



# National Centre for Cold-chain Development

## Annual Report

2013-14

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**National Centre for Cold-chain Development**  
645, A-Wing, Nirman Bhawan, New Delhi-110001

**Annual Report of the  
National Centre for Cold-chain Development (NCCD)  
for FY 2013-14**

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**A. Accounts & Audit**

NCCD was registered under Societies Registration Act 1860 on 27-1-2011 and structured to operate in Public-Private-Partnership (PPP) mode with stakeholders as members of the society. After approval by Cabinet on 09-2-2012, DAC&FW provided a one-time grant of Rs. 25 crore for establishing a Corpus of same amount, so that interest income accruing therefrom, and other income generated by NCCD from fees and charges for services rendered will be used to meet its administrative, personnel and other costs, as decided by its Governing Council. NCCD is structured such that it is distanced from direct government involvement on a day to day basis, and there is no further cost on account of its operation and maintenance on Government.

After approval of Executive committee, the accounts of NCCD for previous three years 2011-12 to 2013-14 were audited by chartered accountants empanelled for the purpose with office of the Comptroller and Auditor General of India, M/s Umesh Babu Agarwal.

Summary of Income and Expenditure account for F.Y.2013-14 is as follows:

<b>Item</b>	<b>Rs in lakh</b>
Income from interest and others	304.60
<i>Less:</i> Administrative expenses	44.19
Excess of income over expenditure	260.41
<i>Less:</i> Income tax provision	64.26
Balance transferred to General Reserve	196.15
<b>Total</b>	<b>260.41</b>

Audited accounts for F.Y.2013-14 are attached.

**B. Establishment and HR status**

Shri Sanjeev Chopra, JS(NHM) was holding additional charge of the position of Director, NCCD from February 2013. Shri Pawanexh Kohli, a cold-chain expert from industry continued to assist the Director, as Chief Advisor from Oct-2012.

The office allocated by DAC, at 645 in A-Wing of Nirman Bhawan, was made operational after renovations in May 2013. As of 1-Apr-2013, the manpower strength at NCCD was 3 persons, with two support staff having left service. Executive Committee (EC) was informed that additional support staff and consultants had been pursued with minimal response. A mid-term paid internship program for students was proposed, to involve the student community in research activities and provide exposure to cold-chain. In addition, strengthening of NCCD with experienced dedicated staff was proposed to the EC.

The EC in its meeting on 03-9-2013, took note of the various initiatives by NCCD and recommended that staff strength be enhanced with competent skills and appropriate experience from industry, including young professionals. Thereafter, after consultative meetings also decided that the organisation be strengthened by adding position of Chief Executive Officer to provide operational and executive direction to NCCD. As a brain trust and knowledge based centre, it was agreed to target hiring of respectable leadership from industry stalwarts. The organisation would continue under direct administration of Joint Secretary NHM as its Director to provide necessary policy level support. The shared leadership between industry and government would be in keeping with the mandate to function under PPP mode. The competent authority thereafter revisited the organisational structure and approved the revised staffing norms accordingly.

In November 2013, DAC advertised the vacancies for six positions initially, inviting candidates with remuneration at par with industry standards. A total of about 50 applications were received by the Selection Committee constituted for the purpose. The advertised positions were filled by the selected candidates from February 2014 onwards. Shri Pawanexh Kohli was selected to post of Chief Executive Officer of NCCD w.e.f. 01-02-2014 for a three year tenure, and 5 other individuals, comprising engineers and generalists, were selected for the remaining positions.

Executive Committee of NCCD had approved a staff strength of 13 persons, against which total 7 positions including CEO are filled as on 31-3-2014.

Executive Committee of NCCD consists of 10 members under chairmanship of Secretary(DAC). The Governing Council consists of 14 members under Secretary (DAC) as President. List of EC and GC members is attached.

### **C. Society Membership Status**

NCCD membership criteria was revised and opened to include a wider range of stakeholders from Jan 2013. As of 31-03-2014 NCCD had 45 active members, including one patron member – CII (FACE) who contributed Rs. 20 lakh to the corpus.

FICCI, one of the founding signatories to the society informed their inability to contribute to the corpus as per the original commitment. It was decided that FICCI may not continue to hold status in EC and GC as member of NCCD. The EC recommended that member participation

from companies and as associates could be focused on to bring grassroots inputs and participation in cold-chain development.

Category- Fees (₹)	Annual	Lifetime	Total
Company- C (50,000 / 4,00,000)	23	2	25
Associate- A (10,000)	14	-	14
Educational Institute- R (Nil)	4	-	4
Patron- P (20,00,000)	-	1	1
Grower- G (Turnover <5 lakhs- Nil; Others- 10,000)	1	-	1
Industry Body- I (75,000 / 5,00,000)	-	-	-
	42	3	45

The membership fees received in F.Y.2013-14 is Rs 39.48 lakh.

The inclusion of educational institutes with NCCD was initiated. The Executive Committee took note and recommended increased interactions and support to private and public education and academic institutes so as to involve more youth and develop innovation at university level.

#### **D. Capacity Building & Knowledge Dissemination initiatives**

EC of NHM had approved that NCCD may take up role as National Level Agency (NLA) of NHM in April 2012. However, role as NLA was taken up after November 2013 and expenditure from NLA allocation were booked thereafter, to support NHM program as per need.

##### **Reefer Vehicle Call-in-centre (RVC)**

The Reefer Vehicle Call-in-centre: NCCD proposed that government provide a toll free number for reefer transporters/operators to lodge complaint about in-transit operational and regulatory challenges/delays. Complaints received could be centrally recorded and information used to for appropriate redressal and other long term corrective action. The recommendation was noted and approved to be taken up by NCCD. A detailed proposal was submitted in annual action plan to NHM for undertaking the initiative. The toll free concept was also to showcase increased interest from the government to promote this component in cold-chain.

##### **Training initiatives**

NCCD proposed taking support of ICE centre of excellence, a member of NCCD, to initiate capacity building and training activities (strengthening capacity of National Horticulture Mission (NHM) officials and staff). The Executive Committee approved rolling out of the skill development and training program which may be undertaken as per provisions provided for as

NLA of NHM. Thereafter, demand driven activities are taken as per allocation made under NLA provisions.

### **On-site at Ripening Chambers**

A set of three pilot training programs was launched specifically for operations of “Ripening Chambers”. These were conducted in three cities of Andhra Pradesh between January and February 2014 and 98 participants were trained at total cost of Rs 4.70 lakh which was borne on actuals from allocation to action plan as NLA of NHM. These sessions were publicised by the state government through the Divisional Public Relations Officer (DPRO) and received local media attention. As a result, the response exceeded the initial plan to train 25 students per batch. To generate interest from entrepreneurs, bank officers (IOB & Canara Bank) also held sessions to explain the loan process for this sector.



These pilot trainings were triggered after ripening room infrastructure owners expressed demand & concern about their lack of skilled operators and inefficient operations. The pilot training primarily targeted unemployed youth and the curriculum was also aimed at creating awareness about safe ripening systems.

In course of evaluation, it was felt that the trainings could be focused on entrepreneur development so as to spread awareness of support mechanism and safe fruit ripening. Following a “rule of three”, feedback from first set of three trainings is being evaluated, and if found satisfactory, it is expected that activity may be implemented by technical group of NHB and the state missions.

### **Technology exposure**

NCCD visited the Danfoss India (a category-C member of NCCD), training centre at Chennai. A mini operational ammonia cold store installation with equipment and controls and modern class rooms and demo equipment were observed. NCCD thereafter developed a curriculum for providing exposure to advanced energy saving technologies as well to develop understanding supply chain and inventory management concepts. A course was devised to give decision makers from government and private sector a technical insight into refrigeration and to explain the differentiating concept of integrated cold-chain in relation to short life perishable products.



The program was developed as a three-day residential course and launched with first three batches of 46 participants were completed by March-2014 at a total cost of Rs 4.7 lakh. The costs on actuals were met from the allocation by NHM to the annual action plan of NLA. Officers from Karnataka, Gujarat, Kerala, Assam, Chhattisgarh, Punjab, Haryana, Arunachal Pradesh, Meghalaya, Rajasthan, Uttar Pradesh and Andhra Pradesh have participated in the trainings. After the first three workshops, feedback from attendees will lead to revisions to the curriculum, if any, for decision on taking up any further courses.

### More capacity building plans

NCCD signed a MoU, the first such in context of cold-chain capacity building, with Cemafruid of France on 3-April-2013. As part of ongoing G2G interactions, and in forwarding the Indo-France Joint Working Group on agriculture, the Govt. of France has expressed agreement to co-finance specialised trainings as may be organised by NCCD and Cemafruid.



A curriculum is being devised to provide necessary exposure to global best practises, energy management, project auditing and operational efficiencies in harmony with International ATP rules. Each batch will comprise of both State government officers (nodal cold-chain officers) and individuals nominated from the members of NCCD.

## E. Applied Research & studies

### North Eastern sector tour

NCCD organised a tour to Meghalaya between 1 to 14 April 2014, at the invitation of Officer on Special Duty, Meghalaya Basin Development Authority and Institute of Entrepreneurs (MBDA/MIE) Govt of Meghalaya, to study transport and logistical challenges of farmers in the state growing vegetables, fruits, flowers and cash crops such as cashew nut and arecanut.

This was a follow-up to earlier study tour in previous year, to other states in this region. MIE assigned 10 interns to this tour as part of their training and exposure. The team covered the districts of East Khasi Hills, West Khasi Hills, East Jantia Hills, West Jantia Hills, Ri Bhoi, West Garo Hills, South Garo Hills, South West Garo Hills, North Garo Hills and East Garo Hills. During this trip, covering a distance of 2,000 km, the team interacted with more than 250 farmers at several villages. The study tour and interaction was conducted pro bono and no cost incurred by DAC or NCCD.



The tour was supported by District Horticulture Officers and their respective teams. The team also visited a few state-run Horti-Hubs to understand their activities in helping farmers. The report of this committee supported tour is being released as part of a book 'Citizen's Report', being published, by the MBDA (Meghalaya Basin Development Authority).

### **J&K Apple value chain**

Chief Advisor NCCD represented DAC in meeting convened by Chief Secretary J&K with NABARD, J&K Bank, and State officers on interventions planned for apple. As a result of this interaction on 13-14 Aug-2013, the apple value chain study by NABARD was re-evaluated with added inputs from NCCD including on rejuvenation and CA cold storage infrastructure. Chairman NABARD requested that NCCD provide cold-chain concept level training to all CGM level officers of NABARD to add clarity on business modelling.

### **Bee migration unit**

NCCD was asked to review and provide technical support to National Bee Board (NBB) for the development of an innovative unit to support migration of bees. This development will lead to a specialised temperature controlled vehicle that will manage an internal environment at ~14°C providing a suitable mode for long distance migration of bees. This transport mode will help in offsetting insect demise during migration due to inclement ambient. The BMU is experimental and the first of its type.

The project involves low cost refurbishment of an existing covered vehicle by cladding it with insulating material, deploying a mild chill cooling machine and the provision of a sliding mechanism for loading and off-loading of beehive boxes. The vehicle can also be used to store and transport raw honey after collection. The pilot will allow for the assessment of alternate apiary handling options in future and is under development.

## **F. Outreach and awareness (workshops, seminars, others)**

### **Nodal Officers at States**

In October 2013, NHM requested State Missions to nominate Nodal Officers for Cold chain Development (NOCDs) to provide a focus point for development activities and liaise with NCCD on cold-chain matters. 11 States reverted to NHM and nominated NOCDs which were forwarded to NCCD. The NOCDs will be provided training in cold-chain with the intention to build relevant capacity to expedite cold-chain initiatives.

### **State level Workshops**

NCCD held three workshops on cold-chain development with the north eastern states of Meghalaya, Arunachal Pradesh and Assam. These workshops were the first ever held on the subject of cold-chain in these states and total cost of Rs. 4.56 lakh was met from allocation made by NHM to the annual action plan. The workshops introduced the concept of cold chains as a supply chain network that can empower producers to link with multiple consumption

markets. A total of 181 officers from Horticulture, Dairy, Veterinary, Agriculture, Dairy, Livestock, Fisheries, KVKs, Marketing Boards, etc. attended.

**Other workshops and seminars**

The IIR international conference on Cold-chain and Sustainability, held on 3-4 April 2013 in Paris, invited Shri Pawanexh Kohli (Chief Advisor) to represent India as Guest of Honour. International Institute of Refrigeration (IIR) is the only independent intergovernmental organization which focuses on promoting knowledge of refrigeration and associated technologies and applications on a global scale.

Chief Advisor NCCD was invited by DIPP to the investment roundtables being held at 5 SE Asian countries. In the previous year a roundtable was held Kuala Lumpur and this year, NCCD presented on the investment opportunity in India’s cold-chain and warehousing sector at the roundtables held at Bangkok on 21.05.2013, as part of a three member team that included the CEO, DMICDC, led by Secretary (DIPP).



NCCD was organising partner with the Asian Productivity Organisation (APO) and NPC for their first ever workshop on “Development of Cold-chain Systems for perishable Agrifood Products” in this region. The international workshop, held on 24-28 March 2014, had officers participating from 13 countries.

An impromptu endorsement was received by NCCD from attending delegates; on learning about NCCD interventions & activities, one of the key recommendations from this workshop was that an ‘NCCD’ also be set up in each delegate country.

At the Krishi Vasant event in Nagpur, from 9-13 February 2014, NCCD supported a stall to demonstrate farm-to-fork supply concept and Chief Advisor held an interactive workshop.

On 4-Oct-13, the Ministry of Defence organised a half day meeting between Chief Advisor NCCD and DRDO officers to discuss cooling innovations and applications that could be adopted by them. NCCD anchored a talk on Alternate Energy applications in cold-chain at Ministry of New and Renewable Energy. This address was

Group I: Southeast Asian countries: Cambodia, Republic of China, Fiji, Indonesia, Korea, Malaysia, Philippines, Thailand

Activity step 1	Objectives/features/topics	Target participants	Responsible party/Convener
Training on technology on CCS	Types of CCS Design and construction of facility Time-temperature	Government, farmer, Coop, Private sector, Academia, Financial institution	Ministry of Agriculture and Cooperatives Local NPC, private sector
Promotion of CCS (Fair, convention, event, etc.) year round	To create awareness and benefits on CCS Develop networking	Farmer, government, private sector	APO, government, private sector
Set up the NCCD in each country	To establish and implement CCS in each country	Farmers, private sector	Government

Part of action plan recommendations by foreign

exclusively for the benefit of Division heads, senior officers and scientists, with approximately 30 officers attending under the Chairmanship of Secretary MNRE. The related XII Plan interventions for cold-chain under upcoming MIDH were also discussed. As follow-up, Chief Advisor also visited MNRE's Solar Energy Centre and was invited to guide on innovative applications.

NCCD along with its members was invited to provide knowledge support to a special workshop for NABARD's senior executive team on funding of cold-chain projects. This initiative by NABARD was in advance of implementing direct financing to cold-chain projects under the provisions of the RIDF window. In this 5 day workshop, Chief Advisor and various NCCD members, addressed the senior team to present an understanding of business models and associated infrastructure, across storage, transportation and for pack-houses at farm-gate. The British High Commission also arranged a half day workshop with Chief Advisor NCCD for the UK Members of Parliament from the All Party Parliamentary Group (APPG) on Agriculture and Food for Development in October.

Total of 6 workshops and seminars were supported at cost of Rs 17.7 lakhs from an allocated amount of Rs 45.5 lakh as NLA of NHM. In this year, NCCD addressed more than 30 workshops and conferences at national and international level (List is annexed).

#### **G. Website and other interactions**

NCCD domain name was approved in May 2013 and independent website eventually launched ([www.nccd.gov.in](http://www.nccd.gov.in)) after NIC security audit in October 2013.

The EC of NCCD took note of logo support and technical support to various conferences and seminars, with full support to specific conferences where NCCD itself is the prime convener. Executive Committee encouraged organising more seminars and conclaves which shall bring in greater participation and suggestions related to cold-chain and for identifying bottlenecks faced by stakeholders. Chief Advisor was asked to participate in regular SOMs in Ministry to share cold-chain concepts. NCCD also participated in Parliamentary committee meetings and Expenditure Finance Committee meetings to discuss XII plan allocations and strategies.

#### **H. Advisory & other support**

##### **a) Rationalising of cold-chain scheme:**

Inputs and recommendations by NCCD on the existing assistance schemes on cold-chain led to various revisions to the operating guidelines of upcoming MIDH. Critical infrastructure items such as integrated pack-houses and various components that promote efficiency were added for the first time. The cold store as a component was redefined and cost norms were graded instead of leaving pro-rata, irrespective of size. The controlled atmosphere cold storage equipment was rationalised, and alternate energy options were added.

NCCD was invited to address the inaugural session of the National Horticulture Conference (NHC) in July 2013. This was a deviation from past practices, and the first time a non-

government official had addressed the plenary inaugural session at NHC. The conference was attended by Senior Government officers of NHM, from States, Agriculture Universities, ICAR Institutions, and the gathering was stressed upon the need revisit to the concept of cold-chain. The Hon'ble Agriculture Minister, referred to the address by Chief Advisor NCCD, and called for giving highest importance to cold chain infrastructure development.

The extensive rationalisation of cost norms and guidelines that followed, were carried out with advice and exclusive inputs of NCCD and this resulted in savings, which could be reallocated for a greater spread of the support into other needed areas. In January 2014, NCCD addressed all states at the National Workshop on MIDH Guidelines held at NASC Complex, to update officers on the rationalised scheme to be launched later in 2014.

**b) Support and participation with MIDH:**

NCCD participated in Project Appraisal Committee (PAC) meetings and EMC meetings of NHM. Total 120 projects were appraised for NHM, and service fees of Rs 11.4 lakh for appraisal of 57 projects was charged. Additionally, NCCD participated in Joint Inspection Team (JIT) for 5 numbers of cold store projects in Gujarat and West Bengal.

Evaluated need for Techno-Economic Feasibility Study of running Horticulture Train under Railways and developed the terms of reference for NHB. NCCD participated in the training programmes conducted by NHB for the cold chain industry. NHB inputs considered and incorporated in new guidelines being developed for MIDH. NCCD has also been tasked with certain demand driven activities of NHM as one of its National Level Agencies.

**c) Reviews and evaluations:**

NCCD is providing knowledge support on cold-chain & agri-logistics matters to the Ministry of Agriculture. This includes evaluation of various inputs sent to department, proposals from states and other agencies, vetting of reports from external consultants/researchers, appraising and inspecting infrastructure projects. Reports received from other NLAs by NHM are also reviewed as a support mechanism.

**d) DAC and SAARC:**

NCCD evaluated and provided extensive inputs on a project under SAARC Development Fund (SDF) on Post Harvest Management and Value Addition of Fruits in Production Catchments in SAARC Countries. The SDF project had special emphasis on the empowerment of rural women in the fruit production areas. A comprehensive project was developed for DAC for implementation in select states.

**e) DEA and NABARD agencies:**

NCCD contributed to discussions for developing appropriate PPP models for cold-chain with DEA, among others. Various interactions were held with NABARD for assisting with planned Warehousing Infra Fund for cold-chain, with direct credit provision by NABARD to projects.

**f) The World Bank:**

Interactions held with Sr. Economist of World Bank (South Asia Sustainable Development Unit, Washington), who proposed a study to help assess and plan World Bank's future

initiatives in the field of post-harvest management for perishables including food losses, as the last study on horticulture by the Bank was in 2009. After a meeting at Ministry of Agriculture in November 2013, the Bank put up a concept note developed with NCCD, with intention to examine the demand/consumption structure, estimate infrastructure capacities, outline the scope of public sector role in post-harvest management and the investment needs for India. It was informed that the Bank viewed this as a strategic area, and needed to build a better understanding on post-harvest losses, to allow for appropriate focus in this area in the future. NCCD had suggested that the study aim to bring to light not only physical losses incurred but also the loss in inputs in form of energy, water resources and loss of earnings. The study will select 5 or 10 specific fruit and vegetable types, across regions, mapping the post-harvest inefficiencies, within and without the cold-chain, and the report would be structured to serve as a reference document to policy makers, to assist setting future policy direction. Further interaction with the Bank is pending as the finalised concept note is under review at World Bank to assigned resources and further action.

**g) Industry support:**

Interactions with stakeholders were initiated at the new NCCD office premises. Meetings were held to assess bottlenecks, policy impact and other NCCD matters. NCCD supported Indo-US collaboration at B2B (with member, Lloyd Insulation from Delhi) which resulted in an off-grid solar powered cold room for which the test runs were completed early in 2014.

As a National Level Agency of NHM, NCCD incurred an expenditure of Rs. 41.33 lakh from the allocation made to annual action plan. This was the first year of activities as an NLA.

**I. NCCD - Aims & Objective**

NCCD is a registered society, to function in an autonomous manner as a think-tank on cold-chain, and to operate under public-private-partnership mode at no cost to the government. The initial capital was provided by the government and the objectives of NCCD are to recommend, suggest, assess, undertake & coordinate, facilitate and foster as below:

- To recommend standards and protocols for cold-chain infrastructure/building including post-harvest management so as to harmonize with international standards and best practices and suggest mechanism for benchmarking and certification of infrastructure /building, process and services provided by cold-chain industry.
- To suggest indicative guidelines for preparation of project reports for potential investors/entrepreneurs.
- To assess and develop appropriate IT-based management information system for cold-chain infrastructure.
- To undertake and coordinate Research and Development (R&D) work required for development of cold-chain industry in consultation with stakeholders.

- To undertake and coordinate the task of Human Resource Development (HRD) and capacity building. It may also conduct in-house training, short-term/long courses relevant for cold-chain development.
- To launch publicity campaign to educate the stakeholders including awareness building about the benefits of integrated cold-chain.
- To recommend appropriate policy framework relating to development of cold-chain.
- To facilitate and foster the development of multi- modal transportation facilities for perishable agricultural, horticultural and allied commodities and establishment of a National Green Grid for Perishable Commodities.

## National Centre for Cold-chain Development (NCCD)

March, 2014

### J. Executive Committee of NCCD (Status)

SN	Name and Address	Designation
1	Secretary Deptt. of Agriculture, Cooperation & Farmers Welfare Ministry of Agriculture & Farmers Welfare, Krishi Bhawan, New Delhi	Chairman
2	Additional Secretary (I/c Horticulture) Deptt. of Agriculture, Cooperation & Farmers Welfare Krishi Bhawan, New Delhi	Committee Member (approved by GC on 7.1.2013)
3	Agricultural marketing Adviser & Joint Secretary (Marketing), Deptt. of Agriculture, Cooperation & Farmers Welfare Krishi Bhawan, New Delhi	Committee Member
4	Joint Secretary(NHM) Deptt. of Agriculture, Cooperation & Farmers Welfare Krishi Bhawan, New Delhi	Committee Member (approved by GC on 7.1.2013)
5	Managing Director, National Horticulture Board 85, Institutional Area, Sector 18, Gurgaon, Haryana	Committee Member
6	Representative of Railway Board (Not below the equivalent rank of Joint Secretary to Government of India) Rail Bhawan, New Delhi	Committee Member
7	Managing Director Central Warehousing Corporation 4/1, Siri Fort Institutional Area Hauz Khas, New Delhi-110016	Committee Member
8	Chairman-CII Task Force on Cold-chain Confederation of Indian Chamber of Commerce & Industries Ground Floor, Core 4A India Habitat Centre, Lodhi Road, New Delhi-110003	Committee Member
9	Chief Executive Officer Fresh & Healthy Enterprises Ltd CONCOR HSIIDC Industrial Estate Rai, Sonapat-131029(Haryana)	Committee Member
10	Director, NCCD	Member Secretary

(as per by-laws of NCCD unless stated otherwise in brackets)

March, 2014

**K. Governing Council of NCCD (Status)**

SN	Name	Designation in the Society
1	Secretary Deptt. of Agriculture, Cooperation & Farmers Welfare Ministry of Agriculture & Farmers Welfare, Krishi Bhawan, New Delhi	Ex-Officio President
2	Director General, Bureau of Indian Standards (BIS) Manak Bhawan, 9, Bahadur Shah Zafar Marg New Delhi-110002	Ex-Officio Member
3	Agricultural Marketing Adviser & Joint Secretary (Marketing), Deptt. of Agriculture, Cooperation & Farmers Welfare, Krishi Bhawan, New Delhi	Ex-Officio Member
4	Joint Secretary(NHM) Deptt. of Agriculture, Cooperation & Farmers Welfare Krishi Bhawan, New Delhi	Ex-Officio Member
5	Representative of Secretary, Ministry of Food Processing Industries, not below the rank of Joint Secretary to Govt. of India, Panchsheel Bhawan, August Kranti Marg, New Delhi	Ex-Officio Member
6	Managing Director, National Horticulture Board, 85, Sector 18, Gurgaon, Haryana	Ex-Officio Member
7	Representative of Railway Board (Not below the equivalent rank of Joint Secretary to Government of India), Rail Bhawan, New Delhi	Ex-Officio Member
8	Chairman - APEDA NCUI Building, 3 Institutional Area, New Delhi	Ex-Officio Member
9	Managing Director Central Warehousing Corporation 4/1, Siri Fort Inst Area Hauz Khas, New Delhi-110016	Ex-Officio Member
10	APC/Pr Secy/Secretary(Agriculture/Horticulture/ Marketing) of two different States to be nominated by DAC	Nominated by Govt. of India
11	APC/Pr Secy/Secretary(Agriculture/Horticulture/ Marketing) of two different States to be nominated by DAC	Nominated by Govt. of India
12	Representative of Confederation of Indian Chamber Of Commerce (CII) - Chairman CII Task Force on Cold-chain- 23, Institutional Area, Lodhi Road, New Delhi-110003	Member
13	Director NCCD	Member Secretary

(as per by-laws of NCCD unless stated otherwise)



**L. List of events, workshops with NCCD participation in 2013-14**

<b>Date</b>	<b>Location</b>	<b>Topic</b>	<b>Organiser</b>
3 April 2013	UIC Conference Centre Paris	IIR International Conference on Cold Chain Sustainability and Innovation (Plenary - Guest of Honour)	IIR
2 May 2013	PHD House Delhi	PHDCCI cold-chain seminar	PHDCCI
21 May 2013	Bangkok	Investment Round Table conference	DIPP
23 May 2013	Oberoi, New Delhi	Indo-Dutch conference	Dutch Govt.
17 July 2013	Constitution Club, New Delhi	National Horticulture Conference	NHM
29-30 July- 13	Ahmedabad	NABARD workshop for senior officers on Cold-chain Investments	NABARD
31-Jul-2013	Delhi	Stakeholder consultation – MoFPI	FICCI-MoFPI
6 Aug 2013	Noida	Workshop, E-learning programme on Post Harvest Technology for South Asia	Amity University
29 Aug 2013	Noida	USAID, UC Davis University of California	Amity University
23 Aug 2013	Bangalore	NCCD “Farm to Fork” Conference	NCCD – Media Today
3-Sep-2013	Delhi	Netherlands Economic Mission to India-Food Security	Dutch Govt.
10-Sep-2013	Gujarat	Vibrant Gujarat Global Agriculture Summit	Gujarat Govt.
4 Oct 2013	DRDO HQ, New Delhi	Workshop-Senior officers of DRDO on cooling innovation and applications	Ministry of Defence
4 Oct 2013	New Delhi	UK Members of Parliament from the All Party Parliamentary Group (APPG) on Agriculture and Food for Development.	British High Commission
22 Oct 2013	Mumbai	Conference on Building Warehousing Competitiveness	CII-IL
6 Dec 2013	IHC, Delhi	BIMTech conference at IHC	BIMT
11-13 Nov 2013	Shillong	Workshop Cold-chain Development MBIE/MBDA	MBIE/MBDA
22-Nov-13	Delhi	Cold-chain Pharma Logistics Summit	Nispana
11-Dec-2013	PHD Chamber, New Delhi	PHD Chamber, cold chain seminar	PHDCCI
13 Dec 2013	Guwahati	State level workshop on cold chain development in Guwahati	SHM, Assam
18-19 Dec 2013	Agra	ICE Expo and Cold chain conference in Agra (18-19 Dec 2013)	NCCD - ICE
3-Jan-2014	MNRE, CGO complex, Delhi	Alternate energy applications in cold-chain and updates on DAC plans	MNRE
7-Jan-2013	Delhi	Canada India Collaboration in Agri-based Cold-chain and Logistics	PHD
16 Jan 2014	Pune	Refcon seminar-ISHRAE in Pune	ISHRAE
24-Jan-2013	Delhi	NHM Workshop for XII Plan	NHM
20-21 Jan; 30-31 Jan; 5- 6 Feb 2014	Andhra Pradesh	Three Training programs for Ripening Chambers in Andhra Pradesh (20-21 Jan-Hyderabad; 30-31 Jan-Warangal; 5-6 Feb-Vijayawada)	NCCD - Samagra
28-29 Jan 2014	Itanagar, Arunachal Pradesh	State level workshop on cold chain development	Arunachal Pradesh Govt.

<b>Date</b>	<b>Location</b>	<b>Topic</b>	<b>Organiser</b>
4 Feb 2014	Delhi.	Africa Asia summit	FICCI
9-13 Feb 2014	Nagpur	Krishi Vasant Farmer Conference, with farm to vending cart supply chain	Ministry of Agriculture
18 Feb 2014	Delhi	ICC Indian Supply Chain Logistics Summit	ICC
21-Feb-14	Chandigarh	International Horti Conference	Media Today
22-24 Feb; 8-10 Mar; 22-24 Mar 2014	Chennai	NCCD training program in Chennai	NCCD - Danfoss
13 Mar 2014	IIC Delhi	National Seminar on "Enhancing Productivity and Food Safety of Dairy Processing Industry"	NPC
24-28 Mar 2014	Delhi	Intl Workshop on "Development of Cold Chain Systems for Perishable Agrifood Products", National Productivity Council	APO-NCCD-NPC

Events with direct participation of NCCD in 2013-14.

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## M. Abbreviations and Definitions used

APEDA	Agricultural and Processed Food Products Export Development Authority, under Ministry of Commerce with mandate to develop exports and also supports cold-chain infrastructure development.
DAC	Department of Agriculture & Cooperation, Ministry of Agriculture.
DRDO	Defence Research and Development Organisation, Ministry of Defence
EC	Executive Committee: the committee that decides executive actions of an organisation.
GC	Governing Council: The council that oversees the executive and takes policy level decisions.
MNRE	Ministry of New & Renewable Energy
MoFPI	Ministry of Food Processing Industries: also implements cold-chain subsidy programs.
NABARD	National Bank for Agriculture and Rural Development
NCCD	National Centre for Cold-chain Development: a society of public and private stakeholders, provided initial capital by Ministry of Agriculture and managed at no cost to government, to function in an autonomous manner as an advisory body to the government.
NHB	National Horticulture Board: central sector sub-scheme for development of commercial horticulture.
NHM	National Horticulture Mission: centrally sponsored scheme for horticulture development.
NLA	National Level Agency: organisations identified by MIDH with suitable expertise to provide technical and knowledge support. NLAs do not implement the scheme but are allocated resources for specific support tasks after acceptance of an action plan.
NOCD	Nodal Officers for Cold-chain Development: State missions are requested by MIDH to nominate officers to liaise and coordinate on cold chain matters with NCCD.
NPC	National Productivity Council under Minister of Commerce & Industry
PPP	Public Private Partnership. Usually seen in infrastructure projects where a concessionaire utilises government support in form of land and funds, and the project reverts back to government at the end of the concession period. In case of NCCD, this additionally means that public and private sector jointly manage the operations and functions through a joint leadership structure, where the administration is under government and the executive decisions is by industry leadership.
SHM	State Horticulture Mission: state level implementing agency of centrally sponsored NHM scheme





## UMESH AGRAWAL & CO.

Chartered Accountants

### AUDITOR'S REPORT

We have audited the attached Balance Sheet and Income and Expenditure Account of NATIONAL CENTRE FOR COLD CHAIN DEVELOPMENT (NCCD), New Delhi as at 31<sup>st</sup> March 2014, which are in agreement with the books of account maintained by the Society. These financial statements are the responsibility of Society Management. Our responsibility is to express an opinion on these financial statements based on our Audit.

We conducted our audit in accordance with auditing standards generally accepted in India. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining on test basis evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by Society Management as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion and report.

Subject to the above and read with other Notes and Accounts attached herewith, we report that.

- (a) The Balance Sheet and Income & Expenditure Accounts are in agreement with the books maintained by the society.
- (b) We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit.
- (c) In our opinion, proper books of accounts have been kept by the Society so far as it appears from our examination of the same.
- (d) In our opinion and to the best of our information and according to explanation given to us the said statements give a true and fair view
  - i) In case of Balance Sheet, of the state of affairs of the Society as on 31<sup>st</sup> March 2014.
  - ii) In case of Income and Expenditure Account of the Surplus for the year ended on that date.

For Umesh Agrawal & Co.  
Chartered Accountants



  
(CA Umesh Babu Agrawal)  
Partner  
Membership No. 86294  
Firm Reg. No. 010325N

Place: New Delhi  
Date :- 25<sup>th</sup> September, 2014

**NATIONAL CENTRE FOR COLD CHAIN DEVELOPMENT(NCCD)**  
**BALANCE SHEET AS ON 31<sup>ST</sup> MARCH, 2014**

(Amount Rs.)

CAPTIAL FUND AND LIABILITIES	Notes	Current Year	Previous Year
<b><u>CAPTIAL FUND AND LIABILITIES:</u></b>			
Capital Fund	1	25,00,00,000.00	25,00,00,000.00
General Fund (Reserve and surplus)	2	3,33,79,016.00	1,37,63,321.00
Current Labilities	3	2,05,93,368.00	51,74,490.00
Fixed Assets - Contra		96,275.34	1,82,658.40
<b>Total</b>		<b>30,40,68,659.34</b>	<b>26,91,20,469.40</b>
<b><u>ASSETS:</u></b>			
Fixed Assets - Contra	4	96,275.34	1,82,658.40
Investments - others	5	27,66,06,258.00	25,30,37,500.00
Current assets, loans and advances, etc	6	2,73,66,126.00	1,59,00,311.00
<b>Total</b>		<b>30,40,68,659.34</b>	<b>26,91,20,469.40</b>

Significant accounting policies and notes to accounts

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**AS PER OUR REPORT OF EVEN DATE ATTACHED**

For Umesh Agrawal & Co.  
Chartered Accountants

For National Centre For Cold Chain Development



(CA. Umesh Babu Agrawal)  
Partner

Membership No. 086294  
FRN : 010325N

(Mr Zeeshan Ahmed)  
Accounts Manager

(Mr S. Kaul)  
Assistant Director

(Mr Sanjeev Chopra)  
Executive Director

Place:- New Delhi

Date :- 25th September,2014

**NATIONAL CENTRE FOR COLD CHAIN DEVELOPMENT(NCCD)**  
**INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD/YEAR ENDED 31st MARCH 2014**

Particulars	Notes	Current Year	Previous Year
<b>INCOME:</b>			
Fees/Subscriptions	7	39,48,002.00	3,40,600.00
Interest Earned	8	2,53,72,521.00	1,83,58,014.00
Other Income	9	11,40,000.00	0.00
<b>Total (A)</b>		<b>3,04,60,523.00</b>	<b>1,86,98,614.00</b>
<b>REVENUE EXPENDITURE:</b>			
Establishment & Other Admin. Expenses	10	39,05,731.00	7,25,282.00
Transport Charges		4,90,451.00	2,17,035.00
<b>CAPITAL EXPENDITURE:</b>			
Fixed Assets	4	22,656.00	2,57,887.00
<b>Total (B)</b>		<b>44,18,838.00</b>	<b>12,00,204.00</b>
Balance being excess of Income over Expenditure (A-B)		2,60,41,685.00	1,74,98,410.00
Less : Income Tax Provision		64,25,990.00	46,06,790.00
<b>Transfer to General Reserve</b>		<b>1,96,15,695.00</b>	<b>1,28,91,620.00</b>

Significant Accounting Policies and notes to accounts

11

**AS PER OUR REPORT OF EVEN DATE ATTACHED**

For Umesh Agrawal & Co.  
Chartered Accountants

For National Centre For Cold Chain Development



(CA. Umesh Babu Agrawal)  
Partner

Membership No. 086294  
FRN : 010325N

(Mr Zeeshan Ahmed)  
Accounts Manager

(Mr S. Kaul)  
Assistant Director

(Mr Sanjeev Chopra)  
Executive Director

Place:- New Delhi

Date :- 25th September,2014

NATIONAL CENTRE FOR COLD CHAIN DEVELOPMENT  
NOTE FORMING PART OF BALANCE SHEET AS ON 31 MARCH, 2014

**NOTE '1' : DETAILS OF CAPITAL FUND**

(Amount Rs)		
Particulars	Current Year	Previous Year
National Horticulture Board	25,00,00,000.00	25,00,00,000.00
<b>TOTAL</b>	<b>25,00,00,000.00</b>	<b>25,00,00,000.00</b>

**NOTE '2' : GENERAL FUND**

(Amount Rs)		
Particulars	Current Year	Previous Year
Opening Balance as per last Balance Sheet	1,37,63,321.00	8,71,701.00
Add : Excess of Income over Expenditure	2,60,41,685.00	1,74,98,410.00
Less : Income Tax Provision	64,25,990.00	46,06,790.00
<b>Balance in General Fund on 31 March 2014</b>	<b>3,33,79,016.00</b>	<b>1,37,63,321.00</b>

**NOTE '3' : DETAILS OF CURRENT LIABILITIES**

(Amount Rs)		
Particulars	Current Year	Previous Year
Sundry Creditors	17,20,691.00	1,38,190.00
Expenses Payable	78,08,984.00	50,36,300.00
NLA Fund (Refundable)	1,08,66,878.00	0.00
Other Current Liabilities	1,96,815.00	0.00
<b>TOTAL</b>	<b>2,05,93,368.00</b>	<b>51,74,490.00</b>

**NOTE '5' : (Investment Others) FIXED DEPOSITS**

(Amount Rs)		
Particulars	Current Year	Previous Year
<b>FDR</b>		
<u>Interest Accrued on FDR and FDR with State Bank of Bikaner &amp; Jaipur</u>	27,66,06,258.00	25,30,37,500.00
<b>TOTAL</b>	<b>27,66,06,258.00</b>	<b>25,30,37,500.00</b>

**NOTE '6'- CURRENT ASSETS, LOANS AND ADVANCES.**

(Amount Rs)		
Particulars	Current Year	Previous Year
<b>A. CURRENT ASSETS:</b>		
<b>Bank :</b>		
State Bank of Bikaner & Jaipur	2,33,94,134.00	1,44,00,298.00





<b>B. LOANS, ADVANCES AND OTHER ASSETS:</b>		
TDS A.Y. 2013-14	15,00,013.00	15,00,013.00
TDS A.Y. 2014-15	24,71,979.00	-
<b>TOTAL</b>	<b>2,73,66,126.00</b>	<b>1,59,00,311.00</b>

**Note '7'- Membership Fees**

(Amount Rs)		
Type of Member	Current Year	Previous Year
Membership Fees	39,48,002.00	3,40,600.00
<b>TOTAL</b>	<b>39,48,002.00</b>	<b>3,40,600.00</b>

**NOTE '8'- INTEREST EARNED**

(Amount Rs)		
Particulars	Current Year	Previous Year
<b>On Term Deposits:</b>		
With State Bank of Bikaner & Jaipur		
Interest on FDRs	2,47,19,246.00	1,50,00,000.00
<b>On Savings Accounts:</b>		
With State Bank of Jaipur & Bikaner	6,53,275.00	1,00,519.00
With Indian Overseas Bank	0.00	32,57,495.00
<b>TOTAL</b>	<b>2,53,72,521.00</b>	<b>1,83,58,014.00</b>

**NOTE '9'- Other Income**

(Amount Rs)		
Particulars	Current Year	Previous Year
Project Appraisal	11,40,000.00	-
<b>TOTAL</b>	<b>11,40,000.00</b>	<b>-</b>

**NOTE '10'- ESTABLISHMENT & OTHER ADMINISTRATIVE EXPENSES**

(Amount Rs)		
Particulars	Current Year	Previous Year
Accounting Charges	29,944.00	10,000.00
Bank Charges	635.00	160.00
Consultancy Fee	7,000.00	-
Interest to Income Tax Department	7,00,000.00	-
Salaries & Wages	23,88,717.00	6,37,032.00
Office Expenses	57,070.00	20,000.00
Printing & Stationary	93,778.00	30,000.00
Tours & Travels	3,53,210.00	-
Advertisement Expenses	2,27,116.00	-
Cartage	10,064.00	-
Meeting & Seminar Expenses	4,490.00	-



Telephone & Internet	1,717.00	-
Penalty on TDS	3,900.00	-
Professional Charges	28,090.00	28,090.00
<b>TOTAL</b>	<b>39,05,731.00</b>	<b>7,25,282.00</b>

AS PER OUR REPORT OF EVEN DATE ATTACHED

For Umesh Agrawal & Co.  
Chartered Accountants



*[Signature]*  
(CA. Umesh Babu Agrawal)  
Partner  
Membership No. 086294  
FRN : 010325N

For National Centre For Cold Chain Development

*[Signature]*  
(Mr Zeeshan Ahmed)  
Accounts Manager

*[Signature]*  
(Mr S. Kaul)  
Assistant Director

Place:- New Delhi  
Date :- 25th September,2014

*[Signature]*  
(Mr Sanjeev Chopra)  
Executive Director

**NATIONAL CENTRE FOR COLD CHAIN DEVELOPMENT**  
NOTE FORMING PART OF BALANCE SHEET AS ON 31 MARCH, 2014

NOTE '4' Fixed Assets

(Amount Rs)

Particulars	Block	WDV As at 01.04.2012	Additions		Sales	Total As at 31.03.2013	Depreciation For the current year	WDV As at 31.03.2013
			Upto 30/09/12	After 30/09/12				
WATER DISPENSOR	15%	8,787.50	0.00	0.00		8,787.50	1,318.13	7,469.38
MICROWAVE	15%		11,025.00	0.00		11,025.00	1,653.75	9,371.25
MOBILE	15%		11,631.00	0.00		11,631.00	1,744.65	9,886.35
<b>SUB TOTAL</b>		<b>8,787.50</b>	<b>22,656.00</b>	<b>0.00</b>		<b>31,443.50</b>	<b>4,716.53</b>	<b>26,726.98</b>
COMPUTERS	60%	1,29,109.40		0.00		1,29,109.40	77,465.64	51,643.76
LAPTOP	60%	44,761.50		0.00		44,761.50	26,856.90	17,904.60
<b>SUB TOTAL</b>		<b>1,73,870.90</b>		<b>0.00</b>		<b>1,73,870.90</b>	<b>1,04,322.54</b>	<b>69,548.36</b>
<b>TOTAL</b>		<b>1,82,658.40</b>		<b>0.00</b>	<b>0.00</b>	<b>2,05,314.40</b>	<b>1,09,039.07</b>	<b>96,275.34</b>

AS PER OUR REPORT OF EVEN DATE ATTACHED

For Umesh Agrawal & Co.  
Chartered Accountants

For National Centre For Cold Chain Development



  
(Mr Zeeshan Ahmed)  
Accounts Manager

  
(Mr S. Kaul)  
Assistant Director

  
(Mr Sanjeev Chopra)  
Executive Director

Place:- New Delhi

Date :- 25th September, 2014

NATIONAL CENTRE FOR COLD CENTRE DEVELOPMENT, NEW DELHI

ACCOUNTING POLICIES AND NOTES TO ACCOUNTS  
FORMING PART OF BALANCE SHEET AS ON 31<sup>ST</sup> MARCH, 2014

Notes 11:

**ACCOUNTING POLICIES**

- 1) The accounts are prepared on historical cost basis as a going concern following the mercantile system of accounting and recognizing income and expenditure on accrual basis. Accounting policies not specifically referred to otherwise are consistent, with generally accepted accounting principles.
- 2) Fixed Assets acquired during the year are charged to Income and Expenditure account in the year of purchase and simultaneously transferred to Balance Sheet under Fixed Assets Fund account to exercise physical and financial control over them.
- 3) Investments are valued at cost.
- 4) Grant funds received under different schemes have been shown separately and used as per need. The administrative charges and service charges as per the parameters of the individual scheme(s) and Interest Income from Deposits of such funds have been treated as income of the society and credited to Income & Expenditure account.



**NOTES TO ACCOUNTS**

- 1) Previous year's figures have been regrouped where ever required to make them comparable.

**For Umesh Agrawal & Co.  
Chartered Accountants**



*Umesh Agrawal*  
**(CA. Umesh Babu Agrawal)**

**Partner**

**Membership No. 086294**

**FRN:- 010325N**

**Place:- New Delhi**

**Date :- 25<sup>th</sup> September, 2014**

**FOR NATIONAL CENTRE FOR COLD CHAIN  
DEVELOPMENT**

*Zeeshan Ahmed*  
**(Mr. Zeeshan Ahmed)**  
**Accounts Manager**

*S. Kaul*  
**(Mr. S. Kaul)**  
**Assistant Director**

*Sanjeev Chopra*  
**(Mr Sanjeev Chopra)**  
**Executive Director**

