



National Centre for Cold-chain Development

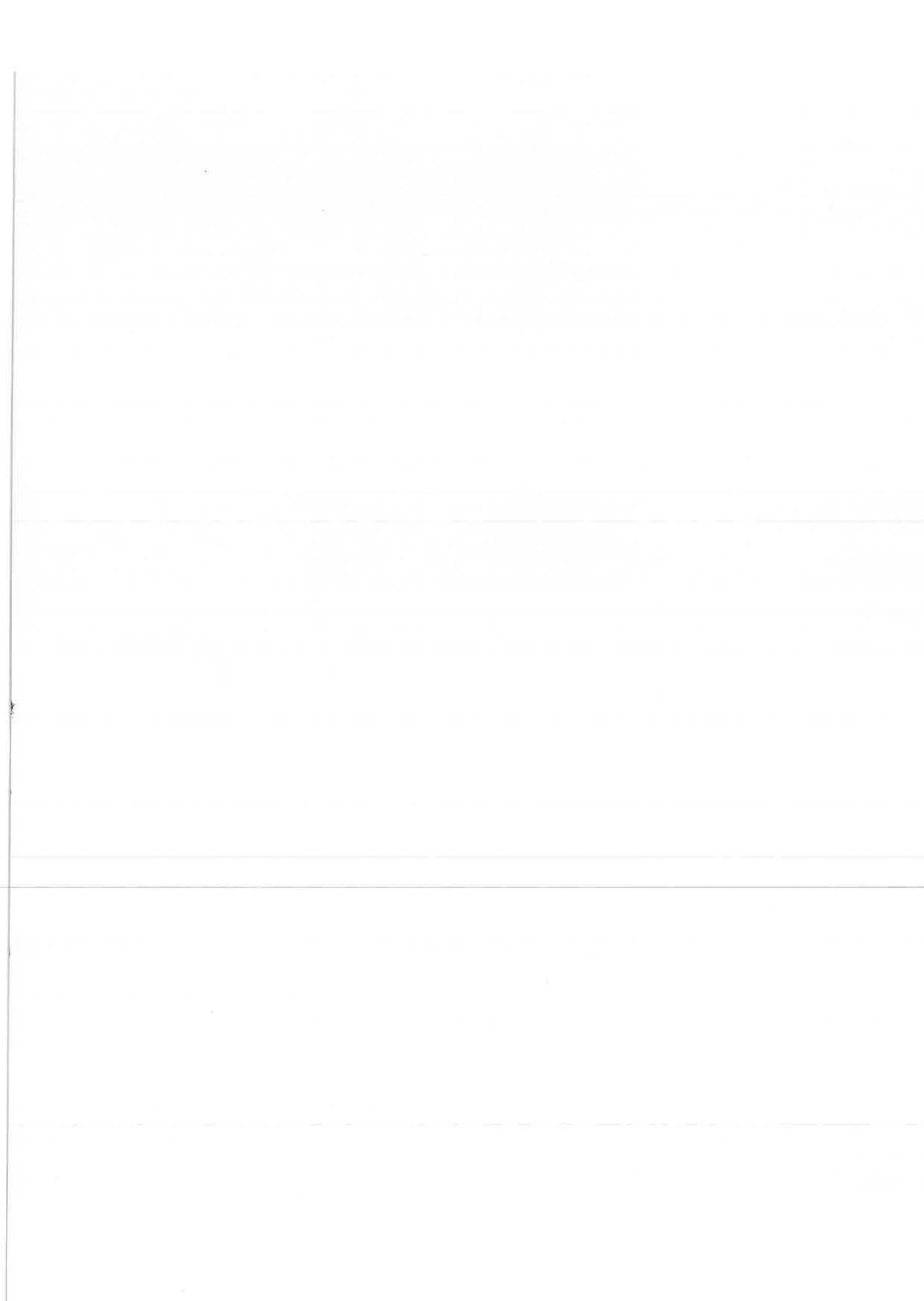
Annual Report

2015-16

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National Centre for Cold-chain Development
2nd Floor, B-Wing, Janpath Bhawan, New Delhi-110001

**Annual Report of the
National Centre for Cold-chain Development (NCCD)
for FY 2015-16**

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**Annual Report of the
National Centre for Cold-chain Development (NCCD)
for FY 2015-16**

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.

Accounts of NCCD for 2015-16 were audited by chartered accountants empanelled for the purpose with office of the Comptroller and Auditor General of India, M/s APN & Associates.

Summary of Income and Expenditure account for F.Y.2015-16 is as follows:

Item	Rs in lakh
Interest and other income	314.93
<i>Less:</i> Administrative expenses	84.59
Excess of income over expenditure	230.34
15% of gross income exempt u/s 11	47.24
Balance set apart for 'General Public Utility' purposes over next 5 years	183.10
Total	230.34

Detailed accounts for F.Y.2015-16 are attached. The audited accounts of this year was presented to the 6th EC with a report of the activities undertaken.

NCCD was registered u/s 12AA of Income Tax Act in July 2015 as a 'General Public Utility' which entitles it to exemption from income tax for 15% of its gross income each year. Of remaining 85% of gross income, the unspent amount is liable to tax unless such amount is set apart for future expenses within 5 years u/s 11(2) of the Act. There is no income tax liability for F.Y.2015-16 as of now.

B. Establishment HR status

Shri Sanjeev Chopra, JS(MIDH) was holding additional charge of the position of Director, NCCD from February 2013 to 29-9-2015. Shri P. Shakil Ahammed, JS(MIDH) took over additional charge of Director, NCCD from 23.10.2015 to 22.9.2017. Shri Pawanexh Kohli, an expert from cold-chain industry is Chief Executive Officer of NCCD, w.e.f. February 2014.

Executive Committee of NCCD approved initial staff strength of 13 persons, against which only 9 persons were in position as on 31-3-2016. In summer of 2015, 6 student interns were inducted from member institutes for 4 to 6 weeks.

Executive Committee of NCCD consists of 12 members under chairmanship of Secretary(AC&FW). The Governing Council consists of 15 members under Secretary(AC&FW) as President. List of EC and GC members is attached.

C. Society membership status

NCCD membership criteria was revised to engage a wider range of participation as of 7-Jan-2013. As of March 2016, NCCD has 72 active members, of which 7 are lifetime members and 65 on annual fees. Category-wise List of Members:

Category- Fees (₹)	Annual	Lifetime	Total
Company- C (50,000 / 4,00,000)	28	5	33
Associate- A (10,000)	15	-	15
Educational Institute- R (Nil)	11	-	11
Patron- P (20,00,000)	-	1	1
Grower- G (Turnover <5 lakh- Nil; Others- 10,000)	11	-	11
Industry Body- I (75,000 / 5,00,000)	-	1	1
	65	7	72

The membership fees received in 2015-16 is Rs 16.97 lakh. Enrolment of participating members is open ended and applications are received throughout the year. Members join in activities of NCCD as stakeholder participants and may undertake knowledge dissemination activity as representative of NCCD. Nodal Officers for Cold-chain Development (NOCD), nominated through MIDH are expected to liaise and coordinated state level activities. There are 19 NOCD in the states.

D. Technical and other Initiatives

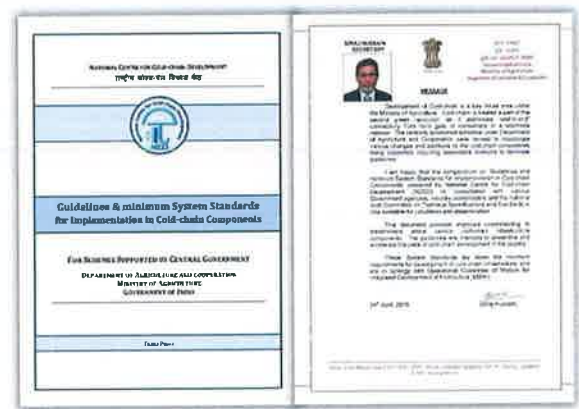
Reefer Vehicle Call-in-centre (RVC)

This activity was commenced in September 2014, using shared resources of NCCD member (Mahindra Logistics) to allow reefer transporters to telephonically register their in-transit complains (24 x 7). The concept was developed in-house at NCCD office and the project was supported by MIDH as per allocation made to the annual action plan of NCCD as National Level Agency (NLA). Total cost in 2015-16, is Rs 7.71 lakh.

As of 31-Mar-2016, a total of 376 calls were recorded. Of these, 19 calls are related to complains of extortion, 5 calls on document inspections or forfeiture, 10 calls for delay at toll plazas and 1 call complaining of opening of sealed doors. The remaining 339 calls related to general agricultural enquires. However, feedback from cold-chain industry is that the RVC helped reduce unnecessary harrassment to transporters. MIDH decided to continue to allocate for the RVC in annual action plan for another year.

Guidelines & Minimum System Standards

The third edition of the “Minimum System Standards and Guidelines for Cold-chain Projects” was published in May-2015. At the same time, the Department of Agriculture & Cooperation issued a notice that these System Standards lay down the minimum requirement for development of cold-chain infrastructure, superseding the technical standards earlier issued in 2010.



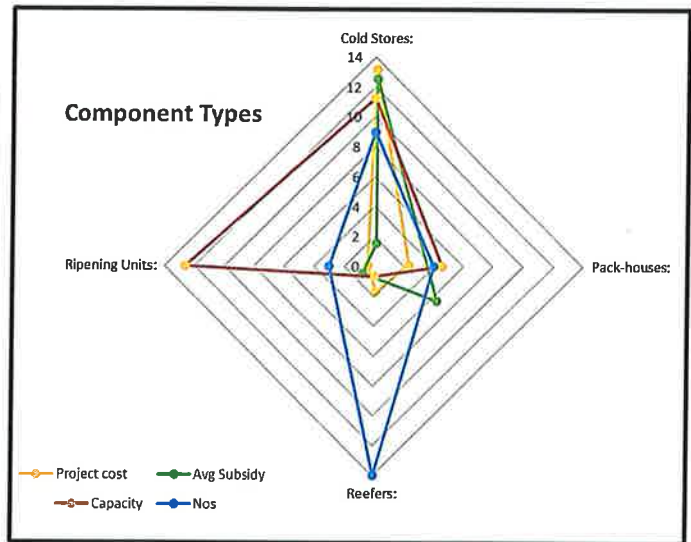
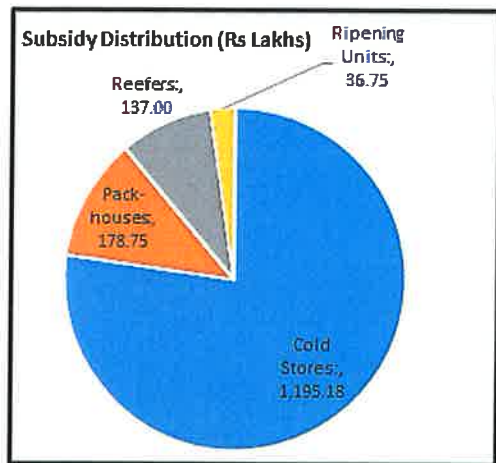
Harmonised MIS for Cold-chain infrastructure

In course of conducting the Capacity Status and Gap study in 2015, it was realised that cold-chain development records, as currently maintained are not harmonised between the agencies and in many cases, the information did not reflect the relevant differentiation between cold-chain components or unit capacity of cold-chain infrastructure created. In a few cases the information was limited only to financial assistance (subsidy amount sanctioned and provided). In October 2015, NCCD proposed that key information of the major identifiable components be maintained by implementing agencies.

The proposal was that records should clearly differentiate the major infrastructure components. As a starting point a standard glossary of the infrastructure components defined in the Operational Guidelines of MIDH can be used. The records format would include information of financial assistance provided, the unit level capacity of each infrastructure component and status of completion. By using a common information template, the intention is to generate quarterly reports on cold-chain development. The information from each agency can thereafter be collated centrally and represented in appropriate dashboard for use in key policy and

direction setting decisions. Sample templates of desired information was prepared and circulated previously for discussions to DAC&FW(IT), MoFPI, NHB, NHM.

To initiate a central repository of cold-chain development it recommended that initially the agencies under DAC&FW keep records in a common format. It was envisaged that decision makers would be provided with a dashboard to monitor shift in new infrastructure developed and the ratio of assistance to individual components. The minimum harmonised information on assisted projects was provided in the recommendation, categorised for



common data, farm-gate infra, cold store, infra, connectivity infra and front-end infra. The template was provided to horticulture division for use and for further action.

Integrated Cold-chain Availability Platform (ICAP), was first recommended by NCCD in 2012 and then published in the AICIC Study. The ICAP was conceived to result in following:

- i. Direct access to nationwide capacity created.
- ii. Information to users and regulators on operational availability.
- iii. Promote linking and integrating activities of cold-chain assets.
- iv. Allow Farmer producer organizations to plan perishable movement across country.
- v. Provide information to agriculture ministry on trade impact in cold-chain sector.
- vi. Empower government to plan viable public procurement mechanisms basis available cold-chain infrastructure.
- vii. Bring traceability to food supply chain in perishables sector.
- viii. Serve as space selling platform for asset owners.
- ix. Promote buy-sell transactions of perishable goods that are in transit in the chain.
- x. Allow cold storages alignment with marketing act by getting considered as transaction platforms, without the physical diversion of produce to non-cold-chain yards.
- xi. Add transparency to cold-chain development, to regional availability and about trade lanes for perishables.
- xii. Provide information on energy consumptions and its monitoring in cold-chain.
- xiii. Improve demand-supply gap analysis and guide future cold-chain development.

The ICAP was selected to be implemented Digital India Programme/Digital Agriculture 2.0 (NeGP-A 2.0). The National Horticulture Board (NHB) was nominated to take this forward. NCCD offered to provide clarity where required.

Project appraisal and site visits

NCCD participates on demand in Joint Inspection Team (JIT) visits to projects, as and when requested by MIDH and supports in appraisals of cold-chain and other projects. In 2015-16 NCCD was part of one JIT to Uttarakhand, 9 cold-chain projects and 2 food processing projects. More than 114 projects were appraised and MIDH as per allocation made in annual action plan of National Level Agency.

E. Capacity Building & Knowledge Dissemination

Entrepreneur development for ripening chambers

The workshop includes on-site training at ripening chambers to engage students and prospective entrepreneurs. Since 2014, a total of 126 trainings were conducted for 4176 persons, throughout the country. The trainings were held in 21 States (Delhi, UP, Punjab, Haryana, Andhra Pradesh, Chhattisgarh, Telangana, Karnataka, Rajasthan, West Bengal, Assam, Madhya Pradesh, Gujarat, Maharashtra, Chhattisgarh, Himachal Pradesh, Jammu, Uttarakhand, Tamil Nadu, Kerala, Odisha etc.). The two day workshop is conducted by NCCD society members (ICE and Samagra) at Rs 1.5 lakh per workshop. Reports are updated on NCCD webpage. In 2015-16, a total of 66 trainings were conducted for 2391 persons at a total cost of Rs 108.85 lakh. Expenditure is managed from the allocation under annual action plan to NCCD as NLA. Observing that there is 85 percent deficit of ripening facilities in the country and lack of awareness of the technology and support scheme, NCCD recommended to MIDH that this activity be continued.

Capacity building in cold-chain technology

This activity was developed in-house with NCCD member (Danfoss) at a custom built learning centre with mini cold rooms and equipment for such training. There is no such establishment available in the country. The course curriculum is developed in-house and implemented for the benefit of government officers and private sector. The 3 day residential course, including independent boarding/lodging, is at inclusive cost of Rs 12,000 per person. In 2015-16, a total of 39 individuals were trained over 7 sessions at a cost of Rs 4.73 lakh. Expenditure is accounted on actuals out of allocation made to the NLA annual action plan by MIDH.

Cold-chain Management training

As part of collaboration under the Indo-France JAWG, a special curriculum was devised for training of Indian stakeholders by NCCD. The program is implemented by Cemafroid of France, under and MoU that was signed with NCCD. The curriculum provides knowledge related to the needs of Indian cold-chain development. Trainings are executed for improved understanding and to improve government & industry interface on the subject. MIDH approved a budget of Rs. 15 lakh per batch to NCCD, under annual action plan as NLA. Expenditure in 2015-16, was managed at Rs 26.48 lakh for 21 participants in 3 training sessions - average of

Rs 1.26 lakh per person for the 5 day residential course. The program is undertaken at optimised costs by sourcing lowest fare tickets and in other coordinated arrangements. The private sector participants contribute to travel costs. The training fees and expenditure of other trainees is met on actuals from allocation to annual action plan as NLA of MIDH.

F. Applied Research and Studies

All India Cold-chain Infrastructure Capacity Study (AICIC-2015)

A comprehensive study to assess the pan-India requirement, capacity created and the existing gaps in Cold-chain infrastructure from food demand perspective was initiated with the support of NABCONs. Draft report was circulated to all stakeholder departments and agencies and to State governments. The report was released on 4-Sept-2015 by Shri Sanjeev Balayan, the Hon'ble Minister of State for Agriculture. The report is being referred to by State governments for planning purposes.



This study has been widely recognised domestically and internationally and NCCD has been asked present the approach and findings at multiple fora. Various educational institutions and organisations like ISHRAE, Amity University, NIAM, IIM, PHD Chambers, CII-FACE, etc. requested copies for use in libraries. The methodology is also adopted for future studies by Nabcons. Copies of the report have been sent to each State (Chief Secretary, Pr.Secretary (Agriculture/Horticulture) and State Horticulture Missions).

Type of Infrastructure	Infrastructure Requirement (A)	Infrastructure Created (B)	All India Gap (A-B)	% share of Gap to Required
Integrated Pack-house	70,080 units.	249 units.	69,831 units	99.6%
Refrigerated Transport	61,826 units.	9,000 units.	52,826 units	85%
Cold Storage (Bulk)	341,64,411 MT	318,23,700 MT	32,76,962 MT	10%
Cold Storage (Hub)	9,36,251 MT			
Ripening Chambers	9,131 nos.	812 nos.	8,319 nos.	91%

The report corrected the earlier belief that the country required 61 million tonnes of Cold storages. Instead, a position emerged that a larger gap exists at farm-gate in form of pack houses and reefer transport units as detailed above. The expenditure was met from the allocation made for studies by MIDH. The report also incorporated the earlier provided concept of Integrated Cold-chain Availability Platform and recommended a National Policy on Cold-chain.

Ongoing studies

The study commenced in October 2014, on documenting post-harvest loss and protocols for 23 select fruits and vegetables, is ongoing and regular review of the field work is undertaken.

The importance of a Pilot demonstration about the cold-chain, on lines of the Malda mango movement carried out in 2014, was discussed in interactions with stakeholder members. NCCD industry and research members were requested to contribute manpower to closely monitor and document the execution of the pilot. Among others, Carrier Transicold India (a lifetime member) agreed to support such a project. Such a holistic applied research is under development, for demonstrating a complete cold-chain from source to market. The demonstration will aim to assess the economic value add, mitigation of food loss and value-add to environment from cold-chain.

G. Outreach and awareness (workshops and seminars)

Various conferences specific to cold-chain had participation from NCCD. In some, where NCCD is main convener, financial support is considered on a case-to-case basis and kept within the norms of DAC&FW. In 2015-16, NCCD directly participated in various events (list is annexed). Expenditure of Rs. 19.41 lakh was incurred for 7 seminars from the amount allocated in annual action plan by MIDII. Workshop to address concerns of existing beneficiaries of MIDH from the northeast was also held, with support of NHB and NHM. Issues about the scheme on protected cultivation, nursery, are expansion, etc. were advised upon, including about operating models of cold chain most suited to individual business options.

ICE Expo 2015 and Awards

NCCD supported the ICE Expo 2015 and Danfoss Ice Awards at Chandigarh in November 2015. The cold-chain industry takes active part in the technology expo and in the NCCD conference. All members of NCCD are provided free access to the conference. At the annual awards the achievements of stakeholders are highlighted and this plays an important role in recognising and fostering excellence in cold-chain. The Federation of Cold Storage Association of India hold their general body meeting which includes interactions with CEO-NCCD.

International seminars, workshops

CEO-NCCD was invited to various international events. He chaired two workshops in a global conference in June 2015, “No More Food to Waste” at The Hague, organised by UNEP, FAO and Dutch Govt. In July 2015, he was invited to a debate on the Global Food Crisis at UK’s House of Lords in July, and was expert witness to the UK’s Policy Commission on Cold-chain. In March 2016, the Asian Productivity Organisation invited him to address a workshop on the topic “India’s PPP initiative for knowledge sharing-The NCCD Model”, at their Asian Food & Agribusiness Conference in Bandung (Indonesia).

CEO also gave the plenary address at the 26th International Cryogenic Engineering Conference on using stranded cryogenic energy in cold-chain, and was invited to chair a workshop at World Cold-chain Summit to reduce Food Loss in Singapore, etc. On 24-June-2015 BBC World radio interviewed CEO-NCCD for a podcast series on the periodic table and cold-chain. Greater awareness on India’s cold-chain roadmap and innovative development interventions by the Government have been propagated by NCCD.

NCCD Student Chapters

A Student Chapter was started at the Ch. Charan Singh National Institute of Agricultural Marketing (NIAM) on 29.7.2015. Interactions were held with the students as workshop level dialogues. The educational institutions that are members of NCCD can open student chapters with the purpose to help their students to learn and acquire requisite capacity to understand and contribute to government policy initiatives as well as to develop knowledge base to serve as professionals in this sector. The NSC program provides a unique opportunity for the students to learn & debate about technology, agribusiness, marketing, supply chain infrastructure, environment and associated policy work.

H. Advisory & other support

As member of EC, EMC and PAC of MIDH, NCCD is also involved in internal strategy, planning and review activities. CEO is also designated to function as Chief Advisor to Dept. of Agriculture Cooperation & Farmers' Welfare on supply chain and post-harvest management. CEO assisted as member of the committee to select candidates to position of chief consultants in DAC&FW. NCCD is also member of Technical Committees of APEDA, WDRA. NCCD had meetings with Ministry of Environment and Forest and inputs were provided on climate change in relation to cold-chain and with stakeholders meeting to discuss concerns on Phase-down of HFC refrigerants from perspective of farmers and cold-chain users. NCCD also provides guidance, as possible, to specific requests from State Governments, and represents DAC&FW on various fora.

Various meetings were held with Secretary and other officers of MoFPI on cold-chain and food processing interventions and to provide suggestions on convergence of schemes in cold-chain. NCCD also participated in the MoFPI Stakeholder Consultation on Budget proposals for next year's General Budget and tax implications on food processing sector. Other meetings with MoFPI included on effective use of space technology tools in food processing industries. Meetings between DAC&FW and Railways and with Ministry of Shipping were also taken up with NCCD support.

NCCD was part of international collaboration and part of meetings with delegates from Australia, Netherlands, Israel, Germany, Japan and others. As member of Indo-France JWG, NCCD participated in the JWG meeting in 2015-16. As member of Indo-Israel Steering Committee, NCCD led the discussions on developing phase III of Indo-Israel Action plan, which would include post-harvest management and market linkage. In August 2015, Govt. of Andhra Pradesh invited CEO-NCCD to guide in agri-logistics planning for the state.

NCCD reiterated its recommendation for active engagement with International Institute of Refrigeration (IIR). India is among of the founding nations of the IIR and except for the period during and after Second World War, it remained Member of the IIR until 2000. The member country participation from 1965 to 2000 was through CSIR. In 2011, the Agriculture Ministry renewed India's membership by paying arrears from 2000. IIR has participation of 58 countries

covering one third of world's population. NCCD recommended that Horticulture Division allocate resources for regular interactions with IIR in future.

The fact that there are no separate records of refrigerated trucks in the country, had been brought forth by NCCD. It was recommended that the provisions to register reefer vehicles be made to maintain a record and to enable targeted support to this important infrastructure component of cold-chain. Accordingly, Ministry of Road Transport and Highways was requested by DAC and NCCD to provide for registration of refrigerated trucks under Motor Vehicles Act and copies of the minimum guidelines were provided. Review of status of ongoing study on Horti-train by NHB (through RITES) regarding use of railways for commercial horticulture were supported with inputs from NCCD. Review of solar power uses in cold storages was also carried out in meetings with Horticulture Commissioner and DDG (Horti). Solar power on rooftop of the Ministry of Agriculture was also evaluated by NCCD. The Principal Scientific Adviser, Dr Chidambaram held meetings with NCCD to understand options in cryogenic recovery at LNG regasification terminals.

Interactions of were held with NITI Aayog officers on various aspects of cold-chain and agri-logistics. DAC&FW assigned NCCD for interactions on cold-chain with assistant secretaries.

EC of MIDH, had desired that State Horticulture Missions should ensure adequate publicity in print and electronic for establishing PHM infrastructure. NCCD designed the necessary information bulletin which was distributed by MIDH to SHMs for action.

Information Bulletin
(Ministry of Agriculture and Farmers Welfare, Government of India)
"Centrally Sponsored Scheme for Cold-chain Projects"

Cold-chain logistics is a thrust area for development, and considered part of the second green revolution. Cold-chain is viewed as an end-to-end logistic bridge, providing uninterrupted continuity of value harvested at farm-gate to the end-consumers. The Government of India supports the development of cold-chain and through the Mission on Integrated Development of Horticulture of the Ministry of Agriculture provides several incentives to interested participants. Financial assistance at 85% to 50% of admissible cost is granted.

Who can apply: Private Industry, Entrepreneurs, Cooperatives, Farmer groups, PSUs.
When to apply: Scheme is demand driven and can be availed all through the year.
Where to apply: Offices of local Horticulture Mission or National Horticulture Board.
Eligible Components: Modern Pack-houses with Pre-coolers, Cold Rooms, Cold Stores, Reefer Vehicles, Reefer Containers, Ripening Units, Alternate Energy, Retail shelves, Vending carts.

Requirements: Fully funded project with loan sanctioned from a sanctioned Bank. Subsidy is credit linked to incentive the owners by reducing their credit burden. Supported components are explained in the scheme Guidelines, should abide minimum 5-star Standards. You can create market links & reduce Food Losses! Guidelines & Standards: See www.MIDH.gov.in or www.NCCD.gov.in | For more information: Contact the closest State Horticulture Department or your State's Nodal Officer for Cold-chain Development (NCCD).

Benefits of investing in Cold-chain

- Investment Linked 150% Tax Deduction (Section 35-AD of IT Act)
- Low interest loan from Warehousing Infrastructure Fund (NAHARI)
- Credit linked Subsidy to projects @ 35% to 50% of admissible costs (MIDH)
- Service Tax exemption for pre-conditioning, storing, transporting agricultural produce
- Rewards of endless Demand, Smart bridge between rural & urban, reduced Food loss
- Growing market for Fresh Fruits and Vegetables, domestic and international
- Option to avail of Negotiable Warehouse Receipts as per WIPRA norms
- 100% FDI through automatic approval route, and ECH route open

The Government of _____ also gives additional support to deserving projects

Contact Details:
Office of National Horticulture Board: _____
Office of State Horticulture Mission: _____
State Nodal Officer for Cold chain Development: Shri/Smt _____
Address: _____

NCCD also designed the brochures and pamphlets for MIDH, for Krishi Unnati, besides assisting in designing of the theme pavilion at this event. This

Mission for Integrated Development of Horticulture (MIDH)
Ministry of Agriculture and Farmers Welfare
Government of India

MIDH provides financial resources, knowledge and technology support for enhancing yield and quality of horticulture crops and their market linkage & retail through Cold-chain connectivity.

MIDH operates in all districts of India through its programs, namely MIDH WAREHOUSE, CFW, MIDH and CH. Each program has focus areas under an integrated agenda for India's strategic growth.

was done in-house at NCCD secretariat. NCCD team also designed advertisements on MIDH scheme that were carried in national newspapers, as part of awareness campaign initiated by Horticulture Division.

NCCD provided annual inputs to DAC&FW in regards budgetary recommendations in reference to cold-chain development. In recognising NCCD efforts and need for more knowledge sharing in cold-chain, during the Union Budget 2016-17, it was announced that NCCD would be exempt from service tax by way of knowledge dissemination activities, to be effective from 1-Apr-2016.

CII-National Task Force on cold-chain initiated a session for Industry CEOs to interact with CEO-NCCD on various aspects of cold-chain policy development, to be held twice a year. The PHD task Force on Logistics also holds frequent interactions with NCCD.

As a National Level Agency of MIDH, NCCD incurred an expenditure of Rs. 267.95 lakh from the allocation made to annual action plan.

I. NCCD - Aims & Objective

NCCD is registered as a 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, 2016

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(MIDH) 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	Representative of Secretary, Ministry of Food Processing Industries, New Delhi	Special Invitee (approved by Secy- AC&FW on 25.7.14)
8	Representative of Secretary, Deptt of Animal Husbandry, Dairying & Fisheries(DAHDF), Ministry of Agriculture & Farmers Welfare, New Delhi	Special Invitee (approved by Secy- AC&FW on 25.7.14)
9	Managing Director Central Warehousing Corporation 4/1, Siri Fort Institutional Area Hauz Khas, New Delhi-110016	Committee Member
10	Shri P. Ravichandran Chairman-CII Task Force on Cold-chain Confederation of Indian Chamber of Commerce & Industries (CII)-FACE, Ground Floor, Core 4A India Habitat Centre, Lodhi Road, New Delhi-110003	Committee Member
11	Shri M L Arora Chief Executive Officer Fresh & Healthy Enterprises Ltd CONCOR HSIIDC Industrial Estate Rai, Sonapat-131029(Haryana)	Committee Member
12	Director, NCCD	Member Secretary

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

K. Governing Council of NCCD (Status)

March, 2016

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	Financial Adviser Deptt. of Agriculture, Cooperation & Farmers Welfare Ministry of Agriculture & Farmers Welfare, Krishi Bhawan, New Delhi	Ex-Officio Member (approved by Secy- AC&FW on 2.3.15)
3	Director General, Bureau of Indian Standards (BIS) Manak Bhawan, 9, Bahadur Shah Zafar Marg New Delhi-110002	Ex-Officio Member
4	Agricultural Marketing Adviser & Joint Secretary (Marketing), Deptt. of Agriculture, Cooperation & Farmers Welfare, Krishi Bhawan, New Delhi	Ex-Officio Member
5	Joint Secretary(MIDH) Deptt. of Agriculture, Cooperation & Farmers Welfare Krishi Bhawan, New Delhi	Ex-Officio Member
6	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
7	Managing Director, National Horticulture Board, 85, Sector 18, Gurgaon, Haryana	Ex-Officio Member
8	Representative of Railway Board (Not below the equivalent rank of Joint Secretary to Government of India), Rail Bhawan, New Delhi	Ex-Officio Member
9	Chairman - APEDA NCUI Building, 3 Institutional Area, New Delhi	Ex-Officio Member
10	Managing Director Central Warehousing Corporation 4/1, Siri Fort Inst Area Hauz Khas, New Delhi-110016	Ex-Officio Member
11	APC/Pr Secy/Secretary(Agriculture/Horticulture/ Marketing) of two different States to be nominated by DAC	Nominated by Govt. of India
12	APC/Pr Secy/Secretary(Agriculture/Horticulture/ Marketing) of two different States to be nominated by DAC	Nominated by Govt. of India
13	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
14	Director NCCD	Member Secretary

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

L. Events, conferences and interactions having direct participation of NCCD in 2015-16

Date	Location	Topic	Main Organizer
7 May 15	Delhi	ASSOCHAM National Summit on Warehousing & Logistics	ASSOCHAM
25-26 May 15	Gangtok	ICC National Cold chain Summit	ICC - MOFPI - NCCD
16-17 Jun-15	The Hague, Netherlands	Global Summit "No More Food to Waste" – to chair/co-chair workshops	FAO/UNEP
2-Jul-15	IHC, Delhi	CII-CEOs interaction with CEO-NCCD	CII-FACE
10-July-15	New Delhi	Stakeholders Meeting-Phase-down of HFCs	MoEF
14 July-15	London, UK	Sustainably meeting the global food crisis – a debate in House of Lords	UK House of Lords
15 July 5	London, UK	UK Policy Commission on Cold-chain	Univ of Birmingham
29-July-15	Jaipur	Launch of NCCD Student Chapter in NIAM	NIAM - NCCD
10-11 Aug-15	ISB, Hyderabad	Workshop on best practices in agriculture & the allied sectors – Planning Dept. of GoAP	Govt of Andhra Pradesh
3-Sep-15	New Delhi	Public Release of AICIC Study with Minister of State (Agriculture)	AC&FW - NCCD
18-Sep-15	New Delhi	8th Agriculture Leadership Awards	Agriculture Today
7-Oct-15	New Delhi	CII-CEOs interaction with CEO-NCCD: Ease of Doing Cold-chain Business	CII-FACE - NCCD
20-Oct-15	IHC, Delhi	Stakeholder consultation meeting to discuss FPI financing	MoFPI
23-Oct-15	Delhi	Importance of cold-chain and expertise driven policy	Rotary club
26-Oct-15	Delhi	Interaction with CEO-NCCD and leading experts from UK on UK-India Industrial R&D, packing, etc.	British High Commission
27-Oct-15	FICCI, Delhi	India PPP summit – VGF in cold-chain	FICCI
17-18 Nov-15	Chandigarh	ICE EXPO 2015 and Awards	ICE – NCCD - Danfoss
26-Nov-15	PHD, Delhi	Structuring PPP models for cold-chain and FPI	PHD-MoFPI - NCCD
29-Nov-15	Lucknow	NABARD's National Seminar on Financing of agri commodity value chain: challenges and opportunities	BIRD-NABARD
4-Dec-15	New Delhi	India Agribusiness Leadership Council	ILFI
29-Jan-16	Jaipur	NCCD Student Chapter Interaction	NIAM - NCCD
4-Feb-16	New Delhi	India's Phytonutrient Consumption: An Examination of the Demand and Supply Situation	ICRIER
9-Feb-16	Udaipur	Gujarat Cold Storage Association AGM	GCSA
11-Feb-16	FICCI, Delhi	India-Africa Agribusiness Forum	FICCI
14-16 Feb 16	Shillong	Parliamentary Standing Committee	MIDH
16-Feb-16	Guwahati	NCCD Stakeholders Meeting	MIDH-NCCD
19-Feb-16	APEDA, Delhi	APEDA workshop – training to APEDA officers	APEDA-NCCD
26-Feb-16	Mumbai	ACREX Hall of fame	ISHRAE
27-Feb-16	Pune	8th International Horti Expo 2016 - Media Today	MTG - NCCD
7-Mar-16	Gurgaon	Haryana Investors' Summit 2016	Govt of Haryana
8-Mar-16	Delhi	International Cryogenic Engineering Conference - CEO plenary address	Intl Cryogenics Council
18-Mar-16	IHC, Delhi	ACRECONF 2016	ISHRAE-NCCD
28-29 Mar-16	Bandung, Indonesia	Asian Food and Agribusiness Conference on PPP models in knowledge dissemination - Asian Productivity Council	APO, Tokyo

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.
CII	Confederation of Industries of India: CII through its Food & Agriculture Centre of Excellence (FACE) works closely with NCCD Secretariat, and as part of NCCD is directly involved in meeting objectives of NCCD.
DAC	Department of Agriculture & Cooperation, Ministry of Agriculture.
EC	Executive Committee: the committee that decides executive actions of an organisation.
FAO	Food and Agriculture Organisation of the United Nations
FPO	Farmer Producer Organisation: where a group of farmers create an institutional structure for their enterprise level operations.
GC	Governing Council: The council that oversees the executive and takes policy level decisions.
LNG	Liquefied Natural Gas: extracted gas is cooled to minus 161°C for ease of handling in transport and storage. The liquid is then warmed back into gas format before end-use.
MIDH	Mission for Integrated Development of Horticulture: launched in 2014, this mission subsumes all previous schemes on horticulture so as to integrate and projectise the activities for holistic outcomes.
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 of MIDH, implementing agency at national level.
NHM	National Horticulture Mission: sub-scheme of MIDH.
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.
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 activities of MIDH.
WDRA	Warehousing Development and Regulatory Authority



FORM NO.10B
[See Rule 17B]
Audit report under section 12A(b) of the Income Tax
Act, 1961, in the case of General Public Utility.

We have examined the balance sheet of National Centre for Cold-Chain Development as at 31st March, 2016 and the Income & Expenditure Account for the year ended on that date which are in agreement with the books of account maintained by the said society. The maintenance and correctness of financial statements is the responsibility of the management of society. Our responsibility is to express an opinion on these financial statements based on our audit

We have obtained all the information and explanations which, to the best of our knowledge and belief, were necessary for the purposes of the audit.

In our opinion, proper books of accounts have been kept at the head office & branches NIL of the above named society visited by us so far as appears from our examination of the books, and proper returns adequate for the purposes of audit have been received from branches not visited by us, subject to the comments given below :

In our opinion and to the best of our information, and according to the information given to us, the said accounts, give a true and fair view:-

- (a) in the case of the balance sheet, of the state of affairs of the above named society as at
- (b) in the case of the income & expenditure account, surplus of the assessee for the year ended

Place : Delhi
Date : 15-09-2016



For APN & ASSOCIATES
Chartered Accountants

FRN: 001876N


(CA Jitender Nath)

Partner

M.No: 015549

**NATIONAL CENTRE FOR COLD-CHAIN DEVELOPMENT
BALANCE SHEET AS ON 31st MARCH, 2016**

(Rupees)

Particulars	Schedules	As on 31st March, 2016	As on 31st March, 2015
<u>CAPITAL FUND AND LIABILITIES:</u>			
Capital Fund	1	25,00,00,000	25,00,00,000
General Fund (Reserve and surplus)	2	5,05,42,481	3,44,25,163
Set Aside u/s 11(2) Of I T Act		1,83,10,095	1,79,43,350
Current Liabilities	3	72,20,892	66,91,649
Fixed Assets - Contra, Corpus		33,063	57,098
Fixed Assets - Contra, NLA		8,39,231	3,81,633
Total		32,69,45,762	30,94,98,893
<u>ASSETS:</u>			
Fixed Assets - Contra, Corpus	4	33,063	57,098
Fixed Assets - Contra, NLA	4	8,39,231	3,81,633
Investments - Fixed Deposits	5	30,85,58,860	27,83,76,760
Current assets, loans and advances	6	1,75,14,608	3,06,83,402
Total		32,69,45,762	30,94,98,893

Significant accounting policies and notes on accounts

10

AS PER OUR REPORT OF EVEN DATE ATTACHED

For APN & Associates
Chartered Accountants
FRN : 001876N

(CA. Jitender Nath)
Partner
Membership No. 015549



For National Centre For Cold-chain Development

(K.K Dhangra)
Advisor Finance

(Pawanexh Kohli)
Chief Executive Officer

(Shakil Ahammed)
Director

Place: New Delhi
Date : 15.09.2016

NATIONAL CENTRE FOR COLD-CHAIN DEVELOPMENT
INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 31st MARCH 2016

(Rupees)

Particulars	Schedules	For year ended 31 March, 2016	For year ended 31 March, 2015
INCOME:			
Members Subscriptions		16,97,046	25,48,154
Interest Earned	7	2,75,03,172	2,63,26,104
Other Income	8	22,92,680	45,80,000
Total (A)		3,14,92,898	3,34,54,258
REVENUE EXPENDITURE:			
Establishment (Salary & wages)		72,89,365	76,90,084
Administrative Expenses	9	11,69,503	27,86,285
CAPITAL EXPENDITURE:			
Fixed Assets	4	-	16,400
Total (B)		84,58,868	1,04,92,769
Excess of Income over Expenditure (A-B)		2,30,34,030	2,29,61,489
Less : Transfer to General Reserve		47,23,935	50,18,139
Set Aside u/s 11(2) of IT Act		1,83,10,095	1,79,43,350
Significant Accounting Policies and notes to accounts	10		

AS PER OUR REPORT OF EVEN DATE ATTACHED

For APN & Associates
Chartered Accountants
FRN : 001876N

(CA. Jitender Nath)
Partner
Membership No. 015549



For National Centre For Cold-chain Development

(K.K. Dhillon)
Advisor Finance

(Pawanexh Kohli)
Chief Executive Officer

(Shakil Ahammed)
Director

Place: New Delhi
Date : 15.09.2016

NATIONAL CENTRE FOR COLD-CHAIN DEVELOPMENT
SCHEDULE FORMING PART OF FINANCIAL STATEMENTS AS ON 31st MARCH, 2016

SCHEDULE 1 : CAPITAL FUND

Particulars	(Rupees)	
	As on 31st March, 2016	As on 31st March, 2015
Government of India Ministry of Agriculture & Farmers Welfare	25,00,00,000	25,00,00,000
TOTAL	25,00,00,000	25,00,00,000

SCHEDULE 2 : GENERAL FUND (RESERVE & SURPLUS)

Particulars	(Rupees)	
	As on 31st March, 2016	As on 31st March, 2015
Opening Balance as per last Balance Sheet	3,44,25,163	3,33,79,016
Add : Excess of Income over Expenditure	47,23,935	50,18,139
Add : Set Aside u/s 11(2) of IT Act (FY 2014-15)	1,79,43,350	-
Less : Income tax/TDS adjustment relating to previous year	65,49,967	39,71,992
TOTAL	5,05,42,481	3,44,25,163

SCHEDULE 3 : DETAILS OF CURRENT LIABILITIES

Particulars	(Rupees)	
	As on 31st March, 2016	As on 31st March, 2015
Sundry Creditors	2,65,714	7,37,668
Expenses Payable	37,49,905	53,81,517
NLA Fund (Payable)	32,05,273	-
Other Current Liabilities	-	5,72,464
TOTAL	72,20,892	66,91,649



NATIONAL CENTRE FOR COLD-CHAIN DEVELOPMENT
NOTE FORMING PART OF FINANCIAL STATEMENTS AS ON 31st MARCH, 2016

SCHEDULE 4 Fixed Assets-Corpus

Particulars	Block	(Rupees)					
		WDV	Additions		Total	Depreciation	WDV
		As at 1.4.2015	Upto 30.9.15	After 30.9.15	As at 31.3.2016	For current year	As at 31.3.2016
WATER DISPENSOR	15%	6,349	-	-	6,349	952	5,397
MICROWAVE	15%	7,966	-	-	7,966	1,195	6,771
MOBILE	15%	8,404	-	-	8,404	1,261	7,143
Sub-total		22,719	-	-	22,719	3,408	19,311
COMPUTERS	60%	20,657	-	-	20,657	12,394	8,263
LAPTOP	60%	7,162	-	-	7,162	4,297	2,865
SOFTWARE(Tally)	60%	6,560	-	-	6,560	3,936	2,624
Sub-total		34,379	-	-	34,379	20,627	13,752
TOTAL		57,098	-	-	57,098	24,035	33,063

SCHEDULE 4 Fixed Assets-NLA

Particulars	Block	(Rupees)					
		WDV	Additions		Total	Depreciation	WDV
		As at 1.4.2015	Upto 30.9.15	After 30.9.15	As at 31.3.2016	For current year	As at 31.3.2016
FURNITURE	10%	-	2,06,493	-	2,06,493	20,650	1,85,843
Sub-total		-	2,06,493	-	2,06,493	20,650	1,85,843
CORDLESS PHONE	15%	73,339	-	-	73,339	11,001	62,338
LCD SCREEN	15%	50,362	-	-	50,362	7,554	42,808
SCANNER/PHOTOCOPIER	15%	38,675	-	-	38,675	5,801	32,874
TABLETS	15%	42,075	-	-	42,075	6,311	35,764
MOBILE	15%	-	22,400	54,500	76,900	7,448	69,452
REFRIGERATOR	15%	-	13,600	-	13,600	2,040	11,560
AIR CONDITIONER	15%	-	1,69,931	-	1,69,931	25,490	1,44,441
LAMINATION MACHINE	15%	-	-	6,000	6,000	450	5,550
Sub-total		2,04,451	2,05,931	60,500	4,70,882	66,095	4,04,787
PRINTER	60%	10,880	19,500	-	30,380	18,228	12,152
LAPTOP	60%	1,66,302	69,500	1,91,900	4,27,702	1,99,051	2,28,651
SOFTWARE(Prezi)	60%	-	-	11,140	11,140	3,342	7,798
Sub-total		1,77,182	89,000	2,03,040	4,69,222	2,20,621	2,48,601
TOTAL		3,81,633	5,01,424	2,63,540	11,46,597	3,07,366	8,39,231



SCHEDULE 5 : INVESTMENTS - FIXED DEPOSITS

Particulars	(Rupees)	
	As on 31st March, 2016	As on 31st March, 2015
Fixed Deposits with State Bank of Bikaner & Jaipur and ICICI Bank (including accrued interest)	30,85,58,860	27,83,76,760
TOTAL	30,85,58,860	27,83,76,760

SCHEDULE 6- CURRENT ASSETS, LOANS AND ADVANCES.

Particulars	(Rupees)	
	As on 31st March, 2016	As on 31st March, 2015
A. CURRENT ASSETS:		
Balance in State Bank of Bikaner & Jaipur A/c	1,48,07,425	2,50,69,688
B. LOANS & ADVANCES		
TDS F.Y. 2014-15		25,44,527
TDS F.Y. 2015-16	26,78,895	
Outstanding for training (Danfoss)	27,000	
Office Imprest	1,288	1,938
C. NLA FUND RECIEVABLE		
	-	30,67,249
TOTAL	1,75,14,608	3,06,83,402

SCHEDULE 7- INTEREST EARNED

Particulars	(Rupees)	
	For Y.E. 31 March, 2016	For Y.E. 31 March, 2015
Interest on fixed deposits with State Bank of Bikaner & Jaipur and ICICI Bank	2,67,89,350	2,54,44,725
Interest on balance in State Bank of Bikaner & Jaipur A/c	7,13,822	8,81,379
TOTAL	2,75,03,172	2,63,26,104

SCHEDULE 8- OTHER INCOME

Particulars	(Rupees)	
	For Y.E. 31 March, 2016	For Y.E. 31 March, 2015
Project Appraisal	22,80,000	45,80,000
Miscellaneous (from Govt of W.B)	12,680	-
TOTAL	22,92,680	45,80,000

SCHEDULE 9-ADMINISTRATIVE EXPENSES

Particulars	(Rupees)	
	For Y.E. 31 March, 2016	For Y.E. 31 March, 2015
Office Expenses	25,091	10,630
Printing & Stationary	22,093	6,14,292
Tours & Travels	-	1,14,084
Cartridge	40,759	41,964
Meeting & Seminar Expenses	5,064	97,126
Telephone & Internet	84,583	72,914
Medical Insurance	27,798	25,000
Professional Charges	7,59,645	5,30,071
Misc Expenses	82,388	4,490
News papers & Magazines	5,682	3,924
Transport Charges	14,923	6,21,928
Repair & Maintenance	-	31,819
Bank Charges	812	937
Staff Welfare	43,665	90,760
Stipend to interns	31,000	23,226
Income Tax Demand (A.Y.2012-13 & 2013-14)	26,000	5,03,120
TOTAL	11,69,503	27,86,285



NATIONAL CENTRE FOR COLD-CHAIN DEVELOPMENT

**ACCOUNTING POLICIES AND NOTES ON ACCOUNTS FORMING PART OF BALANCE SHEET
AS ON 31ST MARCH, 2016**

NOTE 10

ACCOUNTING POLICIES

- 1) The accounts are prepared on historical cost basis as a going concern following 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 account to exercise physical and financial control.
- 3) Investments are valued at cost.
- 4) NLA funds received under MIDH schemes have been accounted separately and utilized for the approved activities.

NOTES ON ACCOUNTS

- 1) The society accumulated Rs. 1,79,43,350/- under section 11(2) of Income Tax Act in F.Y. 2014-15, which is reversed in F.Y. 2015-16 as it has paid income tax on the accumulated amount in that year.
- 2) The society is registered u/s 12AA of Income Tax Act and hence no provision for income tax has been created for F.Y.2015-16, as income of the society is exempt under section 11 of IT Act. Besides, it has accumulated Rs.1,83,10,095/- under section 11(2) of I.T. Act in F.Y. 2015-16 to be utilized in next five years.
- 3) The society received NLA funds of Rs 3,00,00,000/-(Rupees three crores) in F.Y. 2015-16 from Ministry of Agriculture & Farmers Welfare, out of which Rs. 2,67,94,727/- was spent on the approved activities and balance Rs.32,05,273/- remains unutilized as on 31.03.2016.
- 4) NCCD has booked income of Rs.22,80,000/- for appraisal/inspection of 114 projects vide project appraisal committee and site visits in FY 2015-16 under MIDH scheme.
- 5) Last year figures have been re-grouped where necessary.

2

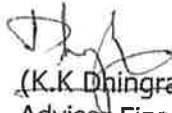
AS PER OUR REPORT OF EVEN DATE ATTACHED

For APN & Associates
Chartered Accountants
FRN : 001876N

For National Centre For Cold-chain Development



(CA. Jitender Nath)
Partner
Membership No. 015549



(K.K. Dhingra)
Advisor Finance



(Pawanexh Kohli)
Chief Executive Officer



(Shakil Ahammed)
Director

Place: New Delhi
Date : 15.09.2016



