

## **SCHEME-1**

### **1. Development of Commercial Horticulture through Production and Post-Harvest Management of Horticulture Crops**

#### **1.2. Commercial Horticulture Development in protected cover on project mode**

a) Activity (ies) allowed and Area norms:

The Board will also take up commercial horticulture development projects under protected cover on project mode including components viz planting material, plantation, irrigation, fertigation, mechanization, etc for projects having area over 2500 sq meter. In case of NE Region, projects having area over 1000 sq meter are eligible. Activities like construction of green houses, shade net house, plastic mulching, and plastic tunnel, anti bird /hail nets etc would be promoted. Provision has been made for selecting a variety of construction material for green houses and shade nets houses. Preference will be given to using locally available material to minimize cost of construction of such structures. In case of flowers, projects will be considered only under Green House structures.

b) Crops eligible:

- a. Flowers: Anthurium, Orchids, Rose, Liliium, Chrysanthemum, Carnation and Gerbera.
- b. Vegetables: High value vegetables: Capsicum, Cucumber, Tomato

c) Pattern of assistance: Credit linked back-ended subsidy @ 50% of the total project cost limited to Rs 56.00 lakh per project as per admissible cost norms for green houses, shade net house, plastic tunnel, anti bird /hail nets & cost of planting material etc.

d) Maximum Project costs allowed for subsidy calculation.

S N	Item	Cost Norms*	Pattern of Assistance#
<b>A.</b>	<b>Development of Commercial Horticulture ##</b>		
A. 2	Commercial Horticulture Development in protected cover.	Rs 112.00 lakh per project covering area above 2500 Sq.mt.	Credit linked back-ended subsidy @ 50% of cost limited to Rs.56.00 lakh per project.
	Protected cultivation		
1.	Green House structure		
	(a) Fan & Pad system	Rs. 1400/Sqm and Rs. 1610/Sqm for hilly states	50% of cost for above 2500 Sqm
	(b) Naturally ventilated system		
	i) Tubular structure	Rs. 844/Sqm and Rs.970/Sqm for hilly states.	50% of cost for above 2500 Sqm
	ii) Wooden structure	Rs. 540/Sqm and Rs. 621/Sqm for hilly states	50% of cost for above 2500 Sqm
	iii) Bamboo structure	Rs. 450/Sqm and Rs. 518/Sqm for hilly states	50% of cost for above 2500 Sqm
2.	Shade Net House		
	(a) Tubular structure	Rs. 710/Sqm and Rs. 816/Sqm for hilly states	50% of cost for above 2500 Sqm
	(b) Wooden structure	Rs. 492/Sqm and Rs. 566/Sqm for hilly states	50% of cost for above 2500 Sqm
	(c) Bamboo structure	Rs.360/Sqm and Rs.414/Sqm for hilly states	50% of cost for above 2500 Sqm
3	Plastic Tunnel	Rs.60/Sqm and Rs.75/sqm for hilly states	50% of cost for above 2500 Sqm
4	Walk in Tunnel	Rs.600/ Sqm	50% of cost for above 2500 Sqm
5	Anti-Bird/Anti Hail Nets	Rs.35/Sqm	50% of cost for above 2500 Sqm
6	Cost of Planting Material and cultivation of High Value vegetables grown in Poly House/Shade net House	Rs.140/Sqm	50% of cost for above 2500 Sqm
7	Cost of Planting Material and cultivation of Orchid and Anthurium grown in Poly House/Shade net House	Rs.700/Sqm	50% of cost for above 2500 Sq.m
8	Cost of Planting Material and cultivation of Carnation & Gerbera grown in Poly House/Shade net House	Rs.610/Sqm	50% of cost for above 2500 Sqm
9	Cost of Planting Material and cultivation of Rose &Lilium grown in Poly House/Shade net House	Rs.426/Sqm	50% of cost for above 2500 Sqm
10	Plastic Mulching	Rs.32000/Ha and Rs.36800/Ha for Hilly Areas	50% of cost for above 2500 Sqm

e. Cost norms for Protected cultivation under NHB Scheme:

**Cost Rs. Lakh per acre**

<b>SN</b>	<b>Crop</b>	<b>Cost of Poly house with drip &amp; fogger system*</b>	<b>Cost of Cultivation</b>	<b>Cost ceiling per acre with add on components in project mode</b>
1	Anthurium & Orchid	33.76	28.00	70.00
2	Rose, Liliium, Chrysanthemum	33.76	17.04	60.00
3	Carnation & Gerbera	33.76	24.40	66.00
4	Hi-Value vegetable under poly house	33.76	5.60	47.00
5	Hi-Value vegetable under Shed net	28.40	5.60	40.00

\* Cost of Tubular structure in plain area. In hilly States, cost of poly house will be 15% more.

**Note:**

- 1 Wherever cost norms are not given, cost norms available under MIDH scheme for similar activity shall be followed. In case norms are not available under MIDH scheme also, cost appraised by bank as per bank norms or approved by Competent committee of NHB shall apply till cost norms are prepared.
- 2 In project mode, applicant may opt for add on components as per norms given 1.1. (f) but unless otherwise specified, cost ceiling, as prescribed for each crop/activity shall be applied where cost of add on components exceeds prescribed ceiling.

(f).Norms for Technology Add on components and other essential components of Integrated Commercial Horticulture projects:

S. No.	Item	Description	Admissible Cost
	<b>Cutoff date for implementation</b>		
I	Cost of Land * #	Admissible only if purchased newly but not before one year from date of sanction of loan.	Actual or up to 10 % of Eligible Project Cost (EPC) (Excluding cost of Land and Development) whichever is less subject to maximum of Rs. 50,000/- per acre.
I(i)	Land Development * #	Includes cost of Land leveling, digging of pits, fencing, gates etc.	Actual or up to 15% of Eligible Project Cost (EPC) (Excluding cost of Land and Land Development) whichever is less subject to maximum of Rs. 50,000/- per acre.
II	Cultivation expenses * #	Includes cost of Planting material, cost of input (labour, fertilizer and manures, pesticides etc)	As per MIDH (NHM) cost norms as given at Appendix- 1
III	Drip system with internal pipeline	Component includes mainline, valve, backflow preventer pressure regulator, filter, tubing adapters and fittings, drip tubing, emitters and an end cap	<ul style="list-style-type: none"> <li>• Actual or Rs. 20,000/-per acre for plant density up to 200 plants</li> <li>• Actual or Rs. 25,000/- per acre for plant density &gt;200 plants/acre</li> <li>• Sprinkler @Rs. 15,000/per acre</li> </ul>
III(i)	Irrigation infrastructure excluding micro irrigation * #	Irrigation infrastructure like tube-well/bore well/open well, pipeline, water harvesting structure, water tank etc, admissible only if newly created with loan component	<ul style="list-style-type: none"> <li>• Actual or up to Rs. 50,000/- per acre for open field cultivation.</li> <li>• Rs. 4.00 lakh per project in case of protected cultivation.</li> </ul> <p>Component – wise cost norms will be as under :</p> <ol style="list-style-type: none"> <li>1. Tube-well – up to Rs. 2.50 lakh per unit</li> <li>2. Water harvesting structure- @ Rs. 100/- CuM with use of minimum 300 microns plastic films or RCC lining.</li> <li>3. Cost of non-lined ponds/tanks will be 30% less.</li> <li>4. Pipe line-Rs 150/- per running meter only from source (min. 4” diameter) of irrigation to production unit</li> </ol>
IV	Horticulture Mechanization * # ##	<ul style="list-style-type: none"> <li>• Power/hydraulic operated machine/tools including small farms tractor with rotavator/equipments etc.</li> <li>• Machineries Identified by NHB under farm mechanization component may be considered for subsidy in standalone mode</li> </ul>	<ul style="list-style-type: none"> <li>• Tractor (up to 20 BHP) @Rs.3.00 lakh/unit</li> <li>• Power Tiller below8 BHP @ Rs.1.00 lakh/unit</li> <li>• Power tiller 8 BHP &amp; Above @ Rs.1.50 lakh/unit</li> <li>• Tractor/Power Tiller (Below 20 BHP) driven equipments</li> <li>- Land development, tillage and seed bed preparation equipments - @ Rs.0.30 lakh per unit</li> <li>- Sowing, planting reaping and digging</li> </ul>

			<p>equipments - @ Rs.0.30 Lakh per unit</p> <ul style="list-style-type: none"> <li>• Plastic mulch laying machine – Rs.0.70 Lakh per unit</li> <li>• Self-propelled Horticulture machinery - @ Rs.2.50 lakh per unit</li> <li>• Other tools and equipments as per norms as per norms of Sub Mission on Agriculture Mechanization (SMAM)</li> </ul>
V	Civil Infrastructure * #	Includes Functional Pack House/ On farm collection unit and labour quarter	<p>1. Functional Pack house @ Rs. 4.00 Lakh/unit with size of 9 x 6 Meter (Pro rate basis for lower size)</p> <p>2. Labour Quarter/ Store room @ Rs. 20,000/- per acre maximum up to 3.00 lakh . Cost norm as per pack house</p>
Vi	Vermi Compost unit * #	Permanent structure and HDPE vermibed	Rs.60,000/- per unit for permanent structure and Rs.10,000/- for HDPE vermibed (96 cft (12’x4’x2’ and IS 15907:2010 to be administered on prorated basis).
VII	Certification for Good Agriculture Practice (GAP), including infrastructure * ##		Rs.4000/- per acre.
VIII	Support system for Grapes (trellis, telephone, bawar and other system etc. *	Permanent structure made up of MS angles and stainless steel wire.	Rs. 1,50,000/- per acre
IX	Plastic Mulching * ##		Rs.12800/- per acre and Rs.14729/- acre for hilly states
X	Bed Preparation Cost in the cases requiring Soil replacement #	Protected Cultivation projects only in cases involving removal and replacement of top soil by red soil or cultivation is done on media/Pots/Concrete bed	Rs.100/- per Sq. m.

Components categorization:

\* Commercial Horticulture, within overall cost ceiling

# Protected Cultivation, within overall cost ceiling

## Over and above overall cost ceiling

Any other add on component as may be decided by Project Approval Committee for inclusion of new item(s) may be suitably incorporated from time to time.

(g) Technical Standards: For availing subsidy, all material /technology should strictly conform to the prescribed standards, else the project is not eligible for any financial assistance.

**g. (i) TECHNICAL STANDARDS OF NATURALLY VENTILATED POLY HOUSE (NVPH)**

Name of Beneficiary: \_\_\_\_\_

Address: \_\_\_\_\_

Sr. No.	PARTICULARS	SPECIFICATION	AS INSPECTED	REMARK
1	Type of structure	NVPH		
2	Area in sq mt			
3	Gutter Height	4.0 to 4.5 mtrs		
4	Ridge Height/Centre Height	6.0 to 6.5 mtrs		
5	Foundation pipe	60 mm OD 1200 to 1300 mm length 3 mm thick weight 4.20 kgs/mtrs		
6	Column	76 mm OD, 2 mm thick, weight 3.75 kg/mtrs		
7	Top purlin	48 mm OD 2.0 mm thick, weight 2.30 kg/mtrs		
8	Gutter purlin	42 mm OD 2 mm thick weight 2.10 kg/mtrs		
9	Top Arch	42 mm OD 2 mm thick weight 2.10 kg/mtrs		
10	Bottom cord of the Truss	60 mm OD/2.0 mm thick weight 2.85 kg/mtrs		
11	Internal Bracing pipe & Cross Bracing	33 mm OD 2 mm thick, weight 1.60 kg/mtrs		
12	Balcony pipe	60 mm OD 2 mm thick 2.85 kg/mtrs		
13	Curtain runner	42 mm OD 2 mm thick, weight 2.10 kg.mtrs		
14	Curtain shaft	27 mm OD 2 mm thick, weight 1.30 kg/mtrs		
15	Hockey support	33 mm OD 2 mm thick, weight 1.60 kg/mtrs		
16	Flap control pipe	21 mm OD 2 mm thick, weight 1.08 kg/mtrs		
17	Poly film	UV stabilized 200 micron		
18	Fasteners	M6 to m10 Nut bolts 50-150 mm long		
19	Shade net	UV stabilized 50% shade net of any colour with manual or auto operation		
20	Bottom Apron	0.6 to 1.5 meter height		
21	Nut bolts	Size 3/8"		
22	Civil work/foundation	45 cm dia. and 75 cm to 90 cm depth		
23	Extra items if any a) Down take pipe b) Trellis system			

Signature of						
NHB Official	Bank Rep.	Crop Expert	Post-Harvest Expert	State Horti/ Agri Dept.	Applicant	Chartered (Mech.) Engineer on behalf of Applicant

**g.(ii).TECHNICAL STANDARDS OF SHADE NET HOUSE**

Name of Beneficiary : \_\_\_\_\_

Address : \_\_\_\_\_

<b>Sr. No.</b>	<b>PARTICULARS</b>	<b>SPECIFICATION OF NHB</b>	<b>AS INSPECTED</b>	<b>REMARK</b>
1	Type of structure	Shade net house		
2	Area in sq.mt	_____ SQM.		
3	Height of structure	4.0 meter		
4	Foundation pipe	1.20 mtr. length 2 mm thick		
5	Column	60 mm OD, 2 mm thick, weight 2.85 kg/mtr		
6	Purlin	42 mm OD 2 mm thick weight 2.0/2.10 kg per mtr.		
7	Balcony pipe	48 mm OD 2 mm thick 2.3 kg/mtr.		
8	Top Net (Shade net/Insect net)	UV stabilized 30% to 75% shade of any colour		
9	Nut bolts	Size 3/8"		
10	Civil work/Foundation	40 cm x 90 cm length		
11	Corner/Four way/Five way/Angle-L	48 mm OD 2 mm thick length 0.15 mtr		
12	Extra items, if any a) Sliding Net b) Trellis system			

Signature of						
NHB Official	Bank Rep.	Crop Expert	Post-Harvest Expert	State Horti/ Agri Dept.	Applicant	Charter (Mech.) Engineer on behalf of Applicant