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Central Institute of Horticulture				
Annual Action Plan 2017-2018				
Sl	Components	Physical Targets	Approx. cost per unit	Approx. Financial Implication
			(Rs. )	(Rs. In lakh)
1	SALARIES			24.60
2	WAGES			40.00
3	MEDICAL			8.00
4	DOMESTIC TRAVEL EXPENSES			20.00
5	OFFICE EXPENSES			
	1) Office furniture		1.00	
	2) Telephone bill		4.00	
	3) Electricity bill		5.00	
	4) Repair of motor vehicle		3.00	
	5) Purchase of rubber stamp		0.10	
	6) Stationary		1.00	
	7) Office equipment		1.00	
	8) Computer		1.00	
	9) Contingent staffs remuneration		1.00	
	10) Stores		5.00	
	11) Printing & binding jobs		0.20	
	12) POL		7.00	
	13) AMC		11.70	
	14) Postage & telegraph		4.00	
	15) Training hall furnishing		5.00	
	Sub total			50.00
6	RATE, RENT & TAXES			2.00
7	PUBLICATION			
	1) Annual Report 2016 – 2017	1No.	Annexure I	
	2) Technical bulletin	2 Nos.		
	3) Folders	6 Nos.		
	4) Reprinting of exhausted Technical folders	10 Nos.		
	5) Reprinting of prospectus of Certificate Course	1No.		
	Sub total			15.00
8	OTHER ADMINISTRATIVE EXPENSES			

  
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 कृषि एवं किसान कल्याण विभाग / Min. Agriculture & Farmers Welfare  
 कृषि, खाद्योन्नति एवं किसान कल्याण विभाग / Dept. Agr., Food & Farmers Welfare  
 कृषि भवन, नई दिल्ली / Krishi Bhawan, New Delhi - 110001

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	<b>A. Human Resource Development</b>			
	<b>B. Meetings</b>			
	<b>C. PHM &amp; Marketing</b>			
<b>8.A</b>	<b>Human Resource Development</b>			
	1) Farmers Training	40 nos.(50 trainees/batch	<b>Annexure II</b>	20.00
	2) Training of Trainers	08 nos. (40 trainees/batch		27.68
	3) Exposure trip cum training	03 nos.		8.00
	4) Capacity Building of CIH Staffs & State officials	04 nos.		2.00
	5) Skill Development trainings	03 nos.	4.00	RKVY funding
	<b>Sub total of 8.A</b>			<b>57.68</b>
<b>8.B</b>	<b>Meetings</b>			
	1) Technical Advisory Committee (TAC) meeting	1 no		2.00
	2) Board of Management (BOM) meeting	1 no		2.00
	3) Regional level stake holders meeting & other meetings	1no		1.67
	<b>Sub total of 8.B</b>			<b>5.67</b>
<b>8.C</b>	<b>PHM &amp; Marketing</b>			
	1) Designing and promotion of packages	500 x 3 =1500	90.00/pcs	1.35
	2) Product developments			0.60
	3) Furnishing of processing unit along with electrical works			2.20
	4) Stainless steel Working table		0.50	1.00
	5) Colour Analyzer	1 No.		1.50
	<b>Sub total of 8.C</b>			<b>6.65</b>
<b>9</b>	<b>ADVERTISEMENT &amp; PUBLICITY</b>			<b>5.00</b>
<b>10</b>	<b>MINOR WORKS</b>			
	1) Land development for construction of polyhouses for nursery unit (JCB work)	1000sqm	2.00	2.00
	2) Construction of polyhouses for nursery unit	1Nos. (500 sqm)	8.00	8.00
	3) Construction of terracing for farm development	1 Ha	35.00	35.00
	4) Construction of low cost poly house (tabular structure)	500sqmt	5.00	5.00

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 कृषि, कानपुर एवं किसान कल्याण विभाग/Dic Agr., Dist. & Farmers Welfare  
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	5) Construction of rain water harvesting structure	20x 30 sq.ft		7.00
	6) Other minor works			3.00
	<b>Sub total</b>			<b>60.00</b>
<b>11</b>	<b>PROFESSIONAL SERVICES</b>			
	a. Consultancy fees as per actual			
	b. Professional fees as per actual			
	c. Invigilator fees as per actual			
	d. Legal services as per actual			10.00
<b>12</b>	<b>OTHER CHARGES</b>			
	A. Demonstration of production technologies at Institute level			
	i. Management of existing demonstrations			
	ii. Demonstrations of Technology in the Institute			
	iii. Demonstration of improved Technologies in NE States			
	B. Quality Planting Material Production			
	C. Accreditation of Horticulture Nurseries in NER			
	D. Certificate Course			
	E. Exhibitions/Trade Fairs/Meets/Mela			
	F. Upgradation of laboratory for basic analysis			
	G. Contractual staff remuneration			
	H. Farm development & beautification			
	I. Contractual staff remuneration			
<b>12.</b>	<b>Demonstration of production technologies at Institute level</b>			
<b>A</b>	<b>i. Management of existing demonstrations</b>			
	1) Maintenance of Organic model farm	1Ha		0.40
	2) Maintenance of Organic NADEP unit	2 units		0.10
	3) Maintenance of Organic Vermicompost	4 units		0.10
	4) Intercropping of Cowpea/Dhaincha in fruit blocks	5.5Ha		0.50
	5) Maintenance of high value flowers in polyhouse			
	i. Anthurium var. Carnaval, Pistachi & Tropical	800 nos.	Annexure III	
	ii. Gerbera Plants var. Shimmer & Preintage	2000nos.		3.00
	6) Repair & re-installation of drip irrigation system in existing fruit blocks including laying of plastic mulching	2 Ha		10.00
	7) Purchase of fertilizers, chemicals & manures for open cultivation	13 Ha	Annexure IV	5.00

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 भूमे, मन्त्रीयत एवं किसान कल्याण विभाग / Bhumi, Mantriyaat & Kisan Kalyan Vibhag  
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	8) Purchase of Fertilizers(water soluble),Chemicals & Manures for polyhouse	10nos. of polyhouse	Annexure V	2.00
	9) Preparation of sign board and labeling of every mother plants along with Institute name and logo	18 nos big size (4x 3 ft) with post and 7000 nos labeled (1ft x 9inch)		7.00
	<b>Sub total of 12A i</b>			<b>28.10</b>
ii.	<b>Demonstrations of Technology in the Institute</b>			
	1) Establishment of Fig block var.Poona and Dinkar for varietal evaluation under foot hill condition of Nagaland including mulching and Installation of drip irrigation & fertigation system (IIHR Bangalore)	0.40 Ha	Annexure VI	2.00
	2) Establishment of pineapple block var. Gaint Kew along the slope area including mulching (AAU, Jorhat)	B 3Block 1.0Ha		3.08
	3) Performance of high value vegetables under protected cultivation (tomato var.Himsona & Avatar,Pusa Cherry-1, sweet pepper var.Bomby(Red) & Shwarna (yellow), Cucumber var.Hilton & Kian, Bittergourd var.Pusa Rasdav) (IARI technology)	1500 sqm		0.50
	4) Varietal evalution of Gladiolus in open field var.Nova Lux,White Prosperity,Eurovision & Pink Frindship) (NBRI, Lucknow)	0.5 Ha		2.00
	5) Demonstration of seed inoculation with biofertilizers of ginger var.Nadia (IISR technology)	0.25 Ha		0.10
	6) Improved production Technology of Marigold var.Pusa Narangi (IARI technology)	0.05 Ha		0.10
	7) Awareness creation on Nutrition through Model vegetable garden(Brinjal var.Pusa Purple Round, Okra var.Arka Anamika, Broccoli var.Pusa Broccoli-1& Cabbage var. Pride of India (IARI technology)			0.50

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	8) Demonstration on organic cultivation of turmeric var. Lakadong & Megha (IISR technology)	1000 sq.m		0.20
	9) Demonstration on organic cultivation of underutilized horticulture crops (IARI technology)	4000 sq.m		0.30
	10) Demonstration on organic cultivation of pineapple var. Gaint Kew under plastic mulch (area expansion of existing plantation) (AAU, Jorhat)	3000 sq.m		0.50
	11) Demonstration on production of organic inputs like bio-enhancers, bio-manures & bio-pesticides (CISH technology)			0.30
	12) Setting up of Mushroom spawn production unit			7.00
	<b>Sub total Sub total of 12A ii</b>			<b>16.58</b>
<b>iii.</b>	<b>Demonstration of improved Technologies in NE States</b>			
	1) Demonstration on plantation of litchi var. China/Shahi in Nagaland (NRC Litchi)	1 Ha	<b>Annexure VII</b>	1.00
	2) Demonstration on plantation of Khasi Mandarin in Sikkim (CCRI technology)	1Ha		1.00
	3) Rejuvenation of declining Citrus orchard Nagaland & Manipur (CCRI technology)	1Ha each		1.00
	<b>Sub total of 12A iii</b>			<b>3.00</b>
<b>B.</b>	<b>Quality Planting Material Production</b>			
	1) Mass multiplication of quality planting material			
	Asexually propagated plants (Cashew 18000nos. var. BBSR-1, VRI-3, V-4; citrus 18000nos. var. Khasi mandarin, Assam lemon; mango 5000nos. var. Amrapali, Dashehari & Mallika, guava 15000nos. var. L-49, Allahabad Safeda, Lalit & Sweta; rose 4000nos. Var. Bordeaux, Avalanche)	70,000 nos	<b>Annexure VIII</b>	7.80
	2) Production & supply of vegetable seedlings to farmers (Brinjal, Broccoli, Cabbage)	9000 nos.		0.35
	<b>Sub total 12B</b>			<b>8.15</b>

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C.	Accreditation of Horticulture Nurseries in NER	20 nos.	1.25	25.00
D.	Certificate Course	4 courses	Annexure IX	35.42
E.	Exhibitions/ Trade Fairs/ Meets/Mela			
	1) National level exhibitions (3 days event to be organized)	1 no		10.00
	2) National/ State level exhibitions (To participate)	2 nos		6.00
	3) NE Kisan Mela ( To organize 2 days event)	1no		8.00
	Sub total			24.00
F.	Upgradation of laboratory for basic analysis			
	1) Muffle furnace	30cmx20cmx20cm		0.70
	2) Microwave oven	30 ltrs		0.20
	3) Centrifuge (vertical)	1 no.		1.00
	4) Autoclave	152 ltrs		1.50
	Sub total			3.40
G.	Chemical & glassware's for laboratory			5.75
H.	Farm development & beautification		Annexure X	5.00
I.	Contractual staff remuneration			66.00
13	MACHINERY & EQUIPMENT			
	1) Farm tools & implements			
	a)Tractor drawn weed cutter	1 No.	2.00	2.00
	b)Tractor drawn pit digger	1 No.	2.00	2.00
	2) Fruit & Vegetable clink &shrink wrapping machine	1 No.		6.00
	Sub total			10.00
	Grand total			535.00

\*\* Cost benefit ratio of all demonstrations undertaken is mentioned in Annexure XI


  
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 कृषि, लक्ष्मीनगर एवं कृषि विभाग, डि.ए.ए. / Dept. of Agriculture & Farmers Welfare  
 कृषि भवन, नई दिल्ली / Krishna Bhawan, New Delhi-110001

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Budget Projection for the year 2017-2018		
Sl	Head of Account	Approved Budget for 2017-18 (Rs. In Lakhs)
<b>A</b>	<b>Major Head -2401</b>	
1	Salary	24.60
2	Wages	40.00
3	Medical Treatment	8.00
4	Domestic Travel Expenses	20.00
5	Office expenses	50.00
6	Rent, Rates & Taxes	2.00
7	Publication	15.00
8	Other Administrative Expenses	70.00
9	Advertisement & Publicity	5.00
10	Minor works	60.00
11	Professional Services	10.00
12	Other Charges	220.40
	<b>Sub Total</b>	<b>525.00</b>
<b>B</b>	<b>Major Head -4552</b>	
1	Major works	
	a. C/o Training hostel (Total cost Rs.650 lakhs) 1st Installment	390.00
2	Machinery & Equipment	10.00
	<b>Sub Total</b>	<b>400.00</b>
	<b>Grand Total</b>	<b>925.00</b>

**Extra budget required for undertaking the following major works**

<b>1</b>	C/o Training hostel (2nd Installment)	260.00
<b>2</b>	C/o Admin block R&D i/c bulk services & site development (Ground floor)	1500.00
<b>3</b>	Renovation of existing barbed wire boundary wall with bricks	156.00
	<b>Total</b>	<b>1916.00</b>


  
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 अध्यक्ष (सामान्य) / Dy. Comm. (General)  
 भारत सरकार / Government of India  
 एन.ए.डी. / N.E.D. / न.ए.डी.  
 श्री. खलीफा / Shri. Khalifa  
 मुख्य सचिव, नई दिल्ली / Secy. to Govt., New Delhi-110001

**ANNEXURE-I****7. PUBLICATION**

Sl. No.	Type of Publication	Particulars	Items	Copies	Approx. rate (lakh)
1.	Annual report 2016-17	Multicolor, A4 size, art paper, 50 pages	1 no.	300	3.00
2.	Folders	Multicolor, 1/3 size, 6 pages	6 nos.	500	2.00
3.	Bulletin/ Manual	Multicolor, A4 size, art paper, 80 pages	2 nos.	500	3.00
4.	Prospectus of Certificate Course	Multicolor, A4 size, art paper, 16 page	1 no.	300	1.00
5.	Reprinting of exhausted folders	Multicolor, 1/3 size, 6 pages	10 nos.	500	6.00
<b>Total</b>					<b>15.00</b>

**ANNEXURE-II****8.A.HUMAN RESOURCE DEVELOPMENT****a) Proposed topic for Farmers Training (40nos.)**

Sl. No.	Topics
1	Technological advancement in HDP & canopy management for enhanced production in horticulture crops
2	Technology interventions for reduction in post harvest losses in horticulture crops
3	Value addition of horticulture crops for livelihood
4	Approaches for Organic production in horticulture crops.
5	Nursery Management & propagation techniques of focus fruit crops
6	Advances in Production Technologies of focus horticulture crops
7	Advances in Integrated pests & disease management in horticulture crops
8	Protected cultivation technology in vegetables/flowers
9	Promotion of Farmers producer organization
11	Enhancing productivity in horticulture crops through Integrated nutrient management practices.
12	Rejuvenation of declining orchard for quality fruit production
13	Dry flower making technology

  
 Dr. Naveen Kumar  
 Dy. Commissioner (Horticulture)  
 Government of India  
 Ministry of Agriculture  
 New Delhi




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**Budget for Farmers training**

Sl.No	Particulars (As per MIDH Norms)	Approx. Cost (Rs. In lakhs)	
1	a)Within the State Conduct of training (working lunch/ refreshment/ training kits/ honorarium/ conference hall/ including transport/TA of participants etc.) @Rs. 1000/person/day (as per norms) for 50 nos. x 1 day	0.50	
	b) Outside the State Project based as per actual. 100% of the cost.	-----	
	<b>i.e. Rs. 0.50 lakh/ training = Rs. 0.50 lakh x 40 trainings</b>	<b>20.00</b>	
Sl	Particulars	Rate (Rs.)	Amount (Rs.)
1	Training Kits (File folder/Pen/Notepad) -50 nos	40.00	2000.00
2	Refreshment – 50 nos x 2 times	40.00	2000.00
3	Working lunch – 50 nos	170.00	8500.00
4	Honorarium – 4 lectures	1000.00	4000.00
5	Banner (8x4 ft) – 1 nos	1000.00	1000.00
6	Training Materials to be distributed/ for demonstration – 50 nos	50.00	2500.00
7	Stationeries/ materials for practical/ M. water/hall hiring/generator etc	--	5000.00
9	TA of participants (to be paid at actual)- 50 nos	500.00	25000.00
	<b>TOTAL</b>		<b>50,000.00</b>

**b) Proposed Topics For Trainer's Training (8 Nos.)**


Sl. No.	Topics
1.	Advances in Protected and Precision Horticulture
2.	Urban Landscaping, Ornamental gardening, Turfing and Turf management for indoor and outdoor landscaping
3.	Biodiversity & Conservation of Horticultural Crops
4.	Biotechnological and Nano technological Approaches for improvement of Horticultural Crops
5.	Climate mitigation in Horticultural crops
6.	Production Technology of Underexploited & Underutilized Horticultural Crops
7.	Organic Farming & Certification of Horticulture Crops
8.	Soil fertility management in fruit crops
9.	Hi-Tech methods for raising nursery of Vegetable/Flower Crops
10.	Advances in Production Technology of focused Horticulture Crops
11.	Advances in Post Harvest Management and Value Addition of Horticulture Crops
12.	Supply Chain and Marketing of Horticultural Crops
13.	Production of quality planting material & accreditation of nursery of focus Fruit Crops
14.	Technological advancement in HDP & canopy management for enhanced production in Horticulture Crops

  
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 नवीन कुमार पथे, सहायक निदेशक (प्रशिक्षण), कृषि विभाग (Horticulture)

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**Budget for Trainers training**

Sl. No	Particulars (As per MIDH Norms)	Approx. Cost (Rs. In lakhs)	
	<b>a)Within the State</b>		
1	Conduct of training (Refreshment/ honorarium/ conference hall etc.) @Rs. 300/person/day (as per norms) for 40 nos x 3 days	0.36	
2	DA of participants (food & lodging) approx. as per admissible @ Rs. 1000 x 40 x 3 days as admissible	1.20	
3	TA of participants (to be paid as admissible) Approx. @Rs. 2500 x 40 nos.	1.00	
4	TA/ DA of resource persons (to be paid at actual as per norms)	0.70	
5	Vehicle hiring (for field trips & local conveyance during training)	0.20	
	Total	3.46	
	<b>b) Outside the State Project based as per actual. 100% of the cost.</b>	-----	
	<b>i.e. Rs. 3.46 lakh/ training = Rs.3.46 lakh x 8 trainings)</b>	27.68	
Sl	Particulars	Rate (Rs.)	Amount (Rs.)
	<b>a)Within the State</b>		
a	Refreshment		
	a) Inaugural (Hi-tea) - 40 nos	40.00	1600.00
	b) Technical session -40 nos (3 times tea)	40.00	4800.00
b	Banner (8/6 ft) with CIH logo – 1 nos	1000.00	1000.00
c	CDs for reading material distribution - 40 nos	30.00	1200.00
d	Honorarium to resource person – (3 person x 4 lectures)	1000.00	12000.00
e	Working lunch – 40 nos. (3 times)	170.00	20400.00
f	Vehicle hiring for local conveyance for 4 days & bus/taxi for field visit	15000.00	15000.00
g	Fooding & lodging for resource person during training (to be paid as actual as per norms)	15000.00	15000.00
h	Fooding & lodging for participants during training (for about 40 nos.)		
	i) Dinner at Dept. guest house – 40 nos. (3 days)	200.00	24000.00
	ii) B/Fast & Evening tea at Dept. guest house – 40 nos. (3 days)	50.00	6000.00
	iii) Lodging at Departmental guest house – 40 nos. (3 days)	750.00	90000.00
i	TA of participants (to be paid as admissible) – 40 nos.	2500.00	100000.00
j	TA of resource person (to be paid as actual as per norms)	70000.00	70000.00

  
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 कृषि, पंजाब / Agriculture, Punjab

	b) Outside the State Project based as per actual. 100% of the cost.	
	Total (Exclusive of TA of resource person)	Rs. 3,61,000.00

Sl.No	Particulars (As per MIDH Norms)	Approx. Cost (Rs. In lakhs)
1	i) Training charges/fooding/lodging @ Rs. 1000/day/person excluding transport) for 20 participants for 8 days	1.60
	ii) Transport cost (approx.) Rs.5400x 20 person	1.08
	Total	2.68
2	Outside the State Project based as per actual. 100% of the cost.	---
3	Outside India Rs. 4.00 lakh / participant Project Based. 100% of air/rail travel. Course fee cost to be funded under Mission Management.	---
	<b>i.e. Rs. 2.68 lakh/ training = Rs. 2.68 lakh x 3 nos)=8.04</b>	<b>8.00 (approx)</b>


SJ.No	Particulars	Approx. Cost (Rs. In lakhs)
1	Training cost @Rs. 50000/ training x 4 trainings (TA/ DA as per actual to be borne by Institute under DTE Head)	2.00

### 12.A.i.Management of existing demonstrations

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	Cement	3 bags@ 350	1050.00	
	Timber	5 cft @300	1500.00	
	C.G.I Sheet	5 pieces @450	2250.00	
	Nails	3 kg @80	240.00	
	Nails for roofing	2 kg @100	200.00	
	<b>Total</b>		<b>10940.00</b>	<b>10,000.00</b>
<b>3</b>	<b>Maintenance of Organic Vermicompost 4units</b>			
	Earth worm( <i>Eisenia foetida</i> )	8000 nos. @1	8000.00	
	Timber	5 cft @300	1500.00	
	Nails	2 kg @80	160.00	
	Wire Mesh	4 m@ 100	400.00	
	<b>Total</b>		<b>10,060.00</b>	<b>10,000.00</b>
<b>4</b>	<b>Intercropping of Cowpea/Dhaincha in fruit blocks 5.5Ha</b>			
	Cowpea var.Assam Valley & C <sub>1</sub> 5 <sub>1</sub>	550kg/90	49500.00	<b>50,000.000</b>
<b>5</b>	<b>Maintenance of high value flowers in Polyhouses</b> <b>Parameters for Anthurium :</b> Number of sprout per plant,plant height (10 days interval),number of leaf (10 days interval),leaf size-length of leaf lamina, width of leaf, length of petiole, diameter of petiole, colour of leaf -dorsal side, ventral side, days to initiation of bud, days to first colour shown, days to full bloom, spathe size-length and width, colour of the spathe-dorsal and ventral side <b>Parameters for Gerbera:</b> Plants Hight(cm), No. of Leave per plants, Leaf Length (cm), Leaf breadth (cm), Plants spread (cm), No. of Suckers per plants, Days to flower bud visibility, Flowers size(cm), Flower weight, Stalk length (cm), Dia-meter of flower (cm), No. of flower/plants, Self Life (days), Vase life (Days)			
	Anthurium (var. Carnaval, Pistachi Tropical & Xavia) Source- Anthura Holland, India Dealer-M/s. Florance Flora, Bangalore	800nos @ 150/plant	1,20,000.00	
	Gerbera Plants (var.Shimmer & Preintage Shimmer & Preintage) Source - KF Bio-tech, Pune, Maharastra	2000nos.@ 50/plant	1,00,000.00	
	Coco husk	2 truck load @ 40,000/load	80,000.00	
	<b>Total</b>			<b>3,00,000.00</b>
<b>6</b>	<b>Repair &amp; re-installation of drip irrigation system in excisiting fruit blocks including laying of plastic mulching (2 HA)</b>			
	Netafim 4way Foggers with assb.	1520 nos. @ 222.00	337440.00	
	Netafim 16mm laterals	4400 mtrs @25.00	110000.00	
	Netafim Misters	250 nos.@ 164	41000.00	
	Netafim 63mm Flush valves	16 nos.@ 138	2208.00	
	Netafim 2" PPBV	16 nos. @1350	21600.00	

  
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	Netafim 16mm Start Nipple	1400 nos. @10	14000.00	
	Netafim 16mm Rubber Gromate	1400 nos. @12	16800.00	
	Netafim 16mm End Blk	1400 nos. @8	11200.00	
	RPVC End Cap -63mm	10 nos. @140	1400.00	
	14 Guage GI Wire	90 kg @350	31500.00	
	RPVC Pipe 63 mm 6kgf/cm <sup>2</sup>	120 mtrs@145	17400.00	
	RPVC Fittings & Accessories	8 sets@11025	88200.00	
	Copper wire	3 kg @400	1200.00	
	Netafim Spinnet assb.	330 nos.@ 155	51150.00	
	Netafim Dripline 0.3 x 2.0 lph	4850 mtrs @25	121250.00	
	Mulching sheet (Width 2.20 mtrs ) UV treated 50 micron	200 kg@200	40000.00	
	Labour for removing old drip systems & relaying new systems including laying of mulching	6 Set For 2 ha @15608.66	93652.00	
	<b>Total</b>			<b>10,00,000.00</b>


#### Annexure IV

#### **12.A.Demonstration of production technologies at Institute level**

##### **12.A.i.Management of existing demonstrations**

##### **12.A(i)7.Fertilizers, Chemicals & Manures for open cultivation**

Sl.No	Components	Quantity	Approx. cost per unit(Rs.)	Amount (Rs. in lakhs)
1	FYM	15 truck load	6,500.00/truck load	1.00
2	Fertilizers			
	Urea (IFFCO)	15 bags		
	M.O.P (IPL)	20 bags		
	S.S.P (IPL)	20 bags		0.50
	DAP (IFFCO)	10 bags		
	Micronutrient	50kg		
3	Pesticides			
	Taf Gore			
	Neem Gold			
	Lannate			
	Furadan/Phorate -10g			
	Apsaa			
	Spintor			
4	Fungicides			
	Bavistin	20kg		0.50
	Diathane M-45			

  
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(3/9)

	Redomil			
	Confidor			
	CAPTRA			
	Streptocycline			
5	Fertilizer, fungicides & pesticides for Strawberry cultivation			
	12-61-00	25 kg		1.00
	13-00-45			
	19:19:19			
	CaNO <sub>3</sub>			
	0:0:50			
	16:08:24	1 ltrs		1.50
	Fertilon Combi			
	Nutrisil (Silicon)			
	Topsin			
	H <sub>2</sub> O <sub>2</sub> with silver			
	Humic acid			
	Sulphur			
	Micronutrient Combi			
	Grant total			5.00


#### ANNEXURE-V

#### **12.A.Demonstration of production technologies at Institute level**

#### **12.A.i.Management of existing demonstrations**

#### **12.A(i)8.Fertilizers (water soluble),Chemicals & Manures for polyhouse**

Sl. No.	Name of fertilizer and chemical	Quantity (liters/kg)	Rate (Rs)	Amount (Rs)
1.	Topaz	4	1800/l	7200.00
2.	Magister	4	1500/l	6000.00
3.	Score	3	1500/l	4500.00
4.	Redomil	4	1800/kg	7200.00
5.	Diathen M-45	4	800/kg	3200.00
6.	Bavestine	4	1000/kg	4000.00
7.	COC	5	400/kg	2000.00
8.	Quantinal	3	1500/kg	4500.00
9.	Acrobat	2	800/200gms	8000.00
10.	Benomyle	2	2000/kg	4000.00
11.	Allite	5	1900/kg	9500.00
12.	Captaf	6	800/kg	4200.00
13.	Vertmac	2	5000/kg	10000.00

  
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 Ministry of Agriculture & Farmers Welfare  
 Government of India  
 New Delhi

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14.	Acifed	5	1300/kg	6500.00
15.	Dicofal	4	1500/l	6000.00
16.	Lannate	5	1600/kg	8000.00
17.	Rogar	5	900/l	4500.00
18.	Neem oil	4	500/l	2000.00
19.	Biozyme	10	500/l	5000.00
20.	Boran	15	150/kg	2250.00
21.	Iron chelated	2	900/kg	1800.00
22.	Copper sulphate	10	400/kg	4000.00
23.	Sodium molybdate	1	3000/kg	3000.00
24.	Calcium Nitrate	50	180/kg	9000.00
25.	Potassium Nitrate	50	160/kg	8000.00
26.	Magnesium sulphate	50	50/kg	2500.00
27.	Potassium sulphate	50	160/kg	8000.00
28.	Mono ammonium sulphate	50	150/kg	7500.00
29.	Zinc Suphate	50	200/kg	10000.00
30.	Rubigan	5	1200/l	6000.00
31.	FYM	5load	8000/ Truck load	40000.00
Total				1,99350.00

#### ANNEXURE VI

#### 12.A.Demonstration of production technologies at Institute level

#### 12.A.(ii)Demonstrations of Technology in the Institute

Sl	Particulars	Details of Cost (Rs.)	Sub Total (Rs.)	Grand total (Rs.)
1	<p><b>Establishment of Fig block var.Poona and Dinkar for varietal evaluation under foot hill condition of Nagaland including mulching and Installation of drip irrigation &amp; fertigation system in 0.4 Ha spacing of 5m x 5m</b></p> <p>IIHR Bangalore Technology to be followed for the cultivation practices of Fig.</p> <ul style="list-style-type: none"> <li>➤ It will be benefit for the farmers Intensive crop cultivation farm by demonstrating latest technologies</li> <li>➤ High quality production systems for domestic market</li> <li>➤ To achieve potential productivity per unit area</li> <li>➤ lead the farmers with technology</li> </ul> <p><b>Parameters to be recorded:</b> Plant height (cm), Trunk diameters (cm), Plant spread (cm) North west &amp; North south, Fruit weight (kg), Fruit length (cm), Fruit breadth (cm), Pulp wt. / fruit (kg), Fruit vol (cm<sup>3</sup>), Juice content/ fruit (ml), Skin colour of fruit, Flesh colour of fruit, Yield/ plant (kg), Yield/ ha (t/ha), TSS (<sup>0</sup>Brix), Vit. C (mg/100g pulp/juice), Reducing sugar (%), Non-reducing sugar (%), Total sugar (%) &amp; Acidity (%)</p>			
	Planting Materials	200 nos. @		

  
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2611998, 2611999, 2612000, 2612001, 2612002, 2612003, 2612004, 2612005, 2612006, 2612007, 2612008, 2612009, 2612010, 2612011, 2612012, 2612013, 2612014, 2612015, 2612016, 2612017, 2612018, 2612019, 2612020, 2612021, 2612022, 2612023, 2612024, 2612025, 2612026, 2612027, 2612028, 2612029, 2612030, 2612031, 2612032, 2612033, 2612034, 2612035, 2612036, 2612037, 2612038, 2612039, 2612040, 2612041, 2612042, 2612043, 2612044, 2612045, 2612046, 2612047, 2612048, 2612049, 2612050, 2612051, 2612052, 2612053, 2612054, 2612055, 2612056, 2612057, 2612058, 2612059, 2612060, 2612061, 2612062, 2612063, 2612064, 2612065, 2612066, 2612067, 2612068, 2612069, 2612070, 2612071, 2612072, 2612073, 2612074, 2612075, 2612076, 2612077, 2612078, 2612079, 2612080, 2612081, 2612082, 2612083, 2612084, 2612085, 2612086, 2612087, 2612088, 2612089, 2612090, 2612091, 2612092, 2612093, 2612094, 2612095, 2612096, 2612097, 2612098, 2612099, 2612100, 2612101, 2612102, 2612103, 2612104, 2612105, 2612106, 2612107, 2612108, 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		50/plant	10,000.00	
	Pit digging(3x3x3 ft)	200 nos. @ 50	10,000.00	
	F.Y.M. (Well decomposed)	2 truck loads (300cft) @6500	13,000.00	
	Mulching and Installation of drip irrigation & fertigation system complete	0.4 Ha@ 1,67,000	1,67,000.00	
	Total			2,00,000.00
2	<b>Establishment of pineapple block along the slope area including mulching</b> AAU Technology to be followed for the cultivation practices of Pineapple. <ul style="list-style-type: none"> <li>➤ It will be benefit for the farmers Intensive crop cultivation farm by demonstrating poly mulch technologies</li> <li>➤ High quality production systems for domestic market</li> <li>➤ To achieve potential productivity per unit area</li> <li>➤ Lead the farmers with technology</li> </ul> <b>Parameters to be recorded:</b> Fruit wt (kg), Crown wt (kg), Fruit length (cm), fruit breadth (cm), peel wt (g), Pulp wt. with core (kg), Pulp wt. without core (kg), Core wt. (kg), Juice content (ml), Yield / ha( t/ha), TSS ( <sup>0</sup> Brix), Vit. C (mg/100g pulp/juice), Acidity (%), Total sugar (%), Reducing sugar (%), Non-reducing sugar (%)			
	Planting Materials	44000 @2/plant	88000.00	
	Bed preparation	50000/1 ha	50000.00	
	F.Y.M. (Well decomposed)	3 truck loads@ 6500	19500.00	
	Laying of Mulching sheet and plantation	150500/1 ha	150500.00	
	Total			3,08,000.00
3	<b>Performance of high value vegetables under protected cultivation (tomato var.Himsona &amp; Avatar,Pusa Cherry-1, sweet pepper var.Bomby(Red) &amp; Shwarna (yellow), Cucumber var.Hilton &amp; Kian, Bittergourd var.Pusa Rasdav) 1500sqm</b> IARI technology to be followed for the cultivation practices. <ul style="list-style-type: none"> <li>➤ Intensive crop cultivation farm by demonstrating latest technologies</li> <li>➤ High quality vegetables production systems for domestic market</li> <li>➤ To achieve potential productivity per unit area</li> <li>➤ Lead the farmers with technology</li> </ul>			
	Tomato var. Himsona & Avatar, Pusa Cherry I F <sub>1</sub> Hybrid Indeterminate type	30g@2000/10g 10g@2500/g	6000.00 2500.00	
	Sweet Pepper var. Bomble (Red) & Shwarna (yellow),(F <sub>1</sub> Hybrid)	30g@5000/10g	15000.00	
	Cucumber (Parthenocarpic)var. Hilton & Kian,	20g@8000/10g	16000.00	
	Bittergourd var. Pusa Rasdav	20g@ 500/10g	1,000.00	
	Staking material (Rope & wire)		10,000.00	
	Total			50,500.00
4	<b>Varietal evaluation of Gladiolus in open field var.Nova Lux,White Prosperity,Eurovision &amp; Pink Frindship (0.5Ha)</b> NBRI, Lucknow technology to be followed for the cultivation practices.			

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	<ul style="list-style-type: none"> <li>➤ Intensive crop cultivation farm by demonstrating latest technologies</li> <li>➤ High quality Flowers production systems for domestic market &amp; International Market</li> <li>➤ To achieve potential productivity per unit area</li> <li>➤ Used latest technology for highest production in Small holding area</li> </ul> <p><b>Parameters to be recorded:</b> Days for sprouting, plant height(cm), No. of leaf/shoot, Leaf length(cm), leaf breadth(cm), leaf area(cm), No. of side shoots/Plants, Days taken to flower, Length of spike, day for first floret production, diameter of first floret, diameter of last floret, No. of floret/spike, duration of first floret, duration of flowers, length of first floret, length of last floret, longevity of individual floret, vase life.</p>			
	Gladiolus var. Nova Lux, White Prosperity, Eurovision & Pink Friendship) NBRI, Lucknow	40000nos. @5/bulbs	2,00,000.0 0	
	Total			2,00,000.00
5	<b>Demonstration of seed inoculation with biofertilizers of ginger var.Nadia (0.25 ha)</b> IISR technology to be followed for the cultivation practices. <ul style="list-style-type: none"> <li>➤ Updating the end users, the farmers and getting the farmers realised about the possible changes in productivity through technology intervention.</li> <li>➤ Building the confidence of farmers about scientific know-how and realising the potential productivity at farmers field</li> <li>➤ Enhance the marketable yield by minimum 35 per cent compared to conventional farmers practice.</li> <li>➤ Expanding the livelihood opportunities</li> </ul> <p><b>Parameters to be recorded:</b> Plant height (cm), number of leaves/plants, number of tillers/clumps and leaf size, length of rhizome finger (cm), diameter of rhizome finger (cm) and yield of fresh and cured ginger (q/ha), B:C ratio.</p>			
	Organic inputs			
	i) FYM	1truck load @6500	6500.00	
	ii) Bio fertilizer (Azotobacter + phosphotika)	15 kg @30	450.00	
	Plant protection			
	i) Bioagents (trichoderma)	6 kg @80	480.00	
	ii) Trichoderma chiloris	15 card @35	525.00	
	iii) Neem oil	3 litre @400/ltr	1200.00	
	Total			9155.00
6	<b>Improved production Technology of Marigold var.Pusa Narangi (0.05 Ha)</b> IARI technology to be followed for the cultivation practices. <ul style="list-style-type: none"> <li>➤ Getting the farmers realised about the possible changes in productivity through technology intervention</li> </ul>			

  
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	<p>➤ Awareness of farmers about scientific know-how and realising the potential productivity at farmers field</p> <p>➤ Intensive crop cultivation farm by demonstrating latest technologies</p> <p><b>Parameters to be recorded:</b> Germination %, Days taken for germinate, Days to 1<sup>st</sup> flowering, height of plant, stem diameter, number of primary branches, spread of plant, flower yield per plant and B:C ratio</p>		
	Seeds	200g	1400.00
	FYM	1 truck load @6500	6500.00
	Neem oil	1 litre @400/l	400.00
	Vermicompost	30 kg @30	900.00
	Total		9200.00
7	<p><b>Awareness creation on Nutrition through Model vegetable garden (Brinjal var.Pusa Purple Round, Okra var.Arka Anamika, Broccoli var.Pusa Broccoli-1&amp; Cabbage var. Pride of India (0.25 ha) IARI technology to be followed for the cultivation practices.</b></p> <p>➤ Enhance the marketable yield compared to conventional farmers practice.</p> <p>➤ Building the confidence of farmers about scientific know-how and realising the potential productivity at farmers field.</p> <p>➤ Expanding the livelihood opportunities.</p> <p>➤ Building up the horticulture- based trained man power as an aid to small scale entrepreneurship.</p> <p><b>Parameters to be recorded:</b> Germination %, Days taken for germinate, Days to 1<sup>st</sup> flowering, Plant ht. (cm), Fruit length (cm), Fruit wt. (g), No. of fruits/ plant, Dry fruit wt. (5 nos. / plant), Fresh fruit wt. (5 nos/ plant, Fruit yield / plant, Fruit yield / plot, Total yield, B:C ratio</p>		
	Vegetable seeds		
	i. Okra	1 kg @500	500.00
	ii. Brinjal	100 gm @100/10gm	1000.00
	iii. Broccoli	150 gm @900/10 gm	13,500.00
	iv. Cabbage	200 gm @200/10 gm	4000.00
	FYM	2 truck load @6500	13,000.00
	Pig manure	2 truck load @5500	11,000.00
	Coco peat, perlite,		3000.00
	Biofertilizer (Azotobacter + phosphotika)	60 kg @25	1500.00
	Bioagents (trichoderma)	30 kg @80	2400.00
	Total		49,900.00
8	<b>Demonstration on organic cultivation of turmeric var. Lakadong &amp; Megha (1000sq.m)</b>		

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<b>spacing of 25 cm x 25 cm. IISR technology to be followed for the cultivation practices</b> <ul style="list-style-type: none"> <li>➤ To train the farmers with respect to identified technologies</li> <li>➤ Yield data to be collected from demonstration plots and analyzed</li> <li>➤ Organic cultivation practices coupled with the proper management of disease.</li> <li>➤ To motivated the farmers towards adoption of turmeric cultivation.</li> <li>➤ Demonstrations may lead to the improvement and empowerment of farmers.</li> </ul> <b>Parameters to be recorded:</b> Plant height, Number of leaves/plant, Number of Clumps/plant, Total yield (tonnes), Curcumin content (%)			
Bioagents <i>Trichoderma spp</i>	5 kg @ 80	400.00	
<i>Pseudomonas fluorescens</i>	5 kg @ 100	500.00	
Biofertilizers (Azotobacter & Phosphotika)	12 kg 225	300.00	
Trichogramma cards	10 nos @ 35	350.00	
Neem oil	2 L @ 450	900.00	
Copper sulfate	4 kg @ 1100	4400.00	
Lime	5 kg @ 30	150.00	
FYM	2 truck load @ 6500	13000.00	
<b>Total</b>			<b>20,000.00</b>
<b>9 Demonstration on organic cultivation of underutilized horticulture crops(4000sq.m)</b> IARI technology to be followed for the cultivation practices. <ul style="list-style-type: none"> <li>➤ To collect and preserve the indigenous and underutilized horticulture crops of NER</li> <li>➤ To study its productivity and economics</li> <li>➤ To maintain as a model farm for various training programmes</li> <li>➤ To popularize the crop and provide a link for market</li> </ul> <b>Parameters to be recorded:</b> Plant height, Number of leaves/plant, Number of fruits/plant, Total yield (tonnes), Biochemical parameters			
Planting materials/seeds	--	2000.00	
Neem oil	4 L @ 450	1800.00	
Copper sulfate	6 kg @ 1100	6600.00	
Lime	7 kg @ 30	210.00	
FYM	3 truck load @ 6500	19500.00	
<b>Total</b>			<b>30,110.00</b>
<b>10 Demonstration on organic cultivation of pineapple var.Gaint Kew under plastic mulch (area expansion of exsisting plantation (3000sq.m) spacing of 25 x 45 x90 cm</b> AAU, Jorhat to be followed for the cultivation practices. <ul style="list-style-type: none"> <li>➤ Visits of the farmers and extension functionaries will be organized at demonstration plots to show the significance of large scale cultivation of pineapple.</li> <li>➤ To demonstrate the recent improved technology and to create awareness of the horticultural technologies.</li> <li>➤ To acquaint the farmers about mulching and high density plantation for better growth and yield.</li> </ul>			

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<b>Parameters to be recorded:</b> Fruit whole wt (kg), Fruit wt (kg), Crown wt (kg), Fruit length (cm), fruit breadth (cm), peel wt (g), Pulp wt. with core (kg), Pulp wt. without core (kg), Core, Juice content (ml)wt. (kg), Juice content (ml), wt. of extracted pulp waste (kg), TSS ( <sup>0</sup> Brix), Vit. C (mg/100g pulp/juice), Acidity (%), Total sugar (%), Reducing sugar (%) and Non-reducing sugar (%)			
Pineapple suckers var. Giant Kew	6000 @ 2/sucker	12000.00	
UV stabilized mulching sheet (One side black & one side silver, width-1.2m and thickness-50 micron)	100 kg @250/kg	25000.00	
FYM	2 truck loads @ 6500	13000.00	
Total			50,000.00
<b>11 Demonstration on production of organic inputs like bio-enhancers, bio-manures &amp; bio-pesticides .CISH technology to be followed</b>			
<ul style="list-style-type: none"> <li>➤ To demonstrate the farmers for preparation of organic inputs for controlling various pest and diseases</li> <li>➤ The bio-enhancers, bio-manures &amp; bio-pesticides to be used in the field on trail basis to check its efficacy</li> <li>➤ To create an awareness among the farmers for promotion of organic farming</li> </ul>			
<b>A.Preparation of Panchgavya</b>			
Fresh cow dung	1Kg	--	
Fresh cow dung slurry	4 Kg	--	
Cow's urine	3 Litres	--	
Cow's milk	3 Litres @ 60	180.00	
Cow's curd	3 Litres @200	600.00	
Cow's ghee	3 Kg@250	750.00	
Sugarcane juice	3 Litres @ 150	450.00	
Tender coconut water	3 Litres @150	450.00	
Banana ripe	12@50	50.00	
Toddy (if available)	2 Litres @500	1000.00	
Sub- total		3480.00	
Total of A Overall preparation (5 times)		17,400.00	
<b>B. Preparation of Jeevamrita</b>			
Black jaggery	2 kg @ 60	120.00	
Bengal gram flour	2 kg @ 200	400.00	
cow dung	10 kg	--	
cow urine	10 lit	--	

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	1 fist full of farm soil, 200 lts water	--	--	
	Sub- total		520.00	
	Total of B Overall preparation (5 times)		2600.00	
	Total (A + B)			20000.00
12	<b>Setting up of Mushroom spawn production unit</b> <ul style="list-style-type: none"> <li>➤ Expand employment generation to unemployed youth and the students</li> <li>➤ To financial provide spawn at subsidy rate to the genuine farmers and keen farmers</li> <li>➤ To improvised skill and technical support for spawn production &amp; cultivation</li> </ul> <b>Parameters to be recorded:</b> Mean value for spawn running time/10days, Number of crops/bag, Stalk height (cm), Stalk diameter (cm), Cap size (mm), Fresh weight (kg), Number of productions per (10 days) and Fruiting bodies formation (day)			
	A. Equipments required			
	Autoclave (big size)	1no. @1,70,000	170000.00	
	Autoclave (mini size)	1no. @ 60,000	60000.00	
	Laminar air flow	1 no.@1,00,000	100000.00	
	B.O.D	1no.@2,00,000	200000.00	
	Unstirred water bath	1no.@48,000	48000.00	
	Total of A		578000.00	
	B.Chemicals &other miscellaneous items			
	Streptomycin	5nos. @9.87/1g	50.00	
	Alcohol (ethanol)	5nos.@840	4200.00	
	Sensitizer (liquid hand wash)	2nos.@ 90	180.00	
	PDA/PDB(agar)	20kg@250/100g	5000.00	
	Petri dishes	400nos@89/pcs	35600.00	
	Cotton plug	10nos@100/rol	1000.00	
	Test tube	400nos@12/pcs	6000.00	
	Test tube stand	2nos/1250/pcs	2500.00	
	Rubber band	1/2kg@150	150.00	
	Brown paper	500nos@19/pcs	9500.00	
	Sealer	1no@2399	2399.00	
	Bunsen burner/spirit lamb	2nos@3000	6000.00	
	Disposable bag	2kg@290	580.00	
	Micropipette(multiple tips & stand)	3nos.@1500	4500.00	
	Scapula	2nos@160	320.00	
	Weighing balance (electronic)	1no@2500	2500.00	
	Glass bottle (250ml)	50nos@520	26000.00	
	Polythene bags (transparent)	400nos@38	15200.00	
	Test tube holder	2nos@169	338.00	
	Total of B		122017	
	Total of A&B			700017.00

  
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## Annexure –VII

### 12.A.Demonstration of production technologies at Institute level

#### iii.Demonstration of improved Technologies in NE States

Sl	Particulars	Details of Cost (Rs.)	Sub Total (Rs.)	Grand total (Rs.)
<b>1</b>	<b>Demonstration on plantation of litchi var.China/Shahi in Nagaland(1Ha) NRC Litchi technology Spacing = 5 x5m for 200 plants</b>			
	Planting material including 10% gap filling	50/- per plant	20000	
	FYM	2 truck load @6500	13000	
	Fertilizer (100:50:25 NPK)		6000	
	Plant protection & chemicals		5000	
	Farm Operation			
	Clearing jungle & land preparation	40 md@Rs. 400/md	16000	
	Digging of pit	Rs 40 /pit	16000	
	Misc. Expenses (loading/unloading, packaging, transportation)		20000	
	Total			<b>96,000.00</b>
<b>2</b>	<b>Demonstration on plantation of Khasi Mandarin in Sikkim (1Ha) CCRI technology Spacing = 5 x5m for 200 plants</b>			
	Planting material including 10% gap filling	50/- per plant	20000	
	FYM	2 truck load @6500	13000	
	Fertilizer (100:50:25 NPK)		6000	
	Plant protection & chemicals		5000	
	Farm Operation			
	Clearing jungle & land preparation	40 md@Rs. 400/md	16000	
	Digging of pit	Rs 40 /pit	16000	
	Misc. Expenses (loading/unloading, packaging, transportation)		20000	
	Total			<b>96,000.00</b>
<b>3</b>	<b>Rejuvenation of declining Citrus orchard Nagaland &amp; Manipur (1Ha each) CCRI technology</b>			
	Copper sulphate	20 kg@220/kg	4400	
	Lime	940 kg@13/kg	12220	

  
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Zinc sulphate	9 kg @438/kg	3942	
Magnesium sulphate	4 kg@80/kg	320	
Ferrous sulphate	4 kg@63/kg	252	
Manganese sulphate	4 kg@720/kg	2880	
Ridomil Z	1 kg@2100/kg	2100	
Bavistin 0.1%	1 kg@1681/kg	1681	
Nuvacron/ monocrotophos	2 kg@740/kg	1480	
Secateur	6 nos@435	2610	
Sprayer	2 nos@2000	4000	
Pruning saw	4 nos@630	2520	
Brite 20 ltr	4 nos@525	2100	
Paint brush	10 nos@50	500	
Urea	157 kg@10/kg	1570	
SSP	270@15/kg	4050	
MOP	135@25/kg	3375	
Total			50,000.00


#### Annexure VIII

#### 12.B.Quality Planting Material and Seed Production

##### 1. Mass Multiplication of Quality Planting Material:

##### i) Raising root stock Seedling:

Sl. No.	Particulars	Qty.	Rate (Rs.)	Approx. Cost (Rs.)
1.	Mango seed (local)	12000	1.50/ no.	18,000.00
2.	Guava seed (local)	2.0 kg	1,000.00/kg	2,000.00
3.	Citrus seed (Rangpur lime, Rough lemon and Volkamariana)	10 kg	4000.00/kg	40,000.00
4.	Cashew seed (local)	200 kg	150.00/kg	30,000.00
5.	Poly bags	500 kg	200.00/kg	1,00,000.00
6.	FYM (Well decomposed)	10 truck loads (300cft)	6500.00/truck	65,000.00
7.	Sand	5 truck loads (300cft)	6000.00/truck	30,000.00
8.	Coco peat bricks (1x1x1 ft)	450 pcs	100/pcs	45,000.00
9.	Vermiculite	450 kg	25/kg	11,250.00
10.	Perlite	200 kg	70/kg	14,000.00
11.	Chemical for media sterilization(Basamide)	20 kg	500/kg	10,000.00
12.	Labour charge for poly bag filling	100000 nos.	2.0/poly bag	2,00,000.00
			<b>Total</b>	<b>5,65,250</b>

  
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ii) Propagation Activity

Sl. No.	Particulars	Qty.	Rate (Rs.)	Approx. Cost (Rs.)
1.	Cashew scion sticks	10000 nos.	2.0/scion stick	20,000.00
2.	Citrus scion sticks	10000 nos.	2.0/scion stick	20,000.00
3.	Mango scion sticks	4000 nos.	5.0/scion stick	20,000.00
4.	Budding and grafting knife	10 nos.	500.00 each	5,000.00
5.	Secateurs	10 nos.	1000.00 each	10,000.00
6.	Label and tags	50,000 nos.	2/label	1,00,000.00
7.	Poly strips	100 kg	200.00/kg	20,000.00
8.	Poly caps	100kg	200.00/kg	20,000.00
			<b>Total</b>	<b>2,15,000.00</b>

Grand Total: (i) + (ii) = Rs. 5, 65,250.00 + Rs. 2, 15,000.00

= Rs. 7, 80,250.00 Say=Rs. 7, 80,000.00

ANNEXURE-IX

12. D.CERTIFICATE COURSES

Budget Estimate For Three Months Certificate Course: 04Nos.

S.No.	Particulars	Details	Amount	Reference
1.	<b>Boarding &amp; Lodging</b>	Rs.400/head/day (400 x 20 trainees x 90 days x 4 courses)	Rs. 28,80,000/-	Guidelines of model training courses conducted under Dte. of Extension, DAC for Central Institutes (P.No. 1/4)*
2.	<b>Field visits</b>			
	a) Within the State	Rs. 400/head/day (Rs. 400 x 20 trainees x 2 visits x 4 courses)	Rs. 64,000/-	ATMA Guidelines 2014 under National Mission on Agriculture Extension and Technology, Annexure-IV (Page No.98).**
	b) Outside the State	Rs. 800/head/day (Rs.800 x 20 trainees x 1 visit x 4 courses)	Rs. 64,000/-	
3.	<b>Honorarium to Lecturers /guest speakers</b>			Guidelines of model training courses conducted under Dte. of Extension, DAC for Central Institutes (P.No.
	a) Local guest speaker	Rs. 500/visit (Rs. 500 x10 visits x 4 courses)	Rs. 20,000/-	
	b) Outsider guest speaker	Rs. 600/visit (Rs. 600 x10 visits x 4 courses)	Rs. 24,000/-	

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				1/4)
4.	<b>Supply of supportive literature &amp; books</b> ***	Rs. 500/head for 8 days training as per MTC. (Rs. 5625/head x 20 trainees x 4 courses)	Rs. 4,50,000/-	Guidelines of model training courses conducted under Dte. of Extension, DAC for Central Institutes (P.No. 1/4)
5.	<b>Preparation of Audio Visual aids</b> ****	Rs. 2000/course (Rs. 2000 x 4 courses)	Rs. 8,000/-	
6.	<b>Stationery &amp; miscellaneous contingencies</b> *****	Rs. 8,000/course (Rs. 8,000 x 4 courses)	Rs. 32,000/-	
	<b>Total</b>		<b>Rs. 35,42,000/-</b>	

\* Expenditure on Board (Tea, Breakfast, Lunch and dinner) and lodging is to be incurred at the prescribed rate of Rs. 400/head/day for the actual number of trainees. No outsider other than the participants/guest speakers is entitled to avail of free boarding and lodging.

\*\* ATMA Guidelines 2014 under National Mission on Agriculture Extension and Technology, Annexure-IV (Page No.98)

\*\*\* The supportive literature and books relevant to the subject of the training course costing upto Rs. 5625/- per participant may be purchased and supplied during the course. (Calculation made on the basis of cost norms of Rs. 500/ head for 8 days training)

\*\*\*\* Cost towards preparation of teaching materials including audio visuals and Power Point presentation are advocated as it enhances the effectiveness of the talks/discussion.

\*\*\*\*\* The overall expenditure under the head must be limited to Rs. 8,000/- per course.

MTC - Model Training Course.

### Annexure X

#### 12 H.Farm development & beautification

Sl. No.	Name of crops	Qty.	Rate (Rs.)	Amounts (Rs.)
1.	Pop up irrigation in old Lawn area along with Road side	2000sqmt	200/sqm.	4,00,000.00
2	Annual seasonal seed material	--	--	50,000.00
3.	Ornamental plants			50,000.00
			<b>Total</b>	<b>5,00,000.00</b>

  
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## Annexure XI

### COST BENEFIT RATIO

#### 1. ECONOMICS FOR CULTIVATION OF GERBERA FOR 1000 SQM IN POLYHOUSE

Variety	No. of plants	Estimated expenditure		Total expenditure (Rs)	Production (nos)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
		Material	inputs					
Imperial	500	27500	2000	29500	5000	35000	5500	0.18
Rosalin	500	27500	2000	29500	6000	42000	12500	0.42
Shimmer	500	27500	2000	29500	3000	21000	-	-
Paradise	500	27500	2000	29500	5000	35000	5500	0.18
Zingaro	1000	55000	5000	60000	14000	98000	38000	0.60
White house	1000	55000	5000	60000	6000	42000	-	-

#### 2. ECONOMICS FOR CULTIVATION OF ANTHURIUM FOR 1000 SQM IN POLYHOUSE

Variety	No. of plants	Estimated expenditure		Total expenditure (Rs)	Production (Nos.)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
		Material	inputs					
Tropical	2000	346000	5000	351000	5000	50000		
Moment	2500	432500	5000	437500	6000	60000		
Pistachi	1500	259500	5000	264500	3000	30000		
Xavia	1000	173000	5000	178000	2000	20000		
Progress of production & sale is going on Main yield data will be available after three year age of plants								

#### 3. ECONOMICS FOR CULTIVATION OF TOMATO FOR 100 SQ M IN POLYHOUSE

Variety	Estimated expenditure	Total expenditure (Rs)	Production (kg)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
	Material & inputs					
Abhinav	10000	10000	1200	18000	8000	0.80
Avinash	10000	10000	600	9000	-1000	-

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**4. ECONOMICS FOR CULTIVATION OF FIG PER HA**

Cultivar	Estimated expenditure	Total expenditure (Rs)	Production (tonnes)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
	Material & inputs					
Poona	50000	50000	2.32	116000	66000	1.32

**5. ECONOMICS FOR CULTIVATION OF PINEAPPLE GAIANT KEW PER HA UNDER PLASTIC MULCH**

Years	Estimated expenditure	Total expenditure (Rs)	Production (Nos. of fruits)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
	Material & inputs					
1 <sup>st</sup>	150000	150000	-	-	-	-
2 <sup>nd</sup>	40000	40000	30800	123200	83200	2.08
3 <sup>rd</sup>	40000	40000	28600	114400	74400	1.86

**6. ECONOMICS FOR ORGANIC CULTIVATION OF TURMERIC VAR. LAKADONG & MEGHA FROM 1000 SQM SPACED AT 25 CM X 25 CM**

Year	Estimated expenditure	Total expenditure (Rs)	Production (tonnes)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
	Material & inputs					
2017-18	20000	20000	1.00	30000	10000	0.5

**7. ECONOMICS FOR ORGANIC CULTIVATION OF PINEAPPLE VAR. GAIANT KEW UNDER PLASTIC MULCH FROM 3000 SQ M SPACED AT 25 X 45 X 90 CM**

Year	Estimated expenditure	Total expenditure (Rs)	Production (tonnes)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
	Material & inputs					
2017-18	50000	50000	6.00	120000	70000	1.4

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8. ECONOMICS FOR CULTIVATION GINGER FROM 0.25 HA SPACED AT 20 X 25 CM

Year	Estimated expenditure	Total expenditure (Rs)	Production (tonnes)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
	Material & inputs					
2017-18	7000	7000	0.30	15000	8000	1.14

9. ECONOMICS FOR CULTIVATION OF CABBAGE FROM 800 SQM SPACED AT 30 X75 CM

Year	Estimated expenditure	Total expenditure (Rs)	Production (tonnes)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
	Material & inputs					
2017-18	9000	9000	0.70	21000	12000	1.33

10. ECONOMICS FOR CULTIVATION OF BROCCOLI 800 SQ M SPACED AT 40 X60 CM

Year	Estimated expenditure	Total expenditure (Rs)	Production (tonnes)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
	Material & inputs					
2017-18	12000	12000	0.50	25000	13000	1.08

11. ECONOMICS FOR CULTIVATION OF BRINJAL FROM 800 SQ M SPACED AT 60 X 75CM

Year	Estimated expenditure	Total expenditure (Rs)	Production (tonnes)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
	Material & inputs					
2017-18	12000	12000	1.0	20000	8000	0.66

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**12. ECONOMICS FOR CULTIVATION OF MARIGOLD FROM 500 SQ M SPACED AT 45X 35CM**

Year	Estimated expenditure	Total expenditure (Rs)	Production (tonnes)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
	Material & inputs					
2017-18	9200	9200	2.0	20000	10800	1.17

**13. ECONOMICS FOR CULTIVATION OF LITCHI PER HA**

Estimated expenditure	Total expenditure (Rs)	Production (tonnes)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
Material & inputs					
90000	90000	7.0	210000	120000	1.33

**14. ECONOMICS FOR CULTIVATION OF KHASI MANDARIN PER HA**

Estimated expenditure	Total expenditure (Rs)	Production (tonnes)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
Material & inputs					
90000	90000	8.5	127500	37500	0.41

**15. ECONOMICS FOR ORGANIC CULTIVATION OF UNDERUTILIZED HORTICULTURE CROPS (TREE TOMATO, ASH/WAX GOURD, SPINE/SWEET GOURD, CHOW CHOW/ SQUASH, WINGED BEAN, BRASSICA SPP./LAI PATTI, KIWI) IARI TECHNOLOGY AT 4000 SQ M**

Year	Crops	Estimated expenditure	Total expenditure (Rs)	Area (sqm)	Production (tonnes)	Gross return (Rs)	Net return (Rs)	Cost benefit ratio
		Material & inputs						
2017-18	Tree Tomato	2500	2500	500	0.70	3500	1000	0.40
	Ash/Wax gourd	2500	2500	500	0.12	2400	300	0.12

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Spine/Sweet gourd	2500	2500	500	0.28	3200	700	0.28
Chow- Chow/Squash	2500	2500	500	2.00	6000	4000	2.00
Indigenous Kiwi	10000	10000	2000	0.60	16000	6000	0.60

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