

# Detailed Project Report (DPR)

## : Model template

for NHB Scheme No.1 for Olive

Scheme.1	<b>Development of Commercial Horticulture through Production and Post-Harvest Management of Horticulture Crops:</b> <ol style="list-style-type: none"> <li>Open field condition</li> <li>Integrated Post Harvest Management</li> </ol>
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Crop			Tick mark
Scheme components	1. Open field condition of NHB specified crops	Within overall cost ceiling	
		+Farm Mechanisation	
		+Good Agri.Practices (GAP)	
		+Plastic Mulching	
	2. Integrated PHM		
	3.1.Integrated Pack House		
	3.2.Pack house		
	3.7 Primary Processing		
	3.8.Van		
	3.9 Retail outlet		

Submitted by

.....Applicant with full correspondence Address

Detailed Project Report (DPR) will have to be signed by the applicant (s) / authorised person ( in case of legal entity) on each page with date -along with Horticulture and Project Finance Expert wherever applicable.

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Checklist of documents to be submitted at Market Viability and Financial Viability stage and during JIT.

### Project at a Glance

1.	Applicant (s)/ Legal entity Name		
2.	Constitution / Applicant nature / beneficiary		
3.	NHB Scheme for which DPR is made		
4.	Project Activity		
5.	Nature of project- Green field/ pre-existing- expansion / component specific		
6.	Products, By-products and services		
7.	Land		
	1. Land ownership: Owned or on registered lease for minimum of 10 effective years from the date of IPA. In other words ideally one should have 11 Years of registered lease including a processing period of 1 Year from the time of application for Technical feasibility.		
	2. Project Area and Survey /khasra/ Gat/Dag No.		
	3. Project Site Address with Postal Code and Police Station Name		
8.	Technical feasibility		
	1. Agro-climatic suitability		
	2. Research institution whose technology and package of practices are proposed to be followed		
	3. Crop husbandry / PHM is based on evidence based R&D		
9.	Existence of similar project activity in the said District		
10.	Whether the project is located in the crop cluster/ hub/ belt		Yes/No
11.	Project economic period/ economic life		
12.	Total Project Cost of the proposal		
13.	<ul style="list-style-type: none"> <li>• Open field condition</li> <li>• Integrated Post Harvest Management</li> <li>• Total</li> </ul>		
14.	Project completion period ( in months)		
	Expected Implementation timeline	Commencement	
		Completion	
15.	Total Eligible Project cost as assessed by the Applicant as per NHB guidelines		
16.	Bank/ Financial Institution identified for Term loan		
17.	Proposed Means of Finance	Promoters contribution (in Lakh Rs.)&%	
Bank Term loan (in Lakh Rs.) &%			
Un secured loan (in Lakh Rs.) &%			
Total			
18.	Gestation period		
19.	Projected Key Financial Parameters	Current Ratio other than export units	
20.		CR-Export units	
		IRR /BCR	
		DSCR*	
		Average DSCR	
		Debt to Equity Ratio i.e DER	
		TOL/TNW	
		Promoters Contribution	
	Break Even Point		

		Security Coverage Ratio	
		Repayment period	
21.	Productivity expected (in MT/Qtl/Kg/numbers)		
22.	Likely Gap in productivity compared to National /Global average		
23.	Potential Market (s)for the commodity and distance from the project site		
24.	Employment generation	Direct- regular per annum	
		In-direct – Man days per annum	

## 1.About the Applicant / Promoter and his/her entrepreneurship

### A. About Applicant / Promoter

<b>1.1.In case of Individuals or Group of farmers (if applicable)</b>		
Individual		
1. Name of Farmer / Entrepreneur/Individual/ Proprietor		
2. Parents or spouse name of Individual		
Group of Farmer growers / SHG- Promoters		
1. Name of Group		
2. Names of all members of group with their father, mother/husband/ wife name		
<b>1.2.In case of Legal entity (if applicable)</b>		
Name / Title		
1. Incorporation / Registration number/ CIN& date of registration		
2. Act under which Registered		
3. Registering authority		
4. Name of Promoter / CEO/CMD/MD/		
5. If it is FPO/ FPC/ Producers Co-op society / Growers Co-operative Marketing federation- Please specify		
6. If it is Reg. Society/ Company/ Corporation / Partnership firm / Proprietary firm- Please specify		
7. Name of Promoter (s)/ Board of Directors/ Partners etc.		
8. Status of the promoter / applicant in the legal entity-please specify		
9. Whether the promoter / applicant is authorised by the Legal entity- Yes/No		
10. In case of Company/partnership firms / legal person <ul style="list-style-type: none"> <li>a. Certified copy of Company/Partnership incorporation/ registration certificate issued by Competent Authority, as applicable</li> <li>b. Certified copy of MoA/Bye Laws</li> <li>c. Certified copy of Board of Directors Resolution duly passed and authorizing signatory of application to apply for IPA</li> <li>d. Certified copy of latest Audit Report, if applicable             <ul style="list-style-type: none"> <li>i. (are to be made available in case the project and the application is considered for processing.- State Yes/No</li> </ul> </li> </ul>		
11. NGO- Specify- give details of registration		
<b>1.3.Government Institutions / Organisations-- Please specify (if applicable)</b>		
(i)	Marketing Board / Agricultural Produce Marketing Committee APMC	
(ii)	Municipal Corporation	
(iii)	PSU/ Agro-Industries Corporation	
(iv)	ICAR/CAU/SAU/ Government R&D Institution	



1.4.Statutory registration	( As per applicability)	
a. PAN No		
b. Aadhaar No.	Yes/No	
c. Udyog Adhaar No.		
d. GST		
1.5.Correspondence Address	Postal Address with PIN code	
	Telephone	
	Mobile	
	Email id	
	Fax if any:	
1.6.Project / Site Address		
1.7.Social Category ( In case of legal entity the CEO and Board of Directors social category is to be mentioned)	General / SC/ST	
	OBC	
	Minority (Muslim/Christians/Sikhs/Buddhists/Parsis/Jains)	
	In case of SC/ST applicants a Certified copy of Caste Certificate issued by Competent Authority is to be enclosed. In case of others a self- declaration is to be enclosed.	
1.8.Location: TSP / NE Region / Hilly States	In case of TSP a self-attested copy of notification is to be enclosed.	
1.9.Gender	Male / Female/Transgender	

## B. Applicant/ Promoters' Entrepreneurship:

1.10.CV / Biodata of Applicant (s) / Promoter (s) (Authorised by legal entity)in brief: ( If applicants are more than one, all are to provide their CV / Biodata)

- a. Name of Applicant/ Promoter:
- b. Fathers' & Mothers' name:
- c. Spouse name:
- d. Date of Birth
- e. Place of Birth (village/town/city, District and State)
- f. Permanent Address:
- g. Educational qualification (Higher Secondary, Under graduation Degree and above)

Education Metric/ U	Name of education / specialisation	Board / College / University/ Institute	Year of Pass	Remarks

- h. Horticulture and project proposal specific Trainings if any undergone

Training	Duration and Period	Institute with address	Purpose for undergoing training

- i. Current profession with details of Turn over, Accomplishments if any.
- j. Previous profession during the last 5 Years with details of Turn over, Accomplishments if any
- k. Experience- General and Horticulture
  - a. General (Other than Horticulture) specify the activity, establishment/ Office, location etc.
  - b. Horticulture-General: State specific activity- crop production, PHM etc. including project site, area, number of years, accomplishments etc.
  - c. Horticulture-Experience in proposed activity: provide the name of establishment/office, location, number of years, specialisation etc.
- l. Any information that establishes the applicants' entrepreneurship (Should be able to enclose evidence during Market & Financial Viability stage and during JIT):

1.11. Registrations with any Government Agency if any

Government Agency	Provide registration No. details with date and location of registration
a. SFAC	
b. NDDB	
c. MSME	
d. MSME/SSI	
e. Any other	

**1.12. Commitment by the applicant:** In case the project is approved for pre-IPA, the promoter / CEO/CMD should undergo a 2 Weeks (min.10 working days) project specific training programme in one of the ICAR/CAU/SAU/SHU/ Research Station/ Centres of Excellence/ related Central or State Government institution/ others as found appropriate / approved by NHB.

**In case of a Partnership firm/ Company / Legal person**

- a. Whether the proposed activity is covered under the objectives as per Memorandum of Association (MoA) / Rules explicitly: If so please provide the Article and Rule in verbatim.
  
  
  
  
  
  
  
  
  
  
- b. Professional history of Legal entities Farmers Producer Organisations (FPOs), Self Help Groups, Partnership/ Proprietary Firms, NGOs, Companies (as a Board of Director), Corporations, Cooperatives, Co-operative Marketing federations/ Government Institutions.
  
  
  
  
  
  
  
  
  
  
- c. Management structure if it is a company/ firm etc depicting the position of the applicant.

**2.Details of benefits availed/ proposed to be availed by the applicant-** either individually or as a member of Association of growers, Group of Farmer Growers/consumers, Farmers Producer Organisations (FPOs), Self Help Groups, Partnership/ Proprietary Firms, NGOs, Companies (as a Board of Director), Corporations, Cooperatives, Co-operative Marketing federations from (i) NHB and (ii) other Ministries/ organisations of Central Government and (iii) State Governments including NHM for Horticulture related projects.

Note: The beneficiary should be truthful. In case any information is received later on at any stage about his/her availing of benefit which is not disclosed hereunder will entitle NHB to reject the current proposal and recover the funds if already released.

**2.1.In this / proposed project and location:**

1. Whether the proposed project proposal has been submitted for consideration under any State Government or Central Government Scheme for financial grant? If yes give details.
2. Whether any subsidy has been availed from the Board, other Central Govt. organisation or State Government for the same activity on the same piece of land, khasra/ Gat/Dag/ etc either in his / her own name individually or in the name of his/her family members or through any legal entity in which he/she is the beneficiary either in the same location, project. - Yes/ No. If Yes, Please provide details

Constitution – Individually or in any form	Ministry/ Organisation	Scheme Name	Project code & Activity	Project Location	Land Survey No	Eligible Project cost (Rs.in lakhs)	Total subsidy/ grant (Rs.in lakhs)	Current status of project- Operational / underutilised / closed

**2.2.In earlier/ any other Project (s) :** Either in his / her own name individually or in the name of his / her family members or through any legal entity or in any form or constitution, in which he / she is the beneficiary either in the current proposed project location or any other location.

2.2.1. From NHB: Whether any assistance in the form of soft loan and subsidy has been availed earlier from the National Horticulture Board? If yes, give details thereof

Year	Scheme Name	Project code & Activity	Project Location	Land Survey No	Eligible Project cost	Total subsidy /grant availed	Current status of project- Operational / underutilised / closed

2.2.2. From Central Government- Ministries / Organisations:

Year	Scheme Name	Project code & Activity	Project Location	Land Survey No	Eligible Project cost	Total subsidy / grant availed	Current status of project- Operational / underutilised / closed

2.2.3.From State Governments:

Year	Scheme Name	Project code & Activity	Project Location	Land Survey No	Eligible Project cost	Total subsidy /grant availed	Current status of project- Operational / underutilised / closed

2.3. Operational status of earlier projects under NHB scheme and other Central Ministries and State Government.

Year	Organisation / Ministry which released assistance	Activity for which assistance is available & code	Dates			As on date Project Operational status (Running or Closed)	Annual Turnover (of previous Year)	Exports if any	Profitable or loss making	Remarks / Reasons
			Subsidy received	Project completed	Commenced production					

\* in case of completed projects and where proposals envisioning expansion/ modernisation are proposed, Annual Reports and Audited Statement of Accounts of the last 3 years are to be made available along with Bank appraisal during Market and Financial Viability stage both online and offline.

2.4. Please provide map of earlier / other subjects and this project- Key map of project land showing project details and land boundary details

2.5. Provide the following details:

- a. Have you ever been refused / denied subsidy claim from NHB, NHM, APEDA, NCDC, MoFPI? If Yes please provide details of (i) Project code, (ii) Name of Applicant, (iii) Address (iv) Project activity etc. and the reason for such refusal / denial:
  
- b. If you were a recipient of Government subsidy, have you / your Bank/FI ever been asked to refund the subsidy / call back? If Yes please provide details of (i) Project code, (ii) Name of Applicant, (iii) Address (iv) Project activity etc. and the reason for such refusal / denial:

Attention:

1. In case the project application is considered for Pre-IPA, the applicant shall have to enclose No Objection Certificate from State Government / State Horticulture Mission that there is no duplication of funding for the project and the applicant shall also submit self-declaration that he/she is not availing government subsidy / grant / assistance from any other ministry.



### 3. About the Project, Rationale, Management and Description

#### 3.1 About the Project

1. Name of the Project	
2. Correspondence Address:	
3. Address of Project Site :	
4. Project Activity and Scheme components (Should be as per NHB scheme latest scheme guidelines- please verify):	

No.	Name of the scheme and component	Unit	Tick mark relevant component
5	Development of Commercial Horticulture through Production and Post-Harvest Management of Horticulture Crops		
	1. Open field condition		
	2. Integrated PHM		
	a. 3.1.Pack House		
	b. 3.2.Integrated Pack house		
	c. 3.3 Primary Processing		
	d. 3.4 Van		
	e. 3.5.Retail outlet (environmentally controlled)		

#### 6. Details of Crop in case of Open field condition

Name of the Crops	Variety / Hybrid/ Cultivar	Area ( acres )	No. of plants	Source of Planting Material

7. Products, product Mix, by products and Services of the Project
8. Objectives of the Project
9. Expected Outcomes of the Project
10. Socio-economic benefit to the region /District / State

### **3.2. Rationale / Justification for the project**

#### **3.2.1. Rationale**

**3.2.2. Details of similar projects / crop in the neighbourhood and the District -Area, Production, Productivity briefly.** Provide more details in Market viability chapter.

**3.2.3. Raw Materials: How quantity and quality of inputs/ raw materials is assured.**

### 3.3. Project Site/ Land details:

#### 3.3.1. Proposed Project Area:

	Activity	Area proposed
1	Cultivation –	
	Open Cultivation (Ha) (Sq.Mt)	
2	PHM	
3	Plant and Machinery	
4	Any other activity	

#### 3.3.2. Land details- RoR/ Ownership / Registration of lease/ map etc.

<b>A</b>	Name of Owner of land proposed for the project as per Land Revenue Records				
	Whether title of the land is clear in the name of applicant and is free from any litigation				
	How Title is derived	Ancestral			
		Purchased (with details of date)			
	Encumbrances if any				
<b>B</b>	Name of the Owner in case of joint ownership	Survey/ Gat /khasraNo etc.	Area in Sq.mt / Ha	Share	
	Whether land boundaries are demarcated for the applicant clearly.		Yes/No		
	Whether land is in possession of the Applicant				
<b>C</b>	In case of Partnership				
	1. Whether land is owned by Partnership firm or jointly by its partners		Yes/No		
	2. NOC: If land is owned by one of the partner, an undertaking by land owner is required stating that he/she will not withdraw, sale or transfer his/her land during currency period of the project				
	Whether land is in possession of the Applicant				
<b>D</b>	In case of Lease				
	1. In case the land is that of leased, Registration details of the said leased land in the office of Sub-Registrar				
	2. No.of Years of lease				
	3. Whether lease is entered in RoR		Yes/No		
	Whether land is in possession of the Applicant				
<b>E</b>	Whether land is mortgaged? If yes provide details of mortgagor and mortgagee				

**3.4.Location of the Project- Identification** (Longitude, Latitude, Altitude, Village, GP, Block, District, State), Area, Number of growers.

1.	Location Address	
2.	a. Survey/Khasra/ Dag/ Other No	
3.	b. Habitation/ Village	
4.	c. Gram Panchayat / Urban body	
5.	d. Block / Urban body	
6.	e. Sub-Division	
7.	f. District	
8.	g. State /UT	
9.	Location Longitude, Latitude& Altitude	
10.	Total Area of land owned (ha)	
11.	Total Area proposed for project (ha)	

**Google map with coordinates:**

**3.5.Current usage of land of proposed Project Area**

<b>Proposed Project</b>			<b>Current usage</b>		
Survey / Dag etc.No	Nature of land Dry/ Irrigated/ Waste land	Area (ha)	Activity / Crop	Area (ha)	Mortgage Yes/No If Yes with whom

**3.6.Current infrastructure and assets possessed by the Applicant:**

Category	Asset Name	Year of Purchase	Make	Capacity	Cost
Fixed Assets	Tube well				
	Dug Well				
	Drip irrigation				
	Electric Motors				
	Tractor				
	Tiller				
	Transport vans				
	Vermi compost shed				
	Stores				
	Pack house				
	Labour room				
	Water harvesting pond				
	Installation/digging				
	Pipeline				
	Others				
Operating Assets	Planting Material				
	Support system				
	Tools and implements				

**3.7.Lay out plan of the project/** Map of Farm / production/ Operations unit / project land showing project details and land boundary details

**3.8.Conversion of Land Use (CLU) if applicable**

Whether Land in possession of the applicant is with/ without approval for industrial use/Whether CLU permission for the project has been received from competent authority: If Yes- Please provide details of the authority approved with full designation, address contact numbers and email id, approval No. and date

**3.9.Whether project site is part of production belt / cluster / hub ? If yes, provide details of working relations with other farmers**

3.10.Rationale for the choosing the said Location for implementation of the project / Location advantages and disadvantages

**Connectivity :**

Road connectivity- Distance from	National High way	
	State Highway	
	Fright Corridor	
	Golden Quadrilateral	
Rail connectivity		
Air connectivity		
Water ways		
Market connectivity		

**Supply side suitability:** Raw material Catchment area

**Whether project site is part of production belt / cluster / hub ? If yes, provide details of working relations with other farmers**

Road connectivity- Distance from  (Range)	National High way	
	State Highway	
	Fright Corridor	
	Golden Quadrilateral	
Rail connectivity		
Air connectivity		
Water ways		
Market connectivity		

**Map of Catchment Area:**

**Demand side suitability**

Proximity and connectivity of project site to major consumption centres /Mandies

Demand centres	Names	Distance from the proposed site
Agriculture Primary Market Committees - APMCs / Mandies		
Tier-1, 2 and 3 cities		

Map of consumption Centres

**Other Merits/ Advantages:**

**3.11.Compliance of project site for food safety**

The information on soil condition and site on water logging, industrial waste and effluents.

Run off and contaminated water is not allowed to enter fields.

3.12.Components / Activities of the Project with justification (Please refer NHB scheme guidelines)

No.	Name of the scheme and component	Justification
1	Development of Commercial Horticulture through Production and Post-Harvest Management of Horticulture Crops	
	1. Open field for specified crops	
	2. Integrated PHM	
	3.1.Integrated Pack house	
	3.2.Pack House	
	3.3 Primary Processing	
	3.4 Van	
	3.5.Retail outlet (environmentally controlled)	



### Component wise cost of the Project and NHB Norms

Scheme Component	Items	Sub- items	Capacity/ Area/ spacing/ size Etc.	Units/ Numbers	Likely / unit cost	NHB Norm
Open field Cultivation	Cultivation Expenses	Planting material				
		Input cost (Labour, Manure & Fertilisers, pesticides etc.)				
		Others				
	Irrigation	Tube well/ bore well/ Open well (Nos.)				
		Cost of Pipeline from source of irrigation to production unit (Length, Size & Material)				
		Water harvesting structure / Water tank min. 300 microns				
		Non lined ponds/tanks				
		Others				
	Drip / Sprinkler					
	Civil Infrastructure	Functional pack house				
		Store & Pump house (Area in sq.ft with size)				
		Labour room & go down (Area in Sq.ft with size)				
		Others				
	Farm Mechanisation (AC)	Tractor upto 20 BHP				
		Power Tiller	HP			
		Equipment's-driven by Tractor/ Power Tiller				
		Mulch laying machine				
		Self-propelled hort. Machinery				

		Other tools and equipment's as per Sub Mission on Agriculture Mechanisation (SMAM)				
		Others				
	Land Development	Soil levelling / Digging/Fencing etc.				
		Others if any				
	Land if newly purchased but not before one year from date of sanction of Term loan (indicate year)					
	Support system for Grapes					
	Vermi Compost Unit					
	• 1. Permanent Structure					
	• 2, HDPE Vermibed(12ft X 4ft X2 ft)					
	Certification of Good Agricultural Practices (GAP) including infrastructure (AC)					
	Plastic Mulching					
	Others					
	Grand Total					
Scheme			Capacity/ Area/ Spacing/ size etc.	Units/ Number	Likely /Unit cost	NHB Norm
Integrated PHM	1. Integrated PHM					
	3.1.Pack House					
	3.2.Integrated Pack house					
	3.3 Primary Processing					
	3.4.Retail outlet (environmentally controlled)					
		Others				

Note: NHB Norm: means Over all ceiling in project mode with add on component as per NHB Scheme guidelines.  
(Appendix 1-A)

AC: Add on component: Over and above the cost ceiling.

### 3.13.Operations Planning

1.	Name of Farm / Project Manager (working directly under the applicant / CEO) if any.-optional	
2.	Name of agency providing technical know-how and turn key for cultivation- and contact person Name and contact numbers	
3.	Operations:	
	1. Land preparation	Own / custom hiring
	2. Procuring planting material/ seeds	Own / outsourcing
	3. Orchard planning, layout	Own / outsourcing
	4. Water and nutrient management	Own / outsourcing
	5. Pruning & Training	Own / outsourcing
	6. Pollinators & Pollinators	Own / outsourcing
	7. Plant growth regulators	Own / outsourcing
	8. Integrated Pest & Disease management	Own / outsourcing
	9. Physiological disorders	Own / outsourcing
	10. Farm Mechanisation	Own / outsourcing
	11. Harvesting/ Fruit/Flower care management	Own / outsourcing
	12. Post-Harvest Management	Own / outsourcing
	a. Cleaning / Washing	Own / outsourcing
	b. Sorting and Grading	Own / outsourcing
	c. Packing and labelling	Own / outsourcing
	d. Transport	Own / outsourcing
	e. Storage	Own / outsourcing
	f. Van	Own / outsourcing
	g. Retail outlet	Own / outsourcing
	h. Cold chain	Own / outsourcing
	13. Marketing	Own / outsourcing
	14. Processing	Own / outsourcing

**3.14. Profile of Agency executing erection of Post Harvest Infrastructure (based on project / applicability etc.**

1.	Name of agency providing technical know-how and turn key basis with full address of its Hq	
2.	Agency local Address	
3.	CIN / Company Incorporation No.	
4.	GST No.	
5.	CEO of the Agency	
6.	Contact person Name and contact numbers	
7.	Technical Manpower available	(Desirable)
8.	Number of years of experience	(Desirable)
9.	No of plants set up till date during the last 5 years in the State	(Desirable)
10.	Turnover of the Agency	(Desirable)
11.	Whether firm has been blacklisted ever by any government or corporate firm	(Desirable)

3.15. Month wise operational chart / Implementation schedule: Commencement to completion:

Project Implementation period in case of approval: Months.

Proposed/ Tentative dates of	Bench mark / Activity	Approximate date
Project Commencement	Land development or Land/ Site Preparation	
First Commercial Crop / plantation / operations if any / Plant & Machinery etc.		
Project Completion		

Activity	Units	Months					
		JF	MA	MJ	JA	SO	ND
1. Land development							
2. Land preparation							
3. Procuring planting material							
4. Orchard planning and layout							
5. Water and nutrient management							
6. Pruning & Training							
7. Pollinators& Pollinizers							
8. Plant growth regulators							
9. Integrated Pest & Disease management							
10. Physiological disorders							
11. Farm Mechanisation- procurement							
12. Farm Mechanisation operations							
13. Harvesting/ Fruit care management							
14. Post-Harvest Management							
a) Cleaning / Washing							
b) Sorting and Grading							
c) Packing and labelling							
d) Transport							
e) Storage							
15. Marketing							
16. Value/ addition Processing							

Note: The table can be extended as per need. JF: January/ February; MA: March/April and similarly other abbreviations.

3.16. Number of days of Operation / Crop etc:

3.17. Backward and Forward linkages

1. Backward linkages -with growers, input suppliers etc.

Operations	Agency / Agents / providers (specify the proposed location)	Distance	Remarks
Seed/ Planting Material			
Manure			
Fertilizers			
Bio fertilizers			
Bio pesticides			
Fertilizers			
Pesticides / Insecticide			
Others			

2. Forward linkages- for Domestic and Export Market

Operations	Agency / Agents / Service providers (specify the proposed location)	Distance	Remarks
Storage Unit			
Processing Unit			
Local Market			
Terminal market			
Farm Market			

3. Briefly explain as to how the produce will be consolidated (backward linkages) and marketed/exported (forward linkages)

4. How transportation of raw material and produce is planned?

3.18.Manpower (Skilled Labour, Expertise etc.), Required, Already available, Gaps and the management in an Year.

### 3.18.1.Managerial and Technical

	Managerial				Technical				Gap	
	Requirement		Availability		Requirement		Availability		S	US
	Number	No.of Days	Number	No.of Days	N	D	N	D		
a)										
b)										
c)										

### 3.18.2.Skilled and Unskilled Labour

	Skilled Labour				Unskilled labour				Gap	
	Requirement		Availability		Requirement		Availability		S	US
	Number	No.of Days	Number	No.of Days	N	D	N	D		
<b>Operations/ activity</b>										
d) Administration										
e) Manager										
f) Finance & Accounts										
g) Typing / IT operations										
h) Watch man										
<b>Crop husbandry</b>										
a)										
b)										
c)										
d)										
e)										
f)										
g)										
h)										

### 3.19.Employment Generation per annum

No.of man days / Annum	
Permanent man power -Permanent (on rolls)	
Casual / Temporary	

3.20.Infrastructure and connectivity (Power, Fuel, Water, Plant and Machinery, Effluents treatment etc.)- Required, Already available, Gaps and the management.

Utility	Requirement	Remarks
Power	Likely requirement per month for the purposes of .....	
	Source of Power	
	Whether renewable alternate energy to power is under consideration	
	Access to Power is assured or not	
	Alternative Source of Power in case of breakdowns	
Water	Source – Ground Water /Surface Water	
	Existing or New source	
Plant & Machinery		
Fuel	Access to fuel to power- Generators- Yes/No	
	Nearest fuel depot	
Effluent treatment	Facility and method adopted for effluent treatment.	
Road connectivity- Distance from	National High way	
	State Highway	
	Fright Corridor	
	Golden Quadrilateral	
Rail connectivity		
Air connectivity		
Market connectivity		
Vermi compost	If available Numbers and Capacity. Types: 1. Permanent Structure and 2, HDPE Vermi bed (12ft X 4ft X2 ft)	
Animal Husbandry	Details of Animals Capacity / Income	
Environmental issues of the project if any		
Fencing		
Any other		



### 3.21.SWOT Analysis

1	Strengths	
2	Weaknesses	
3	Opportunities	
4	Threats	

**Attention of the applicant:**

1. Applicant has to intimate the Board before effecting change of project land, crop, area, bank etc in the proposal before claim of subsidy. (page 121 of guidelines point 10(vi). Thus Any change in crop or project site without prior approval of NHB shall make the component or project, as the case may be, ineligible for getting subsidy.
2. Even the change in FI / Banker should be done with prior approval of NHB.

**(Signature of the Applicant)  
with date and time.**

4	<b>NHB Scheme under which the project is proposed with rationale / justification.</b>	
---	---	--

1. Scheme.1: Copy paste scheme guidelines
  
2. Cost Norms and pattern of assistance: Copy paste scheme guidelines
  
3. Rationale for justification for taking up the proposed project under the scheme No.1 and its components.

# 5.Project details

5.1	Agro-climatic suitability	
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### 5.1.1. Origin, History, and Distribution

#### 1. Origin of the crop and its introduction into India:

The olive, known by the botanical name *Olea europaea*, meaning "European olive", is a species of small tree in the family Oleaceae, found in the Mediterranean Basin from Portugal to the Levant, the Arabian Peninsula, and southern Asia as far east as China, as well as the Canary Islands and Réunion. The species is cultivated in many places and considered naturalized in all the countries of the Mediterranean coast, as well as in Argentina, Saudi Arabia, Java, Norfolk Island, California, and Bermuda. The Origins of the Olive Tree Revealed. Olives, like the Salonika variety pictured here, were likely first domesticated in the Levant around 6,000 years ago, new research suggests. The olive was first domesticated in the Eastern Mediterranean between 8,000 and 6,000 years ago, according to new research. Modern olive cultivars descend from multiple wild ancestors, however, the detailed history of domestication is not known yet. Olive production mainly occurs in countries like Italy, Spain, Greece, Turkey, Tunisia, Syrian Arab Republic, Morocco, Egypt, Portugal, Lebanon, Libyan, Arab Jamahiriya, Algeria, Palestine, United States of America, Argentina, Jordan, Israel, Peru, Islamic Republic of Iran and Croatia.

#### 2. Distribution of crop across the country

Olive crop although grown wild or scattered in some parts of India long back but its commercial cultivation to India is new. It is being grown in some parts of Jammu and Kashmir like Ramban, Uri, and Srinagar etc. Recently Rajasthan state had started cultivation of olive plants. In Rajasthan, Olive farms are basically situated in 7 districts - Bikaner, Sriganganagar, Nagaur, Jhunjhunu, Alwar, Jaipur & Jalore. It is also grown in some parts of UP and Himachal Pradesh.

**5.1.2. Agro-climatic / Horticultural zones including Rainfall, temperatures at critical stages and suitability of the project** *(Not applicable to standalone PHM projects)*

Parameter	Recommended@	Project location parameters#	Remarks / deviations
Climate	The optimal degree of cold winters is dependent upon the origin of the olive cultivar (e.g. Eastern Mediterranean vs. Southern Europe)		
Altitude			
Climatic / Non Climatic			
Temperature range			
Rainfall / Water			

@ Note: Organisation / Institution (ICAR/CAU/SAU/SHU/ other) making recommendation and its source should be specified: SKUAST-Shalimar Kashmir and ICAR-CITH, Srinagar

**Risk management/ Deviation Management if any:**

<b>Conclusion:</b> Whether project crop is recommended for the project location	<b>Yes/No</b>
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**5.1.3. Soil Type and health -requirements and that of project suitability** *(Not applicable to standalone PHM projects)*

	As recommended by ICAR /CAU/SAU/SHU	Project location data as per latest Soil health test	Deviation if any and Management	Date on which soil health is tested and the name of the Institute
Soil type	Olives can be grown on marginal soils. However, the growth and production will not be optimal. Olives therefore require well-drained and well aerated soil.			
Texture	Loamy; clay loam			
pH	5-6			
Electrical conductivity	A conductivity of 0.22 deci-Siemens (ds) per metre is equal to 0.033% of Total Soluble Salts.			

	Values above 0.3 ds/m may retard the growth of roots but other factors, such as soil type and the kind of salt present, must also be considered.			
Chlorine (NaCl)	This is determined if EC values are high. More than 0.05% NaCl in sandy soils and more than 0.1% in clay soils could harm fruit trees; such values indicate that better drainage would improve the growth of trees and prevent the accumulation of salt in the soil			
Potassium	Potash fertiliser is unlikely to be needed if values are above 100 ppm in sandy soils or above 150 ppm in loams and clay loams, provided these levels are present throughout the top 300 mm of soil			
Nitrogen				
Phosphorus	Values above 20 ppm (30 ppm in clay soils) in the surface sample suggest that superphosphate is unlikely to be needed. But unless phosphorus values are also high in the subsurface soil, it would be useful to add superphosphate before planting young trees to supply them with a reserve of phosphate for the future			

@ Note: Organisation / Institution (ICAR/CAU/SAU/SHU/ other): SKUAST-Shalimar Kashmir and ICAR-CITH, Srinagar

#: Provide details of Soil Test Laboratory (should be that of Agriculture Dept/ Agric.Univ/ Central or State Government) where Soil is tested with contact details of Head of Laboratory/ Analyst with telephone and mobile details and weblink if possible. A self-attested copy of the

laboratory results should be submitted in case project is qualified for processing for subsidy claim.

**Whether project location is a problematic soil- Alkalinity/Salinity/Others: if Yes.**

1. Causes
2. Reclamation / Management/ Amendments proposed:

<b>Conclusion:</b> Whether project location soil is suitable for the crop / activity.	
--	--



#### 5.1.4. Water/ Irrigation water Quality -requirements and that of project suitability

(Not applicable to standalone PHM projects)

	As recommended by ICAR /CAU/SAU/SHU	Project location data as per latest Water Analysis test#
pH	6.5 - 8.4	
EC	0.7 - 3.0 dS/m	
Sodium Absorption Ratio (SAR)	3-9	
Bi-Carbonate	1.5 - 8.5 mmol/l	
Boron concentration	0.7 - 3.0 mg/l	

@ Note: Organisation / Institution (ICAR/CAU/SAU/SHU/ other) making recommendation and its source should be specified.

#: Provide details of Laboratory (should be that of Agriculture Dept/ Agric.Univ/ Central or State Government) where water is tested with contact details of Head of Laboratory/ Analyst with telephone and mobile details. A self-attested copy of the laboratory results should be submitted in case project is qualified for processing for subsidy claim.

Conclusion: Whether project location water source is suitable for the crop / activity.	Yes / No
--	----------

## 5.2. Project- Market viability of the Project

(To be facilitated and certified by Horticulture Expert)

5.2.1. Commercial (and nutritive -where ever applicable) importance / significance, composition and uses.

- One hundred grams of cured green olives provide 146 calories, are a rich source of vitamin E (25% of the Daily Value, DV), and contain a large amount of sodium (104% DV); other nutrients are insignificant. Green olives are 75% water, 15% fat, 4% carbohydrates and 1% protein (table).
- The polyphenol composition of olive fruits varies during fruit ripening and during processing by fermentation when olives are immersed whole in brine or crushed to produce oil.<sup>[109]</sup> In raw fruit, total polyphenol contents, as measured by the Folin method, are 117 mg/100 g in black olives and 161 mg/100 g in green olives, compared to 55 and 21 mg/100 g for extra virgin and virgin olive oil, respectively.<sup>[109]</sup> Olive fruit contains several types of polyphenols, mainly tyrosols, phenolic acids, flavonols and flavones, and for black olives, anthocyanins. The main bitter flavor of olives before curing results from oleuropein and its aglycone which total in content, respectively, 72 and 82 mg/100 g in black olives, and 56 and 59 mg/100 g in green olives.<sup>[109]</sup>
- During the crushing, kneading and extraction of olive fruit to obtain olive oil, oleuropein, demethyloleuropein and ligstroside are hydrolyzed by endogenous beta-glucosidases to form aldehydic aglycones. The aglycones become soluble in the oil phase, whereas the glycosides remain in the water phase.<sup>[citation needed]</sup>
- Polyphenol content also varies with olive cultivar (Spanish Manzanillo highest) and the manner of presentation, with plain olives having higher contents than those that are pitted or stuffed
- The olive tree, has been cultivated for olive oil, fine wood, olive leaf, and the olive fruit. About 90% of all harvested olives are turned into oil, while about 10% are used as table olives. The olive is one of the "trinity" or "triad" of basic ingredients in Mediterranean cuisine, the other two being wheat for bread, pasta, and couscous, and the grape for wine

**5.2.2.Targetted market (s) :** Domestic or International. In case of International market, the applicant have to refer APEDA export requirements and should specify compliance appropriately with in the document. In case of domestic market specify the intended market briefly while more details be provided in Marketing chapter.

1. Quality grades/ specifications/ kinds of products and their targeted Domestic/ International market.
2. Existing / Proposed Market linkages:
3. MOUs/ Contract documents / undertakings/ LoA if any
4. Target consumption centres/ key domestic markets
5. Export targets/ Plans if any
6. In case of export, details of volume to be exported / export destination / statutory norms of export destination should be provided in the DPR.

### 5.2.3. Statistics: India and State.

1. India: Area, Production and Productivity in the area, State and India for the last 5-10 years  
National picture

Year	Area in ha	Production MT	Productivity T/ha	Global Productivity data T/Ha		
				Highest	Average	

Source:<http://agricoop.nic.in/>

State wise picture- Top 10 producing states

State	Area in ha	Production MT	Productivity T/ha	

Source: <http://agricoop.nic.in/>

### 2. Project State Picture (Mandatory)

Year	Area in ha	Production MT	States' contribution to Nation	Productivity T/ha	Gap in Productivity (T/Ha)		
					State Av.	National Av	Global Highest


Source: <http://agricoop.nic.in/>

### 3. Project State- district wise performance in the said crop producing districts in Last Year (Mandatory)

Area			Production			Productivity		
District	Area (ha)	% of State Area	District	Production (MT)	% of State Production	District	Productivity (T/ha)	Ranking

Source: <http://agricoop.nic.in/>

### 5. Project crop in the state: Time trend of Area, Production and Productivity (Mandatory)

District	Item	Current Year	CY-2	CY-3	CY-4
District.1	Area				
	Production				
	Productivity				
District.2					

Source: <http://agricoop.nic.in/>

### 6. Share of project Crop- in terms of Area and Production in overall fruits/vegetables.

Crop	Area		Production		
	Ha	%	MT	%	
Total		100		100	

Source: <http://agricoop.nic.in/>

7.Availability of Storage facilities in the project area / District / StateSource: (Desirable Data)

Year	Commodity	Low cost storage structures			Cold storage			CA Storage		
		No.	Capacity	Capacity utilisation	No.	Capacity	Capacity utilisation	No.	Capacity	Capacity utilisation

Source: Multiple sources: <https://nccd.gov.in/#> and District Horticulture Office.

Gap Analysis in Project Area:

	Commodity / produce	Storage required in the area	Storage available in the area	Gap	Remarks

#### 6.2.4. Clusters/ Zones

##### 5.2.4.1.Crop clusters in the State (Mandatory)

Name of Crop	District	No.of villages	No.of farmers	Total Area
1				
2				
3				
4				

##### 5.2.4.2.Crop Agricultural Economic Zones in the State / UT, if any (Desirable)

Crop AEZ	District	No.of villages	No.of farmers	Total Area
1				
2				
3				
4				

5.2.5.Demand for the commodity:( based on the available data- minimum for the project area, district and the state)

Demand -Supply gap for the commodity

Unit	Demand	No.of growers		Supply / production	Gap	Remarks
		Nos.	Area			
Project area*						
District where project is located						
State						
Country						
Globally						

Source: Multiple sources.

<http://agricoop.nic.in/>

APMC/ Agriculture Marketing Board/ District Horticulture Officer

\*: Project area could be a block / District based on the crop / commodity/ activity and its spread area and numbers.

Note: Applicant may take the help of District Horticulture Officer.

5.2.5.A.Projections of production, productivity, targets for domestic and export market (Desirable)

Year	Production	Productivity	Local Market	Value in Rs.	Terminal market	Value in Rs.	Export Market	Value in Rs.

5.2.6.Global producers- Country, Area, Production, Productivity and global market share for the last 5-10 years

Major producing country	Area	Production	Productivity	% share in global market
India				

5.2.7.International trade market and potential:


(collect from APEDA Agri-exchange website at <http://agriexchange.apeda.gov.in/>; including product profile, statistics and market intelligence sites esp. International trade and Global Analytical report in brief to the extent of relevance; may also refer DGCIS site <http://www.dgciskol.gov.in/> for more information)



#### 5.2.8. Seasonality matrix of the fruit/vegetables/ flowers (Desirable Data):

Seasonality matrix of the crop

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Olive												

 Lean Season

 Peak Season

Demand and Supply issues specific to project area:

### **5.2.9 Price variation of Commodities at State / UT Capital or at a Major Fruit Market**

#### **A.At local Market**

	Local Market: 1 Unit=Rs. Per Qtl/MT/Kg											
Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec

Source: Concerned APMC / Marketing Board website or <http://agmarknet.gov.in/>

If no reliable source is available, the above data may be collected from District Marketing / Horticulture Officer

#### **B.At nearest / Major Terminal Market**

	Major Terminal Market: 2 Unit=Rs. Per Qtl/MT/Kg											
Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec

Source: Concerned APMC / Marketing Board website or <http://agmarknet.gov.in/>

If no reliable source is available, the above data may be collected from District Marketing / Horticulture Officer

#### **C.Projected prices of project produce (if Possible)**

	Market: ..... Unit=Rs. Per Qtl/MT/Kg											
Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec

Source: Could be applicants' own assumption / horticulture expert etc.by giving justification

**5.2.10. Balance sheet of commodity in the State** (Desirable Data/ Voluntary)

	Year: Qty: 000Tons											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Stored/ Carry in												
Fresh Production/ Arrivals												
Imports												
Availability												
In LT Storage												
Consumption												
Exports												
Post Production losses												
Total Usage												
Carry out												

Source:

Note:

**5.2.11. Whether transportation infrastructure is available.**

1. Mode of transportation / arrangement:
2. Whether cold chain facility available locally if so details of service providers and contact person name.

**5.2.12. Value Addition scope/ potential**

**5.2.13. Central and State Government policies to promote the commodity:  
(towards its promotion, area expansion and organised marketing, processing and export).**

5.2.14.Value chain in the commodity

5.2.15.Proposed Business Strategy by the Applicant for Marketing and Market viability

**5.3.Financial Viability of the Project**  
**( To be prepared and certified by Project Finance Expert on each page)**

**5.3.1: Due Deligence Status**

	Date of Due Deligence		Remarks
1	Examination of CIBIL report	Yes/No	
2	Credit rating / scoring is done	Yes/No	
3	Whether name of promoters/company appearing in the list of- a) RBI defaulter list b) RBI willfull defaulter list c) ECGC SA list	Yes/No Yes/No Yes/No	
4	a)Verification of CERSAI (Central Registry of Securitisation Asset Reconstruction and Security Interest)	Yes/No	
	b) In case of company whether financial data verified with ROC .	Yes/No	

**5.3.2.Project Cost (Rs in Lakhs) – (subitems are to be decided based on need)**

Scheme Component	Items	Sub- items	Capacit y/ Area/ spacing Etc.	Units/ Numbe rs	unit cost	Cost	Cost as per NHB norms
Open field Cultivation	Cultivation Expenses	Planting material					
		Input cost (Labour, Manure & Fertilisers, pesticides etc.)					
		Others					
	Irrigation	Tube well/ bore well/ Open well (Nos.)					
		Cost of Pipeline (Length, Size & Material)					
		Water harvesting structure / Water tank min. 300 microns					
		Non lined ponds/tanks					
		Others					
	Drip / Sprinkler						
	Civil Infrastructur e	Functional pack house					
		Store & Pump house (Area in sq.ft with size)					
		Labour room & go					

		down (Area in Sq.ft with size)					
		Others					
	Farm Mechanisation (AC)	Tractor upto 20 BHP					
		Power Tiller	HP				
		Equipments- driven by Tractor/ Power Tiller					
		Mulch laying machine					
		Self-propelled hort. Machinery					
		Other tools and equipment's as per Sub Mission on Agriculture Mechanisation (SMAM)					
		Others					
	Land Development	Soil levelling / Digging/Fencing etc.					
		Others if any					
	Land if newly purchased but not before one year from date of sanction of loan (indicate year)						
	Support system for Grapes						
	Vermi Compost Unit						
	Certification of Good Agri Practices Good Agricultural Practices (GAP) including infrastructure (AC)						
	Plastic Mulching						
	Others						
	Grand Total						
Scheme			Capacity/ Area/ Spacing etc.	Units/ Number	Like ly /Unit cost	NH B Norm	
Integrated PHM	2. Integrated PHM						
	3.1.Pack House						
	3.2.Integrated Pack house						
	3.3 Primary Processing						
	3.4.Retail outlet (environmentally controlled)						
	Others						

### Summary of Project Cost

		Project Cost	Max.possible NHB support (self-appraisal)
Open field condition	With add on components		
	Without add on components		
Integrated PHM			
3.1.Integrated Pack House			
3.2.Pack house			
3.7 Primary Processing			
3.8.Van			
3.9 Retail outlet			
Grand Total			

### 5.3.3 Means of Finance (Rs.in Lakhs)

S.No	Item	Components			
1	Promoters share				
2	Bank/FI Term loan				
3	Un secured loan/VCA				
	Total				

### 5.3.3. A Information on subsidy available under different schemes:- (For information)

1.	Subsidy from NHB				
2.	Subsidy from State	*			
3.	Subsidy from Centre	*			
4.	Subsidy from other sources	*			
	Total				



#### 5.3.4.Hypothecation Security if any:

#### 5.3.5.About Bank/ FI: Name of the Bank/FI, branch and its code identified for Term loan and Rationale

Name of Bank/ FI	
Bank/FI Branch Address	
Bank/FI Branch contact Number	
IFSC code	

#### 5.3.6.Investment in Horticulture Sector

#### 5.3.7 Projected / existing operational profitability of the Project : (Rs. In Lakhs)

	Estimated projections							
	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8
Capital								
Reserves								
Intangibles								
Tangible Net Worth								
Net Working Capital								
Current Ratio								
Net Sales								
Op. Profit								
Net Profit Before Tax								
Net Profit After Tax								
TOL/ TNW								
Debt-equity ratio								
Depreciation								
Dividend								
Retained Profit								

Justification for the above (wherever figures are on higher side)

NOTE:- In case of existing business / project, the promoter has to provide the audited data for the last three years apart from estimated and projected data for covering the entire repayment period.

#### 5.3.8 Project Financing:

- 1) Rate of Interest :
- 2) Percentage of Term loan against total project cost
- 3) Internal Rate of Return (IRR):
- 4) Cost of Production and Profitability (Annexure)
- 5) Yield and Sales Chart (Annexure)
- 6) Proposed Balance Sheet: (Annexure)
- 7) Proposed Cash flow Statement for repayment period (Annexure)
- 8) Proposed Profit & Loss Account: (Annexure)
- 9) Proposed Repayment of Term loan and Schedule (Annexure)
- 10) Break even Analysis (Annexure)
- 11) NPV (Net Present Value)
- 12) Economic Rate of Return
- 13) Depreciation

### 5.3.9 Sensitivity analysis of the project.

Base Case	2018-19 (First Full Year of Operation)				
Case I	Decrease in capacity utilization by 10%.				
Case II	Decrease in Sales by 10%.				
Case III	Increase in Raw Material Cost by 10%				
	Base Case	Case I	Case II	Case III	
PBIDT					
PBT					
PAT					
Min DSCR					
Max DSCR					
Overall DSCR					

### 5.3.10 Key Financial Parameters for the proposal:

Sl. No.	Ratio	Benchmark	As calculated by Project Finance Expert				
			1 <sup>st</sup> yr	2 <sup>nd</sup> yr	3 <sup>rd</sup> yr	4 <sup>th</sup> yr	5 <sup>th</sup> Yr
1.	Current Ratio other than export units	1.25:1					
2.	CR-Export units	1.10:1					
3	IRR /BCR						
4	DSCR*	1.50:1					
5	Average DSCR						
6	Debt to Equity Ratio i.e DER	3:1					
7	TOL/TNW	4:1					
8	Promoters Contribution	25% minimum					
9	Break Even Point	Lower the % is better					
10	Security Coverage Ratio	More than 100% of Loan Amount					
11	Repayment period	Up to 7 Years excluding moratorium, but not to exceed an overall tenor of 10 years					

### 5.3.11 Statement of Assets & liability as on.....

#### 1. Immovable Assets

(Rs. In lakh)

Sl.No	Description	Extent	Location	Face value	Market value
1	Land				
2	Building				
3	Plant & machinery				
4	Commercial plots				

#### 2. Movable Assets

Sl.No	Description	Modle	Face value	Market value
1	Car/Scooter/Truck/Bus/Mobile phone			

#### 3. Bank/FI balances and cash

Sl.No.	Name of the institutions	Date of opening	Face value	Market value/Present value

#### 4. Shares & debentures

Sl No	Name of the Company/Institutions	Date of purchase	Face value	Market value

#### 5. Investment in business & other associates concern

Sl No	Name of the Company/Institutions	Date of Investment	Face value	Market value

Total assets.....

#### 1. Liabilities

Sl.No.	Nature of the loan	Name of the institution	Date of loan	Face value	Market value/Present value

Total liabilities.....

Net of assets & liabilities.....

Date:Signature of the Promoter/Guarantors/Directors /partner

### 5.3.12.Risk Analysis& Management

- A. Promoters & Management Risks:
- B. Project Completion and Operational Risk:
- C. Other Risks:

	<b>Risk</b>	<b>Management</b>
	Excess production / Glut situation in Market	
	Crop failure	Crop insurance
	Price volatility-low prices	
	Pests and Diseases	
	Natural calamities- fire, cyclone, Floods etc.	

### 5.3.13.Farm record keeping/ Maintenance proposed

## 5.4: Land development and Crop husbandry

### 5.4.1. Land development: ( in case of waste/ barren land)

### 5.4.2. Selection of Quality Planting Material

Recommended and popular Cultivars- varieties/hybrids, their specific characteristics, requirements and yields and list of reputed / accredited Nurseries

1. Recommended and popular cultivars/ varieties/ Hybrids State wise	Name of variety / Hybrids/ cultivar (with potential yield)
• Leccino	
• Corotina	
• Messinese	
• Pendolino	
• Morolio	
• Frantio	
• Cipressino	
• Picholino	
• Zaituna	
• Etnea	
• Mission	
• Amfissa	
• Itrana	
• Barnea	
• Picual	
2. Ripening season	
• Early ripening: Arbequine, Farga, Leccino, Picual, Sevillano etc	
• Mid ripening: Mission, Pendolino, Moraiolo, Barnea etc	
• Late Ripening: Frantoio, Picholine, Coratina, Picudo etc	
3. Classification of cultivars / Varieties/ Hybrids based on purpose	
a. Table/Pickle purpose: Cerignola, Beruquette, Ascolano, Mastoidis, Amfissa, Etnea, Lucques etc	
b. Oil purpose: Leccino, Pendolino,	

Picual, Coratina, Frantoio (aka Razzo, Corregiolo) etc	
c. Dual Purpose: Barnea, Empeltre, Germaine, Kothreiki, Throumbolia Itrana , Mission, Aglandau etc	

#### Method of Propagation / technology

Method recommended by ICAR / CAU/SAU/SHU	<p>Cutting: Olive trees grow best from softwood and semi-hardwood cuttings, but they will also start from hardwood cuttings. An ideal olive tree cutting must be roughly 6 to 12 inches long with a stem diameter of 1/4 inch and no active flowers or buds</p> <p>Grafting: Also the method of propagation in olive.</p>
Proposed method under the project	
Do's and Don't's proposed / taken in propagation	
Expert guiding the project	

List of NHB accredited Nurseries: availability of quality seeds / planting material.

List of reputed / authorised store / Nursery from where quality seeds / planting material is planned to source in the project:



Planting material-source, quality and suitability

1. Proposed cultivar / variety/Hybrid	
2. Criterion / Rationale for Selection	
3. Nursery from where planting material is procured/ purchased	Name of Nursery:  Proprietor Name Contact Number:
4. Warranty provided if any	
5. Whether variety/ hybrid/ cultivar registered under Section 39 (2) of The Protection of Plant Variety and Farmers Right Act, 2001 (PPVFR Act)	
6. Authority which provides compensation to the farmers in case a registered variety does not perform as per the claim made by the breeders.	Registrar General, PPV & FRA is the designated officer for redressal of Public Grievances and can be addressed to: Registrar General Protection of Plant Varieties and Farmers' Right Authority S-2, A Block, NASC Complex, Opp. Todapur Village New Delhi -110012
7. Applicability of Seed Act and any State Act on nursery/ planting material	
8. Authority which provides compensation to the farmers in case a registered variety does not perform as per the claim made by the breeders under Seed Act / State Nursery Act if any	
9. Parentage if known	
10. Original manufacturer / Source of planting material	
11. Name of Tests with date and lab-conducted to assure pest and disease freeness of planting material/propagation by the nursery	
12. Whether the planting material is imported. If Yes, whether plant quarantine and disease free certification was done	

<b>5.4.3.</b>	<b>Orchard planning Lay out and management</b>	
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#### **5.4.3.1. Planning of orchards establishment and layout systems / Types of orchards**

As recommended by ICAR Institute/ CAU/SAU/SHU/ Others	<ul style="list-style-type: none"> <li>• Orchard should be planned at site where there is source of irrigation, transportation facilities, marketing, suitable soil conditions, slope of land should be suitable, direction of orchard should face sun light etc.</li> <li>• Orchard can be designed in rectangular, hexagonal, diagonal or quincunx system or contour system based on the type of land.</li> </ul>
Action taken / proposed by the applicant	
Points of Deviation if any and justification	

#### 5.4.3.2. Land preparation including bed preparation

As recommended by ICAR Institute/ CAU/SAU/SHU/ Others	Land should be levelled before planting in plains or contour system is adopted for the hills where the plants are planted along the contour across the slope.
Action taken / proposed by the applicant	
Points of Deviation if any and justification	

#### 5.4.3.3. Planting Season / time and density

	Recommended @	Proposed	Remarks in case of deviation
Planting Season / Time	January - March		
Spacing	5 x 6 m, 6 x 6 m,		
Seed/ seedling rate/ Density per Acre	2700-3000 trees/ha.		
Seedling/ Transplanting age	1 or two year old rooted cutting		

@: Specify the organisation / institution recommending. [www.rajoilve.com](http://www.rajoilve.com), Rajasthan Olive Cultivation Limited (ROCL)

#### 5.4.3.4. Water and Nutrient Management

##### 1. Water requirements, Source and irrigation methods&

###### a. Critical stages for Irrigation and Water required under Drip Irrigation

<u>Critical Stages</u>	<u>Recommendation</u>	<u>Proposed practice</u>	<u>Remarks</u>
Flower bud development	Drip or Flood: Olive trees are very sensitive to over irrigation and will not perform well in waterlogged soils. Waterlogged soil, often a result of poor drainage, causes poor soil aeration and root deterioration and can lead to the death of the trees		
Bloom			
Fruit set			
Fruit & Shoot growth			

###### b. Method of Irrigation:

<u>Methods</u>	<u>Recommendation</u>	<u>Proposed practice</u>	<u>Remarks</u>
Flood	8-12ML/ha		
Drip	3-8mm/hr, 4-8ML/ha (Preferred method)		

**2. Nutrient management**—Manure, Bio-/ Chemical fertilizers including micro nutrients:/ Fertigation. Dosage and method and time of application for efficacy, food safety and environment sustainability.

Soil Health Analysis:

Dated		Institute	
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Soil Health Parameters	Values	Recommended range	Remarks

As recommended by ICAR Institute/ CAU/SAU/SHU/ Others	Depending on soil fertility and humidity, it is recommended to apply 500-1500 g/tree nitrogen or 50- 150 kg/ha (1kg N = 5 kgr approximately of ammonium sulfate, 3 kg ammonium nitrate, 4 kg calcium nitrate or 2 kg urea). When phosphate fertilization is necessary, it should not exceed 1/3-1/5 of the amount of nitrogen added. So, if 1 kg N/tree (i.e. 5 kg ammonium sulfate) is added, the corresponding amount of phosphate should not exceed 200-350 g P <sub>2</sub> O <sub>5</sub> /tree (i.e. 1.0-1.7 kg 0-20-0). As a rule		
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	of thumb, it is suggested to add 500 g P <sub>2</sub> O <sub>5</sub> /tree (i.e. 2.5 kg 0-20-0) in a two-year period. The amount of potassium should be determined in combination with nitrogen. In olive orchards, in which no potassium has been used in the past, it is preferable to add twice as much potassium as nitrogen. For example, if 0.5 kg N/tree (i.e. 2.5 kg ammonium sulfate) is applied, then 1 kg potassium/tree (i.e. 2 kg potassium sulfate) must be added. In time, potassium dosage is adjusted to be equal to nitrogen. Trees suffering from boron deficiency appear chlorotic from a distance and delay entering the vegetative stage. Leaves with deficiency contain less than 20 ppm boron, while those from healthy trees have more than 20 ppm (on dry basis). In full production trees, 300-500 g sodium pyroborate is added in the soil to control deficiency, while for younger trees fewer amount is used (10 g for each year of the tree from the moment of planting).
Action taken / proposed by the applicant	
Points of Deviation if any and justification	

Availability of Water and Nutrient management plan: Yes/ No

#### 5.4.3.5. Intercultural operations including Weed management

As recommended by ICAR Institute/ CAU/SAU/SHU/ Others	Active ingredient	Application/remarks
	Pre-emergence, Simazine, Diuron	Apply 3-4 years after tree planting
	Oxyfluorfen, EPTC	Recommended also for young trees
	Chlorthal dimethyl	For olive tree nurseries
	Glyphosate Glyphosate trimensium Aminotriazole (amitrole)	Systemic herbicide
	Source: <a href="http://oliveoilsindia.com/Olive-Tree-Cultivation.htm">http://oliveoilsindia.com/Olive-Tree-Cultivation.htm</a>	
Action taken / proposed by the applicant		
Points of Deviation if any and justification		

#### 5.4.3.6.Plant canopy architecture management/ training and pruning

As recommended by ICAR Institute/ CAU/SAU/SHU/ Others	<p>Pruning is necessary to adjust the trees to the climatic conditions of the area and increase plantation's productivity. The aims of pruning are: (1) to balance vegetation with fruit yield, (2) to minimize the non productive period, (3) to prolong the productivity of the trees, (4) to delay senescence, and (5) to save soil water, a critical factor in non-irrigated orchards.</p> <p>There are three main types of pruning:</p> <ul style="list-style-type: none"> <li>▪ Regulated pruning. It aims to develop the tree's frame and is of great importance in the first years of the tree's life.</li> <li>▪ Pruning for fruiting. The aim of this pruning is to induce productive branches to form fruits leaving the structural branches unaffected. Additionally, it maintains uniform production in terms of yield and quality, a feature that is particularly important in table olive varieties.</li> <li>▪ Renovating pruning. This aims to stimulate sprouting in order to rejuvenate senescent trees.</li> </ul>
Action taken / proposed by the applicant	
Points of Deviation if any and justification	

#### 5.4.3.7. Use of Pollinators & Pollinizers

Impact of pollinators in enhancing pollination and increasing yield and to provide supplementary income to farmers.

Item	Recommended	Proposed	Remarks
No. of Hives	1-3 /ha		
Name of Pollinizers	Frantoio and Leccino are self fertile and does not need pollinizers. Other varieties need pollinizers which vary as per the variety e.g. Picholine require Leccino, Manzanillo as pollinizers; Pendolino require Leccino and Maurino as pollinizers.		
No. of Pollinizers	10-15%		



#### 5.4.3.8. Use of Plant growth regulators (including waiting period)

As recommended by ICAR Institute/ CAU/SAU/SHU/ Others	Auxin application to cutting increase rooting and survival potential. GA <sub>3</sub> @ 30 ppm effects olive oil content positively.
Action taken / proposed by the applicant	
Points of Deviation if any and justification	

#### 5.4.3.9. Flowering& Fruiting

Including Problem of unfruitfulness / Growth, fruiting habits and methods for inducing fruitfulness

As recommended by ICAR Institute/ CAU/SAU/SHU/ Others	Varieties which are not self fruitful require pollinizers for enhancing fruiting. Although olive is wind pollinated but pollination by bees also take place hence placing bee hives in the file enhance fruit set.
Action taken / proposed by the applicant	
Points of Deviation if any and justification	

#### 5.4.3.10. Integrated Pest and Diseases Management including Biological control and Food Safety

<p>As recommended by ICAR Institute/ CAU/SAU/SHU</p>	<p><b>Pests:</b></p> <p><b>Bactrocera (Dacus) oleae:</b> Insect control management includes bait sprays, trapping of adult flies, harvest timing, fruit sanitation after harvest, and biological control. Additionally, insecticides are used in bait-sprays or as sprays from the air to control the olive fruit fly.</p> <p><b>Prays oleae:</b> Control of first generation olive moths can be done using biological insecticides based on <i>Bacillus thuringiensis</i> (e.g. Thuricide, Bactospeine). Second generation individuals must be sprayed with selective insecticides such as triflumuron (Alsystin) and teflubenzuron (Nomolt) that suppress chitin synthesis. Other conventional insecticides comprise fenthion (Lebaycid), methidathion (Ultracide), dimethoate, etc.</p> <p><b>Saissetia oleae:</b> Pruning to provide open, airy trees discourages black scale infestation and is preferred to chemical treatment. In addition, biological control is effective, since a number of natural enemies, including both parasites and predators attack black scale.</p> <p><b>Diseases</b></p> <p><b>Verticillium wilt:</b> The most effective management strategies to protect trees from <i>Verticillium</i> wilt are those taken before planting. When considering a new site for an olive orchard, it is not recommended to use land that has been planted for a number of years with crops that are highly susceptible to the disease, such as cotton, eggplant, peppers, potato, or tomato. Inoculum levels can be reduced before planting by soil fumigation, soil solarization, flooding the fields during summer, growing several seasons of grass cover crops or a combination of these treatments. A resistant rootstock is not available, although some tolerance has been reported in the cultivar Ascolano.</p> <p><b>Olive knot:</b> Olive knot control measures are usually preventive. Attention must be paid to cultural practices as the pruning and destroying of infected plant material and the use of harvesting methods that do not harm the tree. Treatments with fungicides based on copper may reduce the disease but do not eliminate the bacterial population, which soon multiplies back to previous levels. It is also important to cover wounds after pruning such as galls on limbs or trunks with Bordeaux mixture</p> <p><b>Leaf spot:</b> Measures for control of the disease include cultural practices (such as selective pruning to reduce relative humidity within the tree canopy) and treatment with protective fungicides (e.g. Bordeaux mixture) at the beginning of autumn before the first infection occurs, or in the early spring. In addition, highly susceptible olive tree cultivars to the disease must be avoided (e.g. Manzanilla, Frantoio, Arbequina, Moroccan, Picholine).</p> <p><b>Fruit mummification:</b> For the control of the disease, preventive fungicide treatment is recommended at the beginning of September</p>
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	before the rainy period. Application must be repeated later if secondary infections are noticed.
Action taken / proposed by the applicant	
Points of Deviation if any and justification	

Residue Analysis: Address and contact details of NABL approved laboratory proposed for testing pesticide residue:

#### 5.4.3.11. Physiological disorders- causes, preventive and management measures.

As recommended by ICAR Institute/ CAU/SAU / SHU	<p><b>Apical end rot/Soft nose:</b> The cause is unknown. It may result from sudden changes in temperature and humidity, which produce partial dehydration of the fruit at the apical end. It has also been associated with calcium and boron deficiencies, and with changes in watering regimes.</p> <p><b>Clay-panning and root plaiting:</b> These are disorders in root architecture that can lead to unthrifty plants that are subject to stress-related dieback and infections.</p> <p><b>Sphaeroblasts and oedema:</b> Sphaeroblasts are knob-like growths up to 10 mm wide which protrude from stems. When they are cut open, a spherical lump of wood can be removed from the surrounding tissue. Their cause is unknown, and they commonly occur on the cultivar ‘Barnea’.</p> <p><b>Tip death:</b> Ends of branches die for no apparent reason. Tip death appears to have no effect on the general health of the tree or its productivity. Branches can be removed if this is considered necessary for cosmetic purposes.</p>
Action taken / proposed by the applicant	
Points of Deviation if any and justification	

5.4.3.12. Special problems if any

Special Problem	Recommendation by ICAR/CAU/SAU/SHU	Proposal / action taken by applicant	Points of deviation and justification

### 5.4.5. Farm Mechanisation

Available Machinery and equipment's / implements

	Operations	Available Machinery and equipment's / implements	Proposed use	justification
1	Pesticide spray	Sprayers		
2	Ploughing	Tractor		
3	Weeding	Weeder, grass cutter		
4	Harvesting	Manual/Mechanical		
5	Grading	Grading machine		
6	Oil Extraction	Oil Extractor		

Plant & Machinery proposed to be used or procured on outsourcing and on his own

	Operations	Plant & Machinery proposed to be used	Out sourcing / own purchase	Cost	justification
1	Pesticide spray	Sprayers			
2	Ploughing	Tractor			
3	Weeding	Weeder, grass cutter			
4	Harvesting	Harvester			
5	Grading	Grading machine			
6	Oil Extraction	Oil Extractor			

### 5.4.6. Harvesting and Fruit / Flower care management

5.4.6.1. Harvesting season- Across India

State/UT	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
J & K												
HP												
Rajasthan												

5.4.6.2. Harvesting season- Across the project state /UT

District/ Production area	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

5.4.6.3. Harvesting stage based on purpose and market (local/distant market):

5.4.6.4. Harvesting technology and Fruit care management

Global best practices	(Mention source of publication with date/Year)	
As recommended by ICAR Institute/ CAU/SAU/SHU	Pre-harvest Management	
	Maturity Index / determination	
	Technique	
	Devices	
	Skills and training	
	Time/ Period	
	Handling	
	Containers	
	Others	
	(Mention source of publication with date/Year)	
Relevant Photographs if any		
Action taken / proposed by the applicant		
Points of Deviation if any and justification		

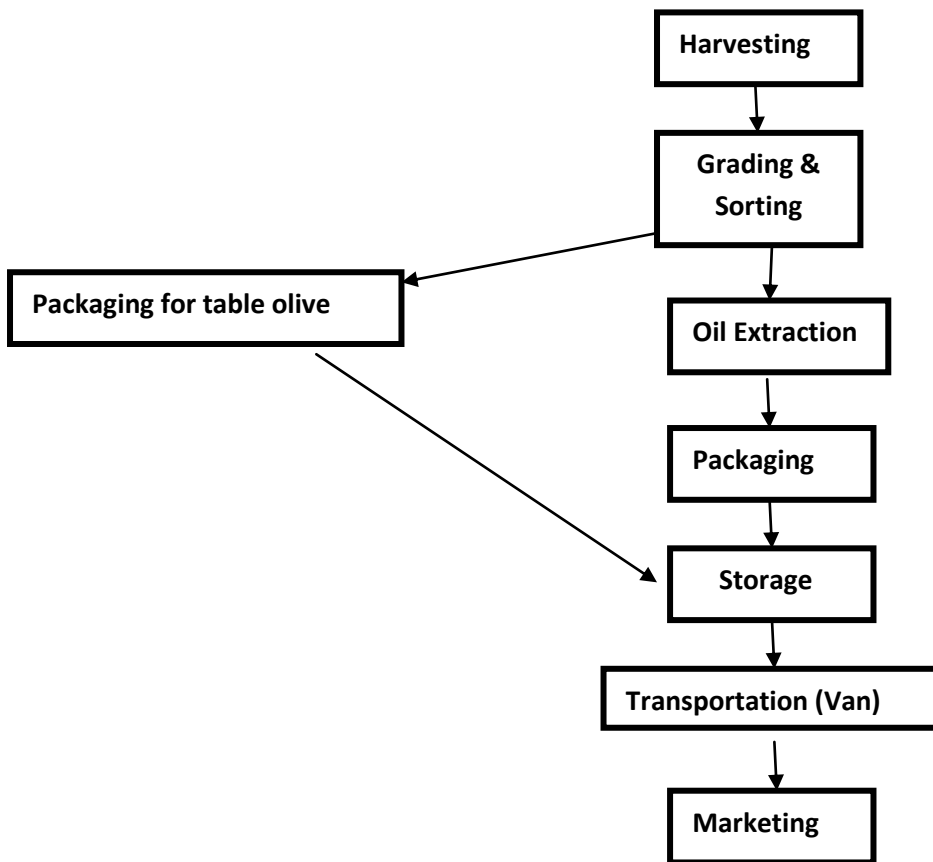
5.4.6.5.Expected Yield / Acre and for the project area in a Year:



5.5.	<b>Post-Harvest Management</b>	
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5.5.1. Post-Harvest infrastructure scenario in horticulture sector in the State and specially for the proposed crop / component

5.5.2.Product / Process Flow chart- Illustrative ( It should be crop and project specific)  
(Unidirectional)



### 5.5.3. Lay out/ Floor Plan of Post-harvest operations

1. Sorting
2. Cleaning / Washing
3. Grading
4. Oil Extraction
5. Packing
6. Storage
7. Transport

### 5.5.4. Post-harvest operations

#### 1. Arrival Area

Activity	Recommended	Proposed practice	Remarks
Collection	Storage		

#### 2. Cleaning / Washing– manual/mechanised; model/make, size, capacity and protocols.

Activity	Recommended	Proposed practice	Remarks
Cleaning and washing	Manual		
	Mechanized		

#### 4. Sorting and grading including manual/mechanised; model/make, capacity and protocols.

Activity	Recommended	Proposed practice	Remarks
Sorting and grading	Size based		
Sorting and grading	Colour based		

#### 5. Oil Extraction

Activity	Recommended	Proposed practice	Remarks
Oil Extraction	Oil Extractor		

#### 6. Packaging and Labelling

(Including steps/ processes, norms, protocols, manual/mechanised; model/make, capacity, turn over / hour; palletisation; wooden/plastic / any other. In case of exports are you aware of compliance requirements as provided by APEDA-

[http://apeda.gov.in/apedawebsite/six\\_head\\_product/FFV.htm](http://apeda.gov.in/apedawebsite/six_head_product/FFV.htm))

Activity	Recommended	Proposed practice	Remarks
Packaging & labelling	Bottle packaging		
	Others		
	Others		

#### 6. Mode of Transport including the requirement of Vans

	Recommended	Present status	Gap / Remarks
Transport method-	Road/Air		
Local Market	Van		
Distant Market	By Air/train		
Exports	By air		

#### 7. Storage/Cold room and Cold Chain

Activity	Recommended	Proposed practice	Remarks
Storage & cold Storage	Storage		
	Cold storage		

#### 5.5.5. Post-harvest Infrastructure – Integrated Postharvest Management

Type of project	New Project/ Expansion/Modernisation	
Location of the Project		
Man power employed (On rolls and on contract)		
Business model -	Rental, Captive, Part of Supply chain service, mixed	
Components of project submitted		
	Infrastructure under the scheme	Tick mark
	Integrated PHM	
	Integrated Pack house	
	Pack House	
	Primary Processing	
	Van	
	Retail outlet	
Types of products to be handled	Bottled, Canned, etc	

Note: In case the project includes any of the post-harvest infrastructure units. Only the relevant details and data sheet should be part of the DPR.

Certificates to enclosed during Market and Financial viability stage and JIT:

1. For Civil Works: Chartered Engineer (Civil) Certificate- component wise cost break up for Civil Works.
2. For Plant & Machinery: Chartered Engineer (Mechanical) Certificate on component wise cost break up for Plant & Machinery showing basic cost and Taxes separately.

#### 5.5.5.1. Integrated Pack house:

1. Rationale for the proposal
2. Stages / process flow chart.
3. Proposed project location:
4. Number of days proposed to be operational:
5. Raw Material:
  - a. Types/ Quality of raw material- Grades/ Specifications
  - b. Raw material availability and procurement: Details of own production if any and local production annually with 5 years data with future projections. Markets and farm areas of procurement and reliability. (Obtain past data from Local District Horticulture Officer. In the absence of scientific data, the authority can give estimated/projected data with stated assumptions)
  - c. Catchment area:

S.No	Location of Catchment (Cluster- Primary / Secondary)	Name of Village, Block, District	Commodities to be sourced	Qty to be sourced

- d. Quality control/ assurance /testing
  6. Pack house/ Sorting and Grading unit:
    - e. Existing number of units, available capacity and utilisation in the project block, district and the State.
    - f. Products and services and projections.
    - g. Statutory requirements / licensing details if any.
  7. Products, Bi products and services
    - h. Various products – Quality, specifications etc.
    - i. Annual output for the last 3 years in the project block, district and state.
    - j. Projections for 7 years.
    - k. Packing and labelling
  8. Market :
    - a) Quality grades/ specifications/ kinds of products
    - b) Demand and Supply data for the products and services.
    - c) Existing / Proposed Market linkage
    - d) MOUs/ Contract documents / undertakings/ LoA
    - e) Target consumption centres/ key domestic markets
    - f) Export targets/ Plans if any
    - g) In case of export, details of volume to be exported / export destination / statutory norms of export destination should be provided in the DPR.
  9. Business model for the unit.
  10. Source of Technology
  11. Pack house unit: Type and Lay out (show the drawing)
  12. Technical standards-Civil infrastructure and Plant and Machinery, accessories: Refer NHB guidelines on Technical Standards
- (Proposed Design, layout and Photographic evidence certified by chartered engineer is required to be submitted in case the project is considered for processing)

Plant & Machinery	Recommended technical standards	Proposed	Make	No.of units	Unit cost	Total cost

13. List of Manufacturers / Suppliers of Plant and Machinery (enclose quotations during Market viability and Financial viability stage)

Plant & Machinery	Manu- facturer	Offer product Technical Specifications	Compliance with the NHB standards	Quotation cost	Dealers location	Quotation is in possession of the applicant

14. Protocols

Activity	Recommended	Proposed practice	Remarks

15. Compliance to relevant BIS code and standards- Electrical, Mechanical- Yes/No.

16.Requirement and Availability of

- Managerial manpower
- Technical manpower
- Skilled manpower
- Un skilled manpower

## Reference Data Sheet

#	Component: Integrated Pack house	Description
1	Pack house Handling capacity	Specify total incoming volume of raw produce in MT/day.
2	Products to be handled	Describe the details of the products planned for value addition.
3	Area of the pack house	Specify the total Plinth area of the construction in m <sup>2</sup> .
4	Receiving Area (L x W x H)m	Provide the dimensions of the receiving, weighing and preliminary handling area.
5	Dimension of the building (L x W x H) m	Provide the total covered area of the building.
6	Handling Area (L x W x H)m	External dimensions of the designated sorting, grading, cleaning and packing area.
7	Roof Details	Provide the construction material and specifications of roof.
8	Outer walls and Flooring Details	Description of the outer walls and flooring of enclosed area (food grade materials).
9	Lighting - Internal and External	Type of lighting used (CFL/LED/Normal – total numbers and wattage).
10	Door/ Window Details	Number and Dimensions of openings - doors and windows.
11	Pest control details	Number and details of pest control used (air curtains, other equipment, etc.).
12	Fumigation Details	Specify the details of fumigation if used.
13	De-sapping tables	Specify use of de-sapping tables if used.
14	Mechanised Conveyor system & capacity	Dimensions of conveyor system – belt or roller based, and throughput handling capacity in tons/hour.
15	Washing and Drying machinery (if used)	Specify the details of throughput capacity/motors/pumps/belts used.
16	Power generating unit	Details of electric generator installed (kVA). If using alternate energy or hybrid systems, provide specifications.
17	Inclusion of Pre-cooling chamber in pack-house	Yes/No
18	Inclusion of staging cold-room in pack-house	Yes/No
19	Layout Drawing	Provide layout drawings of the complete pack house including pre-cooler and staging cold room.



### 5.5.5.2. Pack house:

1. Rationale for the proposal
2. Stages / process flow chart.
3. Proposed project location:
4. Number of days proposed to be operational:
5. Raw Material:
  - a. Types/ Quality of raw material- Grades/ Specifications
  - b. Raw material availability and procurement: Details of own production if any and local production annually with 5 years data with future projections. Markets and farm areas of procurement and reliability. (Obtain past data from Local District Horticulture Officer. In the absence of scientific data, the authority can give estimated/projected data with stated assumptions)
  - c. Catchment area:

S.No	Location of Catchment (Cluster- Primary / Secondary)	Name of Village, Block, District	Commodities to be sourced	Qty to be sourced

- d. Quality control/ assurance /testing
6. Pack house/ Sorting and Grading unit:
  - a. Existing number of units, available capacity and utilisation in the project block, district and the State.
  - b. Products and services and projections.
  - c. Statutory requirements / licensing details if any.
7. Products, Bi products and services
  - a. Various products – Quality, specifications etc.
  - b. Annual output for the last 3 years in the project block, district and state.
  - c. Projections for 7 years.
  - d. Packing and labelling
7. Market :
  - a) Quality grades/ specifications/ kinds of products
  - b) Demand and Supply data for the products and services.
  - c) Existing / Proposed Market linkage
  - d) MOUs/ Contract documents / undertakings/ LoA
  - e) Target consumption centres/ key domestic markets
  - f) Export targets/ Plans if any
  - g) In case of export, details of volume to be exported / export destination / statutory norms of export destination should be provided in the DPR.
8. Business model for the unit.
9. Source of Technology
10. Pack house unit: Type and Lay out (show the drawing)
11. Technical standards-Civil infrastructure and Plant and Machinery, accessories: Refer NHB guidelines on Technical Standards(Proposed Design, layout and Photographic evidence certified by charter engineer is required to be submitted in case the project is considered for processing)

Plant & Machinery	Recommended technical standards	Proposed	Make	No.of units	Unit cost	Total cost

13. List of Manufacturers / Suppliers of Plant and Machinery (enclose quotations during Market viability and Financial viability stage)

Plant & Machinery	Manu- facturer	Offer product Technical Specifications	Compliance with the NHB standards	Quotation cost	Dealers location	Quotation is in possession of the applicant

14. Protocols

Activity	Recommended	Proposed practice	Remarks

15. Compliance to relevant BIS code and standards- Electrical, Mechanical- Yes/No.

16.Requirement and Availability of

- e. Managerial manpower
- f. Technical manpower
- g. Skilled manpower
- h. Un skilled manpower

17.Data sheet if any.

### 5.5.5.3.Primary Processing unit

1. Rationale for the proposal
2. Stages in Primary Processing and flow chart.
3. Proposed project location:
4. Number of days proposed to be operational:
5. Raw Material:
  - a. Types/ Quality of raw material- Grades/ Specifications
  - b. Raw material availability and procurement: Details of own production if any and local production annually with 5 years data with future projections. Markets and farm areas of procurement and reliability. (Obtain past data from Local District Horticulture Officer. In the absence of scientific data, the authority can give estimated/projected data with stated assumptions)
  - c. Catchment area:

S.No	Location of Catchment (Cluster- Primary / Secondary)	Name of Village, Block, District	Commodities to be sourced	Qty to be sourced

- d. Quality control/ assurance /testing
6. Industry:
  - a. Existing number of units, available capacity and utilisation in the project block, district and the State.
  - b. Products and services and projections.
  - c. Statutory requirements / licensing details if any.
7. Products, Bi products and services
  - a. Various products – Quality, specifications etc.
  - b. Annual output for the last 3 years in the project block, district and state.
  - c. Projections for 7 years.
  - d. Packing and labelling
7. Market :
  - h) Quality grades/ specifications/ kinds of products
  - i) Demand and Supply data for the products and services.
  - j) Existing / Proposed Market linkage
  - k) MOUs/ Contract documents / undertakings/ LoA
  - l) Target consumption centres/ key domestic markets
  - m) Export targets/ Plans if any
  - n) In case of export, details of volume to be exported / export destination / statutory norms of export destination should be provided in the DPR.
8. Business model for the unit.
9. Source of Technology

10. Civil infrastructure. Design, layout and Photographic evidence certified by chartered engineer is required to be submitted in case the project is considered for processing.

Facility utility /	Recommended	Proposed.	Remarks

11. Plant & Machinery: Rationale, Design, Capacity, After service, Warranty (Design, layout and Photographic evidence certified by chartered engineer is required to be submitted in case the project is considered for processing).

Plant & Machinery	Recommended technical standards	Proposed machinery standards	Make	No. of units	Unit cost	Total cost

13. List of Manufacturers / Suppliers of Plant and Machinery (enclose quotations during Market viability and Financial viability stage)

Plant & Machinery	Manufacturer	Offer product Technical Specifications	Compliance with the NHB standards	Quotation cost excluding Taxes	Dealers location	Quotation is in possession of the applicant

14. Requirement and Availability of

- Managerial manpower
- Technical manpower
- Skilled manpower
- Un skilled manpower

## 1. Introduction:

### RETAIL SHELF

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#### ***Component Definition***

The Retail Shelf equipment's are temperature and/or humidity controlled cabinets or shelves that help in merchandising of fresh horticulture produce by maintaining the on-shelf quality of fruits and vegetables.

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#### ***Component Description***

A maximum admissible cost norm of Rs 10 lac per establishment is applicable for a Retail shelf as part of add on components for credit linked subsidy. This does not limit the establishment from utilising more retail shelves as per requirement or from sourcing equipment with higher costs or options.

The Component name "Retail Shelf" can consist of individual items such as:

1. Multi-decks
2. Small Multi-decks
3. Roll In decks
4. Vertical Decks
5. Specialised cool shelving
6. Associated refrigeration and humidification equipment.

All applicable safety and performance norms shall apply to Retail Shelf component.

2. Rationale for the proposal
3. Product / Process flow chart.
4. Proposed project location:
5. Number of days proposed to be operational:
6. Produce / Raw Material:
  - a. Types/ Quality of raw material- Grades/ Specifications
  - b. Raw material availability and procurement: Details of own production if any and local production annually with 5 years data with future projections. Markets and farm areas of procurement and reliability.
  - c. Produce/ Raw material quality and assurance testing
7. Enterprise:
  - a. Existing number of units, available capacity and utilisation in the project block, district and the State.
  - b. Products and services and projections.
  - c. Statutory requirements / licensing details if any.
7. Market :
  - o) Quality grades/ specifications/ kinds of products
  - p) Demand and Supply data for the products and services.
  - q) Existing / Proposed Market linkage
  - r) MOUs/ Contract documents / undertakings/ LoA
  - s) Target consumption centres/ key domestic markets
  - t) Export targets/ Plans if any

u) In case of export, details of volume to be exported / export destination / statutory norms of export destination should be provided in the DPR.

8. Business model for the unit.

9. Source of Technology

10. Civil infrastructure, Plant and Machinery. Design, layout and Photographic evidence certified by chartered engineer is required to be submitted in case the project is considered for processing.

Facility / utility	Recommended	Proposed.	Remarks

11. List of Manufacturers / Suppliers of Plant and Machinery (enclose quotations during Market viability and Financial viability stage)

Plant & Machinery	Manu- facturer	Offer product Technical Specifications	Compliance with the NHB standards	Quotation cost excluding Taxes	Dealers location	Quotation is in possession of the applicant

12.Requirement and Availability of

- e. Managerial manpower
- f. Technical manpower
- g. Skilled manpower
- h. Un skilled manpower

13. Data sheet:



Representative Photographs from www

### Reference Data Sheet

#	Component: Retail Shelf	Description
1	Name of Manufacturer	Provide the name of manufacturer and model.
2	Type	Specify the kind of Retail Shelf i.e. Multi-decks, Small Multi-decks, Roll In's.
3	Produce to be handled	Name types of produce to be handled
4	Capacity	Storable volume of fresh products the shelf can store in m <sup>3</sup> .
5	Dimension external	Specify the floor area occupied by the retail and height in mtr
6	Electronics	Specify energy saving electronics and the automatic cut-off/start are provided.
7	Temperature Range	Specify the operating Temperature Range of the Retail Shelf as specified by the Manufacturer.
8	RH control	Provide details of RH controls
9	Lighting system	Provide details and kW of lights used
10	Total Refrigeration capacity	Provide the capacity of refrigeration unit of the shelf in kW.
11	Refrigerant used	Provide the technical name of refrigerant.
12	Energy consumption	Total power consumption of the shelf in kW.
13	Years in business	Provide details of retail shop, years in business, annual sales volume, etc.

5.6	<b>Marketing</b>
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#### 5.6.1.Connectivity of project site and produce

1. Road connectivity	Distance
a. National Highway	
b. State Highway	
c. Fright corridor	
d. Quadri lateral	
2. Rail connectivity	
3. Air connectivity	

#### 5.6.2. Nearest produce Assembling / Aggregation unit/ place if any

#### 5.6.3. Existing Market Institutions – Agri.Produce Market Committees,

- a) Near to Project site
- b) Within the District / Neighbourhood districts
- c) Within the State
- d) In Adjacent State

#### 5.6.4. Alternative Marketing strategies;

- a. Pre-harvest contract
- b. On Farm Marketing
- c. Retail Marketing
- d. Wholesale marketing
- e. Online Marketing
- f. Exports

#### 5.6.5.Traceability Record/ system proposed if any for packs.

#### 5.6.6.Proposed value chain / method of Marketing by the Applicant



<b>5.7</b>	<b>Value Addition/ Processing</b>
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Potential for the processing of crop produce / commodity and facilities / infrastructure available

	Processing product (s)	Infrastructure / Processing units available	Capacity	% capacity utilisation	Remarks

<b>6</b>	<b>Technology providers</b>
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6.1. Research Institute (s) [ICAR/CAU/SAU/SHU etc.] providing / from which technical details are ascertained

- ICAR-central Institute of Temperate Horticulture, Old Air Field, Rangreth, Srinagar – 190007, Jammu and Kashmir, India
- ROCL, Rajasthan

6.2. Experts-whose services are availed -**Crop expert / Subject Matter Specialist (SMS) and other experts consulted DPR preparation.**

Crop Expert	Name of Horticulturist/ Crop Expert	
(Mandatory)	Current profession:	
	Educational Qualification and University passed out	
	Registration Number if any	
	Permanent Address:	
	Contact Number:	
Hi Tech Expert	Name of Expert	
(Desirable)	Current profession:	
	Educational Qualification and University passed out	
	Registration Number if any	
	Permanent Address:	
	Contact Number:	
Post-Harvest Management Expert	Name of PHM Expert	
(Desirable)	Current profession:	
	Educational Qualification and University passed out	
	Registration Number if any	
	Permanent Address:	
	Contact Number:	
Cold storage / Infra Expert / Charter Engineer	Name of Expert	
(Desirable)	Current profession:	
	Educational Qualification and University passed out	
	Registration Number if any	
	Permanent Address:	
	Contact Number:	
Market Expert	Name of Expert	
(Desirable)	Current profession:	
	Educational Qualification and University passed out	
	Registration Number if any	
	Permanent Address:	
	Contact Number:	
Project Finance	Name of Expert	
(Mandatory)	Current profession:	
	Educational Qualification and University passed out	
	Registration Number if any	
	Permanent Address:	
	Contact Number:	

### 6.3. Agri-Business Incubators

1. List of Incubators nearest to the project.
2. If any assistance is taken from the incubators, details
  - a. Dr Desh Beer Singh, Director, ICAR-Central Institute of Temperate Horticulture, Srinagar, [dircithsgr@icar.org.in](mailto:dircithsgr@icar.org.in), [deshbsingh@yahoo.com](mailto:deshbsingh@yahoo.com)
  - b. Dr Om Chand Sharmna, Principal Scientist, Fruit Science, ICAR-Central Institute of Temperate Horticulture, Srinagar, [ommandi@yahoo.co.in](mailto:ommandi@yahoo.co.in)
  - c. Dr Javid Iqbal Mir, Senior Scientist, ICAR-Central Institute of Temperate Horticulture, Srinagar, [javidiqbal1234@gmail.com](mailto:javidiqbal1234@gmail.com)

<b>7</b>	<b>Food Safety – With / Without Good Agricultural Practices Certification</b>
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7.1.	GAP	Optional
	Whether the applicant proposes to undertake Good Agricultural Practices?	Yes/No
	If Yes. What brand / kind GAP – Provide details of brand	
	Provide Certifying Agency details and contact person	
	NABL lab whose services are proposed to be availed to assure compliance with regard to pesticide / chemical residue.	

## 7.2.FOOD SAFETY MEASURES

### 7.2.1.Pre-Planting Measures

Activity	Action taken /Proposed to be in the project
1. Site selection Land or site for olive production should be selected on the basis of land history, previous manure applications and crop rotation.	
a) The field should be away from animal housing, pastures or barnyards.	
b) Farmers should make sure that livestock waste should not enter the produce fields via runoff or drift.	
2. Manure handling and field application Livestock manure can be a valuable source of nutrients, but it also can be a source of human pathogens if not managed correctly.	
a) Proper and thorough composting of manure, incorporating it into soil prior to planting, and avoiding top-dressing of plants are important steps toward reducing the risk of microbial contamination.	
3. Manure storage and sourcing	
a) Manure should be stored as far away as practical from areas where fresh produce is grown and handled.	
b) Physical barriers or wind barriers should be erected to prevent runoff and wind drift of manure.	
c) Manure should be actively compost so that high temperature achieved by well-managed, aerobic compost can kill most harmful pathogens.	
4. Timely application of manure Manure should be applied at the end of the season to all planned olive trees, preferably when soils are warm, non-saturated, and cover-cropped. If manure is being applied at the start of a season, then the manure should be spread two weeks before planting, preferably to grain or forage crops.	

### 7.2.2. Production Measures

1. Irrigation water quality Ideally, water used for irrigation or chemical spray should be free from pathogen. However, potable water or municipal water is not feasible for extensive use for crop production.	
a) Hence, surface water used for irrigation should be quarterly tested in laboratory for pathogen.	
b) Farmers can filter or use the settling ponds to improve water quality.	
c) Olive crop should not be side dressed with fresh or slurry manure. If side dressing is required, well composted or well-aged (greater than one year) manure should be used for the application.	
2. Irrigation methods	
a) Drip irrigation method should be used, whenever possible to reduce the risk of crop contamination	
b) Plant disease levels also may be reduced and water use efficiency is maximized with this method.	
3. Field sanitation and animal exclusion	
a) Farmers should stay out of wet fields to reduce the spread of plant or human pathogens.	
b) Tractors, plant, machinery and equipments that were used in manure handling should be cleaned prior to entering produce fields.	
c) Animals, including poultry or pets should not be allowed to roam in crop areas, especially close to harvest time.	
4. Worker facilities and hygiene	
a) Farmers should get proper training to make them understand the relationship between food safety and personal hygiene. These facilities should be monitored and enforced.	
b) Ideally, farm workers should be provided clean, well-maintained and hygienic toilet facilities around the farming areas separately for the male and female.	

### 7.2.3. Harvest

1. Clean harvest aids	
a) Bins and all crop containers have to be washed and rinsed under high pressure. All crop containers should be sanitized before harvest.	
b) Bins should be properly covered, when not in used to avoid contamination by birds and	

animals.	
<b>2. Worker hygiene and training</b>	
a) Good personal hygiene is particularly important during the harvest of crops. Sick employees or those with contaminated hands can spread pathogens to produce.	
b) Employee awareness, meaningful training and accessible restroom facilities with hand wash stations encourage good hygiene.	

#### **7.2.4.Post-Harvest Handling**

<b>1. Worker hygiene</b>	
a) Hands can contaminate fresh olive fruits with harmful microbes	
b) Packing area should be cleaned and sanitized.	
c) Supply liquid soap in dispensers, potable water, and single-use paper towels for hand washing.	
d) Packing area should be cleaned and sanitized. Supply liquid soap in dispensers, potable water, and single-use paper towels for hand washing.	
e) Workers should be properly educated about the importance of restroom use and proper hand washing.	
f) Encourage proper use of disposable gloves on packing lines.	
g) Sick employee should not be given food-contact jobs.	
<b>2. Monitor wash water quality</b>	
a. Potable water should be preferably used in all washing operations.	
b. Clean water should be maintained in dump tank by sanitizing and changing water regularly.	
c. Use chlorinated water and other labelled disinfectants to wash fresh produce.	
<b>3. Sanitize packinghouse and packing operations</b>	
a. Loading, staging, and all food contact surfaces should be cleaned and sanitized at the end of each day.	
b. Exclude all animals, especially rodents and birds from the packing house.	
c. Wash, rinse and sanitize the packing line belts, conveyors, and food contact surfaces at the end of each day to avoid buildup of harmful microorganisms.	
d. Packaging material should be stored in a clean	

area	
<b>4. Pre-cooling and cold storage</b>	
a. After harvesting, olive fruits should be quickly cooled to minimize the growth of pathogens and maintain good quality.	
b. Water bath temperature for cooling should not be more than 10F cooler than the produce pulp temperature.	
c. Refrigeration room should not be overloaded beyond cooling capacity.	
<b>5. Transportation of produce from farm to market</b>	
a) Proper cleanliness of the transportation vehicles should be ensured before loading.	
b) Farmers have to make sure that fresh fruits and vegetables are not shipped in trucks which have carried live animals or harmful substances.	
c) If these trucks must be used, they should be washed, rinsed, and sanitized them before transporting fresh produce.	
d) For traceability norms, it must be ensured that each package leaving the farm can be traced to field of origin and date of packing	

## 8. Innovation if any



## **9.Profitability of the project (Horti-business): Critical observations of Applicant**

10	Checklist
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### Check list for Detail Project Report (DPR)

		Mandatory Information	Document / Evidence *	Tick Mark
	<b>Project at a Glance</b>	√		
1	<b>About the Applicant /Promoter</b>	√		
2	<b>Details of benefits availedby the Applicant / Promoter</b>	√		
3	<b>About Project -Name, rationale, Management and Description</b>			
	1. Name of Project, Activity, Objectives and expected Outcomes	√		
	2. Rationale / Justification for the project	√		
	3. Site/ Land details- RoR/ Ownership / Registration of lease/ map etc.	√	Certified Land revenue documents	
	4. Location of the Project- Identification	√		
	5. Current usage of land of proposed Project Area	√		
	6. Current infrastructure and assets possessed by the Applicant:	√		
	7. Lay out plan of the project	√	Lay out Plan	
	8. Conversion of Land Use (CLU)	√	Certificate from competent authority	
	9. Whether project site is part of production belt / cluster / hub	√		
	10. Rationale for the location of the project	√		
	11. Compliance of project site for food safety	√		
	12. Components / Activities of the Project with justification	√		
	13. Operations planning	√		
	14. Month wise operational chart / Implementation schedule	√		
	15. Backward and Forward linkages.	√		
	16. Manpower (Skilled & Unskilled labour etc.) availability	√		
	17. Infrastructure (Power, Fuel, Water, Plant and Machinery, connectivity, Effluents treatment etc.)- Required, Already available, Gaps and the management.	√		

	18. Employment generation	√		
	19. SWOT Analysis	√		
	20. Monitoring and evaluation	√	Certificate	
4	<b>NHB Scheme under which the project is proposed with rationale / justification.</b>			
5	<b>Project details</b>			
5.1	<b>Agro-climatic suitability / feasibility</b>			
	1. Origin and distribution of crop in the said location and India and in the world (briefly)			
	2. Agro-climatic / Horticultural zones and suitability of the crop (s)	√	IMD Data	
	3. Soil type and latest health-suitability for the crop	√	Latest Soil health card (not more than 1 month old)	
	4. Water (irrigation) source, availability, Quality and suitability	√	Latest Water Analysis report (not more than 1 month old)	
5.2	<b>Market viability</b>			
	1. Commercial and Nutritive importance / significance, composition and Uses			
	2. Target Market	√		
	3. Area, Production and Productivity in the District, State and India for the last 5 years			
	4. Clusters of the project crop in the state.	√		
	5. Demand and Supply Gap	√	State Horticulture Dept.	
	6. Global producers- Country, Area, Production, Productivity and global market share in the last available 5 years.			
	7. International trade and potential (for export oriented projects)	√ @		
	8. Seasonality of fruit and its comparison with other available fruits	√		
	9. Price variation of commodity in the State and nearby markets	√	State Govt.	
	10. Balance sheet of commodity in the State			
	11. Central and State Government policy			
	12. Value chain in the commodity	√		
	13. Proposed Strategy by the Applicant for Marketing and Market viability	√		
5.3	<b>Financial viability</b>			

	1. Due diligence status	√		
	2. Project Cost	√	Certified by CA	
	3. Means of Finance	√		
	4. Investment into Horticulture	√		
	5. Key financial Indicators	√		
	6. Project Financing	√		
	a. Rate of Interest	√		
	b. Returns from the Project (IRR):	√		
	c. Cost of Production and Profitability (Annexure)	√		
	d. Yield and Sales Chart (Annexure)	√		
	e. Proposed Balance Sheet: (Annexure)	√		
	f. Proposed Cash flow Statement for next 7 years (Annexure)	√		
	g. Proposed Profit & Loss Account: (Annexure)	√		
	h. Proposed Repayment of Term loan and Schedule (Annexure)	√		
	i. Break even Analysis (Annexure)	√		
	j. NPV (Net Present Value)	√		
	k. Economic Rate of Return	√		
	7. Farm record keeping/ Maintenance proposed	√	Records	
<b>5.4</b>	<b>Land development and Crop Husbandry</b>			
	<b>5.4.1.Land development</b>			
	<b>5.4.2.Selection of Quality Planting Material</b>			
	1. Recommended and popular Cultivars-varieties/hybrids, their specific characteristics, requirements and yields	√		
	2. Cultivar/Hybrid/Variety selected and Criterion adopted for selection	√		
	3. Propagation methods	√		
	4. Accredited / Good Nurseries in the area	√		
	5. Planting material-source, quality and suitability	√	Nursery / Shop Invoice with Seed quality	
	<b>5.4.3.Orchard / Site planning, Lay out and management</b>			
	1. Planning, establishment and layout systems	√		
	2. Land preparation	√		
	3. Planting Season / time and density and transplanting	√		

	4. Water and Nutrient management	√	Written plan	
	5. Intercultural operations including Weed management	√		
	6. Plant canopy architecture management/ training and pruning	√		
	7. Planting systems and transplanting of horticultural crops	√		
	8. Use of Pollinators & pollinisers	√		
	9. Use of Plant growth regulators	√		
	10. Flowering & fruiting	√		
	11. Integrated Pest and Disease Management and Food Safety measures	√		
	12. Physiological disorders- causes, preventive and management measures.	√		
	13. Special problems if any	√		
	<b>5.4.5.Farm Structures and mechanisation</b>	√		
	Farm Mechanisation	√	Company Brochures	
	<b>5.4.6.Harvesting and Fruit / flower care management</b>			
5.5	<b>Post-Harvest Management</b>	√		
	1. Post-Harvest infrastructure scenario in horticulture sector in the State and specially for the proposed crop / component			
	2. Product/ Process Flow chart	√		
	3. Lay out / Floor Plan of post-harvest operations	√		
	4. Post-harvest operations (Based on applicability)	√	Protocols	
	5. Cleaning / Washing	√		
	6. Sorting and Grading	√		
	7. Packing and labelling	√	Models	
	8. Transport	√		
	9. Storage	√		
	10. Post-harvest infrastructure – Integrated Post-harvest Management- (Which ever component is proposed)	√	Technical Standards	
	1. Integrated Pack house			
	2. Pack House			
	3. Primary Processing			
	4. Van			
	5. Retail outlet			
	6. Labour room			
5.6	<b>Marketing</b>			
	1. Aggregation & Assembling: Marketing infrastructure	√		

	2. Market Institutions and agents	√		
	3. Demand and Supply trends and forecast both in local and National markets.			
	4. Traceability system	√		
	5. Proposed value chain / method of Marketing by the Applicant	√		
<b>5.7</b>	<b>Value addition / Processing</b>	√		
<b>6</b>	<b>Technology providers</b>	√		
	1. ICAR /CAU/ SAU/SHU / Research Stations and Experts names	√		
	2. Agri/Horti-Business incubators	√		
<b>7</b>	<b>Food Safety -With /Without GAP certification</b>			
	1. GAP Certification if any	√		
	2. Food safety measures	√	Clean farm, Trained workers; Protective clothing, Safety equipment; First Aid; Safety and Hygiene policy; Waste Management Plan	
	a. Pre-planting	√		
	b. Crop husbandry	√		
	c. Harvestings	√		
	d. Post-harvest	√		
8	Innovation if any			
9	<b>Risk Management</b>	√	Proposed insurance details if any	
10	<b>Checklist</b>	√		
11	<b>Declaration from Crop Expert and Project Finance Expert</b>	√		
	<b>Self-declaration by the Applicant</b>	√		

Note: \*: Documents are to be submitted only when NHB accords Pre- IPA approval.

@ In case of export units.

#### **11.1.Declaration by Crop Expert ( if the Project / Crop specific information, data and chapters of DPR are prepared by the expert and not by the applicant)**

I have read and understood the latest NHB Schemes operational guidelines and made the applicant understand the same.

The technical information provided in the Detail Project Report are as recommended by ICAR/ State Agriculture / Horticulture University/ .....Research Institute as published in their publication...../ genuine website.....

The project is technically feasible and economically viable and is bankable.

Certified that 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.

My details are as follows:

Name of Crop Expert		(Could be any working or retired faculty / scientist in ICAR/ CAU/SAU/SHU/State Horticulture Dept. or ICAR Agri/Horti-business incubators)
Current/ previous profession:		
Educational qualification and University passed out		
Registration number if any		
Permanent address:		
Contact Number:	Tel	
	Mobile	
	Email	

Place	Signature
Date	Designation and Seal

### **11.2.Declaration by Project Finance Expert (Chartered accountant)**

( if the Market viability and Financial Viability chapters are prepared by the Project Finance Expert and not done by the applicant on his/her own)

I have read and understood the latest NHB Schemes operational guidelines and made the applicant understand the same.

The project is technically feasible and economically viable and is bankable.

The Financial and Market viability as provided in the Detail Project Report is true to the best of my knowledge.

Certified that 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.

Name of Chartered Accountant	
Current profession:	
Educational qualification and University passed out	
Registration number if any	
Permanent address:	
Contact Number:	Tel
	Mobile
	Email

Place	Signature
Date	Designation and Seal



## **12. Self-Declaration by applicant**

1. I have read, understood and abide by the latest NHB Schemes operational guidelines including conditions, norms and pattern of assistance.
2. The information provided in the Detail Project Report is true to my knowledge.
3. In case the details provided by me viz., (i) my personal details, land, previous benefits availed by me from either Central and State Government if proved false at any stage NHB is entitled to recover any subsidy if any released by it from me.
4. I have personally ascertained technical details of the projector or I have availed the services of a competent Horticulturist for technical details and viability. Accordingly declaration is provided herewith.
5. I have personally ascertained Financial and Market viability of the project or I have availed the services of a competent Project Finance expert for the requisite project finance details and project viability. Accordingly declaration is provided herewith.
6. In case the project is approved for pre-IPA, I shall undergo a 2 Weeks (min.10 working days) training programme in case of Open field condition and protective cover (with or without PHM component) and a minimum of 1 Week programme in case of standalone PHM component at my own expenses in one of the ICAR/CAU/SAU/SHU/ Research Station/ Centres of Excellence/ related Central or State Government institution/ others as found appropriate / approved by NHB.
7. I shall adopt scientific package of practices / technology and maintain proper farm accounts.
8. The project is technically feasible and economically viable and is bankable.
9. In case the project application is considered for application processing, I am bound to submit all required / requisite mandatory documents to establish veracity of my DPR and eligibility to claim subsidy under NHB Schemes in the form prescribed with in 6 months of any such intimation from NHB for according In principle approval (IPA). Else I acknowledge that my application stands vacated and rejected by default of my omission.
10. I understand that incomplete, delayed and /or NPA projects and default cases shall not be eligible for subsidy.
11. I solemnly affirm/ undertake that the proposed project components in the application are a completely new activity and not a pre-existing activity or any component thereof.
12. In case of Plant & Machinery- only new are proposed. Reconditioned / refurbished equipment/ Plant & Machinery shall not be procured under the project.
13. In case of concealment of any facts in this regard, the NHB would have right to reject/ cancel my application / project out right at any stage.
14. In case the project is approved for subsidy claim I shall undertake a MOU with NHB to comply with all the terms and conditions of the scheme guidelines as effective on the date of subsidy claim approval and any other condition/ advisory in the interest of projects success and sustainability.

Applicant (Name and signature) and Seal if any

Date Location:

Should be taken at the time of preparation of DPR (before DPR submission). but should be enclosed during Market viability and Financial viability stage both in soft copy and hard copy.

**CA Certificate Format  
(Letter Head of the CA)**

[Refer Para

**CA certificate (With membership No. and firm registration No. of CA) in the following format:-**

**i. Project Cost:**

Sl. No.	Name of the Component/Item	Amount (Rs. in lakh)
1.	Land/development charges	
2.	Civil works — Technical civil works — Other civil works	
3.	Plant & Machinery	
4.	Misc. Fixed Assets	
5.	Others	
	<b>TOTAL</b>	

**ii. Means of Finance:**

Sl. No.	Item	Amount (Rs. in lakh)
1	Promoter's Equity	
2	Term Loan	
3	Grant from MFPI	
4	Unsecured loan*	
5	Others	

\*Details of unsecured loans along with PAN No. of lenders, if any, duly certified by CA.

**Signature and Seal of C.A (Statutory Auditor in case of company)**

**Date:** \_\_\_\_\_

Counter signature of promoter/ authorized signatory of company with Seal

**CA Certificate Format  
(Letter Head of the CA)**

**CA certificate (With membership No. and firm registration No. of CA) in the following format:-**

**iii. Project Cost: (Rs. in lakh)**

Sl. No.	Name of the Component/Item	Cost approved by the Ministry	Actual expenditure incurred as on -----
1.	Land/development charges		
2.	Civil works — Technical civil works — Other civil works		
3.	Plant & Machinery		
4.	Misc. Fixed Assets		
5.	Others		
	<b>TOTAL</b>		

**iv. Means of Finance: (Rs. in lakh)**

Sl. No.	Item	Means of finance approved by the Ministry	Actual expenditure incurred as on -----
1	Promoter's Equity		
2	Term Loan		
3	Grant from MFPI		
4	Unsecured loan*		
5	Others		

\*Details of unsecured loans along with PAN No. of lenders, if any, duly certified by CA.

**Signature and Seal of C.A (Statutory Auditor in case of company)**

**Date:** \_\_\_\_\_

(The certification by CA should be based on the verification of books of accounts, bills, invoices, work orders, bank statements, etc. related to the project.)

Counter signature of promoter/ authorized signatory of company with Seal

Should be taken at the time of preparation of DPR (before DPR submission). but should be enclosed during Market viability and Financial viability stage both in soft copy and hard copy.

**CE Certificate (Civil) Format for Technical Civil Work:  
(Letter Head of the CE)  
[Refer Para**

**CE certificate (With membership/registration No. of CE) in the following format:**

**Name of Project:**

**Location with address:**

**Date of site Visit by Chartered Engineer:**

**Project Progress: (If project has multiple locations, the location wise details should be submitted in below format for each location)**

Sl. No.	Name of Component	Proposed Area (sq.m)	Proposed Cost (Lakh Rs)	Rate/ Unit(Rs/Sqm)
	<b>Total</b>			

**Signature and Seal of C.E.**

Counter signature of promoter/ authorized signatory of company with Seal

**Annexure-IV**

**CE Certificate (Civil) Format for Technical Civil Work:  
(Letter Head of the CE)**

**CE certificate (With membership/registration No. of CE) in the following format:**

**Name of Project:**

**Location with address:**

**Date of site Visit by Chartered Engineer:**

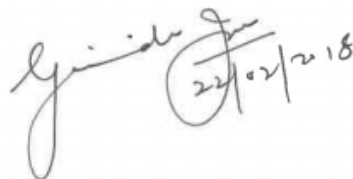
**Project Progress: (If project has multiple locations, the location wise details should be submitted in below format for each location)**

Sl. No.	Name of Component	Proposed/ appraised Area (sqm)	Proposed/ appraised Cost (Lakh Rs)	Actual Area(sqm)	Actual Cost(Lakh Rs)	Rate/ Unit(Rs/Sqm)	Remarks about the status of implementation	Comments on quality, construction standards, market rates
	<b>Total</b>							

**It is certified that the material/ components used in the Technical Civil Work are new.**

**Signature and Seal of C.E.**

**Counter signature of promoter/ authorized signatory of company with Seal**



**CE Certificate (Mechanical) Format for Plant & Machinery:  
(Letter Head of the CE)  
[Refer Para**

**CE Certificate (With membership/registration No. of CE) in the following format:-**

**Name of project:**

**Location with address:**

**Date of Visit by Chartered Engineer:**

**Project Progress (If project has multiple locations, the location wise details should be submitted in below format for each location)**

Sl. No.	Name of Component	Proposed Quantity	Proposed Cost (Lakh Rs)		Supplier/ Manufacturer (Supported by quotations)
			Basic Cost	Taxes, Freight, installation, insurance	
	Component -1				
	Component -2				
	Component -3				
	<b>TOTAL</b>				

**Signature and Seal of C.E.**

Counter signature of promoter/ authorized signatory of company with Seal

**Annexure-V**

**CE Certificate (Mechanical) Format for Plant & Machinery:  
(Letter Head of the CE)**

**CE Certificate (With membership/registration No. of CE) in the following format:-**

**Name of project:**

**Location with address:**

**Date of Visit by Chartered Engineer:**

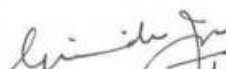
**Project Progress (If project has multiple locations, the location wise details should be submitted in below format for each location)**

Sl. No.	Name of Component	Proposed/ appraised Quantity	Proposed/ appraised Cost (Lakh Rs)	Actual Quantity	Actual Cost (Lakh Rs)		Supplier/ Manufacturer	Status of implementation	Comments on quality, specifications, etc.
					Basic Cost	Taxes, Freight, installation, insurance			
	Component -1							Such as: •Ordered •Received at site •Installation in progress •Installed •Commissioned	
	Component -2								
	Component -3								
	<b>TOTAL</b>								

**It is certified that all the plant and machinery for which grant has been approved are new.**

**Signature and Seal of C.E.**

Counter signature of promoter/ authorized signatory of company with Seal

 12/18

**UNDERTAKING  
[Refer Para 12.1 (m)]**

I ..... (Name of the Lead Promoter/Director/ Partner/ Proprietor etc.) Son of Mr..... (Father's name) resident of ..... (Residential address) do hereby solemnly affirm and declare/undertake as under:

1. That I am promoter/ director/ partner/ proprietor of M/s..... (name of applicant) having its Registration no. ....and Registered Office at ..... (office address of applicant).
2. I hereby make application and I am duly authorized in my own right/by management vide its resolution no. ....dated.....to apply and sign all required documents including this undertaking on behalf of company/partnership firm/cooperative society etc. named as .....; and am fully aware of the facts relating to the setting up of project at Survey/ Plot No....., Village....., Tehsil....., District....., State....., PIN code .....(location of the main facility) for.....(activities to be undertaken by project) and application is being made to the Ministry of Food Processing Industries (MoFPI) under the Central Sector Scheme for Creation of Backward and Forward Linkages.
3. That the term and conditions of the above scheme of the MoFPI under which an application is made by the applicant have been properly read and understood by me and I affirm that the project/ proposal comply with all the terms and conditions of the approval letter and provisions enshrined in the scheme guidelines.
4. That the proposed activities to be undertaken by the project/proposal are covered under the above scheme of MoFPI and no part of the scheme/infrastructure of the project is designed or assigned to be used for any activity other than the activities specified in the application at present or in the near future.
5. It is certified that ..... (name of applicant) has not obtained or applied for grants for the same project, component, purpose or activity from any other Ministry or Department of the Government of India or State Government or their agencies.
6. It is certified that applicant's sister concern (s)/ related company / group company/firms as well as the applicant itself has not availed any financial assistance for a food processing project in the past from MFPI [if availed, the details shall be furnished separately].
7. I also solemnly affirm/undertake that the proposed project components in the application are a completely new activity and not a pre-existing activity or any component thereof.
8. In case of concealment of any facts in this regard, the MoFPI would have right to reject/ cancel my application/project out right at any stage.



**UNDERTAKING**  
**[Refer Para 12.1 (m)]**

I ..... (Name of the Lead Promoter/Director/ Partner/ Proprietor etc.) Son of Mr..... (Father's name) resident of ..... (Residential address) do hereby solemnly affirm and declare/undertake as under:

1. That I am promoter/ director/ partner/ proprietor of M/s..... (name of applicant) having its Registration no. ....and Registered Office at ..... (office address of applicant).
2. I hereby make application and I am duly authorized in my own right/by management vide its resolution no. ....dated.....to apply and sign all required documents including this undertaking on behalf of company/partnership firm/cooperative society etc. named as .....; and am fully aware of the facts relating to the setting up of project at Survey/ Plot No....., Village.....,Tehsil.....,District.....,State....., PIN code .....(location of the main facility) for.....(activities to be undertaken by project) and application is being made to the Ministry of Food Processing Industries (MoFPI) under the Central Sector Scheme for Creation of Backward and Forward Linkages.
3. That the term and conditions of the above scheme of the MoFPI under which an application is made by the applicant have been properly read and understood by me and I affirm that the project/ proposal comply with all the terms and conditions of the approval letter and provisions enshrined in the scheme guidelines.
4. That the proposed activities to be undertaken by the project/proposal are covered under the above scheme of MoFPI and no part of the scheme/infrastructure of the project is designed or assigned to be used for any activity other than the activities specified in the application at present or in the near future.
5. It is certified that ..... (name of applicant) has not obtained or applied for grants for the same project, component, purpose or activity from any other Ministry or Department of the Government of India or State Government or their agencies.
6. It is certified that applicant's sister concern (s)/ related company / group company/firms as well as the applicant itself has not availed any financial assistance for a food processing project in the past from MFPI [if availed, the details shall be furnished separately].
7. I also solemnly affirm/undertake that the proposed project components in the application are a completely new activity and not a pre-existing activity or any component thereof.
8. In case of concealment of any facts in this regard, the MoFPI would have right to reject/ cancel my application/project out right at any stage.

9. I will meet any shortfall in means of finance due to less admissibility of grant or any future reduction in grant-in-aid or any escalation caused in the cost of the project.
10. I shall not dispose-off or encumber or utilize the assets created wholly or substantially out of government grant for purpose other than those for which they have been sanctioned, without obtaining the prior approval of the sanctioning authority of grant-in- aid.
11. In case of non-implementation/ delayed implementation of the project the Ministry will have absolute right in cancelling the approval granted and also recall the grant released, if any, along with interest as per the scheme guidelines.
12. In case of failure to operate the project for at least three years after commencement of commercial operation, I shall return the entire grant-in-aid with interest @ 10% per annum.
13. User charges/hiring rates of the facilities created under the project will be disseminated to the public including uploading of the same on the website of the project/ organization. A copy of the same will also be made available to the Ministry.
14. I undertake that all the information furnished in the application and the DPR with respect to the eligibility conditions, etc. are true and correct to the best of my knowledge and belief and nothing material has been concealed therefrom.
15. I also undertake that in the event of any information or facts furnished by me are found to be incorrect or material information concealed, during the course of implementation of the project or subsequent to implementation, the Ministry of Food Processing Industries may take action as per the provisions of scheme guidelines and/or as per the law of the land, as deemed fit and appropriate in the circumstances.

**Date:** \_\_\_\_\_ **Signature of the Lead Promoter**

**Place:** \_\_\_\_\_

*Q*

9. I will meet any shortfall in means of finance due to less admissibility of grant or any future reduction in grant-in-aid or any escalation caused in the cost of the project.
10. I shall not dispose-off or encumber or utilize the assets created wholly or substantially out of government grant for purpose other than those for which they have been sanctioned, without obtaining the prior approval of the sanctioning authority of grant-in- aid.
11. In case of non-implementation/ delayed implementation of the project the Ministry will have absolute right in cancelling the approval granted and also recall the grant released, if any, along with interest as per the scheme guidelines.
12. In case of failure to operate the project for at least three years after commencement of commercial operation, I shall return the entire grant-in-aid with interest @ 10% per annum.
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15. I also undertake that in the event of any information or facts furnished by me are found to be incorrect or material information concealed, during the course of implementation of the project or subsequent to implementation, the Ministry of Food Processing Industries may take action as per the provisions of scheme guidelines and/or as per the law of the land, as deemed fit and appropriate in the circumstances.

**Date:** \_\_\_\_\_ **Signature of the Lead Promoter**

**Place:** \_\_\_\_\_