REPORT OF JOINT INSPECTION TEAM ON THEIR VISIT TO KARNATAKA DURING 18-21 OCTOBER, 2010

National Horticulture Mission
Ministry of Agriculture
Department of Agriculture & Cooperation
Krishi Bhavan
New Delhi
REPORT OF JOINT INSPECTION TEAM UNDER LEADERSHIP OF DR. JOSE C. SAMUEL, CHIEF CONSULTANT (NHM) ON THEIR VISIT TO KARNATAKA DURING 18-21 OCTOBER TO REVIEW NATIONAL HORTICULTURE MISSION AND RELATED PROGRAMMES

The Joint Inspection Team (JIT) under the leadership of Dr. Jose C. Samuel, Chief Consultant (NHM) visited Dakshina Kannada, Udupi, Shimoga and Tumkur Districts of Karnataka during 18-21 October, 2010 to review the progress under National Horticulture Mission (NHM) and other programmes of Micro Irrigation, National Bamboo Mission, CDB & NHB. A meeting was held under the Chairmanship of Mission Director & Director of Horticulture on 21.10.2010, when the JIT briefed him about their observation, besides reviewing the progress of other Centrally Sponsored Scheme. The JIT comprised of the following Members:

1. Dr. Jose C. Samuel, Chief Consultant(NHM)
2. Dr. Krishna Manohar, Prof. of Horticulture & PI (PFDC), UAS, Bangalore.
3. Shri Venkatesh Hubballi, Director, DCCD, Kochi
4. Dr. K. Jayaprakash, Executive Director, SHM, Bangalore
5. Shri T. Basavaraj, Joint Director of Horticulture (Drip), Bangalore.

Visit to Dakshina Kannada District (18-19/10/2010)

The JIT covered Dakshina Kannada District on 18 and 19th of October, 2010. Shri Shiv Shankar Rao, Deputy Director of Horticulture, Shri Pradeep Dizousa ADH (HQ), Shri Sanjeev Naik, ADH and other officials from the District accompanied the Team during the field visits. Various activities such as establishment of nurseries area expansion, vermi compost unit, adoption of organic farming beekeeping and micro irrigation were inspected.

Out of 1.31 lakh ha of net agricultural land, about 0.983 lakh ha is under horticultural crops, which accounts for about 75% to the total sown area in the District.

The major commercial crop under cultivation in the Dakshina Kannada District is Areca nut. Cocoa, Pepper and Vanilla are cultivated as intercrops under
Areca nut and coconut plantations. Cashew and Rubber is cultivated mainly in waste lands and hilly areas. Due to the high demand and rate for Rubber, farmers are going in for rubber crop in a big way, even by removing cashew plantation. The major cashew growing area is under the control of Karnataka Cashew Development Corporation (KCDC).

The details of area, production and productivity of some of the major crops in the District are given below:

**Area, Production and Productivity of Horticulture Crops in Dakshina Kannada District**

(Area in 000 ha, production 000 M, productivity t/ha)

<table>
<thead>
<tr>
<th>S. N.</th>
<th>Crop</th>
<th>2004-05</th>
<th></th>
<th>2008-09</th>
<th></th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Area (Ha)</td>
<td>Prodn. (MT)</td>
<td>Pnty. (T/Ha)</td>
<td>Area (Ha)</td>
<td>Prodn. (MT)</td>
</tr>
<tr>
<td>1</td>
<td>Banana</td>
<td>3.12</td>
<td>62.35</td>
<td>19.98</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>2</td>
<td>Mango</td>
<td>1.68</td>
<td>6.99</td>
<td>4.16</td>
<td>1.56</td>
<td>15.22</td>
</tr>
<tr>
<td>3</td>
<td>Sapota</td>
<td>0.17</td>
<td>1.37</td>
<td>8.06</td>
<td>0.19</td>
<td>2.02</td>
</tr>
<tr>
<td>4</td>
<td>Cashew</td>
<td>29.59</td>
<td>24.15</td>
<td>0.82</td>
<td>30.94</td>
<td>30.36</td>
</tr>
<tr>
<td>5</td>
<td>Pepper</td>
<td>1.99</td>
<td>0.39</td>
<td>0.20</td>
<td>2.06</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Source: SHM, Karnataka.

The crops identified for development under NHM in the District are pineapple, cashew, cocoa, flowers and pepper.

During the period 2005-06 to 2010-11, an expenditure of Rs 1909.29 lakh was incurred in Dakshina Kannada, as per the following break up.

(Rs. in lakh)

<table>
<thead>
<tr>
<th>Year</th>
<th>Out</th>
<th>Exp</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>363.12</td>
<td>--</td>
</tr>
<tr>
<td>2006-07</td>
<td>348.00</td>
<td>210.08</td>
</tr>
<tr>
<td>2007-08</td>
<td>531.20</td>
<td>714.20</td>
</tr>
<tr>
<td>2008-09</td>
<td>632.64</td>
<td>503.41</td>
</tr>
<tr>
<td>2009-10</td>
<td>483.00</td>
<td>422.91</td>
</tr>
<tr>
<td>2010-11</td>
<td>460.48</td>
<td>58.69</td>
</tr>
<tr>
<td>(Till Sept. 2010)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2818.44</strong></td>
<td><strong>1909.29</strong></td>
</tr>
</tbody>
</table>
The main activities taken up in the District are nursery development, area expansion, rejuvenation, creation of water resources, INM/IPM, organic farming, HRD, and primary processing (cashew).

Under Micro Irrigation, a total area to p 4 of 227.927 ha has been covered, mainly under coconut and arecanut, at an expenditure of Rs. 57.14 lakh, involving 297 beneficiaries.

The following activities were visited by the JIT:
1. Pollination support through beekeeping, vermi compost unit and micro irrigation in the field of Shri Chandrashekhar Gatty, Kondana Kotekar, Mangalore Taluka.
2. Area expansion & MI under banana in the plot of Shri Surendra Mayya, Sajipa Muda, Bantwal Tal.
4. Model Nursery at Gopal Kedilayas Farm, Narimogru, Puttur Tal

The JIT also visited the cashew plantation area under Karnataka Cashew Development Corporation at Panjikal Raj village, being funded by Directorate of cashew & cocoa Development, Kochi. Report in the regard has been submitted separately. The JIT visited the Directorate of Cashew Research, Puttur and interacted with the Director.

Observations of JIT
Summary details of the observation made are as follows:
1. The efforts being made by Shri Chandrashekhar Gatty in adopting integrate coconut farming along with beekeeping organic farming and micro irrigation in worth appreciation. He is fetching good income from the sale of tender coconuts, who is getting a farm gate price of Rs. 16/- for the Chaughat Orange Dwarf variety. He has also maintained Malaysian Yellow Dwarf variety, which are 12 years old, in 3 acres of land. The planting material was processed from CPCRI, Kasargod. On an average,
he is getting an yield of 100 nuts per tree. He has availed subsidy for beekeeping during 2009-10 for 20 honey bee colonies. Drip irrigation system was installed during 2006-07, supplied by Megha Irrigation. He has also taken up multiplication of hives. He mentioned that about 25% increase in the yield of coconut could be desired due to these interventions.

2. Good efforts are being made by Shri Surendra Mayya at Sajipa Munda village in banana cultivation along with drip irrigation. Some part of the plantation (about 3 acres) has been taken up on uplands, involving high investment and labour. Non availability of labour is a serious constraint in the locality. Subsidy assistance of Rs. 37365/- has been availed during 2009-10. The drip system was supplied by Shanti Agro Tech, Bangalore.

3. A small nursery has been established with NHM assistance during 2006-07 at Dr. Varnashi Krishnamurthy farms where grafts of cashew, cocoa besides pepper cuttings are being produced. The nursery required better up keep.

4. The Varanashi Research Foundation (VRF) has been involved as a Service Provider in organic farming since 2008-09, for covering 100 ha with the participation of 54 farmers at Adyandka village, Bantwal Tal. The total project cost is Rs. 20.00 lakh out of which so far an expenditure of Rs. 9.09 lakh has been incurred. The crops covered are arecanut, coconut, cocoa, cashew, pepper and vanilla. Certification agency is Aditi organic certification Pvt. Ltd. During the time of visit to the VRF, a consignment of organic coconut was ready for export to Malaysia. Dr. V. Krishnamurthy, who is a Krish Pandit, is heading the VRF. He explained that marketing of organic produce is a serious challenge.

5. The model nursery set up in the private sector at Gopal Kendilayas Farm, Narimogaru, is producing grafts for cashew and cocoa. An assistance of Rs. 9.00 lakh was provided during 2007-08. The nursery has sold planting material worth 29.00 lakh. During the time of visit by JIT it was observed that the nursery needed better up keep.

A glimpse of some of the activities visited is available on the next two pages.
GLIMPSES OF SOME OF THE ACTIVITIES VISITED BY JIT IN DAKSHINA KANNADA DISTRICT

Vermi compost and beekeeping taken up by Shri Chandrashekar Gatty in his coconut plantation at Kondana. The Changhout orange dwarf variety of coconut is fetching farm gate price of Rs. 16/- per nut. Drip irrigation has been adopted for his coconut garden.

Banana plantation of G-9 and local variety taken up by Shri Surendera Mayya at Sajipa Muda Village
Dakshina Kannada (Contd.)

Small nursery developed at Varanashi Krishnamurth Farms during 2006-07

Organic Coconut produced by the farmers with Varnashi Research Foundation (VRF), ready for export

Interaction with farmers with VRF at Adyanandha
Visit to Udupi District (19/10/2010)

JIT visited Udupi District on 19.10.2010. Shri M. S. Raju, Sr. ADH, Karkala and Shri Guru Prasad, AHO, Karkala accompanied the Team during the field visits. Activities such as area expansion under pineapple, vermi compost unit and primary processing unit (Cashew) were inspected.

The total area of Udupi District is 3.56 lakh ha out of which about 1.00 lakh ha is cultivable land. The total population of the District is 11.12 lakh. Main horticultural crops are cashew, coconut and arecanut, besides rubber. Main fruit crops being grown are mango, banana, jack fruit and pineapple. Cashew, cocoa and flowers were identified as the main crops for development under NHM in the District.

The details of area, production and productivity of different horticultural crops in Udupi district is as follows:

### Area, Production & Productivity of Horticulture Crops in Udupi District

<table>
<thead>
<tr>
<th>S. N.</th>
<th>Crop</th>
<th>2004-05</th>
<th>2008-09</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Banana</td>
<td>1.66</td>
<td>31.30</td>
<td>18.86</td>
</tr>
<tr>
<td>2.</td>
<td>Mango</td>
<td>2.33</td>
<td>21.95</td>
<td>9.42</td>
</tr>
<tr>
<td>3.</td>
<td>Sapota</td>
<td>0.94</td>
<td>14.73</td>
<td>15.67</td>
</tr>
<tr>
<td>4.</td>
<td>Cashew</td>
<td>24.39</td>
<td>45.85</td>
<td>1.88</td>
</tr>
<tr>
<td>5.</td>
<td>Cocoa</td>
<td>0.06</td>
<td>0.08</td>
<td>1.33</td>
</tr>
</tbody>
</table>

**Source:** SHM, Karnataka. Area production and productivity has declined almost all the crops. Decline in sapota is substantial. SHM needs to look into the data as well as reasons for such decline.

During 2005-06 to 2009-10, an expenditure of Rs 686.98 lakh was incurred in the district, as per the following details:
(Rs. in lakh)

<table>
<thead>
<tr>
<th>Year</th>
<th>Out</th>
<th>Exp</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>123.71</td>
<td>123.50</td>
</tr>
<tr>
<td>2006-07</td>
<td>105.41</td>
<td>104.83</td>
</tr>
<tr>
<td>2007-08</td>
<td>264.94</td>
<td>203.13</td>
</tr>
<tr>
<td>2008-09</td>
<td>89.10</td>
<td>68.39</td>
</tr>
<tr>
<td>2009-10</td>
<td>211.90</td>
<td>187.13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>795.06</strong></td>
<td><strong>686.98</strong></td>
</tr>
</tbody>
</table>

An outlay of Rs. 222.25 lakh has been earmarked for 2010-11. An expenditure of Rs. 47.29 lakh has been incurred till September, 2010.

**Observations of JIT**

1. A pineapple cluster of about 14 ha has been developed on leased land by three farmers, viz. Shri Praveen Joseph, Sh. Pradeep Joseph and Shri Joseph Mathew. Queen variety of pineapple was planted during June/July, 2010. Shri Varun, Supervisor of the farm area mentioned that the owners were staying at Kottayam, Kerala, who make frequent visits to the farm site. He mentioned that one Shri James George is the main owner. Telephonic talk to him from the farm premises revealed that the planting material was brought from Vazakulam, Kottayam. Subsidy due to him is yet to be paid. Sr. ADH mentioned that the bills for the 1st instalment, amounting to Rs. 97,500 has been submitted and the payment is expected to be made shortly. Sprinkler system has been installed in the farm at farmers own cost. High weed infestation is a problem in the area, Weeding operation were under progress during the time of visit.

2. The vermi compost unit set up by Shri Dev Raj Hegade during 2009-10 needs upkeep of thatched roof. Area expansion of cocoa in 1.2 ha was taken up by him during 2008-09 for which cost of planting material was met under NHM.

3. Subsidy assistance of Rs. 6.00 lakh has been provided for a primary processing unit for cashew set up by Shri Seetaram Nadu at Andaru, Karkal Tal. The State Govt. has also granted a subsidy of Rs. 6.00 lakh for the same unit. Means of financing need to be indicated correctly while submitting such project to DAC.
Glimpses of some of the activities visited in Udupi District is available below.

GLIMPSES OF SOME OF THE ACTIVITIES VISITED BY JIT IN UDUPI DISTRICT

Pineapple cluster at Madurapana being cultivated by three farmers. The land has been taken on lease from Madurapana Jain Board.

Cocoa plantation taken up by Shri Dev Raj Hegede in 1.2 ha during 2008-09

Primary Processing unit for cashew set up by Shri Sitaram Naik, at Karkala during 2009-10
Visit to Shimoga District (20/10/2010)

The JIT covered Shimoga District on 19th and 20th of October, 2010. Shri Vishwanath, DDH, Shri Eshwarappah, Sr. ADH, Tirtha halli, Shri Laxmikant, Sr ADH, Shimoga, Shri Sidhalingeshwar, Sr ADH, Shikaripura and Dr Anand, Sr. ADH, Shikaripura accompanied the Team during their field visits.

The JIT visited various activities such as beekeeping, primary processing of spices, micro irrigation, area expansion, protected cultivation and wholesale market.

The total geographical area Shimoga District is 8.48 lakh ha. The area under horticulture is 0.65 lakh ha., with a production of 4.14 lakh tonnes. Major horticulture crop cultivated in the district are mango, banana, sapota, pineapple as fruit crops, tomato, watermelon, muskmelon, bhendi as vegetables, areca nut, coconut, cashew, oil palm as plantation crops, ginger, pepper, cardamoms, vanilla as spice crops and flower crops like chrysanthemum, jasmine, and tuberose.

The crops taken up for development under NHM in the District are Banana, Mango, pineapple, sapota, cashew, flowers and spices (Ginger & Pepper).

The main activities taken up under NHM include area expansion, under mango, banana flowers, spices, protected cultivation, INM/IPM, organic farming, primary processing and marketing.

The details of area, production and productivity of main horticultural crops in Shimoga District are as follows:-

Area, Production & Productivity of Horticulture Crops in Shimoga District

<table>
<thead>
<tr>
<th>S. N.</th>
<th>Crop</th>
<th>2004-05</th>
<th>2008-09</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Banana</td>
<td>4.00</td>
<td>47.42</td>
<td>11.84</td>
</tr>
<tr>
<td>2.</td>
<td>Mango</td>
<td>2.17</td>
<td>11.37</td>
<td>523</td>
</tr>
<tr>
<td>3.</td>
<td>Sapota</td>
<td>0.26</td>
<td>1.4</td>
<td>5.34</td>
</tr>
<tr>
<td>4.</td>
<td>Cashew</td>
<td>1.58</td>
<td>2.34</td>
<td>1.49</td>
</tr>
<tr>
<td>5.</td>
<td>Ginger</td>
<td>1.59</td>
<td>18.57</td>
<td>11.61</td>
</tr>
</tbody>
</table>
Since 2005-06, an expenditure of Rs. 3015.65 lakh has been incurred in the District as per the following break-up:-

(Rs. in lakh)

<table>
<thead>
<tr>
<th>Year</th>
<th>Out</th>
<th>Exp</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>86.5</td>
<td>36.90</td>
</tr>
<tr>
<td>2006-07</td>
<td>726.58</td>
<td>702.49</td>
</tr>
<tr>
<td>2007-08</td>
<td>953.35</td>
<td>871.24</td>
</tr>
<tr>
<td>2008-09</td>
<td>838.62</td>
<td>602.30</td>
</tr>
<tr>
<td>2009-10</td>
<td>918.11</td>
<td>802.72</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3523.16</strong></td>
<td><strong>3015.65</strong></td>
</tr>
</tbody>
</table>

An outlay of Rs. 667.87 lakh has been earmarked for 2010-11 against which, an expenditure of Rs. 274.77 lakh has been incurred till September, 2010.

An expenditure of Rs. 58.31 lakh has been incurred under micro irrigation for covering 238.44 ha during 2010-11.

**Observations of JIT**

1. Visit to the wholesale market, Shimoga revealed that the condition of the market has deteriorated since the visit of the Team leader of JIT in August, 2010. Vegetables were being sold in the open area. The taps provided for supplying water to the shops were dry. Display board with NHM logo is yet to be placed. There was no price display mechanism. There was no mechanism available to know the total quantum of arrival in the market on a particular day. Looking into poor State of affairs of the market, the JIT called on the Secretary, APMC, Shri Sarad Chandra Ranade and brought the about facts to his notice. He agreed to rectify the deficiency immediately.

2. Shri Rajender Kumar has taken up cultivation of capsicum (Indira variety) under green house (1100 sq m. Gothic structure Tal structure) at Abbalagere, Shimoga Tal which is providing good income. He himself is a fabricator and supplier of green house structures in the District.

3. Primary processing of spices has been taken up by Shri Ganesh Ganavalli at Megaravalli, Thiurthally Tal. The processing unit basically comprised of
equipments like threshers for pepper, washing and drying unit, shelling unit in the case of arecanut.

4. Since the component of horticulture mechanization has been introduced from 2010-11, equipments such shelling and threshing unit could be funded under this component, rather than as a processing unit, major cost of such processing unit is on civil work. NHB is providing assistance for primary processing, which could be availed.

5. The JIT members witnessed the functioning of a prototype of mobile processing unit for arecanut sheeting which can be used for other products like spices. Commercial manufacture of the machine is yet to take place.

6. The farmers requested for facilitating the import of some farm equipment, such as trawlers with caterpillar wheel, which can be used for transporting farm produce under undulating terrain conditions. It was informed to them that provision exists under NHM for expenditure up to Rs. 50 lakh for importing new machines and tools for demonstration purpose, by some public sector agency. Purchase will be possible once the machines are made available locally on commercial scale.

7. Adoption of beekeeping by Shri Girish S Savitri at Guddekeri PO, Thithahalli is a welcome sign. He has undergone training on beekeeping after availing subsidy for 8 honey bee colonies and hives of *apis cerena*.

8. Drip irrigation has been adopted for a variety of horticultural crops like arecanut, banana, mango etc. It was observed that micro tubes are being used extensively. Since micro tubes are less water efficient, excessive use of micro-tubes need to be discouraged.

9. Farmers of Manchikoppa village Shikasipra Tal. have adopted intercropping of ginger and maize with mango which is fetching them good income. The planting material for mango has been arranged from Sirsi district by the farmers themselves @ Rs. 100/- par plant. A cluster of 25 areas has been developed by 11 farmers in the locality.

Glimpses of some of the activities visited in Shimoga District is appended in the next two pages.
GLIMPSES OF SOME OF THE ACTIVITIES VISITED BY JIT IN SHIMOGA DISTRICT

Beekeeping taken up by Shri Girish S. Savitri Mane at Guddikeri

Primary processing unit for spices set up at Megaravalli by Shri Ganesh Ganavalli during 2008-09
Shimoga (Contd.)

View of Wholesale market for Fruits & Vegetables at Shimoga. Display board is to be placed. Cattle is roaming freely inside the market area.

Cultivation of Capsicum in Green house by Shri S. Rajendra Kumar at Abbalagere

Drip irrigation of Banana at Balligavi. Micro tubes are being used largely.

Inter cropping of ginger with mango plantation by at Shri Mallikarjunappa at Manchikappa.
Tumkur District (21/10/2010)

The JIT covered parts of Tumkur District, enroute to Bangalore, on 21.10.2010. Shri B. N. Prasad, Deputy Director of Horticulture, Tumkur accompanied the JIT to show the activities taken up under protected cultivation.

Observations of JIT

1. Visit made to the plot of Shri Yogindrappa at Tharabenahalli village, Chikkamgakana hall Tal who has constructed a green house structure of 2000 sq. m with wooden frame structure is harvesting a good crop of coloured capsicum. The planting was done during the 1st week of April, 2010. Seed was procured from ECL Seeds Co., Bangalore. He is selling capsicum @ Rs. 40/ kg and there is a ready market in Bangalore. Subsidy has been availed for 500 sq. m only, amounting to Rs. 1.28 lakh. The farmer mentioned that about 14 MT of capsicum has been harvested so far. He has submitted application for claiming subsidy for another 500 sq. m.

2. Visit to the shade net structure constructed by Ms Netravati, covering 1040 sq. m revealed that the structure has been well maintained for producing seedlings of capsicum, chillies, tomato brinjal, marigold, gourd and melons. The structure has a capacity to produce about five lakh seedlings per month. The seedlings are being sold @ Rs. 0.30/ plants if the seeds are not provided by the farmers and @ 0.20/ plant if the seeds are supplied by the farmer. The project was commissioned in January, 2010. A subsidy of Rs. 3.00 lakh was availed under NHM. The total cost was Rs. 7.50 lakh.

Glimpses of activities visited in Tumkur District is given on next page.
GLIMPSES OF ACTIVITIES VISITED BY JIT IN TUMKUR DISTRICT

Cultivation of coloured capsicum by Shri Yogindrappa at Tharabera halli

Vegetable seedling production by Ms Netravati. The vegetable seedlings fetch a price of Rs. 0.2 to 0.3 per plant.
Highlights of Meeting at Bangalore on 21.10.2010

A wrap up meeting was held with the Director of Horticulture & Mission Director, Karantaka State Horticulture Mission on 21st October, 2010. The progress of implementation of National Bamboo Mission, National Horticulture Board and Coconut Development Board programmes was also reviewed during the meeting. The following officers were present:

1. Shri N. Jayaram, Director of Horticulture &MD In Chair
2. Shri A.C Keshava Murthy, Chief Conservator of Forest (Bamboo Mission)
3. Dr. Jose C Samuel, Chief Consultant (NHM), Ministry of Agriculture, New Delhi.
4. Dr. D.L Maheshwar, Addl. Director of Horticulture
5. Shri K.B. Dundi, Joint Director of Horticulture (PC&PP)
6. Shri T. Basavaraj, Joint Director of Horticulture (Drip Irrigation)
7. Dr. K. Jayaprakash, Executive Director (SHM)
8. Shri Venkataaesh Hubbali, Director, DCCD, Kochi
9. Dr. Krishna Manohar, Prof. of Hort. & PT(PFDC), VAS, Bangalroe
10. Shri Dhal Singh, Sr. Asstt. Director (NHB), Bangalore
11. Shri Vijay Kumar Hallikeri, Deputy Director (CDB)
12. Dr. T.S. Hanumantha Govda, GAO, Bangalore

At the outset, Shri Jayaram, Director of Horticulture & Mission Director welcome the participants. He, thereafter, requested Dr. Jose, Chief Consultant to initiate the discussions.

Dr. Jose Samuel, mentioned that the JIT made field visits in Dakshina Kannana, Udupi, Shimoga and Timkur Districts. The JIT interacted with the farmers and held discussion with the District and Taluka level officers. Based on these visits, the JIT observed the following:

1. Under the area expansion programme, the farmers were procuring planting material for fruit crops through their own sources without any quality check by the Department of Horticulture. The planting material were being procured from for off distances outside the District and even from outside the State. It
was advised that the Department of Horticulture should have a system to certify the nurseries and planting material for area expansion programme should be supplied through such certified nurseries. For this, a panel of certified nurseries need to be prepared.

2. Despite large area being brought under horticulture crops, efforts were needed to develop clusters for horticulture crops on a larger scale. JIT observed pineapple cluster in Udupi, taken up on leased land and mango cluster in Shimoga districts.

3. There is scope to expand the area under protected cultivation in Dakshina Kanada and Shimoga Districts, where potential exits. Good numbers of Green house/ Shadenet units are coming up in Timkur District, which is a welcome sign, looking into its proximity to urban market in Bangalore.

4. A large number of request are being received for primary processing of arecanut, spices etc. In view of the health hazard of arecanut consumption, DAC has not been encouraging development of arecanut. Some machines needed for shelling arecanut could, however, be assisted under the component of farm mechanization.

5. Efforts for setting up PHM infrastructure such as pack houses, cold storage units, Ref. Vans etc. need to be stepped up.

6. The APMC market set up at Shimoga did not have any display board with NHM logo. Moreover, there was no transparency in the marketing system. Details of market arrival and price were not available at the market site. The vegetables were being sold under unhygienic conditions in the open, rather than on the raised platforms provided. The matter was brought to the notice of Secretary, APMC, Shimoga, who agreed to look in to the matter. He agreed to place the display board in a days time.

7. The whole sale market at Tumkur is yet to be commissioned despite infrastructure work have been completed.

8. On pointing out the need for the Districts to post the monthly progress report on NHM web site, Director of Horticulture mention that all the districts have started up loading the data.

9. It was brought to the notice that name of the District officials had received the observations made during the visit of the Chief Consultant to Dakshina

With regard to progress monitoring system, it was pointed out that there was large difference between the audited statement of expenditure and the figures reported on the NHM web site. The details are as under:

<table>
<thead>
<tr>
<th>Year</th>
<th>Out</th>
<th>Rel</th>
<th>Expenditure</th>
<th>Web (Tot)</th>
<th>Web (GOI)</th>
<th>Audited</th>
<th>Diff (w.r.t.web)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>8521.90</td>
<td>4455.17</td>
<td>322.72</td>
<td>322.72</td>
<td>1576.12</td>
<td>-1253.40</td>
<td></td>
</tr>
<tr>
<td>2006-07</td>
<td>13358.80</td>
<td>8448.25</td>
<td>6508.33</td>
<td>6508.33</td>
<td>7798.02</td>
<td>-1289.69</td>
<td></td>
</tr>
<tr>
<td>2007-08</td>
<td>12980.27</td>
<td>8571.05</td>
<td>14473.46</td>
<td>13032.61</td>
<td>13739.30</td>
<td>-706.69</td>
<td></td>
</tr>
<tr>
<td>2008-09</td>
<td>20944.85</td>
<td>12536.88</td>
<td>10965.06</td>
<td>9435.39</td>
<td>9302.00</td>
<td>133.9</td>
<td></td>
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<tr>
<td>2009-10</td>
<td>11220.00</td>
<td>8001.67</td>
<td>13321.33</td>
<td>11368.69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010-11</td>
<td>11220.00</td>
<td>3525.00</td>
<td>4440.26</td>
<td>3774.24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>78245.82</td>
<td>45538.02</td>
<td>50031.16</td>
<td>44441.98</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mission Director was requested to reconcile the web posting in accordance with the audited figures.

Responding to the observations, Director of Horticulture mentioned that they have constituted a committee to inspect the nurseries to certify them for supplying planting material under NHM programme. He agreed to furnish the list of the certified nurseries. Besides, awareness programme have been taken up with the help of NHB on quality aspects of nurseries. The NHB has also taken up work in accreditation of nurseries.

With regard to cluster formation, Assistant Director (NHB) mentioned that good cluster for floriculture have been developed in and around Bangalore. Karnataka has emerged as leading State in floriculture. Similarly large area as under protected cultivation has also come up. Director of Horticulture agreed to expand the scope of protected cultivation in other Districts.

With regard to processing units, Assistant Director (NHB) mentioned that they are providing assistance for primary processing of arecanut, which can be availed. Director of Horticulture added that there is a provision under the State sector Scheme to provide assistance upto Rs. 50.00 lakh for mechanization, which would be
extended for horticultural crops. He also agreed to step up efforts for creating infrastructure for PHM. Besides, he will take up the matter with the Director, Directorate of Marketing to look into the Wholesale markets being assisted under NHM.

Chief Conservator of Forest (NBM) mentioned that about 80,000 ha is under bamboo in Karnataka State. They have involved about 34 Joint Forest Management Committees under the NBM. The mission has been progressing satisfactorily. The new plantation programme in the non forest areas has been slow due to non availability of land. He added that the bamboo plantation has started flowering. The matter has been taken up with the State Government to take necessary precautionary measures. He, further, added that release of funds, to the tune of Rs. 3.00 crore for the activities implemented during 2007-08 and 2008-09 is pending with the Horticulture Division. On enquiry whether the activities were implemented withing the approved allocation as per Annual Action Plan, he mentioned that the works were executed within the outlay earmarked as per Action Plan during for the respective years. However, less funds were released during those years by the DAC.

Deputy Director (CDB) mentioned that they are implementing the Scheme on Integrated Farming for Productivity Improvement of coconut by adopting a cluster approach in which contiguous blocks of 25-50 ha are developed. The scheme is implemented in a farmer participatory mode with a view to demonstrate the impact of technological interventions in improvement of coconut gardens. About 1000 ha have been covered in 18 Districts of the State. As regards area expansion, 465 ha was covered during 2009-10. On this, Director of Horticulture observed that there is need to increase the coverage under area expansion of coconut in the State. Deputy Director (CDB) mentioned that despite much efforts, not many applications for area expansions in coming forth from the farmers at the District level. Director of Horticulture assured that he would arrange to get the applications at the District level. He added that the target should be at least 500 ha of area expansion in each district.

Assistant Director, NHB mentioned that they have cleared 235 projects involving an outlay of Rs. 2.50 crore during 2009-10 at the State level. Besides, 50 projects have been approved at the National level involving an outlay of Rs. 5.02
calore. He added that release of funds for 2010-11 is awaited. About 10 projects are pending approval for want of funds. He requested for expediting the release of funds from the NHB Headquarters.