Observations and Recommendations

- The JIT observed that most of the recommendations made by the previous JIT during 2014-15 has not been adopted by the Department of Horticulture and Soil Conservation, Manipur. The JIT has taken serious note about the noadoption of previous recommendations.
- Special emphasis needs to be paid on accreditation of nurseries for production and supply of quality planting material. National Horticulture Board needs to respond to their request for accreditation of nurseries at an early date. Otherwise, Central Institute of Horticulture, Nagaland may be approached for the purpose.
- SHM needs to provide necessary guidance for scientific crop production especially on mulching, plant protection and maintenance of soil health. JIT recommends to constitute a State Level Advisory Committee with a Member from ICAR, CAU and other competent organizations who will provide necessary technical guidance for successful implementation of the mandated activities.
- The JIT realized that an anonymous training need for all the beneficiaries. Hence, JIT suggests that the farmers who have been trained in relevant field at some reputed organizations like ICAR, CAU or KVK should be considered as beneficiary under MIDH. The farmer has to produce the training completion certificate for availing such assistance. KVK should be linked with MIDH for capacity building of the beneficiaries.
- Most of the projected visited by JIT viz. Mushroom Production Unit, Primary/Rural Markets, Green House/shade net, vermin compost units etc. were either construction or work has not been initiated. The overall progress is very slow. It is recommended to accomplish the work at an early date.
- For pack house beneficiaries, it is recommended to undertake skill development programme on low cost packaging and scientific post harvest management to increase the storability of the fresh harvests and enhance shell life of the perishable produce. MIDH may collaborate with NBM for bamboo made vegetable containers/baskets.
- A mushroom production unit, under construction, was visited by JIT at Urup Village, Imphal East. Shelve/ rack was not properly constructed. JIT suggests consulting ICAR before finalizing the layout of mushroom growing unit and vermin compost unit should be integrated with mushroom unit.
- Beekeeping needs integration with flower plantation and mustard plantation.
 Farmers may transport the boxes to other places for pollination. Supply of minimum number of boxes for bees & hives farmers to be decided to make beekeeping economically viable.
- ICAR has developed a CD of ten minutes duration on Vermi Compost which can be given to all vermi compost beneficiaries desirous to set up VCU. Semi mechanized sieve recommended for vermi compost units. Composting in vermin compost units take more time in Manipur because of climate. Use of microbes for early decomposing will help to enrich/value addition to vermi compost. JIT recommends for taking up more number of such vermin compost units. Test report of the vermin compost samples should be obtained from regional Center of Organic Farming, Imphal.
- Beekeeping needs integration with flower plantation and suitable crops.
 Farmers may transport the boxes to other places for pollination. Supply of
 minimum number of boxes for bees & hives farmers to be decided to make
 beekeeping economically viable. One commercial honey production unit may
 be established in the State.
- JIT suggests integrating pineapple with poly-mulching, otherwise it will aggravate the problem of obnoxious weeds and soil erosion.

- JIT observed that the overall achievements creating water resources/water conservation is not at all satisfactory and hence, recommends taking up more number of projects on for water harvesting and conservation with proper care.
- District authorities do not have information regarding projects being implemented in their respective districts. Headquarter may endorse copies of the project implemented in various districts to respective DHMs.
- In addition to big farm machineries like tractor or power tiller, JIT recommends introduction and demonstration of small farm tools like fruit harvester, fruit grader, pre-cooling tank, weeder etc. to reduce the drudgery. Garden tool-kit should be provided to the farmers involved in nursery raising and cut flower production.
- In addition, the JIT realized that the research component under MIDH is missing due to non-availability of funds under R&D. The project submitted by ICAR and CAU under R&D components duly endorsed by the Mission Director must be emphasized and necessary budget provision should be made on priority basis to conduct the need based research for greater interest of the farming community of the state.

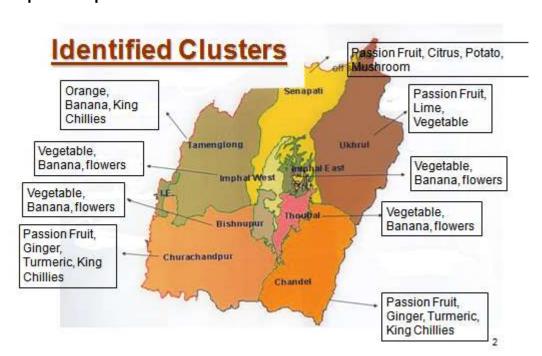
Report of the Joint Inspection Team (JIT) under Leadership of Shri Sanatomba Singh, Under Secretary, Mission for Integrated Development of Horticulture (MIDH), on its visit to Manipur during 1-6 September, 2015 to review the progress under Horticulture Mission for North East & Himalayan States.

The Joint Inspection Team (JIT) comprising Shri Sanatomba Singh, Under Secretary and Shri P. S. Kohli, Resource Person, Mission for Integrated Development of Horticulture (MIDH) visited Manipur during 1-6 September, 2015 to review the progress under Horticulture Mission for North East & Himalayan States (HMNEH)- sub scheme of MIDH in the state. Other members of the Team viz. Prof. W. Ingo Meitei, Central Agriculture University (CAU), Dr. R.K. Dilip, Central Agriculture University (CAU), DR. S.S. Roy, Scientist (Hort.), Indian Council of Agricultural Research and Dr. M.R. Sahoo, Indian Council of Agricultural Research, Shri K.H. Upendra Singh, Assistant Agriculture Officer (SHM) and Shri M. Nabhachandra Singh, Assistant Agriculture Officer (SHM) joined the Team at Manipur. A wrap up meeting was held with Shri M.D. Hafizuddin Khan, In-charge of MIDH at Manipur on 4th September, 2015.

Introduction

The State is a hilly terrain with its distinct geographical entity. The hilly terrain, consisting of 5 districts, surrounds a central valley, consisting of 4 districts, elongating and tapering towards south. The climatic parameters like temperature and rainfall varies in hilly terrain depending on the aspects and elevation.

Map of Manipur:



HORTICULTURE PROFILE OF MANIPUR

Geographical Area: 22,327 Sq. KmPopulation (2001 census) : 27,21,756 (no.)

No. of District
No. of Village
Horticultural Potential Area
2391 nos
2,77,064 ha

 Horticultural Crops Area 98914 ha (Cultivated area) (35%)

 Uncultivated area 178150 ha.

Uncultivated area : Major Horticultural Crops : Passion Fruit, Banana, Citrus, Turmeric,

Chillies, Tomato, Cabbage, Pea, Orchids,

Anthurium etc.

Area under Agriculture

Net crop area 233740 ha.

Gross crop area 339290 ha.

Area Under Horticulture Crops.

Fruit Crops:

i). Orange 5350 ha ii). Lime/Lemon 6000 ha iii).Banana 7010 ha 14296 ha. iv). Pineapple v) Passion fruit 9333 ha iv).others 13640 ha.

Vegetable crops:

i).Tomato 3070 ha ii).cabbage 7590 ha iii) cauliflower 2850 ha iv). Others 6290 ha.

Spice crops:

i).Turmeric 2152 ha ii).Ginger 3026 ha iii).Chillies 9500 ha iv). Others 1400 ha.

Status of Horticulture in Manipur

Main highlights of Horticulture in the State

Manipur produces about 0.81 m MT of horticulture crops from an area of 0.09 m ha. Major horticulture produce is from fruits (63.5%) and vegetables (33.4%).

- During 2013-14, 3800 MT of fruits have been traded in organized markets with average price of Rs. 23.21/ Kg.
- Similarly, 3814 MT of vegetables have been traded in organized markets with average price of Rs 27.26/ Kg.

FRUITS

Banana

- Banana forms about 18.0% of the total production of fruits in the state.
- Recommended varieties of banana in the state are Grand Naine and Poovan.

• Major banana growing belts in the state are Thoubal, Ukhrul, Tamenlong, Chandal, Chura Chandpur, Imphal East, Imphal west and Bishnupur.

Citrus

 Manipur contributes about 1.0% to the total production of orange in the country and forms 18.2% of total production of fruits in the state.

Pineapple

- Manipur contributes about 7.8% to the total production of pineapple in the country with production of 0.14 m MT of pineapple from an area 0.02 m ha with productivity of 9.9 MT/ha.
- The production of pineapple is concentrated in Thonbal, Churchandpur, Imphal-East, Kangpokpi, Bishnupur and Chandel.
- Recommended varieties of pineapple in the state are Mauritious, Kew and Queen.

VEGETABLES

 Main vegetables grown in the State are cauliflower, cabbage, onion, peas and tomato.

SPICES

Manipur produces about 0.02 m MT of spices with productivity of 2.3 MT/ha.

Mission for Integrated Development of Horticulture (MIDH)

The Centrally Sponsored Scheme of Horticulture Mission for North East and Himalayan States (HMNEH) is being implemented in Manipur since 2001-02. From April, 2014 onwards, HMNEH has been subsumed under Mission for Integrated Development of Horticulture (MIDH) for holistic growth of the horticulture sector covering fruits, vegetables, root and tuber crops, mushrooms, spices, flowers, aromatic plants and plantation crops.

Implementation of Horticulture Mission for North East and Himalayan States (HMNEH) in Manipur

The Centrally Sponsored Scheme of Horticulture Mission for North East and Himalayan States (HMNEH) is being implemented in all the districts of the state thereby covering important horticulture crops.

Progress till 2013-14

Salient physical progress till 2013-14 is as follows:-

- An additional area of 79312 ha of identified horticulture crops have been covered.
- In all, 68 nurseries have been established for production of quality planting material.
- An area of 7744 ha has been covered under rejuvenation of old and senile orchards.

- Setting up of 3 IPM/INM infrastructure facilities such as Leaf tissue analysis labs, disease forecasting units.
- Organic farming has been adopted in an area of 2968 ha for promotion of organic cultivation of horticultural crops. Besides, 12063 vermi compost units have been set up.
- An area of 7119 ha has been covered under protected cultivation.
- 89380 farmers have been trained under various horticulture activities.
- Establishment of 3 Centers of Excellence (CoEs) has been reported.

An amount of Rs. 377.64 crore was released to the State till 2014-15 and the State Government has reported an expenditure of ₹ 357.64 crore.

Progress during 2014-15

 An outlay of Rs. 50.00 crore has been approved for the State to implement HMNEH related activities during 2014-15. Funds to the tune of Rs. 44.17 crore have been released, against which an expenditure of Rs. 25.17 crore has been reported.

Details of fund released and expenditure reported as per web posting since 2007-08 (XI Plan) are given below:

| | | (Rupees in crore) |
|---------|---------|-------------------|
| Year | Release | Expenditure |
| 2007-08 | 22.28 | 20.11 |
| 2008-09 | 25.00 | 22.67 |
| 2009-10 | 23.15 | 22.94 |
| 2010-11 | 39.51 | 32.51 |
| 2011-12 | 46.50 | 42.15 |
| 2012-13 | 48.93 | 49.38 |
| 2013-14 | 58.00 | 62.80 |
| 2014-15 | 24.17 | 23.62 |
| 2015-16 | 18.75 | 16.09 |

Programme during 2015-16

An outlay of Rs. 75.00 crore including GOI share of Rs. 37.50 crore (50% of total outlay) has been earmarked for Manipur during 2015-16. Funds to the tune of Rs. 18.75 crore have been released during the current financial year. Out of which, an expenditure of Rs. 16.09 crore has been reported.

Vegetable Initiative for Urban Clusters (VIUC)

VIUC scheme is being implemented since 2011-12 for addressing vegetable supply chain issues in Imphal City. Districts of Imphal East, Imphal West, Bishnupur and Thoubal have been included as catchment area for producing vegetables. During2014-15 an outlay of Rs. 2.00 crore has been earmarked for Manipur, against which a sum of Rs. 1.00 crore has released. Activities taken up under VIUC in the State include vegetable seed & seedling production, area expansion under open field and protected cover, HRD, creation of collection centers besides formation of FIG/FPO.

So far 1750 farmers have been mobilized into 84 FIGs and 2 FPOs have been registered in the state.

Field Visits

Joint Inspection Team visited Imphal East, Imphal West and Thoubal districts of the State to review activities taken under MIDH, OFWM and NVIUC schemes.

Visit to Imphal East District

JIT visited Imphal East District on 2nd September, 2015. The following Officers coordinated the visit:-

- 1. Shri Y. Ibochon Singh, District Horticulture Officer
- 2. Shri W. P. Singh, Agri. Officer
- 3. Shri Gopalchnadra Sharma, Asstt. Agri. Officer
- 4. Shri P. Shantikumar Roy, Asstt. Agri Officer

Details of Area and Production of horticulture crops viz. Fruits, vegetables, Spices, Flowers and Plantation crops in the district are as under:

3rd Estimate of Area and Production of Horticulture Crops, 2014-15 in Imphal East District.

Area In Ha., Prod. In MT Production

| A. Fruits 1 Pineapple 2 Banana 3 Lime/Lemon 4 Orange 5 Passion Fruit 6 Other Fruits Sub Total | 1440 779 185 126 1177 3707 561 1265 | 17950 10895 1665 1372 8710 40592 |
|---|---|--|
| 2 Banana 3 Lime/Lemon 4 Orange 5 Passion Fruit 6 Other Fruits Sub Total | 779 185 126 1177 3707 | 10895 1665 1372 8710 40592 |
| 3 Lime/Lemon 4 Orange 5 Passion Fruit 6 Other Fruits Sub Total | 185 126 1177 3707 561 | 1665 1372 8710 40592 |
| 4 Orange 5 Passion Fruit 6 Other Fruits Sub Total | 126 1177 3707 561 | 1372 8710 40592 |
| 5 Passion Fruit 6 Other Fruits Sub Total | 1177 3707 561 | 8710 40592 |
| 6 Other Fruits Sub Total | 1177 3707 561 | 8710 40592 |
| Sub Total | 3707 561 | 40592 |
| | 561 | |
| | | 6139 |
| B Vegetables | | 6139 |
| 1 Cauliflower | 1265 | |
| 2 Cabbage | 1200 | 15292 |
| 3 Tomato | 581 | 5880 |
| 4 Pea | 1120 | 10979 |
| 5 Cucumber | 51 | 254 |
| 6 Watermelon | 12 | 240 |
| 7 Chillies Green | 37 | 286 |
| 8 Onion | 49 | 778 |
| 9 Okra | 19 | 143 |
| 10 Others | 1036 | 10546 |
| Sub Total | 4731 | 50537 |
| C Spices | | |
| 1 Chillies | 1572 | 12547 |
| 2 Ginger 3 Turmeric | 119 | 1598 |
| | 232 | 2789 |
| 4 Others | 142 | 968 |
| Sub Total | 2065 | 17902 |
| D Flowers | | |
| 1 Cut Flower | 31 | 45875 |
| 2 Loose flower | 93 | 49 |
| Sub Total | 124 | 45924 |
| E Plantation Crops | | |
| 1 Cashewnut | 21 | 13 |

MIDH intervention in Imphal East District

Implementation of HMNEH in East Imphal District – 2014-15

| S.No. | Component | Physical | Financial Achievement |
|-------|--|-------------|-----------------------|
| | | Achievement | (Rs. in Lakh) |
| 1 | New Plantation of Banana (ha.) | 4 | 4.50 |
| | (i) 1 st Year Maintenance (ha.) | 32 | 8.25 |
| 2 | New Plantation of Pineapple (ha.) | 50 | 16.40 |
| | (i) 1 st Year Maintenance | 200 | 26.30 |
| 3 | Papaya New Plantation with Integration (ha.) | 4 | 3.00 |
| | (i) Papaya New Plantation without Integration – 1 st Year Maintenance | 25 | 3.28 |
| 4 | High Density Plantation with Integration (ha.) | 9 | 4.05 |
| 5 | High Density Plantation without Integration – 1 st Year maintenance | 132 | 15.80 |
| | (i) High Density Plantation without Integration – 2 nd Year maintenance | 100 | 12.00 |
| 6 | Hybrid Vegetables (ha.) | 450 | 113.00 |
| 7 | Flowers (ha.) | 50 | 25.00 |
| 8 | Spices 9ha.) | 15 | 2.25 |
| 9 | Plantation Crops (ha.) | 15 | 2.25 |
| | (i) 1 st Year Maintenance | 60 | 7.20 |
| | (ii) 2 nd Year Maintenance | 60 | 7.20 |
| 10 | Rejuvenation (ha.) | 73 | 14.60 |
| 11 | Water Harvesting Structures (Nos.) | | |
| | (A) Community Tanks in General Area | 3 | 60.00 |
| | (B) Community Tanks in Hilly Area | 2 | 50.00 |
| | (C) WHS for Individual in General Area | 8 | 6.00 |
| | (D) WHS for Individual in Hilly Area | 3 | 2.70 |
| 12 | Protected Cultivation (ha.) | 1.56 | 55.30 |
| 13 | Promotion of IPM | 340 | 4.08 |
| 14 | Vermi Compost Units (Nos.) | 35 | 7.00 |
| 15 | Training of Farmers | 180 | 1.80 |

Implementation of HMNEH in East Imphal District – 2015-16

| S.No. | Component | Physical | Financial Achievement |
|-------|---|-------------|-----------------------|
| | | Achievement | (Rs. in Lakh) |
| 1 | Mushroom Production Unit (Nos.) | 2 | 16.00 |
| 2 | Protected Cultivation (ha.) | 2 | 106.00 |
| 3 | Promotion of IPM (ha.) | 1046 | 12.55 |
| 4 | Vermi Compost Units | 100 | 14.3 |
| 5 | Beekeeping (No.) | | |
| | (i) Distribution of colonies with hives | 1400 | 11.20 |
| | (ii) Equipment | 140 | 11.20 |
| 6 | Training of Farmers (No.) | 320 | 3.2 |
| 7 | Post Harvest Management (No.) | | |
| | (i) Pack House | 9 | 33.50 |
| 8 | Promotion of FPOs/FIG (No.) | 1 | 14.50 |
| 9 | Horticulture Mechanization (Nos.) | 4 | 4.00 |

During the visit, the activities viz. Nursery Floriculture), Mushroom Production Unit, Beekeeping, Area Expansion of Pineapple, Primary Rural Market, Vermi Compost Unit, Water harvesting structure, Protected Cultivation (MIDH & NVIUC) and Drip Irrigation were reviewed. Details of beneficiaries covered are annexed.

Observations

- Due to farmer's lack of initiative and entrepreneurship, market for orchid flower (Dendrobium) was not explored and as a result the nursery was not economically viable and was not well maintained.
- Beneficiaries covered under Schemes required training for plantation etc.
- Solaric tunnel under NVIUC was established in low lying area and beds were not properly raised and cucumber plants were viral ridden.
- Spawn producers' needed to be linked with mushroom growers.
- From June to September, there is no production of honey due to non availability of pollination.
- Pits of Vermi compost unit were not as per norms laid in MIDH. Further, there was no outlet in unit and there was no provision of water channel along border of unit to protect from ants etc.
- Uneven construction of water harvesting structure was observed. Tarpaulin was not properly used.
- Setting up of Primary Market (fruits & Vegetables) with cost of Rs. 25.00 lakh at Heikap thereby benefitting 4000 people is a welcome sign. The project is under construction. Subsidy of Rs. 10.00 lakh had been released to Heikap Farmers' Group for the purpose.

Visit to Thoubal district

S.No.

JIT visited Thoubal District on 3rd September, 2015. The following Officers coordinated the visit:-

- 1. Shri Ranjit Kumar Singh, District Horticulture Officer
- 2. Shri P. Tomba Singh, Agri. Officer
- 3. Shri L. Mohan Singh, Agri. Officer
- 4. Shri L. Imo Singh, Asstt. Agri. Officer

Name of Crop

Details of Area and Production of horticulture crops viz. Fruits, vegetables, Spices, Flowers and Plantation crops in the district are as under:

Area

Area In Ha., Prod. In MT

Production

3rd Estimate of Area and Production of Horticulture Crops, 2014-15 in Thoubal District.

Fruits A. 2624 30697 1 Pineapple 2 685 9453 Banana

| 3 | Lime/Lemon | 228 | 2052 |
|----|----------------|------|-------|
| 4 | Orange | | |
| 5 | Passion Fruit | 132 | 1451 |
| 6 | Other Fruits | 1822 | 13847 |
| | Sub Total | 5491 | 57500 |
| В | Vegetables | | |
| 1 | Cauliflower | 610 | 6893 |
| 2 | Cabbage | 1245 | 14865 |
| 3 | Tomato | 521 | 5217 |
| 4 | Pea | 1032 | 10413 |
| 5 | Cucumber | 31 | 167 |
| 6 | Watermelon | 17 | 341 |
| 7 | Chillies Green | 54 | 369 |
| 8 | Onion | 49 | 697 |
| 9 | Okra | 17 | 131 |
| 10 | Others | 996 | 10109 |
| | Sub Total | 4572 | 49203 |

| С | Spices | | |
|---|--------------|------|-------|
| 1 | Chillies | 1502 | 11821 |
| 2 | Ginger | 268 | 3220 |
| 3 | Turmeric | 245 | 2893 |
| 4 | Others | 138 | 890 |
| | Sub Total | 2153 | 18824 |
| D | Flowers | | |
| 1 | Cut Flower | 14 | 21110 |
| 2 | Loose flower | 46 | 24 |
| | Sub Total | 60 | 21134 |

MIDH intervention in Thoubal District

Implementation of HMNEH in Thoubal District – 2014-15

| S.No. | Component | Physical | Financial Achievement |
|-------|--|-------------|-----------------------|
| | | Achievement | (Rs. in Lakh) |
| 1 | New Plantation of Banana (ha.) | 4 | 4.50 |
| | (i) 1 st Year Maintenance (ha.) | 32 | 6.00 |
| 2 | New Plantation of Pineapple (ha.) | 30 | 9.84 |
| | (i) 1 st Year Maintenance | 200 | 26.30 |
| 3 | Papaya New Plantation with Integration (ha.) | 4 | 3.00 |
| | (i) Papaya New Plantation without Integration – 1 st Year Maintenance | 25 | 3.28 |
| 4 | High Density Plantation with Integration (ha.) | 9 | 4.05 |
| 5 | High Density Plantation without Integration – 1 st Year maintenance | 94 | 11.30 |
| | (i) High Density Plantation without Integration – 2 nd Year maintenance | 60 | 7.2 |
| 6 | Hybrid Vegetables (ha.) | 330 | 82.50 |
| 7 | Flowers (ha.) | 50 | 25.00 |
| 8 | Spices 9ha.) | 15 | 2.25 |
| 9 | Plantation Crops (ha.) | | |
| | (i) 1 st Year Maintenance | | |
| | (ii) 2 nd Year Maintenance | | |
| 10 | Rejuvenation (ha.) | 73 | 14.60 |
| 11 | Water Harvesting Structures (Nos.) | | |
| | (A) Community Tanks in General Area | 2 | 40.00 |
| | (B) Community Tanks in Hilly Area | 2 | 50.00 |
| | (C) WHS for Individual in General Area | 4 | 3.00 |
| | (D) WHS for Individual in Hilly Area | 3 | 2.70 |
| 12 | Protected Cultivation (ha.) | 2.06 | 73.00 |
| 13 | Promotion of IPM | 338 | 4.05 |
| 14 | Vermi Compost Units (Nos.) | 35 | 7.00 |
| 15 | Training of Farmers | 77 | 0.77 |

Implementation of HMNEH in Thoubal District – 2015-16

| S.No. | Component | Physical | Financial Achievement |
|-------|---|-------------|-----------------------|
| | | Achievement | (Rs. in Lakh) |
| 1 | Mushroom Production Unit (Nos.) | 1 | 8.00 |
| 2 | Protected Cultivation (ha.) | 1.5 | 79.5 |
| 3 | Promotion of IPM (ha.) | 1500 | 18.00 |
| 4 | Vermi Compost Units | 100 | 14.3 |
| 5 | Beekeeping (No.) | | |
| | (i) Distribution of colonies with hives | 1200 | 9.60 |
| | (ii) Equipment | 120 | 9.60 |
| 6 | Training of Farmers (No.) | 323 | 3.23 |
| 7 | Post Harvest Management (No.) | | |
| | (i) Pack House | 6 | 27.50 |
| 8 | Promotion of FPOs/FIG | 1 | 14.50 |
| 9 | Horticulture Mechanization | 4 | 4.00 |

During the visit, the activities viz. Nursery, Vermi Compost Unit, Protected Cultivation (Shade net), Area Expansion of Pineapple and Beekeeping were reviewed. Details of beneficiaries covered are annexed.

Observations

- Symptoms of virus were observed in tomato plants. Farmer needed training in IPM measures.
- Beneficiary who established vermi compost unit needed training and exposure visit for packaging etc.
- Wrong selection of site for shade net which was constructed in low lying area. No crop was taken due to flood. Farmer needed exposure as well as training.
- Supply of fewer boxes for bees & hives are not economically viable for beekeeping.

Visit to Imphal West District

JIT visited Imphal West District on 4th September, 2015. The following Officers coordinated the visit:-

- 1. Shri L. Upendra Singh, District Horticulture Officer
- 2. Shri Joy Kumar Singh, Agri. Officer

Details of Area and Production of horticulture crops viz. Fruits, vegetables, Spices and Flowers in the district are as under:

3rd Estimate of Area and Production of Horticulture Crops, 2014-15 in Imphal West District.

| C No | Name of Cran | | la., Prod. In MT |
|-------|----------------|------|------------------|
| S.No. | Name of Crop | Area | Production |
| Α. | Fruits | | 0050 |
| 1 | Pineapple | 694 | 8958 |
| 2 | Banana | 825 | 11220 |
| 3 | Lime/Lemon | 191 | 1719 |
| 4 | Orange | | |
| 5 | Passion Fruit | 130 | 1429 |
| 6 | Other Fruits | 1032 | 7637 |
| | Sub Total | 2872 | 30963 |
| В | Vegetables | | |
| 1 | Cauliflower | 527 | 5797 |
| 2 | Cabbage | 1175 | 14100 |
| 3 | Tomato | 342 | 3461 |
| 4 | Pea | 1112 | 11220 |
| 5 | Cucumber | 36 | 180 |
| 6 | Watermelon | 11 | 221 |
| 7 | Chillies Green | 38 | 318 |
| 8 | Onion | 59 | 879 |
| 9 | Okra | 21 | 154 |
| 10 | Others | 1014 | 10331 |
| - | Sub Total | 4335 | 46661 |
| С | Spices | 1 | • |
| 1 | Chillies | 1572 | 10273 |
| 2 | Ginger | 119 | 3367 |
| 3 | Turmeric | 232 | 3105 |
| 4 | Others | 142 | 914 |
| | Sub Total | 2065 | 17660 |
| D | Flowers | | 1 |
| 1 | Cut Flower | 28 | 21110 |
| 2 | Loose flower | 83 | 24 |
| | Sub Total | 111 | 21134 |

MIDH intervention in Imphal West District

Implementation of HMNEH in Imphal West District – 2014-15

| S.No. | Component | Physical | Financial Achievement |
|-------|--|-------------|-----------------------|
| | · | Achievement | (Rs. in Lakh) |
| 1 | New Plantation of Banana (ha.) | 4 | 4.50 |
| | (i) 1 st Year Maintenance (ha.) | 32 | 6.00 |
| 2 | New Plantation of Pineapple (ha.) | 20 | 6.56 |
| | (i) 1 st Year Maintenance | | |
| 3 | Papaya New Plantation with Integration (ha.) | 4 | 3.00 |
| | (i) Papaya New Plantation without Integration – 1 st Year Maintenance | 25 | 3.28 |
| 4 | High Density Plantation with Integration (ha.) | 9 | 4.05 |
| 5 | High Density Plantation without Integration – 1 st Year maintenance | 102 | 12.24 |
| | (i) High Density Plantation without Integration – 2 nd Year maintenance | 68 | 8.16 |
| 6 | Hybrid Vegetables (ha.) | 350 | 87.50 |
| 7 | Flowers (ha.) | 50 | 25.00 |
| 8 | Spices 9ha.) | 25 | 3.75 |
| 9 | Plantation Crops (ha.) | | |
| | (i) 1 st Year Maintenance | | |
| | (ii) 2 nd Year Maintenance | | |
| 10 | Rejuvenation (ha.) | 73 | 14.60 |
| 11 | Water Harvesting Structures (Nos.) | | |
| | (A) Community Tanks in General Area | 2 | 40.00 |
| | (B) Community Tanks in Hilly Area | 2 | 50.00 |
| | (C) WHS for Individual in General Area | 4 | 3.00 |
| | (D) WHS for Individual in Hilly Area | 2 | 1.80 |
| 12 | Protected Cultivation (ha.) | 1.00 | 35.50 |
| 13 | Promotion of IPM | 340 | 4.08 |
| 14 | Vermi Compost Units (Nos.) | 45 | 12.00 |
| 15 | Training of Farmers | 120 | 1.12 |

Implementation of HMNEH in Imphal West District – 2015-16

| S.No. | Component | Physical | Financial Achievement |
|-------|---|-------------|-----------------------|
| | | Achievement | (Rs. in Lakh) |
| 1 | Mushroom Production Unit (Nos.) | 4 | 32.00 |
| 2 | Protected Cultivation (ha.) | 1.50 | 79.50 |
| 3 | Promotion of IPM (ha.) | 1000 | 12.00 |
| 4 | Vermi Compost Units | 90 | 9.3 |
| 5 | Beekeeping (No.) | | |
| | (i) Distribution of colonies with hives | 1600 | 12.80 |
| | (ii) Equipment | 160 | 12.80 |
| 6 | Training of Farmers (No.) | 280 | 2.80 |
| 7 | Post Harvest Management (No.) | | |
| | (i) Pack House | 7 | 29.50 |
| 8 | Promotion of FPOs/FIG (No.) | 1 | 14.50 |
| 9 | Horticulture Mechanization (Nos.) | 5 | 5.00 |

During the visit, the activities viz Rural Primary Markets, Area expansion of Papaya, Vermi Compost unit, Protected Cultivation – Green houses (Floriculture & cauliflower), Pack house, Mushroom Production Unit were reviewed. Details of beneficiaries covered are annexed.

Pack House

JIT visited the site of Pack House cum Collection Centre which was under construction with total cost of Rs. 4.00 lakh by Farmers Interest Group comprising 30 members having size of 20′x30x9′.

Rural Primary Markets

JIT visited the sites of two rural primary markets which were under construction at Phayeng and Mayang respectively. It is a welcome sign.

- (i) At Phayeng, Primary Rural Market is under construction with total cost of Rs. 25.00 lakh. Funds to the tune of Rs. 10.00 lakh have been released to Phayeng Farmers Interest Group (FIG having 23 members) to undertake construction of complex. Three (3) sheds having size of 40′x15′x3′ for selling fruits and vegetables would be constructed thereby benefiting three (3) nearby villages. Work relating to land leveling was under progress.
- (ii) Another Primary Rural Market is under construction at Mayang with total cost of Rs. 25.00 lakh. Funds to the tune of Rs. 10.00 lakh have been released to Mayang Langing Development Board to undertake construction of complex. Board would be contributing Rs.15.00 lakh for the purpose. Two sets having size of 25′x40′ and one set having size of 16′x40′ for selling fruits and vegetables would be constructed thereby benefiting three (8) nearby villages. Vendors would be selected by Zlla Parishads. Construction work had yet to start after rains.

Observations

- Water stagnation in papaya plantation had affected the health of papaya plants. Ring spots and virus also observed in plants. Loose Drip line affected the supply of equitable amount of water in plants. It needed to be tightened.
- Floriculture farmers are to be linked with markets and hotels due to lack of nearby marketing facilities.
- Packing material was not easily available in Manipur required for pack house.
 Farmers opting for setting up of Pack House needed to be trained in sorting, grading packaging etc. Pack house needed to be linked with super markets.
- Farmers covered under Green House/ Shade net needed training in plantation in GH and IPM measures.
- Beneficiary under Mushroom production needed training from ICAR.
- Setting up of 2 Primary Market (fruits & Vegetables) with cost of Rs. 50.00 lakh at Phayeng and Mayang thereby benefitting people of 11 nearby villages is a welcome sign. The projects were under construction.

National Bamboo Mission (NBM)

The field visit to the activities of National Bamboo Mission (NBM) undertaken by Chief Conservator of Forests, Manipur could not be materialized due to unavoidable circumstances. However, power point presentation was made in respect of progress made under NBM during 2014-15 and 2015-16 by Chief Conservator in his chamber for information of JIT. Details are:

Activities of National Bamboo Mission (Manipur) in Imphal East/ West & Thoubal district during 2014-15 and 2015-16:.

Small Nursery :- NBM established one small nursery at Sawombung (Rs. 10 lakh) (Imphal East) capacity of the nursery is 1 lakh. The nursery has started producing planting materials for 2015-16 plantations. Species available in the nursery are as follows –

Dedrocalamus latiflorus (Local Name- Maribob), Dedrocalamus longispathus (Local Name- Uil) and Bambusa pallid (Assamese- Makal)

Transplantation of the saplings in the polythene bag is in progress.

- 2. <u>Plantation in Forest Area</u>: -During 2014-15, 55 ha were covered under bamboo plantation 30 ha in Imphal East/West and 25 ha. in Thoubal District. The centers are as below:
 - a) Langthabal ii) Lamdeng Awangleikai iii) Maharabi iv) Laikot Phajol v) Sijang 6 ha each and the total area is 30 ha.
 - b) In Thoubal district centers are i) Phunal Maring- 10 ha. ii) B Geljang- 5 Ha iii) Wangoo- 10 Ha.

The total expenditure for the above plantation was Rs. 11.55 lakh. Maintenance of the said plantation will be taken up during 2015-16.

- 3. Improvement of Existing Bamboo Stock :- 60 ha of existing bamboo stock were improved 30 ha each in Central and Thoubal districts.
- 4. Training of farmers within state, 55 farmers 30 from central and 25 from Thoubal were trained within the state. And 5 farmers were deputed for training at CBTC Guwahati.
- 5. State level Workshop were organized on $2^{nd} 3^{rd}$ July 2014 at Hotel Classics.
- 6. NBM, Manipur participated in "Sangai Festival 2014" held at Imphal from 21st 30th November 2014. NBM stall was appreciated by all.
- 7. Under Mission management, 50- Local Bamboo Artisans were given practical training in handicrafts. Two (2) Resource persons were from Guwahati and two (2) from Imphal.
- 8. A Bamboo house was constructed at Manipur Zoological garden.
- 9. A bamboo reinforced cement concrete house was constructed at Sawombung.
- 10. Bamboo packaging units are under establishment.

During the discussions, it was pointed out that many commercial varieties/species of bamboo were not available in Manipur. Commercial varieties are being tried out in TC labs at Snebi and Khaua. Monitoring and evaluation of programme were done by Remote Sensing.

District: Imphal East

Production of Planting Material

Nursery

| Sr. No. | Details | Remarks |
|---------|------------------------------------|---|
| 1 | Name of the project | Nursery (Floriculture) |
| 2 | Year of Implementation | 2013-14 |
| 3 | Project Period | One Year |
| 4 | Name of Implementing Agency | Shri Shankar |
| 5 | Location of Project | Renubale, East Imphal |
| 6 | Total Project Cost | Rs. 1.2 lakh |
| 7 | Amount Released by DAC | Rs. 70,000/- |
| 8 | Expenditure incurred (Rs.) | Rs. 70,000/- |
| 9 | Status of Project | |
| | Name of Nursery and crop for which | Orchid (Dendrobium Flower) |
| | plants are produced | |
| | Name of crops for which seeds | NA |
| | produced | |
| | Quantity produced | NA |
| | Quantity sold | NA |
| | • Rate | NA |
| | Amount realized through sale | NA |
| | Whether NHM logo displayed | No |
| | Observations made by JIT | Plants supplied by Deptt. Poor maintenance Training in plantation needed. Nursery was not economically viable because of lack of farmers' interest and entrepreneurship. Farmer did not explore market for flowers. |

Protected Cultivation (NVIUC)

| Sr. No. | Details | Remarks |
|------------|---|--|
| 1 | Name & address of Beneficiary whose field visited. | M. Maipak Singh, Verup, East Imphal |
| 2 | Total land available with the beneficiary (ha). | 1 acre |
| 3 | Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel) | Solaric Tunnel |
| 4. | Year of establishment | 2013-14 |
| 5. | Size of Structure (Sq. m) | 120 |
| 6. | Total cost (Rs. in Lakh) | 112 |
| 7. | Agency involved in fabrication and installation | ZOPAR |
| 8. | Total subsidy paid and date of payment. (Rs. in Lakh) | 1.2 |
| 9. | Crop being grown | Cucumber (Alangiri) |
| 10. | Condition of Structure | Good |
| 11. | Condition of Crop | Good |
| 12. | Tie up with market | Local |
| 13. | General upkeep (Very good/ Good/ Average/ Poor) | Good |
| 14 | Any other relevant observation by JIT. | Established in low lying area. Beds not properly raised. Viral Disease riddled plants. Spray (IPM) needed. Farmer not trained. Selling in local Market and realizing Rs. 10,000/- P.M. |

Mushroom Production Unit

| Sr. No. | Details | Remarks |
|---------|-----------------------------------|---|
| 1 | Name of the project | Mushroom Production Unit (Under |
| | | Construction) |
| 2 | Year of Implementation | 2014-15 |
| 3 | Project Period | 2014-15 |
| 4 | Name of Beneficiary | M. Sushil Meitei |
| 5 | Location of Project | Verup, Imphal East |
| 6 | Total Project Cost (Lakh) | Rs. 20.00 lakh |
| 7 | Amount Released & date | 8 Lakh (Eight Lakh) (40 %) 23/07/15 & Rs. 7.20 lakh 24/08/15 |
| 8 | Expenditure incurred | 8 Lakh (Eight Lakh) (40 %) |
| 9 | Status | |
| | Capacity of unit | NA |
| | Commodity | Mushroom |
| | Equipments purchased | Cooling & heating system |
| | Condition of infrastructure | Under construction |
| | Whether NHM logo displayed | No |
| | Whether funds disbursed to agency | Training in mushroom (oyster) by Hort. Deptt. Quality Spawn material would be arranged by beneficiary. Suggested to attend Spawn Production Programme of ICAR. Suggested for integration with mushroom grower. |

Beekeeping/Project Status of Organic Farming

| Sr. No. | Details | Remarks |
|---------|---|---|
| 1 | Name of the project | Pollination support for Beekeeping |
| 2 | Year of Implementation | 2014-15 |
| 3 | Project Period | 2014-15 |
| 4 | Name of Implementing Agency | Shri T. Lakhoi |
| 5 | Location of Project | Chanam Sanduok, East Imphal |
| 6 | Total Project Cost | NA |
| 7 | Amount Released by DAC | NA |
| 8 | Expenditure incurred Status | NA |
| 9 | Status | |
| | No. of boxes | 25 |
| | Other equipment supplied by Deptt./purchased by beneficiary | 3 Honey Extractor, |
| | Name & address of certifying agency | |
| | Whether any certificate issued | |
| | Observations made by JIT | Beneficiary purchased 10 boxes Rs. 20,000/- realized in three months. No production of honey during June & September due to non availability of pollination. No transportation of boxes to other places for pollination. Also covered for Vermi compost unit which was under construction. Worms would be supplied by Deptt. Pits were wider than the specification of MIDH. Water channel along borders of VCU suggested to protect from ants etc. |

Area Expansion / Rejuvenation

| Sr. No. | Details | Remarks |
|------------|--|--|
| 1 | Name & address of Beneficiary whose field visited. | K. Rame Singh , Vil: Chanam,Sanduok, East Imphal |
| 2 | Total land available with the beneficiary (ha). | 2.0 |
| 3 | Crop Cluster under which covered. | High density plantation of Pineapple (On slanting Hills) in 1.5 ha. |
| 4 | Name & variety of crop planted. | Pineapple V- Queen |
| 5 | Source of planting material. | Own Source |
| 6 | Number of planting material. | 64,000 |
| 7 | Number of plants planted/ rejuvenated. | NA |
| 8 | Date of plants which survived (also indicate percentage survival). | NA |
| 9 | Total amount of subsidy assistance due to the beneficiary as (Rs.) | 65625 /- |
| 10 | Amount paid and date of payment. | 65625 Dated 12/01/15 |
| 11 | Mode of payment. | RTGS/NEFT |
| 12 | Source of Irrigation Water (Bore well/ Tube well/ Canel) | |
| 13. | Whether Drip/ Sprinkle System in use. | |
| 14. | Other inputs provided. | F.V.M |
| 15. | Whether assistance available for Organic Farming | |
| 16 | If so, area covered | |
| 17. | Assistance available | |
| 18. | Available marketing facility for the crop. | |
| 19. | Other infrastructure available in the vicinity. | |
| 20. | General upkeep of the plot; Very good/ Good / Average/ Poor. | Good |
| 21. | Any other relevant observation by the JIT. | Mauritius variety was tried but failed in present conditions. Selling rate @ Rs. 15-20 per piece and Rs. 60,000/ha. realized. Black mulching and inter cropping of pigeon pea recommended. |

Area Expansion / Rejuvenation

| Sr. No. | Details | Remarks |
|------------|--|---|
| 1 | Name & address of Beneficiary whose field visited. | Th. Surjit Singh, Ngariyan Angtha, East Imphal |
| 2 | Total land available with the beneficiary (ha). | 0.75 |
| 3 | Crop Cluster under which covered. | High density plantation of Pineapple on hill slopes |
| 4 | Name & variety of crop planted. | Pineapple V- Queen |
| 5 | Source of planting material. | Local (Own Source) |
| 6 | Number of planting material. (Nos.) | 8000 |
| 7 | Number of plants planted/ rejuvenated. | |
| 8 | Date of plants which survived (also indicate percentage survival). | |
| 9 | Total amount of subsidy assistance due to the beneficiary as (Rs.) | 8203 /- |
| 10 | Amount paid and date of payment. | 8203 dated 25/02/15 |
| 11 | Mode of payment. | NEFT |
| 12 | Source of Irrigation Water (Bore well/ Tube well/ Canel) | |
| 13. | Whether Drip/ Sprinkle System in use. | |
| 14. | Other inputs provided. | F.V.M |
| 15. | Whether assistance available for Organic Farming | Vermi Compost |
| 16 | If so, area covered | (30x8) Sq ft. |
| 17. | Assistance available (Rs.) | 50,000 (50%) |
| 18. | Available marketing facility for the crop. | |
| 19. | Other infrastructure available in the vicinity. | |
| 20. | General upkeep of the plot; Very good/ Good / Average/ Poor. | |
| 21. | Any other relevant observation by the JIT. | At present, no fruit bearing. Black mulching and inter cropping of pigeon pea recommended. Plant health not satisfactory. |

Markets

Rural Market / Wholesale Market MIDH

| Sr. No. | Details | Remarks |
|---------|--|---|
| 1 | Name of the project | Primary Rural Market (Under Construction) by Heikup Farmers Interest Group (FIG) |
| 2 | Year of Implementation | 2014-15 |
| 3 | Project Period | 2014-15 |
| 4 | Name of Implementing Agency | Ex-officio Project Officer () I/E |
| 5 | Location of Project | Heikup, East Imphal |
| 6 | Total Project Cost | Rs. 25 lakh. |
| 7 | Amount Released by Department of Agriculture & Cooperation (Rs.) | 10,00,000 /- |
| 8 | Expenditure incurred | NA |
| 9 | Status | |
| | Size of Market in terms of area | 2000 sq ft (market complex) |
| | Facilities created | Auction buying & setting |
| | Commodities sold | Fruits &Vegetables, fish etc |
| | Approachability | |
| | Condition of Market' | Under construction – land leveling under progress. |
| | Whether funds disbursed to Agency | Yes |
| | Observations made by JIT | 2 sets of 30′x12′x3′ and one small set would be constructed. 4000 people from nearby villages will be covered. |

Vermi Compost Unit – Protected Cultivation

| Sr. No. | Details | Remarks |
|---------|--|---|
| 1 | Name of the project | Vermi Compost Unit by Heikup Farmers Interest Group |
| 2 | Year of Implementation | 2014-15 |
| 3 | Project Period | 2014-15 |
| 4 | Name of Implementing Agency | Th. Samananda Singh |
| 5 | Location of Project | Heikup, East Imphal |
| 6 | Total Project Cost (Rs.) | 1,00,000 /- |
| 7 | Amount Released by Department of Agriculture & Cooperation (Rs.) | 50,000 /- |
| 8 | Expenditure incurred Status | NA |
| 9 | Status | |
| | Crops covered | Tomato, King Chilies, Brinjal |
| | Name of farmers involved | one |
| | Name & address of certifying agency | |
| | Whether any certificate issued | |
| | Observations made by JIT | Worms provided by Deptt. Selling @Rs. 10/kg., 10,000 kg. had been sold. Vermi wash suggested. |

Post Harvest Management

Pack House/Cold Storage/Ref Van/ Primary processing Units MIDH

| Details | Remarks |
|-----------------------------------|--|
| Name of the project | Pack House |
| Year of Implementation | 2014-15 |
| Project Period | 2014-15 |
| Name of Beneficiary | S. Beshambhor Singh |
| Location of Project | Angtha, East Imphal |
| Total Project Cost (Rs.) | 4,00,000 /- |
| Amount Released & date | Rs. 2,00,000/- 10/9/15 |
| Expenditure incurred | Rs. 2,00,000/- |
| Status | |
| Capacity of unit | Size: (9x6) sq m |
| Commodity | Pineapple |
| Equipments purchased | Rack, Plastic Crate, weighing machine, Washing tray. |
| Condition of infrastructure | Good |
| Whether NHM logo displayed | No |
| Whether funds disbursed to agency | yes |
| Observations made by JIT | Beneficiary not present on site. |
| | Name of the project Year of Implementation Project Period Name of Beneficiary Location of Project Total Project Cost (Rs.) Amount Released & date Expenditure incurred Status Capacity of unit Commodity Equipments purchased Condition of infrastructure Whether NHM logo displayed Whether funds disbursed to agency |

Water Resources Development

| Sr. No. | Details | Remarks |
|---------|--|--|
| 1 | Name of the project | Water Harvesting Structure |
| 2 | Year of Implementation | 2014-15 |
| 3 | Project Period | 2014-15 |
| 4 | Name of Implementing Agency | Educated Farmers Association |
| 5 | Location of Project | Kangla Sangom Sang, East Imphal |
| 6 | Total Project Cost | NA |
| 7 | Amount Released by DAC | NA |
| 8 | Expenditure incurred Status | NA |
| 9 | Current Status of Project | |
| | Dimension (L x B) | (50x40) |
| | Capacity | 57,33,000 |
| | Command Area | |
| | Whether linked with new plantation or old plantation | |
| | Whether funds disbursed | |
| | Observations made by JIT | Well maintained. Good quality of Tarpaulin used. Water used for paddy & vegetables cultivation. |

Micro Irrigation (OFWM)

| Sr. No. | Details | Remarks |
|---------|--|---|
| 1 | Name & address of beneficiary visited. | P. Shyamjit Meitei, Uyumpok, East Imphal |
| 2 | Total land available with the beneficiary (ha). | 2 |
| 3 | Type of MI system availed Drip/ Sprinkler | Sprinkler |
| 4 | Crop(s) covered | Tomato |
| 5. | Total area covered (ha) | 0.5 |
| 6 | Crop Spacing (for drip) | 60x60 cm. |
| 7 | Year of establishment | 2014-15 |
| 8 | Name of Manufacturer/ Supplier | Irrigation Enterprises, Thoubal |
| 9 | Total subsidy paid & date of payment | 42,106 /- 09/06/15 |
| 10 | Mode of payment | By cheque |
| 11 | Status of crop | Good |
| 12 | General upkeep (Very good/ Good/ Average/ Poor) | Good |
| 13. | Any other relevant observation by JIT. | Well maintained. |

District: THOUBAL

Production of Planting Material

Nursery

| Sr. No. | Details | Remarks |
|---------|--|---|
| 1 | Name of the project | Nursery |
| 2 | Year of Implementation | 2014-15 |
| 3 | Project Period | One year |
| 4 | Name of Implementing Agency | Sh. Lukhoi Singh |
| 5 | Location of Project | Wabagai |
| 6 | Total Project Cost (Rs. per sq. m.) | 1860 |
| 7 | Amount Released by DAC | In kind |
| 8 | Expenditure incurred | |
| 9 | Status of Project | |
| | Name of Nursery and crop for which plants are produced | Vegetables |
| | Name of crops for which seeds produced | Cabbage, Cauliflower, Tomato, King Chilies |
| | Quantity produced | 50,000 no. of plants |
| | Quantity sold | 40,000 Nos. |
| | • Rate (Rs. per plant) | 0.50 |
| | Amount realized through sale (Rs. in Lakh) | 1.50 |
| | Whether NHM logo displayed | No |
| | Observations made by JIT | Symptom of virus in tomato plants.IPM measures recommended. Crop rotation recommended. Onion would be taken after harvesting tomatoes. Vermi compost unit recommended. |

Vermi Compost Unit.

| Sr. No. | Details | Remarks |
|------------|---|--|
| 1 | Name & address of Beneficiary whose field visited. | M. Kumarjit Meitei of Umathel. M. Ungbi Sophia |
| 2 | Total land available with the beneficiary (ha). | 1 |
| 3 | Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel) Vermi Compost Unit. | 2 Units Vermi Compost Unit |
| 4. | Year of establishment | 2014-15 |
| 5. | Size of Structure (Sq. m) | 30′x8′2.6′ (2 Units) |
| 6. | Total cost (Rs. Per Unit) | 1,00,000 /- |
| 7. | Agency involved in fabrication and installation | Individual |
| 8. | Total subsidy paid and date of payment. (Rs. Per Unit) | 50,000 /- |
| 9. | Crop being grown | Vermi compost |
| 10. | Condition of Structure | Production Stage |
| 11. | Condition of Crop | |
| 12. | Tie up with market | Sericulture Deptt. |
| 13. | General upkeep (Very good/ Good/ Average/ Poor) | Good |
| 14 | Any other relevant observation by JIT. | Produced 2000/kg and sold @ Rs. 15/kg. Worms procured privately @ Rs. 1/piece. Needs exposure visit for packaging Semi mechanized sieve recommended. Beneficiary needs training. |

Protected Cultivation

| Sr. No. | Details | Remarks |
|------------|---|--|
| 1 | Name & address of Beneficiary whose field visited. | Kh. Sanathoi Singh of Kakching Khunou |
| 2 | Total land available with the beneficiary (ha). | 2 |
| 3 | Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel) | Shade net (Under construction) |
| 4. | Year of establishment | 2014-15 |
| 5. | Size of Structure (Sq. m) | 500 |
| 6. | Total cost | NA |
| 7. | Agency involved in fabrication and installation | M\S Florance Flora |
| 8. | Total subsidy paid and date of payment. | In kind |
| 9. | Crop being grown | No crop yet due to flood |
| 10. | Condition of Structure | |
| 11. | Condition of Crop | Not yet, Tomatoes will be grown |
| 12. | Tie up with market | |
| 13. | General upkeep (Very good/ Good/ Average/ Poor) | |
| 14 | Any other relevant observation by JIT. | Set up in low lying area. Beds needed to be raised. Physical exposure & training required. |

Area Expansion / Rejuvenation

| Sr. No. | Details | Remarks |
|------------|--|-------------------------------------|
| 1 | Name & address of Beneficiary whose field visited. | Th. Preamodini Devi Langmeithet. |
| 2 | Total land available with the beneficiary (ha). | 1.0 |
| 3 | Crop Cluster under which covered. | Pineapple |
| 4 | Name & variety of crop planted. | Queen |
| 5 | Source of planting material. | Local |
| 6 | Number of planting material. | 32,000 |
| 7 | Number of plants planted/ rejuvenated. | NA |
| 8 | Date of plants which survived (also indicate percentage survival). | NA |
| 9 | Total amount of subsidy assistance due to the beneficiary as (Rs.) | 32,813 /- |
| 10 | Amount paid and date of payment. | NA |
| 11 | Mode of payment. | By cash |
| 12 | Source of Irrigation Water (Bore well/ Tube well/ Canel) | Rain Water |
| 13. | Whether Drip/ Sprinkle System in use. | NA |
| 14. | Other inputs provided. | |
| 15. | Whether assistance available for Organic Farming | No. |
| 16 | If so, area covered | No. |
| 17. | Assistance available | No. |
| 18. | Available marketing facility for the crop. | Yes |
| 19. | Other infrastructure available in the vicinity. | |
| 20. | General upkeep of the plot; | |
| | Very good/ Good / Average/ Poor. | |
| 21. | Any other relevant observation by the JIT. | Well maintained. |

District: Imphal West

Markets

Rural Market / Wholesale Market MIDH

| Sr. No. | Details | Remarks |
|---------|--|---|
| 1 | Name of the project | Primary Rural Market |
| 2 | Year of Implementation | 2014-15 |
| 3 | Project Period | 2014-15 |
| 4 | Name of Implementing Agency | Phayang Farmers Interest Group (FIG) with 23 Members. |
| 5 | Location of Project | Phayang, West Imphal |
| 6 | Total Project Cost | Rs. 25 lakh. |
| 7 | Amount Released by Department of Agriculture & Cooperation (Rs.) | Rs. 10.00 lakh |
| 8 | Expenditure incurred | NA |
| 9 | Status | |
| | Size of Market in terms of area | 2000 sq ft (market complex) 3 Sheds of 40'x15' would be constructed. |
| | Facilities created | Auction buying & setting |
| | Commodities sold | Fruits &Vegetables, fish etc |
| | Approachability | |
| | Condition of Market' | Under construction – land leveling under progress. |
| | Whether funds disbursed to Agency | Yes |
| | Observations made by JIT | Under Construction 7 nearby villages will be covered/benefitted. |

Area Expansion / Rejuvenation

| Sr. No. | Details | Remarks |
|---------|--|---|
| 1 | Name & address of Beneficiary whose field visited. | N. Roben Sinh, Luren Kabi, Imphal West |
| 2 | Total land available with the beneficiary. | 0.25 ha. |
| 3 | Crop Cluster under which covered. | High Density plantation of Papaya/ Vermi compost unit |
| 4 | Name & variety of crop planted. | Taiwan |
| 5 | Source of planting material. | Hort. & SC. Deptt. |
| 6 | Number of planting material. | 500 plants |
| 7 | Number of plants planted/ rejuvenated. | 500 plants |
| 8 | Date of plants which survived indicate percentage survival). | NA |
| 9 | Total amount of subsidy assistance due to the beneficiary as (Rs.) | Subsidy in kindFor Vermi Compost Unit: Rs. 30,000 |
| 10 | Amount paid and date of payment. | NA |
| 11 | Mode of payment. | Cheque |
| 12 | Source of Irrigation Water (Bore well/ Tube well/ Canel) | |
| 13. | Whether Drip/ Sprinkle System in use. | Drip - OFWM |
| 14. | Other inputs provided. | |
| 15. | Whether assistance available for Organic Farming | |
| 16 | If so, area covered | |
| 17. | Assistance available | Rs. 30,000 to vermin compost & plants |
| 18. | Available marketing facility for the crop. | |
| 19. | Other infrastructure available in the vicinity. | |
| 20. | General upkeep of the plot; Very good/ Good / Average/ Poor. | |
| 21. | Any other relevant observation by the JIT. | Low lying area. Water logging, proper leveling required. 1st crop of papaya. Plant health not good, ring spot/virus observed. Borox recommended for boron deficiency. Rs. 30, 000/- realized thereby selling papaya. Mulching recommended. Vermi compost unit yet to start functioning. Worms would be arranged privately. Drip lining should be tightened for equitable supply of water. |

Protected Cultivation

| Sr. No. | Details | Remarks |
|------------|---|---|
| 1 | Name & address of Beneficiary whose field visited. | Kwaiherba Agro Society, Lamrang, Imphal West |
| 2 | Total land available with the beneficiary (ha). | NA |
| 3 | Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel) | Green/Poly house – Floriculture (Under Construction) Shade house - Vegetable |
| 4. | Year of establishment | 2014-15 |
| 5. | Size of Structure (Sq. m) | 2 units of 500 sq. mtr. each |
| 6. | Total cost | NA |
| 7. | Agency involved in fabrication and installation | Florance & Flora |
| 8. | Total subsidy paid and date of payment. | In kinds |
| 9. | Crop being grown | Shade house – Bannana hardening Poly house - Gerbera |
| 10. | Condition of Structure | 2 61, 110 110 110 110 |
| 11. | Condition of Crop | Not yet cultivated |
| 12. | Tie up with market | Local |
| 13. | General upkeep (Very good/ Good/ Average/ Poor) | Good |
| 14 | Any other relevant observation by JIT. | In Green House, bed raising under progress and Gerbera will be planted and plants would be procured locally. Farmers would be provided training by Florance & Flora. Farmer was advised to procure planting material form Florance & Flora. In Shade net, banana provided by Jain Irrigation being hardened. Rs. 2/ per plants are paid to farmer for hardening for 45 days. Weeding & pruning required. Recommended Drip for Gerbera plantation. |

Markets

Rural Market / Wholesale Market MIDH

| Sr. No. | Details | Remarks |
|---------|-----------------------------------|---|
| 1 | Name of the project | Rural Market / Apni Mandi |
| | | (Under Construction) |
| 2 | Year of Implementation | 2014-15 |
| 3 | Project Period | 2014-15 |
| 4 | Name of Implementing Agency | Mayang Langing Development Board having 16 Members. |
| 5 | Location of Project | Mayang |
| 6 | Total Project Cost | Rs. 25 lakh. |
| 7 | Amount Released by Department of | Rs. 10.00 lakh, Rs. 15 lakh would |
| | Agriculture & Cooperation (Rs.) | be contributed by Board. |
| 8 | Expenditure incurred | NA |
| 9 | Status | |
| | Size of Market in terms of area | 100'x200' 2 Sheds of 25'x40' would be constructed. Other would be 16'x40' |
| | Facilities created | Auction buying & setting |
| | Commodities sold | Fruits &Vegetables, fish etc |
| | Approachability | |
| | Condition of Market' | Work yet to start. Foundation stage. |
| | Whether funds disbursed to Agency | Yes |
| | Observations made by JIT | Work delayed due to rains. 8 nearby villages will be covered/benefitted. Market wate would be used for VCUs. Vendors would be selected by Zila Prishads. |

Post Harvest Management

Pack House/Cold Storage/Ref Van/ Primary processing Units

| Sr. No. | Details | Remarks |
|---------|-----------------------------------|---|
| 1 | Name of the project | Pack House cum Collection Centre by FIG with 30 members |
| 2 | Year of Implementation | 2014-15 |
| 3 | Project Period | 1 Year |
| 4 | Name of Beneficiary | Sh. Paramini Devi |
| 5 | Location of Project | Kameng Sabal, Imphal West |
| 6 | Total Project Cost | 4.00 Lakhs |
| 7 | Amount Released & date | 2.00 lakhs |
| 8 | Expenditure incurred | NA |
| 9 | Status | Under construction |
| | Capacity of unit | 3 tones (size: 20'x30'x9') |
| | Commodity | Vegetable |
| | Equipments purchased | NA |
| | Condition of infrastructure | Work in progress |
| | Whether NHM logo displayed | No |
| | Whether funds disbursed to agency | Yes |
| | Observations made by JIT | Packaging material not easily available in Manipur. Washing tub/ plastic crates would procured. Pack House needs to be linked with super markets. Farmers are vegetable sellers and training in respect of sorting, grading and packaging need to be imparted. |

Protected Cultivation

| Sr. No. | Details | Remarks |
|------------|---|--|
| 1 | Name & address of Beneficiary whose field visited. | K. Goma Shyam Singh, Kameng Sabal, Imphal West. |
| 2 | Total land available with the beneficiary (ha). | 0.25 ha. |
| 3 | Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel) | Normal Green House./Shade net |
| 4. | Year of establishment | A/E 2014-15 |
| 5. | Size of Structure (Sq. m) | 500 sq. m each |
| 6. | Total cost | NA |
| 7. | Agency involved in fabrication and installation | NA |
| 8. | Total subsidy paid and date of payment. | NA |
| 9. | Crop being grown | Cauliflowers & Cucumber |
| 10. | Condition of Structure | Good |
| 11. | Condition of Crop | Fruiting stage (cucumber) |
| 12. | Tie up with market | Local |
| 13. | General upkeep (Very good/ Good/ Average/ Poor) | Poor, No fogger in GH |
| 14 | Any other relevant observation by JIT. | Vermi compost being used. Crop rotation: Tomato (Amitabh variety) would be taken in Oct, 2015. Quantity of 150 kg. of Cauliflower sold at @ Rs. 50/kg. and other 500 kg is expected. Plant curling due to hot conditions. Vermi compost recommended. In poly house, mosaic viral in cucumber, IPM required. Planofix recommended for flower dropping which affects the production of crop. |

Mushroom Production Unit

| Sr. No. | Details | Remarks |
|---------|-----------------------------------|--|
| 1 | Name of the project | Mushroom Production Unit |
| | | (Extension) |
| 2 | Year of Implementation | 2014-15 |
| 3 | Project Period | 2014-15 |
| 4 | Name of Beneficiary | Sh. Dhalajit Singh |
| 5 | Location of Project | Sangai Pouron, Imphal West |
| 6 | Total Project Cost (Lakh) | Rs. 25.00 lakh |
| 7 | Amount Released & date | Rs. 10.00 lakh. |
| 8 | Expenditure incurred | NA |
| 9 | Status | |
| | Capacity of unit | NA |
| | Commodity | Mushroom |
| | Equipments purchased | Cooling & heating system |
| | Condition of infrastructure | Extension of uni:Under construction |
| | Whether NHM logo displayed | No |
| | Whether funds disbursed to agency | From 1st unit, selling spawn by himself locally. Selling 3000 pkts @Rs 30/pkt. Employed 4 personnel, trined by ICAR in mushroom production. 2nd unit will be ready by Feb, 2016. Beneficiary needs ot be trained under ICAR. Mushroom waste recommended for use in VCU. |