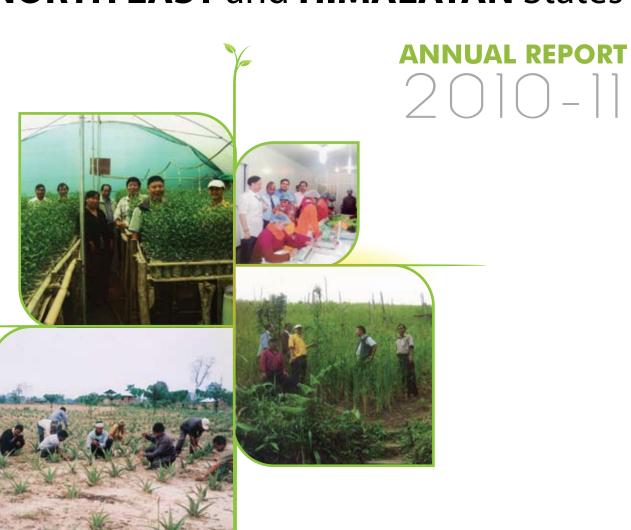
# Horticulture Mission for **NORTH EAST** and **HIMALAYAN** States







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#### **PREFACE**

Small Farmers' Agribusiness Consortium has commissioned a comprehensive exercise to assess extent of achievement under MM-II in terms of area expansion, production and productivity of fruits, vegetables, floriculture and spices along with a suitable design for Management Information System (MIS) at District, State and National levels envisaging collection, collation and preparation of a data base of beneficiaries covered during the XI Plan period which will project the outcome and overall impact of the programmes on the target beneficiaries. Physical verification of a large size of beneficiaries will be carried out at districts across the 11 States covered by the programme. The prevailing system of identification of farmers including processes followed, overall impact of the programme in terms of increase in income level of target beneficiaries, quality of life, reduction in migration, occupational diversification, adoption of new and/or sustainable technologies will be studied to suggest improvements/modifications. Simultaneous exercises are undertaken to find solutions for marketing of horticultural produce, organic certification and mechanization for running pilots in targeted location to demonstrate workable delivery models in the North Eastern and Hilly States under HMNEH. Outcome of these exercises will not merely contribute to meaningful improvements in implementation of the programmes but will also endeavour to put in place an effective MIS system whereby data base that could be readily accessed by stake holders at Central and State levels, will be put in place.

The cumulative physical and financial targets and achievement since inception of the Mission (2001-02 to 2010-11) has been brought out in this Report.

We are thankful to Secretary (Agriculture & Cooperation), Additional Secretary (HMNEH), Horticulture Commissioner, Addl. Commissioner (Hort) for their guidance to SFAC in implementation of the Mission. We are also thankful to Officers and staff of Horticulture Division of Department of Agriculture & Cooperation for their unstinted support and cooperation.

**Managing Director** 



#### Dr. Gorakh Singh

Horticulture Commissioner Government of India Ministry of Agriculture (Department of Agriculture & Cooperation) Krishi Bhawan, New Delhi – 110001



#### **MESSAGE**

I am happy to note that Small Farmers' Agribusiness Consortium is bringing out an Annual Report 2010-11 of Horticulture Mission for North East and Himalayan States highlighting the major achievements of the scheme.

North Eastern and Himalayan States endowed with rich biodiversity have immense potential for development of horticulture. The initiatives taken by the Government in implementation of Horticulture Mission for North East and Himalayan States has helped in bringing an additional area of 566510 ha under various horticulture crops, besides creation of infrastructure facilities for improving the productivity, post harvest management, marketing and processing of horticulture produce. In spite of the difficult terrain and inadequate infrastructure, there has been significant improvement in growth of horticulture sector in this region, in terms of increased area, production and productivity of identified horticultural crops. The cultivation of fruits such as banana, pineapple, khasi mandarin, kiwi, passion fruits in clusters have helped in improving the socio-economic conditions of many small and marginal farmers in all the North Eastern States, especially in States like Tripura, Mizoram, Nagaland, Arunachal Pradesh, Meghalaya and Assam. The upgradation of skills of farmers towards adoption of improved production system including introduction of high yielding varieties, adoption of high density planting, canopy management, protected cultivation of high value vegetables and flowers, etc is one of the aspects, which need to be given a special thrust for sustainable farming.

I appreciate the efforts of Small Farmers' Agribusiness Consortium in bringing out this Annual Report 2010-11.

(Dr. Gorakh Singh)

Horticulture Commissioner



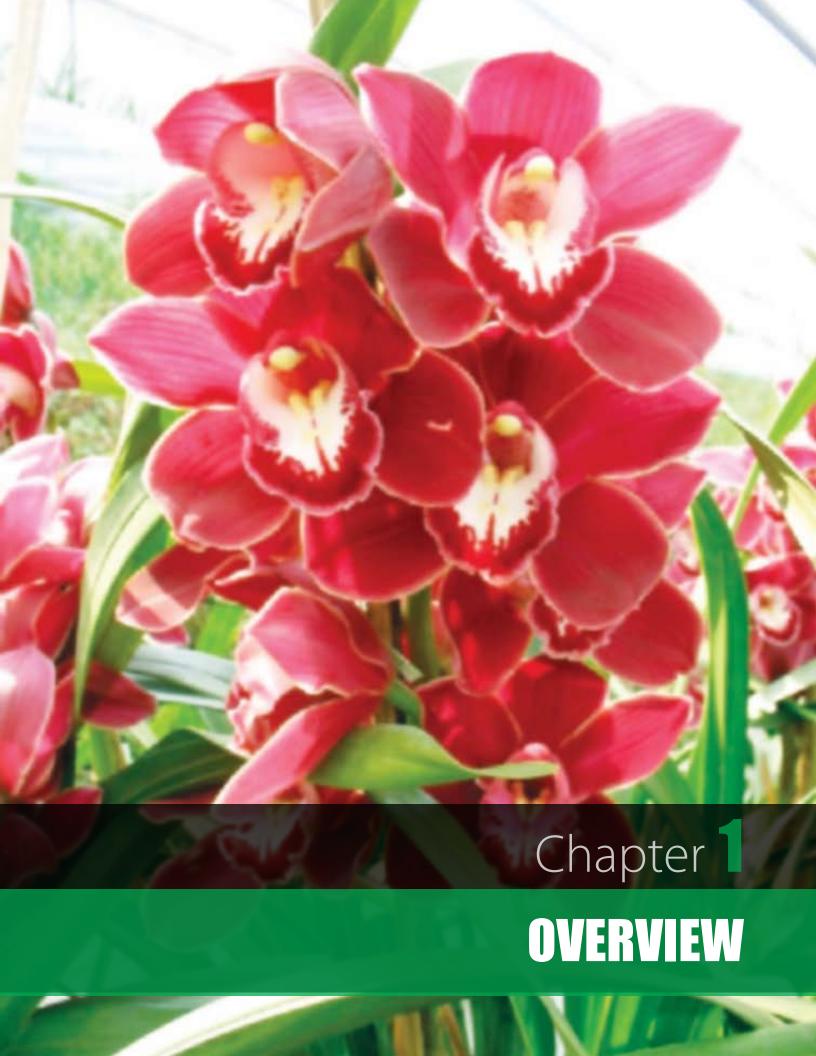
# **CONTENTS**

Chapters	
1. Overview	1
2. Implementation Procedure	5
3. Mini Mission - I: Research	9
4. Mini Mission - II: Production and Productivity	15
5. Mini Mission - III: PHM & Marketing	20
6. Mini Mission - IV: Processing	22
7. Few Success Stories	24
Annexures	
Annexure - I	34
Annexure - II	44
Annexure - III	54

58

Principal Secretary/Secretary (Horticulture) and Directors of States





### **OVERVIEW**

Centrally Sponsored Scheme on Technology Mission for Integrated Development of Horticulture in North East and Himalayan States has been renamed as Horticulture Mission for North East and Himalayan States (HMNEH) during 2010-11. The scheme is being implemented in a mission mode with an end-to-end approach which includes development and introduction of high yielding varieties and technologies, expansion of area, post harvest handling and management, marketing, value addition and processing of horticulture produce with following four Mini Missions, namely:

Mini Mission I - Research: Coordinated and implemented by Indian Council of Agricultural Research. This Mini Mission concentrates on technology generation appropriate to the region. Major components under MM-I are supply of basic seed and planting material, technology standardization, refinement, on farm demonstration and training.

Mini Mission II - Production and Productivity: Coordinated by Department of Agriculture & Cooperation and implemented by State Departments of Horticulture/Agriculture. This mini mission aims at increasing production and productivity of Horticulture crops by adoption of improved production Technologies.

Mini Mission III - Post-Harvest Management and Marketing: Coordinated by Department of Agriculture & Cooperation, implemented by Directorate of Marketing & Inspection and National Horticulture Board. This Mini Mission aims for efficient post-harvest management, techniques, which include development of cold storage facilities, efficient transport and marketing facilities.

Mini Mission IV - Processing: Coordinated and implemented by Ministry of Food Processing Industries, Government of India. This Mini Mission aims at promoting processing industry for value addition to Horticultural produce by promoting new processing units and up gradation of existing units.

#### **Physical Achievement**

The implementation of the mission since inception of the scheme up to 2010-11 has helped in bringing in an additional area of 566510 ha under various horticulture crops in the states. Of this fruits contributed 313896 ha, vegetables 116125 ha, spices including saffron 82484 ha, plantation crops 14111 ha, medicinal 6464 ha, aromatic plants 10412 ha, flowers 33649 ha, root & tubers crops 1319 ha. In addition, 50097 ha of senile and unproductive orchards have been rejuvenated to increase productivity. Major infrastructure which has come up under the mission includes 490 nurseries, 11265 community tanks and 16879 tube wells. Drip irrigation has been extended to 16656 ha, 27 model floriculture centers and 48 herbal gardens have been established. Besides this, 24 tissue culture units and 33 disease forecasting unit have also been setup. Mission gave special thrust to high value crops like tomato capsicum, strawberry and flowers to ensure production of quality produce. So far 103118 agricultural equipments have been distributed under the mission. For proper handling and marketing of horticulture produce, 48 whole-sale markets, 376 rural primary/apni mandis, 18 state Grading laboratories and 81 processing units have been established.

During the period under report, an additional area of 51162 ha has been brought under different horticultural crops. Of this, fruits contributed 27830 ha, vegetables 11923 ha, spices 7999 ha, aromatic plants 229 ha, flowers 3181 ha, etc. In addition, 6505 ha of senile and unproductive orchards have been rejuvenated for further higher production. Besides, infrastructure facilities such as 110 model nurseries, 14 community tanks, 1966 tube wells, 706500 sq m of greenhouses, 1 wholesale market, 32 rural primary markets/apni mandies and 16 processing units have been established. Under Human Resource Development activity 100512 farmers/officers including woman farmers have been trained on various aspects of horticulture.

#### **Financial Achievement**

Durnig the years 2001-02 to 2010-2011, an amount of ₹2264.31 crores has been released under the Mission, of which ₹1640.74 crores for NE States and ₹623.57 crores for Himalayan States.

During the year 2010-2011, an amount of ₹400 crore was earmarked and an amount of ₹399.98 crore was released under the mission, out of which ₹269.99 crore has been released to North Eastern States and ₹129.99 crore to Jammu & Kashmir, Himachal Pradesh and Uttrakhand.

# Important Initiatives Taken by Various State Governments under HMNEH during 2010-11

Concept of vegetable villages in Nagaland has been initiated in most systematic and controlled way. Average income from vegetable cultivation in these villages ranges from ₹25 to 50 lakh. More than 50% of the population of these

- villages is involved in vegetable cultivation out of which 45% are supporting the education of their children from this income.
- Cymbidium Development Centre in Sikkim has been established for varietal screening, technology up-gradation and training & skill development of farmers for improved cultivation of this orchid.
- Model Floriculture Centers in Meghalaya has proven to be of great assistance to the farmers for integrated post harvest management of their crop.
- Establishment of 13 frozen pea processing units in Uttarakhand has brought a huge adjoining area under pea cultivation. The processing unit requires approximately 70,000 mt of green pea per year and after value addition it is exported to many countries.
- Canopy management in newly establish orchards (12282 ha) and rejuvenation of senile orchards (5255 ha) has been taken up extensively to maintain tree height and canopy shape for enhancing productivity profitability and sustainability.

# Physical Progress under Horticulture Mission for North East and Himalayan States (HMNEH) – 2010-11

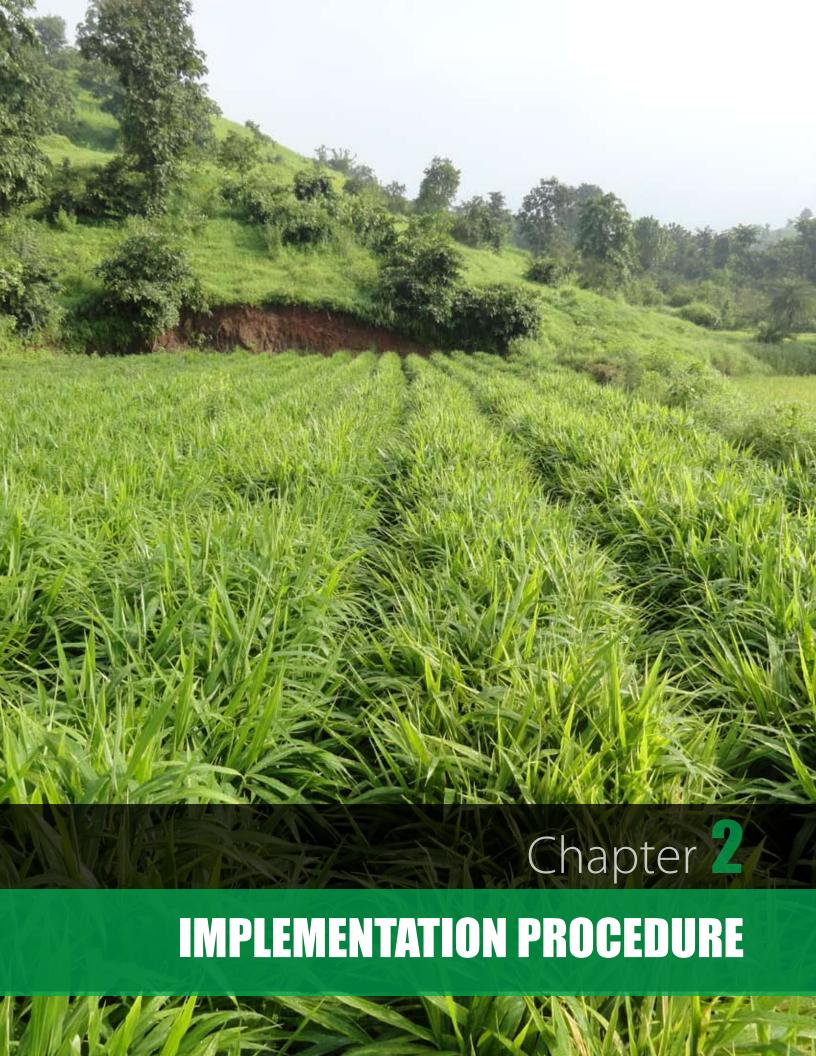
#### A. Production and Productivity

		Mini Mission - II														
States	Ехра	ea nsion a)		enation ia)	Nurser	y (No.)	water :	tion of sources lo.)		House m.)	compo	rmi ost unit o.)	Farr inclu	ing of ners iding n (No.)	Mecha	culture inization lo.)
	Tar.	Ach.	Tar.	Ach.	Tar.	Ach.	Tar.	Ach.	Tar.	Ach.	Tar.	Ach.	Tar.	Ach.	Tar.	Ach.
Arunachal Pradesh	4831	4329	1140	1000	10	10	46	46	52800	50800	40	40	29237	29191	-	-
Assam	8400	7938	1000	600	-	-	52	40	4800	2000	206	167	1300	-	53	42
Manipur	5271	5150	650	650	2	2	58	128	66700	99600	746	847	7789	7367	287	287
Meghalaya	4484	3972			32	32	-	-	91000	79700	-	-	1400	1400	-	-
Mizoram	4090	4090	880	880	4	4	301	301	70000	70000	40	40	23806	19801	200	200
Nagaland	6861	6861	700	700	9	9	450	450	75000	75000	100	100	13305	13305	403	403
Sikkim	4345	3590	500	400	4	2	6	4	92700	87000	-	-	10280	8141	1	1
Tripura	5341	5277	695	675	38	38	164	164	23430	0	504	504	4430	4430	200	90
Total NER	43623	41207	5565	4905	99	97	1077	1133	476430	464100	1636	1698	91547	83635	1144	1023
J&K	4763	5069	1600	1600	14	14	141	389	113500	113500	75	75	9325	9323	934	934
Himachal Pradesh	3476	1360	-	-	7	1	138	130	188427	53000	872	714	24200	2972	866	836
Uttarakhand	3537	3526	-	-	3	-	385	328	152000	73900	500	500	3972	3902	29	28
Total HS	11776	9955	1600	1600	24	15	664	847	453927	240400	1447	1289	37497	16197	1829	1798
Total NER + HS	55399	51162	7165	6505	123	112	1741	1980	930357	704500	3083	2987	129044	99832	2973	2821

Tar: Target Ach: Achievement

#### B. Market and Processing Units

State	Mini Mission - III (markets)		Mini Mission - IV	(processing units)
	Tar.	Ach.	Tar.	Ach.
Arunachal Pradesh	PB	-	PB	2
Assam	PB	-	PB	1
Manipur	PB	3	PB	1
Meghalaya	PB	-	PB	-
Mizoram	PB	-	PB	-
Nagaland	PB	29	PB	-
Sikkim	PB	-	PB	-
Tripura	PB	-	PB	-
NER	PB	32	PB	4
J&K	PB	-	PB	2
Himachal Pradesh	PB	-	PB	3
Uttarakhand	PB	1	PB	7
HS	PB	1	PB	12
Total NER + HS	PB	33	PB	16



### **IMPLEMENTATION PROCEDURE**

#### **Approval of Programmes**

The project proposals related to research should be submitted to DG (ICAR) through concerned Nodal Officers of Mini Mission - I for approval.

State will prepare yearly work plan/action plan or Annual Action Plan (AAP) within the parameters of the Mission and submit the same to the Horticulture Mission Cell at Department of Agriculture & Cooperation. The AAP should be accompanied with project report of each district and it should reflect consolidated approach at state level. The work plan/action plan should have assessment of export potential and detail quantification of all inputs and outputs. AAP needs to be supported with data/ write up on outcome of past interventions covering the details of area expansion (variety introduced, increase in productivity achieved and number of clusters created), water resource development as per felt need of the State (amount of irrigation potential created, whether linked with micro irrigation, maintenance, etc.), INM/IPM (including infrastructure created and how these are being utilized for benefit of the farmers) and organic farming. Area expansion should be determined based on the availability of quality seed and planting material.

Proposals on marketing should be submitted in prescribed format to DMI, Ministry of Agriculture, Government of India through SFAC and the proposals on Post Harvest Management should be submitted directly to NHB in a similar prescribed format. The proposals appraised by DMI/NHB will be submitted to DAC for approval by the Central Subcommittee of MM-III (post harvest management and marketing). Horticulture Mission Cell will examine the proposal further for directing SFAC/NHB to release the funds.

Proposals on processing should be submitted to MFPI through concerned State Implementing Agency.

#### **Fund Flow Mechanism**

The funds for Mini Missions-II, III and IV (except to designated agencies like NHB, NBB for capacity building in Agriculture/ Horticulture, etc.) will be routed through SFAC for further release to respective State Level SFAC of the States concerned. Funds of Mini Mission - I will be directly released to Nodal Officers (Mini Mission - I) of ICAR institutes.

The DAC would release funds to Central SFAC, NHB and ICAR based on approved Annual Action Plans. Central SFAC would further release these funds to State level SFACs/ Director (Hort./Agri.) of respective States immediately within 15 days of receipt of the funds from DAC as per physical and financial targets approved. On the directions of Secretary (Hort./Agri.)/ Director (Hort.)/Nodal Officer of the State for implementing Horticulture Mission, the State level SFAC/ Director (Hort./Agri.) would release funds to District Hort./Agri. Officer. The District Hort./Agri. Officer would further release funds, as far as possible through cheques, to beneficiaries identified in the district on the basis of approved work plan (based on district project report). Even in case of big projects, as far as possible, funds will be routed through District Hort./Agri. Officer, to facilitate post disbursement inspection. The District Hort./Agri. Officer would facilitate beneficiaries in procurement of planting material, organic manures, equipments, etc.

#### **Monitoring Mechanism**

At National Level the implementation of all the four Mini Missions are being regularly reviewed and monitored by a Central Steering Committee headed by Secretary (A&C). In addition the Mini Mission wise programmes are being reviewed and monitored by concerned Steering Committees headed by DG (ICAR) for MM-I, Additional Secretary (DAC) for Mini Mission - II and III and Secretary (MFPI) for Mini Mission - IV.

At State level, the programmes are being reviewed and monitored by State Level Steering Committee headed by Chief Secretary of concerned States.

#### National Agencies Involved in Implementation of the Scheme

### A. Indian Council of Agricultural Research (ICAR)

All the research project proposals including production of nucleus seed and planting material, Human Resource Development are being taken up by ICAR through its concerned Nodal Officers.

# B. Small Farmers' Agri-Business Consortium (SFAC), New Delhi

- SFAC will interact with State Governments/State agencies to obtain their views on the programmes of the Mission and it may suggest modifications in policies or scheme parameters for consideration of DAC.
- ii. SFAC will obtain quarterly progress reports from State level agencies, consolidate them and send to Horticulture Mission Cell at DAC. SFAC will obtain utilization certificates from concerned agencies and forward them to the Horticulture Mission Cell at Department of Agriculture & Cooperation. SFAC will also give statements on utilization of funds regularly and audited certificates at the close of each financial year in GFR-19.
- iii. SFAC will ensure ground level monitoring of the scheme and record their observations in quarterly progress reports sent to Horticulture Mission Cell.
- iv. Each State will prepare an annual report giving details of the programmes implemented under the Mission and benefits accrued to the State and provide it to Horticulture Mission Cell with the list

of beneficiaries along with their names, addresses and details of funds provided to them and for the purpose. The Central SFAC within 3 months of close of the year after collection of the annual reports from the respective states would compile a consolidated report mentioning the performance of the scheme and its role as an implementing agency. The consolidated annual report would be made available to the Horticulture Mission Cell in DAC within the stipulated period of 3 months after close of the financial year.

- v. In addition to its role of monitoring and sending quarterly progress report to Horticulture Mission Cell, DAC, SFAC will also act directly as an implementing agency for any component of the Mission programme on request of DAC.
- vi. The funds for Mini Mission II and III (except to designated agencies like NHB) will be routed through SFAC for further release to concerned agency/State level SFAC of the respective states. The SFAC will be paid service charges @ 0.5% of the funds routed through it.
- vii. Under Mini Mission III, Director Horticulture of the State, would prepare projects which after the approval of State Level Steering Committee would be appraised by NHB/DMI/SFAC on the basis of suitability of locations and economic viability.
- viii. Projects proposals under Mini Mission IV would be sent by the respective State Governments to the MFPI with a copy to DAC. The MFPI's Project Approval Committee would approve the proposal and would recommend it for funding through SFAC.

#### C. National Horticulture Board (NHB), Gurgaon

All the project proposals relating to Post Harvest Management (except those relating to marketing infrastructure) will be received in the prescribed format (Annexure-II) by the NHB from the State Governments. It would appraise these proposals and advice the DAC accordingly.

#### D. Directorate of Marketing & Inspection (DMI), New Delhi

DMI would be responsible for appraisal of all the proposals regarding setting up of marketing infrastructure for horticulture produce received from the respective State Governments in the prescribed format and would advice the DAC. In addition to this it would also provide market intelligence and be responsible for monitoring of all programmes relating to marketing of horticulture crops.

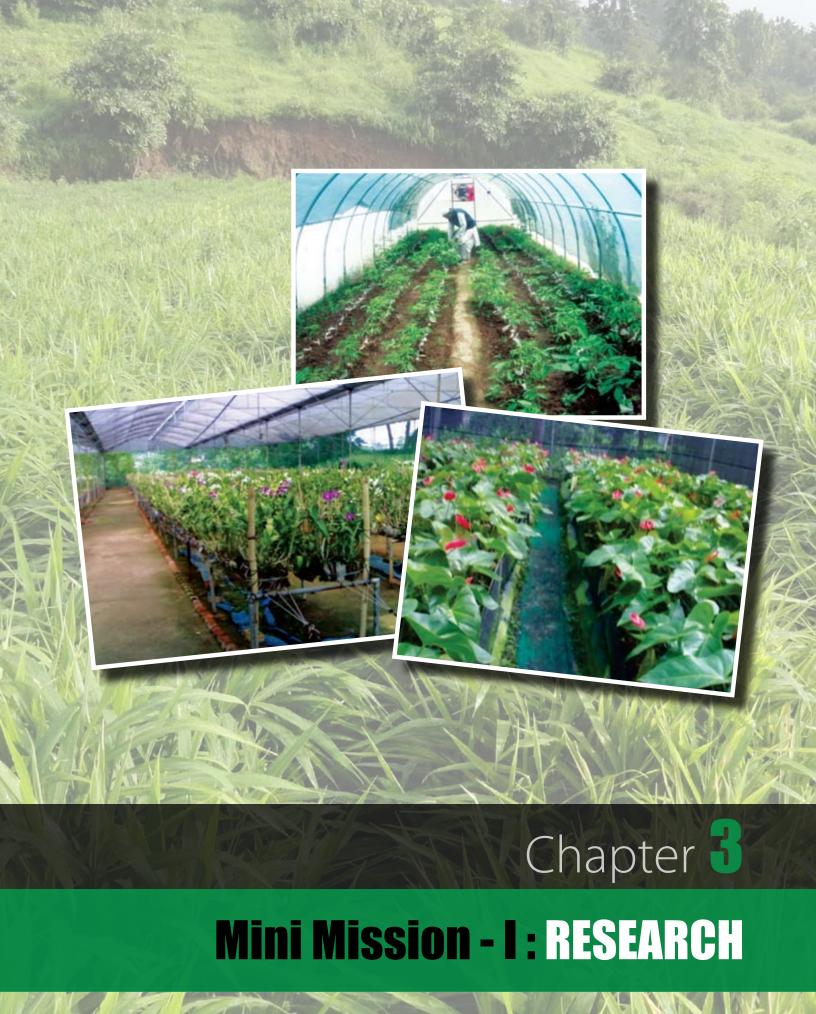
#### E. Ministry of Food Processing Industries (MFPI)

All the project proposals relating to processing will be received by MFPI through concerned State

Implementing Agencies. MFPI's Project Approval Committee would approve proposals for funding under HMNEH.

#### F. Other Ministries

Departments associated in implementation of various programmes under HMNEH are Ministry of Panchayat Raj, Department for Development of North Eastern Region (DONER), APEDA, NCDC, NBB, etc.



### **Mini Mission - I: RESEARCH**

# Progress of Implementation of Programmes during 2010-11

The Mini Mission wise progress of implementation of programmes under HMNEH during 2010-11 are as under:

#### Mini Mission - I (Research)

This mission concentrates on technology generation appropriate to the region. The major components are production and supply of seed and planting material, technology, standardization and refinement specific to the region and on farm demonstration and training. The programmes are being under taken by ICAR Nodal Institutes' namely, i) NRC for Orchids, Sikkim covering all the North Eastern States, ii) CPRI, Shimla for Himachal Pradesh, iii) Vivekananda Parvatiya Krishi Anusandhan Sansathan, Almora for Uttarakhand, and iv) Central Institute of Temperate Horticulture for Jammu & Kashmir. The Institute wise progress of achievements made during 2010-11 are given as under:

# 1. National Research Centre for Orchids, Sikkim

## i. Production of nucleus/basic seeds and planting material

The details of seed and planting material produced and distributed to different State Governments in the region are as under:

#### a. Fruits

Crop	Planting Material	Nos
Banana	Sucker/Tissue cultured	58150/131025
Guava	Layers/Budded	4650
Pineapple	Suckers	149020
Mango	Grafts	5800
Kiwi	Cutting	1400
Passion fruit	Seedling/Cutting	81724
Peach	Grafted	6000
Strawberry	Runners	45200
Papaya	Seedling	2420

#### b. Vegetables

Crop	Planting Material	Kg
Brinjal	Seed	10
Chilli	Seed	5
Cucumber	Seed	9
French beans	Seed	188.50
Okra	Seed	38
Tomato	Seed	5.50
Colo Cassia	Seed	200
Sweet potato	Cutting (nos)	15002
Pea	Seed	275
Mushroom	Spawn	8000
Potato	Mini tubers/Micro plants (nos)	51660

#### c. Flowers

Crop	Planting Material
Marigold	2
Gerbera	102900
Carnation	13000 plants
Chrysanthemum	55900
Orchids (Cymbidiums)	20979
Gladiolus (corms)	32604
Tuberose (bulbs)	439404

#### d. Spices/Medicinal and Aromatic Plants

Crops	Planting Material (No.)
Arecanut (seedlings)	19200
Black pepper (cuttings)	91605
Black pepper (plantlets)	91420
Cashew nut (grafted plant)	3755
Coconut	16100
Ginger (rhizome)	40q
Large Cardamom (sucker)	17420
Lemon grass (slips)	110050
Patchouli (cuttings)	60000
Turmeric (rhizome)	37q
Vetiver (slips)	27210

# ii. Standardization and refinement of production and protection technology

- 1. Standardization of curd and Seed Production of early Cauliflower:
  - Two early cauliflower variety Pusa Meghana and Pusa early Synthetic were grown and average curd weight was recorded as 350.0 gm and 300.0 gm respectively.
  - Later on same varieties were transplanted in the month of August were found suitable for seed production. The stalks were re-transplanted in the month of November (curd to seed method).
  - the seeds were ready for harvesting in the month of March and just before early monsoon.
- 2. In Khasi mandarin, peels were used for developing different value added products viz., peel oil, peel colour and peel candy, etc.
- 3. The banana cv. Giant Cavendish was planted at three densities (3.0 x 3.0 m, 2.5 x 2.5 m and 2.0 x 2.0 m) to examine the effects of plant population on growth and yield of banana.
- 4. Seeds from the ripen Sohshang fruits were removed manually with stainless steel knife. The fruit pieces along with 15% sugar were crushed with the help of laboratory grinder cum mixer to obtain uniform pulp. This pulp were uniformly spread at 5-6 mm thickness on polypropylene sheet (200 gauges) in aluminium tray and placed inside the tray drier at 600C+20C for 8 hours. Dried pulp was removed from the polypropylene sheet on aluminium tray and grinded into fine mesh of 50-60 size to obtain Sohshang fruits powder for preparation of value added products, fruits jam. (Barapani centre).
- In Strawberry (Fragaria X ananassa Duch) cv. 'Chandler', field study was done with three irrigation level viz., 11 (1.0 IW/CPE ratio), 12 (0.8 IS/CPE ratio) and 13 (0.6 IW/CPE ratio) along with different mulch materials viz., black polythene (BPM; 40 m), transparent polyethene

- (TPM; 5um), paddy straw (PSM; 4 t/ha) and pine (PM; 4 t/ha). Il favoured plant growth and enhanced flowering (67.5 days) which resulted in production of significantly larger fruit and higher yield (175.15 g/plant) with higher root numbers, fruit having higher TSS, and ascorbic acid content with lesser incidence of albinism (17.9%) and botrytis rot than other irrigation levels. Plants mulched with BPM have significantly better growth, flowered and fruited early, produced larger fruit and higher yield, with slightly higher incidence of albinism (19.8%), but with lower incidence of botrytis rot (14.9%) than those mulched other materials. (Arunachal Pradesh centre).
- 6. While studying the effect of boron and molybdenum on growth and yield of cauliflower F1 hybrid 'Sobha-158', the results shows that the maximum gross plant weight (1.272 kg) and curd weight (0.637 kg) was found in the treatment combination of 20 kg borax and 2 kg ammonium molybdate (T-I) over other treatment combinations (Mizoram centre).
- In ginger, field experiment was done with six treatments viz., T1: Vermi compost (VC; 2.5 t/ha), T2: Poultry manure (PM: 1.25 t/ha), T3: Swine manure (SM: 3.0 t/ha), T4: Cowdung manure (CDM; 10.0 t/ha), T5: Farm Yard Manure (FYM: 10.0 t/ha) and T6: control to study the effect of applied organic nutrients on growth and yield attributes of ginger. The physical parameters like porosity, maximum water holding capacity (MWHC), field capacity (FC), permanent wilting point (PWP), bulk density (BD) and moisture releasing pattern was measured better when the crop was supplied with FYM followed by CDM Chemical parameters like pH, Soil organic carbon (SOC), available N, P and K were recorded better on VC followed by PM over control. The gross and net return was recorded higher on VC followed by PM. Whereas, B: C ratio was recorded higher on PM followed by CDM. However the lowest economic returns were recorded on control, (Arunachal Pradesh centre).

- Vermi compost @ 25 t/ha were found to be better than 5 t/ha, 10 t/ha, 15 t/ha and 30 t/ha in increasing the number of leaves per plant, early flowering, number of flowers/plant, maximum stalk length, maximum size of flower & vase life of Gerbera, (AAU, Jorhat).
- 9. While evaluating the organic fertilizer as a source of nutrient for Cymbidium, maximum plant height (51.47 cm), no. of leaves (40.55) and no. of pseudo bulbs (3.33) was recorded from the plants treated with Bone meal. Number of back bulb (1.48) and pseudo bulb girth (2,27 cm) was found highest in EM compost treated plants, However, maximum no. of shoots (3.33) was found in Phospho compost and rural compost enriched with Biophos. (NRC), Pakyong).
- 10. Seven genotypes of gerbera were evaluated under polyhouse conditions, RCGH-65 produced maximum number of flower per plant (3.22) and vase life (5.33 days), maximum stalk diameter (4.41 mm) and longest stalk (49.68 cm) was recorded in RCGH-226. The maximum flower diameter (10.63 cm) was recorded in RCGH-114, whereas RCGH-114 recorded maximum flower disc diameter (3.36 cm). Maximum plant spread (43.67 cm) was recorded in RCGH-22, Earliest bud bursting (52.00 days after planting) was recorded in RCGH-22. (Barapani centre).
- 11. Black polythene mulch (50 micron) was found to be better than paddy straw, dried leaves, water hyacinth, wood shaving and dried banana leaves in improving the growth characteristics, cut flower and bulb production of tuberose. Mulching with dried leaves resulted in improvement of spike length, rachis length, self life and vase life of spike, (AAU, Jorhat).

#### iii. Trainings/Demonstrations

Activity	No. of training	No. of beneficiaries
Training	185	138
Demonstration	262	199

# 2. Central Potato Research Institute (CPRI), Shimla, Himachal Pradesh

### i. Production of nucleus/basic seeds and planting material

The details of seed and planting material produced and distributed to State Government are as under:

#### a. Fruit

Crops	Targets	Achievements
Temperate fruits (no.)	9,83,250	9,43,698
Subtropical fruits (no.)	1,58,900	2,31,301

#### b. Vegetables

Crop	Targets	Achievements
Seed (kg)	5,130	1,804.15
Mushroom spawn (kg)	1,800	5,300
Potato tubers (no.)	4,57,000	5,33,844

#### c. Flower/Ornamental Plants

Crops	Targets	Achievements
Bulbous plants/annuals/rooted cuttings (no.)	3,63,300	1,84,004
Corms/bulbs/seed (no.)	71,500	52,450
Seed (kg)	21.5	7.535

## ii. Standardization and refinement of production and protection technology

- 1. An integrated management strategy against core rot disease in apple fruits was developed from ten different schedules evaluated at eight different locations. Results obtained indicated that a schedule consisting of three sprays starting with walnut leaf extract (10%) + carbendazim (0.04%) at pink bud stage followed by Diphenoconazole (0.015%) and hexaconazole (0.04%) + Aonla fruit extract (10%) at petal fall to fruit set and pea to marble walnut stage, respectively was most effective (93.6%) and economic (1:8.21).
- Five modules were tested for management of spider mite (*Tetranychus urticae*) at farmer's polyhouse. Module V comprising of three sprays of profenofos

was most effective and Module III comprising of three releases of predatory mites were found at par to the Module V.

- 3. The effect of subculturing of pomegranate *in vitro* mass propagation revealed that maximum number of micro-shoots per plants was found in the fourth subculturing. *In vitro* rooting of micro.
- 4. shoots was observed to be maximum in ½ MS medium supplemented with 500 mg/l activated charcoal. The maximum rooting was 70.33% in the fifth subculture.
- 5. The effective treatments against *Pythium* under laboratory conditions were applied in fields which revealed that amongst all the treatments, periodic drenching with Pyraclostrobin+Metiram @0.2% (Cabriotop) proved most effective in controlling the disease. Among non-chemicals, the soil applications of Trichoderma & seed treatment with agave @10% were most promising.
- 6. Twenty two new projects have been implemented on Standardization/Refinement of technology.

#### iii. Trainings/Demonstrations

Activity No. of training		No. of beneficiaries
Training	53	0500
Demonstration	108	2583

# 3. Central Institute of Temperate Horticulture (CITH), Srinagar, J&K

# i. Production of nucleus/basic seed and planting material

The details of seed and planting material produced and distributed to State Government are as under:

#### a. Fruit

Crop	Target	Achievement
Temperate fruits	2.00	2.09
Subtropical Fruits	0.50	0.72
Budwood	3.50	4.00
Budwood/rootstock bank (no.)	2.00	2.00

#### b. Vegetable

Crop	Target	Achievement
Vegetable Seeds (kg)	600	811
Vegetable seedlings (lakh)	3.50	4.15
Potato (kg)	5000	900
Corms/bulbs (Lakh)	1.70	1.77
Mushroom spawn (bottle)	4000	9000

### ii. Standardization and refinement of production and protection technology

**Walnut:** propagation under low cost poly house, biological control of white grab, IPM module for control of insect.

**Apple:** Drip irrigation, integrated farming system, biological control of white grab, Management of scab and *Alternaria*.

**Almond:** Rejuvenation technology for old and senile orchards, water harvesting technique and moisture conservation. IPM module for control of mealy bugs.

**Cherry:** Protocol for production of disease free clonal rootstocks under in-vitro conditions.

Aonla: Drip irrigation and fertigation.

**Mango**: Rejuvenation of old mango orchards and drip irrigation.

**Saffron**: IM of corm rot, micro propagation in saffron and production of SLS/stigma.

**Vegetables:** Drip irrigation and fertigation, protected cultivation, IM of soil borne pathogens and wilts, IPM, trench cultivation of leafy vegetables.

**Kala zeera**: IM of tuber rot, improved agro-techniques and nursery tuber production.

**Gerbera**: Protocol for micro-propagation of gerbera through apical buds was standardized and is being refined fro wider adaptation.

**Daffodils**: Four elite varieties from exotic and indigenous collections have been isolated and are being further multiplied for their commercialization.

#### iii. Trainings/Demonstrations

Activity	No. of training	No. of beneficiaries
Training	134	7455
Demonstration	170	7655

#### 4. Vivekananda Parvatiya Krishi Anusandhan Sansathan (VPKAS), Almora, Uttarakhand

# i. Production of nucleus/basic seed and planting material

The details of seed and planting material produced and distributed to State Government are as under:

Crop	Target	Achievement
Fruits	2,52,000	2,86,491
Vegetables	29,036.5 kg	35,231.176 kg
Flowers	35,000 plants and 250 kg seed	38,500 plants and 260 kg seed

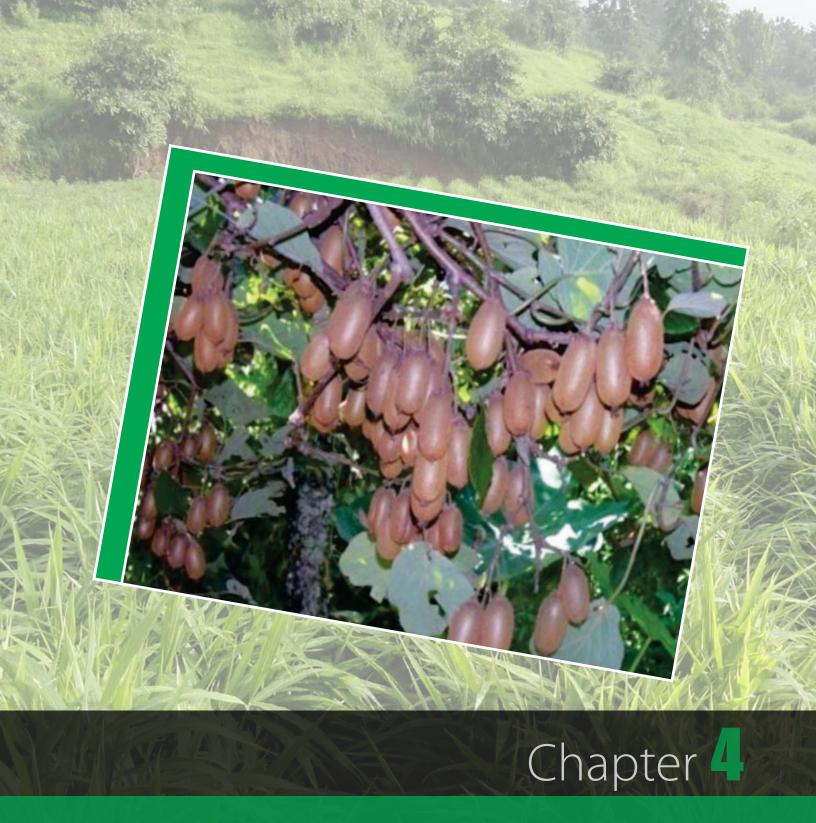
# ii. Standardization and refinement of production and protection technology

Standardization and refinement of production and protection technologies, the following technologies were standardized and refined:

- Protection Cultivation
- Rejuvenation of Senile Apple Orchards
- Management of Scarabaeids in Uttarakhand hills
- Mushroom Cultivation
- Integrated Crop Management
- Dissemination of Poly-tunnel Technology

#### iii. Trainings/Demonstrations

Activity	No. of training	No. of beneficiaries
Training	48	2078
Demonstration	1390	2076



# Mini Mission - II : PRODUCTION AND PRODUCTIVITY

# Mini Mission - II: PRODUCTION AND PRODUCTIVITY

The component wise progress of achievements under Mini Mission - Il are as under:

**Area Expansion**: The Implementation of the Mission has helped in bringing an additional area of 51162 ha

under various Horticulture Crops in North East and Himalayan States.

Fruits, Vegetables, Flowers, Spices, Aromatic and Medicinal Crops

Area (ha)

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Sl. No.	State	Fruits	Vegetables	Flowers	Spices	Aromatic
1	Arunachal Pradesh	2890	264	185	911	79
2	Assam	5200	500	-	2238	-
3	Manipur	2860	1505	505	280	-
4	Meghalaya	1910	1353	281	428	-
5	Mizoram	1425	2270	275	100	20
6	Nagaland	3278	1313	870	1300	100
7	Sikkim	1093	775	470	1252	-
8	Tripura	1394	2920	221	742	-
9	Himachal Pradesh	1038	188	44	90	-
10	Jammu & Kashmir	4396	324	241	78	30
11	Uttarakhand	2346	511	89	580	-
	Total	27830	11923	3181	7999	229

**Rejuvenation:** An area of 6505 ha of senile orchards have been rejuvenated to increase production and productivity level.

SI. No.	State	Area (ha)
1	Arunachal Pradesh	1000
2	Assam	600
3	Manipur	650
4	Meghalaya	-
5	Mizoram	880
6	Nagaland	700
7	Sikkim	400
8	Tripura	675
9	Himachal Pradesh	-
10	Jammu & Kashmir	1600
11	Uttarakhand	-
	Total	6505

On Farm Water Management: On farm water management programmes are aimed at diversifying the horticulture sector, ensuring higher production vis-à-vis better returns to growers. An area of 1229 has been covered with polyethylene mulch film for soil moisture conservation.

SI. No.	States	Mulching (ha)
1	Assam	214
2	Mizoram	400
3	Nagaland	400
4	Himachal Pradesh	3
5	Jammu & Kashmir	130
6	Uttarakhand	296
	Total	1229

**Protected cultivation**: The mission gave special thrust to protected cultivation of high value crops. During the period under report, about 704500,

176795 and 53000 sqm. green houses, shade net and plastic tunnels structures have come in the region.

Sl. No.	States	Green house (sqm)	Shade net (sqm)	Anti Bird/Anti Hail Nets	Plastic tunnels (sqm)
1	Arunachal Pradesh	50800	-	-	-
2	Assam	2000	-	-	-
3	Manipur	99600	75300	-	-
4	Meghalaya	79700	25000	-	-
5	Mizoram	70000	15000	211400	
6	Nagaland	75000	20000	-	50000
7	Sikkim	87000	7000	-	-
8	Tripura	-	-	-	-
9	Himachal Pradesh	53000	2500	98000	1000
10	Jammu & Kashmir	113500	31000	10000	2000
11	Uttarakhand	73900	995	206	-
	Total	704500	176795	319606	53000

**Establishment of nursery:** Production of genuine and true to type planting material is one of the most important components of any development

scheme. As many as 110 (big/small) both in public (57) and private (53) sector have been set up.

SI. No.	State	Private (nos.)	Public (nos.)	Total
1	Arunachal Pradesh	2	8	10
2	Assam	-	-	-
3	Manipur	-	2	2
4	Meghalaya	13	17	30
5	Mizoram	-	4	4
6	Nagaland	5	4	9
7	Sikkim	-	2	2
8	Tripura	32	6	38
9	Himachal Pradesh	1	-	1
10	Jammu & Kashmir	-	14	14
11	Uttarakhand	-	-	-
	Total	53	57	110

**Creation of water source:** Creation of water source was given due importance in order to enhance production and productivity of horticulture crops.

During the period under Report 14 community tanks and 1966 Tube wells have been developed, as per the details given below.

Sl. No.	State	Community tank (nos)	Tube Well (nos)	Total
1	Arunachal Pradesh	-	46	46
2	Assam	-	40	40
3	Manipur	-	128	128
4	Meghalaya	-	0	-
5	Mizoram	1	300	301
6	Nagaland	-	450	450
7	Sikkim	4	-	4
8	Tripura	6	158	164
9	Himachal Pradesh	0	130	130
10	Jammu & Kashmir	3	386	389
11	Uttarakhand	-	328	328
	Total	14	1966	1980

**Organic Farming:** Considering the potentiality of the organic farming due importance is given to this sector. The mission has succeeded in bringing an area of 7617 ha under organic farming. To support such venture, 2987 vermi compost units have been established.

SI. No.	State	Organic farming (ha)	Vermi compost units (nos.)
1	Arunachal Pradesh	120	40
2	Assam	-	167
3	Manipur	-	847
4	Meghalaya	-	-
5	Mizoram	1400	40
6	Nagaland	1100	100
7	Sikkim	4000	-
8	Tripura	-	504
9	Himachal Pradesh	52	714
10	Jammu & Kashmir	435	75
11	Uttarakhand	510	500
	Total	7617	2987

Integrated Pest Management (IPM)/Integrated Nutrient Management (INM): The integrated pest management system has established its significance in horticulture crops for effective control of pest without disturbing the natural enemies like parasite & predator of pests and reducing the level of pesticides residues in the produce. An area of 23422 ha has been covered.

SI. No.	State	IPM (nos.)	INM (nos.)
1	Arunachal	1400	-
	Pradesh		
2	Assam	1494	-
3	Manipur	3921	-
4	Meghalaya	-	-
5	Mizoram	3965	-
6	Nagaland	9170	11000
7	Sikkim	1800	-
8	Tripura	1196	-
9	Himachal	50	-
	Pradesh		
10	Jammu &	-	-
	Kashmir		
11	Uttarakhand	426	-
	Total	23422	11000

Mechanization in Horticulture: The agriculture equipments are popularized to improve the efficiency of horticulture operations and help farmers in reducing their physical labour on the farms. As many as 2819 power operated machines, and 1 other tools/equipments have been distributed among the beneficiaries.

SI. No.	State	Power operated (nos.)	Other Tools (nos)
1	Arunachal Pradesh	-	-
2	Assam	42	-
3	Manipur	286	-
4	Meghalaya	-	-
5	Mizoram	200	-
6	Nagaland	403	-
7	Sikkim	-	1
8	Tripura	90	-
9	Himachal Pradesh	836	-
10	Jammu & Kashmir	934	-
11	Uttarakhand	28	-
	Total	2819	1

**Transfer of Technology**: Transfer of appropriate technology is the key factor in maximizing the horticulture/ agriculture production. Altogether, 92072 farmers, trainers and women have been trained.

SI. No.	State	Training to farmers/ trainers/women (nos.)
1	Arunachal Pradesh	29152
2	Assam	-
3	Manipur	7367
4	Meghalaya	1400
5	Mizoram	14800
6	Nagaland	13302
7	Sikkim	8141
8	Tripura	2760
9	Himachal Pradesh	4575
10	Jammu & Kashmir	6673
11	Uttarakhand	3902
	Total	92072

**Pollination support for Bee-Keeping**: In order to maximize horticulture/agriculture production, honey

bee is used as an important input. As many as 22286 bee colonies have been established in different state.

Sl. No.	State	Bee-colonies
1	Arunachal Pradesh	-
2	Assam	1017
3	Manipur	12000
4	Meghalaya	-
5	Mizoram	-
6	Nagaland	-
7	Sikkim	3000
8	Tripura	-
9	Himachal Pradesh	469
10	Jammu & Kashmir	3000
11	Uttarakhand	2800
	Total	22286

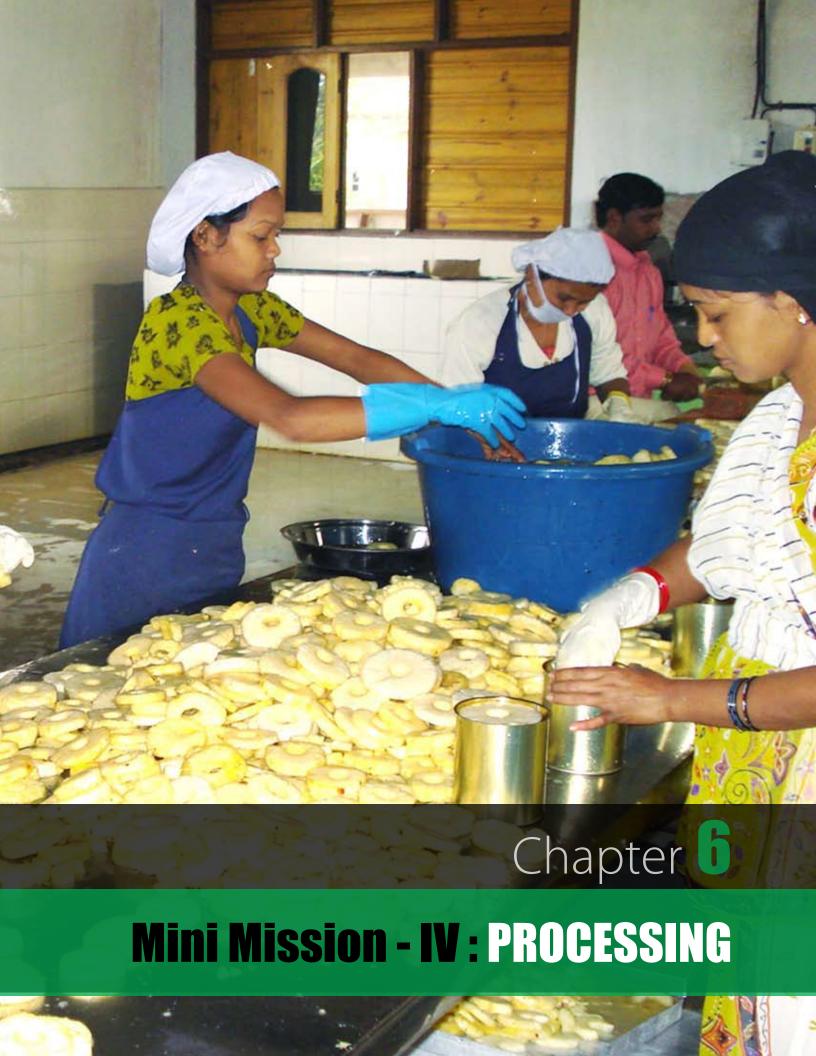


# Mini Mission - III: PHM & MARKETING

The details of PHM and market infrastructure created under Mini Mission - III are as under:

Market infrastructure (SFAC): The mini mission aims to create infrastructural facilities for the post harvest management, marketing and export. During the period under report 1 Wholesale Market, 28 Rural Primary Market and 4 April Mandies have been sanctioned.

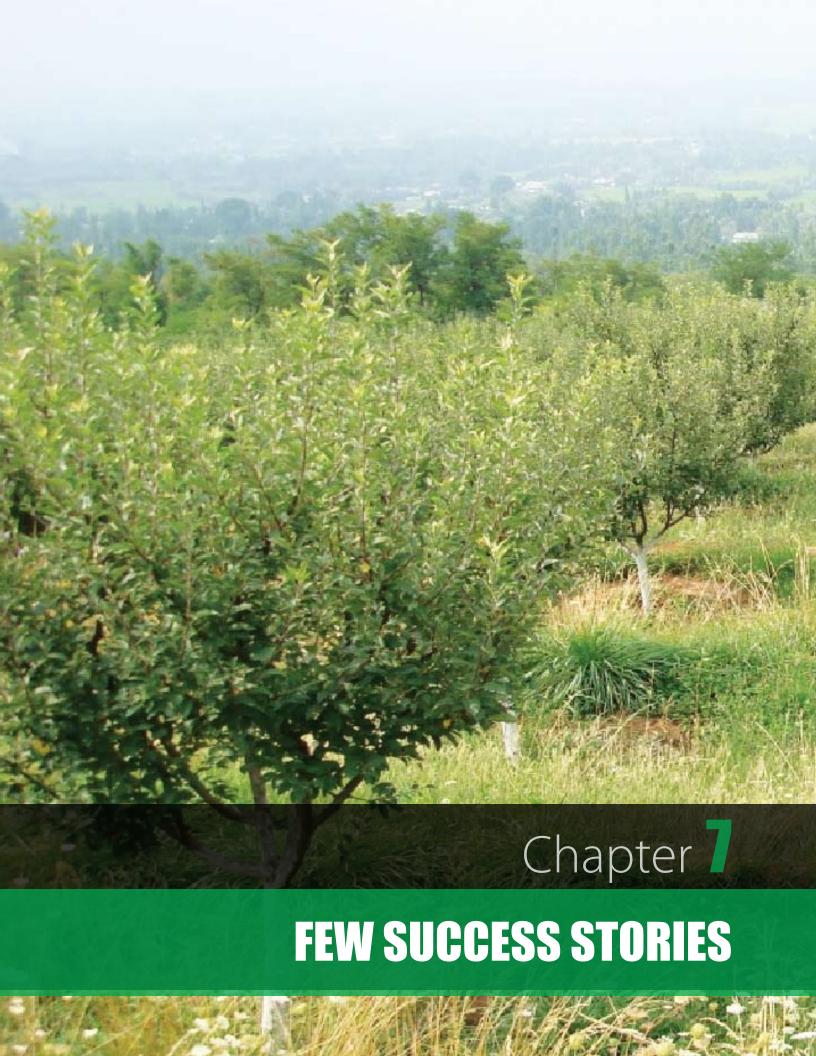
SI. No.	State	Rural Primary (Nos.)	Apni Mandi (Nos.)	Whole sale market (Nos.)
1	Arunachal Pradesh	-	-	-
2	Assam	-	-	-
3	Manipur	3	-	-
4	Meghalaya	-	-	-
5	Mizoram	-	-	-
6	Nagaland	25	4	-
7	Sikkim	-	-	-
8	Tripura	-	-	-
9	Himachal Pradesh	-	-	-
10	Jammu & Kashmir	-	-	-
11	Uttarakhand	-	-	1
	Total	28	4	1



# Mini Mission - IV : **PROCESSING**

The number of processing units established under Mini Mission - IV are as under:

SI. No.	State	Processing Units (nos)
1	Arunachal Pradesh	2
2	Assam	1
3	Manipur	1
4	Meghalaya	-
5	Mizoram	-
6	Nagaland	-
7	Sikkim	-
8	Tripura	-
9	Himachal Pradesh	3
10	Jammu & Kashmir	2
11	Uttarakhand	7
	Total	16



### **FEW SUCCESS STORIES**

#### A. Jammu & Kashmir

With implementation of Horticulture Mission in J&K, there has been a significant improvement in production and productivity which has ultimately resulted in changing the financial scenario of the farming community. Besides economic upliftment, Horticulture Mission has directly and indirectly contributed for social reforms. Few of the successful stories on adoption of production technologies in improving the economic status of farmers are given below:

#### Strawberry cultivation in Gousoo village – A healthy transformation

Under Horticulture Mission, a small area of 1/8th acre of land was brought under cultivation of strawberry in a village called Gousoo on the outskirts of Srinagar city. Assistance under Horticulture Mission was provided to the beneficiary namely, Shri Abdul Ahad Mir. With the continuous guidance of the department, the farmer emerged as a leading strawberry grower who earned National and State awards. Starting from a meager land of 1/8th acre of land, now the entire village and the adjacent villages have adopted cultivation of strawberry which has now touched around 40 acres of land in the vicinity. The annual income of the farmer per acre is about ₹ 5 lakh

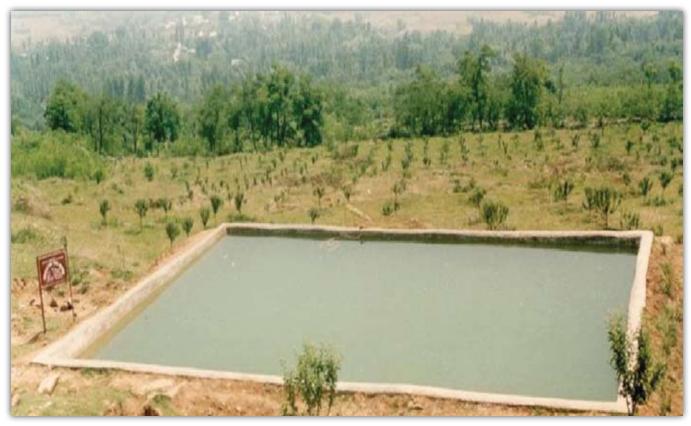
as compared to ₹ 20,000 to ₹ 25,000 prior to adoption of diversification. farmers in the vicinity have also started harvesting the benefits of diversification and as such it has contributed for the upliftment of the economy of the area. Gousoo is now called a strawberry village.

# 2. Canopy management for increasing the yield of apple trees – A good sign of technology adoption

The impact of awareness camps organized by Horticulture Department motivated some of the growers to adopt the scientific approach for canopy management in apple orchards. One of such farmers namely, Shri Ghulam Qadir Bhat R/o: Gund Sathoo Budgam adopted the canopy management as per guidance of the department. The impact of the canopy management has been significant. Prior to such management techniques there was hardly any fruit bearing in the orchard, but after adoption of canopy management techniques the orchard started bearing and presently the grower is earning about ₹ 8.00 lakh per hectare. This is likely to be get enhanced in future years, This technique has now been adopted by the entire village, which has resulted in financial gains to the farmers.







Water Storage Tank and newly established orchard

## 3. Creation of irrigation facility – A system of water harvesting/storage

Assured irrigation has helped in attaining 100% survival of plants at such locations where the normal survival rate is about 50%. One of the beneficiary namely, Gh. Mohi-u-Din Rather R/o: Chattehama, District Srinagar was provided assistance for creation of water storage tank. He planted apple plants in an area of about 2.5 hectares in such area which is rainfed and had no established orchard in the vicinity. Shri Rather assured irrigation to the plantation by using the stored water. The orchard has come up as one of the model orchards and has now started bearing fruit. This has created an impact in the vicinity and now many farmers are establishing orchards in the area. It has also helped in minimizing soil erosion, which has ultimately a great contribution for protecting the famous Dal Lake from sedimentation. The initiative of Shri Gh. Mohi-u-Din Rather is helping the department to popularize the concept of water harvesting/storage tanks. Shri Rather has started earning revenue from

such land which was not yielding any significant returns to him.

#### **B.** Meghalaya

# 1. A dream of a nursery man to create Model floriculture village

Shri. Abelson Marbaniang, popularly known as Bah Ion hails from a non-descript village in Mawreng under Mawphlang Community and Rural Development Block. He started his farming as an ordinary vegetable grower but gradually diversified to floriculture. Today, he is one of the most successful growers of flowers and fruit plants in the East Khasi Hills District.

This is his story.....Being a lover of flowers, he nursed an ambition of transforming his acres of prime agricultural land into a floral garden. Inspite of the idea being far fetched at that point in time, he



embarked on this journey of raising a flower nursery in the year 1987. Later on, Shri. Abelson approached the Department of Agriculture for assistance and technical guidance. It was in the year 1998 that the Department gave him different types of flower seeds and he raised them successfully in his nursery. The income generated from the sale of flower seedlings enabled him to construct a small polyhouse where he intended to multiply his plants as per modern package of practices.

This initial venture was a runaway success and this boosted his confidence to start growing exotic flower seeds, which the people of Shillong have never seen before. This venture also became very successful, the demand for his produce increased and he could command a premium from the customers.

Through the Horticulture Mission, Shri. Abelson received assistance from the Department of Agriculture in the form of Polyhouses, Shade Nets and Planting materials. His sincerity, dedication and hard work paid off when the Department assisted him with a modern pre-fabricated polyhouse for raising Carnations, Orchids, Gerberas and other flowers. He vigorously attended advanced level training programmes in Kolkata, Delhi, Sikkim and Darjeeling. These exposure trips broadened his outlook and his confidence level increased. He became more enterprising while his desire to acquire the latest know-how and technology also grew. He

began to take part regularly in the Autumn Flower Show arranged by the Shillong Agri-Horticulture Society and his exquisite potted Chrysanthemum bagged many prizes.

In the year 2003-04, the Department assisted him in establishing a private nursery for temperate fruits. He was trained by departmental officials on various techniques of grafting and root stock multiplication. He managed to raise a large quantity of planting materials within a year. It was very interesting to note that he had also developed a good marketing network, where he market his produce such as flower seedlings, potted plants, cut flowers and fruit trees saplings to vendors from Shillong and adjoining areas.

From his own resources, Shri. Abelson succeeded in erecting several polyhouses. He is not only also a person with creativity and innovation, but also a practitioner who does not mind sharing his skills with other fellow farmers desiring to erect such type of structures. He said "After seeing the workers who came to construct my modern polyhouse, I realized that I can also try making such type of structures on my own, so that other farmers can benefit". Presently, his nursery is generating a net income of ₹1.5 lakh rupees per annum from the sale of planting materials. He has also managed to buy a new plot of land to expand his business enterprise.

The Department frequently invites him to share his experiences and success story during various training programmes. Shri. Abelshon credited his success to the untiring efforts of the departmental officials who have motivated him right from the beginning to start this venture. He hoped that someday the State of Meghalaya will witness a revolution as far as development of horticulture is concerned. His dream is to make Mawreng a model floriculture village and to attract tourists similar to other flower growing States of India like

Jammu & Kashmir, Sikkim, Maharashtra, Karnataka etc.

# 2. Hard work and dedication led to success in floriculture

Shri. Morning War, 62 years of age, a Retd. Govt. Driver, hailing from a village Lawsohtun, which is about 5 kilometers from Shillong. He has a plot of land not less than 2 (two) hectares and his hobby is to grow flowers right from his childhood. He always concentrated mostly on Indigenous Orchids Collection and has good varieties of them. He along with his wife took keen interest in this field where they would spend more than 3 hours a day attending to their care. Being a "Lover of flowers" and as time passes by, after retiring from his service he was able to expand more and more area in his interest.

Apart from all these and because of his hard work and dedication he always took keen interest in approaching the Department every now and then for Technical Guidance and Incentives. Later, with the launching of Technology Mission Scheme in the State, Shri. Morning War has received assistance from the Department for cultivation of flowers. First of all, the Department has helped him by giving one roll Shade Net and 50 nos. of Cymbidium Hybrid. The second assistance he received is the Installation of Green House of (50 sq. mt) and 250 nos. of

Cymbidium Orchids. Because of his success in this field, the Department has also open ways where he was selected to attend two trainings outside the state; one in Sikkim for "Orchid Cultivation" and the other in Pune on "Green House Management" and cultivation of Rose/Carnation/Gerbera. The third assistance that he received from the Department is another Green House of 50 sq.mt along with the planting materials of Gerbera and Carnation. It was with the help and the assistance from the Technology Mission that he has been able to broaden his activities. With the proper technical guidance which he received he has been able to master and take care of his flowers. Later, the Department has rendered assistance to him by installation of Drip and Sprinkler Irrigation, Vermi-Compost Unit and Tube Well.

Seeing the potential of the floriculture trade in general and cut- flowers in particular, he has increased his cultivation by clinching more steps of expanding his green house by installation of a Hi-Tech Green House of 200 sq.mt along with the planting materials thus enlarging his flower nursery as a bigger set up and as a result more flowers were raised and sold to his valued customers and flower lovers. This has enhance his activities where he was able to market cut flowers without any difficulty, by earning more than ₹1 lakh from the sale of cut-flowers, annually.





The story of Shri. Morning War commendable success through the implementation of Technology Mission which is a clear example of the effectiveness of the scheme provided the farmers take keen interest and work hard in improving their livelihood, as Bah Morning War narrated and praised "The Department has helped in shaping my life and has paved the way to success".

#### 3. An inspiration to expand floriculture

There has been quite a revolution in floriculture in Sohryngkham, a village in the East Khasi Hills, district of Meghalaya. Shri Genister Warlarpih a resident of this village is one such example and his achievement is commendable. Shri Genister a local trader use to support his family with an earning of ₹ 4000 per month, being a person who loves flowers he also use to grow various seasonal flowers and since he possess entrepreneurial skills he was able to generate some income by selling potted flowers seasonally. Seeing the potentiality of floriculture business he was eager to improve his skills, he took the initiative to approach the department for technical guidance. He was advised to take up cut flower production and through the Technology Mission he was given assistance for constructing poly house for cultivation of gerbera in addition to various other inputs like vermi-compost unit, shade net, drip irrigation, etc.

Being a hard worker and with determination to improve his livelihood he got to work with full dedication. He is now able to garner an additional income of another ₹ 4000 monthly from the sale of his flowers, thereby increasing his total monthly income to ₹ 8000. This has given him inspiration to expand his floriculture business and now wants to diversify to rose cultivation, with a vision to pass on the business to his sons. He has become an example in his village and others are also inspired seeing his success.

# 4. Enhanced income from vegetable growing

Shri. Tapan Sangma, resident of Walbakre in the outskirt of Tura, West Garo Hills, was a labourer who supported his family with only his meager daily wage. During the year 2004,he was approached by the then District Horticulture Officer, Tura who offered assistance through Technology Mission on Horticulture Scheme to grow vegetable in his plot of land. Firstly, he started with cole crops viz. cabbage etc. Later he expanded to Legumes, Raddish, Brinjal, Ladies' finger and Tomato. His success in vegetable cultivation accompanied with high return of income encouraged him to expand more. Seeing his hard work and dedication, the office of the District Horticulture Officer, under the present DHO extended more support to him





Shri Genister Warlarpih in his floriculture unit

in terms of assistance Viz. Pumset, Powertiller, vermi-compost unit, low cost polyhouse, vegetable seeds etc.

#### Income generated from vegetables

SI. No.	Vegetable	Plant population (No.)	Return (₹)
1	Cabbage	18,000	₹ 22,000
2	Broccoli	5500	₹ 42.000
3	Cauliflower	3,500	₹ 40,000
4	Knol-khol	12000	₹15,000
5	Lettuce	5,000	₹ 5,000
6	Raddish	8,000	₹15,000



Shri.Tapan Sangma in his plot.



Tapan Sangma selling his produces

Cultivation of off-season vegetables such as cabbage, cauliflower, broccoli, tomato etc., under green houses is gaining momentum in Meghalaya state. A special effort has been made through the

HMNEH Scheme to expand more areas under vegetable cultivation both under open and green house conditions, so as to meet the ever increasing demand of vegetables in NER.









Vegetable production in Meghalaya

### 5. A blooming strawberry village in Meghalaya

Sohliya is a pretty village that nestles in the lush green hills of Ri-Bhoi district of Meghalaya. In less than a decade, its inhabitants have transformed their village from a sleepy, nondescript hamlet to a vibrant model of horticulture-led development, and the originator of Meghalaya's strawberry revolution.

Ten years ago, their energetic and effervescent headman, O. Lyngkhoi brought a few strawberry plants to the village. For a few years, small patches of strawberry cultivation brought a little extra income to the people.

From 2004 onwards, the Technology Mission on Horticulture – North East (TMH-NE), the North Eastern Council (NEC) and the support extended by the State Government's Centre of Excellence for Strawberries at nearby Dewlieh has enabled this to grow into a C2C Agri-Business initiative that is a commercially successful model for emulation, and a vehicle for the economic upliftment of the people. From small beginnings, Meghalaya has emerged as one of the largest producer of strawberries in the country.

Mr. Lyngkhoi, or Bah (Brother) Os as he is affectionately known has expanded his own cultivation from a few plants, to more than an acre of immaculately contoured strawberry cultivation; all of it with well laid and maintained drip irrigation. He has experimented with new forms of mulching, and brought the other farmers together into an

association that carries out post-harvest grading and marketing operations. The Ri-Bhoi Strawberry Growers Association (RBSGA) is now a market player and exporter and a force to contend with in the delicious world of strawberries.

Leading the way, of course, is Sohliya village. 66 of the 67 households grow strawberries. The village is an example of the benefits that can accrue to a community that works together on the cultivation of low volume high value crops, and of the catalytic impact and change that well implemented Government Schemes and a dedicated group of horticulture officers can bring about.

Sohliya village is now booming. Villagers proudly show off their new acquisitions - TV sets, pukka houses, two wheelers, and in some cases, even cars. Proud mothers point to their children, who have gone beyond the village school to higher studies in Shillong and elsewhere. Yushildap Nongbsap has built a new house, complete with shiny CGI sheets. Elberus Wanniang has a new brick house. Shrinly Lyngkhoi has cleared her debts, and looks forward to a new and bright future for herself and her family. Barihun Lyngkhoi has opened a tea stall-cum-grocery shop in the village. These stories are repeated in many villages across the district. Villages like Umktieh, Umran, Bhoirymbong, Umsaitsning, Khliehumtrew, Raitong, the list goes on. These successes have sparked off similar adoption of the crop in districts like East Khasi Hills, Jaintia Hills, West Khasi Hills and the Garo Hills with farmers in these districts jumping onto the strawberry bandwagon with East Khasi Hills leading the way by initiating a two hectare clustered cultivation of the crop in Mawpran village which has brought the village together in a spirit of solidarity.

On 30th January 2010, a Rural Business Hub (RBH) was inaugurated by Dr. Mukul Sangma,

Deputy Chief Minister in charge Horticulture, Meghalaya. The Hub is being setup through the auspices of the Indian Institute of Entrepreneurship (IIE), Guwahati, in coordination with the RBSGA for the benefit of strawberry farmers of the district. On the same day and occasion, the village Durbar of Sohliya in collaboration with a private agency, Nakliar Tours, also inaugurated a Horti-Eco Adventure Tourism project with strawberries as its USP and non motorized eco friendly adventure tourism sporting activities like mountain biking, trekking, paintball shooting and river rafting. The RBSGA is also doing its bit for Sohliya village by establishing, in 2009, the Pratlynti English Medium School in the village for nursery students to class VII.

In fact so confident are the Strawberry farmers of Ri Bhoi today that in 2010 the RBSGA has gone in for an outright crop loan of ₹ 91.5 lakhs to enable them to expand the cultivation of this "fruit of change".

Picturesque Meghalaya is now the land of strawberries and is the third largest producer of the fruit in the country with total dominance of the Eastern and North Eastern market.

#### Indeed, Sohliya village has shown the way!













# **ANNEXURE - I**

## Physical Progress Report for the year 2010-11 under

	Compone	ent	Unit	Arund Prad		Asso	am	Man	ipur	Megh	alaya	Mizo	ram	Nago	ıland	Sikl	cim
				Phys	ical	Phys	ical	Phys	ical	Phys	sical	Phys	ical	Phys	sical	Phys	ical
				Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach
P	roduction of Plant	ing Material	Nos.														
Α	Nurseries																
	Model/Big Nu	rsery (ha.)															
	Public			8	8					17	17	4	4	4	4	4	2
	Private			2	2												
	Small Nursery	,															
	Public							2	2	2	2						
	Private									13	13			5	5		
В	Setting up of in private sec	tissue culture unit tor (Unit)															
C		n of existing unit	Nos.													1	(
D		t of Progeny															
E	Seed Product	ion for vegetables															
+	and rhizomat	•														5	,
+	Open pollinat	ea crops														5	3
F	Hybrid seed															4	(
	for trial and d purpose (by S	. recognised by														4	(
	Area Expansion (Fru	its, Vegetables,	ha	4831	4329	8400	7938	5271	5150	4484	3972	4090	4090	6861	6861	4345	3590
A	•	iiits, rioweis)		3145	2890	5600	5200	2981	2860	2177	1910	1425	1425	3278	3278	1180	1093
	Cost Intensive			440	400	2600	2600	956	927	896	755	780	780	1328	1328	55	55
+	Banana Sucke			440	400	1500	1500	/30	121	070	733	20	20	228	228	55	5.
	Papaya	:1				1300	1300	35	34	120	110	40	40	220	220	33	٠,
+	Grapes							65	60	120	110	300	300				
	Passion Fruit							111	100			220	220	500	500		
+	Strawberry							111	100	50	0	220	220	300	300		
	TC Banana					100	100	360	355	375	294						
+	Pine apple			440	400	100	100	300	333	3/3	274						
	Pine apple			440	400	1000	1000	385	378	351	351	200	200	600	600		
	High Density	Planting				200	200	825		1280.5		620	620	1600	1600	80	50
	Aonla	. iuiitiiig				200	200	023	300	1200.3	1104.0	020	020	1000	1000	80	ار
	Apple													100	100	80	5
	Cashewnut									163	163			100	100	80	ال
	Citrus									103	103			1375	1375		
	Guava							330	324	68	50			10/3	10/3		
	Litchi					100	100	300	297	00	50						
	Mango					100	100	300	2//			20	20	125	125		
	M. Orange									900	822	600	600	123	123		
	Orange					100	100			700	522	300	300				
	Pear					.00	, 00	95	87								
	Plum							100	98								
	Pomegranate							100	,0								
	Temperate frui	its								150	120						
	Normal Spaci			2705	2490	2800	2400	1200	1127	130	120	25	25	350	350	1045	988
	Aonla	''y		2703	2470	2000	2400	1200	112/			23	23	330	330	1043	700
-	Apple			220	215												

Tar : Target Ach : Achievement

## **Horticulture Mission for North East and Himalaya States (HMNEH)**

Tripu	ura	NER '	Total	J&	K	Himachal	Pradesh	Uttara	khand	HS T	otal	Total NE	R & HS
Phys	ical	Physi	ical	Phys	ical	Physi	ical	Phys	ical	Phys	ical	Physi	cal
Tar	Ach.	Tar	Ach.	Tar.	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.
0	0	00	0.7			2	0	1	0	0	0	4.3	0.7
3	3	39 5	37 5			1	0	1 2	0	2	0	41	37 5
3	3	5	5					2	U	2	U	7	5
4	4	8	8									8	8
29	29	47	47	14	14	6	1			20	15	67	62
27	27	77	77	17	17	2	0			2	0	2	0
						-				-		-	Ü
		1	0	1	0					1	0	2	0
				-	_					-	_	_	
				1	1					1	1	1	1
		5	3	1	1					1	1	6	4
				1	1					1	1	1	1
		4	0	2500	0					2500	0	2504	0
5341	5277	43623	41207	4763	5069	3476	1360	3537	3526	11776	9955	55399	51162
3341	32//	43023	41207	4/03	3009	34/0	1300	3337	3320	11770	9933	33399	31102
1394	1394	21179	20049	4090	4396	3005	1038	2324	2346	9419	7780	30599	27830
620	620	7675	7465	505	505	2805	991			3310	1496	10985	8961
203	203	2006	2006				,,,				, -	2006	2006
164	164	359	348									359	348
		365	360	505	505					505	505	870	865
		831	820									831	820
		50	0			2805	991			2805	991	2855	991
		835	749									835	749
		440	400									440	400
253	253	2,789	2782									2789	2782
		4605	4430	165	165	200	47	1910	1933	2275	2145	6881	6576
								175	175	175	175	175	175
		180	150	165	165	200	47	469	494	834	706	1014	856
		163	163									162.5	162.5
		1375	1375					223	223	223	223	1598	1598
		398	374					288	288	288	288	686	662
		400	397					255	255	255	255	655	652
		145	145					450	448	450	448	595	593
		1500	1422									1500	1422
		100	100									100	100
		95	87									95	87
		100	98									100	98
		1.50	100					50	50	50	50	50	50
77.	77.4	150	120	0.400	0707			43.4	410	000.4	4100	150	120
774	774	8899	8154	3420	3726			414	413	3834	4139	12733	12293
		000	015					25	25	25	25	25	25
		220	215					50	50	50	50	270	265

	Component	Unit	Arund Prad		Ass	am	Man	ipur	Megh	alaya	Mizo	ram	Nago	iland	Sikl	kim
	Component	0	Phys		Phys	ical	Phys	sical	Phys	ical	Phys	sical	Phys	sical	Phys	sical
			Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach
	Apricot															
	Assam Lemon				1000	1000										
	Avocado										25	25				
	Cashewnut				700	600	150	144					250	250		
	Cherry						30	27								
	Chestnut						50	45								
	Citrus															
	Guava														180	18
	Kiwi		190	180			70	65					100	100	125	7
	Lemon						350	346								
	Litchi														190	18
	Mango															
	Orange		2295	2095	1100	800	500	455							550	5
	Walnut						50	45								
В	Vegetable (ha)		300	264	500	500	1505	1505	1353	1353	2270	2270	1313	1313	775	7
	Chayote										650	650				
	Open pollinated								730	730			813	813	150	1.
	Pea									. 53			3.3	3.3	,55	
	French bean															
	Lady finger															
	Asparagus										40	40				
	Bhindi										120	120				
	Brocoli										80	80				
	Bittergourd										320	320				
	Brinjal										300	300				
	Cabbage										320	320				
	Capsicum										320	320				
	Carrot															
	Cauliflower		0/0	001												
	Cole crop/tuber root crop/		260	231												
	brinjal, etc. (hybrid)															
	European vegetables				500	500	750	750	623	623	200	200	500	500	625	6
	Hybrid Winter Vegetables				500	500	/50	/50	023	023	200	200	500	500	023	0
	Potato (TPS)						755	755								
	Summer vegetable crops		40	00			755	755			0.40	0.40				
	Tomato		40	33							240	240				
_	Water melon		1050	011	0000	0000	000	000	450	400	100	100	1000	1000	1.400	10
C	Spices		1052	911	2300	2238	280	280	450	428	100	100	1300	1300	1480	12
	Bird Eye Chilly				500	400							50	50		
	Black pepper				500	438							150	150		
	Cardamom												300	300		
	Cherry pepper														130	
	Chilli (Bhut Jalakia)				300	300										
	Chilli				1670	1651					100	100				
	Turmeric			_	1000	1000	280	280					150	150	200	
	Ginger		722	594	500	500							150	150	650	ć
	Garlic															
	Large cardamom		330	317											500	Ę
	Naga Chilli												500	500		
	Seed spices and rhizomatic								450	428						
	Saffron															
D	Aromatic Plants		107	79							20	20	100	100		
	Citronella		80	57												
	Lemongrass												100	100		
	Patchouli		27	22							20	20				
	Other Aromatic plants															
E	Flowers		227	185			505	505	504	281	275	275	870	870	910	4
	Cut Flower															
	Anthurium		70	53							240	240	170	170		
	Alstromeria						105	105					200	200		
	Gerbera		50	41												
	Heligonia										35	35				
	Leather leaf						200	200			- 55	- 55				
	Lillium						200	200					200	200		
	Orchids		32	29			100	100					100	100		

Tripu	ura	NER <sup>-</sup>	Total	J&k		Himachal P	radesh	Uttarakl	nand	HS To	tal	Total NE	R & HS
Phys	ical	Physi	ical	Physi	cal	Physic	al	Physic	al	Physic	cal	Physi	cal
Tar	Ach.	Tar	Ach.	Tar.	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.
iui	71011.	iui	7 (611)	3420	3726	ıuı	7 (011.	Iui	/ terr.	3420	3726	3420	3726
		1000	1000	0420	0720					0420	0720	1000	1000
		25	25									25	25
		1100	994									1100	994
		30	27									30	27
		50	45									50	45
								182	181	182	181	182	181
		180	180									180	180.00
		485	415									485	415
		350	346									350	346
89	89	279	277									279	277
625	625	625	625									625	625
60	60	50	4.5					1.57	157	1.57	157	4505	3960
0000	0000	50	45	20.4	20.4	001	100	157	157	157	157	207	202
2920	2920	10936 650	10900	324	324	201	188	514	511	1039	1023	11975	11923
				72	70	101	101			174	174		650
		1693	1693	73	73	101	101	135	135	174 135	174 135	1867 135	1867 135
								64	61	64	61	64	61
								60	60	60	60	60	60
		40	40					00	00	00	00	40	40
201	201	321	321									321	321
	201	80	80									80	80
		320	320									320	320
145	145	445	445									445	445
588	588	908	908					50	50	50	50	958	958
47	47	47	47					52	52	52	52	99	99
55	55	55	55									55	55
569	569	569	569					52	52	52	52	621	621
		260	231									260	231
								49	49	49	49	49	49
(00	/00	3198	3198	251	251	100	87			351	338	3549	3536
680	680	680	680									680	680
275	275	755 655	755 648					50	50	50	50	755 707	755 700
375 260	375 260	260	260					52	52	52	52	260	260
742	742	7704	7251	78	78	188	90	500	580	856	748	8560	7999
742	742	50	50	/6	/0	100	90	590	360	636	/40	50	7999
		650	588									650	588
		300	300									300	300
		130	50									130	50
		300	300									300	300
446	446	546	546					169	168	169	168	715	714
		1630	1510					103	99	103	99	1733	1609
296	296	2318	2162					211	206	211	206	2529	2368
								107	107	107	107	107	107
		830	817									830	817
		500	500									500	500
		450	428	75	75	188	90			263	165	713	593
				3	3					3	3	3	3
		227	199	30	30	5	0			35	30	262	229
		80	57									80	57
		100	100			5	0			5	0	105	100
		47	42	10	10					10	10	57	52
				20	20					20	20	20	20
285	221	3576	2807	241	241	77	44	109	89	427	374	4003	3181
		480	463									480	463
		305	305									305	305
50	0	100	41									100	4
		35	35									35	35
		200	200									200	200
		200	200									200	200
50	0	282	229									282	229

		Component	Unit	Aruno Prac	lesh	Ass		Man	·		alaya	Mizo		Nago		Sikk	
				Phys		Phys		Phys		Phys		Phys		Phys		Phys	
		1-		Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach
		Rose		75	62					000	011			200	200	000	400
		Other cut flower								238	211					800	400
		Bulbous Flowers Gladiolus								66	50					110	70
		Lilium															
		Other bulbous flowers															
		Loose Flower						100	100	200	20						
		Marigold						100	100	200	20						
3			ha	1140	1000	1000	600	650	650			880	880	700	700	500	400
		Apple		190	169												
		Citrus												700	700		
		Lime						250	250								
		Orange		950	831	1000	600	400	400								
		Rejuvenation										880	880			500	400
4	1st Ye	Assam Lemon	ha	8517	8355	9260 1000	4925 270	4200	4200	2635	2635	3950	3950	6930	6930	1125	825
		Apple		1389	1353									50	50		
		Avocado										150	150				
		Citrus						2200	2200					3000	3000		
		Cherry & Pear															
		Grapes										500	500				
		Guava												100	100	125	100
		Kiwi		802	759							500	500	185	185		
		Litchi				290	290							100	100	200	160
		Mango												300	300		
		M. Orange										1000	1000				
		Plum												265	265		
		Peach		123	109									50	50		
		Orange		4977	4940	3970	2210			400	400					800	565
		Passion Fruit						900	900					1000	1000		
		Temperate fruits								180	180						
		Walnut		312	304												
		Pineapple		914	890	1000	760			500	500	1100	1100	1150	1150		
		Banana						1100	1100					650	650		
		Banana				3000	1395			555	555	700	700				
		Strawberry								1000	1000			80	80		
		Indigenous fruits (Grapes/Kiwi/ Strawberry/Pomegranate/Plum/ Persimmon)															
5	2nd \	ear Maintenance i.e. 3rd year crop	ha	7805	7496	6920	3870	2390	2390	3290	3290	1300	1300	2955	2955	1215	1105
		Assam Lemon			, 5	795	400	_5,5		,0	, 5	. 300	. 333	_,	_,		
		Apple		1782	1756												
		Citrus			. 55			890	890					755	755		
		Cherry & Pear						_,,	_, 5						. 55		
		Grapes										500	500				
		Kiwi		1168	1149											240	220
		Litchi															
		Mango															
		M.Orange										400	400				
		Orange		4048	3807	1130	730			650	650					800	725
		Passion Fruit						650	650			400	400	550	550	175	160
		Pear/ Peach/ Plum		431	413												
		Peach															
		Walnut		376	371												
		Pineapple				880	690			1200	1200			700	700		
		Banana				3715	2050	850	850	640	640			950	950		
		Papaya				400	0										
		Indigenous fruits (Grapes/ Kiwi/ Strawberry/ Pomegranate/Pulm/ Persimmon) Nuts				.53											
		Strawberry								800	800						
		5.1.4.1.DOITY								500	500						

Tripu	ıra	NER T	otal	J&k	(	Himachal I	Pradesh	Uttarak	hand	HS To	otal	Total NE	R & HS
Physi	cal	Physic	cal	Physi	cal	Physic	cal	Physi	cal	Physi	ical	Physi	cal
Tar	Ach.	Tar	Ach.	Tar.	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.
	7.0	275	262		, te		7	23	9	23	9	298	271
		1038	611	38	38	19	13	20	/	57	51	1095	662
				30	30	26.2	9			56.2	39	232.2	159
63	63	63	63					46	43	46	43	109	106
22	22	22	22									22	22
				123	123					123	123	123	123
		300	120	50	50	32	22			82	72	382	192
100	136	100	136					40	37	40	37	140	173
695	675	5565	4905	1600	1600					1600	1600	7165	6505
			- / -										
		190	169									190	169
		700	700									700 250	700 250
		2350	1831									2350	1831
695	675	2075	1955	1600	1600					1600	1600	3675	3555
1530	750	38147	32570	2414	218	1666	1666			4080	1884	42227	34454
1300	730	1000	270	2717	210	1000	1000			4000	1004	1000	270
		1439	1403			921	921			921	921	2360	2324
		150	150			,_,	,			7=1	,_,	150	150
		5200	5200									5200	5200
						12	12			12	12	12	12
		500	500									500	500
		225	200									225	200
		1487	1444									1487	1444
		590	550			45	45			45	45	635	595
		300	300			321	321			321	321	621	621
		1000	1000									1000	1000
		265	265									265	265
		173	159			56	56			56	56	229	215
		10147	8115									10147	8115
		1900 180	1900 180									1900 180	1900 180
		312	304			31	31			31	31	343	335
		4664	4400			31	31			31	31	4664	4400
		1750	1750									1750	1750
		4255	2650									4255	2650
		1080	1080									1080	1080
1530	750	1530	750			280	280			280	280	1810	1030
				2414	218			3212	3212	5626	3430	5626	3430
1845	830	27720	23236	1442	0	1355	1355			2797	1355	30517	24591
		795	400			(0.4	404			101	101	795	400
		1782	1756			696	696			696	696	2478	2452
		1645	1645			7	7			7	7	1645	1645
		500	500			7	7			7	7	7 500	7 500
		1408	1369									1408	1369
		1400	1007			37	37			37	37	37	37
						324	324			324	324	324	324
		400	400			221				521	32 1	400	400
		6628	5912									6628	5912
		1775	1760									1775	1760
		431	413									431	413
						65	65			65	65	65	65
		376	371									376	371
		2780	2590									2780	2590
		6155	4490									6155	4490
		400	0									400	0
1845	830	1845	830			209	209			209	209	2054	1039
						17	17			17	17	17	17
		800	800									800	800
				1442	0			2300	2300	3742	2300	3742	2300

					achal	Ass	am	Mar	ipur	Megh	alaya	Mizo	oram	Nago	aland	Sik	kim
		Component	Unit		desh sical	Phys	ical	Phy	sical	Phy	sical	Phys	eical	Phys	sical	Phy	sical
				Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach
6	Musł	nroom units	Nos.														
		Spawn making unit						4	4			1	1				
		Compost making unit						4	4			1	1				
		Cost intensive spices viz. saffron															
7	Mode	el Floriculture Centre	Nos.														
8	Creat	tion of water sources	Nos.														
		Community tank/on farm pond/ on farm water reservoir with use of plastic/RCC lining	ha					4	0			1	1			6	4
		Water harvesting system/tube wells/dugwells/pond		46	46	52	40	54	128			300	300	450	450		
9	Prote	ected Cultivation/ Green House	Sqm.														
а		and pad system								20000	20000						
b	_	rally ventilated system															
		1. Tubular structure		31000	30000			66700	99600	56000	51200	30000	30000	45000	45000	66000	60500
		2. Wooden structure		21800	20800					15000	8500	20000	20000				
		3. Bamboo structure				4800	2000					20000	20000	30000	30000	26700	26500
С	Shad	le net	Sqm.														
		1. Tubular structure						45700	75300	25000	25000	15000	15000	5000	5000		
		2. Wooden structure															
		3. Bamboo structure												15000	15000	8400	7000
		3. Bamboo structure															
d	_	Bird/Anti Hail Nets											211400				
е	_	ic mulching	ha			249	214					400	400	400	400		
f	_	ic tunnels	Sqm.											50000	50000		
g	veget	of planting material of high value tables grown in poly house	, i								85000						
h		of planting material of high value ers for poly house	Sqm.							81000	78096						
10		notion of INM	ha											11000	11000		
11	Prom	notion of IPM	ha	1510	1400	1700	1494	3921	3921			3965	3965	9170	9170	2600	1800
12	Disea	ase Forecasting Unit	Nos.	11	11												
13	Orga	nic Farming															
	Adop	otion of Organic Farming	ha	120	120							1400	1400	1100	1100	5000	4000
	Verm	ni Compost Unit	Nos.														
а		anent Structure of $(30' \times 8' \times 2.5')$		40	40	100	81	56	56			40	40	100	100		
b	_	E vermibed of 96 cft (12′×4`×2′)	1			106	86	690	791								
	(Clus	nic Certification ster of 50 ha)	Nos.	6	6	106	60					_	_	250	250	130	115
14	_		Nos.	00007	00101	1000		7700	70/7	1.400	1.400	1	10001	10005	10005	10000	01.41
15	Hum	an Resource development (HRD)	Nos.	29237	29191	1300		7789	7367	1400	1400	23806	19801	13305	13305	10280	8141
		Within the district		_	13088	1300		4400	4400	700	700	9800	8800	5300	5300	6050	4536
		Within the state Outside the state		9911	9911 6192			2260 1129	2607 360	700 700		11000 3000	8000 3000	5000 3000	5000 3000	2200 2030	
		Outside India		0172	0172			1127	300	700	700	6		5		2030	1003
	i)	Training of farmer including		15984	15984	1300		2040	2587	1400	1400		4000	7000		6180	4765
	c)	women Within the district		7232	7232	1300		1200	1200			3000	3000	3000	3000	5250	3960
	a) b)	Within the district Within the state		5872	5872	1300		560	1107	700	700	2000	1000	2000		700	
		Outside the state		2880	2880			280	280	700		2000	1000	2000		230	
	c) ii)	Exposure visit of farmers including women (No.)			13168			4780	4780		700	11800	9800	5002		3300	
	a)	Within district		5856	5856			3200	3200			4800	4800	2000	2000		
	b)	Within the state		4000	4000			1500	1500			4000	2000	2000		1500	1200
	c)	Outside the state		3312	3312			80	80			3000	3000	1000		1800	
	d)	Outside India (Proposal based)		3312	3012			- 00	0.0			2000	2000	2	2	. 555	. 500
	iii)	Training/study tour of technical officers/field functionaries involded in implementation of the scheme at central/state level including women.		85	39			969	0			7006	6001	1303	1303	800	576
	a)	Training/Study tour in progressive state including woman 20 group of 5 person for 4 days		46	0							2000	1000	300	300	800	576
	b)	Within the State		39	39			200	0			5000	5000	1000	1000		
	c)	Outside State						769	0								
	d)	Outside India										6	1	3	3		

& HS	Total NE	tal	HS To	nand	Uttarakl	radesh	Himachal F		J&l	[otal	NER 1	a	Tripur
al	Physi	cal	Physic	al	Physic	al	Physic	cal	Physi	cal	Physi	al	Physic
Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar.	Ach.	Tar	Ach.	ar
	6	1	1					1	1	5	5		
-	6	1	1					1	1	5	5		
		0	25					0	25				
(	1	0	1					0	1				
14	23	3	6			0	3	3	3	11	17	6	6
	20										17		o
196	1718	844	658	328	385	130	135	386	138	1122	1060	158	158
59000	59030	39000	39000			14000	14000	25000	25000	20000	20030	0	30
441740	634740	125440	335640	73900	152000	39000	171100	12540	12540	316300	299100	0	4400
160300	173800	111000	111000	73900	132000	39000	171100	111000	111000	49300	62800	0	6000
93500	112827	15000	18327				3327	15000	15000	78500	94500	0	3000
13979	110730	19495	20000	995	1000	2500	3000	16000	16000	120300	90730	0	30
12000	12101	12000	12000					12000	12000	0	101	0	101
25000	26538	3000	3000					3000	3000	22000	23538	0	138
5500 31960	5500 445400	5500 108206	5500 234000	206	10000	98000	214000	5500 10000	5500 10000	211400	211400		
144	1556	429	507	296	300	3	77	130	130	1014	1049		
53000	62000	3000	12000	270	000	1000	10000	2000	2000	50000	50000		
107000	115074	22000	30000			22000	30000			85000	85074	0	74
0.150	100000	1/500	22222			1 (500	22222			7000/	01000		
9459	103020	16500	22000			16500	22000			78096	81020	0	20
11000	11000									11000	11000		
2342	25655	476	1593	426	593	50	1000			22946	24062	1196	1196
1	13	0	2					0	2	11	11		
761	8805	997	1185	510	510	52	240	435	435	6620	7620		
2000	2183	1289	1447	500	500	714	872	75	75	717	736	400	400
98	900	1207	1447	300	300	714	072	/3	7.5	981	900	104	104
43	492									431	492		
100512	130719	16197	37497	3902	3972	3027	25250	9948	10575	83635	91547	4430	4430
46540		6966	11635		1410	1369	6000	4225	4225	39574	43434	3450	3450
3432	48221	5813	16660	1375	1400	1078	11900	3360	3985	28508	31561	490	490
1964	27416	4098	10875	1155	1162	580	7350	2363	2363	15547	16541	490	490
(	13	0	2					0	2	6	11		
48282	60099	9786	18435	1808	1862	1305	9900	6673	6673	38496	41664	2760	2760
25572	31107	4880	7825	670	700	685	3600	3525	3525	20692	23282	2300	2300
14469	18822	2960	6760	680	700	420	4200	1860	1860	11509	12062	2300	2300
824	10170	1946	3850	458	462	200	2100	1288	1288	6295	6320	230	230
4248	56930	5261	17210	2094	2110	1667	13600	1500	1500	37220	39720	1670	1670
1909:	20816	2086	3810	702	710	684	2400	700	700	17006	17006	1150	1150
1266	21310 14802	1703 1472	8050 5350	695 697	700 700	658 325	7000 4200	350 450	350 450	10960 9252	13260 9452	260 260	260 260
10/2	14802	1472	3330	097	700	323	4200	450	450	9252	9452	200	200
9069	11246	1150	1852			0	700	1150	1152	7919	9394		
187	3146									1876	3146		
7189	8089 2444	1150 680	1850 1675			0 55	700 1050	1150 625	1150 625	6039 0	6239 769		
680								020		U	/ / /		

		Compensat	Unit		achal Iesh	Ass	am	Man	ipur	Megh	alaya	Mizo	oram	Nago	aland	Sikl	kim
		Component	Unif	Phys		Phys	ical	Phys	sical	Phy	sical	Phy	sical	Phys	sical	Phys	sical
				Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach
16	Won	nen Self Help Group	Nos.											460	460		
17	pub	rmation dissemination though licity, printed literature etc. and I advedrtisements,						38	38			25	25	11	11	50	25
18	pack	elopment of technology kages in electronic form to be ed through IT network (No.)		16	16			12	12			10	10			4	2
19		ticulture Mechanization	Nos.			53	42	287	287	0	0	200	200	403	403	1	1
	inclu	er operated machines/tools uding power saw and Plant ection equipments				53	42	286	286			200	200	120	120		
		er machines (up to 20 BHP) with vator.												120	120		
	Powe and	er machines 20 H.P. and above including accessories/equipment															
		er machines/tools including power and plant protection equipments												163	163		
		ort of new machines and tools for culture for demonstration purpose						1	1							1	1
20	Polli	nation support through kpeeing	Nos.														
	Prod bree	uction of bee colonies by bee der														1	1
	Hon	ey bee colony				499 500	499 500	6000 6000	6000							2000	1500 1500
	Equi 4 fro	pment including honey extractor ime), food grade container (30 net etc.				23	18	0000	0000							2000	1300
		ning of bree keepers with district ning of bree keepers with State															
21	Deve	elopment of technology sages in electronic form to be det through IT network (No.)	Nos.														
22	Spec	cial Intervention (Construction of	Nos.														
	Tack requ	ling of emergent/ unforeseen irements of State Government/ ementing Agencies.										5	5			1	1
23	_	sion Mangement	Nos.														
	addi prep stren	ect management incuding tional manpower & project varation cost/institutional ugthening/hire/purchase of cle/hardware/software etc.						1	0								
	Tech	nical support group (TSG) at head ter at TM cell and at SHM															
	kisar	inar, conferences, exhibitions, n mela, horti expo, Honey festival, awareness campaign/publicity	Nos.														
	a)	State Level Event		3	3	2	2	1		4		1	1	3	3	4	2
	b)	District Level Event  Baseline survey/collection & completion of Hrticulture Data Base of the state (as volunted by state)		2	2	5	5	9	5	15	15	4	4	11	11	8	6
MM	-111	by sidicj															
	a)	Wholesale Market (I st Inst.)	Nos.														
	b)	Rural Primary Market/Apni Mandi															
		I Inst.						PB	3					PB	29		
	D/	II Inst.												PB	5		
MM		essing unit	Nos.														
	rroc	I Inst.	INOS.	PB	2	PB	1	PB	1								
		II Inst.		טו		PB	2	טו		PB	1			PB	2		

Physic Tar  200 200	Ach.	Physi Tar 460 124	Ach. 460	Phys Tar.	ical Ach.	Phys		Phys		Phys		Physi	cal
Tar 200	Ach.	<b>Tar</b> 460 124	<b>Ach</b> . 460										
200		460 124	460			Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.
	22	124										460	460
	00	42				75	7	14	14	89	21	213	120
	00		40					14	14	14	14	56	54
200	90	1144	1023	934	934	866	836	29	28	1829	1798	2973	2821
	90	859	738	790	790	700	698	16	15	1506	1503	2365	2241
		120	120	120	120	166	118	12	12	298	250	418	370
				24	24			1	1	25	25	25	25
		163	163				20			0	20	163	183
		2	2									2	2
		1	1									1	1
		8499	7999	1650	1650	2000	230	2800	2800	6450	4680	14949	12679
		8500	8000	1350	1350	2000	230			3350	1580	11850	9580
		23	18			40	9			40	9	63	27
								280	280				
								140	140				
								0	13	0	13	0	13
								0	20	0	20	0	20
		6	6									6	6
		3		00	0.0					20	20	0.1	
		1	0	30	30					30	30	31	30
				4	4					4	4	4	4
		18	12	5	5	4	2	0	8	9	15	27	27
		54	48	22	22	5	3	0	5	27	30	81	78
								PB	1	PB	1	PB	1
		PB	32									PB	32
		PB	5									PB	5
		PB	4	PB	2	PB	3	PB	7	PB	12	PB	16
		PB	5	PB	4	PB	3	PB PB	2	PB PB	9	PB	14

# **ANNEXURE - II**

## Financial Progress Report for the year 2010-11 under

		Component	Unit	Rate	Arunacha	l Pradesh	Ass	sam	Man	ipur	Megh	alaya	Mizo	oram
		Component	"	(₹ In Lakhs)	Fina	ncial	Fina	ncial	Fina	ncial	Fina	ncial	Fina	ncial
					Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.
1	Prod	luction of Planting Material	Nos.											
	Α	Nurseries												
		Model/Big Nursery (ha.)		6.250										
		Public		6.250	50.00	50.00			50.00	50.00	106.25	106.25	25.00	25.00
		Private			6.25	6.25								
		Small Nursery												
		Public		6.250							12.50	12.50		
		Private		3.125			84.38	0.00			40.63	40.63		
	В	Setting up of tissue culture unit in private sector (Unit)		50.000										
	С	Rehabilitation of existing tissue culture unit (public sector)	Nos.	15.000										
	D	Establishment of Progeny Centres (Pub. Sector)		5.000										
	Е	Seed Production for vegetables and rhizomatic spices												
		Open pollinated crops		0.300										
		Hybrid seed												
	F	Import of planting materials for trial and demonstration purpose (by State Govt. Growers Assn. recognised by NHB/MOA/PSU		10.000			2.50	2.50						
2		a Expansion (Fruits, Vegetables, es, Aromatic Plants, Flowers)	ha											
	A	Fruits												
		Cost Intensive			248.00	248 00	1209 00	1209.00	447.00	447.00	478.00	406.00	370.00	370.00
		Banana Sucker		0.394			590.63						7.88	7.88
		Papaya		0.394					13.78	13.78	47.25	43.31	15.75	15.75
		Grapes		0.450					29.25	29.25			135.00	135.00
		Passion Fruit		0.450					49.95	49.95			99.00	
		Strawberry		0.450							22.50			
		TC Banana		0.563			56.25	56.25	202.54	202.54	210.94	165.38		
		Pine apple		0.398	247.72	247.72								
		Pineapple		0.563			562.50	562.50	151.59	151.59	197.44	197.44	112.50	112.50
		<b>High Density Planting</b>					72.00	72.00	297.00	297.00	460.98	415.62	223.20	223.20
		Aonla		0.360										
		Apple		0.360										
		Cashewnut		0.360							58.50	58.50		
		Citrus		0.360										
		Guava		0.360					118.80	118.80	24.48	18.00		
		Litchi		0.360			36.00	36.00	108.00	108.00				
		Mango		0.360									7.20	7.20
		M. Orange		0.360							324.00	295.92	216.00	216.00
		Orange		0.360			36.00	36.00						
		Pear		0.360					34.20	34.20				
		Plum		0.360					36.00	36.00				
		Pomegranate		0.360										
		Temperate fruits		0.360							54.00	43.20		
		Normal Spacing				538.20	504.00	432.00	234.90	234.90			4.50	4.50
		Aonla		0.180	39.60	39.60								

Tar : Target Ach : Achievement

## **Horticulture Mission for North East and Himalaya States (HMNEH)**

(₹ in Lakh)

Nago	ıland	Sikl	kim	Trip	ura	NER	Total	18	ιK	Himo Prac	achal desh	Uttara	khand	HS 1	Total	Total N	ER & HS
Fina	ncial	Fina	ncial	Fina	ncial	Fina	ncial	Fina	ncial	Fina		Fina	ncial	Fina	ncial	Fina	ncial
Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.
		05.00	10.45	50.00	20.00	20/ 05	000.70			/ 05	0.00	/ 05	0.00	10.50	0.00	210.75	000.70
		25.00	12.45	50.00 37.50	39.00 30.00	306.25 43.75	282.70 36.25			6.25	0.00	6.25 6.25	0.00	12.50 6.25	0.00	318.75 50.00	282.70 36.25
25.00	25.00			25.00	22.00	62.50	59.50									62.50	59.50
15.62	15.62			91.625	72.50	232.245	128.75	43.75	43.75	18.75	6.25			62.50		294.75	178.75
										100.00	50.00			100.00	50.00	100.00	50.00
		15.00	0.00			15.00	0.00	10.00	0.00					10.00	0.00	25.00	0.00
								5.00	5.00					5.00	5.00	5.00	5.00
		1.50	0.25			1.50	0.25		0.30					0.30	0.30		0.55
								1.33	1.33					1.33	1.33	1.33	1.33
		40.00	0.00			42.50	2.50	10.00	0.00					10.00	0.00	52.50	2.50
653.00	653.00	22.00	22.00	288.00	288.00	3715.00	3643.00	227.00	154.00	505.00	178.00			732.00	332.00	4447.00	3975.00
90.00	90.00	21.66	21.65	80.69	80.69	790.85	790.85									790.85	790.85
				65.19	65.19	141.97										141.97	138.03
						164.25		227.25	153.86					227.25	153.86	391.50	
225.00	225.00					373.95											373.95
						22.50	0.00			504.90	178.38			504.90	178.38		178.38
							424.17										424.17
227.50	337.50			142.31	142.31		247.72 1503.84										247.72 1503.84
	576.00	28.80	17.98	142.31	142.31		1601.80	59.40	59.40	72.00	16.02	687.60	686.19	819.00	762.51	2476.98	
370.00	370.00	20.00	17.70			1037.70	1001.00	37.40	37.40	72.00	10.72	63.00	62.73	63.00	62.73	63.00	62.73
36.00	36.00	28.80	17.98			64.80	53.98	59.40	59.40	72.00	16.92	168.84	168.58		244.90		
						58.50	58.50		-,,,,,							58.50	58.50
495.00	495.00					495.00						73.08	73.02	73.08	73.02	568.08	
						143.28	136.80					103.68	103.49	103.68	103.49	246.96	240.29
						144.00	144.00					91.80	91.26	91.80	91.26	235.80	235.26
45.00	45.00					52.20	52.20					162.00	161.92	162.00	161.92	214.20	214.12
							511.92										511.92
						36.00										36.00	
						34.20										34.20	34.20
						36.00	36.00					05.5	05.	05.5	05.5	36.00	36.00
						5	40.05					25.20	25.19	25.20	25.19		25.19
00.00	00.05	001.05	107.75	100.00	100.05	54.00	43.20		(15.45			71.50	7	(00.35	(00.0)	54.00	43.20
90.00	90.00	221.85	196.61	139.32	139.32	1/32.//	1635.53	615.60	615.60			74.52				2422.89	
						39.60	39.60					4.50 9.00	4.50 9.00	4.50 9.00	4.50 9.00		4.50 48.60

	Component	Unit	Rate (₹ In Lakhs)		al Pradesh	Ass		Man			nalaya	Mizo	
			(CIT Edicis)	Fina		Fina		Fina			ncial	Fina	
			0.100	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach
	Apricot		0.180			100.00	100.00						
	Assam Lemon		0.180			180.00	180.00					4.50	4
	Avocado		0.180									4.50	4.
	Cashewnut		0.180			126.00	108.00	27.00	27.00				
	Cherry		0.180					5.40	5.40				
	Chestnut		0.180					9.00	9.00				
	Citrus		0.180										
	Guava		0.180										
	Kiwi		0.180	85.50	85.50			31.50	31.50				
	Lemon		0.180					63.00	63.00				
	Litchi		0.180										
	Mango		0.180										
	Orange		0.180	413 10	413.10	198.00	144.00	90.00	90.00				
	Walnut		0.180	410.10	413.10	170.00	144.00	9.00	9.00				
_			0.160	101.05	101.05	1/0.75	1/0.75			074.51	074.51	/00.00	/0
В	Vegetable (Ha.)			101.25	101.25	168.75	168.75	507.94	653.07	374.51	374.51	693.00	
	Chayote		0.225									146.25	14
	Open pollinated		0.225							164.25	164.25		
	Pea		0.225										
	French bean		0.225										
	Lady finger		0.225										
	Asparagus		0.338									13.50	1
	Bhindi		0.338									40.50	
	Brocoli		0.338									27.00	2
			0.338									108.00	
	Bittergourd												
	Brinjal		0.338									101.25	10
	Cabbage		0.338									108.00	10
	Capsicum		0.338										
	Carrot		0.338										
	Cauliflower		0.338										
	Cole crop/tuber root crop/ brinjal, etc. (hybrid)		0.338	87.75	87.75								
	European vegetables		0.338										
	Hybrid Winter Vegetables		0.338			168.75	168.75	253.13	253.13	210.26	210.26	67.50	6
	Potato (TPS)		0.338										
	Summer vegetable crops		0.338					254.81	399.94				
	Tomato		0.338	13.50	13.50			201.01	0//./1			81.00	8
	Water melon		0.340	10.50	10.50							01.00	
_	Spices		0.540	024 20	234.38	407 FO	440.00	E0 E0	50.50	04.20	00.05	10.75	,
C	•		0.100	234.38	234.38	487.50	468.90	52.50	52.50	84.38	80.25	18.75	1
	Bird Eye Chilly		0.188										
	Black pepper		0.188			150.00	131.40						
	Cardamom		0.188										
	Cherry pepper		0.188										
	Chilli (Bhut Jalakia)		0.188			56.25	56.25						
	Chilli											18.75	1
	Turmeric		0.188			187.50	187.50	52.50	52.50				
	Ginger		0.188		135.38	93.75	93.75	-1.00					
	Garlic		0.188		100.00	70.75	70.73						
					00.00								
	Large cardamom		0.188		99.00								
	Naga Chilli		0.188										
	Seed spices and rhizomatic		0.188							84.38	80.25		
	Saffron												
D	Aromatic Plants			30.19	30.19							11.25	1
	Citronella		0.188	15.00	15.00								
	Lemongrass		0.188										
	Patchouli		0.563		15.19							11.25	1
	Other Aromatic plants		0.555	10.17	10.17							71.23	
E				110.00	119.00			221.00	221.00	205.00	149.00	144.00	1.4
_	Flowers			119.00	119.00			231.00	231.00	203.00	146.00	144.00	14
	Cut Flower			01=	01=							107.55	
	Anthurium		0.525	36.75	36.75							126.00	12
	Alstromeria		0.525					55.13	55.13				
	Gerbera		0.525	26.25	26.25								
	Heligonia		0.525									18.38	1
	Leather leaf		0.525					105.00	105.00				
			0.525										
	a Hillium												
	a )Lillium b) Orchids		0.525		16.80			52.50	52.50				

Nago	ıland	Sikl	kim	Trip	ura	NER	Total	J8	ιK	Himo Prac		Uttara	khand	HS 1	Total	Total N	ER & HS
Fina	ncial	Fina	ncial	Fina	ncial	Fina	ncial	Fina	ncial	Fina		Fina	ncial	Fina	ncial	Fina	ıncial
Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.
IGI	, terr.	IGI	7 (611.	iu.	7 (611.	iu.	71011.		615.60	iu.	7 (611.	iu.	7 (611.	615.60		615.60	
						180.00	180.00									180.00	
						4.50	4.50									4.50	4.50
45.00	45.00					198.00	180.00									198.00	180.00
						5.40	5.40									5.40	5.40
						9.00	9.00									9.00	9.00
												32.76	32.71	32.76	32.71	32.76	
		32.40	32.39			32.40	32.39									32.40	
45.00	45.00	56.25	31.45			218.25	193.45									218.25	
		0.4.00	00.00	1 / 00	1 / 00	63.00	63.00									63.00	
		34.20	33.82	16.02	16.02	50.22	49.84									50.22	
		99.00	98.95	112.50	112.50	112.50 810.90	112.50 756.85									112.50 810.90	
		99.00	90.93	10.60	10.60	9.00	9.00					28.26	28.23	28.26	28.23	37.26	
331.20	331.20	244.69	244.68	985.06	985 51	3406.39		100.33	100.33	56.48	52.09	144.35	143.79	301.16			3848.18
001.20	001.20	244.07	244.00	700.00	700.01	146.25		100.00	100.00	30.40	32.07	144.00	140.77	001.10	270.21	146.25	
162.45	162.45	33.75	33.74			360.45		17.53	17.53	22.73	22.73			40.26	40.26	400.71	400.70
									.,,,,			30.38	30.38	30.38	30.38	30.38	
												14.40	14.16	14.40	14.16	14.40	
												13.50	13.50	13.50	13.50	13.50	13.50
						13.50	13.50									13.50	13.50
				67.39	67.84	107.887	108.34									107.89	108.34
						27.00	27.00									27.00	27.00
						108.00	108.00									108.00	108.00
				48.94		150.188	150.19									150.19	
				198.45	198.45	306.45	306.45					16.88	16.88	16.88	16.88	323.33	
				15.86	15.86	15.862	15.86					17.55	17.48	17.55	17.48	33.41	33.34
				18.56	18.56	18.563	18.56					17.55	17.40	17.55	17.40	18.56	
				192.04	192.04	192.038	192.04					17.55	17.48	17.55	17.48	209.59	
						87.75	87.75									87.75	87.75
												16.54	16.36	16.54	16.36	16.54	16.36
168 75	168 75	210.94	210.94			1079.32	1079.33	82.80	82.80	33 75	29.363	10.01	10.00	116.55			1191.49
				229.50	229.50												229.50
						254.81										254.81	
				126.57	126.57	221.07	221.07					17.55	17.55	17.55	17.55	238.62	238.62
				87.75	87.75	87.75	87.75									87.75	87.75
243.73	243.73	277.50	234.72	139.13	139.13	1537.85	1472.35	26.20	26.20	35.25	16.88	110.62	108.49	172.07	151.57	1709.92	1623.92
9.38	9.38					9.375	9.38									9.38	9.38
28.12	28.12					178.12	159.52									178.12	159.52
56.24	56.24					56.24	56.24									56.24	
		24.38	9.35			24.375										24.38	
					06.15	56.25										56.25	
00.11	00.11	67.51	15.51	83.63	83.625		102.38					31.69	31.43	31.69	31.43		133.81
28.12	28.12		15.00	F. F. C. C.	FF 56		283.12					19.31	18.84	19.31	18.84	324.93	
28.12	28.12	121.88	116.62	55.50	55.50	434.62	429.37					39.56	38.16	39.56	38.16		467.53
		93.75	93.75			100 75	192.75					20.06	20.06	20.06	20.06	20.06	20.06 192.75
93.75	93.75		73./3			93.75										93.75	
73.73	73.73					84.375	80.25		24.40	35.25	16.88			59.65	41.28	144.03	
						04.073	00.20	1.80	1.80	03.23	10.00			1.80	1.80	1.80	
56.25	56.25					97.69	97.69	16.88	16.88	0.94	0.00			17.82	16.88	115.50	
55.25	55.25					15.00			. 5.00	3.74	5.00			0.00	0.00	15.00	
56.25	56.25					56.25				0.94	0.00			0.94	0.00	57.19	
						26.438		5.625	5.625					5.63	5.63	32.06	
								11.25	11.25					11.25	11.25	11.25	
457.00	457.00	494.00	242.00	134.00	82.00	1612.00	1335.00	75.00	75.00	33.00	17.00	50.00	41.00		93.00		1403.00
89.00	89.00					251.75	251.75									251.75	251.75
105.00	105.00						160.13										160.13
				26.25	0.00	52.50										52.50	
						18.38										18.38	
							105.00										
	105.00			0.1.5			105.00										105.00
52.50	52.50			26.25	0.00		121.80					10.15	4.10	10.15	4.30		
105.00	105.00					144.38	144.38					12.15	4.12	12.15	4.12	156.53	148.50

		Component	Unit	Rate (₹ In Lakhs)		al Pradesh	Ass		Man		Megh		Mizo	
				(CIT Editis)		ncial	Fina		Fina		Fina		Fina	
					Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.
		d) Other cut flower		0.525							124.95	110.78		
		Bulbous Flowers		0.675							44.00	33.75		
		Gladiolus		0.675										
		Lilium		0.675										
		Other bulbous flowers												
		Loose Flower		0.180					18.00	18.00	36.00	3.60		
		Marigold												
		Other loose flowers												
3	-	venation/Replacement of senile ration (ha) including PMRP	ha		171.00		150.00	90.00	97.50	97.50				
		Apple		0.150	28.50	28.50								
		Citrus		0.150										
		Lime		0.150					37.50	37.50				
		Orange		0.150	142.50	142.50	150.00	90.00	60.00	60.00				
		Rejuvenation											132.00	132.00
4	1st Ye	ear Maintenance i.e. 2nd year	ha		374.27	374.27	356.70	189.30	172.50	172.50	87.75	87.75	150.75	150.75
		Assam Lemon		0.045			45.00	12.15						
		Apple		0.045	62.51	62.51								
		Avocado		0.045									6.75	6.75
		Citrus		0.045					99.00	99.00				
		Cherry & Pear		0.045					, , .00	, , .00				
		Grapes		0.045									22.50	22.50
		Guava		0.045									22.50	22.50
					24.00	24.00							22.50	22.50
		Kiwi		0.045	36.09	36.09	10.05	10.05					22.50	22.50
		Litchi		0.045			13.05	13.05						
		Mango		0.045										
		M. Orange		0.045									45.00	45.00
		Plum		0.045										
		Peach		0.045	5.54	5.54								
		Orange		0.045	223.97	223.97	178.65	99.45			18.00	18.00		
		Passion Fruit		0.045					40.50	40.50				
		Temperate fruits		0.045							8.10	8.10		
		Walnut		0.045	14.04	14.04								
		Pineapple		0.030	32.13	32.13	30.00	22.80			15.00	15.00	33.00	33.00
		Banana		0.030					33.00	33.00				
		Banana		0.030			90.00	41.85			16.65	16.65	21.00	21.00
		Strawberry		0.030							30.00	30.00		
		Indigenous fruits (Grapes/Kiwi/ Strawberry/Pomegranate/ Plum/Persimmon)												
5	2nd Y	1st year maintenance Year Maintenance i.e. 3rd year	ha		526.84	526.84	354.71	199.58	142.21	142.21	141.68	141.68	330.75	330.75
	ciop	Assam Lemon		0.068			53.66	27.00						
		Apple Apple		0.068	120.20	120.29	33.00	27.00						
		Citrus		0.068	120.29	120.29			60.08	60.08				
				0.008					80.08	80.08				
		Cherry & Pear		0.0/0									22.75	22.75
		Grapes		0.068	70.01	70.07							33.75	33.75
		Kiwi		0.068	78.84	78.84								
		Litchi		0.068										
		Mango		0.068										
		M.Orange		0.068									27.00	27.00
		Orange		0.068	273.24	273.24	76.28	49.28			43.88	43.88		
		Passion Fruit		0.068					43.88	43.88			270.00	270.00
		Pear/ Peach/ Plum		0.068	29.09	29.09								
		Peach		0.068										
		Walnut		0.068	25.38	25.38								
				0.045			39.60	31.05			45.00	45.00		
		Pineapple					167.18	92.25	38.25	38.25	28.80	28.80		
		Pineapple Banana		0.045			107.10	12.20						
				0.045 0.045			18.00	0.00						
		Banana Papaya Indigenous fruits (Grapes/ Kiwi/Strawberry/ Pomegranate/ Pulm/Persimmon)												
		Banana Papaya Indigenous fruits (Grapes/ Kiwi/Strawberry/ Pomegranate/									24.00	24.00		

Nago	aland	Sikl	cim	Trip	ura	NER	Total	J8	κK	Himo Prac		Uttara	khand	HS .	Total	Total N	ER & HS
Fina	ncial	Fina	ncial	Finar	ncial	Fina	ncial	Fina	ncial	Fina		Fina	ncial	Fina	ncial	Fina	ncial
Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.
		420.00				544.95	320.78	19.95	19.95	9.98	6.825			29.93	26.78	574.88	347.55
		74.25	32.33	10.50	10.50	40.505	10.50	20.15	20.15	17.69	6.345	01.05	22.01	01.05	00.07	70.50	70.40
				42.53 14.85	42.53 14.85	42.525 14.85	42.53 14.85					31.05	29.96	31.05	29.96	73.58 14.85	72.49 14.85
				14.03	14.03	14.03	14.03	25.5	25.5					25.50	25.50	25.50	25.50
						54.00	21.60	9.00	9.00	5.76	3.89			14.76	12.89	68.76	34.49
				24.48	24.48	24.48	24.48					7.20	7.03	7.20	7.03	31.68	31.51
105.00	105.00					500.50	440.50									500.50	440.50
105.00	105.00					523.50	463.50									523.50	463.50
						28.50	28.50									28.50	28.50
105.00	105.00					105.00	105.00									105.00	105.00
						37.50	37.50									37.50	37.50
		75.00	50.00	10105	101.07	352.50		0.40.00	0.40.00					0.40.00	0.40.00		292.50
283.65	283.65	75.00 87.00	59.90 65.04	104.25 55.20	101.37	311.25 1567.81	293.27 1358.76		11.08	74.96	74.04	119.54	119.54		240.00	551.25 1870.41	
263.03	263.03	87.00	65.04	33.20	35.50	1307.61	1336.76	106.63	11.08	74.90	74.90	119.54	119.54	302.60	205.05	16/0.41	1503.61
						45.00	12.15									45.00	12.15
2.25	2.25					64.76	64.76			41.45	41.45			41.45	41.45		106.20
105.55	105.51					6.75	6.75									6.75	6.75
135.00	135.00					234.00	234.00			0.53	0.53			0.53	0.53	234.00 0.53	234.00 0.53
						22.50	22.50			0.53	0.53			0.53	0.53	22.50	22.50
4.50	4.50	15.00	11.99			19.50	16.49									19.50	16.49
8.32	8.32					66.91	66.91									66.91	66.91
4.50	4.50	24.00	19.17			41.55	36.72			2.025	2.03			2.03	2.03	43.58	38.75
13.50	13.50					13.50	13.50			14.45	14.45			14.45	14.45	27.95	27.95
11.93	11.93					45.00 11.93	45.00 11.93									45.00 11.93	45.00 11.93
2.25	2.25					7.79	7.79			2.52	2.52			2.52	2.52	10.31	10.31
		48	33.88			468.62	375.30									468.62	
45.00	45.00					85.50	85.50									85.50	85.50
						8.10	8.10									8.10	8.10
24.50	24.50					14.04	14.04			1.40	1.40			1.40	1.40	15.44	15.44
34.50 19.50	34.50 19.50					144.63 52.50	137.43 52.50									144.63 52.50	137.43 52.50
17.50	17.50					127.65	79.50									127.65	79.50
2.40	2.40					32.40	32.40									32.40	32.40
				55.20	35.50	55.20	35.50			12.60	12.60			12.60	12.60	67.80	48.10
								108.63	11.08			119.54	119.54	228.17	130.62	228.17	130.62
162.34	162.34	110.00	100.48	98.78	55.60	1867.30	1659.47	97.40	5.77	91.38	91.38	130.25	130.25	319.03	227.40	2186.33	1886.87
						F2 //	07.00									E2 //	27.00
						53.66	27.00 120.29			46.95	46.95			46.95	46.95	53.66 167.23	
50.96	50.96						111.04			40.75	40.75			40.75	40.75		111.04
										0.44	0.44			0.44	0.44		0.44
						33.75										33.75	33.75
		36.00	33.00			114.84	111.84			0.47	0.47			0.44	0.44		111.84
										2.46	2.46			2.46	2.46	2.46 21.87	2.46 21.87
						27	27.00			21.07	21.07			21.07	21.07	27.00	
		48.00	43.50				409.89										409.89
37.13	37.13	26.00	23.98			377.01										377.01	
						29.09	29.09			,						29.09	29.09
						2F 20	2F 20			4.39	4.39			4.39	4.39	4.39	4.39
31.50	31.50					25.38	25.38 107.55									25.38 116.10	25.38 107.55
42.75	42.75					276.98										276.98	
						18.00	0.00									18.00	0.00
				98.78	55.60	98.78	55.60			14.13	14.13			14.13	14.13	112.90	69.73
										1.15	1.15			1.15	1.15	1.15	1.15
						24.00	24.00									24.00	
								97.40	5.77			130.25	130.25	227.65	136 02	227.65	136 02

		Component	Unit	Rate (₹ In Lakhs)	Arunacha		Ass		Man			alaya	Mizo	
				(CIT Editis)	Fina		Fina			ncial		ncial	Fina	
6	Muc	nroom units	Nos.		Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.
0	ivius	Spawn making unit	1105.	15.000					60.00	60.00			15.00	15.00
		Compost making unit		20.000					80.00	80.00			50.00	50.00
		Cost intensive spices viz.		20.000					00.00	00.00			00.00	00.00
		saffron												
7	Mod	el Floriculture Centre	Nos.											
8	Crea	tion of water sources	Nos.											
		Community tank/on farm pond/on farm water reservoir with use of plastic/RCC lining		17.250					69.00	0.00			17.25	17.25
		Water harvesting system/tube wells/dugwells/pond		1.030	47.38	47.38	53.56	41.20	55.62	227.62			309.00	309.00
9		ected Cultivation/ Green House cture	sqm.											
а	_	and pad system		732.500							146.50	146.50		
b		rally ventilated system		468.000							140.50	140.50		
U	Ivato	Tubular structure		0.470		144.93			312.16	466.13	261.80	239.10	140.25	140.25
		2. Tubular structure		0.468					0.20	100.10	201.00	207.10		
		3. Wooden structure		257.500		56.14					38.63	21.85	51.50	51.50
		4. Bamboo structure		187.500			9.00	3.75					37.50	37.50
С	Shac	le net	Sqm.											
		1. Tubular structure		0.300					137.10	234.30	75.00	75.00	45.00	45.00
		2. Wooden structure		0.210										
		3. Bamboo structure		0.150										
		4. Bamboo structure		0.300										
d	_	Bird/Anti Hail Nets		10.000									21.14	21.14
е		ic mulching	ha	0.100			24.90	21.40					40.00	40.00
f	_	ic tunnels	Sqm.	1.000										
g		of planting material of high e vegetables grown in poly se	Sqm.	0.001							44.63	44.63		
h		of planting material of high e flowers for poly house	Sqm.	0.003							202.50	195.24		
10		notion of INM	ha											
11	_	notion of IPM	ha	0.010		15.10	17.00	14.94	39.21	39.21			39.65	39.65
12		ase Forecasting Unit	Nos.	4.000	44.00	44.00								
13		nic Farming		0.100	4.00	4.00							1.40.00	1.40.00
		otion of Organic Farming	ha	0.100		4.80							140.00	140.00
а		ni Compost Unit anent Structure of (30'×8'×2.5')	Nos.	0.300	12.00	12.00	30.00	24.30	16.80	16.80			12.00	12.00
b	HDP	E vermibed of 96 cft ×4`×2')			12.00	12.00	5.30	4.30	34.50	34.50			12.00	12.00
	50 h		Nos.	0.150		9.00								
14 15		re of Excellence for Horticulture an Resource development o)	Nos.	0.005									500.00	500.00
	i)	Training of farmer including women												
	a)	Within the district		0.004	28.96	28.96	13.00	13.00	14.40	14.40			12.00	12.00
	p)	Within the state		0.008		44.00			27.44	58.15	5.25	5.25	15.00	7.50
	c) ii)	Outside the state  Exposure visit of farmers including women (No.)		0.010	28.80	28.80			19.60	19.60	7.00	7.00		
	a)	Within district		0.003	14.72	14.72			16.00	16.00			12.00	12.00
	b)	Within the state		0.003		12.00			31.50	31.50			12.00	6.00
	c)	Outside the state		0.006	19.84	19.84			3.36	3.36			18.00	18.00
	d)	Outside India (Proposal based)		3.000										
	iii)	Training/study tour of technical officers/field functionaries involded in implementation of the scheme at central/state level including women.												
	a)	Training/Study tour in progressive state including woman 20 group of 5 person for 4 days		0.007	5.31	5.31							13.00	6.50
	b)	Within the State		0.002	1.40	1.40			2.80	0.00			10.00	10.00
	c)	Outside State		0.007					5.00	0.00				
	d)	Outside India		5.000									30.00	5.00

Nago	aland	Sik	kim	Trip	ura	NER	Total	J8	ιK		achal desh	Uttara	khand	HS .	Total	Total N	ER & HS
Fina	ncial	Fina	ncial	Fina	ncial	Fina	ncial	Fina	ncial	Fina		Fina	ncial	Fina	ncial	Fina	ncial
Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.
						75.00	75.00	15.00	15.00					15.00	15.00	90.00	90.00
						130.00	130.00	20.00	20.00					20.00	20.00		
								15.00	0.00					15.00	0.00	15.00	0.00
								100.00	55.50					100.00	55.50	100.00	55.50
								100.00	33.30					100.00	33.30	100.00	33.30
		103.50	68.59	103.50	103.50	293.25	189.34	51.75	51.75	51.75				103.50	51.75	396.75	241.09
110.50	110.50			1/07/	1/07/	1001.00	1051 //	141.70	1 /1 70	100.05	100.00	000.07	000.00	/71.00	/10.01	17/0.00	10/505
463.50	463.50			162.74	162.74	1091.80	1251.44	141.78	141./8	139.05	133.90	390.37	338.23	6/1.20	613.91	1/63.00	1865.35
				21.96	0.00	168.46	146.50	25.63	25.63	102.55	102.55			128.18	128.18	296.64	274.68
210.15	210.15	308.55	282.81	20.46	0.00	1398.30	1483.37	60.73		799.89	182.33	711.36	344.41	1571.98	587.47	2970.28	2070.84
				0.4.40	0.00	170 (0	100.40	18.70	18.70					157.00	157.00	007.77	00/ 10
56.40	54 AO	50.04	40.49	24.42	0.00	170.69	129.49 147.33	157.08 28.13	157.00					157.08		327.77	
30.40	56.40	50.06	49.68	24.31	0.00	177.27	147.33	20.13	28.13					28.13	20.13	205.40	175.46
15.00	15.00			9.00	0.00	281.10	369.30	54.00	54.00	9.00	7.50	3.00	2.86	66.00	64.36	347.10	433.66
10.00	10.00			20.71	0.00	20.71	0.00	24.60	24.60	7.00	7.00	0.00	2.00	24.60	24.60	45.31	24.60
22.50	22.50	12.60	10.50	20.70	0.00	55.80	33.00	4.50	4.50					4.50	4.50	60.30	37.50
								16.50	16.50								
						21.14	21.14	1.00	1.00	21.40	9.80	1.00	0.20	23.40	11.00	44.54	32.14
40.00	40.00					104.90	101.40	1.30	1.30	7.70	0.30	30.00	29.79	39.00	31.39	143.90	132.79
7.50	7.50					7.50	7.50	0.30	0.30	1.50	0.15			1.80	0.45	9.30	7.95
				3.85	0.00	48.48	44.63			15.75	11.55			15.75	11.55	64.23	56.18
				5.00	0.00	207.50	195.24			55.00	41.25			55.00	41.25	262.50	236.49
	110.00					110.00	110.00										110.00
91.70	91.70	26.00	18.00	11.96	11.96		230.56	0.00	0.00	10.00	0.50	5.93	4.27	15.93	4.77		235.33
						44.00	44.00	8.00	8.00					8.00	8.00	52.00	52.00
44.00	44.00	200.00	160.00			388 80	348.80	43.50	43.50	9.60	2.08			53.10	15.58	441.90	304 38
44.00	44.00	200.00	100.00			300.00	340.00	40.50	40.50	7.00	2.00			33.10	45.50	441.70	374.30
30.00	30.00			120.00	120.00	220.80	215.10	23.75	23.75	261.60	214.20			285.35	237.95	506.15	453.05
				10.40	10.40	50.20	49.20									50.20	49.20
7.50	7.50	195.00	172.48			211.50	188.98										
		500.00	315.00			1000.00	815.00	40.00				251.65	200.00	201.65	200.00	1201 45	1015.00
		300.00	313.00			1000.00	813.00	40.00				231.03	200.00	271.03	200.00	1271.03	1015.00
10.55	70.5	63.55	7.5.55	67.11	67.	100.5	100 =	00.55	00 = 1	7.4	0 = -	0.55	0 11	60.	63.51	1/7.5	155.55
12.00	12.00		15.82	27.60 6.45		128.96		20.90 27.82	20.90	14.40	8.22	2.80	2.68	38.10		167.06	
15.00 20.00	15.00 20.00		2.03	16.10	16.10	118.39 93.8	140.85 93.53	25.32	25.32	29.40 21.00	20.58	5.25 4.62	5.19 4.53	62.47 50.94	53.59 43.85		194.44 137.38
20.00	20.00	2.50	2.03	70.10	10.10	75.6	70.00	23.32	23.32	21.00	14.00	4.02	4.55	30.74	+0.00	1-1-1./4	107.00
5.00	5.00			2.88	2.88	50.60	50.60	2.25	2.25	6.00	3.24	1.78	1.76	10.03	7.25	60.63	57.85
6.00	6.00		3.60	1.56	1.56	67.56	60.66	1.05	1.05	21.00	13.82	2.10	2.06	24.15	16.93	91.71	77.59
6.00	6.00		9.60	7.80	7.80	65.80	64.60	18.90	18.90	25.20	13.65	4.20	4.16	48.30	36.71	114.10	
6.00	6.00					6.00	6.00									6.00	6.00
							, -										
1.95	1.95	5.20	3.74			25.46	17.50									25.46	17.50
2.00	2.00					16.20	13.40	3.70	3.70	1.40	0.00			5.10	3.70	21.30	17.10
								12.86	12.86	6.83	2.50						
15.00	15.00					45.00	20.00	10.00	0.00					10.00	0.00	55.00	20.00

	Component	Unit	Rate	Arunacha	l Pradesh	Ass	am	Man	iipur	Megh	alaya	Mizo	oram
	Component	Onit	(₹ In Lakhs)	Finar	ncial	Finar	ncial	Fina	ncial	Fina	ncial	Fina	ncial
				Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.
16	Women Self Help Group	Nos.	5000.000										
17	Information dissemination though publicity, printed literature etc. and local advedrtisements,		0.400					15.20	15.20			10.00	10.00
18	Development of technology packages in electronic form to be shared through IT network (No.)		1.000	16.00	16.00			12.00	12.00			10.00	10.00
19	Horticulture Mechanization	Nos.				9.10	7.35	100.05	100.05			35.00	35.00
	Power operated machines/tools including power saw and Plant Protection equipments		0.175			9.10	7.35	50.05	50.05			35.00	35.00
	Power machines (up to 20 BHP) with rotavator.		0.600										
	Power machines 20 H.P. and above and including accessories/equipment		1.500										
	Power machines/tools including power saw and plant protection equipments		0.600										
	Import of new machines and tools for horticulture for demonstration purpose		50.000					50.00	50.00				
20	Pollination support through Beekpeeing	Nos.	0.000										
	Production of bee colonies by bee breeder												
	Honey bee colony		0.007			3.49	3.49	42.00	42.00				
	Hives		0.008			4.00	4.00	48.00	48.00				
	Equipment including honey extractor 4 frame), food grade container (30 kg.), net etc.		0.070			1.61	1.26						
	Training of bree keepers with district												
	Training of bree keepers with State												
21	Development of technology packages in electronic form to be shared through IT network (No.)	Nos.											
22	Special Intervention (Construction of bamboo training hall)	Nos.											
	Tackling of emergent/unforeseen requirements of State Government/ Implementing Agencies.		10.000					5.00	0.00			10.00	10.00
23	Mission Mangement												
	Project management incuding additional manpower & project preparation cost/institutional strengthening/hire/purchase of		50.000	24.33	16.73	7.50	7.50	50.00	44.78	26.00	26.00	170.00	120.00
	vehicle/hardware/software etc. Technical support group (TSG) at head guarter at TM cell and at									9.00	9.00		
	SHM												
	Seminar, conferences, exhibitions, kisan mela, horti expo, Honey festival, etc. awareness campaign/ publicity	Nos.											
	a) State Level Event		3.000	9.00	9.00	6.00	6.00	3.00	0.00	12.00	12.00	3.00	3.00
	b) District Level Event c) Baseline survey/collection & completion of Hrticulture Data Base of the state (as volunted		2.000	4.00	4.00	10.00	10.00	18.00	10.00	30.00 50.00	30.00	8.00	8.00
	by state)												
MM-		Nos.											
	a) Wholesale Market (I Inst.) b) Rural Primary Market/ Apni Mandi	INOS.											
	I Inst.							PB	11.25				
MM-	Il InstIV Processing	Nos											
**!!V!-	I Inst.	Nos.		PB	173.93	PB	146.02	PB	14.53				
	II Inst.	55.		10	., 0.,0	PB	41.42	10	7 1.00	PB	28.46		

Nago	ıland	Sikl	cim	Trip	ura	NER	Total	J8	kK		achal desh	Uttara	khand	HS .	Total	Total N	ER & HS
Fina	ncial	Fina	ncial	Fina	ncial	Fina	ncial	Fina	ncial		ncial	Fina	ncial	Fina	ncial	Fina	ncial
Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar	Ach.
23.00 4.40	23.00 4.40	20.00	7.84			49.60	37.44			30.00	5.00	5.60	5.60	35.60	10.60	85.20	48.04
		4.00	2.00			42.00	40.00					14.00	14.00	14.00	14.00	56.00	54.00
130 80	139.80	50.00	48.68	35.00	15.75	368.95	346 63	246.25	246.25	222 10	102 05	6.40	6 32	171 75	445.52	843.70	702 15
21.00	21.00	30.00	40.00	35.00	15.75	150.15			138.25	122.50	122.15	2.80		263.55			
21.00	21.00					21.00	21.00	72.00	72.00	99.60	70.80	2.10			144.90		
07.00	07.00					07.00	07.00	36.00	36.00			1.50	1.50	37.50	37.50	37.50	37.50
97.80	97.80					97.80	97.80									97.80	97.80
		50.00	48.68			100.00	98.68									100.00	98.68
		3.00	3.00			3.00	3.00									3.00	3.00
		14.00	10.50			59.49	55.99	11.55	11.55	14.00	1.61	22.40	22.40	47.95	35.56		91.55
		16.00	12.00			68.00	1.26	1080.00	10.80	16.00 2.80	0.63			1096.00	0.63	1164.00 4.41	76.64 1.89
												1 10	1 10				
												1.12	1.12				
												1.05	1.05			0.00	0.00
																0.00	0.00
				15.00	8.00	15.00	8.00									15.00	8.00
		10.00	1.83	26.00	9.00	51.00	20.83	5.00	5.00					5.00	5.00	56.00	25.83
		15.00	7.55	32.00	13.00	324.83	235.56	37.00	37.00			51.00	51.00	88.00	88.00	412.83	323.56
39.80	39.80					48.80	48.80	8.00	8.00			18.00	18.00	26.00	26.00	74.80	74.80
9.00	9.00	12.00	5.50	3.00		57.00	44.50	15.00	15.00	12.00	6.00	24.00	24.00	51.00	45.00	108.00	89.50
22.00	22.00	16.00	11.50	10.00		118.00 50.00	95.50 0.00	44.00	44.00	10.00	6.00	10.00	10.00	64.00	60.00	182.00 50.00	155.50 0.00
												PB	198.18	PB	198.18	PB	198.18
PB PB	108.75 18.75					PB PB	120.00 18.75									PB PB	120.00 18.75
						PB	334.47	PB	185.51	PB	323.65	PB	1339.45	PB	1848.61	PB	2183.08
PB	155.67						225.54	PB			614.65		197.11		905.078		1130.62

# **ANNEXURE - III**

## **Cumulative Horticulture Mission for North East and**

			Aruno		Ass	am	Mar	nipur	Megh	alaya	Mizo	ram
Con	nponer	nt/Activity	2001-02 1		2001-02 1			to 2010- 1	2001-02 1		2001-02 1	
			Target	Ach.	Target	Ach.	Target	Ach	Target	Ach.	Target	Ach.
Α	1	Area expansion incl. Rejuvenation (ha)	74257	69840	90846	75951	59972	56477	39870	38388	81246	80353
		i. Fruits	42049	40562	42020	39755	34131	29693	18328	17776	45548	44893
		ii. Vegetables	5595	5121	8175	7034	15205	17310	8380	8380	13300	13279
		iii. Spices	10407	10040	15575	14407	5265	4596	4605	4203	8180	8291
		iv. Plant.crops			6955	6313	315	105	3420	3220	670	670
		v. Medicinal plants	1402	1395	710	630	200	75	353	278	2265	1893
		vi. Aromatic plants	7349	6461	1496	1366	160	110	65	35	989	822
		vii. Flowers (ha) 13000/unit of 0.2 ha	2157	2131	3822	3589	2561	2369	3400	3162	5094	5113
		viii. Roots and Tubers (ha)							519	519		
		ix. saffron										
		Rejuvenation incl. PMRP pkg.	5548	4480	12350	11715	2400	2394	1000	1000	5540	5540
		Area Expansion (Crop only) (ha)	68709	65360	78496	64236	57572	54083	38870	37388	75706	74813
	2	Model Floriculture Centre (Nos.)	2	2	2	2	1	2	11	11	1	2
	3	Mushroom (Nos.)	4	4		2	6	10	2	1	7	9
В		Creation of Water Sources										
_		i. Community Tanks (Hec.)	1019	987	484	359	903	810	532	456	1466	1305
		ii. Tube Wells/units	258	258	2837	2700	1139	1168	1006	985	3452	3402
С		On Farm Water Management	200	200	2007	2,00	1107		1000	, 00	0.02	0.02
		i. Drip Irrigation (max./units)	2308	2226	2243	2073	1330	1076	4092	4070	2250	2230
		ii. Sprinkler irrigation	2000	2220	2210	2070	150	50		573	900	900
		iii. Mulching			2488	2411	2270	2030		1321	1450	1389
		iv. Low Cost Green House (sgm)	28000	28000		170000		319089		100954	88347	88345
		v. Green House (500 sqm)	138260	138260	25090	22279		225859		219006	392701	392701
		vi. Low Cost Tunnel (sqm)	253100	253100		22217	1680	0	22400	22400	500	500
		vii. Shade nets (sqm)	10000	10000		210500	1237130	924300		389429	1787000	1737000
			10000	10000	220300	210300	5340	4500	7150	7144	211400	211400
		viii. Antihail nets (per tree)					3340	4300	/130	/144	211400	211400
		ix. Anti Hail Gun (Project based)										
		x. Poly sheet (sqm)										
_		xi. Anti bird net (ha)	000	000	225	104	07/	501	000	100	1007	1010
D		On farm handling (Nos.)	900	900	335	104	876	591	220	183	1386	1318
E		Production of Planting Material (Nos.)										
		1. Private Sector	3.3	11	10	0	0	1		1.1		
		i. Big Nursery	11	11	19	9		1	9	11	6	1
		ii. Small Nursery	36	36		40	22	40		75		12
		iii. Herbal garden			19	6	3	0		2	0	1
		iv. Tissue Culture Unit					2	0	1	1		
		2. Public Sector			_		_				_	
		i. Big Nursery	19	18		4	5	8		45		7
		ii. Small Nursery	17	17			11	11	39	31	5	6
		iii. Herbal garden	1	1			1	0			0	1
		iv. Tissue Culture Unit			0	1			0	1	1	2
F		Transfer of technology (Nos.)										
		i. Training of farmers-within District	13134	13088		0		4400			9800	8800
		ii. Training of farmers-within state	22815	20715		18405		17814		6907	22240	18303
		iii. Training outside state	11542	10492		3165		2706		4446		6891
		iv. Training of Trainers	124	112	107	82	265	280	148	136	241	241

Tar : Target Ach : Achievement

# Himalayan States (HMNEH) progress 2001-02 to 2010-11

Nago	ıland	Sikl	kim	Trip	ura	Total No Region		Himo Prad		Jamr Kash		Uttara	khand	Total Hir States		Total NE	R + HS
2001- 2010		2001- 2010		2001- 2010		2001- 2010		2003- 2010		2003- 2010		2003- 2010		2003- 2010		2001- 2010	
Target	Ach.	Target	Ach	Target	Ach	Target	Ach	Target	Ach	Target	Ach	Target	Ach	Target	Ach	Target	Ach
66316	66619	56761	49082	47479	43678	516748	480387	36416	34500	31531	29542	72334	72178	140281	136220	657029	616607
31637	31637	12236	10608	15234	12723	241183	227647	29239	27627	17877	17846	41741	40777	88857	86250	330040	313896
10043	9873	14930	13022	19105	21423	94733	95442	4085	3919	2700	1850	12746	14914	19531	20683	114264	116125
12000	12523	18598	17425	5677	4257	80307	75742	1487	1390	1359	1093	5018	4091	7864	6573	88171	82316
2927	2877			2660	926	16947	14111									16947	14111
1883	1883	160	35	50	32	7023	6221	25	139	79	55	50	50	154	244	7177	6464
1275	1275	110	28	50	59	11494	10156	66	152	84	79	25	25	175	256	11669	10412
5151	5031	7137	5439	1933	1347	31256	28181	1514	1274	1167	1033	3257	3161	5938	5468	37194	33649
		800	800			1319	1319									1319	1319
										455	168			455	168	455	168
1700	1700	5190	3640	3070	3050	36798	33519			7810	7418	9497	9160	17307	16578	54105	50097
64616	64919	51571	45442	44409	40628	479950	446868	36416	34500	23721	22124	62837	63018	122974	119642	602924	566510
3	3	1	10112	3	2	24	25	2	2	1	0	02007	00010	3	2	27	27
4	4	4	1	1	0	30	31			2	2			2	2	32	33
4		7			Ū	30	31									02	- 33
1507	1507	1431	1271	1674	1521	9016	8216	1543	1534	953	755	849	760	3345	3049	12361	11265
1534	1534			2538	1484	12764	11531	1488	1361	3728	2563	1605	1424	6821	5348	19585	16879
1216	1216	1479	1369	695	199	15613	14459	816	760	108	0	2020	1437	2944	2197	18557	16656
550	550		,	-,-	.,,,	2326	2073	859	782	90	1	740	294	1689	1077	4015	3150
1615	1615	620	615	100	0	9865	9381	955	48	521	241	2380	2010	3856	2299	13721	11680
81343	81343	494504	451800	363067	57	1745789	1239588	152144	137061	317094	177592	140500	117078	609738	431731	2355527	1671319
229366	229366	370143	351316	99865	332	1669110	1579119	861699	701272	122620	121394	257150	141973	1241469	964639	2910579	2543758
100000	100000	4000	400	77000	002	381680	376400	65150	23400	52020	2000	207 100	141770	117170	25400	498850	401800
1030120	1030120	811304	770378	1178364	495	6663847	5072222	359372	113973	33000	31000	49650	27456	442022	172429	7105869	5244651
100120	1000120	9450	9050	140	0	233480	232094	42313	25530	10000	10000	36500	28190	88813	63720	322293	295814
		7430	7030	140	U	200400	202074	42313	25550	10000	10000	30300	20170	2	1	2	1
450000	450000					450000	450000		1					2	1	450000	450000
430000	430000					430000	430000	00000	0			75	0	00075	0		
1500	1500	04	27	220	207	5662	4040	98000		1007	1004	75	743	98075		98075 9924	0
1520	1520	96	37	329	207	3002	4860	1370	1447	1826	1284	1066	/43	4262	3474	9924	8334
12	12	19	44	12	9	97	98	12	9	1	1	7	7	20	17	117	115
105	105	76	74	82	58	485	440		35	157	154	60	35	287	224	772	664
103	103	8	11	02	50	32	20		13	137	0	00	55	41	13	773	33
2	2	3	3			8	6		6	10	U	4	2	16	8	24	14
2	2	3	3			8	0	12	0	0	0	-	0	10	8	24	14
12	12	13	11	10	10	117	117	10	7	0 27	0 21	0 18	10	55	38	170	155
					12	115	117									-	155
2	2	15	13	38	36		116		23	45	40	19	6	93	69	220	185
2	2			_		4	4		11		_	_		2	11	6	15
		1	1	2	2	4	7	2	0	1	0	2	3	5	3	9	10
5300	5300	6050	4536	3450	3450	43434	39574	6000	1369	4225	4225	1410	1372	11635	6966	55069	46540
16050	16050	24400	25605	22490	23587	160490	147386		13901	15486	12430	14795	11169	55071	37500		184886
6018	6018	7670	6454	4880	3671	53742	43843		6745	4653	3966	7667	5880	26624	16591	80366	60434
205	205	162	123	174	99	1426	1278	100	122	54	18	392	545	546	685	1972	1963

			Arun Prad		Ass	am	Man	ipur	Megh	alaya	Mizo	ram
Com	ponent/	Activity		to 2010-	2001-02		2001-02			to 2010-	2001-02	
			Target	Ach.	Target	Ach.	Target	Ach	Target	Ach.	Target	Ach.
		v. Training Centre			J							
		a. Gardners Training Centre	7	7	17	14	8	3	2	2	3	3
		b. Supervisores Training Centre			20	15	1	2			8	7
		c. Malies training center										
G		Popularization of Organic farming and use of										
		bio-fertilizers										
		i.Adoption of Org. farming	5528	4728	1100	750	612	740	1956	866	4661	4643
		ii. Certification	6	6	113	67	1	1	7	0	36	36
		iii.Earthworm units	344	322	2008	1883	2036	1943	3137	2715	492	476
		HDPE vermi bed of 96 cft (12'x4'x2')			106	86	690	791				
Н		Promotion & popularization of Agricultural Equipments Incl. PMRP (Nos.)										
		i. Manual operated	4510	5154	9832	4933	7630	7600	4618	2811	9645	9527
		ii. Power Tiller	50	23	1403	1373	534	538	546	502	100	15
		iii. Diesel Engine	111	71	1815	1775	952	832	838	817	1290	947
		iv. Power Operated	100	0	878	799	993	976	528	408	2041	1790
		v. Power Drawn	16	16							220	180
		vi. Weed Cutters										
		vii. *Horticulture equipments for canopy management, pruning, etc.					465	465	55	55	76	76
		viii. Pit Hole Digger										
T		Promotion of Integrated pest Management										
		i. Adoption of IPM	6910	6150	19502	11398	13681	12549	8024	6060	31134	29999
		ii. Disease fore casting units	19	18	2	2	4	2	4	3	2	1
		iii. Plant Health Clinic	3	3	4	3	2	0	1	1	1	1
		iv. Leaf Analaysis Lab					2	2	1	1	1	1
		v. bio control lab	1	1	1	1	1	0	1	0		
J		Promotion of Integrated Nutrient Management (INM)/ (IPM)/Sanitary and Phytosanitary										
		INM							300	300		
K		Centre of Excellence for HM Prog.									1	1
L		Bee Keeping	1320	1272	6535	4305	12100	10600	2950	2950	5975	3975
		Bee colonies with bee hives			1999	1369	11100	12200				
		Development of Bee Breeders									10	10
		Bee Hives			500	500	6000	6000			4	4
		Equipment (Honey extractor 4 frame, foodgrade container/kg. net etc.)			23	18						
М		Entrepreneurial Development of Women Farmers										
		i. Training of Women (5 days)			17472	13392	8900	7383	8071	5321	9883	10040
		ii. Self help group			1828	1228	1520	1120	2660	1725	120	170
		iii. Dev. of curriculum/Distt.									0	8
		iv. Refresher Training of facilitaters/dist.										
		v. Base line survey										
Ν		Distillation unit for Aro. Plants	37	20	2	2					20	23
		Workshops/Seminar	5	3	15	40	15	9	8	9	2	2
	MM-III											
0		Market infrastructure										
		1. Wholesale Markets	PB	6	PB	2			PB	2	PB	10
		2. Rural Primary Markets	PB	24	PB	43	PB	3		11	PB	96
		3. Apni Mandies										
		4. State Grading Labs.	PB	2	PB	7			PB	2	РВ	2
		5. Ropeways			. 5					_		
	MM-IV											
P		Processing frastructure										
		1. New units	PB	3	PB	7	PB	8	PB	5		
		Upgradation of Existing units			_		_				PB	

Nagaland 2001-02 to 2010-11		Sikkim 2001-02 to 2010-11		Tripura 2001-02 to 2010-11		Total North East Region (NER) 2001-02 to 2010-11		Himachal Pradesh 2003-04 to 2010-11		Jammu & Kashmir 2003-04 to 2010-11		Uttarakhand 2003-04 to 2010-11		Total Himalayan States (HS) 2003-04 to 2010-11		Total NER + HS  2001-02 to 2010-11	
2	2	18	8	6	9	63	48	3	3			23	15	26	18	89	66
3	3	5	4	6	6	43	37	2	2	1	0	4	2	7	4	50	41
J	J	J	-	U	J	70	07			2	2	7		2	2	2	2
5227	2777	13680	9808	2260	1498	35024	25810	1877	748	1724	1357	3338	2822	6939	4927	41963	30737
250	250	151	133	12	4	576	497	3	2			15	15	18	17	594	514
1287	1287	1070	997	2000	1907	12374	11530	6067	6057	615	521	2840	2562	9522	9140	21896	20670
				104	104	900	981									900	981
7770	7770	8810	8630	5410	4424	58225	50849	10425	11923	8620	3570	1190	1081	20235	16574	78460	67423
753	753	9	5	1849	1749	5244	4958	662	712	196	36	285	221	1143	969	6387	5927
930	930			1635	6567	7571	11939	525	490			1281	933	1806	1423	9377	13362
503	503	2336	2135	1325	846	8704	7457	5978	5949	2929	1479	424	330	9331	7758	18035	15215
170	170			50	0	456	366									456	366
120	120					120 596	120 596			34	24			34	24	120 630	120 620
										34	24			34	24		
85	85					85	85									85	85
20523	20523	33727	19732	6681	5470	140182	111881	2258	936			7907	1488	10165	2424	150347	114305
1	1	9	3	1	1	41	30	2	1			2 5	5	4	3 5	45	33
1	I	- 1	- 1	1	1	13	10 5	2	2			5	5	5 2	2	18 7	15 7
				- 1	'	4	2	1	2			1	0	2	2	6	4
								•				·					
12305	12305					12605	12605									12605	12605
		1	1			2	2									2	2
11653	12865	13420	5500	2800	2300	56753	43767	9932	9142	9934	6141	14700	12300	34566	27583	91319	71350
4313	4313	5850	4600			23262	22482	3000	430	2550	2550	4200	2800	9750	5780	33012	28262
2	2	1	1			13	13	2222	222	1050	1050			0050	1500	13	13
		2003	1503			8507 23	8007	2000	230 9	1350	1350			3350 40	1580 9	11857	9587 27
						23	18	40	9					40	9	63	27
1700	1700	14160	12550	9790	10290	69976	60676	5434	5009	4494	3757	12297	9720	22225	18486	92201	79162
2449	2253	26	0	1040	10270	9643	7542	629	474	1774	0/0/	1501	1071	2130	1545	11773	9087
16	16					16	24	7	7					7	7	23	31
								12	12			0	51	12	63	12	63
						59	45									59	45
4	4	3	3	8	8	60	78	1	0			1	1	2	1	62	79
РВ	8	PB	1	PB	3	PB	32			PB	15	PB	1	PB	16	PB	48
PB	128					РВ	305	PB	1					PB	1	PB	306
PB	56	PB	14			PB	70									PB	70
		PB	3			PB	16					PB	2	PB	2	PB	18
												PB	31	PB	31	PB	31
PB	5			PB	1	PB	29	PB	16	PB	10	PB	24	PB	50	PB	79
10	J			10	1	PB	29		10	ט ו	10	10	24	ם ו	50	PB	2

# PRINCIPAL SECRETARY/SECRETARY (HORTICULTURE) AND DIRECTORS OF STATES

Name of State	Principal Secretary/Secretary	Director /Mission Director			
Arunachal Pradesh	Commissioner (Horticulture) Government of Arunachal Pradesh Naharlugan Itanagar – 791110 Tel: 0360-2212420	Director (Horticulture) Government of Arunachal Pradesh Chimpu, Itanagar Arunachal Pradesh Telefax: 0360-2203220			
Assam	Agriculture Production Commissioner Dept. Agriculture & Horticulture Government of Assam Khanapara Janta Bhawan Dispur, Guwahati – 781006 Tel: 0361-2237308 Fax: 0361-2237308	Director (Horticulture) Government of Assam Khanapara, Dispur Guwahati – 781002 Tel: 0361-2335303 Fax No. 0361-2335303			
Manipur	Commissioner & Secretary (Horticulture) Government of Manipur Secretariat Building (Old) Imphal-795 001 (Manipur) Tel: 0385-2450513 Fax: 0385-2451144	Mission Director (Horticulture) Government of Manipur Sanjenthong Imphal – 795001 Tel: 0385-2449765 Fax: 0385-2451089			
Meghalaya	Agriculture Production Commissioner Department of Agriculture Government of Meghalaya Main Secretariat Building Shillong – 793001 Tel: 0364-2211081 Fax: 0364-2225978	Director (Hort.)/MD. SFAC Govt. Fruit Garden, Cleve Colony Shillong – 793003 Tel: 0364-2227434 Fax No. 0364-2227434			
Mizoram	Secretary (Horticulture) Department of Horticulture Government of Mizoram Aizwal – 796001 Tel: 0389-2325029 Fax: 0389-2325291	Director of Horticulture Government of Mizoram Aizwal – 796001 Tel: 0389-2314370 Fax. 0389-2329725			
Nagaland	Commissioner & Secretary (Hort.) Government of Nagaland Civil Secretariat Kohima-797001, (Nagaland) Tel: 0370-2271015	Mission Director Directorate of Horticulture Government of Nagaland New Secretriat Complex Kohima – 797001 Tel: 0370-2222345 Fax: 0370-2221311			

Name of State	Principal Secretary/Secretary	Director /Mission Director			
Sikkim	Secretary (Horticulture) Government of Sikkim Krishi Bhawan, P.O. Tadong Gangtok – 737101 (Sikkim) Fax: 03592-2323474	Director (Horticulture) Government of Sikkim Krishi Bhawan Tadong Gangtok – 737102 Tel: 03592-231960 Fax: 03592-231960			
Tripura	Principal Secretary Department of Horticulture New Secretariat Complex Government of Tripura Agartala – 799006 Tel: 0381-2323474	Director (Horticulture & Soil Conservation) Government of Tripura Paradise Chowmuhani Agartala, (Tripura) – 799001 Fax: 0381-2324739			
Jammu & Kashmir	Principal Secretary Agriculture Production Department Government of Jammu & Kashmir New Secretariat (Srinagar), J&K 0194-2470357	Kashmir Division Director (Hort) Directorate of Horticulture Rajbagh, Srinagar J&K – 0194-2311484 Fax: 0194-2311287, 2311484  Director (Floriculture) Emporium Garden Srinagar, J&K  Director (Agri) Directorate of Agriculture Lal Mandi Srinagar, J&K  Jammu Division Director (Hort) Directorate of Horticulture Opposite Convent School Jammu (J&K) Tel: 0194-2311484 Fax: 0194-2311287  Director (Floriculture) Directorate of Horticulture Gandhi Nagar Jammu (J&K)  Director (Agri) Directorate of Agriculture Talab Tiloo Jammu (J&K)			
Himachal Pradesh	Principal Secretary (Hort.) Government of Himachal Pradesh Secretariat Shimla –171002 Tel: 0177-2621877	Director Department of Horticulture Government of Himachal Pradesh Navbahar Shimla-171002 Tel: 0177-2842390 Fax: 0177-2842389			
Uttarakhand	Secretary (Horticulture) Government of Uttrakhand Subhash Marg Dehradun Uttrakhand Tel: 0135-2714113, 2712919	Director (Horticulture) Government of Uttrakhand Udyan Bhawan, Chaubattia Raniket (Almora) Uttarakhand Tel: 05966-222792 Fax: 05966-221074			





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GOVERNMENT OF INDIA
Ministry of Agriculture
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Krishi Bhawan, New Delhi – 110001



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