

E-BOOK PUBLICATION OF IMPORTANT ACHIEVEMENTS IN RESPECT OF HORTICULTURE DEPARTMENT

Horticulture Department was established in the State in the year 1993 and became a full fledged Department since 1997. Mizoram covers an area of 21,081 Sq. km., out of which 11.56 lakh hectares (55%) is an identified potential area for horticulture crops. However, only 9.4 % of the total potential area is covered so far which proves that horticulture is still at its initial stage. Introduction of Central Sponsored Schemes such as Technology Mission, HMNEH, NMMP, NMSA (OFWM/PMKSY), RKVY, NVIUC and State flagship programme such as NLUP have shown remarkable progress in increasing area, production and productivity.

Horticulture Department, Government of Mizoram is implementing few important projects and schemes in view of increasing area, production and productivity of Horticultural Crops in the State such as –

1. Mission for Integrated Development of Horticulture (MIDH/HMNEH):

The most important Centrally Sponsored Scheme being implemented by Horticulture Department is Mission for Integrated Development of Horticulture. Previously, it was known as ‘Technology Mission for North-Eastern States (TMNE)’, which was later changed to HMNEH in 2010-2011 is now under the umbrella of Mission for Development of Horticulture MIDH from the year 2014-2015.

Major activities under this scheme includes establishment of new garden of fruit, Vegetable, Mushroom, Flower, Spice crops and Aromatic plants, Rejuvenation/ replacement of senile plantation and canopy management on fruit crops, creation of water sources for irrigation of crops etc.

Detail Physical and Financial Achievements under MIDH may be seen in Table I .

2. Rashtrya Krishi Vikas Yojana (RKVY):

RKVY programme was started in Mizoram State only from 2011-2012, undoubtedly as a result of significant increase in the budget allocation of Agri & Allied Sector under NLUP Programme. An important component under RKVY is the National Vegetable Initiative for Urban Clusters (NVIUC) under which stress is given to vegetable crop production. The use of high yielding hybrid seeds and adoption of latest scientific technology have greatly increased the production of vegetables due to higher productivity per unit area. Under RKVY, various activities like cultivation of Mandarin Orange, Dragon fruit, Strawberry and Hybrid vegetable, Integrate Nutrient Management, Integrated Pest Management, Farmers Training, construction of Tubular

structure Green House, individual Water Tank and allocation of 10% flexi fund for link road construction are being taken up.

Detail Physical and Financial Achievements under MIDH may be seen in Table II .

3. Pradhan Mantri Krishi Sinchai Yojana (PMKSY):

Substantial dependency on rainfall makes cultivation in unirrigated areas at high risk, less productive profession. The vision of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) will be to ensure access to some means of protective irrigation to all agricultural farms in the country, to produce ‘per drop more crop’, thus bringing much desired rural prosperity .This new programme is introduced and implemented since 2015-16.

Under this scheme, drip irrigation for wide space crops (i.e. M. Orange, Mango, Grapes etc.) and closed spaced crops(vegetable, spices etc.), Micro sprinkler system, Mini sprinkler system and Training are being provided to farmers. However, there is no new achievement under the scheme this year as fund is not yet available at hand.

4. NMMP (National Mission on Medicinal Plants):

Cultivation of Value added crops having medicinal value are taken up under NMMP. During the last four years farmers of Aloe vera at Baktawng Tlangnuam of Serchhip District exposed the success of implementation of this programme in such away that they have established a Micro Industry of Aloe vera soap. During the fiscal year of 2014-15, cultivation of Aloe Vera, Stevia rebaudiana and Amla was taken up with the financial released by the Govt. of India at the total amount of Rs. 57.72 lakhs.

However, there is no new achievement under this scheme as fund is not available at hand for the fiscal year 2015- 2016.

5. New Land Use Policy (NLUP):

The State Government of Mizoram has launched State flagship programme - New Land Use Policy on 14th January 2011 (*this day of 14th January was since then observed as State’s Labour day every year*). Out of total target of 1,20,000 families to be covered by various Agriculture and Allied Departments, Horticulture Department has covered 24,039 families taking up various horticulture trades such as cultivation of M.Orange,Passionfruit,Pineapple,Grapes,Mango,Tung,Tea,Squash,Arecanut and Aloe Vera.

New Land Use Policy (NLUP) was launched on the 14th January, 2011 and this very auspicious day is celebrated as States Farmer’s Day every year since then. There are ten (10) trades/crops under NLUP Horticulture Sector and in total there are 24,039 beneficiaries, which is covered in 4(four) phases.

Detail Physical and Financial Achievements under MIDH may be seen in Table III .

Table – I

**PHYSICAL AND FINANCIAL ACHIEVEMENTS UNDER MIDH
2015-2016**

Sl.No.	Component	Target Approved		Target achieved	
		Phy.	Fin.	Phy.	Fin.
1	Research	1	23.00	1	23.00
2	Production of Planting Materials	4	80.00	4	80.00
3	Establishment of New Garden				
	a) Fruits				
	i) Cost intensive crops (Dragonfruit, Strawberry, Kiwi, Pineapple, Banana, Papaya)	645	499.87	645	499.87
	ii) High Density Planting (Avocado, M. Orange, Mango)	300	90.00	300	90.00
	iii) Fruit crops other than cost intensive crops using normal spacing	250	45.00	250	45.00
	b) Vegetables	110	27.50	110	27.50
	c) Mushroom	1	20.00	1	20.00
	d) Flowers	70	35.00	70	35.00
	e) Spices	130	19.50	130	19.50
	f) Aromatic Plant	40	16.00	40	16.00
	1st Year Maintenance	495	44.00	495	44.00
	2nd Year Maintenance	319	31.90	319	31.90
4	Rejuvenation/ Replacement of Senile Plantations	1990	398.00	1990	398.00
5	Creation of water sources	528	619.80	528	619.80
6	Protected Cultivation	236667	511.80	236667	511.80
7	Integrated Pest/ Nutrient Management (INM/ IPM)	6600	79.20	6600	79.20
8	Organic Farming	25	12.50	25	12.50
9	Centre of Excellence for Horticulture	2	350.00	2	350.00
10	Pollination through bee keeping	1680	13.44	1680	13.44
11	Horticulture Mechanization	777	116.55	777	116.55
12	Human resource Development	11547	161.32	11547	161.32
13	Integrated Post Harvest Management	1186	158.92	1186	158.92
14	Mission Management	78	263.70	78	263.70
15	Establishment of marketing infrastructure for horticultural crops	1	25.00	1	25.00
	TOTAL		3642.00		3642.00

Table –II**DIVISION-WISE PHYSICAL AND FINANACIAL ACHIEVEMENT UNDER RKVY 2015-2016***(Rs. in Lakhs)*

SI No.	Component	Unit	Rate	District Wise Break-up												Total	
				Aizawl		Lunglei		Serchhip		Khawzawl		Kolasib		Mamit			
				Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
I	Production Growth																
	1. Cultivation of Hybrid Vegetable Crop	Ha	0.25	70	17.50	66	16.50	66	16.50	66	16.50	66	16.50	66	16.50	400	100.00
	2.Promotion of INM/ IPM	Ha	0.012	400	4.80	400	4.80	300	3.60	300	3.60	300	3.60	300	3.60	2000	24.00
	3.Training of Farmers	Day	0.01	100 (18)	1.00 (0.18)	100 (16)	1.00 (0.16)	75 (16)	0.75 (0.16)	75 (16)	0.75 (0.16)	75 (16)	0.75 (0.16)	75 (16)	0.75 (0.16)	500 (98)	5.00 (0.98)
	4. Technical Support Group Management & Monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50
II	1. Infrastructure & Assests	Sqm	0.0122	900 (700)	10.98 (8.54)	450 (200)	5.49 (2.44)	450 (200)	5.49 (2.44)	450 (200)	5.49 (2.44)	450 (200)	5.49 (2.44)	300 (100)	3.66 (1.22)	3000 (1600)	36.60 (19.52)
	a) Tubular structure Green House																
	b) Individual Rain Water Storage Tank (20m x 20m x 3m)	No	0.90	11	9.90	8	7.20	8	7.20	8	7.20	8	7.20	8	7.20	51	45.90
	Total :-				52.90		37.59		36.14		36.14		36.14		33.09		235.50

Note : () = State Matching Share

Table – III**Phase-wise number of Family covered in Horticulture sector under NLUP.**

<i>Trade</i>	<i>1st Phase</i>	<i>2nd Phase</i>	<i>3rd Phase</i>	<i>4th Phase</i>	<i>Total</i>
<i>M. Orange</i>	4,396	4,138	1,705	837	11076
<i>Arecanut</i>	2,753	2,514	845	369	6481
<i>Pineapple</i>	1,217	1,025	1,056	532	3830
<i>Grape</i>	324	231	40	18	613
<i>Tung</i>	141	207	104	25	477
<i>Chayote</i>	285	131	26	15	457
<i>Passion fruit</i>	166	137	99	49	451
<i>Tea</i>	22	205	78	68	373
<i>Mango</i>	-	-	35	4	39
<i>Aloe Vera</i>	23	6	2	3	34
Total :	9327	8594	3990	1920	23831

EXPENDITURE OF NLUP DEVELOPMENT FUND PHASE-WISE
(Upto 31.10.2016)

Table IV

Sl.No.	PHASE	Amount (Rs. In Lakhs)
1.	1 st Phase (Completed)	9425.87945
2.	2 nd Phase (Completed)	8647.07806
3.	3 rd Phase (On- going)	3025.656
4.	4 th Phase (On- going)	1489.57
5.	Gap Filling (Tuidam)	79.60
6.	West Phuldungsei	24.00
7.	Transportation charge	0.388
8.	Transportation charge for Neemkasto for 3 rd & 4 th Phase & Captive Plantation	37.84499
9.	Cost of Neemkasto	224.1236
10.	Fund transferred to AH & Vety	134.737
TOTAL		23088.8771
CAPTIVE PLANTATION (On- going)		
1.	Tuikum Cluster	278.92
2.	Chalfilh and Tuivawl	271.226
3.	G.I. Wire for Chalfilh and Tuivawl	181.488
TOTAL		731.634
GRAND TOTAL		23820.5111

Comparative Statement of performance in Horticulture sector between 2004-05 and 2015-16 according to recorded Base line data may show the prolific growth of horticulture in Mizoram as below:

*(Area in thousandth hectare, Production in thousandth MT
Productivity in thousandth MT/Ha, no. in lakh)*

Table V:

Crops	Area/Production/Productivity	Year		Decadal growth	Growth Rate %
		2004-05	2015-16		
Fruits	Area	10.99	60.67	49.68	69
	Production	53.25	350.91	297.66	73
	Productivity	4.84	5.78	0.94	8
Vegetables	Area	6.19	43.57	37.38	75
	Production	34.38	261.52	227.14	76
	Productivity	5.55	6.00	0.45	3
Spices	Area	6.22	22.55	16.33	56
	Production	41.08	64.91	23.83	21
	Productivity	6.60	2.87	(-)3.73	(-)35
Flowers	Area	0.053	0.198	0.145	57
	Production	3.97 no	475.43 no	471.46 no	98
	Productivity	75 no.	2503 no	2428 no.	94

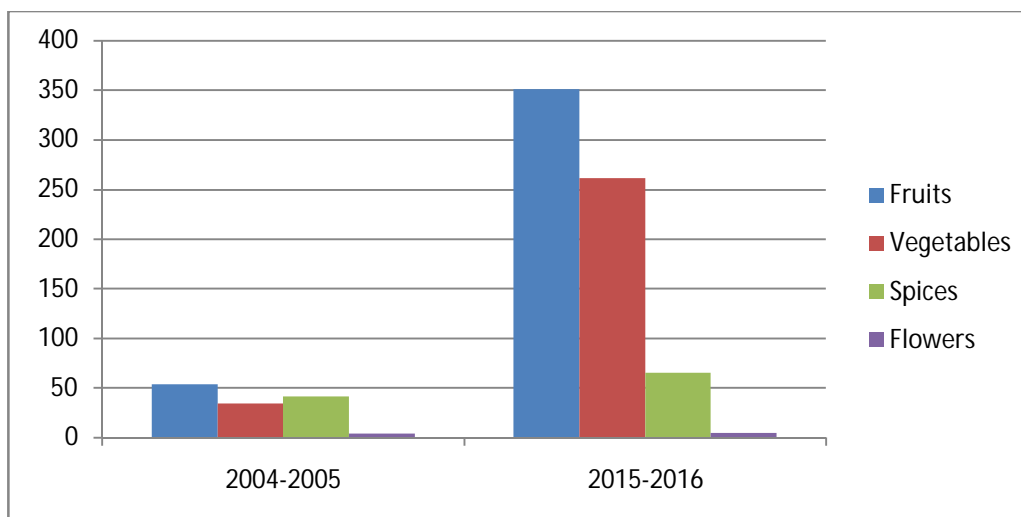


Fig 1: Graphical comparison of production of major Horticulture Crops Production during 2004-05 & 2015-16 in Mizoram

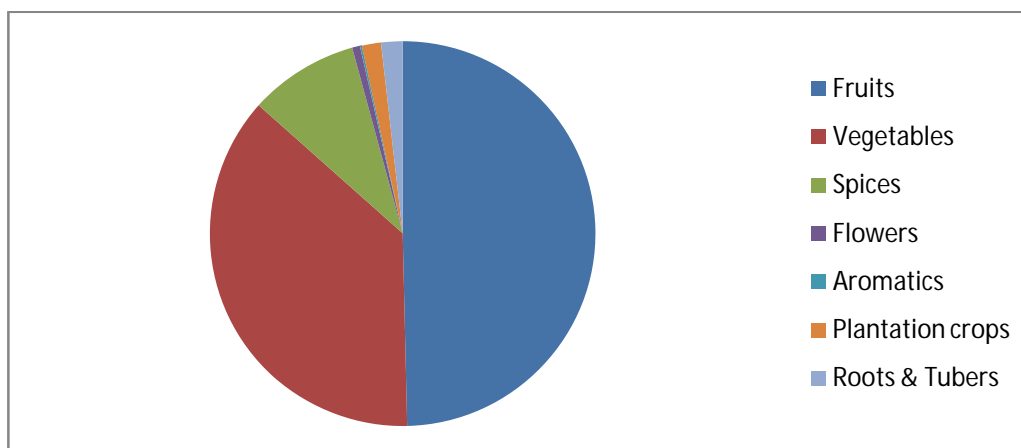


Fig 2: Pie Chart showing area occupied by various horticulture crops in Mizoram (base year 2015-2016)

IMPORTANT PROJECTS RECENTLY ACHIEVED UNDER HORTICULTURE SECTOR INCLUDES:

Centre of excellence:

Apart from the existing Horticulture Centres at Thiak, Serchhip and Thingdawl, to demonstrate advanced technologies in order to boost quality of high value horticultural crops including flowers and vegetables, Mizoram Horticulture Department has set up 3(three) Centre of Excellence for horticulture at the cost of Rs.500.00 lakhs each at Thiak in Aizawl district, Lunglei Zau in Serchhip district. Thingdawl in Kolasib district and (1)one ongoing project at Saichhoh in Lunglei District. Quality planting materials are being produced at these centres every year which were distributed to the farmers within the district under the fund provided by MIDH.



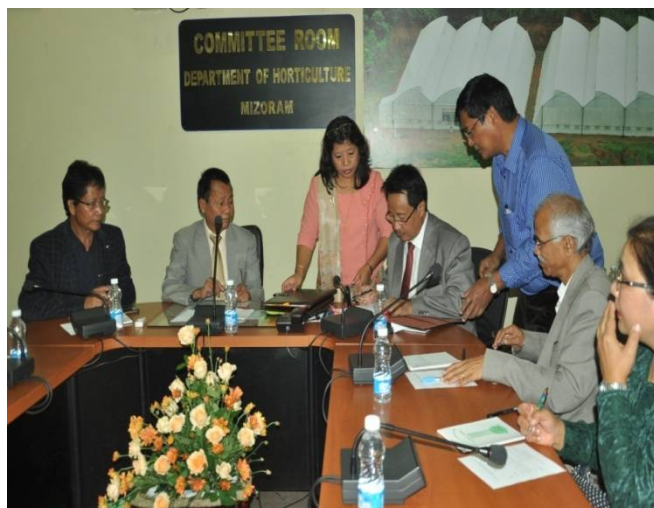
Centre of Excellence , Thingdawl



Inauguration of CoE Thingdawl, Kolasib District by Hon'ble Horticulture Minister, Sgri.P.C Lalthanliana on 4.12.2015

HORTICULTURE COLLEGE:

Central Government, during 2010-2011 had given approval for establishment of Horticulture College in Mizoram. The proposed site for establishment of Horticulture College at Thenzawl having an area of 120 Ha. donated by the local community/Village Council had also been approved. The Hon'ble Union Minister of State for Agriculture, in his press conference on 17th August, 2015 at Selesih, Aizawl had declared that classes would be started from the academic session of 2016-17 at the campus of Central Agriculture University (CAU), Selesih while the targeted site at Thenzawl is being developed. Classes has been going on from the past 15th July, 2016 and courses were implemented under the prescription of Indian Council of Agricultural Research. This is a big stepping stone in the history of Mizoram.



Signing of MoU for College of Horticulture, Thenzawl between Govt. of Mizoram and Central Agricultural University on 12.11.2015



Laying of Foundation Stone for College of Horticulture, Thenzawl by Hon'ble Union Agriculture & Farmers Welfare Minister Shri.Radha Mohan Singh in the presence of Hon'ble Home & Agriculture Minister Shri.R.Lalzirlina on 18.6.2016

HORTICULTURE FAIR:

With fund provided under MIDH, Horticulture fair 2016 was organized on 24th May, 2016 where Stakeholders, Self Help Groups, FIGs, Florist Associations, Zo Anthurium Growers Society, Fruit Growers Societies, Vegetable Growers Societies, Nursery men etc, individual farmers and entrepreneurs from across the state participated in the fair. Also, a successful Plant Health Clinic was operated by our Plant Health Specialist.



Horticulture Fair inaugurated by Pu R.Lalzirlana, Hon'ble Home , Agriculture & Rural Development Minister, Govt. of Mizoram on 24.5.2016



Plant Health Clinic in operation at Horticulture Fair , 2016

**SOME PHOTOGRAPHIC EVIDENCE OF SUCCESSFUL IMPLEMENTATION OF
PROJECTS AND SCHEMES DURING 2015-2016**



Strawberry cultivation at Siaha, Thantluanga's Farm



Dragonfruit Plantation, Lalrindiki, Vaipuanpho



Import of Planting Materials (Mango)



Import of Planting Materials (Guava)



Ryoseki Cabbage, Zawlpui



Hybrid Tomato, Aizawl



Individual Water Tank, Aizawl



Arecanut under NLUP



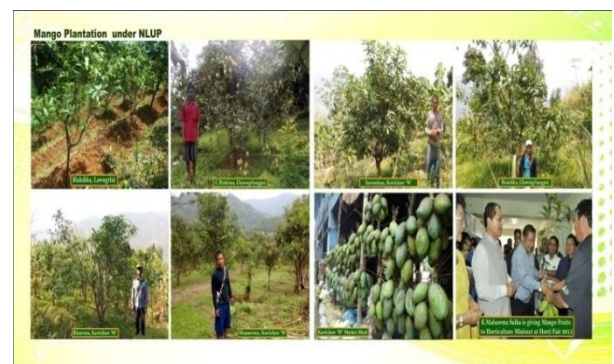
Tung Plantation under NLUP



Chayote under NLUP



Pineapple under NLUP



Mango Plantation under NLUP