has to be appreciated that cold chain provides critical service for preservation of food items, especially perishables. Thus, there is a need for exempting cold chain services availed in respect of food products or at best restrict service tax for storing those products which attracts higher rate of excise duty say 12% and above. For example, IQF services are becoming common for preservation of fruits and vegetables.

However, due to change of characteristics of fruits and vegetables (e.g. pea or mango or carrot) during IQF, Service Tax is levied. Imposition of 12% Service Tax increases the cost of end product thus discouraging wider acceptance of processed fruits and vegetables. Bringing service tax in consonance with concessions of Customs and Central Excise Duty for cold chain products and services will lower the prices and will thus contribute to higher acceptance of such processed products by customers.

13. Accreditation of cold storages for introduction of negotiable warehousing receipts

13.1 The Government of India has set up Warehousing Development & Regulatory Authority (WDRA) in accordance with the provisions of Warehousing (Development and Regulation) Act, 2007. In June, 2012, the WDRA issued a circular outlining the procedure to be adopted for accreditation of cold storages. 26 commodities were identified by WDRA for which this accreditation was to be given. These commodities include potatoes, apple, carrot, orange, Kinoo, grapes, pomegranate, onion etc. WDRA also notified six accreditation agencies for carrying out inspection of warehouses.

13.2 WDRA has since its inception in 2007 however, been able to give accreditation to only one cold storage so far, that too only recently. A suggestion has been made that this Authority may be transferred from Department of Food and Public Distribution to Department of Agriculture and Cooperation. This matter is being separately examined by the Department of Food and Public Distribution. Meetings have been held in the months of July, August and September, 2014, between MoFPI and WDRA, as a result of which the application format for accreditation has been simplified. If more cold storages are accredited by WDRA, it would be possible for large number of farmers to take advantage of negotiable instrument for receiving loans from bank to avoid distress sale of their agricultural produce.

13.3 The Task Force, therefore, recommends a more proactive intervention by WDRA in accrediting the cold storages improving the negotiability of warehouse receipts and make it more attractive to farmers. For this, State-wise meetings may be organized by WDRA in consultation with the Horticulture Division of DAC for creating awareness among various stakeholders like state governments, APMCs, co-operative institution etc. Promoters of existing cold storages may be invited to these meetings. In addition, the promoters of projects financed under NHM, MIDH and cold storage scheme of MoFPI may also be invited.

14. Requirement of funds

14.1 The study conducted by NSEL in the year 2010 assessed a gap of 37 million tonnes of cold storage capacity in the country. Since the submission of the report by NSEL, a capacity of 8 million tonnes has been added. Therefore, the present gap in the storage capacity may be 29 million tonnes. In order to fill up 50% of this gap, an additional capacity of 15 million tonnes was proposed to be created over the next five years. It was also proposed by MoFPI that 1/3rd of this capacity may be created under the scheme of MoFPI while 2/3rd may be created by Ministry of Agriculture under their existing schemes through MIDH. It was estimated that the average capacity created by MoFPI for a cold chain project is about 5000 tonnes of cold storage. The average amount of grant was estimated to be Rs.8.00 crore per project. Therefore, it was projected that in order to create 5 million tonnes of capacity by MoFPI, 1000 new projects are required to be sanctioned over the next five years. The total requirement of funds was, therefore, assessed to be Rs. 8000 crore. Out of these 1000 projects, 500 projects were proposed to be sanctioned during the remaining period of 12th Plan for which an additional allocation of Rs. 4000 crore was proposed. With this amount, the Ministry of Food Processing Industries can sanction additional capacity of 2.5 million tonnes.

14.2 During discussions with DAC, NHB and the promoters, it emerged that the gap of cold storage capacity earlier assessed at 29 million tonnes may not be required at the present level of agricultural development and linkage of consumers to agricultural markets. It was, therefore, suggested that one should wait for the study by NCCD to be completed. This study will make a more realistic assessment of the demand of cold storage/cold chain capacity for agricultural and allied products including demand for pharmaceuticals, dairy, poultry, fisheries and meat products. In view of the consensus for the time being, the Government should aim at agreed additional capacity of 7.5 million tonnes over the next five year. Out of this, DAC can take up 5 million tonnes and MoFPI may take up 2.5 million tonnes. Within DAC, 2.5 million tonnes each can be sanctioned under NHM and NHB. The total cost of the project of 5,000tonnescapacity is approximately Rs. 6.00 crore. The grant component is calculated at the rate of 35% of the eligible cost of the project. Thus, there is likelihood of an investment of Rs. 6,000 crore for creation of capacity of 5 million tonnes under MIDH. At 35% grant, the amount of financial assistance comes to about Rs. 2,100 crore for NHB and NHM for creating 5 million tonnes capacity in the next 5 years. Thus, the total requirement of funds is Rs. 6,100 crore including the requirement of Rs.4,000 crore of Ministry of Food Processing Industries (MoFPI).

15. Availability of bank loans for setting up cold chain projects

15.1 One of the points raised by the investors in various meetings is the high cost of funding due to which many projects become unviable. The Cold Chain Task force of CII has assessed that there is a minus 30% return on investment on cold chain projects due to high cost of power, fuel and finance. In the year 2013-14, the Govt. of India set up a Warehousing Infrastructure Fund (WIF) of Rs.5000 crore through which financing of dry warehouses as well as cold chain projects was permitted by NABARD. For 2014-15, an amount of Rs. 5000crore has been provided under WIF. However, it was decided by RBI, that loan from this fund cannot be routed through the banks and NABARD will directly fund these projects. The fund was fully utilized in 2013-14. However, NABARD has sanctioned only an amount of Rs. 47.00 crore to three cold storage projects.

15.2 In this year's reply to budget discussions the Finance Minister announced creation of a fund of Rs. 2000crore for providing loans to food processing units in Food Parks. This matter has been under discussion between RBI, NABARD andMoFPI. It has been agreed that loans at about 9.5 to 10.00% rate of interest would be available to cold chain projects also. However, the RBI did not agree to extend the facility of re-finance out of this fund through commercial banks. It has, therefore, been decided that NABARD will directly invite applications from eligible projects for loan from this fund. Guidelines of fund are being issued with the approval of RBI/Department of Financial Services.

15.3 Several schemes are available for providing venture capital for agri-business projects. Small Farmers Agri-Business Consortium (SFAC) an organization under DAC, is operating a scheme for providing interest free venture capital (VC) to set up agri-business project. The objective of this scheme is to encourage private investment in agriculture related business project including cold store/cold chain, thus providing a linkage between farmers and consumer. In addition to individuals and companies, self-help groups and farmer producer organizations are also eligible to avail venture capital under this scheme. Poultry and dairy projects are also covered. In the special category States, assistance upto 40% of promoter's equity with a ceiling of Rs. 50 lakh is available. In other states, venture capital assistance is available to the extent of 26% of promoter's equity but with a maximum amount of Rs. 50.00 lakh. Assistance from the

fund is available only if cost of project is less than Rs. 5.00 crore. Venture Capital Assistance (VCA) of Rs. 296.99 lakh has been sanctioned to 950 projects. Out of these, 248 are cold storage projects to which VCA of Rs. 98.26 crore has been sanctioned. State-wise details of VCA sanctioned in various States are at **Annexure-VI**. Year wise sanction of VCA for cold storage projects in three major states of UP, Maharashtra and Haryana is at **Annexure VII**.

15.4 It may be seen that very few projects have been sanctioned in Eastern States of Bihar, Odisha, Chhattisgarh and West Bengal. Similarly, the number of projects sanctioned in North Eastern States is insignificant. From the discussion with MD, SFAC, it emerged that due to constraints of power and road infrastructure, the investors are not willing to set up cold storage projects even though there is surplus production of fruits and vegetables and it is possible to link these areas with major areas of consumption. It is, therefore, recommended that some special grant may be given to these states for providing power infrastructure for cold storage projects. It is also seen from the above that out of 248 cold storage projects sanctioned by SFAC, 107 projects have gone to UP alone.

15.5 The Finance Minister had made an announcement in the Budget speech of 2014-15 for creation of Rs.10,000crore venture capital for micro, small and medium enterprises. The fund, to be operationalized by SIDBI, will act as a catalyst to attract private capital to MSME sector.

16. Study of Post-Harvest losses by CIPHET

16.1 As mentioned in para 2.1, a study conducted by CIPHET during the year 2005 to 2007 found post-harvest losses in the range of 0.8% to 18%. The report was released in 2010. In order to assess the results of various interventions of the Government under several schemes of various Ministries, it was decided to award a repeat study to CIPHET in the year 2012. MoFPI decided that the study may be conducted in the same 106 districts in which the original study was done. It was also decided that same crops/commodities (46) may be studied in which losses were assessed in the previous study.

16.2 CIPHET has already collected data from most of the districts and the same is under compilation. As per the information given by Director, CIPHET, the final study report will be submitted by March, 2015 and the report will be released subsequently. In a meeting between ICAR and MoFPI on 29.8.2013, it was decided that data on post-harvest losses will be collected under All India Coordinated Research project on a regular basis, especially for assessing

qualitative losses, it has also been agreed that CIPHET and commodities institutes of ICAR will maintain close coordination and will share data collected under the AICRP so that the results are acceptable to both sets of institutions. It was also agreed that ICAR will set up a portal in which data collected by CIPHET and crop specific institutions will be uploaded and analyzed. This suggestion was made by MoFPI as it was found that ICAR had not involved research intuitions specializing in various crops in the earlier study of 2010 and even in the current study of 2012-13. However, in data collection, the coordinating centers of AICRP on PHT located in State Agricultural Universities or ICAR Institutes, are involved comprising the experts specialized in the selected crops/commodities. Further, a workshop will be held to utilize the expertise and experience of the crop institutes before finalizing the estimates of post-harvest losses. In view of this, MoFPI suggested that data should be collected by crop specific institution of ICAR on a regular basis so that the expertise of a particular institution is available during data collection and it is analyzed. It is understood that ICAR has already issued instructions to their institutions for collection of data on post-harvest losses. CIPHET has communicated that preliminary results of the study will be available by end of November, 2014.

16.3 ICAR has already issued instructions that data on losses in supply chain collected under AICRP will be uploaded on the website of Indian Agricultural Statistical Research Institute (IASRI), New Delhi. The IASRI will not only collate data but it will also analyze the same and release the data in public domain after due consultation with CIPHET who have already been engaged in two previous studies on post-harvest losses.

17. Viability Gap Funding for Cold Chain projects

17.1 In 2006 the Government of India had announced the scheme of financial support to Public Private Partnership project in infrastructure sector. Central Ministries, State Governments, statutory authorities owning the assets are eligible to apply for Viability Gap Funding(VGF). The matter relating to funding of Cold Chain projects through Viability Gap Funding has been under discussion between MoFPI, Department of Economic Affairs and Department of Agriculture & Cooperation. In case of cold storage/cold chain projects, the lead is taken by the private investor who decides the location of the project as well as the technology he wishes to use for setting up of the project. The technology may vary depending on the crops he wishes to store in the cold storage. Similarly, the backward linkages required to be created for agricultural products will differ on the basis of the crops and processes which are to be used.

Other than West Bengal, no other State has fixed rent also for storage of agricultural produce in the cold storage. In meetings with Department of Economic Affairs, it has been pointed out that Viability Gap Funding can be availed only if land belongs to the Government. If private investor wants to avail VGF he has to buy land and agree to transfer it to the Government at the end of the concession period. Moreover, rentals are not decided by the Government in most States. Therefore, it is not possible to decide the bidding parameters. Due to these difficulties, it has not been possible to formulate a project for VGF for cold chain projects.

17.2 Even in case of grains silos of Food Corporation of India, it has not been possible to finalize any project so far even though Planning Commission and Food Corporation of India have been working on the concession agreement for several years.

17.3 Unless the VGF scheme itself is modified to waive the condition of availability of land and its transfer to Government after the end of the concessional period and fixing of user charges, the scheme of VGF is unlikely to take off for Cold Chain projects.

17.4 It may, therefore, be appropriate for Department of Economic Affairs to evolve a suitable model for cold chain projects in which neither the land would belong to Government nor the rate of storage of agriculture produce would be fixed by Government.

18. Role of State Governments in according permissions/approvals for investment in cold chain sector

18.1 Since the cold chain industry is de-licensed, approval of Central Government is not required for setting up cold chain projects. Even foreign companies wishing to set up cold chain projects do not require any approval as FDI to the extent of 100% is allowed through automatic route. However, a number of approvals are required from the State Governments for setting up and operationalizing the cold chain projects. Among others, the following approvals are required from the State Governments:

- i. Permission for change of land use. For this approval, different state governments follow different procedures. Generally consultation with Collector of the district, Public Works Department, District Health Officer, Forest Department, Gram Panchayat, Electricity Department etc. is required.
- ii. Exemption from land ceiling laws
- iii. Permission to establish and operate units from State Pollution Control Board.

- iv. NoC from Town & Country Planning Department
- v. Permission from railways if the unit is close to railway lines
- vi. Permission from Airports Authority of India if the unit is close to airport.
- vii. Permission for use of ground water
- viii. Sanction of electrical connection
- ix. Sanction of water connection
- x. Approval of Chief Inspector of factories
- xi. Approval of Labour Commissioner
- xii. Approval from Coastal Development Authority
- xiii. Licence from APMC for purchase of agricultural raw material
- xiv. Registration with FSSAI as food business operator
- xv. Registration with Service Tax Department
- xvi. Registration with Central Excise Department
- xvii. Registration with the VAT Department
- xviii. In case of project for availing concessional customs duty, recommendation from MoFPI

18.2 Despite efforts of various Government Departments in setting up Udyog Bandhu & Udyog Mitra, much progress has not been achieved in creating a system for giving single window clearance. Department of Industrial Policy & Promotion is already working in this direction and a portal is planned for giving these approvals online.

18.3 There is a need to fix time limits for both the Central Government & State Government Departments for giving these approvals. Several cold chain projects assisted by MoFPI have been delayed due to time taken by the State Governments in giving various approvals particularly change of land use.

18.4 It is understood that in certain States, dry warehouses do not require the permission for change of land use as it is considered agricultural activity. It is suggested that cold chain projects upto 5000 tonnes capacity may be permitted to set up without any requirement for change of land use permission as these projects may be considered as agricultural projects.

19. Institutional Mechanism for sharing of information about cold storage/cold chain projects sanctioned by various Ministries

Presently there is no uniform system for exchange of information among various Departments which sanction grants-in-aid for cold chain projects. In 2011, PMO introduced a portal (www.thrustareas.gov.in) for uploading the information on monthly basis about the cold storage capacity created in the year. However, the information uploaded in this portal by various Ministries is not available in public domain. It is, therefore, suggested that PMO may discontinue the portal of „thrust areas“ started in 2011. Instead, NHB or NCCD may be given the responsibility of preparing a portal in which information about all the projects sanctioned by various Ministries may be captured mandatorily. MoFPI is already operating a portal for sanctioned cold chain projects. This can be shared with NHB and NCCD and after suitable modifications, it may be made compulsory for all Central Ministries and State Governments sanctioning cold chain projects to enter data in the portal.

20. Conclusions and Recommendations:

On the basis of discussions in the preceding paras, the conclusions and the recommendations of the Task Force are as under:

20.1 The scheme for creation of cold chain/cold storage capacity being operated by DAC under NHM is open ended. The applications are submitted by prospective investors to the State Horticulture Mission and grant is sanctioned by NHM on the basis of the allocation made to each State every year. At the present rate of inflow of applications additional funds are not required for NHM for sanction of cold storage projects upto 5,000 tonnes. However, if 2.5 million tonnes of additional capacity is required to be created through NHM in the next 5 years additional requirement of funds is projected at Rs.1,050 crores. **[Para 14.2]**

20.2 NHB is, however, facing a problem of shortage of funds. In 2014-15, the estimated demand of NHB is Rs. 365.00 crore against the current budget estimate of Rs. 190.00 crore. Therefore, there is a requirement of providing an additional allocation of Rs. 175.00 crore per annum totaling to Rs. 525.00 crore during remaining period of 12th Five Year Plan. Accordingly, it is recommended that NHB may be given an additional allocation of Rs. 175.00 crore per year during the remainder of the 12th Five Year Plan for meeting existing commitments. For creating additional 2.5 million tonnes capacity through NHB in the next five years, additional requirement of funds is projected at Rs.1,050 crores**[Para 6.4& 14.2]**

20.3 The scheme of cold chain operated by the Ministry of Food Processing Industries is not open ended. Applications are invited by issue of an advertisement for sanction of projects which are approved by CCEA from time to time. In order to create an additional capacity of 2.5 million tonnes over the next five years, a requirement of an amount of Rs. 4000 crore is projected over next 5 year. **[Para 14.2]**

20.4 MoFPI may modify its scheme of grant-in-aid to cold chain projects. In the special Category States, the grant may be reduced from 75% to 50% of eligible project cost. In other States, the grant may be reduced from 50% to 35%. The scheme may be made open ended and the proposals may be accepted round the year. However, the present limit of grant-in-aid of Rs. 10.00 crore per project may be continued. Cost norms of NHB wherever feasible may be followed by MoFPI also. **[Para 7.9]**

20.5 Central Board of Excise and Customs (Service Tax), Ministry of Finance may issue clarification exempting certain processes as undertaken on agricultural commodities from the purview of service tax for services such as pre-conditioning (e.g. washing, waxing, de-sapping), pre-cooling, ripening, waxing, retail packaging and labelling, climate controlled storage and transportation which do not alter the essential characteristics of agricultural produce. These processes make it possible for agricultural produce to be marketed more efficiently. [Para 12.4]

20.6 WDRA may take proactive measures, including simplification of its procedures, to accreditate the cold storages set up in various parts of the country, improve the negotiability of warehouse receipts and make it attractive to farmers. It may also organize regional workshops to create awareness about the benefits of obtaining accreditation from WDRA. [Para 13.2 & 13.3]

20.7 NABARD may publicize the availability of funds under the Warehousing Infrastructure Fund for financing of cold chain projects. The special fund created in NABARD for food processing sector of Rs.2000.00 crore announced by the Finance Minister in reply to the discussion on Union Budget 2014-15 may also be publicized so that cold storage projects can obtain loans at about 9.50% rate of interest.[Para 15.2]

20.8 Reform of APMC has not been discussed in this report as this subject has already been under discussion for about a decade. Recommendations have already been made by various Committees for exempting horticulture produce from the purview of APMC Act. Most of the cold chain capacity will be created by private sector investors. In order to facilitate investment, single window clearance must be provided by all the State Governments. [Para 18.3]

20.9 Critical missing links need to be identified to assess gaps in the cold-chain infrastructure especially in states of Eastern India and North Eastern states. Most horticultural crops require preconditioning to enter the cold-chain and this requires capacity in form of modern pack-houses with pre-coolers and refrigerated transport capacity as connectivity between pack-house and markets. NCCD/NHM has been asked to include this part in the Term of Reference (ToR) of new study being commissioned by them. [Para 3.9]

20.10 Promoters of cold chain projects have to obtain about a number of clearances from various state governments and central governments offices. An effective system of single window clearance is necessary in order to ensure timely completion of cold chain projects. [Para 18.1]

20.11 Registration fee for reefer vehicles for national permit may be reduced. Data of registration of reefer vehicles may also be captured separately. [Para 4.6]

20.12 CIPHET and commodities institute of ICAR may coordinate and share data collected under AICRP. ICAR may set up a portal in which data collected by CIPHET and crop specific institutions may be uploaded and analyzed. [Para 16.2& 16.3]

20.13 Department of Economic affairs may evolve a suitable model for cold chain projects and modify the VGF scheme in which neither the land would belong to government nor the rate of storage of agriculture produce would be fixed by the government. This would facilitate implementation of VGF scheme for cold chain projects. [Para 17.3, 17.4]

20.14 High rate of service tax imposed on food products nullifies the fiscal incentives extended to food processing sector including cold chain. Therefore, there is a need to exempt service tax in respect of cold storage/cold chain services availed for storing/preservation/transportation of products. However, services availed for storing high value food products like chocolate/chocolate products, glucose, carmel, carbonated drinks, sugar, confectionary etc may be continue to be under service tax. [Para 12.7]

20.15 At present, NHB is allowed to support cold storages with capacity of above 5,000 tonnes which are mainly used for storage of potato and onions. Given the experience and expertise of NHB in supporting cold storages since 1984, it would be appropriate to allow them to support cold chain infrastructure of less than 5,000 tonn capacity as well.[Para 6.5]

20.16 Cold chain projects upto 5,000 tonn capacity may be permitted to set up without any requirement of change of land use permission as these projects may be considered as agriculture products. The timelines may also be fixed for both central government and state government departments for according requisite approvals for setting up and operationalizing cold chain projects. [Para 18.4]

20.17 A portal under the aegis of NHB/NCCD may be developed to capture the information on various captures the information relating to cold storage capacity creation, IQF, Blast Freezers, Ripening chambers, Reefer vans etc. [Para 19]

ANNEXURES

Annexure-I

Constitution of the Committee on encouraging investment in Supply Chains including Cold Storages for more efficient distribution of farm produce

Chairman

Dr. Saumitra Chaudhuri, Member, Planning Commission

Members

Shri T Nanda Kumar, Member, National Disaster Management Authority (NDMA)

Secretary, Department of Industrial Policy & Promotion

Secretary, Department of Food & Public Distribution

Secretary, Department of Agriculture & Cooperation

Secretary, Department of Animal Husbandry, Dairying & Fisheries

Secretary, Ministry of Food Processing Industries

Shri Rakesh Bharti Mittal, Chairman, CII National Council on Agriculture

Shri B Thiagarajan, Chairman, CII Task Force on Cold Chain Development

Shri S Sivakumar, Chief Executive, Agri Business Division, ITC Ltd.

Member Secretary

Dr. Ashok Sahu, Principal Adviser (Development Policy and Perspective Planning), Planning Commission

ToR for Study on All India Cold-chain Infrastructure Capacity (Status & Gap)**Background:**

With a production of 243 million tons, India is the second largest producer of fruits (81 mill tons) and vegetables (162 mill tons) in the world. The production areas and seasons of F&V are widely dispersed with bulk of consumption mostly taking place in urban concentrations. Government of India has been providing support, both for enhancing production and productively in production clusters and for creating forward linkages in terms of post-harvest management and market infrastructure. As a result horticulture sector has maintained a healthy growth rate of over 6%. Estimated Cold storage capacity of 105 million cubic meters or 31 million tonnes in 6500 have been created. This capacity functions largely as bulk storage of crops at farm-gate for crops like potatoes, spices, etc, while a fair share has been created as distribution hubs for packaged products. The associated infrastructure components such as modern pack-houses, refrigerated transport (road, rail, water or air), ripening chambers for fruits, etc. are also being promoted for facilitating the development of temperature controlled cold chain infrastructure in the country.

During the last 10-15 years, significant progress has been made in the expansion of the cold-chain industry in the country. Such development is playing a leading role in connecting more domestic markets with producing areas as well in the export and import of fruits / vegetables / meats / flowers etc.

In order to improve the cold chain sector further, there is a need to understand the existing status in terms of requirement, capacity created and gaps if any, across the various infrastructure components that comprise an integrated cold-chain.

In this context the Department of Agriculture and Cooperation, Ministry of Agriculture requires an assessment to be made of the post-harvest cold chain infrastructure requirements, specific to products and linked with markets. The infrastructure components would specifically include cold warehousing, packaging & distribution facilities and other cold-chain infrastructure and other operational discrepancies, so as to formulate a future strategy of intervention for development of integrated cold chain infrastructure in the country.

Objective:

Conduct a comprehensive pan-India study to evaluate the requirement, capacity created and existing gaps in Cold-chain infrastructure so as to provide relevant assessment for future development of cold-chain infrastructure.

Terms of Reference: The agency shall:-

Conduct a detailed study and analysis on existing capacity and the gap across all infrastructure segments in cold-chain.

- I. Assess cold storage status, based on the available base line information of the existing capacity.
- II. Assess existing capacity of production and/or originating units (food processing units and fresh produce pack-houses) from secondary data.
- III. Assess the refrigerated transportation available in cold-chain.
- IV. Assess the existing throughput capability of the existing infrastructure across product (temperature) segments.
- V. Assess demand for cold-chain facilities, basis production figures of raw material and market growth trends for both fresh produce and food products.
- VI. To output a consolidated document with segment-wise and category-wise needs across all infrastructure components required to develop integrated cold-chains from farm/production points to market.

The detailed study and analysis on existing capacity and the gap across all infrastructure components of cold-chain should be comprehensive and highlight the region specific and product specific status. This information is to assist policy makers and developers to target specific regions and markets and to thereby develop appropriate business models with suitable infrastructure.

The selected Agency shall work closely and under supervision of National Centre for Cold-chain Development (NCCD) for the duration of the study.

Information / Data to be analysed

- 1.1. A base line information gathering exercise of cold storage capacity has been completed by NHB (in 2014). This information to be updated and analysed for existing capacity status of cold stores.
- 1.2. The production capacity of food processing units to be accessed from Ministry of Food Processing Industries, NABARD, etc.
- 1.3. The availability of modern pack-houses for cold-chain to be accessed from State Governments, NHB, APEDA, DMI, NABARD, Licensing authorities or other sources.
- 1.4. The actively refrigerated transport vehicles available in the country. Information from Ministry of Road Transport and Highways, RTO, and Industry estimates to be used.
- 1.5. The existing container, railways and waterways capacity for domestic transport of perishable goods to be accessed from NHB, Railways (Concor) and IWAI or other sources.
- 1.6. The existing export and import capacity in terms of reefer containers and Perishable Cargo Centres from APEDA, Airport Authorities and Port Authorities.

The primary responsibility of collecting, collation and assessment of data shall be of the research agency. All data sources to be tabulated in the output report

Required output

- a) Existing throughput capacity of fresh produce pack-houses with pre-coolers, cold storage, transport and food processing units.
- b) Cold storage required number and capacity cross tabbed by application segment (mild chill, chill and frozen) and regions.
- c) Reefer transport existing and required, categorized by carrying capacity and monthly throughput.

- d) Current market demand – domestic and international and market demand trends over previous five years and for the next five years.
- e) Matrix to assess infrastructure needs on the basis of existing market demand linked to existing production and growth trends.

The matrix is expected to tabulate and enumerate required infrastructure components as per volumetric flow of goods on basis of per capita consumption at population centers, linked to distance from identified producing districts, categorized by temperature ranges (under frozen, chill, mild chill) and segmented by bulk long term storage or short transitory supply chain.

Description of Approach, Methodology and Work Plan

Technical approach, methodology and work plan must be detailed by the agency in the inception report (see section E):

- a) **Technical Approach and Methodology.** In this sub section, understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output should be explained in detail.
- b) **Work Plan.** In this sub section list the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by NCCD), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the ability to translate TOR into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here.
- c) **Organization and Staffing.** In this sub section submit the structure and composition of your team, list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.

Schedule for submission of Report:

The Agency shall complete the evaluation study within four month time from the date of award of the study.

Submissions of reports are as under:

Agency shall present an inception report within 3 weeks of finalizing the methodology of the study with details of any third party interactions planned, for approval.

Midterm report at a mutually agreed schedule, for approval.

Draft Report within fourteen weeks of commencing the study. Agency will submit 10 copies of draft report (duly supported with tables, graphs and photographs with caption) and make presentation of draft report on a specified date, if required.

Submit 25 copies of Final report along with soft copy of the report in word and in PDF format within 15 days after receipt of final suggestions / comments made at the time of presentation or as suggested by NCCD /MoA.

Schedule of Payment:

The schedule of payment will be as under:

1. First installment of 25% of the total cost as an advance at the time of approval of the study,
2. Second installment of 50% of the total cost on the submission of 10 copies of a draft report, and
3. Third and final installment of 25% of the total cost on presentation and acceptance of final report.

All payments will be released by the National Centre for Cold-chain Development (NCCD). Penalty Clause @ 1% of the released amount will be imposed on the Agency in the event of delay in submission of the Reports as per agreed schedule, for which no justification is provided. There should normally, be very strong and genuine grounds for waiver of penalty on account of delay. The CEO (NCCD) will be the authority for waiving of penalty.

Confidentiality:

This study report must not be reproduced in whole or in part without the prior written consent of National Centre for Cold-chain Development (NCCD). All information contained in the study should not be divulged to any third party, without the prior written authority of CEO (NCCD).

Annexure-III

State-wise details of Cold Chain projects sanctioned under National Mission on Food Processing
(as on 28.10.2014)

S. No.	Name of the project	State	Project description	Sanctioned Amount (In Rs.)	Amount released
1.	Naga Hanuman Fish Packers	Andhra Pradesh	Shrimp, Fish Processing Plant	9,52,26,000	98,00,000
2.	Royal Marine Impex Private Limited	Andhra Pradesh	Shrimp Processing Plant	10,00,00,000	6,98,00,000
3.	Munnangi Sea Foods Private Limited	Andhra Pradesh	Shrimp Processing Plant	6,65,50,000	36,920,000
4.	Al Sameer Exports Pvt ltd	Bihar	Cold Chain Being Set up	4,12,78,000	0.00
5.	Amritmaya Foods Pvt. Ltd.	Chhattisgarh	The company is setting up a dairy farm project and milk processing plant with cold chain facility. This is the only dairy project in the state where the milk processing, dairy farming and fodder production would be carried out.	1,16,63,000	87,47,000
6.	Amrit Humifresh Preservation Private Limited.	Haryana	Multi product & multi humidity cold storage chambers, Quick Freezing system, Frozen Food Storage System integrated to reefer transport for a storage of frozen food.	5,00,00,000	0.00
7.	Sabharwal Food Industries Pvt Ltd	Haryana	For setting up of Cold Store operating at -23 degree Celsius with seamless link from farmer to consumer through Modified Atmosphere(MA) Cold Store, Value addition, blast freezing, Gradient and packaging line, Refrigerated	7,31,00,000	5,48,25,000

			trucks and distribution warehouse suitable for dairy and mix use for non-horticulture produce		
8.	Alpha Agro & Cold Storage	Karnataka	Imported technology Project creates rural employment Quality meat to consumers Efficient utilization of waste by converting into meal meat Adoption of latest meat processing technology for neither land and cooling technology with k-series compressor which helps in lower power consumption better cooling up meat and fish product are stored occupies 0 77 of total cold storage in the countries	1,35,33,000	0.00
9.	Blue Water Foods and Exports Pvt. Ltd.	Karnataka	Blue water Food and Exports Pvt. Ltd. are the processors and exporters of prime quality, frozen, marine products from Karnataka State they are serving various overseas markets for the last ten years in the field of exports of marine products.	3,00,00,000	0.00
10.	Bhatti Cold Store	Punjab	Frozen Fish	3,07,83,000	0.00
11.	Garg Chilling Center	Punjab	Milk Pouch Packing & Processing Plant	31,47,000	30,14,383
12.	PD Fresh Pvt Ltd	Punjab	Milk Processing	42,09,000	0.00
13.	Ramdas Cold Chains	Punjab	Butter, Ice Cream	79,84,000	59,88,000
14.	The Ludhiana Distt. Co-OP, Milk Producers Union Ltd	Punjab	Milk Products	5,90,00,000	1,37,50,000
15.	Indore Sahkari Dugdh Sangh	Madhya Pradesh	Pasteurized milk and indigenous milk products	2,00,00,000	1,00,00,000
16.	Bhopal Sahkari Dugdh Maryadit	Madhya Pradesh	Pasteurized milk in sachets and milk products	1,35,34,000	67,66,000

17.	B. G. Chitale	Maharashtra	B. G. Chitale	10,00,00,000	4,98,66,000
18.	Madurai DCMPU	Tamil Nadu	Receiving milk, Grading, Sampling, testing, Pre-chilling, Storage in VST, Pasteurization, Standardization and packaging.	3,78,58,000	0.00
19.	Salem District Co-operative Milk Products Union Limited	Tamil Nadu	Receiving Milk, Grading, Sampling, Testing, Pre-chilling, Storage in VST Pasteurization, Standardization and packaging	1,55,04,000	0.00
20.	Trichirapalli district cooperative milk producers union ltd	Tamil Nadu	Receiving Milk, Grading, Sampling, Testing, Pre-chilling, Storage in VST Pasteurization, Standardization and packaging	3,78,58,000	0.00
21.	The Tamilnadu cooperation milk producers federation ltd	Tamil Nadu	Receiving Milk, Grading, Sampling, Testing, Pre-chilling, Storage in VST Pasteurization, Standardization and packaging	2,69,00,000	0.00
22.	Dendi Agro Farms Private Limited	Telangana	Frozen Chicken Processing	1,02,00,000	22,00,000
23.	AOV Exports Pvt Ltd	Uttar Pradesh	Up gradation of Existing of Cold Chain Facilities for Buffalo Meat Processing Plant	3,17,78,000	79,45,000
24.	ALP Milk Foods Pvt Ltd	Uttar Pradesh	Setting up of cold chain facilities for Milk Products	8,20,07,000	0.00
25.	FarmTech Foods Pvt Ltd	Uttar Pradesh	Setting up of cold chain facilities for Milk Products	8,30,41,000	2,07,60,000
26.	KK Milk Fresh India Ltd	Uttar Pradesh	Setting up of cold chain facilities for Diary Powder	10,00,00,000	0.00
27.	Raj Kamal Pvt Ltd	Uttar Pradesh	Setting up of cold chain facilities for Milk Products	1,12,00,000	28,00,000
28.	Himalayan Agro Vital Enterprises	Uttarakhand	Creation of Cold Chain	5,87,53,500	0.00

Annexure-IV

Details of Cold Chain Projects sanctioned by Ministry of Food Processing Industries for Financial Assistance

S. No	Project	District	State	Sector	Project cost (Rs. In Lakh)	Approved Amount of grant-in-aid (Rs. In Lakh)	Status of Implementation as on 30.09.20141
1.	Sirish Aqua	East Godavari	Andhra Pradesh	F&V	2,547.71	938.51	Under implementation.
2.	Washington Cold Storage	East Godavari	Andhra Pradesh	F&V	2,538.73	1,000.00	Under implementation
3.	Synthite Industries Ltd	Guntur	Andhra Pradesh	F&V, Spices	2,943.10	582.16	Achieved Completion and Commercial production started
4.	Meena Food Processing Industry	Papumpare	Arunachal Pradesh	F&V	1,508.01	444.09	Under implementation
5.	M/s Global Entrade	Guwahati	Assam	F&V	1,595.90	936.95	75% progress.
6.	Dharampal Premchand Ltd.	Kamrup	Assam	F&V	1,917.26	1,000.00	Under implementation
7.	E-appliances	Guwahati	Assam	F&V	1,399.51	862.45	Under implementation
8.	Chhingpui Cold Chain Solutions	Karimganj	Assam	Fish	1,400.50	1,000.00	Under implementation
9.	Ganga Dairy Ltd.	Begusarai	Bihar	Dairy	2,260.00	935.10	Achieved Completion and Commercial production started
10.	L.L. Logistics Pvt. Ltd	Raipur	Chhattisgarh	F&V	1,868.33	733.93	75% progress reported
11.	Utsav Organic & Cold Chain	Raipur	Chhattisgarh	F&V	2,065.00	607.31	75% progress.
12.	Sabarkantha Dist. Co-op Society	Sabarkantha	Gujarat	Dairy	2,380.00	571.55	Achieved Completion and Commercial production started
13.	Gayatri Dairy Products Pvt. Ltd	Mehasana	Gujarat	Dairy	1,515.16	477.52	Achieved Completion and Commercial production started
14.	Panchmahal Dist Co-Operative Milk Producers' Union Ltd.	Panchmahal	Gujarat	Dairy	2,880.01	1,000.00	Reported 25 % progress
15.	Hi-Tech Frozen Facilities Pvt Ltd.	Palsana, Surat	Gujarat	F&V	1,683.00	719.00	Achieved Completion and Commercial

							production started
16.	Natural Frozen & Dehydrated Foods	Bhav-nagar	Gujarat	F&V	1,250.00	289.69	Achieved Completion and Commercial production started
17.	Innovative Cuisine Pvt. Ltd.	Baroda	Gujarat	F&V	2,072.46	727.42	75% progress.
18.	Asandas& Sons	Mehsana	Gujarat	F&V	2,549.32	775.00	Reported 25 % progress.
19.	Himalaya International Ltd.	Mehsana	Gujarat	F&V , Milk	13,000.00	1,000.00	Reported Completion and Commercial production started.
20.	Suri Agro Fresh Pvt. Ltd.	Sonepat	Haryana	F&V	2,352.00	984.00	Reported Completion and Commercial production started.
21.	M J Logistic Services Ltd.	Palwal	Haryana	F&V	2,138.07	763.76	75% progress.
22.	Miki Export International	Sonepat	Haryana	F&V	1,115.00	292.50	Under implementation
23.	Fresh Food Processing	Hissar	Haryana	F&V	1,591.91	687.85	Under implementation
24.	Aligned Industries Ltd	Rewari	Haryana	Irradiation	2,202.18	730.28	75% progress.
25.	Dev Bhumi	Shimla	Himachal Pradesh	F&V	1,425.00	804.97	Achieved Completion and Commercial production started
26.	Canvas Integrated Cold Chain	Una	Himachal Pradesh	F&V	1,462.76	742.08	Achieved Completion and Commercial production started
27.	Aromatrix Flora Pvt Ltd	Kullu	Himachal Pradesh	F&V	2,000.00	983.36	Achieved Completion and Commercial production started
28.	Hillcrest Foods	Solan	Himachal Pradesh	F&V	1,560.92	768.67	Achieved Completion and Commercial production started
29.	Fresh Produce Impex	Sirmaur	Himachal Pradesh	F&V	1,591.91	949.48	25% progress
30.	Himalaya Cotton Yarn Ltd.	Solan	Himachal Pradesh	F&V	1,229.71	543.78	Reported 25 % progress
31.	Adani Agri Fresh Ltd.	Shimla	Himachal Pradesh	F&V	2,630.90	1,000.00	Reported 25 % progress

32.	Him Fresh Produce Co.	Shimla	Himachal Pradesh	F&V	1,648.73	977.10	25 % progress
33.	C.S. Buildwell Pvt. Ltd.	Kathua	Jammu & Kashmir	F&V	2,133.20	1,000.00	Under implementation
34.	Kachroo Integrated Cold Chain	Baramula	Jammu & Kashmir	F&V	1,426.45	1,000.00	25 % progress
35.	Mir Agro Industries	Pulwama	Jammu & Kashmir	F&V	1,594.31	921.32	25 % progress
36.	FIL Industries Ltd	Sopore&Ran greth	Jammu & Kashmir	F&V	1,380.00	860.29	Under implementation
37.	Dodla Dairy Ltd.	Koppala, Raichur etc.	Karnataka	Dairy	3,200.00	600.00	Reported 25% progress
38.	Vijaykant Dairy & Food Products Ltd	Belgaum	Karnataka	Dairy	955.00	280.00	75 % progress
39.	Atharvass Traders Pvt Ltd.	Hassan, Belgam, Bangalore	Karnataka	F&V	2,861.00	1,000.00	Achieved Completion and Commercial production started
40.	Basweshwar Industry	Belgaum	Karnataka	F&V	1,820.00	871.46	75% progress.
41.	InnovaAgri Bio Park Ltd	Kolar	Karnataka	Irradiation	1,400.00	336.25	Achieved Completion and Commercial production started
42.	Inkal Ventures	Kasargod	Kerala	Dairy	2,264.20	621.26	25% progress
43.	Frozen Fruits & Vegetables	Palakkad	Kerala	F&V	2,533.57	716.88	Achieved Completion and Commercial production started
44.	SH Cold Storage	Kozhikode, Palakkad	Kerala	F&V	2,397.14	869.35	Achieved Completion and Commercial production started
45.	Brij Dairy	Jabalpur	Madhya Pradesh	Dairy	806.09	304.03	25 % progress
46.	M/s Om Agro Products	Jabalpur	Madhya Pradesh	F&V	1,722.44	447.87	Achieved Completion and Commercial production started
47.	Bhanu Farms Ltd.	Jabalpur	Madhya Pradesh	F&V	3,950.00	948.00	Achieved Completion and Commercial production started
48.	Warana Dairy & Agro Industry	Sholapur	Maharashtra	Dairy	4,331.00	914.80	Achieved Completion and Commercial production started

49.	Indapur Dairy & Milk Products Ltd	Pune	Maharashtra	Dairy	1,603.00	717.22	Reported 75% progress
50.	Saikrupa Industries	Nashik	Maharashtra	Dairy	544.10	206.65	Reported 75% progress
51.	Shivtirth Dairy & Agro Producers Company Ltd	Sangli	Maharashtra	Dairy	820.00	262.56	25% progress
52.	Sunfresh Agro Industries Pvt. Ltd	Ahmednagar	Maharashtra	Dairy	4,617.92	976.10	Achieved Completion and Commercial production started
53.	Freshtrop Fruits Ltd.	Nashik	Maharashtra	F&V	3,275.00	847.01	Achieved Completion and Commercial production started
54.	I.G. International	Chennai and Baramati	Maharashtra	F&V	2,225.00	895.54	Achieved Completion and Commercial production started
55.	Saastha Warehousing Ltd	Raigad	Maharashtra	F&V	4,281.22	1,000.00	Achieved Completion and Commercial production started
56.	Savla Foods & Cold Storage Pvt Ltd	Mumbai	Maharashtra	F&V	2,700.00	720.27	Achieved Completion and Commercial production started
57.	Cold Star Logistics Pvt. Ltd.	Navi Mumbai	Maharashtra	F&V	2,326.40	1,000.00	75% progress.
58.	Haldiram Foods Intl. Limited	Nagpur	Maharashtra	F&V	2,800.00	1,000.00	75% progress.
59.	Western Hill Foods Ltd	Pune	Maharashtra	F&V	2,096.00	767.64	75% progress.
60.	Mhetre Foods Pvt. Ltd	Pune	Maharashtra	F&V	1,250.54	480.01	Reported 75 % Progress
61.	Omni Fresh Agro	Nashik	Maharashtra	F&V	1,659.42	571.74	Under implementation
62.	P. D. Shah & Sons	Kolhapur	Maharashtra	F&V	2,172.81	844.73	Under implementation
63.	Satec Envir Engineering (I) Pvt. Ltd	Nashik	Maharashtra	F&V	2,262.22	740.80	Under implementation
64.	Tirupati Balaji Agro Products Pvt. Ltd.	Pune	Maharashtra	F&V	5,041.03	790.03	25% progress
65.	Tricom Fruit Products Ltd	Satara	Maharashtra	F&V	6,919.42	868.07	Reported 25% progress
66.	D.J. Exports Pvt.Ltd.	Thane	Maharashtra	F&V	1,831.38	610.19	75% progress

67.	Vaish Vik Foods Pvt.LTD.	Satara	Maharashtra	F&V	2,652.64	793.30	25% progress.
68.	Swaraj India Industries Ltd.	Satara	Maharashtra	F&V	2,621.00	1,000.00	25% progress.
69.	Suyojit Infrastructure Pvt. Ltd	Nashik	Maharashtra	F&V	2,234.00	892.19	Under implementation
70.	Taksh Cold Chain	Amaravati	Maharashtra	F&V	2,550.70	978.80	Under implementation
71.	Blue Fin Frozen Pvt. Ltd.	Raigad	Maharashtra	Fish	2,545.60	616.27	Achieved Completion and Commercial production started
72.	Baramati Agro Limited	Pune	Maharashtra	Meat/Poultry	911.00	413.00	Achieved Completion and Commercial production started
73.	B. Y. Agro & Infra Pvt. Ltd.	Amaravati	Maharashtra	Mixed (Dairy & F&V)	2,858.00	724.80	Achieved Completion and Commercial production started
74.	Elaf Cold Storage	Raigad	Maharashtra	Mixed (Meat/ F&V)	1,755.75	762.27	Reported 75 % progress
75.	Global Foods	Nagpur	Maharashtra	Mixed (Pulses , F&V, Spices)	2,427.94	968.36	Reported 25% progress
76.	Forstar Frozen Food Pvt. Ltd.	Navi Mumbai	Maharashtra	Ready to Eat products	3,668.00	1,000.00	75% Progress
77.	Associate Action for Progressive Dev. Society	Senapati	Manipur	F&V	1,849.00	1,000.00	Reported Completion and Commercial production started
78.	Mizofa Fish Seed Farm	Aizawl	Mizoram	Fish	519.77	303.01	Achieved Completion and Commercial production started
79.	Zoram Fish Seeds Production Centre	Aizawl	Mizoram	Fish	1,726.22	974.33	75% progress.
80.	Om Oil & Flour Mills Ltd.	Cuttack	Odisha	Ready to Eat products	1,345.00	226.58	25 % Progress
81.	Supreme Agro Foods Pvt. Ltd.	Ludhiana	Punjab	Dairy	3,117.00	891.33	75 % progress
82.	B.D. Agro	Kapur-thala	Punjab	F&V	2,263.91	983.82	Achieved Completion and Commercial

							production started
83.	International Farm Fresh Products (India) Ltd.	Sangrur	Punjab	F&V	2,880.72	819.24	Achieved Completion and Commercial production started
84.	Kool Tech Infra & Logistics	Kapurthala	Punjab	F&V	2,489.74	959.43	25 % Progress
85.	Pagro Frozen Foods Pvt. Ltd.	Fatehgarh Sahib	Punjab	F&V	4,000.00	1,000.00	Achieved Completion and Commercial production started
86.	Resource Foods Pvt Ltd	Patiala	Punjab	F&V	2,155.78	973.36	Reported 75% completion of the project
87.	Alchemist Foods Ltd	Ropar	Punjab	Meat	4,071.00	406.41	Achieved Completion and Commercial production started
88.	Sarawagie Fresh	Jaipur	Rajasthan	Dairy	2,104.00	674.18	Withdrawn.
89.	Shiv Health Foods LLP	Kota	Rajasthan	Dairy	3,300.00	810.70	Reported 75% completion of the project.
90.	Shree Shubham Logistics Ltd	Kota	Rajasthan	F&V	2,847.00	1,000.00	Reported 25 % Progress
91.	Jhunsons Chemicals Pvt. Ltd.	Alwar	Rajasthan	Irradiation	1,773.00	705.96	Achieved Completion and Commercial production started
92.	Sikkim Multifacility Cold Chain & Milk Processing Industry	Gangtok	Sikkim	Dairy	1,438.00	1,000.00	Reported 25 % Completion
93.	Farm Fresh Banana	Tamil Nadu	Tamil Nadu	F&V	1,554.00	605.70	Achieved Completion and Commercial production started
94.	Prasad Seeds Pvt. Ltd.	Medak	Telangana	F&V	3,082.00	1,000.00	Reported 25 % Progress
95.	Prima Food Tech Pvt Ltd	Medak	Telangana	F&V	2,450.00	700.00	Under implementation
96.	Creamline Dairy Products Ltd.	Hyderabad	Telangana	Dairy	2,386.00	975.00	Achieved Completion and Commercial production started
97.	Akashdeep Cold storage	Kanpur	Uttar Pradesh	Dairy	2,706.00	773.88	25% progress.
98.	Gopaljee Dairy Prodcuts Pvt. Ltd.	Panchsheel Nagar	Uttar Pradesh	Dairy	4,120.00	1,000.00	25% progress

99.	Imperial Frozen Food	Agra	Uttar Pradesh	F&V	992.95	359.73	Achieved Completion and Commercial production started
100.	Rajshree Integrated Cold Chain Projects	Noida, Shimla, Bikaner	Uttar Pradesh	F&V	2,257.00	1,000.00	Achieved Completion and Commercial production started
101.	MKC Agro Fresh Ltd.	GautamBud h Nagar	Uttar Pradesh	F&V	3,655.00	1,000.00	25 % Progress
102.	Impartial Agrotech (P) Ltd.	Unnao	Uttar Pradesh	Irradiat ion	1,478.97	630.75	Achieved Completion and Commercial production started
103.	Bio Life Foods Pvt. Ltd.	Nainital	Uttarakhan d	F&V	1,771.00	981.00	Achieved Completion and Commercial production started
104.	Brar Frozen Foods	Udham Singh Nagar	Uttarakhan d	F&V	1,480.00	706.87	Achieved Completion and Commercial production started
105.	Sharda Agri Foods (P) Ltd.	U.S. Nagar	Uttarakhan d	F&V	1,740.39	1,000.00	Reported Completion and Commercial production started
106.	Aalishan International Pvt Ltd	Udham Singh Nagar	Uttarakhan d	F&V	1,683.00	1,000.00	75% progress.
107.	Bajpai Refrigerating and Bakers Co	Kashipur	Uttarakhan d	F&V	1,681.97	966.53	75% progress.
108.	Cheema Frozen Foods	Udham Singh Nagar	Uttarakhan d	F&V	1,600.00	1,000.00	75% progress.
109.	Rana Frozen Foods	Haridwar	Uttarakhan d	F&V	1,688.37	1,000.00	Reported 75% progress
110.	Rajshree Milk Products	Udham Singh Nagar	Uttarakhan d	F&V	1,838.78	902.00	75% progress.
111.	Shri Ram Solvent Extraction Pvt. Ltd.	Udham Singh Nagar	Uttarakhan d	F&V	1,197.50	756.44	75% progress.
112.	Hind Tradex	Udham Singh Nagar	Uttarakhan d	F&V	1,915.26	1,000.00	Under implementation
113.	Konark Industries	Rampur	Uttarakhan d	F&V	1,713.82	1,000.00	25 % Progress.

114.	Ascon Agro Products Exporters & Builders Pvt. Ltd.	Hooghly	West Bengal	F&V	2,127.00	643.78	Achieved Completion and Commercial production started
115.	Keventer Agro	North 24 Paragnas	West Bengal	F&V	3,111.00	732.69	Achieved Completion and Commercial production started
116.	Prime Cold Stores	Howrah	West Bengal	F&V	2,001.88	592.46	Achieved Completion and Commercial production started
117.	Basukinath	Paschim Medinipur	West Bengal	F&V	3,392.00	508.78	Achieved Completion and Commercial production started
118.	Shimla Horticulture	Howrah	West Bengal	F&V	1,480.42	569.29	Reported Completion and Commercial production started
119.	Amicus Healthcare Services and Solution Pvt. Ltd.	Kolkata	West Bengal	F&V	1,627.84	593.83	75% progress.
120.	Avinash Raj Constructions Ltd.	Jalpaiguri	West Bengal	F&V	1,767.36	691.66	Reported 25 % Completion.
	Total				2,76,127.23	9,33,86.23	

State-wise distribution of cold storage and capacity as on 31.03.2014

S.No	State/UTs	Number of Cold Storages	Capacity in MT
1	Andamand & Nicobar (UT)	2	210
2	Andhra Pradesh	404	15,77,828
3	Arunachal Pradesh	2	5,000
4	Assam	34	1,19,652
5	Bihar	303	14,06,395
6	Chandigarh(UT)	6	12,216
7	Chattishgarh	89	4,27,766
8	Delhi	97	1,29,857
9	Goa	29	7,705
10	Gujarat	560	20,30,873
11	Haryana	295	5,88,649
12	Himachal Pradesh	32	38,557
13	Jammu & Kashmir	28	64,769
14	Jharkhand	55	2,17,280
15	Karnataka	189	5,26,752
16	Kerala	197	78,355
17	Lakshadweep(UT)	1	15
18	Madhya Pradesh	260	10,97,168
19	Maharashtra	540	7,06,302.6
20	Manipur	1	2,175
21	Meghalaya	4	8,200
22	Mizoram	3	3,931
23	Nagaland	2	6,150
24	Odisha	111	3,26,639
25	Puducherry (UT)	3	85
26	Punjab	606	20,04,778
27	Rajasthan	154	4,80,032
28	Sikkim	2	2,000
29	Tamil Nadu	163	2,95,671
30	Tripura	13	39,181
31	Uttar Pradesh	2,176	1,36,33,039
32	Uttarakhand	28	84,545
33	West Bengal	502	59,01,925
	Total	6,891	3,18,23,700.6

[Source: DMI, Department of Agriculture and Cooperation &MoFPI]

Annexure-VI

State wise details of sanction of VCA for cold storage projects

S.N o.	State	District	Company Name	Activity	Capacity	VCA (In Lakh)	Project Cost (In Lakh)	Term Loan (In Lakh)
1	Chhattisgarh	Korba	M/s Annapurna cold Storage	Cold Storage	5000 MT per annum	20.00	297.13	200.00
2	Chhattisgarh	Raipur	M/s J. R. Cold Storage	Cold Storage	Installed Capacity : 5000 MT.	29.09	446.50	250.00
3	Chhattisgarh	Raipur	M/s Shri R. K Cold Storage	Cold Storage	5000 MT.	25.56	424.26	250.00
4	Chhattisgarh	Raipur	M/s Shree Radhey Infra Logistics India Private Limited	Cold Storage	5000 MT	35.70	473.08	300.00
5	Gujarat	Sabarkantha	M/s Madhavi Agricare Private Limited	Cold Storage	Installed capacity 4250 MT per annum.	75.00	2021.00	1150.00
6	Gujarat	Bhavnagar	M/s Kailash Cold Storage	Cold Storage		30.94	399.94	250.00
7	Gujarat	Bhavnagar	M/s Shiv Cold Storage	Cold Storage	Installed Capacity: 5100 M.T. per annum.	23.00	366.00	250.00
8	Gujarat	Banaskantha	M/s N. B. Hi-Tech Cold Storage	Cold Storage	Installed Capacity: 5274 MT per annum.	74.69	1205.00	843.00
9	Gujarat	Bhavnagar	M/s Vimal Agro Fresh	Cold Storage	Installed capacity of 5000 MT per annum.	34.00	416.00	250.00
10	Gujarat	Sabarkantha	M/s Balram FreshTech Pvt. Ltd.	Cold Storage	Installed capacity of 1500 MT per annum.	75.00	1149.00	724.00
11	Gujarat	Sabarkantha	M/s Aastha Cold Storage	Cold Storage	Installed Capacity : 5000 MT.	63.00	1175.00	867.75
12	Gujarat	Bhavnagar	M/s Vivek Cold Storage	Cold Storage	3300 MT.	25.00	327.00	180.00
13	Gujarat	Ahmedabad	M/s V J Infracom Private Limited	Cold Storage	Installed Capacity : 1800 MT.	2.50	60.00	28.80

14	Gujarat	Bhavnagar	M/s Shree Cold Storage	Cold Storage	1257 mt per annum	10.56	137.56	85.00
15	Gujarat	Bhavnagar	M/s Reliable Cold Storage	Cold Storage	5000 MT	37.00	431.00	250.00
16	Gujarat	Bhavnagar	M/s Yogeshwar Cold Storage	Cold Storage	6000 MT P.A	38.23	436.23	250.00
17	Gujarat	Bhavnagar	M/s Shakti Cold Storage	Cold Storage	120000 Bags	36.92	429.00	250.00
18	Gujarat	Bhavnagar	M/s Universal Cold Storage	Cold Storage	6000 MT per annum	37.00	431.00	250.00
19	Gujarat	Bhavnagar	M/s Maharaja Cold Storage	Cold Storage	5100 MT	36.92	429.00	250.00
20	Haryana	Sonipat	M/s Lawrence Agro Storage Private Limited.	Cold Storage	5000 MT	44.20	561.67	340.00
21	Haryana	Sonipat	M/s Shree Peetambra Cold Storage Private Limited.	Cold Storage	5000 MT	50.00	662.42	400.00
22	Haryana	Sonipat	M/s Dhingra Ice & Cold Storage Private Limited	Cold Storage	4240 MT	26.00	377.21	148.00
23	Haryana	Sonipat	M/s Ishwar Cold Store	Cold Storage	5114 MT	41.25	450.74	250.00
24	Haryana	Sonipat	M/s Kamal Chand Jain Cold Storage P. Ltd.	Cold Storage	9838 MT	49.73	741.27	485.00
25	Haryana	Sonipat	M/s Prabhu Kripa Agro and Cold Storage Private Limited	Cold Storage	Installed Capacity of 5185 MT per annum.	39.00	674.92	400.00
26	Haryana	Sonipat	M/s Mrigesh Agro & Cold Storage Pvt. Ltd.	Cold Storage	Installed capacity 4691 MT	22.36	417.00	285.00
27	Haryana	Sonipat	M/s Hare Krishna Agrotech Cold Chain	Cold Storage	6046 MT	54.75	617.63	350.00

28	Haryana	Sonipat	M/s Viraj Cold Storage Private Limited.	Cold Storage	Installed Capacity: 5785 MT per annum.	69.00	735.32	400.00
29	Haryana	Sonipat	M/s Golden Century Food Products P. Ltd.	Cold Storage	Installed Capacity: 7209 MT per annum.	50.93	842.92	500.00
30	Haryana	Sonipat	M/s O S Cool Home	Cold Storage	Installed Capacity : 10400 MT/year,	56.51	641.36	360.00
31	Haryana	Sonipat	M/s Amrit Humifresh Preservation Private Limited	Cold Storage	Installed Capacity : 4000 MT	75.00	1041.15	500.00
32	Haryana	Faridabad	M/s Kailash Agro Pvt. Ltd.	Cold Storage	Installed Capacity : 2000 MT.	92.50	980.46	532.00
33	Haryana	Sonipat	M/s Salasar Agro Food Cold Store Private Limited	Cold Storage	Installed Capacity : 8000 MT.	51.15	559.15	308.00
34	Haryana	Sonipat	M/s Sumanglam Traexim Private Limited	Cold Storage	Installed capacity : 4803.86 MT.	57.00	627.00	350.00
35	Haryana	Rohtak	M/s Vinay Cold Storage	Cold Storage	Installed capacity of 11,000 QTLs per annum.	3.38	59.00	40.00
36	Haryana	Sonipat	M/s R. B Mutha Implex Private Limited.	Cold Storage	Installed Capacity: 5026 MT per annum.	39.52	530.00	300.00
37	Haryana	Sonipat	M/s Delhi Agrocool Private Limited	Cold Storage	Cold Storage: 4141.75 MT/year,Banana Ripening Unit : 129.24 MT/year.	53.63	763.30	500.00
38	Haryana	Sonipat	M/s R.S Freezing & Cooling Chambers Private	Cold Storage	Installed capacity 4854 MT	75.00	1146.45	745.00

			Limited					
39	Haryana	Sonipat	M/s Shalla Ram Ice & Cold Storage	Cold Storage	Installed capacity : 6663 MT p.a.	75.00	1131.00	700.00
40	Haryana	Sonipat	M/s Suboli Ice & Cold Storage Private Limited.	Cold Storage	Installed Capacity : 6047 MT.	47.42	599.84	370.00
41	Haryana	Sonipat	M/s Ved Prem Cold Storage Private Limited	Cold Storage	Installed Capacity : 5180 MT.	45.00	569.47	330.00
42	Haryana	Sonipat	M/s Mansa Ram Agro Foods Private Limited	Cold Storage	4337 MT	75.00	869.13	495.00
43	Haryana	Sonipat	M/s Sneh Quality Spices Private Limited	Cold Storage	5800 MT/year	75.00	1341.84	607.02
44	Haryana	Sonipat	M/s Ram Chand Krishan Kumar Cold Storage Private Limited	Cold Storage	Installed Capacity : 19449 MT.	28.60	445.27	225.00
45	Haryana	Sonipat	M/s Topline Cold Chain Private Limited	Cold Storage	6750 MT	56.00	679.00	368.00
46	Haryana	Kurukshetra	M/s Hargobind Cold Storage	Cold Storage	Installed capacity 6235 mt accommodating 140000 bags of potato OF 50 KG.	25.00	431.50	270.00
47	Haryana	Sonipat	M/s Leh Cold Storage Private Limited.	Cold Storage	Installed Capacity : 3850 MT.	32.38	548.38	340.00
48	Haryana	Sonipat	M/s Extra Cold Storage Private Limited	Cold Storage	5625 MT	43.18	566.92	350.00

49	Himachal Pradesh	Una	M/s. Comal Agro Foods Ltd	Cold Storage	1250 MT per annum	75.00	725.70	420.00
50	Himachal Pradesh	Kullu	M/s Trail Blazer Fruit Company	Cold Storage	Installed Capacity : 500 MT.	52.05	295.25	113.00
51	Himachal Pradesh	Kangra	M/s Palam Greens Primary Horticultural Co-Operative Processing and Marketing Society	Cold Storage	Two chambers of cold storage of 50 MT each based on Ammonia refrigeration technology.	23.00	142.08	60.00
52	Himachal Pradesh	Solan	M/s A B Refer Warehousing (P) Ltd.	Cold Storage	Installed Capacity : 5088 MT.	300.00	4280.00	2350.00
53	Himachal Pradesh	Una	M/s Canvas Integrated Cold Chain Services	Cold Storage	7000 MT	75.00	2006.54	500.00
54	Jammu & Kashmir	Pulwama	M/s Valley Fresh Cold Chain Pvt. Ltd.	Cold Storage	Installed Capacity: 5000 MT	200.00	4088.00	3000.00
55	Jammu & Kashmir	Jammu	M/s Bahu Cold Storage & Ice Factory (P) Ltd.	Cold Storage	4650 mt	25.97	333.21	225.00
56	Jammu & Kashmir	Pulwama	M/s Kashmir Fruit Preservers	Cold Storage	3000 MT for CA Storage , 11 MT per hour for Pack house	187.09	2454.84	1800.00
57	Jammu & Kashmir	Baramulla	M/s Alpine Fresh Pvt. Ltd.	Cold Storage	Installed Capacity : 3000 MT.	168.83	2390.91	1800.00
58	Karnataka	Dakshina Kannada	M/s. G.N. H.Kini Integrated Cold Storage	Cold Storage	1800 MT	24.87	169.87	100.00
59	Karnataka	Bangalore	M/s. Sri Shivkiran Cold Storage Pvt. Ltd	Cold Storage	603980 cubic feet	20.02	258.48	150.00
60	Karnataka	Bijapur	M/s Runwal Agritech	Cold Storage	Installed capacity:	34.01	589.84	425.00

					4313 MT.			
61	Karnataka	Bijapur	M/s Hosamani Cold Storage	Cold Storage	Installed Capacity : 1259 MT.	13.08	212.90	145.00
62	Karnataka	Bijapur	M/s Jakir Agro Industries	Cold Storage	cold storage- 1560 MT warehouse -587.00 MT	28.00	354.56	210.00
63	Kerala	Ernakulam	M/s. Padayattil Industries	Cold Storage		5.21	52.19	24.00
64	Madhya Pradesh	Gwalior	M/s Badri Vishal Agro Private Limited.	Cold Storage	Potato Chip - 1500 MT and Extruded Snacs - 1200 MT	75.00	1245.59	750.00
65	Madhya Pradesh	Indore	M/s Shardiya Agritech Private Limited	Cold Storage	Installed Capacity 5982 MT per annum	40.83	504.14	300.00
66	Madhya Pradesh	Ujjain	M/s Shri Ganesh Cold Store	Cold Storage	Installed capacity: 5000 MT per annum.	22.30	385.28	275.00
67	Madhya Pradesh	Ujjain	M/s Anand Cold Store	Cold Storage	Installed Capacity: 5000 MT per annum.	22.30	385.28	275.00
68	Madhya Pradesh	Ujjain	M/s Shree Balaji Cold Storage	Cold Storage	Installed capacity : 3000 MT.	14.00	225.73	150.00
69	Madhya Pradesh	Sagar	M/s Shiv Shankar Cold Storage	Cold Storage	5000 MT per annum	17.31	360.00	270.00
70	Madhya Pradesh	Indore	M/s Patel Malhar Cold Storage	Cold Storage	Installed Capacity: 4450 MT/Year.	43.88	512.67	250.00
71	Madhya Pradesh	Dhar	M/s Narmada Sheit Grah	Cold Storage	5264 MT & 52644 qtls	40.00	545.91	350.00
72	Maharashtra	Latur	M/s. Ashirwad Agro Export	Cold Storage	Presenting - 10 MT Cold storage - 60 MT Packing - 15 MT	27.98	127.98	65.00

73	Maharashtra	Latur	M/s. Krishivikas Exports	Cold Storage	Pre-cooling - 84 M.T., Cold storage - 60 M.T., Grading and packing - 25 M.T.	15.41	154.14	55.00
74	Maharashtra	Pune	M/s. Vinay Gopal Sambare	Cold Storage		22.06	220.62	70.00
75	Maharashtra	Latur	M/s. Latur Cold Storage Pvt, Ltd.	Cold Storage	5000 MT of cold storage and 1000 MT of pre-cooling	48.66	428.77	225.00
76	Maharashtra	Latur	M/s. Vitthal Agro Export	Cold Storage	10 MT pre-cooling unit, 60 MT cold storage	24.00	195.67	93.00
77	Maharashtra	Mumbai City	M/s. Melghat Cold Chain Pvt. Ltd	Cold Storage	5000 MT	67.46	752.76	425.00
78	Maharashtra	Nashik	M/s. Swanand Agro Processing Industries	Cold Storage	Pack House - 20 MT/day, Pre-cooler-5 MT, Cold storage - 280 MT	17.23	225.96	142.00
79	Maharashtra	Nashik	M/s. Sadguru Agro Processing Industries	Cold Storage	Pack House - 20 MT/day, Pre-cooler-5 MT, Cold storage - 280 MT	17.23	225.96	142.00
80	Maharashtra	Nashik	M/s. Chaitanya Agro Processing Industries	Cold Storage	Pack House - 20 MT/day, Pre-cooler-5 MT, Cold storage - 280 MT	17.23	225.96	142.00
81	Maharashtra	Pune	M/s. Iceage Cold Storage	Cold Storage	3000 MT cold storage	54.49	544.91	275.00
82	Maharashtra	Sangli	M/s. Giriraj Cold Storage	Cold Storage	566 MT	6.93	84.06	49.00
83	Maharashtra	Pune	M/s. Sharda Floriculture Park	Cold Storage		7.30	90.39	55.00

84	Maharashtra	Jalna	M/s. Arihant Cold Storage	Cold Storage	Pre-cooling - 6 MT, High Humidity Cold Storage 50 MT, Cold Storage - 2000 MT	20.10	200.97	100.00
85	Maharashtra	Sangli	M/s. Siddhivinayak Agrotech Cold Storage	Cold Storage	2153 MT	19.50	238.33	140.00
86	Maharashtra	Sangli	M/s. Saipooja Agrotech Cold Storage	Cold Storage	Pre-cooling - 148 MT and Cold Storage - 3766 MT	53.41	808.85	550.00
87	Maharashtra	Sangli	M/s. Naresh Cold Storage & Warehousing	Cold Storage	4971 MT	72.54	786.00	434.00
88	Maharashtra	Osmanabad	M/s. Bhagwati Agro Export	Cold Storage	1000 MT multi chamber cold storage, 6 MT pre-cooling	14.53	150.42	80.00
89	Maharashtra	Sangli	M/s. Surbhi Cold Storage	Cold Storage	Raisin 2500 MT, Graphes 1000 MT, Chilly 300 MT	11.57	206.80	150.00
90	Maharashtra	Pune	M/s P. D. Shah & Sons	Cold Storage	3000 MT	75.00	763.51	400.00
91	Maharashtra	Dhule	M/s Agrawal Cold Storage and Ware House	Cold Storage		23.20	312.42	200.00
92	Maharashtra	Satara	M/s Mala's Fruit Products	Cold Storage	1000 MT	39.92	389.21	160.00
93	Maharashtra	Latur	M/s Venkateshwar a Agrotech	Cold Storage	60 MT/Day	67.43	676.80	350.00
94	Maharashtra	Sangli	M/s Shree Dhareshwar Agro Processing & Cold Storage	Cold Storage	Installed capacity 1300 MT per annum.	16.24	170.12	90.00
95	Maharashtra	Latur	M/s S. P. Cold Storage	Cold Storage	Installed Capacity : 5000 MT per annum.	51.70	550.58	300.00

96	Maharashtra	Pune	M/s Nirmal Cold Storage	Cold Storage	Installed Capacity : 5000 MT	26.00	500.00	374.00
97	Maharashtra	Sangli	M/s Gajraj Agrotech	Cold Storage	Installed Capacity : 1200 MT, Two collection and Grading Halls, One pack house, and one primary proc	20.22	202.23	100.00
98	Maharashtra	Sangli	M/s Om Cold Storage Pvt. Ltd.	Cold Storage	Installed Capacity : 2584 MT.	26.04	378.20	248.50
99	Maharashtra	Sangli	M/s Sambhajiraje Cold Storage	Cold Storage	Installed Capacity : 1100 MT.	10.35	140.00	89.60
100	Maharashtra	Sangli	M/s Bhagawati Cold Storage Pvt. Ltd.	Cold Storage	Soyabean Nuggets-600 MT P.A Chilli Powder-600 MT P.A Sugar Crystals-3000 MT P.A Turmeric Powder-0	65.00	1120.00	650.00
101	Maharashtra	Nashik	M/s Al Sana Agro	Cold Storage	Cold Storage: 100 MT Pre-cooling: 20 MT	18.58	210.07	120.00
102	Maharashtra	Sangli	M/s Shri Swami Samarth Cold Storage	Cold Storage	Installed capacity :500 MT.	6.67	95.33	63.00
103	Maharashtra	Nashik	M/s Fresh Agro Exports	Cold Storage	Installed capacity 154 mt per annum	60.83	709.79	415.00
104	Maharashtra	Solapur	M/s Shri Siddheshwar Cold Storage	Cold Storage	500 mt	65.41	654.19	325.00
105	Maharashtra	Nashik	M/s Vakratund Cold Storages and Warehouses	Cold Storage	Installed Capacity: 3500 MT Multi chamber cold storage 100	50.31	738.83	495.00

					MT High Humidity Cold storage			
106	Maharashtra	Nashik	M/s Shivshankar Fruit Company	Cold Storage	pre cooling units -24 mt cold storage unit- 1000 mt	28.30	467.17	330.00
107	Maharashtra	Nashik	M/s Rainbow Exports & Logistics	Cold Storage		21.33	253.48	150.00
108	Maharashtra	Sangli	M/s Shantisagar Cold Storage & Agro Processing	Cold Storage		26.78	374.76	237.90
109	Maharashtra	Nandurbar	M/s Mahavir Cold Storage	Cold Storage	5121 MT.	45.66	621.28	400.00
110	Maharashtra	Nashik	M/s Kalyani Impex	Cold Storage	120 MT & 20 MT.	26.94	499.35	350.00
111	Maharashtra	Solapur	M/s Archishman Cold Storage Private Limited	Cold Storage	Installed capacity : 1608 MT.	15.60	262.77	165.00
112	Maharashtra	Nashik	M/s S K Exports	Cold Storage	60 MT.	15.14	227.13	150.00
113	Maharashtra	Nanded	M/s R. K. Cold Storage	Cold Storage	7250 mt capacity	58.00	580.00	290.00
114	Maharashtra	Sangli	M/s K. M. G. Agrotech Cold Storage	Cold Storage	2500 MT	49.91	499.13	250.00
115	Maharashtra	Nandurbar	M/s Sumati Shram Cold	Cold Storage	3955 MT	38.50	385.00	196.50
116	Maharashtra	Sangli	M/s Aditya Corporation	Cold Storage	1926 MT for cold storage along with raisin grading /packaging/pr ocessing unit of 4320 MT	41.58	610.00	408.00
117	Maharashtra	Satara	M/s Kay Bee Agro Farms Pvt. Ltd.	Cold Storage	10 MT per day	48.26	498.26	250.00

118	Maharashtra	Latur	M/s Kisanmitra Cold Storage Pvt. Ltd.	Cold Storage	Cold Storage : 5000 MT, Ripening Chamber : 40 MT (10 MT * 4 nos), Pre-Cooling Unit - 7 MT * 3 Nos,	50.00	499.42	250.00
119	Maharashtra	Satara	M/s Mahesh Agro Industries	Cold Storage	3 MT raw materials Processing per day.	7.35	77.64	34.08
120	Maharashtra	Nandurbar	M/s Arihant Cold Storage	Cold Storage	6000 MT	50.00	575.00	325.00
121	Maharashtra	Nashik	M/s Kamal Exports	Cold Storage	200 MT	41.00	499.25	300.00
122	Punjab	Chandigarh	M/s. Godwin Agro Products Limited	Cold Storage	3000 MT	75.00	2348.44	1600.00
123	Punjab	Ludhiana	M/s Gurshakti Cold Storage Pvt.Ltd	Cold Storage	5100 MT	36.40	377.28	200.00
124	Punjab	Amritsar	M/s Sakshi Fruit & Vegetable Cold Store	Cold Storage	capacity 5178.41 MT	28.86	463.00	313.00
125	Punjab	Ludhiana	M/s GMH Agrihub	Cold Storage	Installed Capacity: 5535 MT per annum.	68.14	732.35	395.25
126	Punjab	Faridkot	M/s Matta Cold Storage	Cold Storage	Installed Capacity : 3074 MT.	34.38	343.80	175.00
127	Punjab	Kapurthala	M/s Ranvir Agro Tech	Cold Storage	Peas: 1000 Tonns, Corn: 800 Tonns, &Okara : 200 Tonns.	13.00	172.00	50.00
128	Rajasthan	Jaipur	M/s. Hariyali Agrotech Pvt. Ltd	Cold Storage	Grading - 3650 MT, packing - 3650 MT and Shorting & washing - 3650 MT	5.20	71.86	40.00
129	Rajasthan	Dholpur	M/s. Agrasen Sheet Grah Pvt. Ltd.	Cold Storage	56188 qtls	31.00	367.40	200.00

130	Rajasthan	Dholpur	M/s Pratap Cold Storage P. Ltd.	Cold Storage	Installed Capacity - 120000 Qtls ,Existing-70000 ,Proposed-50000	24.18	316.50	170.00
131	Rajasthan	Dholpur	M/s Maa Kaila Devi Cold Storage	Cold Storage	Installed Capacity of 77535 Qtls	44.00	490.22	272.00
132	Rajasthan	Dholpur	M/s Shri Gajanand Sheetgrah P. Ltd.	Cold Storage	Installed capacity of cold storage of 79893 Qtls per annum	39.00	493.79	274.00
133	Rajasthan	Jaipur	M/s C B Cold Storage Private Limited	Cold Storage	Installed Capacity: 6250 MT per year.	44.14	737.64	497.50
134	Tamilnadu	Coimbatore	M/s. S.S. Cold Storage	Cold Storage	5000 MT	36.00	366.00	190.00
135	Tamilnadu	Chennai	M/s Devaraj Agro Industries	Cold Storage	3800 Tone/ Annum	69.00	428.00	207.00
136	Tamilnadu	Theni	M/s. Farm Fresh Banana	Cold Storage	280 MT	75.00	1553.8 1	575.00
137	Tamilnadu	Chennai	M/s. Annapoorani Cold Storage Pvt. Ltd.	Cold Storage	3500 MT	9.06	191.83	137.00
138	Tamilnadu	Krishnagiri	M/s. Aam Fruits Pvt. Ltd	Cold Storage	100 tons per day	7.80	158.45	85.00
139	Uttar Pradesh	Hathras	M/s. Madan Lal Agarwal Sheetgrah Pvt. Ltd	Cold Storage	58256 Qtls	30.00	407.00	210.00
140	Uttar Pradesh	Agra	M/s. Ramdoot Cold Storage Pvt. Ltd.	Cold Storage	75213 quintals	41.78	453.44	234.00
141	Uttar Pradesh	Aligarh	M/s. Rashi Ice and Cold Storage Pvt. Ltd.,	Cold Storage	108290 Qtls.	52.00	640.53	380.00
142	Uttar Pradesh	Saharanpur	M/s. Shital Prashad Cold Store	Cold Storage	54740 Qtls.	26.00	357.27	225.00
143	Uttar Pradesh	Aligarh	M/s. Joyti Sheetgarh Pvt. Ltd	Cold Storage	64294 Qtls.	36.00	395.40	210.00

144	Uttar Pradesh	Aligarh	M/s. M.D. Fresh Veg. Pvt. Ltd.	Cold Storage	2000 kg. per hour	68.00	930.00	566.00
145	Uttar Pradesh	Etah	M/s. Kusum Cold Storage Pvt. Ltd.	Cold Storage	72979 Qtls.	36.00	451.88	255.00
146	Uttar Pradesh	Hathras	M/s. Chiranjilal Ice & Cold Storage Pvt. Ltd	Cold Storage	25374 Qtls.	15.00	205.35	94.50
147	Uttar Pradesh	Hathras	M/s. Sumitra Devi Nand Kumar Sheetgrah Pvt. Ltd	Cold Storage	57672 Qtls	30.00	390.75	220.00
148	Uttar Pradesh	Hathras	M/s. Jai Hari Namonarayan Cold Storage Pvt. Ltd	Cold Storage	57672 Qtls	30.00	390.00	220.00
149	Uttar Pradesh	Mathura	M/s. Mahalaxmi Sheetgrah Pvt. Ltd	Cold Storage	58256 Qtls	30.00	384.00	210.00
150	Uttar Pradesh	Agra	M/s. Keshri Sheetgrah Pvt. Ltd	Cold Storage	65457 Qtls.	36.00	411.61	230.00
151	Uttar Pradesh	Aligarh	M/s. Braj Bhoomi Ice & Cold Storage Pvt. Ltd	Cold Storage	93004 qtl.	52.00	574.82	320.00
152	Uttar Pradesh	Firozabad	M/s. Ram Raghu Sheetgrah Pvt. Ltd	Cold Storage	120320 bags	38.00	441.51	240.00
153	Uttar Pradesh	Agra	M/s. Chaudhary Pratap Singh Cold Storage Pvt. Ltd.	Cold Storage	73625 qtls per annum	36.00	482.21	250.00
154	Uttar Pradesh	Hathras	M/s. N.L. Sheetgrah Pvt. Ltd	Cold Storage	5825.60 MT	30.00	401.00	220.00
155	Uttar Pradesh	Agra	M/s. Parijat Cold Storage Pvt. Ltd	Cold Storage	77535 qtls	41.60	499.27	274.00
156	Uttar Pradesh	Firozabad	M/s. Maa Durgayani Sheetgarh Pvt.	Cold Storage	58256 qtls	30.00	416.00	220.00

			Ltd					
157	Uttar Pradesh	Mathura	M/s. Shree Hiramani Cold Storage Pvt. Ltd	Cold Storage	75122 qtls	27.64	505.01	265.00
158	Uttar Pradesh	Hathras	M/s Harshvardhan Sheetgrah Private Limited	Cold Storage	57840 Qtls and 115680 bags of 50 kg	36.00	450.57	256.25
159	Uttar Pradesh	Hathras	M/s Dorilal Sheetgrah Private Limited	Cold Storage	77921	41.60	474.69	270.00
160	Uttar Pradesh	Agra	M/s Maa Sheetla Sheetgrah Private Limited	Cold Storage	58256 Qtls	30.00	423.00	220.00
161	Uttar Pradesh	Agra	M/s Leelavilas Cold Storage Private Limited	Cold Storage	58256 Qtls	30.00	423.00	220.00
162	Uttar Pradesh	Agra	M/s Gopeshwar Sheetgrah Private Limited	Cold Storage	87293 Qtls	58.50	625.75	318.00
163	Uttar Pradesh	Firozabad	M/s Bholenath Cold Storage	Cold Storage	81974 Qtls	36.00	460.00	220.00
164	Uttar Pradesh	Firozabad	M/s Maa Siddheshwari Sheetgrah Private Limited	Cold Storage	75122 Qtls	41.00	477.23	268.00
165	Uttar Pradesh	Aligarh	M/s Hey Nath Cold Storage Private Limited	Cold Storage	80469 Qtls	49.00	521.32	282.00
166	Uttar Pradesh	Agra	M/s JTS Cold Storage Private Limited.	Cold Storage	79492 Qtls	46.80	515.78	280.00
167	Uttar Pradesh	Hathras	M/s Dynamic Cold Storage P. Ltd.	Cold Storage		30.00	393.57	220.00

168	Uttar Pradesh	Hathras	M/s KVS Cold Storage P. Ltd.	Cold Storage	77629 Qtls	49.40	562.17	280.00
169	Uttar Pradesh	Hathras	M/s JPGD Cold Storage P. Ltd.	Cold Storage	79492 Qtls	41.60	482.68	280.00
170	Uttar Pradesh	Mathura	M/s Sheetal Ice & Preservation P. Ltd.	Cold Storage	70010 Qtls	34.84	443.37	225.00
171	Uttar Pradesh	Aligarh	M/s Maa Chamunda Devi Sheetgrah P. Ltd.	Cold Storage	77921 Qtls	39.00	468.97	275.00
172	Uttar Pradesh	Aligarh	M/s Vatika Agritech P. Ltd.	Cold Storage	1500 MT	27.50	633.00	433.00
173	Uttar Pradesh	Farrukhabad	M/s Samridhi Cold Storage Pvt. Ltd.	Cold Storage	3 Chamber Cold Storage of 77921 Qtls	41.60	495.59	275.00
174	Uttar Pradesh	Agra	M/s Maa Ambey Gouri Sheet Grah Pvt. Ltd.	Cold Storage	73942 Qtls	36.00	495.18	268.00
175	Uttar Pradesh	Agra	M/s Bhudevi Cold Storage Pvt. Ltd.	Cold Storage	108888 Qtls	32.00	352.19	158.00
176	Uttar Pradesh	Hathras	M/s R. L. Sharma Cold Storage P. Ltd.	Cold Storage	36678 Qtls (Expansion)	6.40	176.40	110.00
177	Uttar Pradesh	Hathras	M/s Padam Cold Storage Private Limited	Cold Storage	Installed Capacity of the cold Storage is 77535 Qtls	46.70	525.20	270.00
178	Uttar Pradesh	Hathras	M/s Shiv Shambhu Sheetgrah P. Ltd.	Cold Storage	Installed capacity of Cold Storage is 77921 Qtls	41.00	477.90	275.00
179	Uttar Pradesh	Hathras	M/s M.B Sheetgrah Private Limited	Cold Storage	Installed Capacity of 77466 Qtls of potatoes or 154932 bags of 50 kg each	49.40	533.17	290.00
180	Uttar Pradesh	Hathras	M/s Manvendra	Cold Storage	Installed capacity of	18.00	280.09	116.00

			Ice and Cold Storage Private Limited.		31782.26 MT			
181	Uttar Pradesh	Hathras	M/s S.R. Preservation P. Ltd.	Cold Storage	Installed Capacity Of Cold Storage is 72436 Qtls Or 144872 Bags of 50 Kg each.	36.00	459.41	250.00
182	Uttar Pradesh	Agra	M/s S. K. Ice & Cold Warehouse Private Limited.	Cold Storage	Installed capacity for storage of potatoes for 66612.53 Qtls	44.00	502.94	255.00
183	Uttar Pradesh	Aligarh	M/s Yashpal Agri Products & Sheetgrah P. Ltd.	Cold Storage	Installed Capacity of 76095 Qtls of Potatoes per Annum 152190 Bags of 50 Kg	45.00	522.35	275.00
184	Uttar Pradesh	Firozabad	M/s Kaleshwar Cold Storage Private Limited	Cold Storage	Preservation of Potatoes with an installed capacity of 44400 Qtls (for expansion)	31.00	319.24	165.00
185	Uttar Pradesh	Agra	M/s Radha Swami Sheetgrah P. Ltd.	Cold Storage	60160 qunlts	38.00	463.01	254.00
186	Uttar Pradesh	Hathras	M/s Venkateshwar Sheetgrah Pvt. Ltd.	Cold Storage	Installed Capacity of 78240 Qtls per annum or 52160 bags of 50 Kg each	41.60	475.12	270.00
187	Uttar Pradesh	Hathras	M/s Vishwanath Sheetgrah Private Limited.	Cold Storage	Installed capacity of 58256 Qtls and 116512 Bags of 50 Kg each	30.00	429.17	225.00

188	Uttar Pradesh	Firozabad	M/s Jai Dayal Singh Cold Storage P. Ltd.	Cold Storage	Installed Capacity of 52311 Qtls With 2 Chambers, Expansion for 3rd and 4th chambers with installed	20.80	274.95	172.00
189	Uttar Pradesh	Etawah	M/s Gopal Krishna Cold Storage P. Ltd.	Cold Storage	Installed capacity of 79492 Qtls	39.78	489.59	280.00
190	Uttar Pradesh	Agra	M/s Shankar Lal Sheetgrah P. Ltd.	Cold Storage	Installed capacity of 81294 Qtls	43.00	503.31	275.00
191	Uttar Pradesh	Etah	M/s Romo Cold Storage P. Ltd	Cold Storage	Installed Capacity for Proposed Expansion of 26080 Qtls	21.00	250.67	110.00
192	Uttar Pradesh	Firozabad	M/s Chandan Sheetgrah Private Limited,	Cold Storage	Installed capacity is 79492 Qtls	45.00	504.30	265.00
193	Uttar Pradesh	Hathras	M/s Shri Sai Preservation and Ice factory P. Ltd.	Cold Storage	Installed capacity of Cold Storage of 78240 Qtls	41.60	475.12	270.00
194	Uttar Pradesh	Hathras	M/s Chetan Cold Storage Pvt. Ltd.	Cold Storage	Installed Capacity of 78240 Qtls	41.60	475.12	270.00
195	Uttar Pradesh	Agra	M/s Agra Ice Factory & Cold Storage	Cold Storage	Installed Capacity (118165 Qtls)Expansion :37375 QtlsExisting : 80810 Qtls	6.15	226.15	140.00
196	Uttar Pradesh	Hathras	M/s Sri Krishna Balram Ice & Preservation Private Limited	Cold Storage	81294 qtls	41.60	476.25	270.00

197	Uttar Pradesh	Agra	M/s Nandishwar Ice & Cold Storage P. Ltd.	Cold Storage	Installed capacity for the Proposed Unit of Expansion is 37350 Qtls For Total capacity of 165925 Qtl	15.60	211.52	130.00
198	Uttar Pradesh	Agra	M/s G.R. Sheetgrah Pvt. Ltd.	Cold Storage	Installed Capacity of Multichamber Cold Storage Of 78240 Qtls/Annum	37.70	516.27	270.00
199	Uttar Pradesh	Agra	M/s Paritosh Cold Storage Pvt. Ltd.	Cold Storage	Installed capacity of 36678 Qtls (Expansion)	50.00	535.60	268.00
200	Uttar Pradesh	Aligarh	M/s Vishal Ice and Cold Storage	Cold Storage	Installed capacity of the cold storage is 86835 Qtls per annum	45.50	498.35	268.00
201	Uttar Pradesh	Firozabad	M/s Phool Singh Baghel Cold Storage Pvt. Ltd.	Cold Storage	Installed capacity of cold storage for potatoes is 65896.56 Qtls.	39.00	423.54	220.00
202	Uttar Pradesh	Hathras	M/s Maa Taragarh Ice and Cold Storage Pvt. Ltd.	Cold Storage	Expansion of two more chambers having the installed capacity of 40501 qtls.	16.90	229.89	144.00
203	Uttar Pradesh	Hathras	M/s Radha Govind Sheetgrah Private Limited.	Cold Storage	Capacity- 58256 qtls of potatoes.	30.00	404.00	225.00
204	Uttar Pradesh	Agra	M/s Prem Ice and Preservation Private Limited	Cold Storage	Installed capacity 5825.48 MT	30.00	400.00	230.00

205	Uttar Pradesh	Firozabad	M/s ALP Enterprises Private limited,	Cold Storage	Installed capacity of 74762 Qtls per annum	41.60	484.23	250.00
206	Uttar Pradesh	Etah	M/s Shree Dugdh Dairy and Cold Storage	Cold Storage	Installed capacity for the proposed chamber of Cold Storage is 25866 Qtls	16.90	182.00	100.00
207	Uttar Pradesh	Hathras	M/s Jai Jaharveer Sheetgrah P Ltd	Cold Storage	Capacity is 63381 qtls.	39.78	446.86	235.00
208	Uttar Pradesh	Hathras	M/s Jai Maa Laxmi Sheetgrah Private Limited	Cold Storage	Installed Capacity of 52685 Qtls per annum.	30.00	385.00	210.00
209	Uttar Pradesh	Agra	M/s S. N Singhal Cold Storage Private Limited,	Cold Storage	Installed capacity of 78583 Qtls	39.78	531.93	275.00
210	Uttar Pradesh	Agra	M/s P. S. Cold Storage	Cold Storage	Installed capacity of 116847 Qtls Existing : 51947 Qtls Expansion : 64900 Qtls	32.50	387.31	180.00
211	Uttar Pradesh	Mathura	M/s Bharat Cold Storage and Ice Factory	Cold Storage	Installed capacity of 59504 Qtls	30.00	406.00	228.00
212	Uttar Pradesh	Aligarh	M/s Shri Balaji Ice & Cold Storage (A unit of M/s Shri Mehandipur Hanumant Foods Private Limited),	Cold Storage	Installed capacity : 75598 Qtls.	39.78	534.97	290.00
213	Uttar Pradesh	Gautam Buddha Nagar	M/s MKG Foods and Logistics.	Cold Storage	Installed capacity : 5880 MT/year	25.70	257.00	110.00

214	Uttar Pradesh	Mathura	M/s LMB Refrigeration (A Unit of SDSN Agrotech Private Limited.	Cold Storage	Installed capacity of cold storage of 106030 Qtls per annum.	52.00	723.53	350.00
215	Uttar Pradesh	Mathura	M/s Shree Ram Cold Storage & Ice Factory	Cold Storage	Installed capacity for Expanded Cold Chamber of 64767 Qtls	6.89	352.89	216.00
216	Uttar Pradesh	Agra	M/s O.P. Ice & Cold Storage	Cold Storage	Total Installed Capacity : 125872 Qtls and modernisation capacity : 62990 Qtls.	4.00	60.00	40.00
217	Uttar Pradesh	Hathras	M/s Madnawat Cold Storage Private Limited	Cold Storage	Installed Capacity : 60158 Qtls.	34.84	364.60	150.00
218	Uttar Pradesh	Hathras	M/s Unchagaon Ice and Cold Storage Private Limited	Cold Storage	Installed Capacity: 58256 Qtls per annum.	30.00	401.00	220.00
219	Uttar Pradesh	Aligarh	M/s Shree Balram Sheetgrah P Ltd	Cold Storage	Installed capacity of 68422 qtls of potatoes and other perishable products per annum.	39.00	516.54	260.00
220	Uttar Pradesh	Agra	M/s Alaipuria Food and Cold Storage Private Limited	Cold Storage	Installed capacity for expansion of 3rd chamber of 26823 Qtls	20.80	209.87	96.00
221	Uttar Pradesh	Hathras	M/s Sasni Agro Coldware Private Limited.	Cold Storage	Installed capacity: 75000 Qtls per annum.	46.00	534.25	300.00

222	Uttar Pradesh	Hathras	M/s Satyam Sheetgrah Private Limited	Cold Storage	Installed Capacity : 26050 Qtls.	13.00	159.00	95.00
223	Uttar Pradesh	Hathras	M/s Bisawar Sheetgrah Private Limited	Cold Storage	Installed capacity 58256 Qtls per year	30.00	405.00	220.00
224	Uttar Pradesh	Hathras	M/s TLK Ice and Cold Storage Private Limited	Cold Storage	84703 Qtls/annum	30.00	551.58	275.00
225	Uttar Pradesh	Aligarh	M/s Friolay C.A Storage	Cold Storage	Installed Capacity: 3250 MT per annum.	75.00	1202.69	700.00
226	Uttar Pradesh	Hathras	M/s Maa Brahma Devi Ice & Cold Storage Private Limited	Cold Storage	Installed Capacity of 26497 Quintals.	22.00	227.76	95.00
227	Uttar Pradesh	Hathras	M/s Satish Chand Ramesh Chand Sheetgrah Private Limited	Cold Storage	Installed capacity for 4th Chamber is : 23402 Qtls.	12.00	158.00	90.00
228	Uttar Pradesh	Agra	M/s Jai Jinendra Sheetgrah Private Limited.	Cold Storage	Installed Capacity: 7417.16 MT per annum.	49.40	552.50	308.00
229	Uttar Pradesh	Etah	M/s Suraj Sheetgrah India Pvt. Ltd.	Cold Storage	Installed Capacity : 79000 QTLs.	44.00	503.43	280.00
230	Uttar Pradesh	Mathura	M/s Shri Baldau Sheetgrah Private Limited	Cold Storage	Installed Capacity is 58256 Qtls. or 116512 bags of 50 kg.	30.00	412.00	230.00
231	Uttar Pradesh	Hathras	M/s Shri Balaji Ice & Cold Storage	Cold Storage	Installed Capacity: 53233 qtls.	29.90	411.68	262.00
232	Uttar Pradesh	Etawah	M/s Shiva Preservation Private	Cold Storage	Installed capacity: 34929.41	20.80	211.32	110.00

			Limited		Qtls/year.			
233	Uttar Pradesh	Aligarh	M/s Lagsma Ice & Cold Storage Private Limited	Cold Storage	Installed Capacity of 76915 Qtls	52.00	561.66	280.00
234	Uttar Pradesh	Agra	M/s S.S Sheetgrah Private Limited	Cold Storage	Installed capacity :62148 Qtls.	29.90	435.93	240.00
235	Uttar Pradesh	Hathras	M/s Bhawini Cold Storage	Cold Storage	Installed Capacity : 46930 Qtls.	42.90	407.90	200.00
236	Uttar Pradesh	Hathras	M/s Rasmalai Ice & Cold Storage Private Limited	Cold Storage	Installed Capacity : 59985.50 Qtls.	36.00	445.92	225.00
237	Uttar Pradesh	Hathras	M/s PRR Ice & Cold Storage Pvt. Ltd.	Cold Storage	Existing: 69612 and Proposed: 29127 Total: 98739.	14.00	184.00	110.00
238	Uttar Pradesh	Auraiya	M/s Anurag Sheetgrah & Industries	Cold Storage	Installed Capacity: 41400.45 Qtls/Annum.	17.98	182.17	90.00
239	Uttar Pradesh	Kannauj	M/s M. S Preservation Private Limited	Cold Storage	91655 Qtls	44.26	469.26	250.00
240	Uttar Pradesh	Aligarh	M/s J R Agritech Private Limited	Cold Storage	4000 MT of Frozen Green Peas 2000 MT of Frozen Mix Veg.	52.00	1638.6 5	860.00
241	Uttar Pradesh	Etawah	M/s Santosh Preservation Private Limited	Cold Storage	Installed Capacity : 37095.10 Qtls.	23.25	234.37	100.00
242	Uttar Pradesh	Lucknow	M/s Golden Cold Storage a unit of M/s Abidi Enterprises	Cold Storage	Installed Capacity : 5000 MT.	37.00	427.00	260.00

243	Uttar Pradesh	Bulandshahar	M/s Sanjeevani Cold Storage	Cold Storage	Installed Capacity: 5680 MT per annum.	23.59	383.59	240.00
244	Uttar Pradesh	Aligarh	M/s Sanjay Ice & Preservation India P Ltd.	Cold Storage	73332 qtls	45.18	482.78	260.00
245	Uttar Pradesh	Unnao	M/s Prayag Sheetgrih Private Limited	Cold Storage	60,000 Qtls	32.50	501.68	225.00
246	Uttarakhand	Udham Singh Nagar	M/s Ashish Agri Foods Private Limited	Cold Storage	Installed capacity of 16000 MT of Fruits and 7200 M.t of IQF Fruits & Vegetables per annum	75.00	1089.00	646.00
247	West Bengal	Birbhum	M/s. Rajshree Enterprises	Cold Storage	1400 MT	6.66	128.80	73.80
248	West Bengal	Cooch Behar	M/s. Sitai Literacy and Poverty Alleviation Association	Cold Storage	2000 MT	13.41	303.57	97.50

Annexure VII

**Assistance under Venture Capital scheme sanctioned by SFAC
Uttar Pradesh**

Year	No. of cold storages sanctioned	Amount of VCA (Rupees in lakh)
2011-12	28	1,054.92
2012-13	49	1,679.20
2013-14	29	948.80
2014-15	1	32.50
Total	107	3,715.42

Maharashtra

Year	No. of cold storages sanctioned	Amount of VCA (Rupees in lakh)
2005-06	1	27.98
2006-07	1	15.41
2007-08	1	22.06
2008-09	2	72.66
2009-10	1	67.46
2010-11	10	285.96
2011-12	3	101.10
2012-13	4	146.79
2013-14	20	688.77
2014-15	7	276.69
Total	50	1,704.88

Haryana

Year	No. of cold storages sanctioned	Amount of VCA (Rupees in lakh)
2011-12	4	161.45
2012-13	5	234.84
2013-14	19	1,014.02
2014-15	1	43.18
Total	29	1,453.49

Details of State-wise VCA assisted cold storages

Sl.No	State	No. of Projects	Amount of VCA (Rupees in lakh)
1.	Chhattisgarh	4	110.35
2.	Gujarat	15	599.76
3.	Haryana	29	1,453.49
4.	Himachal Pradesh	5	525.05
5.	Jammu & Kashmir	4	581.89
6.	Karnataka	5	119.98
7.	Kerala	1	5.21
8.	Madhya Pradesh	8	275.62
9.	Maharashtra	50	1,704.88
10.	Punjab	6	255.78
11.	Rajasthan	6	187.52
12.	Tamil Nadu	5	196.86
13.	Uttar Pradesh	107	3,715.42
14.	Uttarakhand	1	75.00
15.	West Bengal	2	20.07
Total		248	9,826.88

References

1. Study by National Spot Exchange Ltd. in 2010 for assessing requirement of the cold storage capacity in the country.
2. Report of the committee headed by Shri Soumitra Choudhary, Member Planning Commission on encouraging Investments in Supply Chain including provision for cold storages for more efficient distribution of farm produce.
3. Base Line Study draft report submitted by Hansa Research Group Private Limited to NHB on All India Cold Storage Capacity and Technology.
4. Study by Central Institute of Post-Harvest Engineering and Technology (CIPHET), Ludhiana on Harvest and Post-Harvest Losses of Major Crops and Livestock in India.