

राष्ट्रीय बागवानी बोर्ड

कृषि एवं किसान कल्याण मंत्रालय,भारत सरकार 85, इंस्टीट्यूशनल एरिया, सैक्टर-18, गुड़गाँव-122015

National Horticulture Board

Ministry of Agriculture & Farmers Welfare, Govt. of India 85, Institutional Area, Sector - 18, Gurgaon - 122015

NHB/CC/Guidelines Revision/2016-17/

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Dated 12.04.2017

Office Order

The Department of Agriculture & Farmers Welfare vide letter dated 28.03.2017 have conveyed the approval of Hon'ble Agriculture & Farmers Welfare Minister as Chairman of General Council of MIDH to the modifications in the operational guidelines pertaining to the schemes implemented by National Horticulture Board. A copy of the said letter of DAC&FW is enclosed herewith for ready reference.

The suggested modifications, inter-alia, include;

(i) NHB would accept proposals only in those cases where term loan has already been sanctioned by the banks/FIs.

(ii) NHB will circulate a checklist prescribing requirements of documents for issue of In-Principal Approval (IPA) to the project proposal. Applicant has to submit required documents as per check list along with project proposal.

(iii) The proposals so received would be examined by NHB in a judicious manner preferably without interaction with the Promoter/Applicant based on the circulated checklist. After such due diligence and scrutiny of documents, In Principal Approval may be issued by duly constituted Pre-Project Appraisal Committee of NHB.

In view of the above, it has been decided to stop letter of intent (LOI) system for all categories w.e.f. 01.04.2017. In addition, it has also been decided that NHB may return the LOI applications which have still not been issued LOI with an advise to the promoter to resubmit it for issuance of IPA after getting loan sanctioned from the Bank/FI.

In the meantime, as advised by DAC&FW, the revised checklist prescribing requirements of documents for issue of In-Principal Approval to the project proposal to be submitted to NHB are being prepared and would be circulated separately.

The above instructions would effective from 01.04.2017.

(V. K. Sharma)
Joint Director(Coord.)

Distributions: All concerned



Ministry of Agriculture & Farmers Welfare
Government of India,
Plot No.85, Sector 18, Institutional Area,
Gurgaon - 122 015 (Haryana)
Ph. 0124-2342992, Fax: 2342991, 2341225
Website: www.nhb.gov.in

NHB/CC/Guideline Revision/2017-18

May 1, 2017

OFFICE ORDER

In continuation to our Office Oder of even number, dated 12.04.2017, the revised application format is enclosed herewith for seeking In Principle Approval (IPA) under following schemes of National Horticulture Board:-

- (i) Development of Commercial Horticulture through Production and Post Harvest Management of Horticulture Crops, and
- (ii) Capital Investment Subsidy Scheme for Construction/Expansion/Modernization of Cold Storages/Storages of Horticulture Produce

It has been decided that at present applications from applicants belonging to SCP/TSP across the country and all categories of NE Region will be accepted for issuance of IPA. Orders for acceptance of IPA applications from applicants belonging to General category will be issued separately.

This issues with the approval of Competent Authority.

(Brajendra Singh)
Deputy Managing Director

Encls: Revised IPA Application format

Distribution:

All Concerned

General Instructions for Filling up of IPA application

- 1. In Principle Approval (IPA) is mandatory for availing financial assistance under subsidy schemes of NHB.
- 2. Before submitting application, applicants should carefully read and understand operational guidelines of the relevant scheme available on website: http://nhb.gov.in and ensure that financial assistance sought is as per the notified scheme and they fulfill the eligibility criteria.
- The applicant seeking In Principle Approval should submit application to the Board in the prescribed application format, available on website: http://nhb.gov.in with all necessary enclosures as specified in corresponding annexure given in the individual schemes details, to the nearest designated Regional Office or Head Office of NHB, as the case may be.
- 4. To ensure that your application is processed in a timely manner, make sure that the application is fully completed, signed and submitted with necessary enclosures. Each column in the application form should be filled in with complete information, as required. Please complete the checklist to ensure you have attached the required supporting documentation.
- 5. Submit your application to our office in following manner:
 - (i) Application for project costing up to Rs. 50 lacs: Your nearest designated centre of State as per Address given in Annexure 1
 - (ii) Application for project costing over Rs. 50 lacs: NHB Head Office on following address:

Managing Director, National Horticulture Board, Plot No. 85, Sector-18, Institutional Area, Gurgaon (HR) – 122015

- 6. On receipt of the application and enclosures the Board/State Office will acknowledge receipt of the application. The receipt & acknowledgment does not necessarily mean the approval of application, unless it is found to be feasible in all respects during the time of final scrutiny and evaluation.
- 7. If ineligibility of an applicant is found during scrutiny of the application at the acceptance stage, it will be informed to the applicant to correct the deficiency/ submit required documents, failing which the entire application and enclosures will be returned to the applicant to facilitate submission of complete application
- 8. Applicants qualifying the eligibility criterion will be issued In Principle Approval (IPA) subject to availability of fund.
- 9. If you are unsure about any of the information that is required in the application, it is important that you may contact the nearest NHB Office in your State or writes to Concerned Area Officer, NHB HQ Gurgaon for clarification.
- 10. Incomplete, Unsigned and undated application will be rejected forthwith.

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- 11. Components of projects not forming part of bank appraisal note are not eligible for NHB subsidy.
- 12. Incomplete project/ NPA projects and default cases shall not be eligible for subsidy and subsidy will be called back in such cases with interest.
- 13. Term Loan need to be essentially linked with Aadhaar number of beneficiary.
- 14. Over writing should be avoided. Over writing in all cases should be duly authenticated.
- 15. Status of the project is regularly updated on NHB Website and applicants may get latest status of their project by visiting our website. Applicants are also advised to give their mobile number for SMS alerts and e-mail ID for faster communication.

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Check list of required documents for seeking In Principle Approval (IPA)

Name of Scheme: "Development of Commercial Horticulture through production and post Harvest Management"

Sr. No.	PARTICULARS	Yes/No			
1.	IPA Application in prescribed format				
2.	Prescribed Cost of Application Form & Scheme Brochure				
3.	Certified copy of Record of Rights over the piece of project land. In case of lease of land for the project, a certified copy of lease deed which should be registered at the time of submission of IPA application				
4.	Detailed Project Report (DPR) duly signed by promoter on each				
5.	Certified copy of Detailed Term Loan Sanction letter of lending				
6.	Certified copy of Caste Certificate issued by Competent Authority in case of SC/ST applicants				
7.	Certified copy of Aadhaar Card of applicant (s)				
8.	In case of Company/partnership firms (i) Certified copy of Company/Partnership registration certificate issued by Competent Authority, if applicable (ii) Certified copy of MoA/Bye Laws (iii) Certified copy of Board of Directors Resolution duly passed and authorizing signatory of application to apply for IPA (iv) Certified copy of latest Audit Report, if applicable				
9.	Basic data sheet for Banana Ripening Unit/Reefer Van only				

ANT 1237

IN PRINCIPLE APPROVAL (IPA) APPLICATION FORM

Name of Scheme: "Development of Commercial Horticulture through production and post Harvest Management"

(To b	e signed on each page by the applicant. Part-II of this form need to be fill	led only in case of Banana ripening unit)
1) 2)	Date of application Control No. : (to be given by NHB)	
		Affixed duly singed PHOTO here

To,

The Centre In-Charge National Horticulture Board

(Only projects up to Rs. 50.00 Lakh may be sent to concerned State Office of NHB)

To
The Managing Director
National Horticulture Board
Plot No. 85, Sector-18, Institutional
Area, Gurgaon-122015
(Haryana)

(Projects above Rs. 50.00 Lakh may be sent to Head Office of NHB at Gurgaon and a copy of the same to concern State Office too)

A. GROWER/ENTREPRENEUR

1.	Name				
	Permanent Addre	ess			
	Postal Address				
	Mobile				
	Fax				
	Email				
2.	Category	SC	ST	OBC	EX-SERVICE MAN
	Please (√)				
3.	Please (√) Constitution	Society/ a of Society	s /Partnership Fir Society register Act/ a company/ oducers Compan	ed under Regist self-help group	ration)/
		Society/ a of Society Farmer Pro	Society register Act/ a company/	ed under Regist self-help group	ration
 4. 5. 	Constitution	Society/ a of Society Farmer Pro- Female)	Society register Act/ a company/	ed under Regist self-help group	ration)/

Signature of applicant

7.	Promoters/beneficiary profile	
	i. Principle Promoter/Beneficiary	
	ii. Others	
	iii. In case of companies-Registration number & date ofRegistering authority	registration

B. PROPOSED ACTIVITY

B-I. (Cultivation/PHM/Primary Processing/ Nursery/ Mushroom/Tissue Culture/Others)

1.	Name of the Pro	ject							
2	Location								
	Survey/Khasra N	0.							
	Village								
	Taluka								
	District								
	State					Trick Control			
3.		d under the project	in details						
		ultivation/project							
	Name of the	Variety (S)		Area	1141	o. of	Source		Density of
	crop			(Acres)	pl	ants	plantin	The second second	plantation
							materi	al	
	(b)PHM Activity			Grading	Q,	Pre-coo	ling	Dof	er Van
	Please (V)			packing	a	116-000	iii ig	Keit	er vari
				packing					
	(c) Primary prod	essina							
		with details of pro	ducts						
		(Not covered in a	to c)						
	- Activity in brief								
								E.O.	

B-II. Whether proposed activity in application is

Sr. No.	Particular	Yes/No
(a)	Completely a new activity (if No, the details of pre-existing activity or any component thereof included in the application should be indicated clearly)	
(b)	Whether any subsidy has been availed for the proposed proposal/ activity or component thereof from Central Govt. or any of its Agencies. (if YES, please indicate clearly in detail)	

Signature of applicant

NEXX 3/2018

C. PROPOSED PROJECT COST (COMPONENT-WISE)

Sr. No.	Component/Items			Proposed Cost (Amount in Rs.)
(a)	Cultivation Expenses			
1.	Cost of Cultivation			
	(i) Cost of Planting material			
	(ii) Input Cost			
	(iii) Cost of labour			
2.	Irrigation			
	(i) Bore-well/Tube-well (new/old)	- and a second		
	(ii) Cost of pipeline (length, diamete	r & type of ma	iterial used)	
	(iii) Water harvesting pond (existing,	/new & size)		3 9 9
	(iv) Other expenditure, if any (pl. sp	ecify)		
3.	Micro Irrigation, use of plastic m			
	(i) Cost of drip irrigation			
	(ii) Cost of sprinkler			
NII.	(iii) Cost of plastic mulching			
	(iv) Other expenditure, if any (pl. sp	ecify)	<u> </u>	
4.	Infrastructure			
	(i) Store			
	(ii) Labour quarter			
	(iii) Other expenditure, if any (pl. s			
5.	Farm mechanization			
	Cost of tractor and accessories			
	II) Other tolls and equipments (item	n wise)		
6.	Land development (including diggin	g of pit & fenc	ting	
7.	Cost of Land, if purchased			D. L Consider
8.	Creation of controlled atmosphere	Area (sq. mtrs)	Cost (Rs. in lakh)	Rate per Sqmeter
	a) Green house/poly house (size)		THE WAR PERSON	
	b) Shade net (size)	100-11-1-1-1		
	c) Other Components			
	Total			

(B) POST HARVEST INFRASTRUCTURE

Sr. No.	Component/Items	Proposed Cost (Amount in Rs.)
1.	Cost of grading/packing house (Size)	
2.	Cost of grading/packing line	
3.	Cost of pre-cooling unit (capacity)	
4.	Cost of refrigerated van (capacity)	
5.	Zero Energy Cool Chamber	
6.	Other components, if any (pl. specify)	
	Total	

(C) PRIMARY PROCESSING

Sr. No.	Particulars	Details to be given
(i)	Activity	
(ii)	Capacity in MT/day	
(iii)	Capacity in MT/annum	
(iv)	Name the product of primary processing	Signature of applicant

Signature of applicant

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Sr. No.	Component/Items	Proposed Cost (Amount in Rs.)
1.	Cost of Civil Constructions	
2.	Cost of Plant & Machinery	
3.	Other components, if any (pl. specify)	
	Total	

D. PROPOSED MEANS OF FINANCE

Sr. No.	Particulars	Proposed Amount (Rs. in lakh)
(i)	Promoter's share	
(ii)	Bank/FI term loan	
(iii)	Proposed subsidy from other sources, if any a) Form State Govt. b) From Central Govt. other than NHB	
	Total	

(Note: Unsecured loans from friends/relatives will not be treated as equity)

Sr. No.	Particulars	Proposed Amount (Rs. in lakh)
1.	Expected back-ended subsidy from NHB	

(NHB subsidy will be considered as per Board's guidelines and applicable cost norms, if found in order, but not guaranteed)

E. EXISTING STATUS OF PROJECT

(Please	give	details	about	the	activities	of	the	proposed	l project	already	completed
at the t	ime o	f subm	ission	of a	pplication	of	In	Principle	Approva	I (IPA)	

- F. Whether any assistance in the form of soft loan and subsidy has been availed by the beneficiary earlier from the National Horticulture Board? If yes, give details thereof.
- G. Whether any subsidy has been availed from the Board, other Central Govt. organization or State Govt. for the same activity or component thereof on same piece of land, Khasra no. etc.?

DETAILS OF SUBSIDY, IF AVAILED FROM:

Sr. No.	Name of Organization	Subsidy amount (Rs.)
(a)	MoFPI	
(b)	APEDA	
(c)	Other sub schemes of MIDH including NHM	
(d)	RKVY	
(e)	HMNEH/Technology Mission	
(f)	Others	

Signature of applicant

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NAME OF THE BANK/FI FROM WHERE THE TERM LOAN HAS BEEN H. SANCTIONED (Please enclose a certified copy of detailed Term Loan Sanction Letter of Bank/FI).

Sr. No.	Particulars	Details to be given
a)	Name of Bank	
b)	Branch	
(c)	Bank Code	
(d)	Date & Amount of sanction of Term Loan	
(e)	Details of release of term loan, if any:	
(f) -	Whether Term Loan is linked with Aadhaar* Number – Yes/ No	

^{*} Aadhaar linkage is mandatory

I. DETAILS OF LAND

Sr. No.	Particulars	Details to be given
I)	Whether own land (ancestral/purchased):	
II)	Whether leased If so, how many years lease	
iii)	Whether lease/tenancy/contract is registered with the Competent Registration Authority	

(Copy of the proof of land title be enclosed)

J. IMPLEMENTATION SCHEDULE OF PROPOSED ACTIVITY

Sr. No.	Particulars	Details to be given		
i)	Proposed month for start of proposed project			
ii)	Proposed month for plantation			
iii)	Expected date/month of first commercial crop			
iv)	Proposed month for start of unit in case of processing			
v)	Expected month of completion of project			

MARKETING OF PRODUCE

Details of marketing tie-up (Backward/forward linkage)

COST OF APPLICATION FORM/ SCHEME BROCHURE AND MODE OF PAYMENT WILL BE AS UNDER:

Sr. No.	Cost of project	Amount of Fee	Mode of Payment
1.	Projects costing up to Rs. 10.00 lakh	Rs. 1000/-	Demand Draft drawn in favour of
2.	Projects costing above Rs. 10.00 lakh and up to Rs. 20.00 lakh	Rs. 2000/-	National Horticulture Board payable at Gurgaon (Haryana) for
3.	Projects costing above Rs. 20.00 lakh and up to Rs. 50.00 lakh	Rs. 5000/-	projects costing Rs. 50.00 lakh & above and at concerned state
4.	Projects costing above 50.00 lakh	Rs. 10000/-	office where project cost is below Rs. 50.00 lakh.

The above prescribed cost of application form and brochure will be non- refundable.

M. DETAILS OF INSTRUMENTS/DEMAND DRAFT

Name of the issuing Bank Branch	Demand Draft No.	Date	Amount(Rs.)
		Si	gnature of applicant
	5	XX 5100	

N. NAME & ADDRESS OF CONSULTANT WHO PREPARED THE PROJECT REPORT (DPR).

SELF DECLARATION

I hereby declare and certify that information/ contents as above furnished by me/us in the application are true to the best of my/our knowledge & belief and nothing material has been concealed. In case, any information furnished in the application is found false, my/our application may be rejected out rightly at any stage by the Board.

Verified that the information given in the application form is true to the best of my knowledge and belief and nothing material has been concealed.

(Signature of the Applicant)
Name & Address:

Place:

Date:

Mobile No: Telephone/Fax No. E-mail:

Enclosures:

1. Prescribed Cost of Application Form & Scheme Brochure

- Certified copy of Record of Rights over the piece of project land. In case of lease of land for the project, a certified copy of lease deed which should be registered at the time of submission of IPA application
- 3. Detailed Project Report (DPR) duly signed by promoter on each page of DPR
- 4. Certified copy of Detailed Term Loan Sanction letter of lending Bank/FIs
- 5. Certified copy of Caste Certificate issued by Competent Authority in case of SC/ST applicants
- 6. Certified copy of Aadhaar Card of applicant (s)
- 7. Basic data sheet for Banana Ripening Unit/Reefer Van only.

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PART-II BASIC DESIGN DATA SHEET FOR BANANA RIPENING UNIT

SI. No.	Specifications	Units	Parameters
A.	Capacity Details		
1.	Holding/Storage Capacity (in terms of banana)	MT	
2.	Room Volume	M ³	
3.	Room Size (lxwxh)	Each in M	
4.	Number of ripening rooms	Lacrimit	
5.	Peak ambient temperature	Deg C	
B.	Pallets	Deg c	
6	Size of pallets (lxwxh)	(MMxMMXMM)	
7.	Size of crate/box (lxwxh)	(MMxMMXMM)	
8.	Crates/box per pallet	No.	
9.	No. of pallets in each chamber	No.	
10.	No. of tiers	No.	
11.	Pallet Lifting System	INO.	
C.	Ripening Parameters		
12.	Ripening Room Temperature	Deg C	
13.	Relative Humidity	%age	
14.	Co2 Concentration	PPM	
15.	Ethylene concentration	PPM	
16.	Product incoming Temperature		
17.	Pull down period	Deg C Hours	
18.	Air Flow	CMH	
D.	Insulation Details	CIMIT	
19.	Wall, Ceiling and partition	Describe the	
	wan, centing and partition	material, thickness	
20.	Floor Types	Describe the material, thickness and U value	
21.	Exterior wall construction	Describe the material and type of wall construction	
Ε.	Doors		
22.	Door Size (w x h x thickness)		
23.	Types of door used	Hinged/sliding/sec tional overhead doors	
24.	Number of Doors	Nos.	
25.	Emergency measures	List of safety provision provided	
26.	Gasket	Type of gasket seal used	The state of the s
	Refrigeration load		
7.	Estimated refrigeration load per	kW	

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	chamber			
28.	Total refrigeration load	kW		
G.	Refrigeration System			
29.	Refrigerant used			
30.	Refrigeration system			
31.	Refrigeration capacity	kW and total numbers of condenser		
32.	COP (Coefficient of Performance)			
33.	Evaporators/condenser details	Types, capacity, delta T of coil to room temp. etc.		
34.	Air Flow	Provide the air flow of evaporator in CFM.		
35	Static pressure and fan rating	Provide the static pressure of evaporation (pa) and fan rating (kw).		
36	Manufacturer name	Name of manufacturer		
Н	Ripening system			
37	Ethylene applicator	Maker name		
38	Number of cylinders and capacity per cylinder	Provide the number of cylinders and its capacity per cylinder.		
39	Portable/Centralized	Provide the type of ethylene generator.		
40	Type of controller and Ethylene ppm range	Specify the type of controller and ppm range of ethylene.		
41	CO ₂ exhaust system	Provide the CO ₂ exhaust system details.		
42	Humidifier system details	Details of the humidifier used.		
1	Others			
43	Lighting load	KW.		
	Refrigeration load	KW.		
44	Remgeration load	IVVV.		

All mandatory rules & regulations (BIS, ISO, IS etc.) relevant to the item must be complied with.

Name in Capital Letters Signature & Seal of Consultant seal who has designed ripening chamber and is going to provide supervision during Construction and commissioning Signature and Name of Applicant with

MAX STOOLY

Basic Design Data Sheet for Refer Van

S. No.	Component: Refrigerated Transport	Description
Α	Truck Details	
1	Chassis number	Provide the chassis details
2	Make and Engine Model	Provide the make and engine model number
3	Engine power	Provide the power of prime mover engine in KW
4	Rated Payload	List the carrying capacity of vehicle in tons
5	Outer dimensions	Provide the (L \times B \times H)m of the outer dimension of vehicle
6	Cabin details	Describe the details of the cabin – sitting, sleeping and driver comfort
7	Total number of tires	List the total number of tires of the refrigerated transport used
В	Insulated Container	
8	Manufacturer name	Provide the name of manufacturer
9	Insulating material and cladding	Type of cladding, insulating material along with its U-value and thickness
10	Internal/External Dimension of insulated box	Provide the internal/external dimensions of insulated box
11	Flooring details	Described the details of the floor section (T-section, U-section etc.)
12	Weight of insulating box	Proved the weight of the insulating box in kgs.
C	Refrigeration Unit	
13	Maker and Model number	Provide the make and model number
14	Refrigerant used	Provide the technical name of refrigerant
15	Refrigeration capacity	Provide the refrigeration capacity in KW
16	Defrosting system	Provide details of defrosting system used
17	Air flow and pattern	Air flow in cubic meter per hour and flow pattern (top-down, bottom-up)
18	Total power consumption	Provide the total power consumption in KW
19	Diesel/electric auto-switching	Specify the Diesel/ electric auto-switching mechanism
D	Data Logging/ GPS	
20	Data loggers	Type and number of date loggers/ recording capability
21	GPS	Maker and model of GPS unit

Code	Codes and References				
1	ISO/ TC 104	Freight containers			
2	ISO 668:2013	Classification, dimensions and ratings			
3	ISO/NP 1161:1990	Corner fittings			
4	ISO 1496 /2 : 1996	Specification and testing			
5	ISO Code 22R1, 45R1	Size of container			
6	ISO 6346: 1995	Coding, Identification and Marking			
7	ISO -14001:2004	Environmental Management			
8	ISO 1496/2	Performance test of thermal appliances			

All mandatory rules & regulations (BIS, ISO, IS etc.) relevant to the item must be complied with.

Name in Capital Letters Signature & Seal of Consultant seal who has designed ripening chamber and is going to provide supervision during Construction and commissioning Signature and Name of Applicant with

2/2017

Annexure - 1 List of National Horticulture Board Offices

National Horticulture Board Plot No. 60, 3rd Floor, Krishna Apartment, Azad Society, Ambawadi Ahmedabad-380 015 Tele/Fax:079-26766416, 26766413 E-mail: nhbahd@yahoo.co.in National Horticulture Board	National Horticulture Board HPMC, 2nd Floor, Nigam Vihar, Shimla-171 002 Tele/Fax:0177-2622908/2623801 E-mail: nhbhp2004@yahoo.com National Horticulture Board
No.14/43, 2 nd Floor, 1 & 2 Stage Industrial Suburb, Tumkur Road, Yeshwantpur Bangalore-560 022 Tele/Fax 080-23371935, 23374149 E-mail: nhbblr@yahoo.com	Horticulture Complex Rajabagh Srinagar-190008 Tele Fax 0191-2474349 (PP) E-mail :nhbjammu@rediffmail.com
National Horticulture Board R-24, 2 nd Floor, Near Hindustan Times MP Nagar, Zone-1, Bhopal – 462011 (MP) Tele/Fax:0755 – 2550768,2761741 Email :bplnhb@rediffmail.com	National Horticulture Board No. UR-10, Uppalam Road, Statue, Thiruvanantha Puram-695001 (Kerala) Tele/Fax: 0471-2470505, 2470506 E-mail: nhbtvm@gmail.com
National Horticulture Board N-1/7, I.R.C. Village, Nayapalli, Opp. CRPF Gate Bhubaneshwar- 751015(Odisha) Tele/Fax:0674-2558134,2559620 Email :nhbbbsr@gmaill.com	National Horticulture Board Municipal Stadium Complex Vijayawada-520010 Tele/Fax 0866-2473351
National Horticulture Board Room No. 317, 4 th Floor Central Facility Building, APMC Fruit Market Complex, Sector-19, Turbhe Vashi (Navi Mumbai)- 400703	National Horticulture Board Hall No 307, A-2, 3rd Floor South Block, Bahu Plaza Rail Head Complex, Jammu-180 004
Tele/Fax 022-27830107 E-mail: nbhpune@gmail.com	Tele/Fax:0191-2474349, 2474112 E-mail: nhbjammu@rediffmail.com
National Horticulture Board Mayukh Bhawan, 2 nd Floor, Salt Lake, Sector-II Kolkata -700091 Tele/Fax: 033-23377182,23211259 E-mail: nhb kolkata@yahoo.com	National Horticulture Board S.C.Panwar Market Yard, Commercial Complex No. 1, Peth Road Panchwati, Nashik-422003 Tele/Fax:0253-2534558,2533715 E-mail:nhbnashik@gmail.com
National Horticulture Board S.C.O. 85, 2nd Floor, Sector - 40-C Chandigarh-160 047 Tele/Fax:0172-2625249, 2625269 E-mail : nhb chd@yahoo.co.in	National Horticulture Board MCAER Building 132/B, Bhambhurda Bhosale Nagar, Pune-411 007 Tele/Fax: 020-25530582-83 E-mail: nhbpune@gmail.com

National Horticulture Board National Horticulture Board C/o. Superintendent Garden, Shahjan 19-22. (Garage) Krishi Bhawan Park. New Delhi-11001 Tajganj, Agra-282001 Tele/Fax 011-23097015,23073019 E-mail:nhbdelhi@gmail.com Tele/Fax 0562-2331470 National Horticulture Board National Horticulture Board C/O Deputy Director (Horticulture), Govt. of Chang Choop Building UP, Company Bagh, Kachahari, Varanasi-Near Nayuma Television, 221001 Tibet Road. Gangtok-737 101 E-mail :nhbvaranasi@gmail.com Tele/Fax:03592-208453,220975 E-mail: nhbgangtok@yahoo.com National Horticulture Board National Horticulture Board Residency Kothi (Complex) Chhibber House, 4th Floor, Indore-452001 Dispur P.O., Guwahati-781 005 Tele/Fax 0731-2701522 Tele/Fax:0361-2343719. 2340695 E-mail: nhbghy@gmail.com National Horticulture Board National Horticulture Board Laxmi Niwas, Krishi Bhawan No.2, 5-9-195, William Niwas, Chirag Ali Kankey Road, Ranchi-834 008 Lane, ABIDS, Hyderabad-500 001 Tele/Fax:0651-2230132,2233832 Tele/Fax:040-23200806, 23201140 E-mail :nhbranchi@gmail.com E-mail: nhb.govhyd@gmail.com National Horticulture Board National Horticulture Board 310/311, 3rd Floor, I.D. Shopping Centre Second Floor, Modak Privay, Plot No. 16 & Near Shivaji Stature, Sahara Darwaja 17, Near New, Atish Market, Shipra Path, Surat-395003 Mansarovar. Jaipur 302 020 Tele/Fax 0261-2311343 Tele/Fax:0141-2399405, 2390818 E-mail: nhbjpr@yahoo.com National Horticulture Board National Horticulture Board Plot No. 142, 1st Floor C/o. Director of Horticulture Seikkilar Street Extension Horticulture Complex, Bibikulam Cantt. Road Madurai -625002 Jalandhar (Punjab) Tele/Fax 0452-2531195 Tele/Fax 0181-223048 National Horticulture Board National Horticulture Board H No. 470 C/o. Director of Horticulture Behind Ashoka Cinema 2, Sapru Marg Udyan Bhawan Diwan Colony Lucknow-226001 Karnal-132001 Tele/Fax 0522-2623374/2202420,4072096 E-mail: nhblko@rediffmail.com National Horticulture Board National Horticulture Board C/o. Directorate of Horticulture Module No.37, 2nd Floor, Room No. 13, 2nd Floor SIDCO Readymade Garment Complex, Kheti Bhawan, Ranjeet Avenue Industrial Estate Guindy, Amritsar- 143001 Chennai-600 032 Tele/Fax 0183-2500236 Tele/Fax:044-22501151/22500965 E-mail: nhbtn@yahoo.com

NEW Show

National Horticulture Board National Horticulture Board Vikas Bhawan, Fazilka Road 401, 4rth Floor, Lotus Plaza, Abohar-152116 Near Lakshmi Bhawan, Old Post Office Road. Tele/Fax 01634-230822 Gokulpeth, Nagpur-440 010 Tele/Fax:0712-2525030,2523110 E-mail: nhbnagpur@rediffmail.com National Horticulture Board National Horticulture Board H.No. 42, First Floor, Jal Vihar Colony, Room No 501, 502, 5th Floor, Near Rotary Club of India, Telibandha Boring Road, Verma Centre Raipur-492001 (Chhattisgarh) Patna-800 001 Tele/Fax:0771-2423992 Tele/Fax:0612-2541218,2541128 E-mail: nhbraipur@yahoo.co.in E-mail : nhbpatna@gmail.com National Horticulture Board National Horticulture Board C/o Regional Institute of Rural Naveen Sabzi Mandi Ashthal, Krishi Development, Utpadan Mandi Samiti, Niranjanpur, Delhi-Saharanpur Road, Dehradun- 248171 Baraut (Baghpat) Tele/Fax 0135-2761922,2762767,2725517 Tele/Fax:01234-251723 E-mail: nhb dehradun@yahoo.com E-mail: nhbbaraut 2007@yahoo.com

mar /5/2017

Check list of required documents for seeking In Principle Approval (IAP)

Name of Scheme: "Capital Investment Subsidy Scheme for Construction/Expansion/ Modernization of Cold Storages and Storages of Horticulture Produce"

Sr. No.	PARTICULARS	Yes/No
1.	IPA Application in prescribed format	
2.	Prescribed Cost of Application Form & Scheme Brochure	
3.	Certified copy of Record of Rights over the piece of project land. In case of lease of land for the project, a certified copy of lease deed which should be registered at the time of submission of IPA application	
4.	Detailed Project Report (DPR) duly signed by promoter on each page of DPR	
5.	Certified copy of Detailed Term Loan Sanction letter of lending Bank/FIs	
6.	Certified copy of Caste Certificate issued by Competent Authority in case of SC/ST applicants	
7.	Certified copy of Aadhaar Card of applicant (s)	4
8.	In case of Company/partnership firms (i) Certified copy of Company/Partnership registration certificate issued by Competent Authority, if applicable (ii) Certified copy of MoA/Bye Laws (iii) Certified copy of Board of Directors Resolution duly passed and authorizing signatory of application to apply for IPA (iv) Certified copy of latest Audit Report, if applicable	
9.	Basic Data Sheet (Available at NHB Website http://nhb.gov.in)	
10.	Please attach a Plan & Layout of the proposed Cold Store unit in accordance to the Statutory Building By-Laws and BIS Building Codes & Standards duly approved by a Registered Architect and Structural Engineer. The drawings should detail out insulation type, thickness, and fixing methodology in sectional details	
11.	Please attach detailed heat load calculation sheets of the proposed cold store unit in accordance to the prescribed Technical Standards and Guidelines duly approved by a Qualified Engineer	
12.	Please attach Detailed Technical Data Sheets of each equipment namely Compressors, Condensers, Cooling Towers, Air Cooling Units giving General Layout, Dimensions, Material of Construction, Rated Capacity, Operating Parameters and COP (please note that the Air Cooling Unit data sheet should include heat transfer area, fin spacing, no. of rows, air flow, face velocity, fan static, air throw, Fan Motor BKW/KW, fin spacing, etc) duly Certified by the respective equipment manufacturers with reference to the Relevant Codes & Standards.	

IN PRINCIPLE APPROVAL (IPA) APPLICATION FORM

Name of Scheme: "Capital Investment Subsidy Scheme for Construction/Expansion/
Modernization of Cold Storages and Storages of Horticulture
Produce"

(To be signed on each page by the applicant)

1) Date of application

2) Control No. : (to be given by NHB)

Affixed duly singed PHOTO here

To
The Managing Director
National Horticulture Board
Plot No. 85, Sector-18, Institutional
Area, Gurgaon-122015 (Haryana)

A. BENEFICIARY/ENTREPRENEUR

1.	Name				
	Permanent Addre	ess			
			100		
	Postal Address				
	Mobile				
	Fax				
	Email				
2.	Constitution	Partnership Firm Society/ a Society Registration of S	pany/Joint Promo n/ Trust/Cooperat ety registered und Society Act/ self-h Producers Compa	ive der nelp ny	
3	In case of	SC	ST	OBC	EX-SERVICE MAN
	Individual Please (√) Category				
4.	Gender (Male/	Female)			Age:
5.	Aadhaar Numbe				
6.	Occupation				

Signature of applicant

NAX 3231

. Promoters/benefici	ary profile	
i. Principle Promo	ter/Beneficiary	
ii. Others		
iii. In case of comp	panies	
 Registration num registration 	ber & date of	
 Registering authorities 	prity	
 Act under which 	Registered	
 Authorized share 		
Paid up share cap of last financial	pital (by end	
Reserve & Surplu last financial ye	us (by end of	

B. PROPOSED ACTIVITY

1.	Name of the F	Project						
2	Location							
	Survey/Khasra	a No.						-
	Village		THE RESERVE AND THE RESERVE AN					
	Taluka							
	District							
	State			· C				
3.	Component	Onion Stora	e/CA Storage/Mod age/ Modernization	n of Existing				
4.	(A) EXISTI	NG CAPACIT	TY, IF ANY CHA	MBER (S) CAI	PACITY	INMI		_
	Chamber- 1							
	Chamber- 2			1 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -				-
	Chamber -3							
	Chamber -4							
	Total Capacit	Total Capacity (B) PROPOSED NEW CAPACITY CHAMBER (S) CAPACITY IN MT						
		DSED NEW C	APACITY CHAI	AREK (2) CAPA	ACITI	IN III		
	Chamber- 1							
	Chamber- 2							
	Chamber -3	U Carlo						
	Chamber -4							
	Total Capacit	ty		D CHAMPED	(5)	CAPACITY	IN I	МТ
	MODI	IBER/CAPAC ERNIZATION	CITY PROPOSI	CHAMBER	(3)	- CAFACITT		
	Chamber- 1							
	Chamber- 2							
n.	Chamber -3		<u> </u>					
	Chamber -4							
	Total Capaci	ty						
	(D) JUSTIF CAPAC	ICATION FO	OR ADDITIONA NIZATION				2002 20	

Signature of applicant

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B-II. WHETHER PROPOSED ACTIVITY IN APPLICATION IS

Sr. No	PARTICULAR	Yes/No
(a)	Completely a new activity (if No, the details of pre-existing activity or any component thereof included in the application should be indicated clearly)	
(b)	Whether any subsidy has been availed for the proposed proposal/ activity or component thereof from Central Govt. or any of its Agencies. (if YES, please indicate clearly in detail)	

C. PROPOSED PROJECT COST (COMPONENT-WISE)

Sr. No	Component/Items	Proposed Cost (Amount in Rs.)
1.	Cost of civil constructions	
2.	Cost of plant & machinery	
3.	Other components, if any (pl. specify)	
	Total	

D. PROPOSED MEANS OF FINANCE

Sr. No	Particulars	Proposed Amount (Rs. in lakh)
(i)	Promoter's share	
(ii)	Bank/FI term loan	
(iii)	Proposed subsidy from other sources, if any a) Form State Govt. b) From Central Govt. other than NHB	
	Total	

(Note: Unsecured loans from friends/relatives will not be treated as equity)

Sr. No	Particulars	Proposed Amount (Rs. in lakh)
1	Expected back-ended subsidy from NHB	

(NHB subsidy will be considered as per Board's guidelines and applicable cost norms, if found in order, but not guaranteed)

E. EXISTING STATUS OF PROJECT

(Please give details about the activities of the proposed project already completed at the time of submission of application of In Principle Approval (IPA)

- F. Whether any assistance in the form of soft loan and subsidy has been availed by the beneficiary earlier from the National Horticulture Board? If yes, give details thereof.
- G. Whether any subsidy has been availed from the Board, other Central Govt. organization or State Govt. for the same activity or component thereof on same piece of land, Khasra no. etc.?

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DETAILS OF SUBSIDY, IF AVAILED FROM:

Sr. No	Name of Organization	Subsidy amount (Rs.)
(a)	MoFPI	
(b)	APEDA	
(c)	NHM	
(d)	HMNEH/Technology Mission	
(e)	RKVY	
(q)	Others	

H. NAME OF THE BANK/FI FROM WHERE THE TERM LOAN HAS BEEN SANCTIONED (Please enclose a certified copy of detailed Term Loan Sanction Letter of Bank/FI).

Sr. No.	Particulars	Details to be given
a)	Name of Bank	
b)	Branch	
(c)	Bank Code	
(d)	Date & Amount of sanction of Term Loan	
(e)	Details of release of term loan, if any:	
(f)	Whether Term Loan is linked with Aadhaar Number* – Yes/ No	

^{*} Aadhar linkage is mandatory

I. DETAILS OF LAND

Sr. No.	Particulars	Details to be given
I)	Whether own land (ancestral/purchased):	
II)	Whether leased If so, how many years lease	
iii)	Whether lease/tenancy/contract is registered with the Competent Registration Authority	

(Copy of the proof of land title be enclosed)

J. IMPLEMENTATION SCHEDULE OF PROPOSED ACTIVITY

Sr. No.	Particulars	Details to be given
i)	Proposed month for Start of project	
ii)	Proposed month for Civil Construction	
iii)	Proposed month for Installation of plant & machinery	
iv)	Expected month of Completion of project	

K. MARKETING OF PRODUCE

Signature of applicant

man / Short

L. COST OF APPLICATION FORM/SCHEME BROCHURE AND MODE OF PAYMENT WILL BE AS UNDER:

Sr. No.	Cost of project	Amount of Fee	Mode of Payment
1.	Projects costing up to Rs. 10.00 lakh	Rs. 1000/-	Demand Draft drawn in favour of
2.	Projects costing above Rs. 10.00 lakh and up to Rs. 20.00 lakh	Rs. 2000/-	National Horticulture Board payable at Gurgaon (Haryana) for
3.	Projects costing above Rs. 20.00 lakh and up to Rs. 50.00 lakh	Rs. 5000/-	projects costing Rs. 50.00 lakh & above and at concerned state
4.	Projects costing above 50.00 lakh	Rs. 10000/-	office where project cost is below Rs. 50.00 lakh.

The above prescribed cost of application form and brochure will be non-refundable.

M. DETAILS OF INSTRUMENTS/DEMAND DRAFT

Name of the issuing Bank Branch	Demand Draft No.	Date	Amount(Rs.)

N. NAME & ADDRESS OF CONSULTANT WHO PREPARED THE PROJECT REPORT (DPR).

SELF DECLARATION

I hereby declare and certify that:-

- 1. The information/ contents as above furnished by me/us in the application are true to the best of my/our knowledge & belief and nothing material has been concealed. In case, any information furnished in the application is found false, my/our application may be rejected out rightly at any stage by the Board.
- 2. That I have thoroughly read and examined notification F. No. 45/64/2010-Hort., dated 15.05.2015 for prescribed technical standards w. e. f. 15.05.2015
- 3. That I accept and undertake that the Technical Scrutiny of the documents by NHB or its empanelled agencies shall not in any way obviate the responsibility of the Promoter/deponent , to scrutinize his project and insure that it invariability complies to the prescribed technical standards w.e. f. 15.05.2015 vide notification F. No. 45/64/2010-Hort., dated 15.05.2015.

Verified that the information given in the application form is true to the best of my knowledge and belief and nothing material has been concealed.

(Signature of the Applicant)
Name & Address:

Place:

Mobile No:

Telephone/Fax No.

Date : Email :

Enclosures:

Prescribed Cost of Application Form & Scheme Brochure

- Certified copy of Record of Rights over the piece of project land. In case of lease of land for the project, a certified copy of lease deed which should be registered at the time of submission of IPA application
- 3. Detailed Project Report (DPR) duly signed by promoter on each page of DPR
- 4. Certified copy of Detailed Term Loan Sanction letter of lending Bank/FIs
- 5. Certified copy of Caste Certificate issued by Competent Authority in case of SC/ST applicants
- 6. Certified copy of Aadhaar Card of applicant(s)
- 7. Basic Data Sheet (Available at NHB Website http://nhb.gov.in)

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PART-2

BASIC DATA SHEET FOR COLD STORAGES

A. IDENTIFICATION

Name of Cold Storage			
Location of Cold Storage	Area / Village		Town
Education of Cold Storage	District		State
Name of Promoter Company/Owner			
Type of company (Proprietorship / Partnership / Pvt. Ltd / Ltd)			
Postal address of Promoter			
	Tel / Fax	Mob. No	E-mail
Present activity in brief	7		
Name of CEO / MD			
Name of Manager/Contact Person			Phone / Mobile No
Aadhaar Number of Applicant			

B. BASIC COLD STORE DESIGN CONSIDERATIONS

i) Commodity Storage Requirements Type of Commodities/Produce Ideal / Recommended Storage Conditions - Temperature (DB in °C) - Humidity RH (%) Range - Air Circulation (CMH/MT of Produce) - Ventilation (Air Changes/Day) - CO ₂ Range (PPM) - Produce Cooling Rate (°C/day) - Freezing Point °C - Others	
Cold Chamber Dry bulb (DB in ^o C)	
Cold Chamber RH (%)	
Max Storage period (months)	
Max product temp (°C) - at the time of loading	
Daily loading rate (MT/day) - in each cold chamber	
Loading Period (months)	

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Pull down rate (°C / day)	
Unloading Period (months)	
Daily unloading rate (MT/day) - from each cold chamber	
Ante Room Conditions (T °C & RH %)	
Sorting & Grading Area (T °C & RH %)	
Special Provisions - CIPC treatment for Process Potatoes	
Special Provisions – MA / Ethylene Control / Fumigation/ Fresh Air etc	

ii) Fresh Air / Ventilation System

Brief Description of CO ₂ Extraction / Ventilation System	
CO ₂ Concentration Control Range (PPM)	
Monitoring & Control Instrument - Type - Accuracy	
Ventilation Capacity (Max Air Changes/Day)	
Design Considerations for Energy Recovery and Preventing Wetting of Produce	

iii) Cold Store Chamber Sizing and Capacity

i). No. of chambers:

ii). Type : Mezzanine/ Palletized

iii). Max Height of Building

DETAILS	CSC 1	CSC 2	CSC 3	CSC 4
Total Capacity of Each Cold Store Chamber (MT)				
Internal Chamber Dimensions L x B x H (m)				
No. of mezzanine floors X Height (m) per floor				
Size &Weight of Bags or Boxes being stored				
Total number of Bags/Boxes stored in each Cold Store Chamber				
Total number of Bags/Boxes stored in each Cold Store Chamber				

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iv) Ante Room & Process Areas

Details	Length (m)	Width (m)	Height (m)
Ante Room			
Sorting & Grading Area			
Loading / Unloading dock			

v) Machine Room & Utility Areas

Details	Length (m)	Width (m)	Height (m)
Machine Room			
Office Area			
Toilets & Changing rooms			
Any other			

vi) Building & Construction Details

Type of construction: Civil/ Pre-engineered Building

Type of External walls of cold chambers	
Type of Internal / Partition walls	
Type of Roof / Ceiling	
Type of Internal structure / Racks	
Type of mezzanine grating	
Types of Lighting fixtures in cold Chambers	
Types of Lighting fixtures in Process & Other Areas	

vii) Insulation and Vapor Barrier

Type of Insulation: Insulating Sheets / Metal Skin Composite panels

Type of Insulation	Wall External	Internal	Ceiling/Roof	Floor
Type of material EPS / Metal Skin PUF Composite Panels / XPS/ PUR, Others				
Relevant IS Code				
Density (kg/m³)				
Thermal Conductivity at +10°C k value (W/m.K)				
Thermal diffusivity m2/h				
Water vapour transmission rate, ng/Pa.sm, Max.				
Water absorption after 24h immersion, percentage by mass.				
Relevant IS Code of Practice for Thermal Insulation of Cold Store				

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Total Insulation Thickness (mm)	
No. of layers & Thickness / layer (mm)	
Type of vapor barrier & thickness (microns)	
Type of Bituminous/Sticking Compound	
Type of Cladding / Covering/External Finish	
Locking/Fixing & Sealing System in case of Metal Skin Composite Panels	
Any other info	

viii) Cold Store Doors & Air Curtains

Type of Insulation	Details
No. of Insulated doors	
Type hinged / sliding	
Insulation Material EPS / PUF / Others	
Thickness of Insulation (mm)	
Type of cladding	
Size of door opening	
Provision of Strip curtains – nos. & overlap %	
Air curtains, if any	
Others	

ix) Material Handling

Proposed Practice: Manual / Semi Automated /Automated
Procedure Brief Description

Material Handling Procedures & Equipments

Cap of Electric Elevator Rating of motor (kW)

Any other device

x) Grading, Sorting Washing & Packing Line (optional)

Proposed Practice: Manual / Semi Automated /Automated

Procedure	Brief Description
Process Line	
Total Connected Load (kW)	

Please attach a Plan & Layout of the proposed Cold Store unit in accordance to the Statutory Building By-Laws and BIS Building Codes & Standards duly approved by a Registered Architect and Structural Engineer. The drawings should detail out insulation type, thickness, and fixing methodology in sectional details.

C. HEAT LOAD CALCULATION OF COOLING SYSTEM - SUMMARY

Ambient Conditions	Summer	Monsoon	Winter
Dry Bulb Temperature (°C)			
Wet Bulb Temperature (°C)			

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Refrigeration Load Transmission Load		During Loading (kW)	During Pull Down (kW)	During Holding (kW)
Product Load				
Internal Load	Lighting load			Lain Land
	Occupancy load			
Infiltration Loa	d			
Ventilation/Fr	esh Air Load			
Equipment Load - Fan motors etc.				
Total Load (kW/24 hrs)				

Compressor Operation Hours/Day	Loading Period	
	Pull Down Period	
	Holding period	

Multipliers	Safety Factor	
	Defrost Period	

Total Refrigeration Load	Peak Period	Holding Period	Lean Period
Total Load (KW)			

Please attach detailed heat load calculation sheets of the proposed cold store unit in accordance to the prescribed Technical Standards and Guidelines duly approved by a Qualified Engineer.

D. COOLING SYSTEM DESIGN & EQUIPMENT SELECTION

i) Cooling System Configuration

Type of Refrigerant	Ammonia /Freon /Others
Type of System	Direct Exp / Gravity Feed / Overfeed
Type of compressor	Reciprocating / Screw / Scroll / Others
Type of capacity control	Automatic In steps / Step less
Type of condenser	Atmospheric / Evaporative / Shell & Tube / Plate Heat Exchanger / Other
Cooling Towers (if applicable)	FRP Induced Draft / Others
Type of cooling coil	Ceiling suspended / Floor Mounted / Others
Type of defrosting	Air / Water / Electric / Hot gas
Humidification System & Control (Brief Description)	

Signature of Consultant

Signature of applicant

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ii) Compressor Detail

Compressor Make & Mode	Nos.	Comp. RPM	Operating Parameters Evap. SST. / Cond. Temp (°C)	Refrigeratio n Capacity (KW)	Motor Rating. (KW)	Total Electric Power. (BkW)	Remarks Working /Standby
				- Charles			

iii) Condenser Details

Condenser Make & Model	Nos.	Operating Parameters Cond.Temp.(SDT)/ in/out water temp(°C) &flow (Ips)	Condenser Capacity (kW)	Electric Fan /Pump Motor Rating (kW)	Power (BkW)	

iv) Cooling Tower Details (if applicable)

Cooling Tower Make & Model	Operating Parameters DB & WB Temp, in/out water temp(°C)	Cooling Tower Capacity(KW)	Fan & Pump Capacity (CMH/LPS) & Motor (kW)	Total Electric Power (BkW)	Remarks Working /Standby

v) Air Cooling Units (ACU)

ACU Make & Model	Nos.	Operating Parameters Evap. (SST) & TD* (°C)	Cooling Capacity (kW)	Air Flow (CMH) & Face Velocity (M/S)	Material of Coil Tubes & Fins	Fin pitch (mm)	Total Fan Electric Powe (BKW)
					200 Alba.		

(*) TD - Temperature difference between Evap. (SST) °C & Return Air (at coil inlet).

Please attach Detailed Technical Data Sheets of each equipment namely Compressors, Condensers, Cooling Towers, Air Cooling Units giving General Layout, Dimensions, Material of Construction, Rated Capacity, Operating Parameters and COP (please note that the Air Cooling Unit data sheet should include heat transfer area, fin spacing, no. of rows, air flow, face velocity, fan static, air throw, Fan Motor BKW/KW, fin spacing, etc.) duly Certified by the respective equipment manufacturers with reference to the Relevant Codes & Standards.

Signature of Consultant

Signature of applicant

15/2017

E. ELECTRICAL INSTILLATION

Total Connected load (kW)	
Estimated power requirement at Peak Load Period (BkW)	
Estimated power requirement at Holding Load Period (BkW)	
Estimated power requirement at Lean Load Period (BkW)	
Capacity of Transformer (KVA) (proposed)	
Size of Capacitor for power factor correction & their operation	
Make & Capacity of standby D. G. Set (KVA)	

F. SAFETY PROVISIONS

Details of Fire Fighting equipment	Dry	
	Water based	
Handling Refrigerants & Leaks	Leak Detection	
	Handling measures	
Safety devices - LP/HP cutouts, safety	valves, shut off valves etc.	
Details of Emergency alarm system & push button system in cold chambe		
Emergency lighting in Cold chambers	& other areas	
Lightening arrestors		
Any other safety provisions		

G. CODES & STANDARDS FOLLOWED

Building Design & Structure	
Construction Materials	
Thermal Insulation & Application	
Refrigeration Equipment & Systems	
Electrical & Mechanical Systems	
Food Safety	
Others	

H. ENERGY SAVING EQUIPMENT & MEASURES

Details of Energy Saving devices	Brief Description and Savings
Light Fixtures CFL/LED	
Natural Lighting for general areas	
VFD for fans / compressors	
Refrigerant Controls and Automation	

Signature of Consultant

Signature of applicant

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Air Purger	
Power Factor Controller	
Energy recovery heat-exchanger for Ventilation System	
Renewable/ Solar Energy e.g. PV lighting	
PLC Control, & Data Acquisition	
Any other features e.g. water recycling, rain water harvesting	

I. OPERATION & MAINTENANCE

Description	Nos. / Details
Proposed staff for Operation & Maintenance	
Proposed Annual Maintenance Contracts (if any)	
Training & Preventive Maintenance procedures	
Sanitation & Hygiene practice	
Pollution Control	

J. ESTIMATED PERFORMANCE PARAMETERS OF PROPOSED COLD STORE

Parameters	Peak Period	Holding Period	Lean Period
Coefficient Of Performance (COP) of the Cold Store Unit			
Power Consumption (KWH/Day)			
Total Electricity Cost (Rs/Day)			
Electricity Cost towards Storage (Rs/ MT /Day)			

K Other Information

Place	Signature and
Date	Name of Applicant with seal

Place Date..... Name in Capital Letters
Signature & Seal of Consultant
who has designed Cold Storage
and is going to provide supervision
during Construction and commissioning

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