Report of Joint Inspection Team to monitor the implementation of National Horticulture Mission Scheme in Karnataka State


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## Karnataka State

## Geography

Karnataka is located in the western half of the Deccan plateau. The State extends to about 750 km . from north to south and about 400 km . from east to west. It has four physiographic regions. Northern Karnataka Plateau (largely includes the Deccan Trap covering districts Bidar, Belgaum, Gulbarga and Bijapur with elevation ranging between 300 to 600 meters), Central Karnataka Plateau (covers districts Chitradurga, Raichur, Chikmagalur, Dharwad, Shimoga and Bellary i.e., Tungabadra region with an elevation between 450 to 700 meters), Southern Karnataka Plateau (includes districts Bangalore, Hassan, Kodagu, Bangalore Rural, Mandya, Mysore, Kolar and Tumkur with elevation of the region is estimated to be 600 to 900 meters) and Karnataka Coastal Region (Western Ghats, edges of the Karnataka Plateau, Uttara Kannada districts and Dakshina Kannada).

## Geographical details:

- Area: 191,791 square kilometers,
- Gross Cropped area: 114,503 square kilometers,
- Net cropped area: 98,466 square kilometers,
- Irrigated area: 12,817 square kilometers,
- Area under horticulture: 19.00 lakh ha.
- Boundaries - Arabian sea to the West, Goa and Maharashtra in the North, Tamil Nadu and Kerala in the South and Andhra Pradesh to the East,
- Number of Districts - 30 .


## Climate

Karnataka State enjoys a salubrious climate throughout the year. Weather in the state is however dynamic and changes from place to place owing to its altitude, topography and its distance from the sea. It is influenced by four major seasons namely: winter season
(December to February), summer season (March to May), monsoon season (June to September), and post-monsoon season (October to November).

## Rainfall

The southwest monsoon accounts for almost $80 \%$ of the rainfall the state receives. The annual rainfall across the state ranges from low 50 to 250 cm . The districts of Bijapur, Raichur, Bellary and Southern half of Gulbarga experience the lowest rainfall ranging from 50 to 60 cm . while the west coast region and Malnad enjoy the highest rainfall.

## Soil and irrigation facility

The state has been divided into six types of soils namely: red, lateritic, black, alluvial, forest and coastal soils.

Karnataka accounts for about 6\% of the country's surface water resources. Around $60 \%$ of this is provided by the west flowing rivers, while the remaining comes from the east flowing rivers. There are 7 river basins all formed by the Godavari, Cauvery, Krishna, west-flowing rivers, South Pennar, and Palar.

## Horticulture in Karnataka

Karnataka is regarded as the "Cafeteria of Horticultural Crops" in view of its suitability for cultivation of various horticultural crops. The current area and production of horticulture crops is estimated to be around 18.9 lakh hectares and 148 lakh tons respectively, with an average productivity of about 7.8 tons per hectare. Though the horticulture sector in the state has witnessed a phenomenal growth in the last five decades, there are abundant opportunities for further growth, especially in areas like productivity improvement, quality enhancement, hi-tech horticulture, protected cultivation, precision farming, etc. Horticulture sector is an important source of livelihood for as many as 12 lakh farming households in the state.

Area and production of major horticultural crops in Karnataka
(fig. in '000 ha/ tons)

|  | Fruits |  | Vegetables |  | Spices |  | Plantation |  | Flowers |  | Aromatic |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Area | Prodn | Area | Prodn | Area | Prodn | Area | Prod n | Area | Prodn | Area | Prodn |
| 2004-05 | 230.8 | 3339.9 | 234.0 | 2466.3 | 216.3 | 458.5 | 759 | 495.0 | 16.9 | 138.7 | 1.2 | 4.8 |
| 2005-06 | 233.4 | 3515.6 | 267.4 | 4638.0 | 196.9 | 472.4 | 698 | 407.0 | 19.0 | 115.5 | 1.2 | 14.7 |
| 2006-07 | 252.2 | 3786.6 | 263.9 | 4719.2 | 210.5 | 461.2 | 724 | 450.0 | 21.4 | 182.2 | 0.8 | 8.3 |
| 2007-08 | 259.8 | 3975.9 | 271.8 | 4955.2 | 216.8 | 453.7 | 746 | 425.0 | 22.0 | 191.3 | 0.9 | 8.7 |
| 2008-09 | 289.5 | 4482.0 | 257.6 | 4098.1 | 207.3 | 517.0 | 721 | 412.0 | 27.0 | 199.8 | 1.7 | 15.0 |
| 20009-10 | 360.2 | 5962.7 | 436.9 | 7063.0 | 266.4 | 1097.1 | 805 | 442.0 | 26.83 | 195.5 | 1.5 | 16.17 |

Karnataka state has an equal distribution of key horticultural crops such as major Fruits and Vegetables (F\&Vs) with the area under the crop ranging between 2.5 to 3.6 lakhs ha. The area under major spices is also significant at about 2.37 lakhs ha. followed by flowers and aromatic crops with about 0.24 and 0.13 lakh ha respectively. In terms of output, major F\&Vs account about 48.25 and 56.19 lakh tons, respectively.

During the JIT visit five districts namely: Bagalkot, Bidar, Dharwad, Gulberga and Bijapur were visited by the team. The district-wise details, beneficiaries visited and observations made are given below separately for each district.

## Crop- wise requirements and availability of planting material for the year 2011-12 under NHM in Karnataka

| Sl. <br> No. | Crops | Requirement for 2011-12 |  | Availability <br> (No. In lakhs) |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Physical (Ha.) | No. of <br> plants(lakhs) |  |
| 1 | Mango | 4850 | 7.76 | 24.22 |
| 2 | Grapes | 750 | 22.50 | 41.25 |
| 3 | Pomegranate | 300 | 0.90 | 4.46 |
| 4 | Sapota | 1000 | 1.60 | 13.07 |
| 5 | Citrus | 500 | 1.50 | 11.39 |
| 6 | Banana (TC) | 1900 | 85.50 | 300.50 |
| 7 | Papaya | 200 | 6.00 | 37.05 |
| 8 | Cocoa | 800 | 3.12 | 4.60 |


| 9 | Cashew | 750 | 0.81 | 15.91 |
| :---: | :---: | :---: | :---: | :---: |
| 10 | Pepper | 400 | 10.00 | 59.15 |
|  | Total | $\mathbf{1 0 3 5 0}$ | $\mathbf{1 3 9 . 6 9}$ | $\mathbf{5 1 1 . 6}$ |

The total availability of planting material in the state including both private and public sector nurseries is estimated at about 511.6 lakh plants. Whereas, the scheme requirement of planting material is estimated at about 139.69 lakh plants ( $27.3 \%$ of the availability) covering various important crops for implementation of its area expansion plan of 10,350 ha. Hence, planting materials estimated to be sufficient to meet the scheme requirement.

## DISTRICT : Bagalkot



## Geography

Bagalkot District is located on the northern part of the state. It consists of 6 taluks viz Badami, Bagalkot, Bilagi, Hungund, Jamkhandi and Mudhol, and 3 prominent rivers namely: Krishna, Ghatprabha and Malaprabha flow through the district, the famous Almatti dam exists in the district and 70\% of the area under irrigation. Horticulture crops grown on the right and left side of the canals.

The Geographical area of the district is 658,887 ha out of which $4,73,590$ ha cultivable, 37296 ha under Horticulture crops are mainly Fruits 6856 ha, Vegetables 22997 ha, Flowers 227 ha, Plantation 2094 ha, Spices 5108 ha, Medicinal \& Aromatic Plants 16 ha in the district. There are 64010 small farmers, 49910 marginal farmers, 82622 Medium farmers and 4,262 large farmers, of which 25,283 are Horticulture families in the district. Bagalkot is a rich district with respect to horticulture wealth. It is endowed with congenial agro-climate conditions which has made it possible to grow different varieties of horticulture crops.

## Land Availability

Geographical area and land use features:

| 1 | Geographical Area (ha) |  | 658887 |
| :---: | :---: | :---: | :---: |
| 2 | Forest land (ha) |  | 81126 |
| 3 | Waste land (ha) |  | 59318 |
| 4 | Others (ha) |  | 51026 |
| 5 | Land holdings and Area | No. | Area (Ha). |
|  | (a) Marginal (<1.0 Ha) | 60928 | 35898 |
|  | (b) Small (1.0-2.0Ha) | 70396 | 103262 |
|  | (c) Semi Medium (2.0-4.0 Ha) | 56193 | 154754 |
|  | (d) Medium (4.0-10.0 Ha) | 27350 | 158496 |
|  | (e) Large (>10.0 Ha) | 3746 | 51124 |
|  | Total | 200895 | 502089 |
| 6 | Net area irrigated (In Ha) |  |  |
|  | (a) Major Irrigation |  | 68144 |
|  | (b) Medium Irrigation |  | 92370 |
|  | (c) Minor Irrigation |  | 3291 |
| 7 | Source of Irrigation |  |  |
|  | (a) Ground water |  | 85550 |
|  | (b) Surface water |  | 77609 |
| 8 | Canal Irrigation (Ghataprabha and Malaprabha left bank canal ) |  | 64283 |

General Agro climatic Details of the Bagalkot District

| 1 | Taluka's | Badami, Bagalkot, Bilagi, Hunagund, <br> Jamakhandi, Mudhol |
| :---: | :---: | :---: |
| 2 | Agro Climatic Zone | Northern dry zone Altitude |
| 3 | Altitude | 533.0 m. ASML |
| 4 | Latitude | $16^{\circ} 12^{1} \mathrm{~N}-16^{\circ} 46 \mathrm{~N}-$ |
| 5 | Longitude | $74^{\circ} 59^{1} \mathrm{E}-76^{\circ} 20^{1} \mathrm{E}$ |
| 6 | Annual Rainfall | $585 \mathrm{~mm}, 40$ rainy days |
| 7 | Temperature | Minimum $-18^{\circ} \mathrm{C}$, Maximum- $40^{\circ} \mathrm{C}$ |
| 8 | Climate | Dry Climate |
| 9 | Soil Type | Balck, Red \& Alluvial Soils. |

## Horticulture in the District

The diverse agro-ecological conditions prevailing in the District has made it possible to grow large varieties of horticulture crops covering fruits, vegetables, flowers, spices, plantations, roots and tuberous crops, aromatic crops, medicinal crops, oil palm etc. . There has been a significant development in horticulture sector since the last two to three decades.There is a clear shift from agriculture to horticulture sector which is mainly attributed to the fact that horticulture crops are perennial in nature and are less labour oriented and highly remunerative. Horticulture crops are grown in an area of 37296 ha. with an annual production of 742103 tons annually.

Planting Material Requirement and Availability 2011-12

| SI. | Requirement of Planting material |  |  | Availability |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Crop | Area <br> (Ha) | No of <br> Plants <br> Required | Source | Stock | Remarks |
| 1 | Grape (1110 plants/ ha) | 75 | 83250 | Farmers | 83250 | Sufficient |
| 2 | Banana (3086 plants/ ha) | 50 | 154300 | Private | 500000 | $\begin{aligned} & 345700 \\ & \text { surplus } \end{aligned}$ |
| 3 | Papaya (3086 plants/ ha) | 50 | 154300 | UHS Bagalkot, Private Nurseries | 75000 | 20700 <br> surplus |
|  |  |  |  | Seeds available in Private | 100000 |  |

## Field Visit

## Beneficiary No. 1

## Area Expansion-Banana <br> Area- 3.88 ha <br> Spacing - 6*6ft

| SI <br> No | Details | Remarks |
| :---: | :--- | :--- |
| 1 | Name and adress of Beneficiary whose feild <br> visited | Shri Hanamappa Shivappa Sulikeri <br> atpost-Takkalaki |
| 2 | Total Land available with the beneficiary | 11.12 Acre |
| 3 | Crop Cluster under which covered | Bilagi |
| 4 | Name and variety of crop planted | G-9 |
| 5 | Source of planting material | Kantesh Horti/Tech, Dharwad |
| 6 | Number of planting material | 12000 plants |
| 7 | Number of plants planted/rejuvinated | 12000 |
| 8 | Date of plants which survived(also indicate \% <br> survival) | $100 \%$ |
| 9 | Total amount of subsidy assistance due to the <br> beneficiary | $121060 /-$ |
| 10 | Amount paid and date of payment | $121060 /-4-12-2010$ |
| 11 | Mode of payment | NEFT, Through Bank |
| 12 | Source of Irrigation water (Bore well/Tube <br> well/canal) | Bore well |
| 13 | Whether Drip/sprinkler system in use | Drip Irrigation |
| 14 | Other inputs provided | Subsidy Availed for Drip irrigation <br> system of Rs. 155700.00 (31.03.20111) |
| 15 | Whether assistance available for Organic Farming | No |
| 16 | If so area covered | Nood <br> 17 |
| 18 | Assistance available | Avaialble Marketing facility for the crop |
| 19 | Other infrastucture available in the vicinity | auction centre |
| 20 | General upkeep of the plot: very <br> good/good/Average/poor | Gocal Market <br> 21 |
| Any other relevant observation by the JIT |  |  |

# Beneficiary No. 2 <br> Area Expansion- Grape <br> Area- 0.80 ha <br> Spacing - 10*5ft 

| $\begin{gathered} \text { Sl } \\ \text { No } \end{gathered}$ | Details | Remarks |
| :---: | :---: | :---: |
| 1 | Name and address of Beneficiary whose field visited | Shri Mastanshab Dongrisahab <br> Yendigeri Atpost- Girisagar |
| 2 | Total Land available with the beneficiary | 3.20 Acre |
| 3 | Crop Cluster under which covered | Anagawadi |
| 4 | Name and variety of crop planted | Manik Chaman |
| 5 | Source of planting material | Farmers Field |
| 6 | Number of planting material | 1780 |
| 7 | Number of plants planted | 1780 |
| 8 | Date of plants which survived(also indicate \% survival) | 100\% |
| 9 | Total amount of subsidy assistance due to the beneficiary | 24000/- |
| 10 | Amount paid and date of payment | 18010/- 6-12-2010 |
| 11 | Mode of payment | NEFT, Through Bank |
| 12 | Source of Irrigation water (Bore well/Tube well/canal) | Bore well |
| 13 | Whether Drip/sprinkler system in use | Drip Irrigation |
| 14 | Other inputs provided | Critical inputs like PSB 20 kg Azospirullum 20kg Zinc Sulphate 20Kg Ferrous Sulphate 24 Kg Borax 8kg Liquid Organic 11lit Enrich city compost 240kg of worth Rs 5990/(25\% of new AEP installement) |
| 15 | Whether assistance available for Organic Farming | No |
| 16 | If so area covered |  |
| 17 | Assistance available |  |
| 18 | Available Marketing facility for the crop | First crop in local market |
| 19 | Other infrastructure available in the vicinity | Local Market |
| 20 | General upkeep of the plot: very good/good/Average/poor | Good |
| 21 | Any other relevant observation by the JIT |  |

## Beneficiary No. 3 <br> Area Expansion- Papaya <br> Area- 1 ha <br> Spacing - 7*5ft

| SI No | Details | Remarks |
| :---: | :---: | :---: |
| 1 | Name and address of Beneficiary whose field visited | Shri Subhashchandra Sankerrapa <br> Hadli Atpost- Anagawadi |
| 2 | Total Land available with the beneficiary | 4.00 Acre |
| 3 | Crop Cluster under which covered | Anagawadi |
| 4 | Name and variety of crop planted | Thaiwan 786 RED LADY |
| 5 | Source of planting material | Cadilla Pharmecuticals limited |
| 6 | Number of planting material | 4500/- |
| 7 | Number of plants planted | 4500/- |
| 8 | Date of plants which survived(also indicate \% survival) | 100\% |
| 9 | Total amount of subsidy assistance due to the beneficiary | 31500/- |
| 10 | Amount paid and date of payment | 23651/- 6/12/2010 |
| 11 | Mode of payment | NEFT, Through Bank |
| 12 | Source of Irrigation water (Bore well/Tube well/canal) | Bore well |
| 13 | Whether Drip/sprinkler system in use | Drip Irrigation |
| 14 | Other inputs provided | Critical inputs like PSB 28kg Azospirullum 28kg Zinc Sulphate 16.8 Kg Ferrous Sulphate 14 Kg Borax 5.6kg Liquid Organic 14lit Enrich city compost 455 kg of worth Rs 7849/- (25\% of new AEP installement) Microirrigation Subsidy of Rs. 74600 availed (31.03.2011) |
| 15 | Whether assistance available for Organic Farming | No |
| 16 | If so area covered |  |
| 17 | Assistance available |  |
| 18 | Available Marketing facility for the crop | HOPCOMS Bangalure, Mumbai. |
| 19 | Other infrastructure available in the vicinity | HOPCOMS Bangalure. |
| 20 | General upkeep of the plot: very good/good/Average/poor | Good |
| 21 | Any other relevant observation by the JIT |  |

## Beneficiary No. 4

## Area Expansion- Papaya

Area- 1 ha
Spacing - 7*5ft

| SI No | Details | Remarks |
| :---: | :---: | :---: |
| 1 | Name and adress of Beneficiary whose feild visited | Shri Shrisail virupakshigouda Patil Atpost- Anagawadi |
| 2 | Total Land available with the beneficiary | 12.22 Acre |
| 3 | Crop Cluster under which covered | Anagawadi |
| 4 | Name and variety of crop planted | Thaiwan 786 RED LADY |
| 5 | Source of planting material | Cadilla Pharmecuticals limited |
| 6 | Number of planting material | 3600/- |
| 7 | Number of plants planted/rejuvinated | 3600/- |
| 8 | Date of plants which survived(also indicate \% survival) | 100\% |
| 9 | Total amount of subsidy assistance due to the beneficiary | 22500/- |
| 10 | Amount paid and date of payment | 16893/- 20/12/2010 |
| 11 | Mode of payment | NEFT |
| 12 | Source of Irrigation water (Bore well/Tube wel1/canal) | Bore well |
| 13 | Whether Drip/sprinkler system in use | Drip Irrigation |
| 14 | Other inputs provided | Critical inputs like PSB 20kg Azospirullum 20 kg Zinc Sulphate 12 Kg Ferrous Sulphate 10 Kg Borax 4kg Liquid Organic 10lit Enrich city compost 325 kg of worth Rs $5607 /-$ ( $25 \%$ of new AEP installement ) Micro irrigation subsidy of Rs. 74600 availed (31.03.201) |
| 15 | Whether assistance available for Organic Farming | No |
| 16 | If so area covered |  |
| 17 | Assistance available |  |
| 18 | Avaialble Marketing facility for the crop | HOPCOMS Bangalure, Mumbai. |
| 19 | Other infrastucture available in the vicinity | HOPCOMS Bangalure. |
| 20 | General upkeep of the plot: very good/good/Average/poor | Good |
| 21 | Any other relevant observation by the JIT |  |

## Beneficiary No. 5

Pack House

| Sl <br> No | Details | Remarks |  |  |  |
| :---: | :--- | :--- | :---: | :---: | :---: |
| 1 | Name and address of Beneficiary whose feild <br> visited | Shri Prakash virupakxgouda Patil Atpost- <br> Anagawadi |  |  |  |
| 2 | Total Land available with the beneficiary | 12.22 Acre Sy No-36/1 |  |  |  |
| 3 | Year of Establishment | 2010 |  |  |  |
| 4 | Size of Structure (Sq.m) | $12 * 5 * 4 \mathrm{mtr} \quad$ 240Sq.m |  |  |  |
| 5 | Total Cost | Self <br> P.K.P.S Anagawadi Acc no 04 dated 12- <br> $4-2011$ |  |  |  |
| 6 | Agency involved in frabication and installation |  |  |  |  |
| 7 | Total subsidy paid and date of payment | Grape,Pomegranate |  |  |  |
| 8 | Crop being grown |  |  |  |  |
| 9 | Condition of structure | Good |  |  |  |
| 10 | Condition of crop | General upkeep of the plot: very <br> good/good/Average/poor |  |  |  |
| 12 | Any other relevant observation by JIT | - |  |  |  |

## Beneficiary No. 6 Production of Planting Material

 Nursery| Sl <br> No | Details | Remarks |
| :---: | :--- | :--- |
| $\mathbf{1}$ | Name of the Project | Public Sector Small Nursery |
| $\mathbf{2}$ | Year of Imlementation | $2010-11$ |
| $\mathbf{3}$ | Project Period | 120 days |
| $\mathbf{4}$ | Name of Implementing Agency | University of Horticultural Sciences <br> (UHS) Bagalkot |
| $\mathbf{5}$ | Location of Project | Orchard office, UHS, Navangar <br> Bagalkot |
| $\mathbf{6}$ | Total Project Cost | Rs. 7.60 lakhs |
| $\mathbf{7}$ | Amount Released by DAC | Rs. 6.25 lakhs |
| $\mathbf{8}$ | Expenditure incurred | Rs. 7.60 lakhs |
| $\mathbf{9}$ | Status of Project | Orchard Model Nursery, Work under <br> progress for Mango, Pomogranate, <br> Sapota, Grape Rootstock, Fig, Lime <br> production. |
|  | Name of Nursery and crop for which plants are produced |  |
|  |  |  |
|  | Name of Crops for which seeds produced |  |
|  | Quantity Produced |  |


|  | Quantity Sold | - |
| :--- | :--- | :---: |
|  | Rate | - |
|  | Amount realized through sale | - |
|  | Whether NHM logo displayed | No |

## Beneficiary No. 7

Water Resources Development

| Sl <br> No | Details | Remarks |
| :---: | :--- | :--- |
| $\mathbf{1}$ | Name of the Project | Community Tank |
| $\mathbf{2}$ | Year of Imlementation | $2009-10$ |
| $\mathbf{3}$ | Project Period | 60 days |
| $\mathbf{4}$ | Name of Implementing Agency | Senios Assistant Director of <br> Horticulture (ZP) Badami |
| $\mathbf{5}$ | Location of Project | Agasankoppa Tq: Badami |
| $\mathbf{6}$ | Total Project Cost | Rs. 3.52 lakhs |
| $\mathbf{7}$ | Amount Released by DAC | Rs. 2.00 lakhs |
| $\mathbf{8}$ | Expenditure incurred Status | Rs. 3.52 lakhs |
| $\mathbf{9}$ | Current Status of Project | $32 \times 32 \times 3$ |
|  | Dimension (L x B x W) | 300 (Cubic meter) |
|  | Capacity | 12 ha |
|  | Command Area | Yes New plantation of <br> Capsicum, Tomato |
|  | Whether linked with new plantation or old plantation |  |
|  |  | Yes |

## Observations :-

1. The Area Expansion for TC Banana G-9 variety in Village Rolli has found to be less producting because of damage due to wind. The quality and size of the bunches is very small. The AEP is supported under MI also for drip irrigation.
2. The AEP- Grapes in Village :- Girisagar and also supported for drip irrigation under MI is performing well.
3. AEP - Papaya in Village :- Anaga wadi with Red Lady variety is performing excellent and the beneficiary is getting very high returns.
4. The community pond supported under NHM during 2009-10 in Village :- Anagan wadi to Shri Mahadevappa has not been put to use for irrigation but being used for rearing fish.


## District :- Bidar



## Geography

The entire district forms a part of the Deccan Plateau and is made up mostly of solidified lava. The northern part of the district is characterized by expanses of level and treeless surface punctuated here and there by flat and undulating hillocks, black soils and basaltic rocks. The southern half of the district is a high plateau about 715 m above mean sea level and are well drained. The average elevation of the district is between 580 to 610 m above mean sea level. Alluvial deposit is normally found along the banks of the Manjra river and its main tributaries. The district is entirely covered by the Deccan trap flows of the tertiary period. The Deccan trap is composed of horizontal flows of basaltic lava. They generally form flat-topped hillocks and terrace-like features.

## Soils

Two types of soils found in the district are Lateritic red soil and black cotton soil. Aurad and Bhalki taluks have mainly black cotton soil. Bidar and Humnabad taluks have mainly lateritic red soil. Basavakalyan taluk has both types of soils.

## Climate

The climate of this district is characterized by general dryness throughout the year, except during the southwest monsoon. The summer season is from the middle of February to the first week of June. This is followed by southwest monsoon season, which continues till the end of September. The months of October and November constitute the post-monsoon or retreating monsoon season.

The winter season is from December to middle of February and the temperature begins to decrease from the end of November, December is the coldest month with mean daily maximum temperature of $27.3^{\circ} \mathrm{C}$ and mean daily minimum of $16.4^{\circ} \mathrm{C}$. From the middle of the February, both day and night temperatures begin to rise rapidly. May is the hottest month with mean daily maximum temperature of $38.8^{\circ} \mathrm{C}$ and mean daily minimum of $25.9^{\circ} \mathrm{C}$. With the withdrawal of southwest monsoon in the first week of October, there is slight increase in day temperature but night temperature decreases steadily. After October, both day and night temperatures decreases progressively. The highest maximum temperature recorded at Bidar was on 8-5-1931 (43.3 ${ }^{\circ} \mathrm{C}$ ) and the lowest was on 5-1-1901 (3.9 $\left.{ }^{\circ} \mathrm{C}\right)$.

Physical and Financial Targets during 2005-06 to 2010-11
Area in Ha.
Rs. in lakhs

| Year | Target |  | Achievement |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Physical (Ha) | Financial (Rs) | Physical | Financial |
| $\mathbf{2 0 0 5 - 0 6}$ | - | - | - | - |
| $\mathbf{2 0 0 6 - 0 7}$ | - | - | - | - |
| $\mathbf{2 0 0 7 - 0 8}$ | 401.22 | 37.44 | 401.22 | 37.44 |
| $\mathbf{2 0 0 8 - 0 9}$ | 1567.00 | 167.61 | 1513.80 | 158.83 |
| $\mathbf{2 0 0 9 - 1 0}$ | 870.00 | 89.38 | 870.00 | 89.38 |
| $\mathbf{2 0 1 0 - 1 1}$ | 290.00 | 64.26 | 366.00 | 67.36 |

Area and Production of Horticulture Crops in Bidar District

|  | 2005-2006 |  |  | 2010-2011 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Crops | Area(Ha) | Production (Ton)) | Area(Ha) | Production (Ton ) |
| 1 | Mango | 767 | 7670 | 1676 | 10710 |
| 2 | Grapes | 152 | 2280 | 327 | 5172 |
| 3 | Pomegranate | 22 | 220 | 181 | 1440 |
| 4 | Sapota | 44 | 500 | 108 | 1080 |
| 5 | Citrus | 26 | 650 | 222 | 3888 |
| 7 | Papaya | 914 | 7280 | 168 | 10920 |
| 8 | Loose flowers | 62 | 496 | 297 | 2376 |
| 9 | Ginger | 1300 | 13000 | 2088 | 20880 |
| 11 | Cashew | 152 | 268 | 199 | 298.5 |
|  | Total | 3707 | 40404 | 5913 | 72026.5 |

Taluk wise Area details

| Sl. <br> No. | Taluka | Geo <br> graphical <br> Area (Ha.) | Forest <br> Area <br> (Ha.) | Non <br> Agricultural <br> Land (Ha.) | Barren <br> (Ha.) | Cultivable <br> waste land <br> (Ha.) | Permanent <br> Pasture <br> (Ha.) | Trees and <br> Grooves <br> (Ha.) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Aurad | 121622 | 2311 | 2661 | 3213 | 3412 | 1684 | 2776 |
| 2 | Basavakalyan | 119438 | 7143 | 3254 | 7687 | 6053 | 3443 | 77 |
| 3 | Bhalki | 109259 | 2584 | 5260 | 395 | 3115 | 3541 | 7290 |
| 4 | Bidar | 92203 | 4655 | 4299 | 2525 | 2085 | 910 | 482 |
| 5 | Humnabad | 99243 | 11014 | 6532 | 5307 | 4717 | 4386 | 312 |
|  | Total | 541765 | 27707 | 22006 | 19127 | 19382 | 13964 | 10915 |

## Field Visit Beneficiary No. 1

| SI. <br> No. | Details | Farmers field information |
| :---: | :---: | :---: |
| 1 | Name and address of the beneficiary | Sri Manik Reddy S/o Ram Reddy <br> Post Bemalkheda <br> Taluka Humnabad District Bidar |
| 2 | Total Land available with the beneficiary | 1.31 Ha |
| 3 | Crop cluster under which covered | Sweet Orange |
| 4 | Name and variety of the crop planted | Sathgudi |
| 5 | Source of planting material | Ananthpur, Andhra Pradesh |
| 6 | No. of plants planted | 325 |
| 7 | Date of palnting | Jan 2008 |
| 8 | No of plants which surviced (Percentage survival) | 324 (99.99\%) |
| 9 | Total amount of subsidy assistance to the beneficiary (Rs.) | 29475/- |
| 10 | Amount paid and date of Payment | 2008-09 - Rs. 14737/- Date of Payment : 6-3-2008 2009-10 - Rs. 5895/- Date of Payment : 14-8-2009 <br> 2010-11 - Rs. 8843/- Date of Payment : 25-8-2010 |
| 11 | Mode of Payment | By Eclectronic Clearance System (ECS) |
| 12 | Source of irrigation | Borewell |
| 13 | Whether Drip or Sprinkler System is used | Drip Irrigation |
| 14 | Other Inputs provided | - |
| 15 | Whether assistance availed for organic farming | NA |
| 16 | If so area covered | - |
| 17 | Assistance availed | - |
| 18 | Available marketing facility for the crop | Hyderabad, Solapur and Local Market |
| 19 | Other infrastructure available in the vicinity | - |
| 20 | General upkeep of the plot | Good |
| 21 | Any other relevant observation by the Joint Inspection Team | Use of Micro nutrients like Zn and Mg based on soil test reports Removal of water shoots |

## Beneficiary No. 2

| $\begin{array}{\|l\|} \hline \text { Sl. } \\ \text { No. } \end{array}$ | Details | Farmers field information |
| :---: | :---: | :---: |
| 1 | Name and address of the beneficiary | Sri Manik Reddy S/o Ram Reddy <br> Post Bemalkheda <br> Taluka Humnabad District Bidar |
| 2 | Total Land available with the beneficiary | 0.58 Ha |
| 3 | Crop cluster under which covered | Sweet Orange |
| 4 | Name and variety of the crop planted | Sathgudi |
| 5 | Source of planting material | Ananthpur, Andhra Pradesh |
| 6 | No. of plants planted | 160 |
| 7 | Date of palnting | July 2010 |
| 8 | No of plants which surviced (Percentage survival) | 160 (100\%) |
| 9 | Total amount of subsidy assistance to the beneficiary (Rs.) | 8720/- |
| 10 | Amount paid and date of Payment | 2010-11 - Rs. 8720/- Date of Payment : 1-10-2010 |
| 11 | Mode of Payment | By Eclectronic Clearance System (ECS) |
| 12 | Source of irrigation | Borewell |
| 13 | Whether Drip or Sprinkler System is used | Drip Irrigation |
| 14 | Other Inputs provided | - |
| 15 | Whether assistance availed for organic farming | NA |
| 16 | If so area covered | - |
| 17 | Assistance availed | - |
| 18 | Available marketing facility for the crop | - |
| 19 | Other infrastructure available in the vicinity | - |
| 20 | General upkeep of the plot | Good |
| 21 | Any other relevant observation by the Joint Inspection Team | - |

## Beneficiary No. 3

| $\begin{array}{\|l\|} \hline \text { SI. } \\ \text { No. } \end{array}$ | Details | Farmers field information |
| :---: | :---: | :---: |
| 1 | Name and address of the beneficiary | Praveena D/o Manik Reddy <br> Post Bemalkheda <br> Taluka Humnabad District Bidar |
| 2 | Total Land available with the beneficiary | 1.0 Ha |
| 3 | Crop cluster under which covered | Sweet Orange/Mango |
| 4 | Name and variety of the crop planted | Sweet Orange - Sathgudi, Mango- Kesar |
| 5 | Source of planting material | Ananthpur, Andhra Pradesh |
| 6 | No. of plants planted | Sweet Orange - 160 Mango- 110 |
| 7 | Date of palnting | Dec 2009 |
| 8 | No of plants which surviced (Percentage survival) | Sweet Orange - 160 (100\%) Mango-110 (100\%) |
| 9 | Total amount of subsidy assistance to the beneficiary (Rs.) | Sweet Orange - 9293/- Mango- 6300/- |
| 10 | Amount paid and date of Payment | Sweet Orange 2009-10 - Rs. 6638/- Date of Payment : 3-1-2010 <br> Mango 2009-10 - Rs. 4500/- Date of Payment : 3-1-2010 <br> Sweet Orange 2010-11 - Rs. 2655/- Date of Payment : 16-8- <br> 2010 <br> Mango 2010-11 - Rs. 1800/- Date of Payment : 16-82010 |
| 11 | Mode of Payment | By Eclectronic Clearance System (ECS) |
| 12 | Source of irrigation | Borewell |
| 13 | Whether Drip or Sprinkler System is used | Drip Irrigation |
| 14 | Other Inputs provided | - |
| 15 | Whether assistance availed for organic farming | NA |
| 16 | If so area covered | - |
| 17 | Assistance availed | - |
| 18 | Available marketing facility for the crop | - |
| 19 | Other infrastructure available in the vicinity | - |
| 20 | General upkeep of the plot | Good |
| 21 | Any other relevant observation by the Joint Inspection Team | - |

## Beneficiary No. 4

Vermicompost Unit :

| Sl. <br> No. | Details | Farmers field information |
| :--- | :--- | :--- |
| 1 | Name of the project | Construction of on farm Vermicompost Unit |
| 2 | Name and address of the beneficiary | Praveena D/o Manik Reddy <br> Post Bemalkheda <br> Taluka Humnabad District Bidar <br> $2010-11$ <br> 3 Year of Implementation |
| 4 | Project Period | 2 Months |
| 5 | Name of implementing Agency | Hittalapur Village |
| 6 | Location of the project | $60000 /-$ |
| 7 | Total Project Cost (Rs.) | $30000 /-$ |
| 8 | Amount Released by DAC (Rs.) | $60000 /-$ |
| 9 | Expenditure Incurred (Rs.) |  |

## Beneficiary No. 5

| Sl. <br> No. | Details | 10 |
| :--- | :--- | :--- |
| 1 | Name and address of the beneficiary | 11 |
| 2 | Total Land available with the beneficiary | 4.0 Ha |
| 3 | Crop cluster under which covered | Pomogranate |
| 4 | Name and variety of the crop planted | Bhagwa |
| 5 | Source of planting material | Solhapur (MH) |
| 6 | No. of plants planted | 2900 |
| 7 | Date of palnting | Sept 2008 |
| 8 | No of plants which surviced (Percentage | $2775(95.68 \%)$ |
| 9 | Total amount of subsidy assistance to the <br> beneficiary (Rs.) | $100000 /-$ |
| 10 | Amount paid and date of Payment | $2008-09-$ Rs. 45000/- Date of Payment : 27-11-08 <br> $2009-10-$ Rs. 18000/- Date of Payment : 16-10-09 <br> $2010-11-$ Rs. 27000/- Date of Payment : 16-08-10 |
| 11 | Mode of Payment | By Eclectronic Clearance System (ECS) |
| 12 | Source of irrigation | Borewell |
| 13 | Whether Drip or Sprinkler System is used | Drip Irrigation |
| 14 | Other Inputs provided | - |
| 15 | Whether assistance availed for organic farming | NA |
| 16 | If so area covered | - |


| 17 | Assistance availed | - |
| :--- | :--- | :--- |
| 18 | Available marketing facility for the crop | Hyderabad, Solapur and Local Market |
| 19 | Other infrastructure available in the vicinity | - |
| 20 | General upkeep of the plot | Good |
| 21 | Any other relevant observation by the Joint <br> Inspection Team | Suggested for improving agronomic practices <br> Proper weed management <br> Thinning of branches to improve the quality and yield |

## Beneficiary No. 6

| Sl. <br> No. | Details | Farmers field information |
| :---: | :---: | :---: |
| 1 | Name and address of the beneficiary | Sri Bhavinder Singh S/o Kirpal Singh Post Nirna <br> Taluka Humnabad District Bidar |
| 2 | Total Land available with the beneficiary | 4.0 Ha |
| 3 | Crop cluster under which covered | Pomogranate |
| 4 | Name and variety of the crop planted | Bhagwa |
| 5 | Source of planting material | Solhapur (MH) |
| 6 | No. of plants planted | 2900 |
| 7 | Date of palnting | Sept 2008 |
| 8 | No of plants which surviced (Percentage survival) | 2823 (97.34\%) |
| 9 | Total amount of subsidy assistance to the beneficiary (Rs.) | 100000/- |
| 10 | Amount paid and date of Payment | 2008-09 - Rs. $45000 /-$ Date of Payment : 27-11-08 2009-10 - Rs. 18000/- Date of Payment : 16-10-09 2010-11 - Rs. $27000 /-$ Date of Payment : 16-08-10 |
| 11 | Mode of Payment | By Eclectronic Clearance System (ECS) |
| 12 | Source of irrigation | Borewell |
| 13 | Whether Drip or Sprinkler System is used | Drip Irrigation |
| 14 | Other Inputs provided | - |
| 15 | Whether assistance availed for organic farming | NA |
| 16 | If so area covered | - |
| 17 | Assistance availed | - |
| 18 | Available marketing facility for the crop | Hyderabad, Solapur and Local Market |
| 19 | Other infrastructure available in the vicinity | - |
| 20 | General upkeep of the plot | Good |
| 21 | Any other relevant observation by the Joint Inspection Team | Suggested for improving agronomic practices <br> Proper weed management <br> Thinning of branches to improve the quality and yield |

## Beneficiary No. 7

| $\begin{array}{\|l\|} \hline \text { SI. } \\ \text { No. } \end{array}$ | Details | Farmers field information |
| :---: | :---: | :---: |
| 1 | Name and address of the beneficiary | Sri Ravinder Pal Kaur S/o Kirpal Singh Post Nirna <br> Taluka Humnabad District Bidar |
| 2 | Total Land available with the beneficiary | 4.0 Ha |
| 3 | Crop cluster under which covered | Pomogranate |
| 4 | Name and variety of the crop planted | Bhagwa |
| 5 | Source of planting material | Solhapur (MH) |
| 6 | No. of plants planted | 2900 |
| 7 | Date of palnting | Sept 2008 |
| 8 | No of plants which surviced (Percentage survival) | 2770 (95.51\%) |
| 9 | Total amount of subsidy assistance to the beneficiary (Rs.) | 100000/- |
| 10 | Amount paid and date of Payment | 2008-09 - Rs. 45000/- Date of Payment : 27-11-08 2009-10 - Rs. 18000/- Date of Payment : 16-10-09 2010-11 - Rs. 27000/- Date of Payment : 16-08-10 |
| 11 | Mode of Payment | By Eclectronic Clearance System (ECS) |
| 12 | Source of irrigation | Borewell |
| 13 | Whether Drip or Sprinkler System is used | Drip Irrigation |
| 14 | Other Inputs provided | - |
| 15 | Whether assistance availed for organic farming | NA |
| 16 | If so area covered | - |
| 17 | Assistance availed | - |
| 18 | Available marketing facility for the crop | Hyderabad, Solapur and Local Market |
| 19 | Other infrastructure available in the vicinity | - |
| 20 | General upkeep of the plot | Good |
| 21 | Any other relevant observation by the Joint Inspection Team | Suggested for improving agronomic practices <br> Proper weed management <br> Thinning of branches to improve the quality and yield |

Beneficiary No. 8
Community Tank

| Sl. <br> No. | Details | Farmers field information |
| :--- | :--- | :--- |
| 1 | Name of the project | Construction of Community Tank |
| 2 | Name and address of the beneficiary | Sri HarDev Singh S/o Kirpal Singh <br> Post Nirna <br> Taluka Humnabad District Bidar |
| 3 | Year of Implementation | $2009-10$ |
| 4 | Project Period | 3 Months |
| 5 | Name of implementing Agency | Horticulture Department |
| 6 | Tocation of the project | $800000 /-$ |
| 8 | Amount Released by DAC (Rs.) | $400000 /-$ |
| 9 | Expenditure Incurred (Rs.) | $800000 /-$ |
| 10 | Water storage Capacity | 18240 Cubic Meter (64m x57mx5m) |
| 11 | Command Area | 85 Acres |
| 12 | Whether Linked with New Plantation or old <br> Plantation | Whether funds are Distributed |
| 13 | Yes Plantation |  |

## Beneficiary No. 9

| Sl. <br> No. | Details | Farmers field information |
| :--- | :--- | :--- |
| 1 | Name and address of the beneficiary | Sri Mujibuddin S/o Hissamuddin <br> Post Nirna <br> Taluka Humnabad District Bidar |
| 2 | Total Land available with the beneficiary | 1.81 Ha |
| 3 | Crop cluster under which covered | Mango |
| 4 | Name and variety of the crop planted | Kesar and Dasheri |
| 5 | Source of planting material | Peddapur, Andhra Pradesh |
| 6 | No. of plants planted | 500 |
| 7 | Date of palnting | July 2010 |
| 8 | No of plants which surviced (Percentage <br> survival) | $500(100 \%)$ |
| 9 | Total amount of subsidy assistance to the <br> beneficiary (Rs.) | $27675 /-$ |
| 10 | Amount paid and date of Payment | $2010-11$ - Rs. 27675/- Date of Payment : 20-11-10 |
| 11 | Mode of Payment | By Eclectronic Clearance System (ECS) |


| 12 | Source of irrigation | Borewell |
| :--- | :--- | :--- |
| 13 | Whether Drip or Sprinkler System is used | Drip Irrigation |
| 14 | Other Inputs provided | - |
| 15 | Whether assistance availed for organic farming | NA |
| 16 | If so area covered | - |
| 17 | Assistance availed | - |
| 18 | Available marketing facility for the crop | - |
| 19 | Other infrastructure available in the vicinity | - |
| 20 | General upkeep of the plot | Very Good |
| 21 | Any other relevant observation by the Joint <br> Inspection Team | -Suggested to practice Insitu Green leaf Manuring <br> - Suggested to Construct Vermicompost Unit |

## Beneficiary No. 10

Post Harvest Management

| Sl. <br> No. | Details | Farmers field information |
| :--- | :--- | :--- |
| 1 | Name of the project | Construction of on Farm Pack house |
| 2 | Name and address of the beneficiary | Sri Madiwalaiah S/o Karbasaiah <br> Itaga Village Post Chitaguppa <br> Taluka Humnabad District Bidar |
| 3 | Year of Implementation | $2010-11$ |
| 4 | Project Period | 6 Months |
| 5 | Name of implementing Agency | Horticulture Department |
| 6 | Location of the project | $350000 /-$ |
| 7 | Total Project Cost (Rs.) | $150000 /-$ |
| 9 | Amount Released by DAC (Rs.) | $300000 /-$ |
| 10 | Storage Capacity of the unit | 7 Tonnes (12m x5mx4m) |
| 11 | Commodity | Orange, Mango and Ginger |
| 12 | Whether NHM logo is displayed | Yes |
| 13 | Whether funds are Distributed | Yes |

## Beneficiary No. 11

Small Nursery

| Sl. <br> No. | Details | Farmers field information |
| :--- | :--- | :--- |
| 1 | Name of the project | Establishment of Small Nursery |
| 2 | Name and address of the beneficiary | Sri KalyanRao S/o Madivalappa <br> Talamadagi Village Post Chitaguppa <br> Taluka Humnabad District Bidar |
| 3 | Year of Implementation | $2007-08$ |
| 4 | Project Period | 9 Months |
| 5 | Name of implementing Agency | Horticulture Department |
| 6 | Location of the project | Talamadagi Village |
| 7 | Total Project Cost (Rs.) | $113820 /-$ |
| 8 | Amount Released by DAC (Rs.) | $50000 /-$ |
| 9 | Expenditure Incurred (Rs.) | $113820 /-$ |
| 10 | Name of the Nursery and Crops for which plants <br> are produced | Sherika Nursery <br> Rose, Night Queen, Mango, Coconut, Jasmine, Lime Tamarind <br> and other ornamental |
| 11 | Quantity produced Nos | $50000-80000$ |
| 12 | Quantity Sold | $60000 /-$ |
| 13 | Rate (Rs.) | $8-25$ |
| 14 | Amount realized through Sales | $250000 /-$ |
| 15 | Whether NHM logo is displayed | Yes |

## Observations :-

1. The AEP for sweet orange in Village :Vittalapura, Tlauk :- Humnabad is good but there is a need for canopy management with particular reference to pruning. Also, nutrient deficiency in the plants was observed.
2. The AEP for Pomegranate in Village :- Nirna, Taluk: -Humnabad was full of weeds and heavy incidence of Bacterial Blight was observed in the field.
3. The community pond constructed with plaster lining is as per the specifications and maintained.
4. The pack house in Village : Itaga, Taluk: Himabad has been constructed but does not have any packing facility/ material.
5. In all the activities visited under NHM logo has not been displayed.
6. In AEP, the cluster approach has not been adopted.
7. In some cases, the vermi compost units are not maintained scientifically.
8. There is a need to arrange more field awareness programmes.
9. Volume of NHM activities in Bidar district is very less as compared to potential of the district.


## District : Dharwad



## Geography

Dharwad district is situated in North-Eastern part of Karnataka state . The district has Belgaum district in North, Haveri district in south, Gadag district in South and Uttar Kannada district in West. The district Dharwad comprises of 5 taluks namely, Dharwad, Hubli, Kalaghatagi, Kundagol and Navalagund.

## Horticulture in the District

Total geographical area of the district is $4,27,329$ ha. Out of this $85 \%$ area is under cultivation. The Horticulture crops covers the area of about 1,06,919 ha. The prominent Horticulture crops grown in this districts are fruit crops like, Mango, Sapota, Banana, Guava, and Papapa, flower crops like, Rose, Gailardia, Jasmine, Marigold, vegetables like, Brinjal, Chili, Bhendi, Tomato, onion etc.

Alphanso variety of Mango is widely grown in Dharwad, Hubli and Kalaghatagi taluks. Apart from this chilli crop is extensively grown in Kundagol, Hubli and Navalagund taluks. The local
variety of chilli namely Dyavanur Dabba, Byadagi Kaddi and Byadagi dabba are having Superior characters like colour and aroma. These varieties are in demand in market because of high content of Oleoresin and of superior qualities. They are being grown as traditional crops since many years. In the same way local red onion is also extensively grown in Dharwad district.

Taluk wise details of important Horticulture Crops, Production and Productivity

| SI <br> No. | Taluk | Area <br> (ha) | Production(Tons) | Productivity <br> (ton Per Ha) | Important Horticulture <br> Crops |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Dharwad | 12580 | 77523.68 | 6.16 | Mango, Chikku, <br> Guava, Banana, Potato, <br> Onion, Chilli \& Gladiolus |
| 2 | Hubli | 24094 | 22190.84 | 9.21 | Mango, Chikku, <br> Guava,Banana, Potato, <br> Onion, Chilli \& Rose |
| 3 | Kalaghatagi | 1918 | 19404.10 | 10.12 |  <br> Coconut |
| 4 | Kundgol | 32098 | 109609.20 | 3.41 |  <br> Garlic |
| 5 | Navalgund | 36229 | 453976.68 | 12.53 | Guava, Onion \& Chilli |
| District Total | $\mathbf{1 0 6 9 1 9}$ | $\mathbf{6 8 2 7 0 4 . 5 0}$ | $\mathbf{8 . 2 5}$ |  |  |

Dharwad district having variety of climatic conditions, soil, rainfall and wind speed. In Dharwad district Kalaghatagi taluk comes under malnad belt, Dharwad and Hubli taluk comes under traditional belt of malnad/ semi malnad belt and kundagol and Navalagund taluks comes under plain topography.

Field Visit
Beneficiary No. 1
Protected Cultivation

| SI.No. | Details | Remarks |
| :---: | :--- | :--- |
| 1. | Name \& address of Beneficiary whose <br> field visited. | Shri. Avinash R Agadi <br> Unkal, Hubli Dist: Dharwad |
| 2. | Total land available with the beneficiary <br> (ha.) | 1000 Sq.M. |
| 3. | Type of protected cultivation activity (Hi- <br> Tech /Normal GH Shade net, Plastic <br> tunnel ........) | High tech Polly House |
| 4. | Year of establishment | $2009-10$ |
| 5. | Size of Structure (sq. m.) | 1000 Sq.M. |
| 6. | Total Cost | 14.75 Lakhs |
| 7. | Agency involved in fabrication and <br> installation | Shri hari Green house Pvt. Ltd. <br> Pune |
| 8. | Total subsidy paid and date of payment | 3.25 Lakhs |
| 9. | Crop being grown | Gerbera |
| 10. | Condition of structure | Good |
| 11. | Condition of Crop | Good |
| 12. | Tie up with market | - |
| 13. | General Upkeep (Very <br> good/Good/Average/poor) | Good |
| 14. | Any other relevant observation by JIT | - |

## Beneficiary No. 2 <br> Protected Cultivation

| SI.No. | Details | Remarks |
| :---: | :---: | :---: |
| 1. | Name \& address of Beneficiary whose field visited. | Smt. Akkamahadevi $R$  <br> Agadi  <br> Unkal- <br> Dharwad  <br> Dist:  |
| 2. | Total land available with the beneficiary (ha.) | 1000 Sq.M. |
| 3. | Type of protected cultivation activity (HiTech/Normal GH Shade net, Plastic tunnel .........) | Hi-Tech Polly House |
| 4. | Year of establishment | 2010-11 |
| 5. | Size of Structure (sq. m.) | 1000 Sq.M. |
| 6. | Total Cost | 14.75 Lakhs |
| 7. | Agency involved in fabrication and installation | Ramanagar Hi-Tech Agro Industries- Pune |
| 8. | Total subsidy paid and date of payment | 4.675 Lakhs |
| 9. | Crop being grown | Gerbera |
| 10. | Condition of structure | Good |
| 11. | Condition of Crop | Good |
| 12. | Tie up with market | - |
| 13. | General Upkeep (Very good/Good/Average/poor) | Good |
| 14. | Any other relevant observation by JIT | - |

## Beneficiary No. 3

Protected Cultivation

| SI.No. | Details | Remarks |
| :---: | :--- | :--- |
| 1. | Name \& address of Beneficiary whose <br> field visited. | Shri. Abhishek R Agadi <br> Unkal- Hubli Dist: <br> Dharwad |
| 2. | Total land available with the beneficiary <br> (ha.) | 1000 Sq.M. |
| 3. | Type of protected cultivation activity (Hi- <br> Tech /Normal GH Shade net, Plastic <br> tunnel .........) | Hi-Tech Polly House |
| 4. | Year of establishment | $2010-11$ |
| 5. | Size of Structure (sq. m.) | 1000 Sq.M. |
| 6. | Total Cost | Ramanagar |
| 7. | Agency involved in fabrication and <br> installation | Agro Industries- Pune |
| 8. | Total subsidy paid and date of payment | 4.675 Lakhs |
| 9. | Crop being grown | Gerbera |
| 10. | Condition of structure | Good |
| 11. | Condition of Crop | Good |
| 12. | Tie up with market | Good |
| 13. | General Upkeep (Very <br> good/Good/Average/poor) | Any other relevant observation by JIT <br> 14. |


| Beneficiary No.4 <br> Mango Rejuvenation |  |  |
| :---: | :--- | :--- |
| Sl.No. | Details | Remarks |
| 1 | Name \& Address of Beneficiary whose field visited. | Shri Madarsab Mehabubsab Arebasavankopp. <br> Devargudihaal Tq: Hubli Dist Dharwad |
| 2 | Total land available with the beneficiary (ha.) | Sy No-78/1 |

## Beneficiary No. 5

Rose Area Expansion

| SI.No. | Details | Remarks |
| :---: | :---: | :---: |
| 1 | Name \& Address of Beneficiary whose field visited. | Shri. Shivaji Siddappa Savasi Devargudihaal Tq: Hubli Dist Dharwad Sy No-139/6 |
| 2 | Total land available with the beneficiary (ha.) | 0.60 Ha |
| 3 | Crop Cluster under which covered. | Rose (0.60 ha) |
| 4 | Name \& Variety of crop planted | Soflorance |
| 5 | Source of planting material | Private Nursery |
| 6 | Number of planting | 4166 No |
| 7 | Number of plants planted / rejuvenated | 4166 No |
| 8 | Date of plants which survived (also indicate percentage survival) | July -2011-12 ( 100\%) |
| 9 | Total amount of subsidy assistance due to the beneficiary as (Rs.) | Applied for subsidy |
| 10 | Amount paid and date of payment | - |
| 11 | Mode of payment | - |
| 12 | Source of irrigation water <br> (Bore well / Tube well / Cane) | Bore well |
| 13 | Whether Drip / Sprinkle System in use | - |
| 14 | Other inputs provided | - |
| 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; <br> Very good / Good / Average / Poor | - |
| 21 | Any other relevant observation by the JIT | - |

## Beneficiary No. 6 <br> Banana And Mango Ripening Chamber

| SI.No. | Details | Remarks |
| :---: | :---: | :---: |
| 1. | Name of the Project | Poonam Agri Tech <br> Banana and Mango Ripening <br> Chamber |
| 2. | Year of Implementation | 2011-12 |
| 3. | Project Period | - |
| 4. | Objective | Providing facility for ripening Chambers for Banana and Mango to growers and Traders. |
| 5. | Location of Project | Kundagol Taluka, <br> Ramankoppa Industrial <br> Estate, $\quad$ Tadas Cross, <br> NH-4, Dist: Dharwad. |
| 6. | Total Project Cost | 210 Lakhs |
| 7. | Amount Released by DAC | Still not Sanctioned |
| 8. | Expenditure incurred | 210 Lakhs |
| 9. | Status of Project |  |
|  | * Name of fruits Ripened | Banana and Mango |
|  | * Required Quantity Collected from | Haveri, Karwar, Gadag, Davanageri District |
|  | * Annual Ripened Fruits | 25.6 Tonnes X 180 Days = 4608 Tonnes |
|  | * Amount realized through sale | - |
|  | * Whether NHM logo displayed | - |

## Beneficiary No. 7

Mango Area Expansion

| Sl.No. | Details | Remarks |
| :---: | :---: | :---: |
| 1 | Name \& Address of Beneficiary whose field visited. | Shri Shivaradrayya B. Matapati Varur , Tq: Hubli Dist Dharwad Sy No-191 |
| 2 | Total land available with the beneficiary (ha.) | 1.20 Ha |
| 3 | Crop Cluster under which covered. | Mango (1.20 ha) |
| 4 | Name \& Variety of crop planted | Alphanso |
| 5 | Source of planting material | Private Nursery |
| 6 | Number of planting | 150 No |
| 7 | Number of plants planted / rejuvenated | 150 No |
| 8 | Date of plants which survived (also indicate percentage survival) | June-2009-10 ( 100\%) |
| 9 | Total amount of subsidy assistance due to the beneficiary as (Rs.) | $\begin{aligned} & 1^{\text {st }} \text { Year Rs. } 9750 /- \\ & 2^{\text {nd }} \text { Year Rs. } 2700 /- \end{aligned}$ |
| 10 | Amount paid and date of payment | - |
| 11 | Mode of payment | NEFT |
| 12 | Source of irrigation water (Bore well / Tube well / Cane) | Bore well |
| 13 | Whether Drip / Sprinkle System in use | - |
| 14 | Other inputs provided | $\begin{array}{r} \text { Critical inputs } 1^{\text {st }} \text { Rs. } 3750 /- \\ 2^{\text {nd }} \text { Rs. } 2700 \end{array}$ |
| 15 | Whether assistance available for Organic Farming | - |
| 16 | If so, area covered | - |
| 17 | Assistance available | - |
| 18 | Available marketing facility for the crop | Local Market |
| 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 | - |

## Beneficiary No. 8 <br> Mango Area Expansion

| SI.No. | Details | Remarks |
| :---: | :--- | :--- |
| 1 | Name \& Address of Beneficiary whose field visited. | Shri Mohan Kavatekar Serewada <br> Tq: Hubli Dist Dharwad <br> Sy No-538/2 |
| 2 | Total land available with the beneficiary (ha.) | 2.80 Ha |
| 3 | Crop Cluster under which covered. | Mango (2.68 ha) |
| 4 | Name \& Variety of crop planted | Alphanso |
| 5 | Source of planting material | Private Nursery |
| 6 | Number of planting | Number of plants planted / rejuvenated |
| 7 | Date of plants which survived <br> (also indicate percentage survival) | 335 No |
| 9 | Total amount of subsidy assistance due to the <br> beneficiary as (Rs.) | June-2009 -10 ( 100\%) <br> 10 |
| Amount paid and date of payment | $2^{\text {nd }}$ Year Rs. $21775 /-$ |  |
| 11 | Any other relevant observation by the JIT |  |

## Beneficiary No. 9

## Banana Area Expansion

| SI.No. | Details | Remarks |
| :---: | :---: | :---: |
| 1 | Name \& Address of Beneficiary whose field visited. | Sr. Sureesh C Kematur Noolvi, Tq: Hubli Dist Dharwad <br> Sy No-735/A |
| 2 | Total land available with the beneficiary (ha.) | 4.80 Ha |
| 3 | Crop Cluster under which covered. | Banana (0.80 ha) |
| 4 | Name \& Variety of crop planted | Grand -9 |
| 5 | Source of planting material | Private Nursery |
| 6 | Number of planting | 2000 No |
| 7 | Number of plants planted / rejuvenated | 2000 No |
| 8 | Date of plants which survived <br> (also indicate percentage survival) | Nove -2009-10 ( 100\%) |
| 9 | Total amount of subsidy assistance due to the beneficiary as (Rs.) | $\begin{aligned} & 1^{\text {st }} \text { Year Rs. 6000/- } \\ & 2^{\text {nd }} \text { Year Rs. } 6000 /- \end{aligned}$ |
| 10 | Amount paid and date of payment | - |
| 11 | Mode of payment | NEFT |
| 12 | Source of irrigation water <br> (Bore well / Tube well / Cane) | Bore well |
| 13 | Whether Drip / Sprinkle System in use | - |
| 14 | Other inputs provided | - |
| 15 | Whether assistance available for Organic Farming | - |
| 16 | If so, area covered | - |
| 17 | Assistance available | - |
| 18 | Available marketing facility for the crop | Local Market |
| 19 | Other infrastructure available in the vicinity | Vermi Compost |
| 20 | General upkeep of the plot; <br> Very good / Good / Average / Poor | Good |
| 21 | Any other relevant observation by the JIT | - |

## Beneficiary No. 10

## Adoption of Organic Farming

| Sl.No. | Details | Remarks |
| :---: | :--- | :--- |
| 1 | Name of the project | Vermi Compost |
| 2 | Year of Implementation | $2006-07$ |
| 3 | Project Period | 3 months |
| 4 | Name of Implementing Agency | - |
| 5 | Location of Project | Noolvi |
| 6 | Total Project Cost | Rs. 30,000/- |
| 7 | Amount Released by DAC | - |
| 8 | Expenditure incurred Status | Banana, Mango, Sapota \& Coconut |
| 9 | Status | - |
|  | Crops covered | - |
|  | No of farmers involved | - |
|  | Name \& Address of certifying agency |  |

## Observations :-

1. In Unkal village, three units each of 1000 sq. m supported under protected cultivation for Gerbera are functioning very well and generating very good income.
2. Financial assistance given for Mango rejuvenation during 2010-11 in Village :- Devaragudihal is practically not rejuvenated at all.
3. The ripening chamber ' Poonam Agritech' started functioning during March,2010. This has 6 chambers of 12 ton capacity each and 2 chambers of 20 tons each. It is being used for Mango and Banana ripening. The owner has submitted his application for NHM support during March, 2011.
4. Two plots of AEP - Mango supported during 2009-10 in Varur and Sherewada villages on the main highway are doing well but NHM sign board has not been displayed.
5. Vermi compost unit established during 2006-07 in Village :- Noolvi has benefitted the farmer and he is using only vermi compost for horticulture crops. The farmer feels that due to use of vermi compost the incidence of Pest and disease has also decreased.


## District : Gulbarga



## District Profile

| District Total Geographical Area (lakh Ha.) | 10.94 |
| :--- | :--- |
| Total Aerable Land (lakh Ha.) | 10.05 |
| Total Horticultural Area (Ha.) | 18103 |
| Fruits (Ha.) | 7762 |
| Vegetables (Ha.) | 7587 |
| Spice crops (Ha.) | 1734 |
| Flower crops (Ha.) | 667 |
| Plantation crops (Ha.) | 352 |
| Total (Ha.) | $\mathbf{1 8 1 0 3}$ |

## Taluka-wise area under different Horticulture crops :

| Taluka | Area (ha) |
| :--- | :--- |
| Afzalpur | 2600 |
| Aland | 3260 |
| Chincholi | 4830 |
| Chittapur | 1038 |
| Gulbarga | 3324 |
| Jewargi | 2129 |
| Sedam | 922 |
| Total | $\mathbf{1 8 1 0 3}$ |

## Important Horticulture Crops of District :

Important Horticulture crops grown in the district are as under:-

| Crops | Specific Crops |
| :--- | :--- |
| Fruits | Banana, Mango, Grapes, Citrus, <br> Musambi, Sithapal, Jambolina,Fig |
| Flowers | Rose, Tuberose, Marygold, <br> Gaillardia, Aster, Mallige |
| Vegetables | Almost all vegetables |
| Spices | Dry chilly, Tamarind, Ginger, <br> Turmeric |

## Talukas suitable for different Horticulture crops

| Crops | Taluks Suited |
| :--- | :--- |
| Banana | All Taluks |
| Mango | Chincholi,Gulbarga,Aland,Afzalpur |
| Grapes | Aland, Afzalpur, Gulbarga, |
| Fig | Gulbarga,Aland,Afzalpur |
| Lime | Afzalpur,Aland,Gulbarga,Jewargi |
| Musambi | Sedam, Gulbarga,Afzalpur,Aland |
| Flower crops | Gulbarga, Afzalpur,Aland |
| Medicinal \& Aromatic crops | Gulbarga, Aland |
| Spice crops | Chincholi,Gulbarga,Jewargi,Aland,Afzalpur |

## Soils

The district has 7 talukas. The type of soils in different talukas are as under:

| Type of soil | Talukas |
| :--- | :--- |
| Deep black cotton soil | Sedam, Chittapur, Jewargi |
| Medium black cotton soil | Gulbarga, Aland, Afzalpur |
| Sandy loam soil | Parts of chincholi |

## Climate

The temperature of the district in winter season falls to $10.2^{\circ} \mathrm{C}$ and goes up to $44^{\circ} \mathrm{C}$ during summer. The average minimum temperature is $23^{\circ} \mathrm{C}$ and average maximum temperature is $40^{\circ} \mathrm{C}$

Annual rainfall of the district is about 776 mm and is not uniformly distributed all over.

## Irrigation :

Major Irrigation - 33941 Ha .
Minor Irrigation-41359 Ha.
Source- wise irrigated area

| Source of irrigation | Area (Ha) |
| :--- | :--- |
| Canals | 33941 |
| Tanks | 689 |
| Wells | 23110 |
| Bore wells | 13995 |
| Lift irrigation | 2604 |
| Other sources | 961 |
| Total | $\mathbf{7 5 3 0 0}$ |

## Details of Farms \& Nurseries of the District:

The Department has 5 farms under State Sector \& 6 farms under District Sector.These farms are involved in the production of seeding and grafts of different fruit crops. Since the private Nurseries are less in number, these farms are taking up the responsibility for requirement of farmers for good quality planting materials.

## State Sector Farms

| SI.No. | Farms/ Nurseries | Total Area <br> (Ha.) | Developed <br> Area(Ha.) | Un <br> developed <br> area (Ha.) |
| :--- | :--- | :--- | :--- | :--- |
| 1 | Narayanapura | 93.34 | 56.00 | 37.34 |
| 2 | Chandrampalli | 108.00 | 65.00 | 43.00 |
| 3 | Hattikuni | 42.00 | 27.20 | 15.00 |
| 4 | Malagatti | 21.10 | 15.00 | 6.10 |
| 5 | Sedam | 11.13 | - | 11.13 |
|  | Total | $\mathbf{2 7 5 . 5 7}$ | $\mathbf{1 6 3 . 2 0}$ | $\mathbf{1 1 2 . 5 7}$ |

## Z.P Sector Farms

| SI.No. | Farms/ <br> Nurseries | Total Area <br> (Ha.) | Developed <br> Area (Ha.) <br> (Har developed <br> area (Ha.) |  |
| :--- | :--- | :--- | :--- | :--- |
| 1 | Badepura | 5.07 | 2.07 | 3.00 |
| 2 | Kesaratagi | 6.00 | 6.00 | - |
| 3 | Hallisalagara | 14.16 | 10.00 | 4.16 |
| 4 | Kallahangarga | 31.20 | 12.00 | 19.00 |
| 5 | Guduru | 6.22 | 6.22 | - |
| 6 | Gola K | 26.12 | 8.00 | 18.12 |
|  | Total |  | $\mathbf{8 8 . 7 7}$ | $\mathbf{4 4 . 2 9}$ |

## Cluster Developed Under NHM in District : Gulberga

| $\begin{aligned} & \hline \text { Sl. } \\ & \text { No } \end{aligned}$ | Taluk | Hobli | Custer Name | Total area of cluster | Villages | Implime nting programs | Remark |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Gulbarga | Pattan | Papaya | $\begin{array}{\|l\|} \hline 200 \\ \text { Acre } \end{array}$ | Hadagil Haruti, Kanni, Melakunda | NHM scheme |  |
|  |  |  | Banana | 50 Acre | Melkunda(K), Bhimalli, Savalgi | NHM scheme |  |
|  |  | Aurad(B) | Papaya | 60 Acre | Kumasi, Kallahangarga, Jambaga | NHM scheme |  |
|  |  |  | Banana | 50 Acre | Kallahangarga, <br> Kumasi, Astaga | NHM scheme |  |
|  |  | Fathabad | Papaya | 70 Acre | Minajagi, Garur, Tegnoor | NHM scheme |  |
|  |  |  | Tube Rose | 40 Acre | Tadtegnur, Garoor | NHM scheme |  |
|  |  | Gulbarga | Banana | $\begin{aligned} & 100 \\ & \text { Acre } \end{aligned}$ | Nandoor(B), <br> Ajadpoor, <br> Kesaragagi,Darmapur | NHM scheme |  |
|  |  | Mahagaon | Papaya | 40 Acre | Dastapoor, <br> Mahagaon,Navadgi, <br> Siragapoor, Babalad | NHM scheme |  |
| 2 | Afzalpur | Karajagi | Lime | 250 Ac | Karjagi, Kudiganoor, Maashal, Jevargi(B) | NHM\& NREGA Scheme |  |
|  |  |  | Banana | 180 Ac | Karjagi, Kudiganoor, Maashal, Jevargi (B) | $\begin{aligned} & \text { NHM\& } \\ & \text { NREGA } \end{aligned}$ Scheme |  |
|  |  | Afzalpur | Grapes | 200 Ac | Baloorgi, Nandarga | NHM scheme |  |
|  |  |  | Banana | 400 Ac | Baloorgi, Afzalpur, Revoor (B) |  <br> NREGA <br> Scheme |  |
|  |  |  | Grape Dehydrati on Unit |  | Baloorgi, Afzalpur, Revoor (B) | NHM\& NREGA <br> Scheme |  |


| 3 | Aland | Nimbarga | Grapes | 130 | Dannoor, Kadaganchi, Narona, Nimbarga | NHM Scheme |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Banana | 400 | Madyal, Yalasangi, Madyal thanda | NHM\& NREGA Scheme |  |
|  |  | Khajuri | Lime | 160 | Chitali, Rudravadi, Kinnisultan, Hudloor | NHM\& NREGA Scheme |  |
|  |  |  | Warmi compost | 35 | Rudravadi, Kinnisultan, Chithali | NHM <br> Scheme |  |
|  |  | Naroona | Banana | 200 | Ambalaga, Ladmugali, Chinchansoor, Belamagi | NHM\& NREGA <br> Scheme |  |
|  |  | Madanhip parga | Banana | 300 | Nimbal, Chalagera, <br> Madagunaki, <br> Madanhipparga | NHM\& NREGA Scheme |  |
| 4 | Jewargi | Nelogi | Banana | 50 | Nelogi, Madeval, Kallur,(K) Kallor(B) | NHM <br> Scheme |  |
|  |  | Yadrami | Lime | 100 | Kondgooli, Magangera, Kanameshwar, Allapoor | NHM\& NREGA Scheme |  |
| 5 | Chincho li | Chincholi | Mango | 400 | Kunchavaram, <br> Mogadmpoor, <br> Shivrampoor, <br> Shivareddy palli, <br> Jalavarsha thanda, <br> Shadipoor | NHM Scheme |  |
|  |  |  | Termaric | 450 | Degalmadi, Chandramppalli, Ainolli, Pattepur, Nagaidlai | NHM <br> Scheme |  |
| 6 | Sedam | Mudool | Mosambi | 50 | Kanagadda, Tolmamadi, Ganga ravalpalli | NHM\& NREGA <br> Scheme |  |

Field Visit
Beneficiary No. 1
Adoption of Organic Farming

| Sl.No. | Details | Remarks |
| :---: | :--- | :--- |
| 1 | Name of the project | Biodigester |
| 2 | Year of Implementation | $2010-11$ |
| 3 | Project Period | 3 months |
| 4 | Name of Implementing Agency | - |
| 5 | Location of Project | Mahagaon |
| 6 | Total Project Cost | Rs. 30,000-00 |
| 7 | Amount Released by DAC | - |
| 8 | Expenditure incurred Status | Banana, Tomato, Papaya, Watermelon |
| 9 | Status | 1 |
|  | Crops covered | - |
|  | No of farmers involved | - |
|  | Name \& Address of certifying agency | Whether any certificate issued |

## Beneficiary No. 2

Adoption of Organic Farming

| Sl.No. | Details | Remarks |
| :---: | :--- | :--- |
| 1 | Name of the project | Vermicompost |
| 2 | Year of Implementation | $2007-08$ |
| 3 | Project Period | 3 months |
| 4 | Name of Implementing Agency | - |
| 5 | Location of Project | Babalad (IK) |
| 6 | Total Project Cost | - |
| 7 | Amount Released by DAC | - |
| 8 | Expenditure incurred Status | Papaya, Grapes, Lime, Turmeric, <br> Onion, Chilli |
| 9 | Status | 1 |
|  | Crops covered | - |
|  | No of farmers involved | - |
|  | Name \& Address of certifying agency |  |
|  | Whether any certificate issued |  |

## Beneficiary No. 3

## Area Expansion / Rejuvenation

| Sl.No. | Details | Remarks |
| :---: | :---: | :---: |
| 1 | Name \& Address of Beneficiary whose field visited. | Suraj Patil <br> Kamalapur |
| 2 | Total land available with the beneficiary (ha.) | 4 ha |
| 3 | Crop Cluster under which covered. | Banana |
| 4 | Name \& Variety of crop planted | Red banana |
| 5 | Source of planting material | Local |
| 6 | Number of planting | 2000-00 |
| 7 | Number of plants planted / rejuvenated | 2000-00 |
| 8 | Date of plants which survived (also indicate percentage survival) |  |
| 9 | Total amount of subsidy assistance due to the beneficiary as (Rs.) | - |
| 10 | Amount paid and date of payment | 24000-00 |
| 11 | Mode of payment | NEFT |
| 12 | Source of irrigation water <br> (Bore well / Tube well / Cane) | Open well |
| 13 | Whether Drip / Sprinkle System in use | Drip |
| 14 | Other inputs provided | - |
| 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; <br> Very good / Good / Average / Poor | - |
| 21 | Any other relevant observation by the JIT | - |

## Beneficiary No. 4

## Protected Cultivation

| Sl.No. | Details | Remarks |
| :---: | :--- | :--- |
| 1 | Name \& Address of Beneficiary whose field visited. | Chandrakanth Hirapur |
| 2 | Total land available with the beneficiary (ha.) | 40 ha. |
| 3 | Type of protected cultivation activity (Hitech / <br> Normal GH, Shade net plastic tunnel....) | Shade net |
| 4 | Year of establishment | $2011-12$ |
| 5 | Size of structure (sq.mtr) | 1600 sq.mtr |
| 6 | Total cost |  |
| 7 | Agency involved in fabrication \& installation |  |
| 8 | Total subsidy paid \& date payment | $2,05,000$ (yet to be paid) |
| 9 | Crop being grown | Vegetable seedling |
| 10 | Condition of structure | - |
| 11 | Condition of crop | - |
| 12 | Tie up with market | - |
| 13 | General upkeep (Very good / Good / Average / Poor) |  |
| 14 | Any other relevant observation by JIT |  |

Beneficiary No. 5
Grape Dehydration Unit

| Sl.No. | Details | Remarks |
| :---: | :--- | :--- |
| 1 | Name of the project | Grape dehydration Unit |
| 2 | Year of Implementation | $2010-11$ |
| 3 | Project Period | 6 months |
| 4 | Name of Implementing Agency | - |
| 5 | Location of Project | Hadgil Haruti. Sy.No. $55 / 3$ |
| 6 | Total Project Cost | Rs. 5,43,000-00 (yet of release) |
| 7 | Amount Released by DAC | - |
| 8 | Expenditure incurred Status | Grape |
| 9 | Status | Crops covered |
|  | No of farmers involved | - |
|  | Name \& Address of certifying agency | - |
|  | Whether any certificate issued |  |

# Beneficiary No. 6 <br> Area Expansion / Rejuvenation 

| SI.No. | Details | Remarks |
| :---: | :---: | :---: |
| 1 | Name \& Address of Beneficiary whose field visited. | Udaykumar S/o Basavaraj |
| 2 | Total land available with the beneficiary (ha.) | 2 ha. |
| 3 | Crop Cluster under which covered. | Chrysanthemum, Local variety |
| 4 | Name \& Variety of crop planted | Chrysanthemum, Local variety |
| 5 | Source of planting material | Local variety |
| 6 | Number of planting |  |
| 7 | Number of plants planted / rejuvenated |  |
| 8 | Date of plants which survived <br> (also indicate percentage survival) |  |
| 9 | Total amount of subsidy assistance due to the beneficiary as (Rs.) | Rs. 12,000-00 |
| 10 | Amount paid and date of payment |  |
| 11 | Mode of payment | NEFT |
| 12 | Source of irrigation water <br> (Bore well / Tube well / Cane) | Bore well |
| 13 | Whether Drip / Sprinkle System in use |  |
| 14 | Other inputs provided | - |
| 15 | Whether assistance available for Organic Farming | - |
| 16 | If so, area covered | - |
| 17 | Assistance available | - |
| 18 | Available marketing facility for the crop | Local Market |
| 19 | Other infrastructure available in the vicinity | - |
| 20 | General upkeep of the plot; <br> Very good / Good / Average / Poor | - |
| 21 | Any other relevant observation by the JIT | - |

## Beneficiary No. 7

Area Expansion / Rejuvenation

| Sl.No. | Details | Remarks |
| :---: | :---: | :---: |
| 1 | Name \& Address of Beneficiary whose field visited. | Chandrika W/o Santosh Kulkarni |
| 2 | Total land available with the beneficiary (ha.) |  |
| 3 | Crop Cluster under which covered. | Banana |
| 4 | Name \& Variety of crop planted | Banana, G-9 |
| 5 | Source of planting material | Cadilla Company |
| 6 | Number of planting | 4000-00 |
| 7 | Number of plants planted / rejuvenated | 4000-00 |
| 8 | Date of plants which survived <br> (also indicate percentage survival) |  |
| 9 | Total amount of subsidy assistance due to the beneficiary as (Rs.) | Rs. 12,480-00 |
| 10 | Amount paid and date of payment | 37,440-00 |
| 11 | Mode of payment | NEFT |
| 12 | Source of irrigation water <br> (Bore well / Tube well / Cane) | Bore well |
| 13 | Whether Drip / Sprinkle System in use | Drip |
| 14 | Other inputs provided | - |
| 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; <br> Very good / Good / Average / Poor | - |
| 21 | Any other relevant observation by the JIT | - |

## Beneficiary No. 8

Area Expansion / Rejuvenation

| Si No | Details | Remarks |
| :---: | :---: | :---: |
| 1) | Name \& address of Beneficiary whose field visited | Makim Bee w/o Lal Ahmad |
| 2) | Total Land available | 1 ha |
| 3) | Crop Cluster | Nelogi |
| 4) | Name \& Variety | Lime, Local |
| 5) | Source Of Palanting Material | Indi |
| 6) | Number of planting Material | 270 |
| 7) | Numbe of Plants Planted rejuvenated | 270 |
| 8) | Date of plants which survived | 100\% |
| 9) | Total amount of subsidy | 6450/- |
| 10) | Amount paid and date of payament | 6450/- |
| 11) | Mode of payment | NEFT |
| 12) | Source of Irrigation Water | Bore well |
| 13) | Whether Drip/ Sprinkle system in use | Drip |
| 14) | Other inputs provided | - |
| 15) | Whether assistance available for Organic Farming | Neem oil |
| 16) | If so area Covered | 1 Ha |
| 17) | Assistance Available | - |
| 18) | Available marketing facility for the crop | Bijapur \& Gulbarga |
| 19) | Other infrastructure available in the vicinity | No |
| 20) | General upkeep of the plot | - |
| 21) | Any other relevant Observation by the JIT | - |

## Beneficiary No. 9

Area Expansion / Rejuvenation

| Si No | Details | Remarks |
| :---: | :---: | :---: |
| 1) | Name \& address of Beneficiary whose field visited | Lal Ahamad s/o Kashim sab |
| 2) | Total Land available | 0.8 ha |
| 3) | Crop Cluster | Nelogi |
| 4) | Name \& Variety | Grape, Thomson seedless |
| 5) | Source Of Palanting Material | Baba Nagar |
| 6) | Number of planting Material | 1800 |
| 7) | Numbe of Plants Planted rejuvenated | 1800 |
| 8) | Date of plants which survived | 100\% |
| 9) | Total amount of subsidy | 18000/- |
| 10) | Amount paid and date of payament | $18000=00$ |
| 11) | Mode of payment | NEFT |
| 12) | Source of Irrigation Water | Bore well |
| 13) | Whether Drip/ Sprinkle system in use | Drip |
| 14) | Other inputs provided | - |
| 15) | Whether assistance available for Organic <br> Farming | Neem oil |
| 16) | If so area Covered | 0.8 Ha |
| 17) | Assistance Available | - |
| 18) | Available marketing facility for the crop | Bijapur \& Gulbarga |
| 19) | Other infrastructure available in the vicinity | No |
| 20) | General upkeep of the plot | - |
| 21) | Any other relevant Observation by the JIT | - |

Beneficiary No. 10
Grape Dehydration Unit

| Sl.No. | Details | Remarks |
| :---: | :--- | :--- |
| 1 | Name of the project | Grape dehydration Unit |
| 2 | Year of Implementation | $2008-09$ |
| 3 | Project Period | 6 months |
| 4 | Name of Implementing Agency | - |
| 5 | Location of Project | Babalad (IK) |
| 6 | Total Project Cost | - |
| 7 | Amount Released by DAC | - |
| 8 | Expenditure incurred Status | Grape |
| 9 | Status | 1 |
|  | Crops covered | $-000-00$ |
|  | No of farmers involved | - |
|  | Name \& Address of certifying agency |  |
|  | Whether any certificate issued |  |

## Adoption of Organic Farming

| Sl.No. | Details | Remarks |
| :---: | :--- | :--- |
| 1 | Name of the project | Adoption of Organic farming |
| 2 | Year of Implementation | $2009-10$ |
| 3 | Project Period | Bars <br> Society, Nellur, Gulbarga |
| 4 | Name of Implementing Agency | Aurad, Bannur, Kumsi, Algud. |
| 5 | Location of Project |  |
| 6 | Total Project Cost |  |
| 7 | Amount Released by DAC | Banana, Papaya, Vegetables |
| 8 | Expenditure incurred Status | 51 |
| 9 | Status | Apops covered |
|  | No of farmers involved | IC-1 |
|  | Name \& Address of certifying agency |  |
|  | Whether any certificate issued |  |

## Beneficiary No. 12 <br> IPM/INM Infrrastructure <br> Plant Health Clinic

| SINo. | Details | Remarks |
| :---: | :---: | :---: |
| 1 | Name of the project | Plant Health Clinic |
| 2 | Year of Implimentation | 2006-07 |
| 3 | Project period | 2006-07 to 2010-11 |
| 4 | Name of Implementing Agency | National Horticulture Mission (NHM) |
| 5 | Location of Project | Krishi Vigyan Kendra, Gulbarga |
| 6 | Total project cost | 20 lakhs |
| 7 | Amount Release by DAC | 20 lakhs |
| 8 | Expenditure incurred | 18,22,214/- <br> (Annexure -I copy enclosed) |
| 9 | List of equipments procured | Annexure - II List enclosed |
| 10 | Whether trained manpower employed | Yes |
| 11 | Arrangements made to meet recurring cost | KVK budget will be utilized |
| 12 | Current status |  |
|  | Number of samples analyzed | 226 |
|  | Rate of analysis per sample |  |
|  | Amount realized through analysis |  |
| 13 | General condition of lab during the time of inseption |  |
| 14 | Whether funds disbursed |  |

## Observations :-

1. The cluster approach as per NHM guidelines is not being followed.
2. The farmers of Kamalapura Village in Gulberga district are interested in area expansion of Red Banana. The farmers are demanding financial assistance for stakes for supporting the banana bunches against wind damage. Also they are demanding transport and marketing facilities.
3. Farmers are very happy with the advantages of biodigester units supported under NHM.
4. The construction of APMC fruit and vegetable market at Gulberga was completed one year ago with financial support of NHM to the extent of 1.75 crores. This has not been put to use so far. The approach road to the main entrance is not complete. The sign board is only a flexi banner without NHM logo.
5. Plant Health Clinic at KVK Gulbarga is functioning well with regard to training of farmers as well as management of pests and diseases.
6. Farmers samples are being analyzed with regard to pests and diseases at Plant Health Clinic, KVK Gulberga. The diagnosis and remedial report is being given to the farmers but ,thereafter, feed back from the farmers is not being obtained.
7. Dehydration unit for grapes supported under NHM is helping the farmers in getting higher income as the farmers are using this unit, whenever, the rates for green grapes are very low in the market.


## DISTRICT : Bijapur



## Geography

Bijapur is one of the largest districts in Karnataka and has an area of 10541 sq Km. Consisting $5.49 \%$ of the area of the state. It is nearly 580 Kms from the state capital Bangalore. It lies between $15 \times 50$ and $17 \times 28$ North Latitude and $74 \times 54$ and $76 \times 28$ East Longitude. The district is bounded by Solapur district on the north and Sangli on the north-west (both of Maharastra state), by the district of Belgaum on the west, Bagalkote on the south, Gulburga on the East and by Raichur on the south-east. Thus, it is a land-locked district on the northern boundary of Karnataka.

Bijapur district is accessible by both highways and rail. The National highway 13 passes through the district in the eastern and central parts. Via Muddebihal and Bijapur. The
taluka towns are well connected by state highways and district roads. The railway line connecting Solapur in Maharastra and Hubli passes through the center of the district, via Indi and Basavan Bagewadi.

Bijapur district consists of 5 Taluks viz Bijapur, Basavana-Bagewadi, Indi, Muddebihal and Sindgi.

## Rainfall

There are 34 rain gauge stations in Bijapur District. The average annual rainfall for the district is 552.8 mm with 37.2 rainy days. The monsoon generally breaks in the district during June and lasts till October. The highest mean monthly rainfall is 149.2 mm in the month of September and lowest is 3.4 mm in February. The annual rainfall variation in the district is marginal from place to place. Of the total geographical area of 10.53 lakh ha . 7.76 lakh ha. Is available for cultivation which is $74 \%$ of the total area, while area under forest account for only $0.19 \%$ of the total area. Only $17.3 \%$ of the net cultivable area is irrigated and balance $82.7 \%$ of the area has to depend on monsoon.

## Agriculture

The cropping pattern in the district reveals that food crops like jowar, maize, bajra and wheat among cereals, red gram, Bengal gram and green gram among pulses are major crops cultivated in the district. The major oilseed crops are sunflower, groundnut and safflower. Horticulture crops like grapes, pomegranate, ber, guave sapota, lime are also grown. Recent trend shows that there is a low shift towards fruit crops like Pomegranate and grapes of the total area of 8.61 lakh ha. Covered during 2002-03 cereals occupy about $55.2 \%$ by oilseeds $24.5 \%$ pulse $15.6 \%$ and other commercial crops like cotton and sugarcane about 4.8\% There is slight shift towards commercial crops like cotton and sugarcane over last 2 years.

The land holding pattern in the district indicates that small and marginal farmers account for $4 \%$ of total land holdings and $0.6 \%$ of the total land, semi-medium for $27.5 \%$ with $10.1 \%$ of total land while $68 \%$ of the holdings are above 2 ha. Accounting $89.3 \%$ of land.

## Horticulture Sector

Horticultural crops in the district are being grown in an area of 46884 ha with annual production of 846012 MT. out of which grape constitute 7208 ha, lime-4539 ha, pomegranate-840 ha, banana- 785 ha, onion- 1721 ha, tomato- 1910 ha \& chillies- 1284 ha. Presently, lime is grown in an area of 4539 ha and still area under lime is increasing.

In grapes, Thompson seedless variety is grown for fresh market as well as resins. In the district 270 resin making units are working to reduce market glut during season and produce around 20000 MT resins.

Field Visit Beneficiary No. 1

Pack House

| Sr. No. | Details | Remarks |
| :---: | :--- | :---: |
| 1 | Name of farmers | Revanasidda Siddaray Bagalkot Sy No: <br> 374/2 <br> At post: Siddapur K. Tq: dist: Bijapur |
| 2 | Name of crop | Grapes and other horticulture Cultivation <br> Own land, bering Sy No; 374/2 7 114/1 <br> Own Grape |
| 3 | Availability of lands | Pack House |
| 4 | Name of the project | $2010-11$ |
| 5 | Year of Implementation | 2010-11 |
| 6 | Project period | SADH (ZP) BIJAPUR under NHM |
| Scheme |  |  |

Beneficiary No. 2

| Sr. No. | Details | Remarks |
| :---: | :--- | :---: |
| 1 | Name of the project | Community tank |
| 2 | Year of implementation | $2008-09$ |
| 3 | Project period | $2008-09$ |
| 4 | Name of implementing <br> agency | SADH (ZP) BIJAPUR under NHM |
| 5 | Location of project | Siddapur K (SD Hatti) |
| 6 | Total project cost | $34,72,400 /-$ |
| 7 | Amount released by DAC | $732174 /-$ |
| 8 | Expenditure incurred status | $34,72,400 /-$ |
| 9 | Current status of project | Good |
|  | *Dimension (LxBxW) | $170 \times 45 \times 3$ m |
|  | *Capacity | $(30,000$ Sqm) |
|  | *Command Area | 65.69 |
|  | *Whether linked with new <br> plantation or old plantation | Old and New plantation |
|  | *Whether funds disbursed | Corporation Bank Nehru Road, Bljapur |

## Beneficiary No. 3

| Sr. No. | Details | Remarks |
| :---: | :---: | :---: |
| 1 | Name \& address of Benificiary whose fiels visited | Smt Sanmati Jayapal Kusnal At post: Babanagar Tq: Bijapur |
| 2 | Total land available with the beneficiary (ha) | 0.40 he |
| 3 | Crop cluster under which covered. | Grape |
| 4 | Name of variety of crop planted. | Thamson seed less |
| 5 | Source of planting material | Local |
| 6 | Number of planting material | 870 |
| 7 | Number of plants planted/ | 870 |
| 8 | Date of plants which survived (also indicated percentage survival). | 2010-11 |
| 9 | Total amount of subsidy assistance due to the beneficiary as (Rs.) | 12000 |
| 10 | Amount paid and date of payment. | Rs. 9000 Date : 27.08.2011 |
| 11 | Mode of payment. | On Account pay |
| 12 | Source of irrigation water (Bore well/ Tube Well/ Canel) | Bore well |
| 13 | Whether Drip/Sprinkle system in use. | Drip irrigation |
| 14 | Other inputs provided | P.P. camicals \& Organic mannure |
| 15 | Whether assistance available for organic farming | No |
| 16 | If so, area covered | " |
| 17 | Assistance available | " |
| 18 | Available marketing facility for the crop | Local and out of state |
| 19 | Other infrastructure available in the civinity. | - |
| 20 | General upkeep of the plot; very good/ Good/Average/ Poor. | Good |
| 21 | Any other relevant observation by the JIt |  |

Beneficiary No. 4

| Sr. No. | Details | Remarks |
| :---: | :---: | :---: |
| 1 | Name and address of beneficiary whose fiels visited. | Shri Javed Mousa Hebbalattikar Sy No: 684/3 At: Post Tikota Tq: Dist Bijapur |
| 2 | Total land available with the beneficiary (ha) | 2.40 ha |
| 3 | Crop cluster under which covered. | Grape |
| 4 | Name \& variety of crop planted | Thamson seed less |
| 5 | Source of planting material | Local |
| 6 | Number of planting material. | 5220 No |
| 7 | Number of plants planted/ | 5220 No |
| 8 | Date of plants which survived (also indicated percentage survival). | 2009-10 |
| 9 | Total amount of subsidy assistance due to the beneficiary as (Rs.) | 27000/- |
| 10 | Amount paid and date of payment. | Rs. 27000 Date; 07.10.2011 |
| 11 | Mode of payment. | On account pay |
| 12 | Source of irrigation water (Bore well/ tube well/ canel) | Bore well |
| 13 | Whether drip/ sprinkle system in use. | Drip irrigation |
| 14 | Other inputs provided | P.P. Camicals \& Organic Mannure |
| 15 | Whether assistance available for organic farming | No |
| 16 | If so, area covered | " |
| 17 | Assistance available | " |
| 18 | Available marketing facility for the crop | Local and out of state |
| 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 |  |

## Beneficiary No. 5

| $\begin{array}{c}\text { Sr. } \\ \text { No. }\end{array}$ | Details | Remarks |
| :---: | :--- | :--- |
| 1 | Name of the project | $\begin{array}{l}\text { Proposed horticultural online trading } \\ \text { building under NHM plan at APMC Bijapur. }\end{array}$ |
| 2 | Year of implementation | $\begin{array}{l}\text { Work order to the contractor Shri: C.S. } \\ \text { Patil is issued on 5-01-2009 (2007-08) }\end{array}$ |
| 3 | Project period | $\begin{array}{l}12 \text { months period (Excluding rainy } \\ \text { seasion) } \\ \text { Completion period will be on 31-08-3011. }\end{array}$ |
| 4 | Name of implementing agency | $\begin{array}{l}\text { APMC. Bijapur Through the P.W.D. class.I } \\ \text { contractor Shri: C.S. Patil Bijapur. }\end{array}$ |
| 5 | Location of project | $\begin{array}{l}\text { Station road behind R ambedakar stadium } \\ \text { infromt of new lokaukta office bijapur. }\end{array}$ |
| 6 | Total project cost | $\begin{array}{l}\text { Estimated cost : 250 Lakhs } \\ \text { (2) amount put to tender : 23049678-00. }\end{array}$ |
| 7 | Amount released by DAC | $\begin{array}{l}\text { Deputy director of horticulture. Has } \\ \text { released Rs. 31.25 Lakhs to this office on } \\ 16-06-2011 \text { through the cheque }\end{array}$ |
| 9 | Status | Rs 18164862-00. |
| 10 | Size of marker in term of area | $\begin{array}{l}1 \text { Acres 8 Guntas } \\ \hline 11 \\ \text { Facilities created } \\ \hline\end{array}$ |
|  | $\begin{array}{l}\text { Automatic sorting system display } \\ \text { mechanism } \\ \text { Providing banana, repining, unit of 2 MT } \\ \text { capacity per day. } \\ \text { Providing comprehensive building for } \\ \text { sorting system for colour and size } \\ \text { automatically by computerized method } \\ \text { Providing pack house with crates and } \\ \text { coolears providing office space for } \\ \text { minimum 11 traders inshort 30 traders in } \\ \text { long run in first floor complex } \\ \text { Provide secured storage cum display yard } \\ \text { for fresh produce for auction in ground } \\ \text { floor about 50 farmers } \\ \text { Provide display mechanism for sample of } \\ \text { lots for auction } \\ \text { Provide computerized auction room with } \\ \text { searing capacity for 50 traders and 50 } \\ \text { farmers in is short term and long term }\end{array}$ |  |
| Auction room seats for traders to be |  |  |
| computer enabled for participation in |  |  |
| auction and be linked to bank account for |  |  |
| instant debets of their accounts once |  |  |
| auction is concluded |  |  |
| Concrete roads and landscape |  |  |$\}$


| 12 | Commodities sold | Horticultural commodities like grapes, dry <br> grapes, lemon, and pomegranate. |
| :---: | :--- | :--- |
| 13 | Approachability | Beside the indoor stadium through way to <br> new lokayukta office. |
| 14 | Condition of market | Near completion, ofter completion when it <br> starts functioning condition of market will <br> be good, and very soon it will be develop. |
| 15 | Whether funds disbursed to <br> agency | Yes, out of subsidy amount Rs 62.50 the <br> deputy director of horticulture. Has <br> released Rs 31.25 lakhs to this office on <br> $16-06-2011$ through the cheque |

## Beneficiary No. 6

| Sr. <br> No. | Details | Remarks |
| :---: | :--- | :--- |
| 1 | Name of the project | Proposed improvements to fruits and vegetable <br> market in the main market yard by APMc bijapur <br> under NHM scheme. |
| 2 | Year of implementation | $2008-09$ work order to the contractor shri C.S. Patil <br> is issued on 10-03-2011 |
| 3 | Project period | 6 months including rainy season. |
| 4 | Name of implementing agency | APMc bijapur through the P.W.D. class I contractor <br> shri C.S. Patil bijapur. |
| 5 | Location for project | APMC bijapur main market yard, indi road bijapur <br> Amtimated cost Rs: 200 lakhs <br> Sancunt put to tender Rs: 29676686-94 |
| 6 | Total project cost | Nil |
| 7 | Amount released by DAC | Nil the contractor has collected the materials to <br> start the work |
| 8 | Expenditure incurred | 5 Acres <br> 9 Status |
| 10 | Size of market in term of area | Fruits and vegetable shops 15 No' <br> Concrete roads and drains <br> Additions and alterations to covered platforms <br> Construction of compound wall and arch gate <br> Construction of RCC over head tank water supply <br> distribution ETC. <br> Rain water harvesting and vermin pits <br> Electrification (Proveding street lights and solar <br> lights and shops internal electrification) At bijapur <br> city. |
| 11 | Facilities created | Fruitsits and vegetables |
| Bijapur main market yard indi road bijapur |  |  |
| 12 | Commodities sold | Fruitsits and vegetables trade is regularly going on <br> in the main market yard bijapur. |
| 13 | Approachability | Condition of market |
| 14 | Whether funds disbursed to agency |  |
| 15 |  |  |

## Observations:-

1. The construction of online trading building for Horticulture Produce at Bijapur with a financial assistance of Rs 62.5 Lakh under NHM is in progress. The construction is expected to be completed in another 4-5 months.
2. In this district, three units of community tanks supported under NHM were visited in villages namely : Tikoda, Somdeveddy and Siddapur K. These have proved very useful for the beneficiaries for the cultivation of grapes.
3. The pack house for grapes in Village Somdev Reddy has greatly benefitted the beneficiary.


# Proceedings of the Wrap-up meeting of Joint Inspection Team (JIT) held on 06.08.2011 in the office of the Mission Director and Director of Horticulture, Lalbagh, Bangalore (Karnataka). 

Members present:

1. Mission Director and Director of Horticulture, Bangalore (Karnataka)
2. Dr.H.V.L.Bathla, Chief Consultant, NHM,GOI.
3. Director, Directorate of Arecanut and Spices Development, Calicut.
4. Director, Directorate of Cashew and Cocoa Development, Cochi.
5. Dr.R.Krishna Manohar, Principal Investigator (PFDC), UAS, Bangalore.
6. Dr.R.Jayaprakash, Executive Director, KSHMA, Lalbagh, Bangalore.

At the outset, the Mission Director welcomed the JIT members.The Joint Inspection Team under the leadership of Dr.H.V.L.Bathla, Chief Consultant, NHM, GOI visited Bidar, Gulbarga, Bagalkot, Bijapur and Dharwad districts of Karnataka State from $1^{\text {st }}$ to $5^{\text {th }}$ of August 2011. During the wrap-up meeting held on $6^{\text {th }}$ August 2011 with the Mission Director and Director of Horticulture, Lalbagh, Bangalore and after detailed interaction, the points enunciated in the meeting are as follows.

1. The opinion of the JIT is that the overall implementation of the scheme in the State is satisfactory. However, the cluster approach is followed in some places and it has to be strengthened.
2. They were of the opinion that in some places even though NHM sign board is there, NHM logo is missing. Display of NHM logo should be ensured in all the cases where NHM assistance is given.
3. While giving assistance to pack houses, its effective usage for the said purpose should be ensured.
4. The ripening chambers assisted under NHM should be farmer friendly. SHM should evolve a mechanism to fix the price for the produce to be placed for ripening by the farmers in these ripening chambers.
5. The on-line trading mechanism developed at the Bijapur APMC market is very effective and it should be followed in the Gulbarga APMC market also. The markets assisted under NHM should start functioning soon.
6. While there is good scope for rejuvenation in Dharwad district, the recommended rejuvenation technique given by the Department of Horticulture to all the DHO's is not being followed. This should be ensured that recommended rejuvenation technique is used.
7. The JIT while appreciating the usage of bio-digesters, opined that there is a need to promote this in other States also. They requested to send a note on the usage, methodology and qualitative and quantitative aspects of bio-digesters, so that this can be promoted in other States.
8. On the whole, implementation of community water storage structures is good and they are well maintained in Bijapur district.
9. The medicinal properties of Kamalapur banana should be ascertained by testing it before promoting it for its medicinal properties.
10. The Department should impart more technical guidance to the farmers.

Mission Director and Director of Horticulture while discussing the issue of availability of good planting material, said that in case of Cocoa the only accredited nursery available in the State is at CPCRI, Vittla, Dakshina Kannada. Since, all the cocoa growers cannot afford to purchase the planting material from Dakshina Kannada, the nurseries in Shimoga are making the plants available to the growers after producing the plants from the pods procured from CPCRI, Vittla. The Mission Director requested Director, DCCD to arrange to inspect these nurseries for their genuinity.

## Recommendations:-

1. In area expansion programme for different horticulture crops, there is a need to follow cluster approach.
2. Signboard with NHM logo need to be displayed, wherever, financial support has been given.
3. The financial support for Bio-digester is being given only in the State of Karnataka. These need to be evaluated for nutrient availability as well as its beneficial effects on controlling pests and diseases.
4. In view of the huge financial support of NHM for establishing APMC markets in different districts, efforts are needed to start functioning of the markets without undue delay and the interest of the farmers need to be safeguarded.
5. The information pertaining to the farmers, samples analyzed, diagnosis made and remedial measures suggested by the Plant Health Clinics along with the feedback of the farmers, thereafter, need to be documented.
6. The State Horticulture Mission must ensure that activity for which financial support under NHM has been provided has started functioning before releasing the final installment.
7. The scientific techniques recommended and already tested for rejuvenation of Mango Orchards need to be followed.
8. More training / exposure visit need to be arranged for transfer of technology.
