

Directory of Schemes in Department of Agriculture, Punjab

I. Centrally Sponsored Schemes

(Rs. in lac)

S. No.	Scheme/ Component	Brief description/ Activities covered	Subsidy/ Assistance	Proposed Budget-2017-18
1.	National Food Security Mission (NFSM) (60:40)			
	High Yielding Varieties of Seeds, Technology Dissemination through Cluster Demonstrations, Cropping System Based Demonstrations, Latest Farm Machinery, Assistance for Custom Hiring and Training of Farmers etc.			2000.00
A.	Wheat	12 Districts i.e Amritsar, Bhatinda, Ferozepur, Hoshiarpur, Gurdaspur, Fazilka, Jalandhar, Kapurthala, Pathankot, Ropar, S.A.S Nagar and Tarn Taran		
i.	Demonstrations on Improved Technologies:			
a)	Cluster Demonstrations (of 100 ha each)		Rs 7500/-per Ha	
b)	Cropping System based demonstrations (100 ha each) i. Wheat-Maize ii. Wheat-Rice (SRI/DSR/Line Transplanting)		Rs 12500/-per Ha Rs 12500/-per Ha	
ii.	Distribution of HYVs seeds		Rs 1000/-per Qtl	
iii.	Need Based Plant/Soil Protection Management:			
a)	Soil Management (i) Micronutrients		Rs 500/ha or 50% of the cost, whichever less	
b)	Plant Management (i) Plant Protection Chemicals & bio-agents		Rs 500/ha or 50% of the cost, whichever less	
iv.	Resource Conservation Machineries/ Energy Management:			
a)	Manual Sprayers		Rs 600/unit or 50% of cost whichever less	
b)	Power Knap Sack Sprayers		Rs 3000/unit or 50% of cost whichever less	
c)	Zero Till Seed Drills		Rs 15000/unit or 50% of cost whichever less	

d)	Multi Crop Planters		Rs 15000/unit or 50% of cost whichever less	
e)	Seed Drills		Rs 15000/Unit or 50% of cost whichever less	
f)	Rotavators/ Turbo Seeder		Rs 35000/unit or 50% of cost whichever less	
g)	Chiseller		Rs 8000/unit or 50% of cost whichever less	
h)	Laser Land Levelers		Rs 150000/unit or 50% of cost whichever less	
i)	Multi Crop Threshers		Rs 40000/unit or 50% of cost whichever less	
v.	Cropping System based trainings	Four sessions i.e one before Kharif, One each during kharif and rabi crops and one after rabi harvest	Rs 3500/-per session /Rs 14000/- per Training	
vi.	Local Initiative			
a)	Reversible Hydrolic MB Plough (As per SMAM* norm) (*Sub Mission on Agricultural Mechanization)		40% of cost or Rs. 35,000/-	
b)	Mulcher (As per SMAM norm)		40% of cost or Rs. 35,000/-	
B.	Pulses	all districts		
i.	Demonstrations on Improved Technologies:			
a)	Cluster Demonstrations (of100 ha each i. Arhar ii. Kharif Moong iii. Summer Moong		Rs. 7500/- per ha Rs. 7500/- per ha Rs. 7500/- per ha	
b)	Cropping System Based Demonstrations i. Wheat-Summer Moong		Rs.12500/- per ha	
ii.	Assistance for Distribution & Production of Seeds			
a)	Distribution of Seeds		Rs. 2500/- Qtl or 50% of cost whichever less	
b)	Production of Seeds i. Moong		Rs. 2500/-Qtl or 50% of cost whichever less	
iii.	Integrated Pest Management (IPM):			
	(a) Distribution of PP Chemicals		Rs. 500/ha or 50% of cost whichever less	
	(b) Weedicides		Rs. 500/ha or 50% of cost whichever less	
iv.	Resource Conservation Machineries/ Energy Management:			
a)	Power Knap Sack Sprayers		Rs 3000/unit or 50% of cost whichever less	
b)	Rotavators		Rs 35000/unit or 50% of cost whichever less	

v.	Cropping System based trainings	Four sessions i.e one before Kharif, One each during kharif and rabi crops and one after rabi harvest	Rs 3500/-per session /Rs 14000/- per Training	
vi.	Other Initiative			
	Assistance for Custom Hiring Centers			
a)	Mechanical line sowing of pulses		Rs 1500/- ha	
b)	Mechanical Threshing of Pulses		Rs 1500/- ha	
C.	Coarse Cereals (MAIZE)	(3 districts: Hoshiarpur, Roopnagar, SBS Nagar)		
i.	all Demonstrations on Improved Package			
	(i) Maize		Rs. 5000/-per ha	
ii.	Distribution of Certified Seeds:			
	(b) Hybrid Seeds			
	(i) Maize		Rs. 5000/-per qtl.	
D.	Commercial Crops (NFSM-CC)			
a)	COTTON			
	i.Front Line Demonstration on Integrated Crop Management		Rs 7000/- ha (Rs 6000/- for inputs & Rs 1000/- for Contingency)	
	ii. Front Line Demonstration on Desi & ELS cotton / ELS cotton seed production		Rs 8000/- ha (Rs 7000/- for inputs & Rs 1000/- for Contingency)	
	iii. Trails on High density Planning System		Rs 9000/- ha (Rs 8000/- for inputs & Rs 1000/- for Contingency)	
b)	SUGARCANE			
	i. Demonstration on Inter-cropping and single bud chip technology with sugarcane		Rs 8000/- ha (Rs 7000/- for inputs & Rs 1000/- for Contingency)	
2.	National Mission on Agriculture Extension and Technology(NMAET) (60:40)			
A.	Seed Village Programme			1.00
i.	Supply of Seeds	subsidy on Wheat and Summer Moong seed, subsidy on seed bin and organizing training camps	The concerned implementing agencies will distribute the foundation/certified seeds at 50% cost to the already identified farmers. The seeds for half an acre per farmer will be allowed.	

ii.	Supply of Storage Bin		<p>Assistance @ 33% subject to a maximum of Rs.3000/- for SC/ST farmers and @ 25% subject to maximum of Rs.2000 for other farmers for procuring seeds storage bin of 20 qtl. capacity.</p> <p>Assistance @ 33% subject to maximum of Rs.1500/- to SC/ST farmers and @ 25% subject to maximum of Rs.1000/- for other farmers for making seeds storage bin of 10 qtl. capacity in the seed villages where seed village scheme is being implemented.</p> <p>No beneficiary should be provided 2 storage bins and assistance would be limited to only one storage bin as per demand from the beneficiary.</p>	
B.	Sub Mission on Agricultural Extension – Support to State Extension Programmes for Extension Reforms: Agricultural Technology Management Agency (ATMA)			4184.59
i.	Training of Farmers			
	a. Inter-state (outside state)	Duration of training shall be 5-7 days	Training expenses will be borne by the department	
	b. Within the state	Duration of training shall be 3-5 days		
	c. Within the district	Duration of training shall be 1-2 days		
ii.	Organizing demonstrations (for agriculture & allied sectors)			
iii.	Exposure visit of farmers			
	a. Inter-state (outside the state)	Up to 5 farmers per Block per batch of an Exposure Visit. Maximum period of an exposure visit not to exceed 7 days (excluding journey time). (the cost should be limited to actual traveling expenditure and boarding/ lodging cost.)	Expenses for exposure visit will be borne by the department	
	b. Within the state	Same as given above, except that the maximum period of an exposure visit not to exceed 5 days (excluding journey time).		

iv.	c. Within the district	Same as given above, except that the maximum period of an exposure visit not to exceed 3 days (excluding journey time).		
v.	Mobilization of farmer groups of different types including Farmer Interest Groups, Women Groups, Farmer Organizations, Commodity Organizations, and Farmer Cooperatives etc.			
	a. Their capacity building, skill development and support services	Upto 20 groups per block	Rs. 5000/- per group	
	b. Seed money /revolving fund	Only to viable groups on competitive basis	Rs. 10,000/- per group	
	c. Food Security Groups	2 FSGs/ Block is mandatory. These will be all women farmers' groups and Seed Money will be given for Household food security garden.	Rs. 10,000/- per group	
vi.	Rewards and incentives –Farmer Groups	Best organized group representing different enterprises (5 groups)	Rs. 20,000/- per group	
vii.	Farmer Awards	Best farmers representing different enterprises at Block Level	Rs. 10,000/- per farmer	
viii.	Farm Information dissemination			
	a. District level exhibitions, kisan melas, fruits/ vegetable shows.			
	b. Information dissemination through printed leaflets etc and local advertisements.			
	c. low cost publication			
ix.	Agricultural Technology Refinement, Validation and Adoption			
	a. Farmer Scientist Interactions at district level 25 farmers for 2 days.	2 interactions per district		

	b. Designate expert support from KVK/SAU at District Level	KVKs/SAUs/ Agri. Research Institutes have to designate expert in charge of one district. He would provide instant guidance to dist. functionaries/BTMs/ SMSs within his respective district. The support is to be provided as an incentive for sharing expertise in their respective fields in addition to their official duties.		
	c. Joint visits by Scientists & Extension Workers			
	d. Organization of Kisan Gosthis to strengthen Research –Extension – Farmer linkages (1 per block in each of the 2 seasons).			
x.	Farm School	Farm Schools will be preferably organized in a cluster approach so as to have a demonstrable impact.	Rs.29,414/Farm School + Rs.4000/ group of Farm Schools	
xi.	Farmer Friend	One FF/ 2 Village	Rs. 6,000/- per farmer friend per year	
C.	Sub Mission on Agriculture Mechanization (SMAM)			5000.00
	Procurement subsidy for establishment of custom hiring center upto 10 lac		Rs 4.00 lac	
	Procurement subsidy for establishment of custom hiring center upto 25 lac		Rs 10.00 lac	
	Procurement subsidy for establishment of custom hiring center upto 40 lac		Rs 16.00 lac	
	Procurement subsidy for establishment of custom hiring center upto 60 lac		Rs 24.00 lac	
	Procurement subsidy for establishment of custom hiring center upto 100 lac		Rs 40.00 lac	

3.	Paramparagat Krishi Vikas Yojna (60:40)			200.00
	Assistance to the Farmers Collective of 50 clusters towards market initiatives		50% Financial assistance will be permissible for a. Grading and sorting b. Packing, labeling & hologram printing c. Hiring charges for go down The charges will be fixed by the SLEC (State Level Executive Committee) for the above activities	
	Assistance to the Farmers Collective of 50 clusters towards transportation of their produce from farm fields to go down/markets		50% Financial assistance will be permissible for collection and transportation of organic produce to market places, for purchasing four wheel transport vehicles.	
	Assistance to Farmers Collective of 50 clusters towards market facilitation		50% Financial assistance will be permissible towards i) Hiring of market place for a maximum period of one year. ii) Buyer seller meets and negotiations iii) Product development	
	Assistance to Farmers Collective of 50 clusters towards participation in Organic fair/ Seminars/ workshops/ Events to increase the marketability of products.		50% financial assistance is permissible towards the participation in seminars/ workshops/other events.	
4.	National Mission on Oilseeds and Oil Palm (NMOOP) (60:40)			96.67
	Distribution of Certified Seeds		Assistance @50% of the cost limited to Rs.2500/- per quintal for varieties of oilseeds not older than 10 years EXCEPT Sesamum.. Assistance for distribution of hybrid seeds of sunflower, safflower, rapeseed-mustard, castor and variety of sasamum will be @ 50% of the cost limited to Rs. 5000/- per quintal which are not older than 10 years.	

Plant Protection Equipments/eco friendly light-trap (NCIPM Model)		<p>For manual sprayers: Knapsack/foot operated sprayers, eco friendly light trap (NCIPM), @ 40% of the cost of procurement subject to a ceiling of Rs. 600/- per equipment (additional 10% assistance to SC / ST / Small / Marginal Farmers / Women, Groups >5 members FPOs and NE States to a ceiling of Rs. 800/- per unit). Seed treating drum with a capacity of 20 kg and 40 kg @ 50% assistance subject to ceiling of Rs.1750/- and 2000/- per unit respectively.</p> <p>For Knapsack power sprayers (capacity below 16 litres) @ 50% of the cost of procurement subject to a ceiling of Rs. 3000/- per unit (additional 10% assistance to SC / ST / Small / Marginal Farmers / Women, Groups >5 members FPOs and NE States to a ceiling of Rs.3800/- per unit).</p> <p>For Knapsack power sprayers (capacity above 16 litres) @ 40% of the cost of procurement subject to a ceiling of Rs. 8000/- per unit (additional 10% assistance to SC / ST / Small / Marginal Farmers / Women, Groups >5 members FPOs and NE States to a ceiling of Rs. 10000/- per unit).</p>	
Plant Protection Chemicals/ insecticides/ fungicides/ Bio-pesticides/ Weedicides/ Bio-agents/ micronutrients etc		Need based supply of PP chemicals, insecticides, fungicides, bio-pesticides, weedicides, bio-agents, micronutrients etc. to the farmers will be supported @ 50% of the cost limited to Rs 500/- ha.	
Distribution of gypsum/ pyrite/ liming/ dolomite/ Single Super Phosphate etc. (SSP)		NMOOP for supply of gypsum/pyrite/liming/ dolomite/SSP, etc., to the farmers. Any source of sulphurnotified in FCO including 90% Powder (FCO Grade) as alternative source of Sulphur will also be included as new component. Support to SDAs @ 50% cost of the material + transportation limited to Rs. 750/- per ha.	

	Block Demonstrations		Crop Assistance (Rs./ha) Groundnut 7500 Soybean 4500 R & M 3000 Sunflower 4000 Sesame/Safflower/castor 3000 Linseed 3000 Niger 3000 One demo will be allowed to one farmer with a ceiling of one Ha under each crop	
Soil Health Card (60:40)				751.97
	Components: i. Issue of Soil Health Cards ii. Training for soil analysis iii. Capacity building and regular monitoring and evaluation iv. Financial assistance for package of nutrient recommendations	Objectives: i. To issue soil health cards every 3 years, to all farmers of the country, so as to provide a basis to address nutrient deficiencies in fertilization practices. ii. To develop and promote soil test based nutrient management in the districts for enhancing nutrient use efficiency.		
	Financial assistance for package of nutrient recommendations	Aims to provide financial assistance to farmers to apply corrective measures for nutrient deficiencies and popularizing balance and integrated nutrient management practices for their cropping systems.		
i.	Gypsum/phosphogypsum / bentonite sulphur		50% of the cost of material limited to Rs.700 per ha	
ii.	Micronutrients		50% of the cost limited to Rs.500 per ha	
iii.	All Bio-fertilizers		50% of the cost limited to Rs.300 per ha	
iv.	Lime/liming materials		50% of the cost material limited to Rs.1000 per ha	

Directory of Schemes in Department of Horticulture, Punjab

1. Mission for Integrated Development of Horticulture During XII Plan

INTRODUCTION

Mission for Integrated Development of Horticulture (MIDH) is a Centrally Sponsored Scheme for the holistic growth of the horticulture sector covering fruits, vegetables, root & tuber crops, mushrooms, spices, flowers, aromatic plants etc. At present this scheme is implemented in the state with funding pattern of 60:40 i.e. Government of India (GOI) is contributing 60% and 40% is state share.

Objectives of the Mission are:

- a) Promote holistic growth of horticulture sector, including bamboo and coconut through area based regionally differentiated strategies, which includes research, technology promotion, extension, post harvest management, processing and marketing, in consonance with comparative advantage of each State/region and its diverse agro-climatic features;
- b) Encourage aggregation of farmers into farmer groups like FIGs/FPOs and FPCs to bring economy of scale and scope.
- c) Enhance horticulture production, augment farmers, income and strengthen nutritional security;
- d) Improve productivity by way of quality germplasm, planting material and water use efficiency through Micro Irrigation.
- e) Support skill development and create employment generation opportunities for rural youth in horticulture and post harvest management, especially in the cold chain sector.

PROVISIONS FOR FARMERS

I. PRODUCTION OF PLANTING MATERIAL

1. **Nurseries:** Production and distribution of good quality seeds and planting material will receive top priority. States will have a network of nurseries for producing planting material, which were established through Central or State assistance. To meet the requirement of planting material (for bringing additional area under improved varieties of horticultural crops and for rejuvenation programme for old/senile plantations), assistance will be provided for setting up new hi-tech nurseries and small nurseries. Hi-tech nurseries will have an area between 1 to 4 ha with a capacity to produce 50,000 plants per ha of mandated perennial fruit crops / tree spices / aromatic trees / plantation crops per year. The plants produced will be duly certified for their quality. The support includes:
 - (i) Proper fencing.
 - (ii) Scion / Mother block of improved varieties.
 - (iii) Root stock block (Rhizome bank in case of bamboo).
 - (iv) Net house
 - (v) Irrigation facilities
 - (vi) Hi-tech green house having insect proof netting on sides and fogging and misting systems.

- (vii) Hardening/maintenance in insect proof net house with light screening properties and sprinkler irrigation system.
- (viii) Pump house to provide sufficient irrigation to the plants and water storage tank to meet at least 2 days requirement.
- (ix) Soil solarization - steam sterilization system with boilers.

Provision:

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Hi-tech nursery (4 ha)	Rs. 25.00 lakh/ha.	credit linked back-ended subsidy @ 40% of cost, subject to a maximum of Rs. 40 lakh/unit, for a maximum of 4 ha. as project based activity on prorata basis. Each nursery will produce a minimum of 50,000 numbers per hectare of mandated perennial fruit crops/ tree spices/ aromatic trees/plantation crops per year, duly certified for its quality.
ii.	Small Nursery (1 ha)	Rs. 15.00 lakh/ha	credit linked back-ended subsidy of cost, subject to a maximum of Rs. 7.50 lakh/unit, as project based activity. Each nursery will produce a minimum of 25,000 numbers of mandated perennial vegetatively propagated fruit plants/tree spices/ plantation crops per year, aromatic plants, duly certified for its quality.
iii.	Upgrading nursery infrastructure to meet accreditation norms	Up to Rs. 10.00 lakh/nursery of 4 ha	50% of cost subject to a maximum of Rs. 5.00 lakh/nursery. The infrastructure facilities will include establishment of hot bed sterilization of media, Working shed, Virus indexing facility (for citrus & apple), Hardening chamber/net house, Mist chamber, Establishment of Mother Block, Irrigation and fertigation facility/unit.

2. **Tissue Culture Units:** New Tissue Culture (TC) units will be established and assistance will be provided for rehabilitation/ strengthening of existing TC Units. New TC units will produce 25 lakh plants of the mandated crop for which protocols are available for commercial use, except Date palm. In the event of production of lesser number of plants, cost of lab will be reduced on a pro rata basis (subject to its viability). Each TC unit would get itself accredited as per standards and norms of Department of Bio Technology within eighteen months from the date of receiving funds, failing which the assistance provided under the scheme will have to be returned

Provision:

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Strengthening of existing Tissue Culture (TC) units	Rs. 20.00 lakh /unit	100% of cost to public sector and in case of private sector, credit linked back ended subsidy @ 50% of cost
ii.	Setting up of new TC Units.	Rs. 250.00 lakh/unit	credit linked back ended subsidy @ 40% of cost. Each TC unit will produce a minimum of 25 lakh plants/year of mandated crops, duly hardened, for which protocols are available for commercial use.

3. **Vegetable Seed Production**

Production of ‘disease-free vegetable seedlings’ will be encouraged for hybrid cultivars. Wherever necessary, ‘plug technology’ and environment control for germination, growth and hardening of vegetable seedlings may be introduced. The infrastructure facilities will include a green

house with maximum area of 10,000 sq. meter, including hardening facilities, designed for tropical conditions, with insect netting on sides and rolling poly sheets. The infrastructure for media sterilization i.e. steam boiler, holding bins, etc will also be provided. Total cost will not exceed Rs. 104.00 lakh for a unit with one ha or Rs. 1040 per sq.m.

To facilitate proper handling, storage and packaging of seeds, assistance will be provided for creating infrastructure like drying platforms, storage bins, packaging unit and related equipments.

Provision:

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Seed production for vegetables and spices		
	a) Open pollinated crops	Rs. 35,000/ha	35% of cost limited to 5 ha. (Output target of seed for each crop will be fixed by the State govt./authorities)
	b) Hybrid seeds	Rs. 1.50 lakh/ha	35% of cost limited to 5 ha. (Output target of seed for each crop will be fixed by the state govt./authorities for each beneficiary, before releasing funds.)
ii.	Seed infrastructure (for handling, processing, packing, storage etc. of seeds meant for use as seed material for cultivation of horticulture crops)	Rs. 200.00 lakh	credit linked back subsidy @ 50% of cost of project.

II. ESTABLISHMENT OF NEW GARDENS (Area expansion - for a maximum area of 4 ha per beneficiary): The Mission envisages coverage of area under improved varieties of horticultural crops. Norms for area expansion of **fruits, vegetables, plantation crops** and other crops including **flowers, spices and aromatic plants** are also given in this mission.

1. Fruits:

S. No.	Item	Cost Norms*	Pattern of Assistance#
Cost intensive fruit crops			
i.	Fruit crops like Grape, Kiwi, Passion fruit etc.		
	a) Integrated package with drip irrigation and trellis.	Rs. 4.00 lakh/ha.	Maximum of Rs. 1.60 lakh/- per ha. (40% of cost) for meeting the expenditure on planting material and cost of material for drip irrigation, trellies and INM/IPM, in 3 installments of 60:20:20 subject to survival rate of 75% in 2nd year and 90% in 3rd year).
	b) Without integration	Rs. 1.25 lakh/ha	Maximum of Rs. 0.50 lakh/ha (40% of cost) for meeting the expenditure on planting material and cost of INM/IPM in three installments of 60:20:20 subject to survival rate of 75% in 2nd year and 90% in 3rd year.

ii.	Strawberry		
	a) Integrated package with drip irrigation & mulching	Rs. 2.80 lakh/ha	Maximum of Rs. 1.12 lakh/ per ha. (40% of cost) for meeting the expenditure on planting material and cost of material for drip irrigation, mulching and INM/IPM, in one installment.
	b) Without integration	Rs. 1.25 lakh/ha	Maximum of Rs. 0.50 lakh/ha (40% of cost) for meeting the expenditure on planting material and cost of INM/IPM one installment.
iii.	Banana (sucker)		
	a) Integrated package with drip irrigation.	Rs. 2.00 lakh/ha	Maximum of Rs. 0.80 lakh/ha (40% of the cost) for meeting expenditure on planting material, drip irrigation and cost of material for INM/IPM, in 2 installments (75:25).
	b) Without integration	Rs.87,500/ha	Maximum of Rs. 0.35 lakh/ha (40% of cost) for meeting the expenditure on planting material and cost of INM/IPM in 2 installments (75:25).
iv.	Banana (TC)		
	a) Integrated package with drip irrigation.	Rs. 3.00 lakh/ha	Maximum of Rs. 1.20 lakh/ha (40 % of cost) for meeting the expenditure on planting material and cost of material for drip system, INM/IPM etc., in 2 installments (75:25).
	b) Without integration	Rs. 1.25 lakh/ha.	Max. of Rs. 0.50 lakh per ha, (40% of cost) for meeting the expenditure on planting material and cost of INM/IPM in 2 installments (75:25).
v.	Papaya		
	a) Integrated package with drip irrigation.	Rs. 2.00 lakh/ha	Maximum of Rs. 0.80 lakh/ha (40% of the cost) for meeting expenditure on planting material, drip irrigation and cost of material for INM/IPM, in 2 installments (75:25).
	b) Without integration	Rs. 60,000/ha	Maximum of Rs. 0.30 lakh/ha (50 % of cost) for meeting the expenditure on planting material and cost of INM/IPM in 2 installments (75:25).
vi.	Ultra high density (Meadow orchard)		
	a) Integrated package with drip irrigation.	Rs. 2.00 lakh/ha.	Maximum of Rs. 0.80 lakh/ ha. (40% of cost) for meeting the expenditure on planting material and cost of material for drip system, INM/IPM, and canopy management in 3 installments of 60:20:20 subject to survival rate of 75% in 2nd year and 90% in 3rd year).
	b) Without integration	Rs. 1.25 lakh/ha	Maximum of Rs. 0.50 lakh/ha., (40% of cost) for meeting the expenditure on planting material and cost of INM/IPM in 3 installments.
vii.	High density planting (mango, guava, litchi, pomegranate, apple, citrus etc).		
	a) Integrated package with drip irrigation	Rs. 1.50 lakh /ha	Maximum of Rs. 0.60 lakh per ha. (40% of cost) for meeting the expenditure on planting material, cost of drip system, INM/IPM, canopy management etc., in 3 installments of 60:20:20 subject to survival rate of 75% in 2nd year and 90% in 3rd year).

	b) Without Integration.	Rs. 1.00 lakh/ha.	Maximum of Rs. 0.40 lakh/ha (40% of the cost) for meeting the expenditure on planting material and cost of INM/IPM in 3 installments (60:20:20).
Fruit crops other than cost intensive			
viii.	Fruit crops other than cost intensive crops using normal spacing		
	a) Integrated package with drip irrigation	Rs. 1.00 lakh/ha	Maximum of Rs. 0.40 lakh/ ha. (40% of cost) for meeting the expenditure on planting material, cost of drip system, INM/IPM, canopy management etc in 3 installments of 60:20:20 subject to survival rate of 75% in 2nd year & 90% in 3rd year for perennial crops and for non perennial crops in 2 installments of 75:25.
	b) Without Integration	Rs. 60,000/ha	Maximum of Rs. 0.30 lakh/ha (50 % of cost) for meeting the expenditure on planting material and cost of INM/IPM in 3 installments, in all States.

2. Vegetable (For maximum area of 2 ha per beneficiary):

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Hybrid	Rs.50,000/ ha	assistance will be given @ 40% of cost

3. Mushroom Production

In case of mushroom, assistance will be provided for setting up of individual mushroom production, spawn production and compost making units.

Provision:

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Production unit	20 lakh /unit	40% of cost for meeting the expenditure on infrastructure, as credit linked back ended subsidy.
ii.	Spawn making unit	Rs. 15 lakh/unit	40% of cost for meeting the expenditure on infrastructure, as credit linked back ended subsidy.
iii.	Compost making unit	Rs. 20.00 lakh/unit	40% of cost for meeting the expenditure on infrastructure, as credit linked back ended subsidy.

4. Flowers (For a maximum of 2 ha per beneficiary):

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Cut flowers	Rs. 1.00 lakh/ha	40 % of the cost for S&M farmers and 25% of cost to other category farmers
ii.	Bulbulous flowers	Rs. 1.50 lakh/ha	40 % of the cost for S&M farmers and 25% of cost to other category farmers
iii.	Loose Flowers	Rs. 40,000/ha	40 % of the cost for S&M farmers and 25% of cost to other category farmers

5. Spices (For maximum area of 4 ha per beneficiary):

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Seed spice and Rhizomatic spices	Rs.30,000/ha	Maximum of Rs. 12,000/- per ha. (40% of cost) for meeting the expenditure on planting material and cost of material for INM/IPM etc).

6. Aromatic Plants (For a maximum area of 4 ha per beneficiary):

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Cost intensive aromatic plants (patchouli, geranium, rosemary, etc)	Rs. 1,00,000/ha	40% of cost, subject to a maximum of Rs.40,000/- per ha, for meeting the expenditure on planting material and cost of material for INM/IPM etc.
ii.	Other aromatic plants	Rs. 40,000/ha	40% of cost, subject to a maximum of Rs.16,000/- per ha, for meeting the expenditure on planting material and cost of material for INM/IPM etc.

III. REJUVENATION/REPLACEMENT OF SENILE PLANTATION, CANOPY MANGEMENT: Rejuvenation programme will address orchards and plantations which have low productivity. It will be implemented through individual farmers, farmers' cooperatives, Self-Help Groups, growers' associations and commodity organizations. Assistance will be available only in respect of rejuvenating/ replanting senile and unproductive plantations through proven technologies. However, assistance will depend on the nature and requirement of particular crop. Canopy management will address maintenance of tree architecture as a means for productivity enhancement, particularly for fruit crops and high density plantations. In case of seedling origin, uneconomical orchards will be considered for replanting with improved varieties.

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Rejuvenation / replacement of senile plantation, canopy management	Rs. 40,000/ha	50% of the total cost subject to a maximum of Rs. 20,000/ha limited to two ha per beneficiary.

IV. CREATION OF WATER SOURCES

Under the Mission, assistance will be provided for creating water sources through construction of community tanks, farm ponds/reservoirs with plastic / RCC lining to ensure life saving irrigation to horticulture crops. This will be in conjunction with MNREGS and wherever possible adequate convergence has to be ensured. These water bodies may be linked with Micro Irrigation facility for judicious use of water. Assistance under NHM will be limited to cost of plastic / RCC lining. Lining material should conform to BIS standards. Assistance would also be provided for creating water source through construction of farm ponds/tube wells/ dug wells for individuals.

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Community tanks/on farm ponds/on farm water reservoirs with use of plastic/ RCC lining	Rs. 20.00 lakh/ unit	100% of cost to irrigate 10 ha of command area, with pond size of 100m x 100m x 03m or any other smaller size on prorata basis depending upon the command upon the command area either use of minimum 500 micron plastic films or RCC lining, owned & managed by a community/ farmer group.

			Cost for non-lined ponds/tanks (only in black cotton soils) will be 30% less. Assistance will be restricted to the cost of plastic/RCC lining. However, for non MNREGS beneficiaries, assistance on entire cost including construction of pond/tank as well as lining can be availed under the scheme.
ii.	Water harvesting system for individuals- for storage of water in 20mx20mx3m ponds/tube wells/dug wells @ Rs.125/- cum	Rs. 1.50 lakh/unit in plain areas and Rs. 1.80 lakh/unit in hilly areas	50% of cost including 300 micron plastic/RCC lining. Cost for non-lined ponds/tanks (only in black cotton soils) will be 30% less. For smaller size of the ponds/dug wells, cost will be admissible on pro rata basis depending upon the command area. Maintenance will be ensured by the beneficiary

V. PROTECTED CULTIVATION

Activities like construction of green houses, shade net house, plastic mulching, and plastic tunnels, anti bird/ hail nets would be promoted under the Mission. Provision has been made for selecting a variety of construction material for green houses and shade net houses. Preference will be given to using locally available material to minimize cost of construction of such structures. However, for availing/subsidy assistance, all material/technologies should conform to BIS standards

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Green House Structure		
a)	Fan & Pad system	Rs. 1650/Sq.m (up to Rs. 1465/Sq. m (>500 Sq.m up to 1008 Sqm) Rs. 1420/Sq. m (>1008 Sq. m up to 2080 Sq.m) Rs. 1400/Sq. m (>2080 Sq. m upto 4000 Sq.m)	50% of cost for a maximum area of 4000 sq. m per beneficiary.
b)	Naturally ventilated system		
i)	Tubular structure	Rs.1060/Sq.m (up to area 500 Sq. m) Rs. 935/Sq.m (>500 Sq. m up to 1008 Sq. m) Rs. 890/Sq. m (>1008 Sqm up to 2080 Sq. m) Rs. 844/Sq. m (>2080 Sq. m up to 4000 Sq. m)	50% of cost limited 4000 sq. m. per beneficiary.
ii)	Wooden structure	Rs. 540/Sq. m	50% of the cost limited to 20 units per beneficiary (each unit not to exceed 200 sq.m).
iii)	Bamboo structure	Rs. 450/Sq. m	50% of the cost limited to 20 units per beneficiary (each unit should not exceed 200 sq.m).
ii.	Shade Net House		

a)	Tubular structure	Rs. 710/Sqm	50% of cost limited to 4000 sq.m. per beneficiary.
b)	Wooden structure	Rs. 492/Sqm	50% of cost limited to 20 units per beneficiary (each unit not to exceed 200 sq.m) .
c)	Bamboo structure	Rs.360/Sqm	50% of cost limited to 20 units per beneficiary (each unit not to exceed 200 sq.m).
iii.	Plastic Tunnels	Rs. 60/Sqm	50% of cost limited 1000 sq.m. per beneficiary.
iv.	Walk in tunnels	Rs. 600/ sqm	50% of the cost limited to 5 units per beneficiary (each unit not to exceed 800 Sq. m).
v.	Anti Bird/Anti Hail Nets	Rs.35/Sqm	50% of cost limited to 5000 sq.m. per beneficiary.
vi.	Cost of planting material & cultivation of high value vegetables grown in poly house	Rs.140/Sq. m	50% of cost limited to 4000 sq.m. per beneficiary.
vii.	Cost of planting material & cultivation of Orchid & Anthurium under poly house/ shade net house.	Rs. 700/Sqm	50% of cost limited to 4000 sq.m. per beneficiary.
viii.	Cost of planting material & cultivation of Carnation & Gerbera under poly house/ shade net house.	Rs. 610/Sqm	50% of cost limited to 4000 sq.m. per beneficiary.
ix.	Cost of planting material & cultivation of Rose and lilum under poly house/ shade net house	Rs. 426/Sqm	50% of cost limited to 4000 sq.m. per beneficiary
x.	Plastic Mulching	Rs. 32,000/ha	50% of the total cost limited to 2 ha per beneficiary.

VI. ORGANIC FARMING

Organic farming in horticulture will be promoted to harness environmental and economic benefits by way of adoption of organic farming techniques along with its certification.

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Adoption of organic farming.	Rs. 20,000/ha	50% of cost limited to Rs.10000/ha for a maximum area of 4 ha. per beneficiary, spread over a period of 3 years involving an assistance of Rs.4000/- in first year and Rs.3000/- each in second & third year. The programme to be linked with certification.

ii.	Organic Certification	Project based	Rs 5 lakh for a cluster of 50 ha which will include Rs 1.50 lakh in first year, Rs. 1.50 lakh in second year and Rs. 2.00 lakh in third year.
iii.	Vermi compost Units/ organic input production	Rs.100,000/ unit for permanent structure and Rs. 16,000/unit for HDPE Vermibed	50% of cost conforming to the size of the unit of 30'x8'x2.5' dimension of permanent structure to be administered on pro-rata basis. For HDPE Vermibed, 50% of cost conforming to the size of 96 cft (12'x4'x2') and IS 15907:2010 to be administered on pro-rata basis.

VII. CERTIFICATION FOR GOOD AGRICULTURAL PRACTICES (GAP), including infrastructure

GAP certification has been introduced to encourage farmers to adopt good agricultural practices in line with global GAP, so that farmers are able to get better price for their produce in domestic as well as international market. Certification agencies to be involved for this will be as per list approved by APEDA.

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Certification for GAP, including infrastructure	Rs. 10,000/ ha	50% of the cost for maximum of 4ha/beneficiary.

VIII. POLLINATION SUPPORT THROUGH BEE-KEEPING

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Production of bee colonies by bee breeder	Rs. 10.00 lakh	40% of cost for producing min. of 2000 colonies / year
ii.	Honey bee colony	Rs.2000/colony of 8 frames	40% of cost limited to 50 colonies / beneficiary.
iii.	Bee Hives	Rs 2000/ per hive.	40% of cost limited to 50 colonies / beneficiary.
iv.	Equipment including honey extractor (4 frame), food grade container (30 kg), net, including complete set of Bee keeping equipment.	Rs. 20,000/set	40% of the cost limited to one set per beneficiary.

IX. HORTICULTURE MECHANIZATION

Horticulture mechanization is aimed to improve farm efficiency and reduce drudgery of farm work force. Assistance in this regard will be provided for activities such as procurement of power operated machines & tools, besides import of new machines. Assistance for horticulture mechanization will also be available to such grower associations, farmer groups, Self Help Groups, women farmer groups having at least 10 members, who are engaged in cultivation of horticultural crops, provided balance 60% of the cost of machines and tools is borne by such groups. SHM will enter in to MoU with such association/groups to ensure proper upkeep, running and maintenance of the machines and tools.

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Tractor (upto 20 PTO HP)	3.00 lakh/unit	25% of cost, subject to a maximum of Rs. 0.75 lakh/unit for general category farmers, and in the case if SC, ST, Small & Marginal famers, women farmers, then 35% of cost, subject to a maximum of Rs. 1.00 lakh per unit.
ii.	Power Tiller		
a)	Power tiller (below 8 BHP)	1.00 lakh per unit	Subject to a maximum of Rs.0.40 lakh/unit for general category farmers, and in the case if SC, ST, Small & Marginal farmers, women farmers subject of a maximum of Rs. 0.50 lakh/unit
b)	Power tiller (8 BHP & above)	1.50 lakh per unit	Subject to a maximum of Rs.0.60 lakh/unit for general category farmers, and in the case if SC, ST, Small & Marginal farmers, women farmers subject of a maximum of Rs. 0.75 lakh/unit.
iii.	Tractor/Power tiller (below 20 BHP) driven equipments		
a)	Land Development, tillage and seed bed preparation equipments	0.30 lakh per unit	Subject to a maximum of Rs.0.12 lakh/unit for general category farmers, and in the case if SC, ST, Small & Marginal farmers, women farmers subject of a maximum of Rs. 0.15 lakh/unit.
b)	Sowing, planting reaping and digging equipments	0.30 lakh per unit	Subject to a maximum of Rs.0.12 lakh/unit for general category farmers, and in the case if SC, ST, Small & Marginal farmers, women farmers subject of a maximum of Rs. 0.15 lakh/unit.
c)	Plastic mulch laying machine	0.70 lakh per unit	Subject to a maximum of Rs.0.28 lakh/unit for general category farmers, and in the case if SC, ST, Small & Marginal farmers, women farmers subject of a maximum of Rs. 0.35 lakh/unit.
iv.	Self-propelled Horticulture Machinery	2.50 lakh per unit	Subject to a maximum of Rs. 1.00 lakh/unit for general category farmers, and in the case if SC, ST, Small & Marginal farmers, women farmers subject of a maximum of Rs. 1.25 lakh/unit.
v.	Plant Protection equipments		
a)	Manual sprayer: (Knapsack/foot operated sprayer)	Rs. 0.012 lakh/unit	Subject to a maximum of Rs.0.005 lakh/unit for general category farmers, and in the case if SC, ST, Small & Marginal farmers, women farmers subject of a maximum of Rs. 0.006 lakh/unit.
b)	Powered Knapsack sprayer/ Power Operated Taiwan sprayer (capacity 8 - 12 lts):	Rs. 0.062 lakh/unit	Subject to a maximum of Rs.0.025 lakh/unit for general category farmers, and in the case if SC, ST, Small & Marginal farmers, women farmers subject of a maximum of Rs. 0.031 lakh/unit
c)	Powered Knapsack sprayer/ Power Operated Taiwan sprayer (capacity above12-16 lts):	Rs. 0.076 lakh/unit	Subject to a maximum of Rs.0.03 lakh/unit for general category farmers, and in the case if SC, ST, Small & Marginal farmers, women farmers subject of a maximum of Rs. 0.038 lakh/unit

d)	Powered Knapsack sprayer/ Power Operated Taiwan sprayer (capacity above16/ lts	Rs. 0.20 lakh/unit	Subject to a maximum of Rs.0.08 lakh/unit for general category farmers, and in the case if SC, ST, Small & Marginal farmers, women farmers subject of a maximum of Rs. 0.10 lakh/unit
e)	Tractor mounted /Operated Sprayer (below 20 BHP):	Rs. 0.20 lakh/unit	Subject to a maximum of Rs.0.08 lakh/unit for general category farmers, and in the case if SC, ST, Small & Marginal farmers, women farmers subject of a maximum of Rs. 0.10 lakh/unit
f)	Tractor mounted / Operated Sprayer (above 35 BHP)/ Electrostatic Sprayer	Rs. 1.26 lakh/unit	40% of cost, subject to a maximum of Rs. 0.50 lakh/unit for general category farmers, and in the case if SC, ST, Small & Marginal famers, women farmers 50% of cost, subject to a maximum of Rs. 0.63 lakh per unit.
g)	Eco Friendly Light Trap	Rs. 0.028 lakh/unit	Subject to a maximum of Rs.0.012 lakh/unit for general category farmers, and in the case if SC, ST, Small & Marginal farmers, women farmers subject of a maximum of Rs. 0.014 lakh/unit

X. HUMAN RESOURCE DEVELOPMENT (HRD)

Assistance for organizing training courses for Supervisors, Entrepreneurs, Gardeners and Field Functionaries will be continued during XII Plan.

Training programme for Supervisors, Entrepreneurs will be organized through selected State Agricultural Universities (SAU), ICAR Institutes, Deemed Universities/Private Universities recognized by UGC having faculty in horticulture and Gardeners training through Krishi Vigyan Kendras and SAUs/ Deemed Universities/Private Universities recognized by UGC recognized by UGC having faculty in horticulture, while departmental staff will be trained under various ongoing training programmes. Training expenses will be met by the Mission.

Minimum qualification for Supervisory & Entrepreneurs training programme would be Higher Secondary and for Gardeners it would be Class-VIII (Middle) standard.

Institutions identified for training should have minimum infrastructure facilities including class rooms, staff, hostel facilities etc.

The courses will be of one year duration for Supervisors and of six months for Gardeners and of three months for Entrepreneurs. In order to attract the candidates and more importantly retain them and prevent their drop out, a monthly stipend will be provided in form of boarding & lodging charges. These courses will be residential. At the end of the training, Supervisors will be awarded a Diploma in horticulture, while Gardeners and Entrepreneurs will be awarded a Certificate of training in horticulture. At least 25 Supervisors, 50 Gardeners and 25 Entrepreneurs will be trained in each participating institution annually.

In case States wish to organize specialized training courses on horticulture related subjects, assistance will be provided for the same to concerned Institutes directly, based on recommendation of concerned State (s). Such training would generally be of short duration of 7 - 10 days for 20 to 25 participants.

Trainers, who are required to train others, can be deputed abroad for training, for which assistance would be made available for meeting the travel cost and course fee. Concerned State Departments of Horticulture/ Agriculture/SHM function as nodal agency for this purpose. Funds will be made available to SHMs for meeting expenses of candidates involved in implementation of Mission programmes based on their specific proposal.

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	HRD for Supervisors & Entrepreneurs	Rs. 20.00 lakh/unit	100% of the cost in first year. In subsequent years, cost of infrastructure not to be claimed.
ii.	HRD for Gardeners	Rs. 15.00 lakh/unit	100% of the cost.
iii.	Training of farmers		
	a) Within the State	Rs. 1000/day per farmer including transport	100% of the cost.
	a) Outside the State	Project based as per actual.	100% of the cost.
iv.	Exposure visit of farmers		
	a) Outside the State	Project based as per actual.	100% of the cost.
	b) Outside India	Rs. 4.00 lakh / participant	Project Based. 100% of air/rail travel. Course fee cost to be funded under Mission Management.

XI. INTEGRATED POST HARVEST MANAGEMENT

Under post-harvest management, including that for Medicinal plants, activities like handling, grading, pre-conditioning, packaging, transient storage, transportation, distribution, curing and ripening and where possible long term storage can be taken up. Existing schemes of the Directorate of Marketing and Inspection (DMI) and National Cooperative Development Corporation (NCDC) will be leveraged to the extent possible. MIDH would include projects relating to establishment of pre-cooling units, 'on-farm' pack houses, mobile pre-cooling units, staging cold rooms, cold storage units with and without controlled atmosphere capability, integrated cold chain system, supply of refrigerated vans, refrigerated containers, primary/mobile processing units, ripening chambers, evaporative/low energy cool chambers, preservation units, onion storage units and zero energy cool chambers. These projects will be entrepreneur driven and provided credit linked back-ended subsidy.

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Pack house	Rs. 4.00 lakh/unit with size of 9Mx6M	50% of the capital cost.
ii.	Integrated pack house with facilities for conveyer belt, sorting, grading units, washing, drying and weighing.	Rs. 50.00 lakh per unit with size of 9Mx18M	Credit linked back-ended subsidy @ 35% of the cost of project

iii.	Pre-cooling unit	Rs. 25.00 lakh / unit with capacity of 6 MT.	Credit linked back-ended subsidy @ 35% of the cost of project
iv.	Cold room (staging)	Rs. 15.00 lakh/ unit of 30 MT capacity	Credit linked back-ended subsidy @ 35% of the cost of project
v.	Mobile pre- cooling unit	Rs. 25.00 lakh	Credit linked back-ended subsidy @ 35% of the cost of project
vi.	Cold Storage (Construction, Expansion and Modernization)		
a)	Cold storage units Type 1 - basic mezzanine structure with large chamber (of >250 MT) type with single temperature zone	Rs. 8,000/MT, (max 5,000 MT capacity)	Credit linked back-ended subsidy @ 35% of the cost of project
b)	Cold Storage Unit Type 2 – PEB structure for multiple temperature and product use, more than 6 chambers (of < 250 MT) and basic material handling equipment.	Rs. 10,000/MT, (max 5,000 MT capacity)	Credit linked back-ended subsidy @ 35% of the cost of project
c)	Cold Storage Units Type 2 with add on technology for Controlled Atmosphere	Additional Rs. 10,000/MT for add on components of controlled atmosphere technology. Details are as per Appendix - II	Credit linked back-ended subsidy @ 35% of the cost of project
vii.	Technology induction and modernization of cold-chain	Max Rs. 250.00 lakh for modernization of PLC equipment, packaging lines, dock levelers, advanced graders, alternate technologies, stacking systems, modernization of insulation and refrigeration, etc. Details are in Appendix –II	Credit linked back-ended subsidy @ 35% of the cost of project
viii.	Refrigerated Transport vehicles	Rs. 26.00 lakh for 9 MT (NHM & HMNEH), and prorata basis for lesser capacity, but not below 4 MT.	Credit linked back-ended subsidy @ 35% of the cost of project
ix.	Primary / Mobile/ Minimal processing unit	Rs 25.00 lakh/unit	Credit linked back-ended subsidy @ 40% of the capital cost of project
x.	Ripening chamber	Rs. 1.00 lakh/MT	Credit linked back-ended subsidy @ 35% of the capital cost of project for a maximum of 300 MT per beneficiary.
xi.	Evaporative / low energy cool chamber (8 MT)	Rs. 5.00 lakh/unit	50% of the total cost.

xii.	Preservation unit (low cost)	Rs.2.00 lakh/unit for new unit and Rs.1.00lakh/unit for up-gradation	50% of the total cost.
xiii.	Low cost onion storage structure (25 MT)	Rs. 1.75 lakh/per unit	50% of the total cost.
xiv.	Pusa Zero energy cool chamber (100 kg)	Rs. 4000 per unit	50% of the total cost.
	Integrated Cold Chain supply System	Project Based. Project should comprise of minimum two components listed under C.1 to C.13 above, with maximum cost of Rs. 600.00 lakh.	Credit linked back-ended subsidy @ 35% of the cost of project

XII. ESTABLISHMENT OF MARKETING INFRASTRUCTURE

Main objectives of providing assistance under this component are (a) to encourage investments from private and cooperative sectors in the development of marketing infrastructure for horticulture commodities (b) strengthen existing horticulture markets including wholesale and rural markets; (c) focus on promotion of grading, standardization and quality certification of horticulture produce at farm/market level to enable farmers to realize better price; and (d) create general awareness among farmers, consumers, entrepreneurs and market functionaries on market related agricultural practices.

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Rural Markets/Apni mandies/ Direct markets	Rs. 25.00 lakh	Credit linked back-ended subsidy @ 40% of the capital cost of project in general areas and 55% in case of Hilly & Scheduled areas, per beneficiary.
ii.	Retail Markets / outlets (environmentally controlled)	Rs. 15.00 lakh/unit	Credit linked back-ended subsidy @ 35% of the capital cost of project in general areas and 50% in case of Hilly & Scheduled areas, per beneficiary.
iii.	Static/Mobile Vending cart/ platform with cool chamber.	Rs. 30,000/ unit	50% of total cost.
iv.	Functional Infrastructure for:		
	i) Collection, sorting/ grading, packing units etc.	Rs.15.00 lakh	Credit linked back-ended subsidy @ 40% of the capital cost of project in general areas and 55 % in case of Hilly & Scheduled areas, per beneficiary.
	ii) Quality control/ analysis lab	Rs. 200.00 lakh	100% of the total cost to public sector and 50% of cost to private sector as credit linked back ended subsidy.

XIII. FOOD PROCESSING

Processing of horticultural produce and value addition is an important activity. While primary/ minimal processing units will be promoted under NHM, large scale processing units will be promoted by Ministry of Food Processing Industries (MFPI), out of their ongoing Schemes.

S. No.	Item	Cost Norms*	Pattern of Assistance#
i.	Food processing units	Rs. 800 lakh/unit	Credit linked back ended capital investment assistance of 50% of cost in the States of J&K, Himachal and Uttarakhand

XIV. SPECIAL INTERENTIONS

S. No.	Item	Cost Norms*	Pattern of Assistance#
	Innovative interventions not covered under any GOI schemes	10% of outlay	50% of cost, based on project proposal.
	Tackling of emergent /unforeseen requirements of State Horticulture Mision (SHMs)	Rs.20.00 lakh	50% of cost, based on project proposal.

* Cost norms means upper limit of cost for calculation of subsidy.

Note: The release of back ended subsidy need not be credit linked for the institutions like Public Sector Units, Panchayats, Cooperatives, Registered Societies / Trusts and Public limited Companies, provided they can meet the remaining share of the project cost, out of their own resources.

APPENDIX II

TECHNOLOGY INDUCTION IN COLD CHAIN, ADD-ON FOR CA AND MODERNIZATION

S. No.	Item	Description	Admissible Cost
i	CA Generator*	Inclusive of sensors, pressure equalising equipment, controls	Rs. 125.00 lakh per unit, maximum 2 generators
ii	Specialised CA Doors*	Add-on specialisation to storage doors for positive pressure chambers.	Rs. 2.50 lac per door, maximum 20 doors
iii	CA Tents#	Low cost enclosure of polyethyelene PVC, mylar or other impermeable body for existing or new cold stores	As per original invoice, maximum 5 enclosures
iv	Programmed Logic Controller (PLC) equipment# @	Electronic and electrical logic controls for machinery & equipment for existing or new cold stores.	50% of cost as per original invoice, maximum Rs 10 lakh
v	Dock Leveler system # @	In existing or new storages	Max Rs. 7 lakh per unit, max 5 units
vi	Warehouse Development & Regulatory Authority (WDRA) / Negotiable Warehouse Receipt (NWR) system, equipment# @	Computers and printers & software for use with NWR of WDRA	100% of cost as per original invoice, maximum Rs. 2 lakh
vii	Specialised Packaging#	Automated packaging lines for fruits & vegetables with farm code labelling, with packaging material	100% of cost as per invoice, maximum Rs. 15 lakh per project
viii	High Reach Material Handling Equipment (MHE)*#	Specialised material Handling equipment	Rs. 17 lakh per unit, for max 2 units.
ix	Modernisation of refrigeration @	For upgrading of evaporator system, compressor system	50% of cost as per original invoice, maximum Rs. 100 lakh @ Rs. 2500/MT
x	Modernisation of insulation@	For repair or modernising of cold chamber insulation	50% of cost as per original invoice, maximum Rs.100 lakh @ Rs. 1500/MT
xi	Reefer Container#	Reefer container for use on existing chassis trailers	Max Rs. 6 lakh per 9MT (20 foot container)
xii	Advanced Grader*#@	Computerised, Optical Grading Lines, with packaging material	100% of cost as per original invoice, max Rs. 75 lakh per line
xiii	Stacking system*#@	Racking systemBins, Pallets, for existing or new cold stores.	100% of invoice cost, max Rs 2000/MT
xiv	Retail Shelf / equipment#	Temperature controlled retail cabinets or merchandising equipment	Maximum Rs. 10 lakhs per establishment

xv	Alternate Technology#@	Vapour Absorption, Phase change material, Solar PV panels or Solar Thermal sys	100% of cost as per invoice, maximum Rs. 35 lakhs per project
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*Components categorization: * CA Add-ons; # Other Add-ons; and @ Modernisation.*

Maximum permissible subsidy shall be subject to original invoices and in no case more than Rs. 750.00 lakh, whichever is lower. For add-on technology, credit linked back ended subsidy shall be provided at 35/50% of the admissible cost. Technology offers inherent value for operators and the admissible cost norms are designed to incentivize induction and not to serve as venture funding.

Any other components as maybe decided by Technical Committee when new technology or items that reduce carbon footprints are introduced. For individual unit components like insulation, graders, CA generator, solar panels, etc - NCCD shall publish guidelines for use by appraising agency.

Directory of Schemes in Department of Soil & Water Conservation

I. Centrally Sponsored Schemes

Sr. No	Scheme/ Component	Brief description/ Activities covered	Districts Covered	Subsidy/ Assistance	Proposed Budget-13 th Plan (2017-22)
1.	PRADHAN MANTRI KRISHI SINCHAYEE YOJANA (PMKSY)				
A.	Micro Irrigation (Per Drop More Crop) - GoI:State 60:40 sharing pattern	Objective of the scheme is to enhance water use efficiency in the agriculture sector by promoting appropriate technological interventions like drip & sprinkler irrigation technologies and encourage the farmers to use water saving and conservation technologies.	All Districts	@35% (10% additional subsidy for small/marginal farmers)	Rs 40.00 crore
B.	Watershed Development (60:40)	Projects for reclamation of special problematic areas and degraded soils are taken up by GoI under its technology development, extension & training programme. The major activities covered under these projects include Drainage, flood water harvesting, bench terracing, land leveling, masonry drop structures, field bunding, plantation, sand scrapping, desalting of ponds, precision leveling, demonstration of high value crops	Gurdaspur	- For farmers, 60% assistance is provided by GoI and 40% is contributed by beneficiary - For Govt/ Community Lands, assistance is provided on 100% basis by GoI	Rs 0.92 crore
C.	Repair/renovation of existing village ponds and water used for irrigation (60:40)	Renovation of village ponds and laying of irrigation network through underground pipelines	All Districts	100% assistance on community projects	Rs 167.37 crore
D.	Creation of alternate source of irrigation by utilization of treated water from STPs for irrigation (60:40)	Use of treated sewerage water from Sewerage Treatment Plants (STPs) of various towns of the state for irrigation purposes	All Districts	100% assistance on community projects	Rs 161.94 crore

E.	Improved distribution system through box outlet underground pipeline in agricultural fields for increasing irrigation water efficiency (60:40)	Providing financial assistance both on individual and community projects for laying of underground pipelines for irrigation in agricultural fields	All Districts	50% assistance on individual projects and 90% assistance on community projects	Rs 547.53 crore
F.	Solar pumpset for farmers having Micro Irrigation/ Water Storage Tank (60:40)	Providing Solar Photovoltaic Pumpsets to farmers having drip irrigation by providing financial assistance to farmers	All Districts	75% assistance on individual projects	Rs 129.15 crore

II. State Sponsored Schemes (Funded by NABARD – RIDF)

Sr. No	Scheme/ Component	Brief description/ Activities covered	Districts Covered	Subsidy/ Assistance	Proposed Budget-13 th Plan (2017-22)
1.	Project for Judicious use of available water & harvesting of rain water for enhancing irrigation potential in Punjab (NABARD-RIDF-17) (95:5)	Construction of Rainwater Harvesting and Recharge Structures, Check dams and laying of irrigation network to bring additional area under assured irrigation	12 Districts	90% assistance is approved for Community Underground Pipeline System (UGPS)	Rs 21.31 crore
			Kandi Area	100% assistance on rainwater Harvesting Structures	
2.	Project for Laying of Underground pipeline for Irrigation from Sewerage Treatment Plants (NABARD-RIDF-18) (95:5)	Under the scheme projects are being installed to supply treated water from sewerage treatment plants of various towns/cities.	All Districts		Rs 5.63 crore
3.	Project for promotion of Micro irrigation (NABARD-RIDF-20) (95:5)	Subsidy is being provided to farmers for installation of Drip, Micro Sprinkler & Sprinkler Irrigation systems	All districts	80% subsidy on micro-irrigation system and beneficiaries are given additional subsidy from RIDF-20 over & above the GoI scheme subsidy	Rs 60.00 crore

4.	Scheme for providing assured irrigation water to the waterlogged areas in south western districts (NABARD-RIDF-21) (95:5)	NABARD sanctioned a project namely “Underground Pipeline projects for improving irrigation system for the waterlogged areas in South-Western districts. The project aims at rejuvenating the agriculture production system by reclaiming the seasonal/permanent water-logged areas	Sri Muktsar Sahib, Ferozepur, Fazilka	90% assistance is provided by govt and 10% of the actual cost will be contribute by beneficiary	Rs 44.00 crore
5.	Scheme for conveyance of irrigation water to the field at the tail ends of canal network in sangrur and barnala	Scheme is for the benefit of many pockets in sangrur and barnala districts which are not able to get the irrigation water as they are located either too far from the canal outlets or at tail ends	Sangrur and Barnala	90% subsidy from the scheme	Rs 50.00 crore
6.	Project for laying of underground pipeline system for conveyance of irrigation water (NABARD-RIDF-22) (95:5)	Project aims at improving the sustainability of agriculture through assistance on Underground Pipeline System for optimal use of available water resources. It is proposed to undertake community/ individual lift/ gravity RCC/ PVC/HDPE UGPS projects from canal/river/rivulet/tubewell/ponds or any other irrigation source outlet	11 districts	90% assistance is provided by govt and 10% of the actual cost will be contribute by beneficiary	Rs 105.26 crore

III. Ongoing Schemes of other Departments

1. Rashtriya Krishi Vikas Yojana (Deptt. Of Agriculture)

Under this scheme started in 2007-2008, 90% assistance is provided on Community UGPS Projects under “Project for improving conveyance efficiency of irrigation water for sustaining agricultural production”. There is a budget outlay of Rs 86.00 Crore for 2017-2018. There is also a provision of 75% subsidy on Solar Pumps to run Micro Irrigation systems under “Project for Matching irrigation water availability and demand for improved productivity through Efficient On-farm Water Management” with a budget outlay of Rs 23.10 Crore in 2017-2018. Total proposed budget for 13th Plan (2017-22) is Rs 250 crore.

2. Crop Diversification Plan (Deptt. Of Agriculture)

Under this scheme started in 2013-2014, 50% assistance (limited to Rs 22,000/- per hectare) is provided on Individual UGPS projects on own tubewell of farmers. There is a budget outlay of Rs 2.52 Crore for 2017-2018 and proposed budget is Rs 10 crore for 13th Plan (2017-22).

3. Integrated Watershed Management Programme (Deptt. Of Rural Development)

The department is serving as an Implementing Agency for Watershed Development projects with an objective to improve productivity of problematic areas in various districts. Works like land leveling, ponds, drainage line treatment, recharging, plantation, retaining wall, chiseling etc. are carried out under these projects. There is a target to cover 56,416 hectares at a cost of Rs 67.70 Crore during 2017-2018 and proposed budget is Rs 100 crore for 13th Plan (2017-22).

4. Projects of Wetland Development (Punjab State Council of Science & Technology)

Main aim of these projects is to develop area falling under Ropar, Nangal and Harike wetlands by carrying out works like silt detection structures, silt monitoring, erosion control structures alongwith various vegetative measures for conservation and management of these wetlands. For this project, Rs 50.00 lakhs are likely to be utilized in 2017-2018. Comprehensive 5-year action plans have also been prepared for these wetlands with a total cost of about 750.00 lakhs.

Directory of Schemes in Department of Animal Husbandry, Punjab

I. Centrally Sponsored Schemes

S. No	Scheme/ Component	Activities	Subsidy/ Assistance	Budget provided/ proposed (2017-18)
1.	National Livestock Health and Disease Control Programme (NLHDCP)			
i.	National Project on Rinderpest Eradication. (100% GOI)	Under this programme, the state is required to carry out physical surveillance through village, stock route & institutional searches to maintain the freedom status of Contagious Bovine Pleuro-Pneumonia (CBPP) and to undertake surveillance of other animal diseases on routine basis.	Nil	6.00 lac
ii.	Foot and Mouth Disease Control Programme (FMD-CP) (60:40)	Vaccinate all the eligible cattle and buffalos at six monthly interval, publicity and mass awareness campaign including orientation of the state functionaries for implementation of the scheme, identification of the target animals , monitoring of animal population on random basis, mass vaccination, procurement of cold cabinets and FMD vaccine, assessment of vaccines for their quality, viru typing in case of outbreaks and recording/regulation of animal movement from unvaccinated areas through temporary quarantine/check-posts.	Nil	600.00 lac
iii.	National Control Programme on Brucellosis (60:40)	<p>Brucellosis is one of the major infectious disease of livestock caused by brucella anprtis. It causes abortions in the last quarter of pregnancy causing huge economic losses to livestock sector. This disease can be prevented over a period of time by one time vaccination of all eligible female calves.</p> <p>Brucellosis-CP envisages vaccination of female calves between 6-8 months.</p> <p>Adulthood vaccination is also being taken up covering all un-vaccinated adult female bovines in a phased manner. Under this scheme, prophylactic vaccination of young female population is being undertaken besides conducting surveillance of the disease.</p>	Nil	50.00 lac

iv.	Peste des Petits Ruminants- Control programme (PPR-CP) (60:40)	Peste des petits is a viral disease of sheep and goat. It may lead to ulsration of the mucous membrane and diarrhea. Presently sheep and goat population is about 5 lac and it is mostly reared by weaker section of the society so to control this disease GOI approved this programme.	Nil	50.00 lac
2.	National Livestock Management Programme			
i.	National Livestock Mission (60:40)	Under this programme various types of development projects like setting up of piggery, goatry farms, setting up of backyard poultry units, strengthening of piggery sector are being implemented	Setting up of 1333 Backyard Poultry Units, insurance of 20000 animals	400.00 lac
3.	National Mission on bovine Productivity (60:40)	<p>Objectives:</p> <ol style="list-style-type: none"> To enhance milk production and productivity of bovine population by increasing population of disease free high genetic merit female population and check on spread of disease. To improve quality of dairy animals, milk and milk product. To increase trade of livestock and livestock product by meeting out sanitary and phytosanitary (SPS) issues. To create e-market portal for bovine germplasm for connecting breeders and farmers, especially from sicio-economically weaker section. To increase farmers income as a part of goal set by Hon'ble PM for doubling farmer's income by 2022. <p>Components:</p> <ol style="list-style-type: none"> Pashu Sanjivni. Advanced breeding technology. Creation of "E-PasjudhanHaat"- Nakul Prajnanbajar National Bovine Genomic Centre for Indigenous breeds (NBGC-IB). 	Nil	100.00 lac

II. Special Central Assistance Schemes (SCA) (100% GOI)

1.	Scheme for female buffalo calf rearing	The objective of the scheme is to improve the economic status of the BPL Scheduled Castes landless labourers involved in the Animal Husbandry practices by providing them one young female buffalo calf (up to the age of one year) for rearing. When these calves are fully developed, the beneficiaries can sell them in the market or can keep the same for milk production.	each beneficiary will be given one female buffalo calf costing about Rs10000/- per calf de-worming of these calves will be done by the Animal Husbandry Deptt, free of cost	51.00 lac
2.	Setting up of Goat/ Sheep Rearing Units	The objective of this scheme is to provide financial assistance to BPL SC families.	A financial assistance of Rs 10000/- will be provide to each BPL SC family For this purpose, each identified family will be provided a unit of three goat kids (app. @ Rs 3333/- per goat kid). de-worming of the goat would be done by the Animal Husbandry Deptt, free of cost	50.00 lac
3.	Supply of Hand Driven Chaff Cutter (Toka machine) to landless/marginal Scheduled Castes families.	The objective of the scheme is to facilitate the landless and marginal below poverty line Scheduled Castes families by providing them a hand driven chaff cutter so that they can feed their milch animals properly for better utilization of nutrients resulting in better health and production.	each beneficiary will be given a good quality hand driven chaff cutter at a cost of Rs.6000/-	40.00 lac

Directory of Schemes in Department of Dairy Development

I. SCHEMES BY DAIRY DEVELOPMENT DEPARTMENT, PUNJAB

1. **Establishing New Dairy Unit:** Interested Farmers, after having two-weeks training from the department can apply for establishing new dairy unit.
2. **Dairy Loan for Commercial Dairy Farms:** under this scheme, farmers can establish their own dairy farms. Loan will be provided to the beneficiaries for purchasing dairy animals (atleast 20 animals) at minimum interest rates.
3. **Subsidy for Purchase of Machinery at Dairy Farms:**

S. No.	Component	Pattern of Assistance
1.	Fodder Harvester	Subsidy @ 25% subject to the maximum of Rs. 50,000/-
2.	Self Propelled Forage Cutter (beneficiary must have minimum 10 milch animals to avail subsidy under this)	Subsidy @ 25% subject to the maximum of Rs. 50,000/-
3.	Mobile Automatic Milk Vending Machine Unit	
	a. Mobile Automatic Milk Dispensing Unit b. Bulk Milk Cooler (BMC of 500 ltr) c. Generator (7.5 KVA) d. Vehicle	Subsidy @ 50% subject to the maximum of Rs. 4.00 lakh

4. Capacity Building/Training of farmers:

- i. **One day awareness camp:** With the objective of enhancing knowledge and skills of milk producers, one day awareness camps have started by department at block level. Knowledge has been imparted on dairy farming and management techniques at every block.
- ii. **Milk production training and extension camp:** This programme has started especially for remote areas where villagers/farmers generally didn't get extension services.
- iii. **Milk consumer awareness camp and milk consumer awareness for students by holding camps in Senior Secondary Schools:** It was felt that the most effective deterrent against adulteration in milk and sale of spurious milk was to create awareness among the consumers about the quality of milk they buy. With this background, the Punjab Dairy Development Board (PDDDB) launched a sustained campaign through the Dairy Development Department. Under this programme, the Board has provided automatic milk analyzers, adulteration detection kits and other infrastructure. Milk consumer awareness camps are organized with the help of this infrastructure in the cities/towns after giving due publicity, where milk samples brought by the consumers are tested free of cost and results are given on the spot. The department also hold camps for students of senior classes in the schools to arouse awareness among them of the utility of milk for their physical and mental health, constituents of milk, usefulness of each constituent, possible adulteration and their detection at home. For this purpose, An expert in food science will be engaged to address the students and answer their queries.

- iv. **2-week dairy training programme:** The department imparts two weeks training to the un-employed rural youth at the dairy training and extension centers of the department. The main objective of these trainings is to provide knowledge on dairy farming techniques such as breeds of dairy animals, nutrient requirements of animals, construction and management of dairy sheds, management of small animals/calves etc. This training programme is essential for farmers who want to start new dairy units/farms.
- v. **6-week dairy training programme:** With the objective of making the dairy farmers self dependant, six week trainings has been started at all the Dairy Training and Extension Centers. Besides, giving knowledge on different techniques of dairy farm management, the candidates are imparted training in artificial insemination, pregnancy diagnosis and milk handling etc.

II. Schemes by NABARD

1. Dairy Entrepreneurship Development Scheme

Background:

The Department of Animal Husbandry, Dairying and Fisheries, Govt of India is implementing Dairy Entrepreneurship Development Scheme (DEDS) since 01.09.2010 with the objective of generating self employment opportunities in the dairy sector, covering activities such as enhancement of milk production, procurement, preservation, transportation, processing and marketing of milk, by providing back ended capital subsidy for bankable projects. The scheme is being implemented by National Bank for Agriculture and Rural Development (NABARD).

Objectives of the Scheme:

1. To generate self-employment and provide infrastructure for dairy sector
2. To set up modern dairy farms and infrastructure for production of clean milk
3. To encourage heifer calf rearing for conservation and development of good breeding stock
4. To bring structural changes in unorganized sector, so that initial processing of milk can be taken up at village level.
5. To upgrade traditional technology to handle milk on commercial scale
6. To provide value addition to milk through processing and production of milk products.

Target group/Beneficiaries:

Eligible beneficiaries of the scheme are

- Farmers, individual entrepreneurs and groups of unorganized and organized sector. Group of organized sector, includes self-help groups, dairy cooperative societies, Milk unions, milk federation, Panchayati Raj institutions, etc.
- An applicant will be eligible to avail assistance for all components under the scheme but only once for each component. However, more than one member of a family can be assisted under the scheme provided they set up separate units with separate infrastructure at different locations. The distance between the boundaries of two such farms should be at least 500 m.
- Priority shall be given to projects being implemented in a cluster mode covering dairy farmers/Women in SHGs, Cooperatives and producer companies including creation of facilities of processing, value addition and marketing of milk produced in the cluster.

Financial Institutions eligible for re-finance under the scheme:

- Commercial Banks
- Regional, Rural, Urban Banks
- State Cooperative Banks
- State Cooperative Agriculture and Rural Development Banks
- Other institutions, which are eligible for refinance from NABARD

Rate of Interest application on the loan amount under the scheme:

- Rate of interest on the loans shall be as per RBI guidelines and declared policy of the concern bank
- Under this scheme, the borrower has to deposit 10% as the margin money.
- Under this scheme, subsidy of 25% to 33.33% is provided by NABARD. The subsidy is given according to availability of funds.
- Loan is given for a unit of 2 to 10 animals for a maximum of 6 lakh Rupees.

Time limit for Completion of the project:

- Time limit for completion of the project (except for calf rearing units where disbursements are expected to continue till two years) would be as envisaged under the project, subject to maximum of 9 months period from the date of disbursement of the first installment of loan which may be extended by a further period of 3 months, if reasons for delay are considered justified by the financial institution concerned.
- If the project is not completed within the stipulated period, benefit of subsidy shall not be available and advance subsidy placed with the participating bank, if any, will have to be refunded to NABARD.

Repayment:

- Repayment Period will depend on the nature of activity and cash flow and will vary between 3- 7 years. Grace period may range from 3 to 6 months in case of dairy farms to 3 years for calf rearing units (to be decided by the financing bank as per needs of individual projects).
- The recovery of loan will be based on net loan amount only i.e. not including subsidy, which will be adjusted by the concerned bank after effective bank loan and interest thereon has been repaid.
- The repayment schedules will be drawn on the total amount of the loan (including subsidy) in such a way that the subsidy amount is adjusted after liquidation of net bank loan (excluding subsidy).

Security:

- The security for availing the loan will be as per guidelines issued by RBI from time to time.
- The beneficiary contribution of 10% shall not be required for loans less than Rs. 1 lakh or any amount as specified in the RBI guidelines as revised from time to time.
- Kisan Credit Cards (KCC) may be used for availing loans under the scheme, subject to RBI guidelines.

Components and Pattern of Assistance provided under this scheme:

S.No	Component	Unit Cost	Pattern of Assistance
1	Establishment of small dairy units with crossbred cows/ indigenous descript mulch cows like Sahiwal, Red Sindhi, Gir, Rathi etc /graded buffaloes upto 10 animals. (for SHGs, Cooperatives societies , Producer Companies; unit size will be 2-10 animals per member)	Rs 6.00 lakh for 10 animal unit — minimum unit size is 2 animals with an upper limit of 10 animals.	25% of the project cost (33.33% for SC / ST farmers), as back ended capital subsidy. Subsidy shall be restricted on prorata basis to a maximum of 10 animals subject to a ceiling of Rs.15,000 per animal, (Rs 20,000 for SC/ST farmers) or actual whichever is lower. Beneficiaries may purchase animals of higher costs, however, the subsidy will be restricted to the above ceilings.
2	Rearing of heifer calves — cross bred, indigenous descript milch breeds of cattle and of graded buffaloes — upto 20 calves	Rs 5.30 lakh for 20 calf unit — with an upper limit of 20 calves	25% of the project cost (33.33 % for SC / ST farmers) as back ended capital subsidy. Subsidy shall be restricted on prorata basis to a maximum of 20 calf unit subject to a ceiling of Rs.6,600/- per calf (Rs.8,800 for SC/ST farmers) or actual whichever is lower
3	Vermi-compost with milch animal unit (to be considered with milch animals/small dairy farm and not separately)	Rs 22,000/-	25% of the project cost (33.33% for SC / ST farmers) as back ended capital subsidy subject to a ceiling of Rs 5,500 (Rs 7300/- for SC/ST farmers) or actual whichever is lower.
4	Purchase of milking machines/milkotesters/ bulk milk cooling units (upto 5000 lit capacity)	Rs 20 lakh	25% of the project cost (33.33% for SC / ST farmers) as back ended capital subsidy subject to a ceiling of Rs 5.0 lakh (Rs 6.67 lakh for SC / ST farmers) or actual whichever is lower
5	Purchase of dairy processing equipment-for manufacture of indigenous milk products	Rs 13.20 lakh	25% of the project cost (33.33% for SC/ST farmers) as back ended capital subsidy subject to a ceiling of Rs 3.30 lakh (Rs 4.40 lakh for SC/ST farmers) or actual whichever is lower
6	Establishment of dairy product transportation facilities and cold chain	Rs 26.50 lakh	25% of the project cost (33.33% for SC / ST farmers) as back ended capital subsidy subject to a ceiling of Rs 6.625 lakh (Rs 8.830 lakh for SC/ST -farmers) or actual whichever is lower
7	Cold storage facilities for milk and milk products	Rs 33 lakh	25% of the project cost (33.33 % for SC / ST farmers) as back ended capital subsidy subject to a ceiling of Rs 8.25 lakh (Rs 11.0 lakh for SC/ST farmers) or actual whichever is lower
8	Establishment of private veterinary clinics	Rs 2.60 lakh or mobile clinic and Rs 2.0 lakh for stationary clinic	25% of the project cost (33.33 % for SC / ST farmers) as back ended capital subsidy subject to a ceiling of Rs 65,000/- and Rs 50,000/- (Rs 86,600/- and Rs 66,600/- for SC/ST farmers) respectively for mobile and stationary clinics or actual whichever is lower
9	Dairy marketing outlet / Dairy parlour	Rs 1.0 lakh/-	25% of the project cost (33.33% for SC / ST farmers) as back ended capital subsidy subject to a ceiling of Rs 25,000/- (Rs 33,300/- for SC/ST farmers) or actual whichever is lower

Note:- The subsidy amount will be rounded off to the nearest 100 Rupees. Beneficiaries may submit project proposal/s without any limit. However, the back ended capital subsidy under the scheme will be restricted to the above ceilings. The Banks will verify the costs of components admissible under the scheme based on the cost norms notified by NABARD.

III. National Programme for Dairy Development (NPDD)

This component focuses on developing infrastructure at the grassroots by providing financial and technical assistance for production, procurement, processing and marketing by milk unions/federations and also extension activities include training of farmers.

Objectives:

1. To create and strengthen infrastructure for production of quality milk including cold chain infrastructure linking the farmer to the consumer
2. To create and strengthen infrastructure for procurement, processing and marketing of milk
3. To create training infrastructure for training of dairy farmers
4. To strengthen dairy cooperative societies/Producers Companies at village level
5. To increase milk production by providing technical input services like cattle feed and mineral mixture etc.
6. To assist in rehabilitation of potentially viable milk federations/unions

IV. National Dairy Plan

The National Dairy Plan Phase I (NDP-I), a central sector scheme with a total outlay of about 2,242 crore, is implemented by the National Dairy Development Board through End Implementing Agencies (EIAs) in 14 major dairying states with the following objectives:

- To help increase productivity of milch animals and thereby increase milk production to meet the rapidly growing demand for milk
- To help provide rural milk producers with greater access to the organized milk processing sector

Directory of Schemes in Department of Fisheries, Punjab

I. Central Sector Scheme on Blue Revolution

Introduction:

Blue Revolution, the Neel Kranti Mission has the vision to achieve economic prosperity of the country and the fishers and fish farmers as well as contribute towards food and nutritional security through full potential utilization of water resources for fisheries development in a sustainable manner, keeping in view the bio-security and environmental concerns.

Objectives:

- i. To fully tap the total fish potential of the country both in the inland and the marine sector and triple the production by 2020
- ii. To transform the fisheries sector as a modern industry with special focus on new technologies and processes
- iii. To double the income of the fishers and fish farmers with special focus on increasing productivity and better marketing postharvest infrastructure including e-commerce and other technologies and global best innovations
- iv. To ensure inclusive participation of the fishers and fish farmers in the income enhancement
- v. To triple the export earnings by 2020 with focus on benefits flow to the fishers and fish farmers including through institutional mechanisms in the cooperative, producer companies and other structures
- vi. To enhance food and nutritional security of the country

STRATEGY - CENTRAL SECTOR ASSISTANCE SCHEMES

The Ministry of Agriculture and Farmers Welfare, Department of Animal Husbandry, Dairying & Fisheries has accordingly restructured the scheme by merging all the ongoing schemes under an umbrella of Blue Revolution. The restructured scheme provides focused development and management of fisheries, covering inland fisheries, aquaculture, and marine fisheries including deep sea fishing, mariculture and all activities undertaken by the National Fisheries Development Board (NFDB).

Scheme Components and Pattern of Assistance:

The Scheme has following broad components (with respect to Punjab state):

1. Development of Marine Fisheries, Infrastructure and Post-Harvest Operations

S. No	Component	Unit Cost	Central financial assistance	Terms and Conditions
1.	Strengthening of Post Harvest Infrastructure			
1.1	Development of Post Harvest infrastructure Projects eligible for central financial assistance under this sub-component are: i. Ice plants ii. Cold Storages iii. Ice plants cum-cold storages	Rs.2.50 lakh per tonne	50% of the unit cost with a ceiling of Rs.50 lakh per plant project in General States.	<ul style="list-style-type: none"> i. Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances and financial resources along with necessary clearances/ permissions etc. in the DPR. No funds shall be provided for the land. ii. Cost estimates shall be based on the latest SoRs admissible in the project area and prevailing market rates. iii. The beneficiaries shall certify that all operational and maintenance costs of the infrastructure facilities shall be borne by them in future. iv. The beneficiaries shall submit self contained proposals together with documentary evidences in respect of (i) to (ii) above. v. The proposal shall be routed through the concerned State Governments/ UTs with clear recommendation.
1.2	Renovation /modernization of existing a. Ice plants b. Cold c. storages and d. Ice plants-cum- e. cold f. storages	Rs 1.50 lakh per tonne	50% of the unit cost with a ceiling of Rs. 30 lakh per plant project	<ul style="list-style-type: none"> i. The broad items for renovation/modernization of the existing plants shall include civil works of the existing building, replacement of plants & machineries, electrification & water supply & sanitation works etc., with a view to enhance the efficacy of the existing plant. ii. The beneficiaries should have the ownership of the existing infrastructure plant/facilities. iii. Renovation/modernization of existing & operational plants of minimum 10 years old only may be considered for funding on one time basis. iv. The beneficiaries should clearly indicate the source of balance funding for the project. v. Cost estimates shall be based on the latest SoRs admissible in the project area and prevailing market rates. vi. The beneficiaries shall confirm that all operational and maintenance costs of the modernized plant/ infrastructure facility shall be borne by them. vii. The beneficiaries shall submit self contained proposals together with documentary evidences in respect of (ii) to (vi) above. viii. The proposals shall be routed through the concerned State Governments/ UTs with clear recommendation.

1.3	Development of Retail Fish Markets and Allied Infrastructure (Items: Modern hygienic fish market with a minimum of 10 retail outlets, 20 retail outlets, and 50 retail outlets units with common cold storage facility, waste collection & disposal units, fish cleaning and dressing space, auctioning platforms, water and power supply facilities etc.)	As per actual with a ceiling of as below: (a) Rs.100 lakh for a fish market of 10 unit retail outlets, (b) Rs 200 lakh for a fish market of 20 unit retail outlets, (c) Rs 500 lakh for a fish market of 50 units or more retail outlets.	50% of the unit cost with a ceiling of Rs.50 lakh for a fish market of 10 units of retail outlets, Rs.100 lakh for a fish market of 20 units of retail outlets and Rs. 250 lakh for a fish market of 50 units or more retail outlets.	<ul style="list-style-type: none"> (i) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances and financial resources along with necessary clearances/permissions etc. in the DPR. No funds shall be provided for the land. (ii) The beneficiaries shall complete the planning, designing of the market facilities and cost estimates etc. through professionals in the subject. (iii) Cost estimates shall be based on the latest SoRs admissible in the project area and prevailing market rates. (iv) The post-construction operational and maintenance costs of the infrastructure facility shall be borne by the beneficiaries. (v) The beneficiaries shall submit self contained proposals together with documentary evidences in respect of (i) to (iv) above. (vi) The proposals shall be routed through the concerned State Governments/ UTs with clear recommendation. (vii) NFDB shall take up development and management of fish markets on commercial approach at feasible locations.
1.4	Setting up of mobile/retail fish outlet (Kiosk) (kiosk along with one fish storage/display cabin, one visi cooler, weighing machine, facilities/ utensils for fish cutting cleaning facilities)	As per actual with a ceiling of Rs. 10 lakh per unit.	50% of the unit cost with a ceiling of Rs. 5 lakh per unit.	<ul style="list-style-type: none"> (i) Beneficiaries shall provide documentary evidence of availability of requisite land (wherever required) free from all encumbrances and financial resources along with necessary clearances/permissions (wherever required) etc. in the DPR. No funds shall be provided for the land. (ii) Cost estimate for construction of fish retail outlet/kiosk shall be based on the latest SoRs admissible in the project area, and cost estimate for mobile outlet shall be based on prevailing market rates. (iii) The post-construction operational and maintenance costs of the fish retail outlet/kiosk/mobile fish retail outlet shall be borne by the beneficiaries. (iv) The beneficiaries shall submit self contained proposals together with documentary evidences in respect of (i) to (iii) above. (v) The proposals shall be routed through the concerned State Governments/ UTs with clear recommendation.

				(vi) Fish retail outlet/kiosk shall be of a minimum floor area of 100 Sq.ft (static). (vii) Priority shall be given to SCs/STs/women/unemployed youth.
1.5	Assistance for fish transport infrastructure			
1.5.1	Refrigerated truck/ container of a minimum 10 tonne capacity.	As per actual with a ceiling of 25 lakh per truck.	50% of the unit cost with a ceiling of Rs. 12.50 lakh per truck.	(i) Maintenance & operational costs of the fish transport vehicles shall be met by the beneficiaries at their own cost. (ii) Government of India shall not be responsible for any losses incurred on procurement, operation, maintenance and management of the fish transport facilities. (iii) Beneficiaries should ensure that fish transport facilities are maintained in operational condition. (iv) Beneficiaries shall abide by rules/regulations, if any imposed by the concerned State/UT as well as Central Government on maintenance & operation of the fish transport facilities. (v) Beneficiaries shall ensure that the fish transport vehicles/facilities procured under the scheme will be used only for transport of fish and fisheries related items and not for any other purposes. (vi) In case, it is found at any point of time that the fish transport vehicles procured under the scheme are used for other than the fisheries purposes, the Government of India will recover the entire central assistance with interest from the beneficiaries. (vii) Beneficiaries will display permanently to the effect that the fish transport vehicle is procured with financial assistance from the Government of India, Ministry of Agriculture, Department of Animal Husbandry, Dairying and Fisheries.
1.5.2	Insulated truck of a minimum 10 tonne capacity.	As per actual with a ceiling of 20 lakh per truck.	50% of the unit cost with a ceiling of Rs. 10 lakh per truck.	
1.5.3	Insulated Truck of a minimum 6 tonne capacity	As per actual with a ceiling of 15 lakh per truck.	50% of the unit cost with a ceiling of Rs. 7.50 lakh per truck.	
1.5.4	Auto rickshaw with ice box	As per actual with a ceiling of Rs.2 lakh per unit	50% of the unit cost with a ceiling of Rs. 1 lakh per unit.	

1.5.5	Motorcycle with ice box	As per actual with a ceiling of Rs. 0.60 lakh per unit.	50% of the unit cost with a ceiling of Rs. 0.30 lakh per unit.	
1.5.6	Bicycle with ice box	As per actual with a ceiling of Rs. 3000/- per unit.	50% of the unit cost with a ceiling of Rs. 1500/- per unit.	
2	Innovative activities			
	Innovative Activities	Actual	50% of the unit cost with a ceiling of Rs. 50 lakh for each project for General States.	<p>(i) Innovative activities shall broadly cover fisheries management, conservation, induction of new technology in fishing and allied activities including onboard handling of fish, diversification of species to enhance the production and productivity, new technologies in mari-culture, fish culture, Re-circulatory Aquaculture Systems (RAS) with a minimum capacity of 500 tonnes/year, cage/pen culture including auto feed technology, energy efficient operation of post harvest infrastructure facilities such as FHs/FLCs etc, fisheries waste management, improvement in hygienic conditions of the post harvest infrastructure facilities including deboning machine etc., post harvest processing and value added products, promotional activities and any unforeseen activities etc.</p> <p>(ii) The States/UTs/Agencies are requested to submit self contained proposal clearly indicating the innovative activities, capabilities of implementing agencies, anticipated outcomes/outputs (both in terms of qualitative and quantitative) and broad long-term impact on local fisheries etc.</p>

2. Development of Inland Fisheries and Aquaculture

Sr No	Component	Unit Cost	Central financial assistance	Terms and Conditions
1	Development of Freshwater/Brackishwater Aquaculture			

1.1	Construction of new ponds/tanks (including construction of sluice gates, civil works for water supply and aeration appliances, feed storing shed etc.)	As per actual cost subject to a ceiling of Rs. 7 lakh per ha	50% of the unit cost with a ceiling of Rs.3.50 lakh per ha	<p>(i) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances and financial resources along with necessary clearances/ permissions etc. in the DPR. No funds shall be provided for the land.</p> <p>(ii) The constructed ponds shall have a minimum water depth of 1.5m.</p> <p>(iii) Central financial assistance shall be restricted to a maximum area of 2 ha for individual beneficiary, 2 ha x number of members for cooperatives/ collectives subject to viability of pond sizes and with a ceiling of 20 ha. for group/collectives. The project proposals in this category shall be routed through the concerned State /UT Government with proper recommendations.</p> <p>(iv) For Central and State Government organizations/ federations/ corporations/ agencies etc financial assistance for quantum of hectareage shall be decided on case to case basis in consultation with the concerned applicant.</p>
1.2	Renovation of existing ponds/tanks (repair and strengthening of bunds, repair of electrical and water supply works and other accessories/ equipment, desiltation, repair/ installation of sluice gates, site clearing, Dewatering etc.)	Rs. 3.5 lakh/ha	50% of the unit cost with a ceiling of Rs.1.75 lakh per ha.	<p>(i) Beneficiaries shall provide documentary evidence on ownership of the existing ponds/tanks, financial resources along with necessary clearances/ permissions (if any required) etc. in the DPR.</p> <p>(ii) Renovation/ repair/ desilting of existing ponds/tanks, other related civil works etc. may be considered for funding only after 5 years on one time basis.</p> <p>(iii) Central financial assistance shall be restricted to a maximum area of 2 ha for individual beneficiary, 2 ha x number of members for cooperatives/ collectives subject to viability of pond sizes and with a ceiling of 20 ha. for group/collectives.</p> <p>(iv) The project proposals (except for central Govt organizations/ instates) shall be routed through the concerned State/UT Government with proper recommendations.</p>

1.3	Renovation of MNERGA ponds and tanks, new water bodies created under various State Govt/ central programme including wetland development department etc.	Rs. 3.5 lakh/ha	50% of the unit cost with a ceiling of Rs.1.75 lakh per ha	<p>(v) Beneficiary organizations /agencies shall provide documentary evidence on ownership of the ponds/tanks, financial resources along with necessary clearances/ permissions (if any required) etc. in the DPR.</p> <p>(vi) Renovation/repair/ desilting of the ponds/tanks, other related civil works etc. may be considered for funding only after 5 years on one time basis.</p> <p>(vii) Central financial assistance shall be restricted to a maximum area of 2 ha for individual beneficiary, 2 ha x number of members for cooperatives/collectives subject to viability of pond sizes and with a ceiling of 20 ha. for group/collectives.</p> <p>(viii) The project proposals (except for central Govt organizations/ instates) shall be routed through the concerned State/UT Government with proper recommendations.</p>
1.4	Rejuvenation of Urban/Semi-Urban/ Rural Lakes/Tanks for fish culture	Rs. 3.5 lakh/ha	50% of the unit cost with a ceiling of Rs.1.75 lakh per ha	<p>(i) Beneficiary organizations/ agencies shall provide documentary evidence on ownership of the ponds/tanks, financial resources along with necessary clearances/ permissions (if any required) etc. in the DPR.</p> <p>(ii) Renovation/repair/ desilting of the ponds/tanks, other related civil works etc. may be considered for funding only after 5 years on one time basis.</p> <p>(iii) Central financial assistance shall be restricted to a maximum area of 2 ha for individual beneficiary, 2 ha x number of members for cooperatives/collectives subject to viability of pond sizes and with a ceiling of 20 ha. for group/collectives.</p> <p>(iv) The project proposals (except for central Govt organizations/ instates) shall be routed through the concerned State/UT Government with proper recommendations.</p>
1.5	Inputs Cost for freshwater fish culture and brackishwater fish/shrimp culture (items at 1.1 to 1.4 above)			

1.5.1	For freshwater fish culture (unit cost includes cost of fish/prawn seed, feed, manure, disease prevention measures, transportation charges etc.)	(a) Finfish Culture: As per actual cost subject to a ceiling of Rs. 1.50 lakh/ha (b) Fresh water prawn/trout culture: As per actual cost subject to a ceiling of Rs. 2.50 lakh/ha	(a) Central assistance for Finfish culture is restricted at 50% of project/unit cost with a ceiling of Rs.0.75 lakh/ha for all beneficiaries and (b) Central assistance for Freshwater prawn/trout culture is restricted to 50% of the unit cost with a ceiling of Rs.1.25 lakh/ha	(i) This input cost shall be provided for the ponds/ waterbodies mentioned at S.No.1.1 to 1.4 above with the ceiling indicated therein. (ii) Beneficiaries shall be provided central assistance for input costs for the initial crop only in the newly constructed/renovated ponds/tanks. (iii) Central assistance for input cost shall be released only after the ponds/tanks are ready for culture.
1.5.2	For brackish water fish/shrimp culture (unit cost includes cost of fish/shrimp seed, feed, manure, disease prevention measures, transportation charges, etc.)	(a) Finfish Culture: As per actual cost subject to a ceiling of Rs. 2.00 lakh/ha (b) Culture of shrimp such L.vannamei/ P.monodon etc: As per actual cost subject to a ceiling of Rs. 3.00 lakh/ha	(I) Central assistance for Finfish culture is restricted at 50% of unit cost with a ceiling of Rs.1.00 lakh/ha for all beneficiaries in general States (II) Central assistance for culture of <i>L.vannamei/ P.monodon etc</i> is restricted at 50% of the unit cost with a ceiling of Rs.1.50 lakh/ha to all beneficiaries	(i) This input cost shall be provided for the ponds/waterbodies mentioned at S.No.1.1 to 1.4 above with the ceiling indicated therein. (ii) Beneficiaries shall be provided central assistance for input costs for the initial crop only in the newly constructed/renovated ponds/tanks. (iii) Central assistance for input cost shall be released only after the ponds/tanks are ready for culture.

1.6	Establishment of Fish seed hatcheries for Indian Major Carps and other specific cultivable fin fish.	As per actual cost subject to a ceiling of Rs. 25.00 lakh per hatcheries of 2 ha area.	50% of the unit cost with a ceiling of Rs.12.50 lakh per hatchery.	<p>(i) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances and financial resources, necessary clearances/permissions etc. with full technical details including bio-security measures in the DPR. No funds shall be provided for the land.</p> <p>(ii) The project proposals from individual beneficiaries, cooperatives/collectives shall be routed through the concerned State /UT Government with proper recommendations.</p> <p>(iii) Fish hatchery shall have a minimum capacity of 10 million fry/year with minimum area of 2 ha.</p> <p>(iv) Fish hatchery shall include brooder pond, nursery ponds, rearing tanks, small laboratory, water & electric supply, required infrastructure facilities etc.</p> <p>(v) The fish hatchery should be managed by the required qualified technical staff.</p> <p>(vi) Beneficiary organizations shall ensure supply of seed produced from the central assisted hatcheries to farmers at affordable/reasonable price.</p> <p>(vii) Post construction operation, management and maintenance of the hatcheries shall be carried out in a satisfactory manner by the beneficiaries at their own costs.</p> <p>(viii) NFDB shall also directly set up & manage the hatcheries with commercial approach at suitable location.</p>
1.7	Establishment of Freshwater/Brackish water Prawn Hatcheries.	As per actual cost subject to a ceiling of Rs. 50 lakh per unit with a minimum capacity of 5 million post larvae per year.	50% of the unit cost with a ceiling of Rs. 25 lakh per hatchery.	<p>(i) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances and financial resources, necessary clearances/permissions etc. with full technical details including bio-security measures in the DPR. No funds shall be provided for the land.</p> <p>(ii) Fisher cooperatives/collectives shall be eligible for central financial assistance and should route their proposals through the concerned State /UT Government with proper recommendations.</p> <p>(iv) Beneficiary should have the requisite technical expertise and trained manpower for construction, operation and management of the hatchery,</p> <p>(v) The hatchery shall include brooder pond, PL rearing tanks, small laboratory, water & electric supply, biosecurity arrangements and required infrastructure facilities etc.</p>

				<p>(vi) Beneficiaries organisations shall ensure supply of seed produced from the central funded hatcheries to farmers at affordable/reasonable price.</p> <p>(ix) Post construction operation, management and maintenance of the hatcheries shall be carried out in a satisfactory manner by the beneficiaries at their own costs.</p> <p>(x) NFDB shall also directly set up & manage the hatcheries with commercial approach at suitable location.</p>
1.8	Solar power support system for aquaculture	As per actual with a ceiling of Rs. 15.00 lakh per unit	50% of the unit cost with a ceiling of Rs.7.50 lakh per unit.	<p>(i) Solar energy system to operate water pump, aerator and other uses in fish culture and fisheries.</p> <p>(ii) Beneficiaries shall be provided central assistance for procurement & installation of solar power support system for fisheries on onetime basis.</p> <p>(iv) Central assistance for input cost shall be released only after the ponds/tanks are ready for culture.</p>
2	Cold Water Fisheries and Aquaculture			
2.1	Construction of permanent farming units and Raceways	As per actual cost subject to a ceiling of Rs. 2 lakh per unit of minimum volume of 50 m ³	50% of the unit cost with a ceiling of Rs. 1 lakh per unit.	<p>(i) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances and financial resources along with necessary clearances/ permissions etc. in the DPR. No funds shall be provided for the land.</p> <p>(ii) Central financial assistance shall be restricted to a maximum area of 4 units for individual farmer/ beneficiary, 10 units for fisher cooperatives/ federations and Entrepreneurs. The project proposals in this category shall be routed through the concerned State /UT Government with proper recommendations.</p>
2.2	Running cold water fish culture in earthen units	As per actual cost subject to a ceiling of Rs. 1 lakh/unit of minimum volume of 100 m ³	50% of the unit cost with a ceiling of Rs.0.50 lakh per unit.	<p>(i) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances and financial resources along with necessary clearances/ permissions etc. in the DPR. No funds shall be provided for the land.</p>
				<p>(ii) Central financial assistance shall be restricted to a maximum 4 units of fish culture for individual farmer/ beneficiary, 40 units for fisher cooperatives/ federations and Entrepreneurs. The project proposals in this category shall be routed through the concerned State /UT Government with proper recommendations.</p>

3.	Development of Waterlogged Areas			
3.1	Development of Waterlogged areas	As per actual cost subject to a ceiling of Rs 5.00 lakh/hectare.	50% of the unit cost with a ceiling of Rs.2.50 lakh per ha	(i) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances and financial resources along with necessary clearances/ permissions etc. in the DPR. No funds shall be provided for the land. (ii) Central financial assistance shall be restricted to a maximum area of 5 ha for individual beneficiary, 5 ha x number of members for cooperatives/ collectives subject to viability of pond sizes. The project proposals in this category shall be routed through the concerned State /UT Government with proper recommendations.
3.2	Inputs Cost (unit cost includes cost of fish/prawn seed, feed, manure, disease prevention measures, transportation charges etc.)	(a) Finfish Culture: As per actual cost subject to a ceiling of Rs. 1.50 lakh/ha (b) Fresh water prawn/trout culture: As per actual cost subject to a ceiling of Rs. 2.50 lakh/ha	(a) Central assistance for Finfish culture is restricted at 50% of unit cost with a ceiling of Rs.0.75 lakh/ha for all beneficiaries (b) Central assistance for Freshwater prawn/ trout culture is restricted to 50% of the unit cost with a ceiling of Rs.1.25 lakh/ha for all beneficiaries	(i) Beneficiaries shall be provided central assistance for input costs for the initial crop only in the newly constructed/renovated ponds/ tanks. (ii) Central assistance for input cost shall be released only after the ponds/tanks are ready for culture.
4.	Productive utilization of Inland Saline/Alkaline Waters for Aquaculture			

4.1	Construction of new ponds/tanks.	As per actual cost subject to a ceiling of Rs. 7 lakh per ha.	50% of the unit cost with a ceiling of Rs. 3.50 lakh per ha	<p>(i) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances and financial resources along with necessary clearances/ permissions etc. in the DPR. No funds shall be provided for the land.</p> <p>(ii) The constructed ponds shall have a minimum water depth of 1.5 m.</p> <p>(iii) Central financial assistance shall be restricted to a maximum area of 2 ha for individual beneficiary, 2 ha x number of members for cooperatives/collectives subject to viability of pond sizes. The project proposals in this category shall be routed through the concerned State /UT Government with proper recommendations.</p> <p>(iv) For Central and State Government organizations/ federations/ corporations/ agencies etc financial assistance for quantum of hectareage shall be decided on case to case basis in consultation with the concerned.</p>
4.2	Input cost (unit cost includes cost of fish/prawn seed, feed, manure, disease prevention measures, transportation charges etc.)	<p>(a) Finfish Culture: As per actual cost subject to a ceiling of Rs. 1.50 lakh/ha</p> <p>(b) Fresh water prawn/trout culture: As per actual cost subject to a ceiling of Rs. 2.50 lakh/ha</p>	<p>(a) Central assistance for Finfish culture is restricted at 50% of project/unit cost with a ceiling of Rs. 0.75 lakh/ha for all beneficiaries in general States</p> <p>(b) Central assistance for Freshwater prawn/ trout culture is restricted to 50% of the unit cost with a ceiling of Rs.1.25 lakh/ha for all beneficiaries</p>	<p>(i) Beneficiaries shall be provided central assistance for input costs for the initial crop only in the newly constructed/renovated ponds/ tanks.</p> <p>(ii) Central assistance for input cost shall be released only after the ponds/tanks are ready for culture.</p>

5	Inland Capture Fisheries (village ponds, tanks etc.)			
5.1	Fish Seed Rearing Units. <i>(one time grant)</i>	As per actual subject to a ceiling of Rs.6.00 lakh/ha	50% of the unit cost with a ceiling of Rs. 3.0 lakh per ha.	<p>(i) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances and financial resources along with necessary clearances/ permissions etc. in the DPR. No funds shall be provided for the land.</p> <p>(ii) Beneficiaries shall also produce the documentary evidence on availability of fishing rights/permissions from the competent authorities to fish and develop required facilities in around the reservoirs/tanks etc.</p> <p>(iii) Central financial assistance shall be restricted to a maximum area of 2 ha for individual beneficiary, 2 ha x number of members for cooperatives/collectives subject to viability of fish rearing units and their sizes. The project proposals in this category shall be routed through the concerned State /UT Government with proper recommendations.</p> <p>(iv) For Central and State Government organizations/ federations/ corporations/ agencies etc financial assistance for quantum of hectareage of fish rearing units shall be decided on case to case basis in consultation with the concerned.</p> <p>(v) The fish rearing units should be planned, designed, constructed and managed under the supervision of qualified technical experts.</p>
5.2	Input cost (unit cost includes cost of fish/prawn seed, feed, manure, disease prevention measures, transportation charges etc.)	<p>(a) Finfish Culture: As per actual cost subject to a ceiling of Rs. 1.50 lakh/ha.</p> <p>(b) Fresh water prawn/trout culture: As per actual cost subject to a ceiling of Rs. 2.50 lakh/ha.</p>	<p>(a) Central assistance for Finfish culture is restricted at 50% of project/unit cost with a ceiling of Rs.0.75 lakh/ha for all beneficiaries</p> <p>(b) Central assistance for Freshwater prawn/ trout culture is restricted to 50% of the unit cost with a ceiling of Rs.1.25 lakh/ha for all beneficiaries</p>	<p>(i) Beneficiaries shall be provided central assistance for input costs for the initial crop only in the newly constructed fish rearing units.</p> <p>(ii) Central assistance for input cost shall be released only after the fish rearing units tanks are ready for rearing.</p>

5.3	Craft and gear (Unit :boats of appropriate sizes including fishing nets, fish & ice holding boxes etc.).	As per actual cost subject to a ceiling of Rs.1.00 lakh per unit.	50% of the unit cost with a ceiling of Rs.0.50 lakh per unit.	(i) Beneficiaries should provide documentary evidence of availability valid fishing license issued by the competent authority. (ii) The project proposals of individual beneficiary (consolidated), cooperatives/ collectives shall be routed through the concerned State / UT Government with proper recommendations. (iii) Beneficiaries shall also produce the documentary evidence of availability of fishing rights/permissions in the reservoirs/tanks etc. from the competent authorities. (vi) For Central and State Government organizations/ federations/ corporations/ agencies etc. financial assistance shall be decided on case to case basis in consultation with the concerned. (vii) The fishing craft/boats may also be shared by a group of fishers/ collectives. (viii) Beneficiaries shall be abide by the fishing regulations (if any) on use of size & type of boat/craft and nets etc. (ix) Central assistance shall also be provided for replacement existing boats of more than 5 years old.
5.4	Construction of landing centers (landing & berthing platforms, auctioning platform/ hall, net mending shed etc.)	As per actual cost subject to a ceiling of Rs. 4.00 lakh per landing center.	50% of the unit cost with a ceiling of Rs. 2 lakh per landing center.	(i) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances and financial resources, necessary clearances/permissions etc. with full technical details of the landing centre in the DPR. No funds shall be provided for the land. (ii) The project proposals of cooperatives/ collectives shall be routed through the concerned State /UT Government with proper recommendations.
6.	Integrated Development of Reservoirs			
	Integrated Development of Reservoirs (the proposal shall include the need based activities from the broad activities as below:		50% of the unit cost with a ceiling of Rs.1 crore per project.	(i) This component will be implemented by NFDB with commercial approach. (ii) Beneficiaries shall submit self contained Detailed Project Report (DPR) with full justification & technical details etc. (iii) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances, financial resources, necessary clearances/ permissions & fishing rights etc. in the DPR. No funds shall be provided for the land.

	pre-culture preparation, strengthening of bunds, desilting, dewatering etc., hatcheries, fish rearing units, fish stocking, cage culture, feed mills, boats & nets, landing centers, cold storages, ice plants, fish transport facilities etc.),	As per actual.		(iv) The DPRs shall also contain details of anticipated direct & indirect employment generation, enhancement of fish production and productivity, improvement of economic status of locals, specific time lines for the implementation of the project etc. (v) The project proposals of cooperatives/ collectives/ omnibus/ entrepreneurs shall be submitted to NFDB. The central funds will be provided as back ended subsidy in respect of these beneficiaries.
7	Establishing fish feed mills/plants			
7.1	Small of capacity 1 to 5 quintals/day) Rs 10.00 lakhs	As per actual cost subject to a ceiling of Rs. 10 lakh per plant	50% of the unit cost with a ceiling of Rs.5 lakh per unit for small feed mill plant and Rs.1 crore per unit for large plant.	(i) Beneficiaries shall submit self contained Detailed Project Report (DPR) with full justification & technical details of the plant etc. (ii) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances, financial resources, necessary clearances/ permissions etc. in the DPR. No funds shall be provided for the land. (iii) Beneficiaries organisations shall ensure supply of fish feed produced from the central funded feed mill plants to farmers at affordable/ reasonable price. (iv) Post construction operation, management and maintenance of the feed mills shall be carried out in a satisfactory manner by the beneficiaries at their own costs. (v) The project proposals of cooperatives/collectives/ entrepreneurs shall be routed through the concerned State /UT Government with proper recommendations.
7.2	Large (formulated pellet feed plant of a Minimum capacity @ 6 to 10 tonne/hour or more)	As per actual.	50% of the unit cost with a ceiling of Rs.5 lakh per unit for small feed mill plant and Rs.1 crore per unit for large plant.	(i) This component will be implemented by NFDB with commercial approach. (ii) The project proposals of cooperatives/ collectives/ omnibus/ entrepreneurs shall be submitted to NFDB. The central assistance to these agencies will be provided as back-ended subsidy. (iii) Beneficiaries shall submit self contained Detailed Project Report (DPR) with full justification & technical details of the plant etc.

				<p>(i) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances, financial resources, necessary clearances/permissions etc. in the DPR. No funds shall be provided for the land.</p> <p>(ii) Beneficiaries organisations shall ensure supply of fish feed produced from the central funded feed mill plants to farmers at affordable/ reasonable price.</p> <p>(iii) Post construction operation, management and maintenance of the feed mills shall be carried out in a satisfactory manner by the beneficiaries at their own costs.</p>
8.	Installation of cages/pens in reservoirs and other open water bodies			
	Cages/pens with inputs in reservoirs and other open bodies (inputs include: cost of fish seed, feed, manure, disease prevention measures, transportation charges etc.)	Rs. 3.00 lakhs per cage including installation and inputs for first crop)	50% of the unit cost with a ceiling Rs.1.50 lakh per cage to State Government, State Agencies/ Organisations, Corporations, Federations, Boards, Fishers Cooperatives.	<p>(i) This component will be implemented by NFDB with commercial approach.</p> <p>(ii) The project proposals of cooperatives/ collectives/ omnibus/ entrepreneurs shall be submitted to NFDB.</p> <p>(iii) The applicant shall obtain necessary prior permissions from the concerned State/UT Government and other Competent Authorities for installation of cages in reservoirs and other water bodies.</p> <p>(iv) Fishermen Cooperative Societies, SC/ST Cooperative Societies, Women Self Help Groups, Registered Entrepreneurs etc. shall be eligible for</p>
				<p>back ended subsidy for a maximum of 4 batteries of 6 cages each (24 cages) at a particular location.</p> <p>(v) The unit cost includes capital, operational and maintenance costs on one time basis.</p> <p>(vi) The applicants shall be required to submit self contained project proposals together with documentary evidence of necessary clearances, permissions etc to avail of the assistance.</p>
9.	Re-circulatory Aquaculture Systems (RAS)			

	Low cost Recirculatory Aquaculture System (RAS)	As per actual cost with a ceiling of Rs. 15.00 lakh per unit	50% of the unit cost with a ceiling of Rs.7.50 lakh per unit/plant.	<p>(i) Beneficiaries shall submit self contained Detailed Project Report (DPR) with full justification & technical details etc.</p> <p>(ii) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances, financial resources, necessary clearances/permissions etc. in the DPR. No funds shall be provided for the land.</p> <p>(iii) DPRs shall also contain details of anticipated direct & indirect employment generation to local populations, enhancement of fish production, specific time lines for the implementation of the project etc.</p> <p>(iv) Project proposals of cooperatives/ collectives/ omnibus/ entrepreneurs shall be submitted to NFDB. The central assistance to these beneficiaries will be provided as back-ended subsidy.</p> <p>(vi) Post construction operation, management and maintenance of the RAS shall be carried out in a satisfactory manner by the beneficiaries at their own costs.</p> <p>(viii) Infra structure created should have essential requirements for RAS including water treatment units.</p> <p>(ix) The proposed RAS should have a minimum production capacity of 2 MT in each tank of size 5x5x4 m cement tanks.</p>
10	Stocking of fish fingerlings in beels / wetland			
	Stocking of IMC fingerlings in wetlands (beels, chaus etc.) @ 2000 Nos per hectare.	As per actual with a ceiling of Rs. 2.50/ Fingerling.	50% of the unit cost with a ceiling of Rs.1.25 per fingerling.	<p>(i) Beneficiaries shall provide documentary evidence of availability of requisite wetland/ (beels, jeels, chaus etc.) free from all encumbrances and financial resources along with necessary clearances/ permissions etc. in the DPR. No funds shall be provided for the land.</p> <p>(ii) Central financial assistance shall be restricted to a maximum area of 2 ha for individual beneficiary, 2 ha x number of members for cooperatives/ collectives. The project proposals in this category shall be routed through the concerned State /UT Government with proper recommendations.</p>
11.	Creation of portal for advisory services to farmers on mobile and internet			

	Creation of Portal for Extending Advisory Services to Fish Farmers, through mobile appliances/ applications, Internet (IEC), ecommerce platform for suppliers, Traders for end-to-end services to farmers, suppliers, trades and all need based services in fisheries.	As per actual.	100% of the actual cost of the project/ component.	(i) This activity/component shall be carried out through the central Government Institutions/agencies/ corporations such as NIC, NICS, Central Public Sector Undertakings (CPSUs), Fisheries Institutes including ICAR Institutes etc. (ii) A dedicated portal for fisheries shall be created to extending of advisories, dissemination of information, networking fish markets and fish landing centres, compilation of various fishers related database, e-commerce platform for suppliers, Traders for end-to-end services to farmers, suppliers, trades and all need based services in fisheries etc. (iii) The agencies shall submit self contained proposals with technical and financial details etc.
12.	Training, Skill development and capacity building to fish farmers and other stakeholders in all fisheries related activities both marine and inland fisheries.			
	T r a i n i n g , D e m o n s t r a t i o n / L o c a l f i e l d v i s i t		100% of the actual cost of the training programme.	(i) Training, skill development & capacity building programmes for fish farmers & fishers and other stakeholders shall be carried through State Governments, UTs, Central Government organizations/ institutions such as KVKs, ICAR Institutes, ATMAs, ATARIs, Fisheries Institutes, State/UT
				owned organizations, State agriculture/ veterinary/ fishery Universities, fisheries federations, corporations etc. (ii) The training batch shall not be less than 50 (fifty) trainees per batch. (iii) Training organization shall submit self contained proposal indicating, details of trainees, training courses, venue, infrastructure facilities available for the purpose, duration of the training programme, availability of boarding and lodging facilities, details of resource persons, anticipated outputs etc. (iv) Preferably, the trainees shall be identified by the respective State Governments/UTs. The Central Government shall also identify the trainees in consultation (if need be) with the concerned State Governments/UT.

3. National Fisheries Development Board and its activities

S.No	Component	Unit Cost	Central financial assistance	Terms and Conditions
1	Fish Seed production including development of brood banks (National and Regional)			
1.1	Hatcheries	Setting up fish hatcheries are covered in Inland component. NFDB, with the approval of DADF shall add any additional hatcheries required keeping in view the needs of the sector and broad funding patters.		
1.2	Establishment of freshwater / brackish water Fish / Shrimp/ Trout Brood Banks	As per actual with a ceiling of Rs. 500 lakh per brood bank of 5 ha area	50% of the unit cost with a ceiling of Rs. 250 lakh per Brood bank.	(i) Beneficiaries shall submit self contained Detailed Project Report (DPR) with full justification & technical details. (ii) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances, financial resources, necessary clearances/ permissions (wherever required) etc. in the DPR. No funds shall be provided for the land. (iii) Post construction operation, management and maintenance of the integrated cold chain infrastructure facilities shall be carried out in a satisfactory manner by the beneficiaries at their own costs. (iv) The project proposals of cooperatives/collectives/ entrepreneurs shall be routed through the concerned State /UT Government with proper recommendations.
2	Fish feed including establishment of feed mills	This is covered in Inland component. NFDB, with the approval of DADF shall add any additional items required keeping in view the needs of the sector and broad funding patterns.		
3	Development of post harvest, value addition infrastructure and marketing	This is covered in marine component. NFDB, with the approval of DADF shall add any additional items required keeping in view the needs of the sector and broad funding patterns.		
4	Cold chain development			
4.1	Certain items of the cold chain for fisheries such as ice plants, cold storages, fish marketing facilities have been covered under the marine component. NFDB, with the approval of DADF shall add any additional items required keeping in view the needs of the sector and broad funding patterns.			

4.2	Integrated Cold chain development covering the activities from fry to fry-pan such as pre-processing, and processing of fish, fish transportation(-insulated and refrigerated vehicles), retail outlets, moveable fish markets, kiosks etc.	As per actual with a ceiling of Rs. 500 lakh per project	50% of the unit cost with a ceiling of Rs. 250 lakh per project unit.	(viii) Beneficiaries shall submit self contained Detailed Project Report (DPR) with full justification & technical details. (ix) Beneficiaries shall provide documentary evidence of availability of requisite land free from all encumbrances, financial resources, necessary clearances/permissions (wherever required) etc. in the DPR. No funds shall be provided for the land. (x) Post construction operation, management and maintenance of the integrated cold chain infrastructure facilities shall be carried out in a satisfactory manner by the beneficiaries at their own costs. (xi) The project proposals of cooperatives/collectives/ entrepreneurs shall be routed through the concerned State /UT Government with proper recommendations.
5	Development of Inland Fisheries	This is covered in Inland component. NFDB, with the approval of DADF shall add any additional items required keeping in view the needs of the sector and broad funding patterns.		
6	Promotion of Small Scale Fisheries	This is covered in Marine and Inland components. NFDB, with the approval of DADF shall add any additional items required keeping in view the needs of the sector and broad funding patterns		
7	Provision of alternative livelihood	This is covered in Marine and Inland components. NFDB, with the approval of DADF shall add any additional items required keeping in view the needs of the sector and broad funding patterns.		
8	Skill up-gradation of stakeholders in the fisheries sector	This is covered in Inland component. NFDB, with the approval of DADF shall add any additional items required keeping in view the needs of the sector and broad funding patterns.		

II. Schemes under RKVY

1. **Development of fish culture in non-water logged areas of Punjab:** Under this scheme, 50% subsidy is being provided to fish farmers for excavation of new pond and cost of inputs for the first year. Details of subsidy are as under:

S. No.	Item	Subsidy
1	for excavation of new pond and making water arrangements	Rs. 1.50 lakh/ha
2	For first year inputs (Feed & Seed)	Rs. 0.50 lakh/ha
Total		Rs 2.00 lakh/ha

2. **Development of fish culture in salt affected/water logged land in Punjab with 90% one time grant:** Under this scheme, 90% subsidy is being provided to fish farmers for excavation of new pond and cost of inputs for the first year. Details of subsidy are as under:

S. No.	Item	Subsidy
1	for excavation of new pond	Rs. 2.00 lakh/ha
2	For first year inputs (Feed & Seed)	Rs. 1.00 lakh/ha
3	For nets to catch the fish	Upto Rs. 25,000/ha
Total		Rs 3.25 lakh/ha

3. **Subsidy for installation of aerator for fisheries sector:** under this scheme, 50% subsidy is being provided to fish farmers for installation of two paddle wheels aerator and four paddle wheels aerator at their fish ponds. Details of subsidy are as under:

S. No.	Item	Subsidy
1	For installation of two paddle wheels aerator	Rs. 18,000/-
2	For installation of four paddle wheels aerator	Rs. 23,000/-

Directory of Schemes in Department of Forests and Wild Life Preservation, Punjab

I. CENTRALLY SPONSORED SCHEMES

1. Green India Mission

Government of India has approved the Perspective Plan for Green India Mission for the State of Punjab. The plan has been prepared as per the guidelines issued by Ministry of Environment, Forests & Climate Change for approximately Rs. 223.35 cores for six years 2015-16 to 2020-2021 for treatment of the ecologically vulnerable landscapes in the State.

Green India Mission is based on a holistic view of greening and focuses not on carbon sequestration targets alone, but on multiple ecosystem services, especially biodiversity, water, biomass etc. along with climate adaptation and mitigation as a co-benefit. It has the following broad objectives to be covered over next six years.

- Increase forest/tree cover and improved quality of forest/tree cover of forest/non-forest lands
- Improved/enhanced eco-system services like carbon sequestration and storage (in forest and other ecosystems) hydrological services and biodiversity along with provisioning services like fuel, fodder and timber and non timber forest produces
- Increased forest based livelihood income of households

It is proposed to do plantation over an area 15976 ha upto 2022 and do other allied activities.

It is proposed to spend Rs. 1666.67 lac and do plantation over an area of 5982 ha during 2017-18.

2. Sub-Mission on Agro-Forestry

The Sub-Mission on Agroforestry (SMAF) under National Mission for Sustainable Agriculture (NMSA) is focused to achieve the quantifiable benefits such as increase tree cover to enhance carbon sequestration, enrichment of soil organic matter, availability of quality planting material, improvement in livelihood, productivity enhancement of crop and cropping systems, development of an information system etc.

Mission Objectives:

Sub-Mission on Agro-forestry will have following objectives:

- 1) To encourage and expand tree plantation in complementary and integrated manner with crops and livestock to improve productivity, employment opportunities, income generation and livelihoods of rural households, especially the small farmers.
- 2) To ensure availability of quality planting material like seeds, seedlings, clones, hybrids, improved varieties, etc.
- 3) To popularize various Agro-forestry practices/models suitable to different agro ecological regions and land use conditions.
- 4) To create database, information and knowledge support in the area of agro-forestry.
- 5) To provide extension and capacity building support to agro-forestry sector.

It is proposed to spend Rs. 500 lac and do planting approx. 50 lac plants during the year 2017-18.

Project Activities and Pattern of Assistance:

The Sub-Mission has following broad interventions:

- 1. Nursery Development for quality planting material (NDQPM):** Assistance shall be given for nurseries (small, big & hi-tech nurseries) for producing quality planting material to meet the requirement of planting material. Eligible components and pattern of assistance is as under:

Cost Norms and for Nursery Development for Production of Quality Planting Material (NDQPM) :

Sr. No.	Nursery area(ha)	Indicative field of expenditure	indicative Unit cost (Lakh Rs)
1.	Small Nursery (0.5ha)**	Land preparation etc., nursery equipments, seed/mother scion production/root stock production etc., infrastructure and other essential operational costs etc. as per norms as existed in case of MIDH	10.00
2.	Big Nursery (1.0 ha)		16.00
3.	Hi-tech** Nursery		40.00

** Cost norms as already approved under National Bamboo Mission (NBM)

Mandatory Requirement for availing support for Nursery Development

Sr. No	Type of Nursery	Basic Requirement	Infrastructure Requirement
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1.	Small Nursery (0.5ha)**	<p>Selection of Site Nurseries will be established only to produce planting material which are suitable for that agroecology. The nurseries should be well connected to road / rail networks to facilitate transport. Sites exposed to strong winds and with danger of flooding or landslides should be avoided.</p> <p>Soil Conditions Well drained, light to medium textured fertile soils.</p> <p>Source of Irrigation</p>	<ul style="list-style-type: none"> • Fencing • Water Source (Irrigation source/ Ponds/ Tanks/ Well/ Tube well) • Energy Source (electricity or Genset) • Water lifting devices • Water distribution system • Farm machineries required for land preparation, bed preparation and other operations • Other equipments & tools for raising seedlings • Composting Unit • Watch & ward
2.	Big Nursery (1.0 ha)	<p>Availability of good quality assured irrigation source is an essential pre-requisite for setting up of a commercial nursery production unit. For increased water use efficiency, Drip irrigation system, rose cans or micro sprinklers should be used.</p>	<p>As above. Number of equipments may increase or decrease based on size of nursery</p>
3.	Hi-tech** Nursery	<p>Layout of Nursery Generally a good nursery must consist of water tank/ pond, water pump/pump house, seed and fertilizer store room, implement shed, germination/main bed area; potting/container filling area, seedling raising area, worker mess/hall, office room, propagation structures, compost area, etc.</p> <p>Inputs Availability of nutrients to seedlings, well decomposed farm yard manure (FYM), plant protection chemicals, root hormones etc.</p>	<p>Office An office building, best located near the main entrance and storage area for the nursery records are basic requirements</p> <p>Laboratory A mini laboratory attached to the nursery for use by the technical/skilled staff for observing/recording the growth and developmental irregularities if any, disease/ pest problems, and nutritional deficiencies/imbalance during the nursery growth of the planting stock.</p>

			<p>Composting unit Composting unit attached to the nursery is desirable. The unit will consist of a roofed shed with partially open side walls for encouraging very good air-circulation, a shredder machine to chop the plant material, and sieves to clean the final product.</p> <p>Media sterilization Area For steam sterilization, soil solarization or fumigation of potting media</p> <p>Potting shed To carry out the work of preparing the containers, mixing the potting mix, filling the bags and potting the planting stock, a spacious shed is required in the nursery</p> <p>Net house A portion of the nursery should have Net house made of plastic shade nets that can cut the light intensity by 50%</p> <p>High-tech green house Green-house with automated misting equipments and temperature control is desirable but low cost polytunnels can also be an alternative</p> <p>Irrigation systems Modern mechanized irrigation systems with sprinklers, misting units, high pressure pumps and filtering equipments for fertigation are essential components to be installed and used in nurseries</p> <p>Pump house with overhead water storage tanks The tanks should have enough storage capacity to meet at least 2 days irrigation requirements</p> <p>Nursery records</p>
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Note:

- a. The Small nursery will have a minimum capacity to produce 25,000 plants per year.
 - b. The Big nursery will have a minimum capacity to produce 50,000 plants per year.
 - c. The High-tech Nurseries will have a minimum capacity to produce 100,000 propagules per year
 - d. Assessment of nursery for its quality/standard will be done on the basis of its location, quality of mother plants, techniques for nursery development, infrastructural facilities created, irrigation facilities with water use efficiency, bio-security & disease free conditions and overall management practices. Assessment of nursery for accreditation / certification will be undertaken either through any of the available institutional certification mechanism of Central / State Government or through suitable institutional mechanism to be devised specifically for this purpose in future.
2. **Peripheral and Boundary Plantation(PBP)** : To make potential use of the area occupied by these bunds around the periphery of the farmers fields, tree species can be grown as peripheral/boundary plantations to add more income to the farmers' basket. This will not only make effective use of the precious land for livelihood support but also for generating additional income opportunities to the farmers. It will also help in stabilizing the bunds and reducing soil erosion. Eligible components and pattern of assistance for PBP is as under:

Sr. No.	Type of Interventions	Indicative Unit cost per plant (Rs.)
1.	Pre-Plant activities/Land clearing/maintenance etc.	10.00
2.	Digging /Planting etc	6.00
3.	single unit Planting material etc	15.00
4.	Transportation charges	1.00
5.	Critical inputs viz., FYM, Fert., seed treatment, PP chemicals etc.	10.00
6.	Planting cost	2.00
7.	Fencing	10.00
8.	Maintenance (weeding+ watering etc.)	16.00
	Total	70.00

Note:

- (i) The activity wise cost indicated above are tentative and states have the flexibility to formulate their own estimate based on local requirements subject to a maximum of Rs. 70/- per plant
 - (ii) The assistance will be given in the year wise proportion of 40:20:20:20 for four years.
4. **Low Density Plantation on Farm Lands (LDPFL)** : Low Density Block Plantation(HDBP) ranging from more than 100 plants/ha to more than 500 plants/ha without sacrificing the yield of the existing crops/cropping systems, shall be incentivized at the proportionate rates as applicable to per plant expenditure. Eligible components and pattern of assistance for LDPFL is given as under:

Sr. No.	Type of plantations' magnitude (no of plants/ha)	Indicative total cost (Rs)
1.	Less than 100	As per actual no of plants @ Rs.70/- per plant
2.	>100 upto 500	28000 (or in proportion to planting intensity)
Note: The cost will be calculated on proportionate basis as per the no of plants/trees per block		
Note: (i) The cost will be calculated on proportionate basis as per the no of plants/trees per block ; (ii) The assistance will be given in the year-wise proportion of 40:20:20:20 for four years.		

4. **High Density Block Plantation (HDBP):** High density Block Plantations on farm lands (HDBP) will be supported as a complementary source of income to the farmers. Differential planting densities ranging from more than 500 plants/ha to 1500 plants/ha as intermediate blocks / strip plantations /wind breaks would be supported. Farmers can take up block plantation in waste and degraded land not suitable for growing crops to make productive use of these land in creating livelihood and income opportunities for them. In addition, the tress will help in enriching the soil and making it fertile & more productive thereby bringing land under crops in times to come. Eligible components and pattern of assistance for HDBP is given as under:

Sr. No.	Magnitude of block Plantations (no of plants/block of 1 ha)	Indicative total cost (Rs) for the block
1.	500 to 1000 (spacing 3.5mX3.5m)	30000
2.	>1000 to 1200 (spacing 3mX3m)	35000
3.	>1200 to 1500 (spacing 2.5mX2.5m)	45000
4.	>1500 (spacing less than 2.5mX2.5m))	50000
Note: (i) The cost will be calculated on proportionate basis as per the no of plants per block with a spacing indicated above; (ii) The assistance will be given in the year wise proportion of 40:20:20:20 basis for four years		

5. **Capacity Building & Trainings:** Capacity Building and Training will be one of the important interventions of the sub-mission. Activities like training of farmers/field workers with a view to ensure growing quality planting material, skill development, awareness campaign, Publications, Information sharing, exposure visits at national and international levels, seminars/Workshops at national/international levels etc. would be supported under this. States can utilize upto 5% of the allocated funds for capacity building and training activities.

II. STATE FUNDED SCHEMES

1. Conservation, Management & Development of Wildlife in the State:

The main objective of this scheme is upkeep and development of 13 Wildlife Sanctuaries, 3 Community Reserve and one Conservation Reserve of the State as well as 5 Zoological Parks/Mini Zoos located in Chhatbir, Neelon, Ludhiana, Patiala and Bathinda and conservation of wildlife outside Protected Areas. The scheme also addresses the issue of man-animal conflict through suitable compensation against crop damage or damage to the property and life due to Wildlife including snake bites.

Target:

1. Provision for in-situ conservation in Protected Area and outside Protected Areas.
2. Provision for ex-situ conservation – Upkeep feed fodder, maintenance and up gradation of zoos.
3. Provision for rescue of animals and other expenditure including administrative expenditure and contingency.
4. Provision for providing compensation for man-animal conflict.

It is proposed to spend 550.00 lac during 2017-18 for the above activities.

2. Grant in aid to State compensatory Afforestation Fund Management and Planning authority under Green Punjab Mission

To decrease the man animal conflict a new scheme is introduced by the Forest Department in the year 2016-17 to fencing the agriculture land of farmers in kandi area of Punjab which are off side the preview of section 4 & 5 of PLPA 1900. The area lies within the administrative districts of Pathankot, Hoshiarpur, Shaheed Bhagat Singh Nagar (Nawanshehar), Roop Nagar (Ropar) and SAS Nagar (Mohali) covered under this scheme. The overall goal of the project is to fence the agricultural crop grown areas along the Kandi belt of Punjab so as to avoid the most prevalent crop damage by the wild animals.

- i. To improve the status of co-operation with respect to wildlife management between the Forest department and the local community living in those Kandi area.
- ii. To reduce the man animal conflict in the area.
- iii. To improve the incomes status of the rural households in the project area by reducing the crop damage.

It is proposed to spent Rs. 1000.00 lac for the year 2017-18.

3. Action to control critically polluted areas

Some main cities in the Punjab State such as Ludhiana, Jalandhar, Mandi Gobindgarh, Batala Bathinda, Amritsar and Bathinda are undergoing increase in population, rapid increase in the number of vehicles and topping the chart in terms of industrial pollution. The main objective of this scheme is to improve the environment of the State. Forest Department is required to take preventive/corrective measures to mitigate pollution level and improve the environment of these cities. The main purpose of this scheme is to increase forest/green cover, organizing trainings/seminars/awareness camps, providing green belt around the industrial area and pollution sources, establishment of Herbal Gardens, enrichment planting in the Protected Forest Areas, developing linkages between the Department and NGOs, Resident Welfare Associations, Municipal Corporations and Educational Institutions, providing more plants/saplings free of cost in these cities.

It is proposed to spend Rs. 500.00 lac for the year 2017-18.

III. Crop Diversification Programme

Background:

Crop Diversification refers to a shift from the regional dominance of one crop to regional production of a number of crops, to meet ever increasing demand of cereals, pulses, vegetables, fruits, oilseeds, fibres, fodder, grasses etc. It aims to improve soil health and to maintain dynamic equilibrium of the agro-ecosystem. In the instant case, crop diversification is intended to promote technological innovations for sustainable agriculture and enable farmers to choose crop alternatives for increased productivity and income.

The concerns relating to diversification of rice-wheat cropping systems area in the country came to fore when yield levels of these two most important food crops experienced stagnancy and net profit accruals showed diminishing trend. The problem got further aggravated due to depletion of water table in North-West plains zone comprising Punjab, Haryana and West Uttar Pradesh. Thus, dwindling ground water resource in these States due to excessive withdrawal of water for irrigation led to impurities in the water-a cause of attendant crop health effects. Accordingly, these concerns were interalia examined in detail by the Committee of Secretaries (CoS) nine (9) major States comprising three (3) rice-wheat cropping systems States namely; Punjab, Haryana and Uttar Pradesh, two (2) rice dominant States namely; West Bengal & Bihar and four (4) other States namely; Andhra Pradesh, Karnataka, Maharashtra and Rajasthan. The Committee concluded that the Original Green Revolution States were facing problem of stagnancy in yield and over-exploitation of ground water resources which call for immediate diversification in crops through promotion of technological innovations in order to enable farmers to choose appropriate crop alternatives.

The continuous cultivation of water guzzling crops like paddy due to frequent flood irrigation has resulted into depletion of ground water in the original Green revolution States namely; Punjab, Haryana and Western Uttar Pradesh. The continuous cultivation of rice wheat cropping system has witnessed the stagnancy in crop yield, infestation of weeds, contamination of ground water, incidence of pests-diseases and deterioration of soil health. Therefore, it is essential to diversify the area from paddy to alternate crops not only to improve soil fertility and arrest depletion of ground water but also to enhance the farm income.

Pattern of assistance for Activities

(i) Cluster Demonstrations

Cluster demonstration units (one unit=10 hectares) of identified alternate crops in each district will be organized through identified beneficiaries groups by State Department of Agriculture. One progressive farmer will be designated as group leader for organization of cluster demonstration. Honorarium of Rs.2000/ per cluster demonstration of 10 ha will be provided in one time basis for organization of cluster demonstration. Assistance @ of Rs.10000 per ha for Maize, kharif pulses (arhar, mung bean, urd bean, cluster bean), oilseeds (soybean, till) and Rs.10000/- per hectare for poplar based agro-forestry system for sole crop. The financial assistance of Rs 10000 per hectare except poplar based agro-forestry system will be given in the form of Rs.5000 for critical inputs including honorarium & other activities, Rs.2500 for land development and Rs.2500 for marketing support. An amount of Rs.5000/- per hectare for inter-cropping of pulses and wheat will be provided to the farmers in the terms of critical inputs for organization of demonstrations. District Programme Management Group (PMG) will be responsible for arrangement of critical inputs for organizing cluster demonstrations. All critical inputs will be ensured by the State Department of Agriculture (SDA) well in advance before the sowing/transplanting of the crops. State will decide crop specific cluster demonstrations as per the availability of quality seeds of identified alternate crops.

Crop & component-specific pattern of assistance is given as under:

S.N.	Components	Crops	
		Maize, kharif pulses (Arhar, mungbean, urd bean) cluster bean, oilseeds and Basmati (directed seeded)	Eucalyptus (water logged conditions only) Poplar/ based agro-forestry system for sole
A.	Cost of Critical inputs (seeds, micronutrients, seed treating chemical & P.P chemical etc	4500	9500
	Production technology & publicity materials	150	150
	Honorarium & mobility to group leader of cluster demonstration	200	200
	Visit of GOI/State officials for hiring of vehicle or POL	150	150
	Sun-total	5000	10000
B.	Land development Charges*	2500	-
C.	Marketing Support (store bin etc)**	2500	-
D.	Inter crops with poplar (critical inputs)	-	5000
	Grand-Total	10000	15000