

**National Centre for Cold-chain Development**  
[A Govt. of India initiative]

**Report of discussions at the National Level Workshop for Cold-chain  
Development with Nodal Officers for Cold-chain Development (NOCCD)**

*Date:* 09<sup>th</sup> May'2014

*Time:* 09:30 a.m. to 5:00 p.m.

*Venue:* India International Centre, New Delhi.

Agenda

Discussion on Cold-chain components under MIDH Operational Guidelines.

Workshop Programme appended.

Summary

In view of the newly launched schemes of MIDH all nodal officers for cold chain development from States and Mission directors were invited to an interactive conclave. The conclave was held to have consultative meeting with the State governments on the components relating to cold chain covered under MIDH guidelines. Special focus was on new add-on technologies under these guidelines.

A draft document on these technologies and components was prepared by NCCD and distributed.

Interactions with other stakeholder Ministries were also conducted. In the course these interactions fresh requirements from states and suggestions were noted as key take-aways.

Comments and suggestions to the draft document on MIDH guidelines on components were invited from all participants. The participants were advised to return with comments within one month of this event. A revised document will be communicated after subsequent ratification. The key takeaways from these interactions are mentioned below.

**Key take-aways / Action points:**

- I. States to revert with suggestions within one month on the draft document provided to them during conclave.
- II. Each State requested enhanced capacity building workshops. They are to formally revert with specific details on training needs in their respective states. NCCD would undertake relevant workshops to fulfil these demands.
- III. All States to set up a technical committee on cold-chain development. These technical teams will function to assist the State departments with cold-chain development initiatives and on technical appraisals of projects. NCCD to recommend composition criterion of these technical teams that are to be established in each State.
- IV. On establishment of a cold-chain technical team in each state, NCCD to organise a similar interactive conclave with them. Regular capacity building would be undertaken by NCCD for these technical teams.
- V. Each State to provide data on existing on cold-chain infrastructure - storage, reefer trucks and pack houses to NCCD. For want of baseline information, detailed assessment of the current status of cold-chain was incomplete.
- VI. NCCD to take up interactions with Nationalised Banks and Financing Institutions on facilitating financing needs of cold-chain stakeholders and segments.

- vii. States will share knowledge inputs in hand from their universities and other initiatives on material handling and storage practices. NCCD would catalogue a comprehensive document across all regions.
- viii. Depending on need, NCCD requested to assess the possibility of empaneling project consultants for each state.
- ix. A total need assessment of alternate energy needs of cold-chain industry to be compiled and shared with MNRE for further implementation.
- x. NCCD to organize field level exposure to operational pack-houses as part of capacity building initiative in this missing link.
- xi. Support of vehicles of less than 4 ton capacity to be deliberated for inclusion in MIDH guidelines.

### Inaugural Session

1. Mr. Pawanexh Kohli, Chief Advisor and CEO – NCCD, welcomed all participants to the interactive conclave.
2. Mr. Sanjeev Chopra presented the keynote address, some of the key points from his address:
  - I. Important to understand that cold-chain is not just about availing subsidies but about linking the farmer to the consumer.
  - II. Cold-chain is not just static it involves a highly dynamic supply chain. He stressed the need to promote seamless flow of produce in cold chains networking the country.
  - III. He stressed that Local Government departments should develop communication with cold store association so as to have access to market base.
  - IV. Nodal Officers for Cold-chain Development (NOCCDs) would support as the eyes and ears of NCCD and to communicate and liaise with other departments and stakeholders across all segments.
  - V. He also highlighted the understanding that subsidy is an encouragement to invest and not to replace the need for project funds.
3. Mr. R.K. Tiwari - MD, National Horticulture Board (NHB) delivered a special address. He appreciated NCCD's efforts on cold chain development and technical capacity building and informed the house of some key points:
  - I. He informed that the shortage in cold storages was both in capacity and due to uneven regional spread.
  - II. He stated that the phenomenal growth in horticulture production from 150 million MT in 280 million MT in ten years, had increased the gap in cold storage capacity. He stated that the last assessment indicated a gap of 37 million tons of cold storage capacity in the country.
  - III. He stressed on the need to develop many more multi chamber and multi product cold stores so that multiple combinations of agricultural produce like for dairy , fish, meat etc. can be stored safely.
  - IV. He suggested that NCCD should incorporate certification for facilities complying with the latest standard and for modernisation & replacing old infrastructure in the cold chain with state of the art technology.

- V. He emphasised that NHB and NCCD would work together to revise standards and to certify cold stores.
  - VI. He informed that though NHB developed standards were being implemented since 2010, a recent research undertaken has indicated that many of the cold stores recently built were continuing to incorporate older and inefficient technologies.
  - VII. He informed that NHB was conducting critical research to develop CA stores for storing fresh mangoes so that they can be made available to consumers for extended duration across seasons.
4. Mr. D.K. Jain in his inaugural address to the gathering appreciated NCCD's efforts of bringing all the states to a common platform on cold chain development. Some of the key points from his address:
- I. He said that it is important for all States to focus upon institutional capacity building and also on entrepreneurial capacity building.
  - II. He stressed that State Governments should take the responsibility to establish technical teams to take advantage of expertise offered by NCCD as a think tank.
  - III. He recommended that each state should appoint officials and professionals to work towards cold chain development and use NCCD as a common platform for sharing of information and technical expertise.
  - IV. He recommended that a project based approach be the norm for cold-chain development, in association with other production and market based initiatives in horticulture.
  - V. He advised that increased collaboration between the states be promoted and an impact monitoring mechanism on the interventions undertaken be initiated.

#### Technical Session

5. The session was continued by Mr. Pawanexh Kohli who gave inputs on the role of Nodal Officers for Cold-chain in holistic development. He explained that cold-chain technology has two distinct functions, one to preserve and the other is to extend shelf life. The later related to horticulture and other fresh agricultural produce. He informed that all States view cold-chain as an active intervention that serves to link their local producers with other parts of the country and with this view, to identify the missing links in the cold-chain. He presented details of how integrated cold-chain functions to facilitate the flow of fresh produce, right from the farm gate level to the end consumer with storage as a buffer to streamline such flow. For fresh produce, cold-chain 'buys time', and for the majority of produce, this time is best utilised to reach markets across distances to make a ready sale. This was already being done in case of our dairy sector.

He emphasised that there is no cold-chain without a pack house to initiate the supply of produce and that these function similar to manufacturing centres in case of fresh produce. At these packhouses, ready to retail packages are prepared, much like ice-cream factories prepare the ice cream to drive that cold chain. He explained that as origin points of the cold-chain, these packhouses initiate multiple supply lines – to feed local markets, to feed distant markets, to feed food processing units and lastly for non-edible processing. He informed that these are identified as major missing components in horticulture cold-chain and are important to achieve capacity utilisation of the remaining infrastructure. He reminded that cold stores are middle links and developing those alone would not suffice if the aim is to have India's domestic produce to flow

in the cold-chain. He advised that physical storage capacity should not be the core measure, but asked all NOCCDs to think in terms of throughput and that cold storage capacity should not be the sole measure of consideration for holistic and commercially beneficial development. The need for developing appropriate infrastructure for effective cold-chain also included transport with multi-modal links.

He explained about how the MIDH Operational Guidelines integrated and promoted all these relevant cold-chain components. He explained the concept and direction setting agenda behind each new add-on component and the benefits they can bring to overall efficacy of cold-chain. He stated that cold-chain is a multi-domain and highly cross functional sector that links two ends of our socio-economic spectrum as well as in technology. To be future ready and sustainable, he required that all stakeholders in this energy intensive industry should promote and maintain an environment conscious mind-set He reminded that India had a low ecological footprint and expressed the benefits of continuing all future development with environmentally friendly models. He also touched upon the need for improved understanding on the financial aspects of cold-chain and for awareness programmes with banks and financing organisations.

6. The session continued after the tea/coffee break with a presentation by Mr.Rajagopal Sivakumar, Mr.Aman Bhatnagar and Mr.Vanshaj Kaul, the technical team of NCCD. They presented on technical insights into the new add-on components under MIDH. The technical details of each component were discussed during the interactive session. Some of the key matters discussed were:
  - I. A modern pack house should have a pre-cooling unit and this in turn would require a cold room with staging area. A pack house should include washing, sorting, grading system. An additional packaging line was also discussed as added support component. Packaging lines that are supported must have farm code labelling for complying food safety norms. A simple cold-chain process in line with MIDH components was explained.
  - II. Sorting is when one segregates saleable quality categories. Grading is based on different sizes, weight and colours. Grading is a pre-packaging process for logistical convenience and to make marketable lots. Packaging should be in done prior to precooling such that the packing material is also cooled. Packaging must be designed to keep fresh produce safe and in living condition.
  - III. Once precooled, the packaged product is evacuated into an appended cold room in preparation for staging the lots to be loaded into reefer containers for transportation. This is performed at end of every batch period and the precooler is readied for next batch. Normally a precooler can output three batches in twenty four hours and harvesting can be timed accordingly.
  - IV. Using reefer containers, the packaged produce moves to a close to market cold storage, from where it is distributed on demand.
  - V. Technology support for CA equipment has been extended as an option to multiple users including existing cold stores as add-on components. This opens this technology option to any cold store user to convert selected chambers as an option and users can develop infrastructure that offers multiple usage opportunities to farmers instead of selective use only by rejecting non-CA produce.
  - VI. Retail cabinets at front end are also supported, within the norms in the guidelines.

- VII. The team addressed queries on the Add-on components included in MIDH Operational Guidelines.
  - VIII. It was clarified that the cost norms are a budget allocation norm and should not be mistaken as affirmation of market value of the equipment. The incentive schemes were so as to be more equitable across regions and are credit linked. It was explained that the subsidy was not a grant as part of project funding but to alleviate some of the credit burden on some of the capital costs.
  - IX. It was explained that 1 metric ton of storage capacity is defined in MIDH guidelines to represent 3.4 m<sup>3</sup> (120 cuft) of space created and not linked to weight of product stored. Similarly in case of transport units, 1MT would be considered as 3.0 m<sup>3</sup> volume of the insulated carrier box.
  - X. In case of refrigerated trucks, each vehicle would henceforth be required to have GPS tracking and data logging equipment fitted. There were no limits to the number of vehicles supported under this scheme, provided other norms were complied with.
  - XI. It was advised that individual beneficiary can apply for integrated project or apply for multiple components to integrate the value chain. Appraising teams would assess on the integration of such projects.
7. This was followed by a presentation by Mr. Pankaj Kumar (Director - MoFPI) who focussed on the role of MoFPI in cold-chain infrastructure development in the states. He recommended the collaborative approach by NCCD. A link to MoFPI webpage was already linked on NCCD website with other related web sites.
  8. Ms. Veena Sinha (Director-MNRE) presented next. She commended the inclusion of alternative energy options as add-on components for building cold chain projects and appreciated that MIDH had approved initiatives that gave more environmentally friendly options to cold-chain stakeholders. She informed that MNRE is keen to initiate support to develop these options as an opportunity for cold-chain operators. She explained to the house of the different solar technology options, Vapour Absorption (VAM) application with solar thermal, diesel gen-set hybrid system and others. The information shared by her was an eye opener to many and fetched great interest from the officers. She also surprised the gathering by informing them that there already existed in India, cold stores of upto five thousand ton capacity which were successfully using various renewable energy solutions.  
  
Ms Sinha also suggested Solar thermal with Phase change material was a feasible option for drying and dehydration of horticulture produce. On the enquiries about commercial feasibility, Ms. Sinha clarified that the payback time for the solar thermal should not be confused with photovoltaic technologies and that in any case, the renewable energy calculations are most viable with attractive payback periods and would share the calculations. Ms. Sinha informed the house that MNRE would like to invite NCCD for a repeat interaction as her ministry was keen to support application based solutions.
  9. The next presentation was on financial support available through NABARD for cold-chain Projects by Dr. G.H.V. Ratna Babu who discussed in details the different financing models. Various queries on institutional lending program of NABARD and options for private entrepreneurs were raised. This session also provided key insights on funding mechanism of NABARD and future plans to support State Governments.

### HRD Session

10. After the lunch break the conclave was resumed by NCCD HRD team with a presentation by Ms. Monica Gupta and Mr. Angshuman Siddhanta. The team informed the house about various capacity building programs conducted by NCCD and the evaluation of each. States were requested to provide details on their training needs so as to structure future programs to such specific needs. NOCCDs were advised of NCCD initiative in offering support to promote technical education as per needs of each State; a communication had been sent to Principal Secretaries for Technical Education to initiate skill development and specialised courses for cold-chain development. NOCCDs were requested to support further contact and developments with the technical education departments of their States. The NOCCDs were kept advised on procedural delays in approvals for specialised trainings at Cemafruid and on the ongoing capacity building programs. All were apprised that special studies were being developed with Amity University and about the previous study tours in North East by NCCD Committee member Shri Ramesh Kumar.

### Interactions

#### Key Discussions/suggestions during the conclave

1. Uttar Pradesh appreciated the NCCD initiative towards cold-chain development and requested NCCD to organise workshops in Agra, Mathura and Firozabad focusing on the latest technology options for cold-chain. Mission Director (UP) proposed that they may appoint a cold-chain team with appointees from local university and requested NCCD to help train the selected officers and faculty heads. He informed that many pack houses are to be constructed in Uttar Pradesh, however there is no consultant to guide them. He requested NCCD to provide their technical expertise in developing the integrated pack houses.

The need of greater trainings in UP on concept and technology base was stressed and NCCD requested to provide such trainings. It was informed that 5 cold storages had recently been approved with 7 in the pipeline. It was stated that UP government was very keen to increase development in the cold-chain sector, being a large producer of various perishable produce.

2. Arunachal Pradesh informed that the production area in Arunachal Pradesh is very scattered and a cluster based approach may not always be suitable. He expressed the need to build small sizes of cold storages and requested that NCCD guide them about the selection of right sizes of cold storages. Also requested guiding literature to be made available to make them aware of the right use of technology and direction. He requested live training at packhouse.
3. Mr. Pawanexh Kohli informed that if any state required any sort of training, workshops, a formal mail along with details of requirement should be forwarded to NCCD office so that the matter may be acted upon. Mr. Navneet Sharma of APEDA queried about value addition through improved post-harvest handling. It was appreciated that farm code labelling would bring harmonisation with global practises. Initiatives by APEDA were shared.
4. Mr. Sanjeev Chopra advised nodal officers from different states to share their experiences with each other for better understanding of their practical requirements. He also advised that the state nodal officers communicate regularly with cold storage associations in their State. Mr. Chopra stressed on the importance of interaction among state governments, on

- the subject of cold-chain. He also advised that SHM officers to keep copies of MoFPI guidelines along with guidelines of other schemes in cold-chain.
5. Punjab Mr. Pannu (Principal Secretary-Punjab Agriculture) enquired about the rate of interest for repayment of loan amount. Mr. Pannu highlighted the case of Tomatoes and how an increase in shelf life of around 20 days would tremendously affect the marketability of the produce. Mr. Pannu stated that in Punjab all cold stores are bunker type and are driven by manufacturers and suppliers of bunker type system and not by the guidelines. He suggested that with an extended arm of NCCD, the guidelines could be implemented better. As a proactive initiative he informed that Punjab has already appointed 2 Professor's from Agriculture universities, 1 Department officer and 1 post-harvest expert to work as a state level team who can directly interact with farmers, make DPR and then consult NCCD for their support. He also requested team NCCD to visit 5 cold-storages in Punjab and make a report that may serve as a bench mark for up gradation of other existing cold storages in Punjab. For last 30-40 years potato store called 'allo mills' are running without any interventions from the government. Mr. Pannu suggested that a book may be published by NCCD on material handling and storing practises of fruits and vegetables.
  6. One of the questions raised was on the commercial cost of vapour absorption machines and if they were justifiable for function with solar heat vis to VAMs functioning on industry based heat recovery. It was examined that the entire value of the operations be considered including the long life of VAM equipment (around 15-20 years), all of which shall make up for initial higher expenditure. Moreover, in areas with no access or with shortage of grid power the option to use solar heat to power refrigeration is very attractive.
  7. Mr Kohli was enquired about how reefer trucks could be promoted to improve their presence in the cold-chain. He suggested that logistics companies fo not normaly interact with horticulture departments and efforts can be made to make them aware of the support available. Further he recommended that building capacity for investment linked development to reach rural India would require involvement of young rural entrepreneurs. They would benefit most from setting up transport and pack-house projects.
  8. Mr.Kohli enquired from NABARD the process that enabled that funds/loans were available to individuals, farmers and farmer groups vis practise of financing corporates only. NABARD informed they had limited reach to take up such activities similar to retail banking. It was then asked if tripartite arrangements can be made with cold-chain associations or State govt bodies to serve as channel partners of NABARD, such that NABARD funds for cold-chain can be made available at farm-gate level. This would be aligned with fulfilling the agenda for rural development by ensuring that agri-entrepreneurs at farm gate have access to funds. Mr.Kohli stressed finance options keeping in mind the need for more pack-houses and transport units. It was suggested that these points be discussed with Ministry of Finance later during the drafting of NABARD guidelines for next session.
  9. Mr. D.K .Jain also expressed that NCCD may interact with Nationalised banks to develop a simpler lending experience to farmers. There was also the need to provide web-links to other ministries giving subsidies/ funding for cold-chain was required. Those missing to be displayed on the NCCD website. Eg MNRE, NABARD, NCDC, WDRA, etc.
  10. Meghalaya requested NCCD for similar training on cold chain concepts and technologies.

11. West Bengal requested NCCD to guide them with some good Consultants and put up some bench marking project reports on the web-site so that people may refer for their upcoming projects. NCCD recommended that State focus should be to train and educate entrepreneurs on the various market opportunities available.
12. Uttrakhand requested for front line demo and training in pack houses and new technologies.
13. Maharashtra informed that they have approached APEDA 5 times for recruiting Consultants. However none were found suitable and NCCD was requested to guide them further. The lack of any first hand information of infrastructure across States was expressed.
14. Gujarat requested for training for cold storage operations, technical and others. They expressed the need for standardised literature on concepts, technology and practises. A uniform description of cold-chain aspects was stated as necessary to harmonise interactions. The need to develop links with markets across the country was mentioned for which NCCD was asked to provide status of available infrastructure.
15. Haryana requested for identification of agencies and consultants for integrated packhouses development. Tenders had been floated for packhouses but responses were unsuitable.
16. Mr. S.K. Kaul (Asst Director-NHM) advised the house that a States must develop capability to technical appraise project submissions. As part of strengthening such teams, initially the committee members of the PAC of the centre may be accessed on demand.
17. List of committee members would be put up on MIDH website for easy reference. The timelines for receiving projects and closing the sanction were also discussed. States with long delays on submitting projects were required to hasten with the process.
18. Mr. D.K. Jain emphasised that like Punjab, each state should start forming teams who can work with NCCD and interface with the farmers, cold storage owners and gather data which can further be analysed by NCCD. Mr. Pawanexh Kohli also informed that during recent APO workshop many countries showed interest for setting up NCCD in their respective countries.
19. Mr. D.K. Jain expressed that each state take a month's time to select and appoint state level technical teams and hold another conclave comprising of all new state nominated members. NCCD was requested to support by providing criterion for selection of the right candidates.
20. Mr. Pannu expressed the need to enhance the storage life of tomato and that studies from Punjab Agriculture and other concerned universities would be shared with NCCD for further guidance where possible. Other states with similar studies could also do the same.
21. The evening interactive session continued with many interactions with officers from different States and sharing of current development scenario in each State.
22. The Valedictory address was made by Mr. D.K. Jain (Additional Secretary, DAC), who appreciated the interactions at this national level conclave. He concluded the conclave by listing the key take-aways from these interactions, He recommended another conclave be held as soon as the States completed appointing technical teams to interact with NCCD.
23. CEO NCCD gave a vote of thanks to the gathering.

### Participation List

Officers from 19 States, 3 ministries, 10 government organisations and local members of NCCD.

#	Name	Organisation
1	Mr. K M Parashiva Murthy	Joint Director, SHM, Karnataka
2	Mr. Krishan Gopal Malik	HDO, SHM, Punjab
3	Mr. Neeraj Shaha	Asst Director, SHM, Chhattisgarh
4	Mr. Khagendra Sarmah	ADO, DOH&FP, Assam
5	Mr. C.M. Patel	Deputy Director, SHM, Gujarat
6	Dr. S. K. Chauhan	Director, SHM, Uttar Pradesh
7	Dr. Kuldeep Singh	Director, SHM, Haryana
8	Mr. Melvin Jose	TO, SHM, Kerala
9	Mr. Triru. G. Kandaswamy	Joint Director, TANHODA, Tamil Nadu
10	Mr. M. Papi Reddy	Mission Director, SHM, Andhra Pradesh
11	Dr. B.R. Shah	Director, SHM, Gujarat
12	Dr. Arjun Singh Saini	Mission Director, SHM, Haryana
13	Dr. K. Prathapan	Mission Director, SHM, Kerala
14	Mr. Umakant Dangat	Managing Director, SHM & MPB, Maharashtra
15	Dr. Gurkanwal Singh	Mission Director, SHM, Punjab
16	Mr. S.P. Joshi	Mission Director, SHM, Uttar Pradesh
17	Dr. P.K. Pramanik	Mission Director, SHM, West Bengal
18	Dr. Ratan Kumar	Deputy Director, SHM, Uttarakhand
19	Mr. B.K. Hota	Er. DOH, Orrisa
20	Dr. H.D. Nandvate	Director, SHM, Maharashtra
21	Mr. Sita Ram Jat	Joint Director, SHM, Rajasthan
22	Mr. Entan Ekka	DHO, SHM, Jharkhand
23	Mr. Mahinder Singh	Dept of Horticulture, Delhi
24	Mr. Ravinder Singh	Dept of Horticulture, Delhi
25	Mr. Rajbir Singh	Deputy Director, NHB, Gurgaon
26	Mr. Bharat P	MFS
27	Ms. Sapna Nigam	SFAC
28	Mr. B.R. Gupta	SFAC
29	Mr. N. Sharma	APEDA
30	Mr. Asheesh F	APEDA
31	Mr. V.P. Singh	Hort Officer, NHB

#	Name	Organisation
32	Mr. P. Kharkongor	Principal Secretary, Agriculture, Meghalaya
33	Mr. K.S. Pannu	Principal Secretary, Agriculture, Punjab
34	Mr. Tage Tatung	M.D., APHPM&PB, Arunachal Pradesh
35	Mr. R. K. Tiwari	M.D., National Horticulture Board
36	Mr. N.K. Suri	Chief Director, NCDC
37	Mr. Pankaj Kumar	Director MoFPI
38	Ms. Veena Sinha	Director MNRE
39	Dr. G. H. V. Ratna Babu	DGM, NABARD
40	Mr. D.K. Jain	Additional Secretary, DAC
41	Mr. Sanjeev Chopra	Joint Secretary, MIDH / Director, NCCD DAC
42	Mr. Omprakash	Additional Commissioner, DAC
43	Ms. Anuradha Vemuri	Additional Commissioner (H), DAC
44	Mr. S. K. Kaul	Assistant Director NHM, DAC
45	Mr. Samuel Jose	Chief Consultant, DAC
46	Ms. Sadhana Khanna	Under Secretary, DAC
47	Ms. Jyoti Singhal	Under Secretary, DAC
48	Mr. Rajagopal Sivakumar	Technical Advisor, NCCD
49	Mr. Aman Bhatnagar	Executive Manager, NCCD
50	Mr. Vanshaj Kaul	Executive Manager, NCCD
51	Ms. Monica Gupta	Head HRD & PR, NCCD
52	Mr. Angshuman Siddhanta	Executive Manager, NCCD
53	Mr. S.M. Bindra	Press Reporter, NAI
54	Dr. Sunil Saran	Chairman, Post Harvest Tech, Amity University
55	Mr. Tarun Malhotra	Head, Carrier - United Technologies Corp
56	Mr. Yogesh Dhaiya	M.D. NVFL
57	Mr. Bharat D. Revar	Director, NVFL
58	Mr. Ritwik Sinha	Editor, Logistics Times
59	Mr. Abhay Gaiind	Advocate
60	Mr. Ajay Gaiind	Advocate
61	Mr. K.K. Mitra	Vice President, Lloyds Insulations
62	Mr. Ramesh Kumar	Chairman, KRK Foundation
63	Mr. V.K. Seth	Ishrae Institute of Engineers



Sincere thanks to all participants for proactive interest and for keeping team NCCD motivated



With Support of:



Ministry of Agriculture  
Department of Agriculture & Cooperation



Ministry of Food Processing Industries  
Government of India



and  
State Governments



National Centre for Cold-chain Development

## Interactive Conclave on Cold-chain Development

9th May, 2014

India International Centre, New Delhi

Participation by:



NABARD  
COMMITTED TO RURAL PROSPERITY



National Horticultural Board



एपीडा  
APEDA



SFAC  
लक्ष्म कृषक  
कृषि विकास सार

State Nodal Officers for Cold-chain Development  
Discussions on Operational Guidelines (MIDH)

[www.nccd.gov.in](http://www.nccd.gov.in)  
Contact-NCCD@gov.in

## PROGRAMME – Conclave with Nodal Officers for Cold-chain Development

0930 – 0955 hrs			<b>Registration – 9 May 2014 – IIC Annexe, New Delhi</b>
1000 – 1030 hrs			<b>Inaugural Session</b>
1000 – 1005 hrs	Welcome Address	Shri Pawanexh Kohli, NCCD	
1005 – 1010 hrs	Keynote Address	Shri Sanjeev Chopra Joint Secretary (DAC) - MIDH / Director, NCCD	
1010 – 1015 hrs	Special Address	Shri R. K. Tiwari M.D., National Horticulture Board	
1015 – 1025 hrs	Inaugural Address	Shri Ashish Bahuguna Secretary, Department of Agriculture & Cooperation	
1030 – 1300 hrs			<b>Session – I (Technical)</b>
1030 – 1050 hrs	Role of Nodal Officers for Cold-chain development.	Shri Pawanexh Kohli, Chief Advisor and CEO, NCCD	
1050 – 1130 hrs	Presentation on new Technical Components in Cold-chain infrastructure ( <i>Introducing new add-on components under MIDH and concept</i> )	Shri Rajagopal Sivakumar, Technical Advisor NCCD Shri Aman Bhatnagar, Executive Manager NCCD Shri Vanshaj Kaul, Executive Manager NCCD	
1130 – 1200 hrs	Interactive Q&A with participants .		
1200 – 1215 hrs			<b>Tea / Coffee Break</b>
1215 – 1230 hrs	Role of MoFPI in Cold-chain Infrastructure Development in the States	Shri Pankaj Kumar Director MoFPI	
1230 – 1240 hrs	Alternative Energy options for strengthening energy efficiency in cold-chain management	Smt. Veena Sinha Director MNRE	
1240– 1300 hrs	Interactive discussions with participants...continued		
1300 – 1400 hrs			<b>Lunch Interaction</b>
1400 – 1600 hrs			<b>Session – II (Projects)</b>
1400 – 1410 hrs	Post-Harvest Management in light of operating guidelines under MIDH	Smt. Anuradha Vemuri Additional Commissioner (Horticulture)	
1410 – 1420 hrs	Financial Support available through NABARD for cold-chain Projects	Dr. G. H. V. Ratna Babu DGM NABARD	
1420 – 1440hrs	Project Appraisal Committee - procedure and concerns on project submissions.	Shri S. K. Kaul Assistant Director NHM	
1440 – 1530 hrs	Interactive discussions with participants...		
1530 - 1600 hrs			<b>Session – III (HRD)</b>
1530 – 1550 hrs	Capacity Building programs & Trainings planned by NCCD / Participation Criteria & understanding HRD needs from states.	Smt. Monica Gupta, Head HRD & PR NCCD Shri Angshuman Siddhanta, Executive Manager NCCD	
1550 – 1610 hrs	Interactive feedback from participants...		
1610 - 1630 hrs			<b>Valedictory Session</b>
1610 – 1620 hrs	Valedictory Address	Shri D.K. Jain Addl. Secretary, Dept. of Agriculture & Cooperation	
1620 – 1625 hrs	Vote of Thanks	Shri Pawanexh Kohli, CEO NCCD	
1625 – 1700 hrs			<b>Open House Interactions – High Tea</b>

Note to participants: *This interactive conclave is an NCCD outreach programme to share the concept and the guidelines of cold-chain related components in the MIDH Operational Guidelines. The agenda is to have dialogue with State Government nodal officers and to initiate a feedback mechanism from the officers. Extensive interactions are planned to give opportunity to nodal officers to express their varied needs so as to facilitate greater appreciation when planning policy interventions. Participants are exhorted to keep this prime agenda in mind for the day's deliberations & are requested to freely share inputs. The entire day's proceedings shall be video recorded.*