# 2010-11 **Annual Report**





Directorate of Horticulture, Department of Agriculture Govt. of Odisha







#### **ORISSA HORTICULTURE DEVELOPMENT SOCIETY (OHDS)**

Directorate of Horticulture Department of Agriculture Govt. of Odisha



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Bhubaneswar, the 15th Oct., 2011

## Message

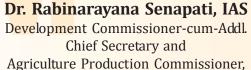
I am pleased to know that the Odisha Horticulture Development Society is bringing out its first Annual Report. The Horticultural activities in the State got a big push with the operationalization of the Nationl Horticulture Mission. The coverage of fruits crops has significantly increased and stands around one lakh hectares. The focused attention and priority accorded to the sector has led to significant increase in production of fruits and vegetables and Odisha ranks among the top five States. Different Agro-climatic zones provide opportunity for the farmers to go for diversified crops which provide better returns besides nutritional security and poverty alleviation.

The increased production of fruits and vegetables poses a bigger challenge as the infrastructure for post harvest management has to be put in place to reduce the loss and deterioration in quality. The Odisha Horticulture Development Society (OHDS) through schemes of NHM should give big push to post harvest management and provide end-to-end solutions for different crops so that the farmers can get better returns from these crops.

The first annual report being brought out by the Society for the year 2010-11 highlights the achievements made in the sector. I hope the Society will continue to bring such reports on regular basis.

With best wishes.

(B.K. Patnaik)







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Bhubaneswar - 751 001 Date: 20th October, 2011

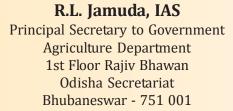


Message

I am glad to know that horticultural activities have gained momentum due to implementation of National Horticulture Mission in the state since 2005-06 and similar activities under State RKVY and other Schemes. Emphasis has also been given for the development of commercial flowers like rose, gladioli, tube rose and marigold as well as protected cultivation. There is tremendous growth in the production of Quality Planting Materials by the establishment of nurseries under NHM and the state is now self sufficient in the production of mango and cashew grafts. However, there is a need for rapid development in the post harvest management and marketing sector. The Annual Report of 2010-11 reflects the activities under taken by the Directorate of Horticulture.

I hope this publication will be useful for all those who are engaged in horticulture sector.

(R.N. Senpati)





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Message

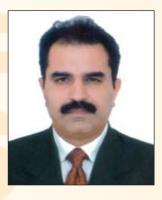
I am delighted to know that the Odisha Horticulture Development Society is bringing out its Annual Report for the year 2010-11. The report reflects the achievements made by the Society besides focusing on some of the important issues relating to plantation of fruit crops and post harvest management. A majority of the people of Odisha depend on agriculture & allied activities and the growth in agriculture can be better achieved through the intervention of horticulture in uplands and other areas where horticulture can offer better cash flow to the farming community. The Directorate has already covered more than one lakh twentyfive thousand hectare area under fruit plantations under the National Horticulture Mission and other programmes. The production of fruits has already started in some of these orchards and the challenging task is to cover extensive areas under uplands and the post harvest management & marketing of the produce to strongly support the farmers and enable them to get better remuneration for their crops.

The Annual report of the OHDS for the year 2010-11, I believe, will act as mirror of activities of Horticulture Development Society and will guide the officers besides empowering the farming community and other stakeholders. I take this opportunity to extend my best wishes to the employees of Horticulture Directorate and do hope that the Annual Report will be useful to all stakeholders and patrons.

(R.L. Jamuda)



Sanjeev Kumar Chadha
Director, Horticulture
&
Secretary, OHDS



Message

Odisha stands at threshold of a horticultural revolution in this decade. With huge areas already under friut plantations there is potential of becoming one of the major fruit exporting states in the country. There needs to be a paradigm shift in strategy to catapulate Odisha to national and international scenario in export of fruits, vegetables and floriculture.

Small farmers, especially in Scheduled Areas, shall be the focus of our programmes. It is by convergence of programmes like OTELP, SCA to TSP, MNREGA, Irrigation schemes etc. returns from a small holding of one acre shall cross rupees at least fifty thousand per annum and farmers move up from the poverty line. The trust reposed by the Government on this Directorate to deliver on these goals has strengthened our resolve to succeed in reaching and benefitting the small farmers and prove the myth wrong that "Horticulture is only for rich farmers".

I am sure we in the Horticulture family, would rededicate ourselves and channelize our energy towards reaching small farmers, setting up market linkages and putting Post Harvest Infrastructure in place and come up to the expecations of the farming community. This shall transform the State into a power centre in the field of Horticulture in coming years.

(Sanjeev Kumar Chadha)

# **Governing Body of OHDS**

The society shall be constituted with the following members and more members may be nominated or substituted by Govt. as the need may be.

1.	Minister, Agriculture	Chairman
2.	Minister, Finance	Member
3.	Minister(S), Cooperation	Member
4.	Minister(S), ST & SC, Welfare	Member
5.	Sri Devi Prasad Mishra, MLA	Member
6.	Dr. Nrusingha Sahoo, MLA	Member
7.	Chief Secretary, Orissa	Member
8.	APC-cum-ACS	Member
9.	Secretary, Agriculture	Member
10.	Secretary, Finance Deptt.	Member
11.	Secretary, Cooperation Deptt.	Member
12.	Secretary, W & CD Deptt.	Member
13.	Secretary, Panchayati Raj Deptt.	Member
14.	Principal, Chief Conservator of Forest	Member
15.	Special Secretary, P& C Deptt.	Member
16.	Deputy Chief Administrator, KBK	Member
17.	President, OMFED	Member
18.	Prof. & HOD of Horticulture, OUAT	Member
19.	MD, APICOL	Member
20.	Two representatives of farmers	Member
21.	Two representatives of the Central Govt.	Member
22.	Director, RPRC	Member
23.	Director, Bio-technology, Odisha	Member
24.	Director, Horticulture	Secretary

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# Districts of **Odisha** covered under NHM

 $\mathcal{N}_{ ext{ature}}$  has placed the state of Odisha in a position of advantage with respect to cultivation of different horticultural crops offering a wide range of choices to the farmers for crop diversification with the focussed attention of the Govt. of India as well as state Govt. The horticulture sector is receiving favourable policy environment and increased investment support in recent years. NHM launched since 2005 by Govt of India is now under implementation in 24 districts of the state for holistic development of horticulture sector starting from planting to post harvest management and marketing.





# **Mission Objectives**

- Provide holistic growth of horticulture sector through area based regionally differentiated strategies, which include research, technology promotion, extension, post harvest management, processing and marketing, in consonance with comparative advantage of each State / region and its diverse agro-climatic features;
- Enhance horticulture production, improve nutritional security and income support to farm households;
- Establish convergence and synergy among on-going and plan programmes for horticulture development;
- Promote, develop and disseminate technologies for horticulture development through seamless blending of traditional wisdom and modern scientific knowledge;
- Create employment generation opportunities for skilled and unskilled persons, especially unemployed youth.



 $\mathsf{C} \mid \mathsf{H} \mid \mathsf{A} \mid \mathsf{P} \mid \mathsf{T} \mid \mathsf{E} \mid \mathsf{R} \mid \mathbf{1}$ 

# Orissa Horticulture Development Society (OHDS) It's Functioning

#### 1.1 Horticulture Scenario

India has a wide variety of climate and soils on which a large number of horticulture crops such as fruits, vegetables, potato, tropical tuber crops, mushrooms, ornamentals, medicinal and aromatic plants, plantation crops, spices, cashew, cocoa and betel vine are grown. After attaining independence in 1947, major emphasis by the Government of India was laid on achieving self-sufficiency in food production especially in cereals. After the Green Revolution in the sixties, it however, became clear that horticulture, for which the Indian topography and agro-climate are well suited, was an ideal method of achieving sustainability of small holdings. However, the need for diversification was acknowledged by Government of India only in mid-eighties to make agriculture more profitable, through efficient land use; create skilful employment for rural masses and women and optimize the utilization of natural resources (soil, water and environment). Past efforts have been rewarding in terms of increased production and productivity of horticulture crops. India has emerged as the largest producer of coconut, areca nut, cashew, tea and the second largest producer of fruits and vegetables in the world. The changing scenario encourages private investment. As a result horticulture has moved from rural confines to commercial ventures attracting youth since it has proved to be intellectually satisfying and economically rewarding.

At national level horticulture sector has emerged as a potential player in the Indian economy contributing 30% to GDP in agriculture from more than 13.08% area under horticultural crops as well as a means of diversification in overall development of agriculture.

Horticulture invariably improves the economic status of our farmers. The earlier seasonal availability of fruits and vegetables has now extended to all the year round, increasing the per capital consumption of fruits and vegetables. It has also played a significant role in women empowerment, providing employment opportunities through mushroom cultivation, floriculture, processing, nursery raising, vegetable seed production etc. The national goal of achieving 4% growth in agriculture can be achieved through the major contribution in growth from horticulture.

#### 1.2 Creation of Directorate of Horticulture

In Orissa, prior to 1977, Horticulture interventions were under taken simultaneously, along with normal agriculture programme as a part of Directorate of Agriculture and Food Production. Thus before creation of separate Directorate of Horticulture, promotion and development of Horticulture crops was taken as second priority, next to rice, pulses etc. After separation of Horticulture Directorate from Directorate of Agriculture and Food production in 1977, systematic and structured approach for Horticulture development came into being. A designated cadre of extension personnel, though inadequate, was put in place in 1989. Since then the Directorate of Horticulture is engaged in promotion of fruits, vegetables, flowers, mushrooms, medicinal and aromatic plants etc. It is now gaining momentum due to implementation of various schemes like National Horticulture Mission, Rastriya Krishi Vikash Yojana, National Mission on Medicinal Plants, National Mission on Micro Irrigation, State Plan scheme, CDB, ISOPOM for Oil palm etc.

#### 1.3 Establishment of Orissa Horticulture Development society

- i) Government of India have launched National Horticulture Mission for promoting, on a mission mode, the all round development of horticulture in the country encompassing all aspects such as increase in production and productivity, post harvest management, processing, marketing and export. They requested all states to form and register state level horticulture development societies for planning, coordinating, supervising and monitoring the activities of different organizations and agencies concerned with the development of horticulture and implementation of the National Horticulture Mission's programmes.
- ii) There is tremendous scope for development of horticulture in our state due to the advantageous agro-climatic conditions, and the state Government consider horticulture as the most potent mode of increasing agricultural income and employment opportunities for the people of the state. The state Government have accordingly decided to focus on the development of commercial horticulture in the state by taking advantages of various schemes of the central Government, National Horticulture Board, Coconut Development Board, other similar organization and above all the proposed National Horticulture Mission.
- iii) The State Govt. after careful consideration, decided to constitute a society at the state level namely, the **Orissa Horticulture Development Society** registered under the Registration of Societies Act XXI of 1860 having the no. 22020/1 of 2005-2006 to entrust to it task of planning, coordinating, supervising and monitoring of horticulture development activities in the state as would be necessary from time to time. The registered office of the society is situated in the premises of the Directorate of Horticulture, Bhubaneswar and its area of operation extends to the whole state.

#### 1.4 Funds of the Society

- 1.4.1 The following shall constitute the funds of the Society,
  - (i) Recurring and Non-recurring grants received from the State and Central Govts. and their Agencies.
  - (ii) Donations/ Contributions received from any donors.
  - (iii) Grants received from any National or International Organisation or Donor Agencies.
  - (iv) Income from investments and other sources.
- 1.4.2 All funds of the Society shall be paid in to the Society's account maintained with the Bankers to the Society and shall not be withdrawn except on cheques duly signed by the Secretary, or jointly by the Secretary and the chairman of the Executive Committee or by any other officers of the Society singly or jointly as the Executive Committee may determine.

#### 1.5 Authorities of the Society

1.5.1 General Body: The General Body consisting of all members of the society is the Supreme authority of the Society.



1.5.2 Executive Committee: There is an Executive Committee consisting of not less than nine and not more than twelve official and non-official members to be nominated by the Govt.

(Explanation: An official member is one who is nominated to be a member by virtue of an office held by him, and a non-official member is one who is nominated to be a member by name)

#### 1.6 Powers and Functions of the Executive Committee

- (i) The General superintendence of the affairs of the Society are vested in the Executive Committee of the Society; and save as otherwise expressly delegated to the Project Management Committee or any other Committee or the Secretary or any other Officer of the Society, all the duties, functions, powers and rights whatsoever consequential or incidental to the carrying out of the objectives of the Society, shall be performed and exercised by the Executive Committee.
- (ii) In particular, and without prejudice to the generality of the foregoing provisions and subject to the provisions of the Memorandum, the Executive Committee may -
  - (a) receive grants, donations and contributions and have custody of the funds of the Society, and shall appoint the Bankers to the Society.
  - (b) approve the Annual Budget and Work Plan of the Society and sanction the expenditure within the limits of the Budget for approved purposes.
  - (c) issue guidelines to be followed for carrying out its various activities and implementation of programmes.
  - (d) decide on procurements of machinery and equipment, goods and services and hiring services of consultants and experts necessary for carrying out the objectives of the Society.
  - (e) enter into any agreement for and on behalf of the Society.
  - (f) institute and defend all legal proceedings of the Society.
  - (g) consider and approve the Annual Reports, Annual Accounts and Audit Reports of the Society.
  - (h) do any other thing for the furtherance of the objectives of the Society.
- (iii) The Executive Committee may delegate any of its functions and powers to the extent deemed appropriate to the Project Management Committee, or any other Committee constituted by it or to the Secretary or any other officer of the Society.

#### 1.7 Committees of the Executive Committee

- 1.7.1 The Executive Committee may appoint Committees for disposal of any of the business of the Society or for tendering advice in any matter pertaining to the Society.
- 1.7.2 Project Management Committee: Without Prejudice to the generality of the previous sub-rule, there shall be constituted an Executive Committee consisting of the following:

(a) Agriculture

Production Commissioner ..... Chairman

(b) Principal Secretary,

Agriculture Department ..... Member

(c) Head of the Deptt.

Of Horticulture, OUAT ..... Member

(d) Financial Adviser,

Agriculture Department ..... Member

(e) Secretary of the Society ..... Member Secretary

# **1.7.3 Powers and Functions of the Project Management Committee:** (Subject to the delegation by the Executive Committee, the Project Management Committee shall)

- (a) issue directions to the Secretary to carry out various activities and implement different programmes in the furtherance of the objectives of the Society.
- (b) approve projects and programmes and sanction expenditure for their implementation.
- (c) decide machinery, equipment, planting materials, and other goods and services to be procured and accept offers/bids, for award of contracts; or recommend to the Executive Committee for such acceptance or award.
- (d) scrutinize and present before the Executive Committee the Annual Work Plan and Budget of the Society and its Annual Report.
- (e) make periodic review of the activities of the Society and monitor the progress of programmes and projects taken up.

#### 1.7.4 Meeting of the Executive Committee

- (a) The Executive Committee shall meet at least once in a quarter.
- (b) The Secretary shall issue necessary notice for the meeting of the Executive Committee with the approval of the Chairman by giving the Executive committee members a notice of at least ten days before hand.
- (c) Every meeting of the Executive Committee shall be presided over by the Chairman of the Committee.
- (d) The Chairman shall have the power to invite any State or Central Government Officer connected with Horticulture development or any eminent expert in the field of Horticulture not being member of the Executive Committee to attend any meeting of the Executive Committee, but such invitee shall not have any right to vote.



#### 1.7.5 Meeting of the Project Management Committees

- (a) The Project Management Committee shall meet as often as necessary, but not less than once every two months. Other Committees may meet according to necessity.
- (b) An advance notice of at least three clear days shall be given by the Secretary for a meeting of any Committee to the members.
- (c) At least fifty percent members must be present at a Project Management Committee meeting.

#### 1.7.6 Annual General Body Meeting

- (a) The Society shall hold a General Body Meeting of all its members at least once every year.
- (b) Clear fourteen days notice shall be given to the members by the Secretary with the approval of the Chairman.
- (c) Not more than 15 months shall elapse between two successive annual General Body Meetings.
- (d) The Annual Report, the Balance Sheet and the Auditor's Report shall be placed at the Annual General Body Meeting for consideration.
- (e) The Chairman of the Society shall preside over the Annual General Body Meeting.

#### 1.7.7 Office Bearers

- (a) The Secretary shall be the Chief Executive Officer of the Society and all decisions and instructions of the Executive Committee and the Project Management Committee shall be carried out by him.
- (b) The Society subject to the provision of Rule-5.3 may appoint as many other officers at its Registered Office, or any Branch Office it may open in the districts of the State, as its may deem necessary for carrying out its functions.
- (c) Without prejudice to the generality of the previous Sub-rule, there may be appointed by the Society, an Administrative-cum-Finance Officer who shall discharge such duties and exercise such powers as will be delegated to him by the Executive Committee for assisting the Secretary in discharging his administrative and financial responsibilities.

#### 1.7.8. Meetings of PMC/EC/TSG held in the year 2010-11

- (a) Project Management Committee meeting: 12th PMC meeting was held on 4.10.2010
- (b) Executive Committee meeting: 4th EC meeting was held on 24.01.2011
- (c) Technical Support Group meeting: TSG meeting was held twice i.e. on 26.07.2010 and 23.02.2011.

#### 1.8. Powers and functions of the Secretary

1.8.1. It shall be the duty of the Secretary to carry on the work, administration and management of

- the Society under the overall control and superintendence of the Executive Committee in conformity with the aims and objectives and rules and regulations of the Society.
- (a) He will receive all grants and contributions meant for the Society on behalf of the Executive Committee and deposit the same in the Fund of the Society.
- (b) He will maintain the Accounts of the Society with the Banks and operate the same in accordance with the arrangements approved by the Executive Committee.
- (c) He shall be responsible for drawings, endorsing and negotiating all Cheques, Bills of Exchange, Promissory Notes, Drafts, Govt. and other securities, as will be necessary for carrying on the transactions of the Society.
- (d) All sanctions of expenditure within the budget grant whether authorized by the Executive Committee or Executive Committee in accordance with the delegation of power shall be authenticated by the Secretary.
- (e) All contracts on behalf of the society shall be signed by the Secretary.
- (f) The Secretary shall file with the Registrar of Societies the documents required under Section-4 of the Act as amended from time to time.
- (g) He shall be responsible for presenting the Books of Accounts and records of the Society for inspection before all authorities to whom such records and books need be presented.
- (h) He shall represent the society and act on its behalf in all judicial, quasi-judicial proceedings and may sue or be sued on behalf of the society.

#### 1.9. District Branches and formation of DMC

- (a) The society will establish its Branches in different Districts of the State for carrying out programmes of horticulture development, particularly the programmes under the National Horticulture Mission. It may appoint any local horticulture department Officer as an Officer of the Society and may entrust to him the business relating to its activities in the District.
- (b) The Society will designate one of its officers to be Manager for each Branch who will be in charge of transaction of the Society's business at the Branch and will operate the Society's Accounts at the Branch subject to the authorizations and stipulations of the Executive Committee.
- (c) In every District there will be a Committee consisting of Officers of the concerned department and the Collector to supervise, coordinate and monitor the Horticulture development programmes. The members of the DMC are:-



1.	Collector of the District	- Chairman
2.	Vice Chair Person, Zila Parisad	- Member
3.	P. D., DRDA	- Member
4.	P. A. , ITDA	- Member
5.	Dy. Director, Agriculture	- Member
6.	Training Organizer, KVK (OUAT)	- Member
7.	Soil Conservation Officer	- Member
8.	One farmer to be nominated by the Collector for 2 years	- Member
9.	All the Horticulturists and AHOs I/c. of independent	- Member
	charge in the District.	
10.	Dy. Director, Horticulture	- Member Secretary-cum-
		Convener

#### 1.9.1. TECHNICAL SUPPORT GROUP (TSG)

To give technical advice regarding implementation of various schemes under NHM and to guide the personnel linked with Horticultural activities under NHM, the Technical Support Group is constituted headed by Director of Horticulture as chairman and Joint Director Horticulture acts as member Convener. As per necessity the TSG meeting is held monthly or quarterly. The other members of the TSG are:-

- 1. M.D., APICOL
- 2. H.O.D., Dept. of Horticulture, OUAT
- 3. Head, CTCRI
- 4. Head, CHES
- 5. Deputy Director, NHB
- 6. Deputy Director, CDB
- 7. Dr. T. Maharana, Retd. ADR (Seeds)OUAT
- 8. Er. Nutan Kumar Dash, Retd. Executive Engineer
- 9. Dr. S. Panda, Retd. Director of Horticulture

Thus the members of TSG seated in a forum provide technical advice in developing a strategy, preparing Annual Action Plan and suggesting feasibility of various horticultural activities in action or innovative approach if any.

#### 1.9.2. Role and Functions of TSG

TSG will have the following role and functions:

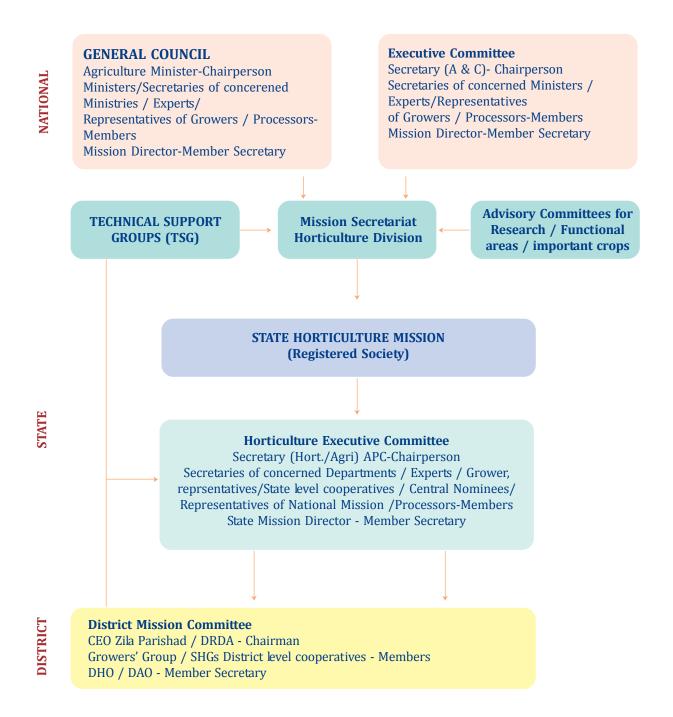
- (i) To visit the States regularly and frequently to provide guidance in organizational and technical matters.
- (ii) To compile materials for conducting regional workshops in respect of different plantations and different aspects viz. production, post-harvest management, processing and marketing. There will be a year long calendar of capacity building and promotional events, workshops/ seminars on different regions.
- (iii) To mount Supervision and Evaluation Mission.
- (iv) To conduct studies on different aspects of horticulture in different regions.
- (v) To document and disseminate case studies of success stories.
- (vi) Assist the states in capacity building programmes.
- (vii) Undertake publicity/information campaign to promote the Missions objectives.
- 1.9.3. The State Mission can also set up State level TSG for project formulation, appraisal and concurrent monitoring. State Mission, will have freedom to hire consultants for providing technical support at the State as well District levels.



TSG meeting held at conference hall of Directorate of Horticulture



#### 1.9.4. The Indicative administrative structure of the NHM at the National/State and substate level



The above struture is indicative. The institutional arrangement at the state level and below state level would be flexible and the state will have the flexibility to adopt an appropriate model viz. cooperative federations in the pattern of NDDB, incorporated companies (with cooperatives for procurement, joint sector for processing and corporates for marketing) or orient existing institutions to carry out the tasks of the Mission.

### Scenario of NHM in Odisha

2.1. In Odisha the National Horticulture Mission is being implemented since 2005-06. The annual budget for various programmes of NHM which was Rs. 1967.65 lakh in the year 2005-06 has gone up to Rs. 65.00 Crores in the year 2010-11. It is important to mention that the State has been provided with funds for all the major activities like area expansion, rejuvenation, nurseries, protected cultivation, organic farming, integrated pest management, post harvest management, bee keeping, market development, infrastructural development for crop production, storage and marketing. In last four years the project has supported the increase in areas under the horticultural crop equal to 96620 hectares. From sixteen districts in 2005, NHM related programmes are now being implemented in 24 districts of the State. The districts under NHM are Bolangir, Balasore, Cuttack, Gajapati, Keonjhar, Khurdha, Koraput, Kalahandi, Mayurbhanj, Malkangiri, Nawarangpur, Nuapada, Nayagarh, Puri, Rayagada, Sonepur, Ganjam, Kandhamal, Dhenkanal, Bargarh, Deogarh, Sambalpur, Sundargarh, Angul. Since its beginning, the total budget earmarked for the mission's programmes has been Rs. 26831.94 (till year 2007-08) out of which Rs. 8994.64 was spent. For the year 2010-11 total proposed budget was Rs.65.00 crores out of which Central Government's share was Rs. 55.25 crores and rest of the amount was contributed by the State Government. Thus NHM is a centrally sponsored scheme in which Govt. of India contributes 85% and 15% is met by the state govt.

2.2 The mission, through its various programmes, is promoting the production of quality planting material by supporting both State owned and private nurseries. The project plans to establish model nurseries and small nurseries on the land available with Government Institutions including Directorate of Horticulture, Odisha,

In order to give boost to the vegetable production in the State, the project aims at making high quality seeds and seedlings available to the growers. The project envisages participation of various State level institutions like Odisha State Seeds Corporation, National Seeds Corporation, Odisha University of Agriculture and Technology.

**2.3** The agro-climatic conditions of the State are suitable for cultivation of many fruits and flower species. The NHM in Odisha has not only planned to establish new gardens for selected fruits like Mango, Aonla, Litchi, Orange, Banana which have high potential both in terms of production and also in terms of market, but also has provisions of providing support for maintaining such gardens.

- **2.4** To meet the increasing demands of flowers particularly in urban areas, the programme aims at promoting cultivation of flowers in potential village clusters. Speces like Rose, Tuber ose, Marigold, Gladioli, ginger and turmeric are extensively grown in the Koraput and Khandhmal districts of the State. Although the quality of local varieties of these spices is very good and are in great demand, the commercial cultivation is yet to pick up. The mission not only aims to increase the area under cultivation but also wants to increase the productivity by introducing new varieties.
- **2.5.** Cashew, one of the most important cash crops with huge potential, is one of the priorities of the mission. The mission is trying to bring more areas under cultivation of grafted plants. There is also subsidy for the farmers if they intend to plant quality materials by procuring the same from the mission and also for the maintenance of the plantation.
- **2.6.** The mission provides technical and financial support for the adoption and promotion of protected cultivation (under green houses, shadenet houses), integrated pest management, organic farming, etc. It also gives considerable importance to the capacity building of farmers in skills related to plantation, maintenance and marketing of horticulture crops.
- **2.7.** Considering the importance of post harvest management of horticultural crops, the mission provides incentives to farmers, private entrepreneurs and state agencies for improved techniques for sorting, grading, packaging processing and storage. The mission intends to open wholesale markets of horticultural crops to provide all required facilities, refrigerated vehicle, cool chamber, grading and packaging units etc. Assistance for the low cost onion storage structures is one of the State specific objectives of the mission. The activities like creating awareness about the benefits of cultivating horticultural crops, mission's objectives and working, establishing a functional market information system, promotion and facilitation of extension activities to meet the mission's objectives have to be undertaken under the NHM programme.
- 2.8. For implementing the mission's programme in the State, a registered society named "Orissa Horticulture Development Society" (OHDS) has been formed which is the apex body for project implementation. The Director, Horticulture who is the Member Secretary of the society works as principal coordinator for all the activities of the mission. The society gets all the support from other related State agencies like Agricultural Promotion and Investment Corporation, State Agriculture Marketing Board, Odisha State Seeds Corporation Ltd, Odisha Cashew Development Corporation Ltd.
- **2.9.** Since its inception in the year 2005 the mission has been able to bring 30776 ha of land under mango cultivation, 2980.85 ha under floriculture and 12409 ha has been brought under cashew plantation. Sixty three nurseries have been established across the State and 3275 onion storage structures have been constructed with the financial and technical assistance from the mission. NHM has been successful in introducing organic farming in more than 1500 ha of land with establishment of 1380 units of vermi compost units in the state. Farmers (27500) have been exposed to modern agriculture technologies and

improved cultivation practices through trainings and visits to the successful case studies through inside and outside state visits. During the year 2008-09, besides other activities including maintenance and continuation of already started activities, mission had planned to establish model and small nurseries both in public and private sector, enhance the vegetable seed production and bring some more land under the cultivation of horticultural crops. During the year 2010-11, Strengthening of Horticulture sector was achieved through endeavours like creation of infrastructure for infusion of modern micro-propagation technologies, development of marketing infrastructure, processing industries and proper market linkages. Focus was given to minimize the import of fruits and vegetables from other states and maximize export as marketing surplus. For promoting horticulture based farming system in the state trainings, seminars and exhibitions are being organized at district and state level along with participation in National Level Workshops like IITF, Flora Expo, Organic products Expo, Horticulture Expo etc.



Participation of Directorate of Horticulture at IITF, New Delhi during 2010-11



# $C \mid H \mid A \mid P \mid T \mid E \mid R \mid 3$

# Annual Action Plan (AAP) under National Horticulture Mission for 2010-11

#### 3.1. Introduction

Odisha is the 10th largest state in area and 11th largest state in population, accounting for 5% of the geographical area and 4% of the population of the country. The state has a geographical area of 1.56 lakh sq. km and population of 3.68 crores as per 2001 census. Administratively the state is divided into 30 districts, 58 subdivisions, 314 CD blocks, 316 tahasils, 40 municipalities and corporations, 6234 gram panchayats and 51551 villages. Out of the total population, Scheduled Caste and Scheduled Tribe constitute 17% and 22% of the total population respectively. 85% of the population lives in rural area. Cultivators and agricultural labourers constitute 65% of the total workforce. The total literacy percentage is 63.08.

One important trend observed in the last five years is that horticulture development has gradually moved out of its rural areas to urban areas and from traditional agricultural enterprise to the corporate sector. This trend has led to the adoption of improved technology, greater commercialization and professionalism in the management of production and marketing of different horticulture crops. The National Horticulture Mission Scheme has helped in exploring the horticulture potential of the State since 2005-06 as it provides for taking up a variety of components in areas of development of planting material, production and productivity improvement programmes, PHM and marketing.

#### 3.2 Salient aspects of the Annual Action Plan for 2010-11

- (i) In developing the Action Plan, thrust has been given on area approach and promotion of horticultural crops in compact patches and in cluster villages. The crops have been selected for each area to which they are most suitable from the agro climatic point of view. From the physiographic point of view the State consists of four Zones viz. (i) the Northern Plateau (ii) the Eastern Ghat zone (iii) the Central Table lands and (iv) the Coastal Zone. But on the basis of climate, soil, rainfall, topography and crop feasibility the State has been delineated into ten Agro-Climatic Zones.
- Local minimum wage rates have been used in determining the costs of cultivation. These cost norms have been adopted in calculating the requirement of funds for the area expansion activities under the programme keeping in view the ceiling prescribed by the National Horticulture Mission.
- (iii) The Annual Action Plan has to be viewed as an integrated project covring 24 potential districts of the State. But for facilitating the implementation, separate District Plans have been drawn up taking into account the potential of each district.

#### (iv) Major components included in the Action Plan

- (a) Plantation Development including supporting infrastructure
- (b) Post Harvest Infrastructure and Management
- (c) Mission Management

The Financial outlay for implementation of the Annual Action Plan for 2010-11 was Rs. 65.00 crore. The Central Govt. share was Rs. 55.25 crore & the State Govt. share was Rs. 9.75 crore.

Sl. No.	Item	Amount Proposed for 10-11	Remarks
1	Plantation Development including supporting infrastructure	5386.29	% of flow are not mentioned due to some of
2	Post Harvest infrastructure and Management	686.40	items are proposed as Token
3	Mission Management	429.32	provision or less budgetary outlay

#### 3.3 Detailed Plan of Action 2010-11

#### 3.3.1 Plantation Development Including Supporting Infrastructure

#### 3.3.1.1 Production of Planting Material

(a) The main objective of the scheme is to cater to the demand of the farmers by supplying good quality planting materials and export the balance planting material to the neighbouring states. Simultaneously, it also helps in by creating employment opportunities.



Farmers visiting Nursery



- (b) The production potential of the nursery is about 2.88 lakh per annum for model nursery and 0.77 lakh per annum for small nursery.
- (c) The model nurseries and small nurseries have produced about more than 23.60 lakh planting material.

During 2010-11 under Public sector 7 model nurseries in an area of 4 ha each and under private sector, 17 small nurseries of an area of one ha each have been established all over the state.



Area covred under Banana using sucker (ha) 2000 1800 1600 1400 1200 1000 Banana Sucker ha. 600 400

Ashok Kumar Agrawala, Dhenkanal



Banana Cultivation using Drip Irrigation

#### 3.3.1.2. Establishment of New Gardens

#### Banana Sucker

The physiographic condition of the state is suitable for banana cultivation in almost all the districts. There was a programme to take up banana cultivation by utilizing suckers as planting material over an area of 500 ha. of variety D.C., Robusta, G-9, Bantal, Champa, Patakapura in the action plan 2010-11. The rate of assistance was Rs.22500/- per ha. limited to 4ha. per beneficiary in 2 installments of 75:25. The subsidy allowed to the farmers for banana cultivation was for minimum area of 0.25 ha. to maximum 4.0 ha. in a compact patch. During 2010-11 financial year, an area of 647.49 ha has been achieved utilising banana sucker for production of banana in the state.

#### (b) **Banana Tissue Culture**

Similarly, there was a programme of 450 ha. under tissue culture banana cultivation. The rate of assistance is Rs.41602/- per ha. limited to 4ha. per beneficiary in 2 installments of 75:25. The planting material (TC plantlet) was procured from RPRC / OUAT / NSC. The subsidy was allowed to the farmers for cultivation of T.C. banana in a minimum area of 0.25 ha. to maximum 4.0 ha. in a compact patch. Against the target of 450 ha the state Horticulture Mission has achieved 92.92 ha. The shortfall was due to non availability of Tissue Culture Banana plantlets.

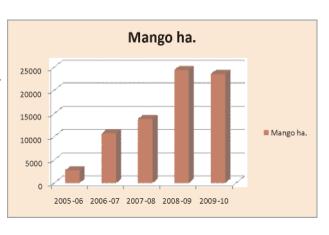




Beneficiaries covered under Banana Cultivation

#### (c) Mango

The agro-climatic zone prevailing in Orissa also favours both horizontal and vertical expansion of mango. There was a programme to take up new plantations over an area of 20000 ha. of Mango variety Amrapalli, Baganpalli, Dasheri, Totapuri, Mallika, Neelam etc. by allowing 75% of assistance for cultivation subject to a maximum of Rs.16,500/- per ha. for maximum 4ha. per beneficiary for a period of 3 years at a ratio of 60:20:20 having survival rate of 75% during 2nd year and 90% during 3rd year. 60%



of subsidy amount will be released to the beneficiary in the plantation year in 2 installments.



(ii) During 2010-11 in various pockets of Odisha mango plantation has been covered over an area of 20,385.29 ha along with maintenance of mango plantation carried out in previous years.





Farmers benefitted through Mango Cultivation



Drip Irriagtion proves to be beneficial in Mango Orchard

#### (d) Litchi

The microclimate suitable for litchi prevails in the western parts of the state, though some specific pockets also favour litchi plantation. To create market potentiality in Litchi, it was programmed to take up Litchi plantation over an area of 150 ha. of variety Muzafarpur, China by assisting 75% of the cost of cultivation subject to maximum of Rs.21923/- per ha. for maximum 4ha. per beneficiary for a period of 3 years at a ratio of 60:20:20 having survival rate of 75% during 2nd year and 90% during 3rd year. The requirement of quality planting material for new plantation of Litchi was met from deptt. Farms / registered private nurseries / research institutes both inside / outside the state. As such during 2010-11, area 148.89 ha of area has been covered under new plantation of Litchi.



#### (e) Citrus (Orange / K.Lime)

As Citrus is a major fruit crop cultivated in Odisha, there was a programme to take up Citrus cultivation over an area of 200 ha. of Nagpur Santra, Kinnow and local K.Lime variety by giving 75% of assistance towards of cost of cultivation subject to maximum of Rs.25005/- per ha. for maximum 4ha. per beneficiary for a period of 3 years at a ratio of 60:20:20 having survival rate of 75% during 2nd year and 90% during 3rd year. The planting material required for plantation was met from deptt. farms / registered private nurseries from both inside / outside the state. Thus during 2010-11, an area of 225.12 ha has been achieved under citrus i.e. 36.74 ha under orange and 88.38 ha under K. lime.





#### 3.3.1.3 Maintenance of Fruits (Perennial):

For success of the plantation programme and for proper growth of the plants, it was proposed to provide maintenance for plantation crops. There was a provision for maintenance of the plantation taken up during 2008-09 and 2009-10. The subsidy for maintenance of the plantations is given to farmers after assessing the survival percentage as per the norm. 20% of subsidy amount will be released to the beneficiaries for 1st year and 2nd year maintenance as per survival report. The cost of maintenance was proposed as per the pervious structure. The physical and financial provision is given in the table below.

The component wise physical and financial programmes for 2010-11 is as follows:

Component	Unit	Physical Programme	Rate of Assistance / unit	Financial Programme
Mango	ha.	13000	75% of cost limited to Rs.16500/ ha. in 3 installments of 60 : 20 : 20 subject to survival of 75% in 2nd yr. & 90% in 3rd yr.	1287.00
Mango (balance)	На.	7000	75% of cost limited to Rs.16500/ ha. in 3 installments of 60 : 20 : 20 subject to survival of 75% in 2nd yr. & 90% in 3rd yr.	693.00
Litchi	ha.	150	75% of cost limited to Rs.21923/ ha. in 3 installments of 60 : 20 : 20 subject to survival of 75% in 2nd yr. & 90% in 3rd yr.	19.73
Citrus	ha.	200	75% of cost limited to Rs.25005/ ha. in 3 installments of 60 : 20 : 20 subject to survival of 75% in 2nd yr. & 90% in 3rd yr.	30.01
2nd year maint. of Mango	ha.	14000	Rs.6750/- per ha.	945.00
1st yr. maint. of Mango	ha.	20000	Rs.4500/ - per ha.	900.00
2nd year maint. of Aonla	На.	60.5	Rs.6750/- per ha.	4.08
2nd year maint. of Litchi	ha.	210	Rs.6750/- per ha.	14.18
1st year maint. of Litchi	ha.	135	Rs.4500/ - per ha.	6.08
2nd year maint. of Citrus	ha.	300	Rs.6750/- per ha.	20.25
1st year maint. of Citrus	ha.	500	Rs.4500/ - per ha.	22.50
2nd year maint. of Banana	ha.	656	Rs.4500/ - per ha.	29.52
1st year maint. of Banana	ha.	656	Rs.3000/ - per ha.	29.52
Total		56867.5		4000.87

Against the above target, all the plantations have been maintained.

#### 3.3.1.4 Flowers:

(a) Since area under floriculture is gradually increasing due to increase in demand for flowers in the urban areas, establishment of Flower Mandi and flower kiosk in the name of "Kusum Batika" in collaboration with Bhubaneswar Municipal Corporation, the forward linkage in marketing has been strengthened. This has ultimately created interest among the farmers to cultivate flowers over larger areas so that the import of flowers can be minimized. It was programmed to provide assistance to small and marginal farmers and other farmers for cultivation of flowers over an area of 1600 ha. with a financial outlay of Rs.428.98 lakh. The physical and financial programme and the rate of assistance are furnished below:

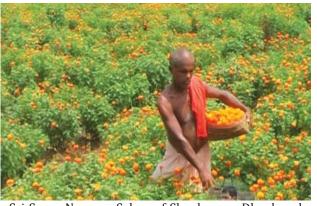
(Fin. in lakh Rs.)

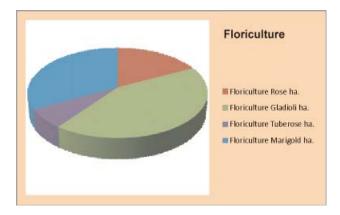
	<b>VV</b> 1.	Physical		Financial		
Component	Unit	Programme	Rate of Asst./Unit (Rs.)	Programme		
Cut Flowers (Rose, Gerbera etc.)						
Small & Marginal Farmer	На.	200	50% of the cost @ Rs.35000/ha. limited to 2ha. per beneficiary	70.00		
Other Farmer	На.	200	33% of the cost @ Rs.23100/ha. limited to 4ha. Per beneficiary	46.20		
Bulbous Flowers (Gladioli, T	'uberos	e etc.)				
Small & Marginal Farmer	На.	400	50% of the cost @ Rs.45000/ha. limited to 2ha. per beneficiary	180.00		
Other Farmer	На.	300	33% of the cost @ Rs.29700/ha. limited to 4ha. per beneficiary	89.10		
Loose Flowers (Marigold, Go	ldenro	d etc.)				
Small & Marginal Farmer	На.	100	50% of the cost @ Rs.12000/ha. limited to 2ha. per beneficiary	12.00		
Other Farmer	На.	400	33% of the cost @ Rs.7920/ha. limited to 4ha. per beneficiary	31.68		
Total		1600 ha.		428.98		



Gladioli field visit by Gardener tranees







Sri Surya Narayan Sahoo of Shankarpur, Dhenkanal

(b) Thus during 2010-11 an area of 512.06 ha was achieved under cut flowers, 691.21 under bulbous flowers and 563.53 ha under loose flowers.

#### 3.3.1.5 SPICES:

(a) Spices like Ginger and Turmeric are generally cultivated by the tribals at Kandhamal, Koraput and few other interior districts in large scale but the varieties grown are mostly traditional ones. An AEZ (Agri Export Zone) has been established for ginger and turmeric in the districts like Koraput and Kandhamal. Assistance will be provided to encourage farmers to cultivate high yielding varieties of Turmeric (Roma, Surama, Ranga, Rashmi, Allepy, Lakadong Rajendrasonia etc.) and Ginger (Suprava and Suruchi etc.). There was a programme to grow both ginger and turmeric over an area of 1000 ha. with a total financial outlay of Rs. 125.00 lakh. The planting materials of ginger and turmeric were being supplied to the beneficiaries out of the subsidy amount.

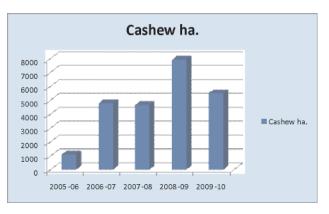
During 2010-11 about 116.73 ha area was covered under cultivation of spices like ginger and turmeric.



A scene from marketing of Ginger in Kudulihaat, Koraput district

#### 3.3.1.6 Plantation crops including coastal horticulture (Cashew):

(a) Cashew has tremendous potential in the State to benefit the farmers. The existing area available under cashew plantation is of traditional varieties. It was programmed to take up 4000 ha. of new plantations with improved grafts of varieties like viz. V-4, Hyb. 2/16, H-1608, NRCC-2, BBSR-1 for increasing the productivity within a short period. The required planting materials were made available from registered private nurseries & OSCDC Ltd. Number of cashew processing units



are also existing in the state in the private sector which favours processing and marketing. The rate of assistance was at the rate of 50% of cost subject to Rs.20,000/- per ha. limited to 4 ha. per beneficiary in 3 instalments of 60:20:20 subject to survival rate of 75% in 2nd year and 90% in 3rd year. During 2010-11, Cashew Plantations were being developed in an area of 4559.43 ha.

#### (b) Maintenance:

For success of the plantation programme and proper growth of the plant, it was proposed to give maintenance for the plantation crop. During 2008-09, 2009-10 about 3850 ha., 4500 ha. under Cashew has been covered respectively. The subsidy for maintenance of the plantations is given to farmers after assessing the survival percentage as per the norm. 20% of subsidy amount will be released to the beneficiaries for 1st year and 2nd year maintenance as per survival report. The cost of maintenance was proposed as per the norm fixed earlier.



The farmer in fruiting cashew field

#### 3.3.1.7 Protected Cultivation

(a) Very often the programme of planting material production gets impeded due to adverse weather conditions i.e. heavy rainfall and extreme heat condition. It is desirable to grow seedlings and grafts under protected conditions where the temperature, sunlight and the relative humidity of the micro environment remain under control by constructing green house/shade net house. There is also a provision for mulching to control evaporation of soil moisture and also restrict the growth of weeds. Provision has been made with a financial outlay of Rs.47.38 lakh as per the breakup given below:



Seedlings ready under protected condition



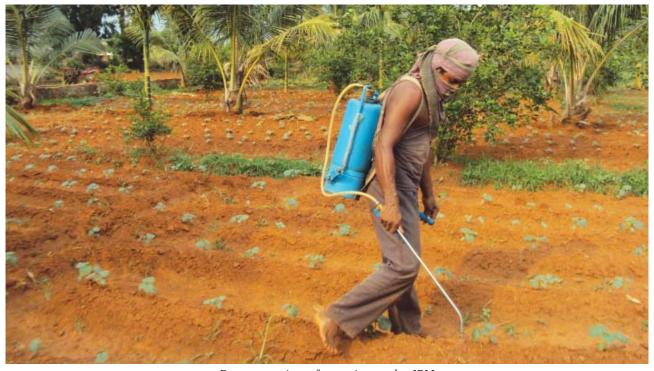
(Fig. in Lakh Rs.)

Component	Unit	Physical Programme	Rate of Asst./Unit (Rs.)	Financial Outlay
Green House Structur	re (Natur	ally Ventilated	d System)	
Bamboo Structure	Sq.m.	1000	50% of the cost limited to 5 units (each unit max. 200 Sq.m.) per beneficiary	1.88
Plastic Mulching	На.	300	50% of the total cost subject to a max. of Rs.10000/ ha. limited to 2 ha. per beneficiary	30.00
Shadenet House				
Bamboo Structure	Sq.m.	10000	50% of the cost limited to 5 units (each unit limited to 200 Sq.m.) per beneficiary	15.00
Anti Bird / Anti Hail Nets	Sq.m.	5000	50% of the cost limited to 5000 sq.m. per beneficiary	0.50
Total				47.38

During 2010-11 areas to the tune of 1.19 ha, 133.31 ha., 0.65 ha and 0.4 ha have been covered under Green house, mulching, shadenet house and plastic tunnel respectively.

#### 3.3.1.8 Promotion of IPM / INM:

Integrated Pest Management and Integrated Nutrient Management is preferred to chemical control of pests in view of environmental and health hazards associated with the large scale use of inorganic pesticides and for better production and productivity. There was a programme to provide assistance @ Rs.1000/per ha. to the farmers to take up integrated pest management over an area of 200 ha. with a financial outlay of Rs. 2.00 lakh. In the year 2010-11 access has been rendered to nearly about 71 groups who have taken training on IPM/INM.



Demonstration of spraying under IPM

#### 3.3.1.9 Organic Farming:

(a) Compost is one of the nature's best mulches and soil amendments. Compost improves soil structure, aeration and water-holding capacity. The quality and quantity of organic manures play a vital role in the maintenance of soil quality in sustainable agriculture production. Provision was made for construction of 200 vermi compost units with the pit size of 30' x 8' x 2.5' dimension for permanent structure, so that vermi compost can easily be made available



Visit of Vermi compost by SHG

to the farmers. The financial outlay of Rs.60.00 lakhs has been provided. But during 2010-11 about 496 vermi-compost pits were constructed in farmers field including both big and small size.

#### 3.3.1.10 Pollination Supmport through Beekeeping:

Honey bee is considered to increase the pollination thereby adding to the yield of the crops. Bee colonies established in the orchards shall not only increase the crop production but also shall add to the income of the farmers. It was proposed to provide assistance for 2000nos. honey bee colonies, 2000 Hives and equipment for honey extractor @ 50% of cost with a financial outlay of Rs.44.00 lakh. against which 500 nos have been achieved.

#### 3.3.1.11 Horticulture Mechanization:

Most of the horticultural activities are labour intensive. In order to reduce the cost of cultivation and to decrease the human drudgery farm mechanization should be promoted. Mechanisation also helps to carry out the timely farm operations. Hence, it is proposed to give assistance under power operated machines tools including power saw and power tiller etc. to the farmers for smooth operation of horticultural activities. Thus the same is proposed with a financial outlay of Rs.43.00 lakh. The details of physical and financial break up are given in the table.

Against 43.0 lakhs, financial achievement was achieved amounting to Rs. 27.0 lakhs under various components of Horticulture mechanisation. (Fig. in Lakh Rs.)

Component	Unit	Physical Programme	Rate of Asst./Unit (Rs.)	Financial Programme
Power operated machines / tools including Power Saw and Plant Protection equipments etc.	Nos.	100	50% of cost limited to one set per beneficiary	17.50
Power Machines (upto 20 BHP) with rotavator / equipment	Nos.	30	50% of cost limited to one set per beneficiary	18.00
Power machines (20 HP & above including accessories / equipments)	Nos.	5	50% of cost limited to one set per beneficiary	7.50
Total				43.00



#### 3.3.1.12 HRD including Horticulture Institute:

Training of the farmers inside the state includes plantation training, INM/IPM training, Post Harvest Management training etc. Training will be provided to the farmers who will take up plantation and other allied activities. The training activity will be carried out both by Goyt, sector as well as private and NGO's. Assistance will be provided to the agencies involved in the training programme @ of Rs.750/- per day per farmer.

In order to familiarize the farmers about the production practices being followed in other states, trainingcum-exposure visit outside the state will be organized for a minimum period of 7 days. Assistance of Rs.1000/- per day per farmer will be provided.



Exposure visit in Nayagarh district

Trainers at the level of district offices / sub-division offices functionaries will be trained in the modern technological advances in horticulture at various ICAR Institutes in or outside the state. The officers in turn, will train the staff and farmers in their respective jurisdiction. Periodical training of the staff and officers is also required to update their knowledge about latest development horticulture sector the cost of which will be met under this component.

School of Horticulture, Khurda and Horticulture Training Institute at Kandhamal are engaged in imparting

training to the gardeners and grafters employed under the Horticulture Directorate. These institutes are also imparting training to the unemployed youth for self employment for last 4 years under this component. The financial assistance will be provided by Govt. of India for strengthening infrastructure of these institute along with the funds for conducting training programme of gardeners. Training will be imparted on bed preparation / planting / grafting / IPM / INM / Nursery management etc. to unemployed youth so that





School of Horticulture, Khurda

they could became entrepreneurs or self employed in horticulture sector and to create skills for employability in the horticulture units / farms and up grade their knowledge. Emphasis will be given on practical training rather than on theory.

The various programmes under this component have been executed with a total financial outlay of Rs.83.975 lakh. As such 544 farmers have been facilitated getting training inside the state and 328 farmers getting training outside the state.

#### 3.3.2 POST HARVEST INFRASTRUCTURE AND MANAGEMENT

(a) Post harvest management is very crucial to minimize loss and to enhance the marketability of the produce through proper packing, sorting, grading, storage and processing. Due to inadequate market infrastructure, lack of proper market linkage and market intelligence the marketable surplus gets damaged right in the production center and the farmers do not get proper price for their produce. It is therefore, essential that pack houses, cold storages, refrigerated vans, mobile processing units etc. are promoted by providing assistance to the entrepreneurs. The subsidy on this account is administered through DHO. Funds will also be provided to Orissa State Agriculture Marketing Board / Private Entrepreneur to gather and disseminate market intelligence to benefit the growers.



Refrigerated Van

- (b) During 2010-11, though not remarkable still one pack house, 16 Pusa Zero energy cool chambers, one cold storage unit and 3 canning centres have been constructed initiating the process of post harvest-management of fruits and vegetables.
- (c) For creating better marketing facilities for the farmers to sale their produce it is desirable to construct one terminal market in Odisha. So it is proposed for construction of Terminal market at Sambalpur district by giving a subsidy of Rs.50.00 lakh as token provision.
- (d) As markets in the producing area are not having even basic facilities of grading, sorting, packing for distance marketing, it is therefore proposed to strengthen rural market in each related districts. As such 50 rural markets in co-operative sector for up gradation are in progress.
- (e) To minimize distress sale of onion in major onion producing districts like Bolangir, Angul etc. during 2010-11, about 18 onion storage structures have been constructed in farmer's field.

#### 3.3.3 MISSION MANAGEMENT

(a) Due to commissioning of Horticulture Mission at the State as well as district level, the workload has increased manifold. But the existing infrastructure and staff strength under the Directorate of Horticulture is highly inadequate to cope up with the additional workload. It is proposed to provide support to the Directorate of Horticulture, Dy. Director of Horticulture and the Horticulturists at the field level by providing additional manpower through contractual appointment. More vehicles, Xerox



- machines, computers and funds for mobility are proposed to be provided for proper implementation and monitoring of the programme.
- (b) Organising visit and meeting of TSG, preparation of monitoring report and hiring of technical services etc. will be covered under this component for Mission activities. Besides, State level shows, District level shows, Pre-seasonal workshops will be organized to disseminate latest knowledge in the field of horticulture and solve the farmers problems by direct interactions. Information, Education and Communication material will also be produced for distribution among the farmers The State Level Show / District Level Show / Preparation of IEC material are also included in this component.

During 2010-11 along with distirct level shows, a state level show on Mango and a Seminar on production, processing and marketing of Mango was organized which was inaugurated by Hon'ble Chief Minister of Odisha Sj. Naveen Patnaik. In this state level show, 2634 nos of entries of Mango variety and products of mango had been displayed. Prizes had been distributed to the winners i.e. farmers and field officers.



Stat Level Mango Show 2010



Hon'ble Chief Minister of Odisha visiting Mango samples

## 3.4. Annual Action Plan (AAP) under National Horticulture Mission for 2010-11

Final Annual Action Plan for 2010 -11							
				(Financial in Lakh Rs.)			
Component	Unit	Implementing		Programme			
		Agency	Physical	Rate of Assistance / ha. / unit	Financia		
A. Plantation Developmer	nt includ	ing supporting Infra	structure				
1. Production of Planting	Materia	1					
i. Public Sector							
a. Model Nursery (2 -4ha.)	Nos.	DHO	2	Max. of Rs.25.00 lakh / unit	50.00		
b. Small Nursery (1 ha.)	Nos.	DHO	2	Max. of Rs.6.25 lakh / unit	12.50		
ii. Private Sector							
a. Model Nursery (2 -4ha.)	Nos.	DHO	4	Credti linked back -ended subsidy @ 50% of the cost of project limited to Rs.12.50 lakh per nursery for individual entrepreneur.	50.00		
b. Small Nursery (1 ha.)	Nos.	DHO	5	Credti linked back -ended subsidy @ 50% of the cost of project limited to Rs.3.125 lakh per nursery for individual entrepreneur.	15.63		
2. Establishment of New O	ardens	(Area Expansion)					
i. Non Perennial							
Banana Sucker	ha.	DHO	500	50% of cost limited to Rs.22500/ ha. in 2 installments of 75 : 25	84.38		
Banana Tissue Culture	ha.	DHO	450	50% of cost limited to Rs.41602/ ha. in 2 installments of 75 : 25	140.41		



ii. Other Fruit Crops					
Mango	ha.	DHO	13000	75% of cost limited to Rs.16500/ ha. in 3 installments of 60 : 20 : 20 subject to survival of 75% in 2nd yr. & 90% in 3rd yr.	1287.00
Litchi	ha.	DHO	150	75% of cost limited to Rs.21923/ ha. in 3 installments of 60 : 20 : 20 subject to survival of 75% in 2nd yr. & 90% in 3rd yr.	
Citrus	ha.	DHO	200	75% of cost limited to Rs.25005/ ha. in 3 installments of 60: 20: 20 subject to survival of 75% in 2nd yr. & 90% in 3rd yr.	
2nd year maint. of Mango	ha.	DHO	14000	Rs.6750/ - per ha.	945.00
1st year maint. of Mango	ha.	DHO	20000	Rs.4500/ - per ha.	900.00
2nd year maint. of Aonla	ha.	DHO	60.5	Rs.6750/ - per ha.	4.08
2nd year maint. of Litchi	ha.	DHO	210	Rs.6750/ - per ha.	14.18
1st year maint. of Litchi	ha.	DHO	135	Rs.4500/ - per ha.	6.08
2nd year maint. of Citrus	ha.	DHO	300	Rs.6750/ - per ha.	20.25
Component	Unit	Implementing		Programme	
		Agency	Physical	Rate of Assistance / ha. / unit	Financia
1st year maint. of Citrus	ha.	DHO	500	Rs.4500/ - per ha.	22.50
2nd year maint. of Banana	ha.	DHO	656	Rs.4500/- per ha.	29.52
1st year maint. of Banana	ha.	DHO	656	Rs.4500/- per ha.	29.52
3. Flowers					
a. Cut Flowers (Rose, Ger	bera etc.	)			
Small & Marginal Farmers	ha.	DHO	200	50% of the cost @ Rs.35000/ha. limited to 2ha. per beneficiary	70.00
Other farmer	ha.	DHO	200	33% of the cost @ Rs.23100/ha. limited to 4ha. Per beneficiary	46.20
b. Bulbous Flower (Glad	ioli, Tube	rose etc.)			
Small & Marginal Farmers	ha.	DHO	400	50% of the cost @ Rs.45000/ha. limited to 2ha. per beneficiary	180.00
				limited to 2ha. per beneficiary  33% of the cost @ Rs.29700/ha.	

b. Bulbous Flower (Gladioli, T	uberose	etc.)			
Small & Marginal Farmers	ha.	DHO	400	50% of the cost @ Rs.45000/ha. limited to 2ha. per beneficiary	180.00
Other farmer	ha.	DHO	300	33% of the cost @ Rs.29700/ha. limited to 4ha. per beneficiary	89.10
c. Loose Flower (Marigold, Go	ldenrod	etc.)			
Small & Marginal Farmers	ha.	DHO	100	50% of the cost @ Rs.12000/ha. limited to 2ha. per beneficiary	12.00
Other farmer	ha.	DHO	400	33% of the cost @ Rs.7920/ha. limited to 4ha. per beneficiary	31.68
4. Spices					
Ginger	ha.	DHO	300	50% of the cost subject to a max. of Rs.12500/ha. limited to 4ha. per beneficiary	37.50
Turmeric	ha.	DHO	700	50% of the cost subject to a max. of Rs.12500/ha. limited to 4ha. per beneficiary	87.50
5. Rejuvenation / replacement of senile plantation including canopy management	ha.	DHO	1200	50% of the total cost subject to a max. of Rs.15,000 / ha. To alimited of 2 ha. per beneficiary	180.00
6. Plantation crops including o	coastal h	orticulture			
Cashew	ha.	DHO	4000	50% of cost limited to Rs.20000/ ha. in 3 installments of 60:20:20 subject to survival rate of 75% in 2nd year and 90% in 3rd yr	480.00
2nd year maint. of 08-09 Cashew plantation	ha.	DHO	3850	Rs.3375/ - per ha.	129.94
1st year maint. of 09-10 Cashew plantation	ha.	DHO	4500	Rs.2250/ - per ha.	101.25
7. Protected Cultivation					
i. Green House Structure					
a) Naturally Ventilated system	l				
Bamboo Structure	Sq.m.	DHO	1000 sq.m. or 0.10 ha.	m. (each unit max. 200 Sq.m.) per	
Component	Unit	Implementing		Programme	
		Agency	Physical	Rate of Assistance / ha. / unit	Financia
ii. Plastic Mulching	ha.	DHO	300	50% of the total cost subject to a max. of Rs.10000/ ha. limited to 2 ha. per beneficiary	30.00



iv. Anti Bird / Anti Hail Nets Sq.m. DHO sq.m. or 0.50 ha. 50% of the cost limited to 5000 sq.m. per beneficiary  8. Promotion of INM / IPM  Promotion of IPM / INM ha. DHO 200 S0% of cost subject to a max. of Rs.1000/ha. limited to a 4ha. / beneficiary  9. Organic Farming  Vermi Compost Units (Size 30' x 8' x Nos. DHO 200 50% of cost limited to a 4ha. / beneficiary  10. Pollination support through bee keeping  a) Honey bee colony Nos. DHO 200 50% of cost limited to 50 colonies / beneficiary  b) Hives nos. DHO 200 50% of cost limited to 50 colonies / beneficiary  c) Equipment including honey extractor (4 frame), food grade container (30kg), nos. DHO 200 50% of cost limited to 50 colonies / 11. Horticulture Mechanization  a) Power operated machines / tools including Power Saw and Plant Protection equipments etc.  b) Power Machines (upto 20 BHP) with rotavator / equipment (100 power Saw and Plant Protection equipments)  Nos. DHO 30 50% of cost limited to one set per beneficiary  10. DHO 30 50% of cost limited to one set per beneficiary  11. Horticulture Mechanization  a) Power operated machines / tools including Power Saw and Plant Protection equipments etc.  50% of cost limited to one set per beneficiary  11. Horticulture Mechanization  22. Sow of cost limited to one set per beneficiary  13. Sow of cost limited to one set per beneficiary  14. Human Resource Development  C) Power machines (20 HP & above including accessories / equipments)  50% of cost limited to one set per beneficiary  12. Human Resource Development  Cardeners Training  Grp. DHO 2 100% of the total cost  13. Training of farmers within the District  Nos. DHO 1400 100% of the total cost	i. Shadenet House					
iv. Anti Bird / Anti Hail Nets  Sq.m. DHO sq.0.50 ha. per beneficiary  8. Promotion of INM / IPM  Promotion of IPM / INM ha. DHO 200 S0% of cost subject to a max. of Rs.1000/ha. limited to a 4ha. / beneficiary  9. Organic Farming  Vermi Compost Units (Size 30° x 8° x Nos. DHO 200 50% of cost limited to a 4ha. / beneficiary  10. Pollination support through bee keeping  a) Honey bee colony Nos. DHO 200 50% of cost limited to 50 colonies / beneficiary  b) Hives nos. DHO 2000 50% of cost limited to 50 colonies / 10 colonies / beneficiary  c) Equipment including honey extractory nos. DHO 200 50% of cost limited to 50 colonies / 11 colonies / 12 colonies / 13 colonies / 14 colonies / 1	Bamboo structure	Sq.m.	DHO	sqm. or 1.00	(each unit limited to 200 Sq.m.) per	15.00
Promotion of IPM / INM ha. DHO 200 Solve of cost subject to a max. of Rs.1000/ha. limited to a 4ha. / beneficiary  9. Organic Farming  Vermi Compost Units (Size 30' x 8' x Nos. DHO 200 50% of cost   60 to 2.5')  10. Pollination support through bee keeping  a) Honey bee colony Nos. DHO 2000 50% of cost limited to 50 colonies / beneficiary  b) Hives nos. DHO 2000 50% of cost limited to 50 colonies / beneficiary  c) Equipment including honey extractor (4 frame), food grade container (30kg), net, etc.  11. Horticulture Mechanization  a) Power operated machines / tools including Power Saw and Plant Protection equipments etc.  b) Power Machines (upto 20 BHP) with rotavator / equipments (20 HP & above including accessories / equipments)  Nos. DHO 30 50% of cost limited to one set per beneficiary  1. C) Power machines (20 HP & above including accessories / equipments)  Nos. DHO 2 100% of the total cost including accessories / equipments  1. C) Power machines (20 HP & above including accessories / equipments)  Nos. DHO 2 100% of the total cost including accessories / equipments  1. C) Power machines (20 HP & above including accessories / equipments)  Nos. DHO 100 100% of the total cost including accessories / equipments etc.	. Anti Bird / Anti Hail Nets	Sq.m.	DHO	sq.m. or 0.50		0.50
Promotion of IPM / INM ha. DHO 200 Rs.1000/ha. limited to a 4ha. / beneficiary  9. Organic Farming  Vermi Compost Units (Size 30' x 8' x 2.5') Nos. DHO 200 50% of cost 66  10. Pollination support through bee keeping  a) Honey bee colony Nos. DHO 2000 50% of cost limited to 50 colonies / beneficiary  b) Hives nos. DHO 2000 50% of cost limited to 50 colonies / beneficiary  c) Equipment including honey extractor (4 frame), food grade container (30kg), net, etc.  11. Horticulture Mechanization  a) Power operated machines / tools including Power Saw and Plant Protection equipments etc.  b) Power Machines (upto 20 BHP) with rotavator / equipments (20 HP & above including accessories / equipments)  Nos. DHO 30 50% of cost limited to one set per beneficiary  12. Human Resource Development  Gardeners Training Grp. DHO 2 100% of the total cost 3  Training of farmers within the District Nos. DHO 1400 100% of the total cost 3	Promotion of INM / IPM					
Vermi Compost Units (Size 30' x 8' x 2.5')  10. Pollination support through bee keeping  a) Honey bee colony  Nos. DHO 2000 50% of cost limited to 50 colonies / beneficiary  b) Hives  nos. DHO 2000 50% of cost limited to 50 colonies / beneficiary  c) Equipment including honey extractor (4 frame), food grade container (30kg), net, etc.  11. Horticulture Mechanization  a) Power operated machines / tools including Power Saw and Plant Protection equipments etc.  b) Power Machines (upto 20 BHP) with rotavator / equipment  c) Power machines (20 HP & above including accessories / equipments)  Nos. DHO 30 50% of cost limited to one set per beneficiary  12. Human Resource Development  Gardeners Training Grp. DHO 2 100% of the total cost 3 3 3 5 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5	romotion of IPM / INM	ha.	DHO	200	Rs.1000/ha. limited to a 4ha. /	2.00
2.5')  10. Pollination support through bee keeping  a) Honey bee colony  Nos. DHO 2000 50% of cost limited to 50 colonies / beneficiary  b) Hives  nos. DHO 2000 50% of cost limited to 50 colonies / beneficiary  1 c) Equipment including honey extractor (4 frame), food grade container (30kg), nos. DHO 200 50% of cost limited to one set per beneficiary  11. Horticulture Mechanization  a) Power operated machines / tools including Power Saw and Plant Protection equipments etc.  b) Power Machines (upto 20 BHP) with rotavator / equipment  c) Power machines (20 HP & above including accessories / equipments)  Nos. DHO 30 50% of cost limited to one set per beneficiary  12. Human Resource Development  Gardeners Training Grp. DHO 2 100% of the total cost 3  Training of farmers within the District Nos. DHO 1400 100% of the total cost 5  Exposure visit of Farmers	Organic Farming					
a) Honey bee colony  Nos. DHO 2000 50% of cost limited to 50 colonies / beneficiary  1 b) Hives  nos. DHO 2000 50% of cost limited to 50 colonies / beneficiary  1 c) Equipment including honey extractor (4 frame), food grade container (30kg), nos. DHO 200 50% of cost limited to one set per beneficiary  11. Horticulture Mechanization  a) Power operated machines / tools including Power Saw and Plant Protection equipments etc.  b) Power Machines (upto 20 BHP) with rotavator / equipment  c) Power machines (20 HP & above including accessories / equipments)  Nos. DHO 30 50% of cost limited to one set per beneficiary  12. Human Resource Development  Gardeners Training Grp. DHO 2 100% of the total cost 3  Training of farmers within the District Nos. DHO 1400 100% of the total cost 5  Exposure visit of Farmers	•	Nos.	DHO	200	50% of cost	60.00
b) Hives  nos. DHO 2000 beneficiary  b) Hives  nos. DHO 2000 beneficiary  1  c) Equipment including honey extractor (4 frame), food grade container (30kg), nos. DHO 200 beneficiary  1  11. Horticulture Mechanization  a) Power operated machines / tools including Power Saw and Plant Protection equipments etc.  b) Power Machines (upto 20 BHP) with rotavator / equipment  c) Power machines (20 HP & above including accessories / equipments)  Nos. DHO 5  DHO 5  DHO 5  Nos. DHO 5  DHO 6  DHO 6  DHO 6  DHO 6  DHO 7  DHO 8  DHO 8  DHO 8  DHO 9	0. Pollination support through bee kee	ping				
c) Equipment including honey extractor (4 frame), food grade container (30kg), nos. DHO 200 50% of cost limited to one set per beneficiary  11. Horticulture Mechanization  a) Power operated machines / tools including Power Saw and Plant Protection equipments etc.  b) Power Machines (upto 20 BHP) with rotavator / equipment  c) Power machines (20 HP & above including accessories / equipments)  Nos. DHO 30 50% of cost limited to one set per beneficiary  12. Human Resource Development  Gardeners Training Grp. DHO 2 100% of the total cost 3  Training of farmers within the District Nos. DHO 1400 100% of the total cost 5  Exposure visit of Farmers	Honey bee colony	Nos.	DHO	2000		14.0
(4 frame), food grade container (30kg), net, etc.       nos.       DHO       200       So% of cost limited to one set per beneficiary       1         11. Horticulture Mechanization       a) Power operated machines / tools including Power Saw and Plant Protection equipments etc.       Nos.       DHO       100       50% of cost limited to one set per beneficiary       1         b) Power Machines (upto 20 BHP) with rotavator / equipment       Nos.       DHO       30       50% of cost limited to one set per beneficiary       1         c) Power machines (20 HP & above including accessories / equipments)       Nos.       DHO       5       50% of cost limited to one set per beneficiary       1         12. Human Resource Development       Grp.       DHO       2       100% of the total cost       3         Training of farmers within the District       Nos.       DHO       1400       100% of the total cost       1         Exposure visit of Farmers	) Hives	nos.	DHO	2000		16.0
a) Power operated machines / tools including Power Saw and Plant Protection equipments etc.  Nos. DHO 100 50% of cost limited to one set per beneficiary  1 power Machines (upto 20 BHP) with rotavator / equipment  Nos. DHO 30 50% of cost limited to one set per beneficiary  1 power machines (20 HP & above including accessories / equipments)  Nos. DHO 5 50% of cost limited to one set per beneficiary  1 power machines (20 HP & above including accessories / equipments)  Nos. DHO 5 100% of the total cost  1 power machines (20 HP & above including accessories / equipments)  1 power machines (20 HP & above including accessories / equipments)  Nos. DHO 5 100% of the total cost  1 power machines (20 HP & above including accessories / equipments)  1 power machines (20 HP & above including accessories / equipments)  1 power machines (20 HP & above including accessories / equipments)  Nos. DHO 1 power machined to one set per beneficiary  1 power machines (20 HP & above including accessories / equipments)  Nos. DHO 1 power machined to one set per beneficiary  1 power machines (20 HP & above including accessories / equipments)  1 power machines (20 HP & above including accessories / equipments)  1 power machines (20 HP & above including accessories / equipments)  1 power machines (20 HP & above including accessories / equipments)  1 power machines (20 HP & above including accessories / equipments)  Nos. DHO 2 100% of the total cost  1 power machines (20 HP & above including accessories / equipments)  1 power machines (20 HP & above including accessories / equipments)  1 power machines (20 HP & above including accessories / equipments)  1 power machines (20 HP & above including accessories / equipments)  1 power machines (20 HP & above including accessories / equipments)  1 power machines (20 HP & above including accessories / equipments)  1 power machines (20 HP & above including accessories / equipments)  1 power machines (20 HP & above including accessories / equipments)  2 power machines (20 HP & above including accessorie	frame), food grade container (30kg),	nos.	DHO	200		14.0
Including Power Saw and Plant Protection equipments etc.  b) Power Machines (upto 20 BHP) with rotavator / equipment  c) Power machines (20 HP & above including accessories / equipments)  Nos. DHO 5 50% of cost limited to one set per beneficiary  12. Human Resource Development  Gardeners Training Grp. DHO 2 100% of the total cost  Training of farmers within the District Nos. DHO 1400 100% of the total cost  Exposure visit of Farmers	1. Horticulture Mechanization					
rotavator / equipment Nos. DHO 30 beneficiary  c) Power machines (20 HP & above including accessories / equipments)  Nos. DHO 5 50% of cost limited to one set per beneficiary  12. Human Resource Development  Gardeners Training Grp. DHO 2 100% of the total cost 3  Training of farmers within the District Nos. DHO 1400 100% of the total cost 5  Exposure visit of Farmers	cluding Power Saw and Plant	Nos.	DHO	100	<del>_</del>	17.5
including accessories / equipments)  12. Human Resource Development  Gardeners Training  Grp. DHO  2 100% of the total cost  Training of farmers within the District  Nos. DHO  1400  100% of the total cost  Exposure visit of Farmers		Nos.	DHO	30		18.0
Gardeners Training Grp. DHO 2 100% of the total cost 3  Training of farmers within the District Nos. DHO 1400 100% of the total cost 5  Exposure visit of Farmers		Nos.	DHO	5		7.50
Training of farmers within the District Nos. DHO 1400 100% of the total cost  Exposure visit of Farmers	2. Human Resource Development					
Exposure visit of Farmers	ardeners Training	Grp.	DHO	2	100% of the total cost	30.0
•	raining of farmers within the District	Nos.	DHO	1400	100% of the total cost	5.60
Division of the second of the	xposure visit of Farmers					
1) Within the State (5 days) Nos. DHO 800 100% of the total cost (5 days) 1	Within the State (5 days)	Nos.	DHO	800	100% of the total cost (5 days)	12.0
Transport for within the State LS DHO Rs.100 / per day / per farmer	ransport for within the State	LS	DHO		Rs.100 / per day / per farmer	4.00
ii) Outside the State (5 days)  Nos. DHO 600 100% of the total cost	Outside the State (5 days)	Nos.	DHO	600	100% of the total cost	18.0

Transport for outside the State	LS	DHO	Rs.2000 / per farmer for 7 days		12.00
Training / study tour of techni	cal stafi	f / field functiona	ries		
Within the State	Nos.	DHO	50	100% of the total cost	0.10
Study tour to progressive States / units (group of minimum 5 participants) ( 7 days)	Nos.	DHO	50	100% of the total cost	2.275
Sub-Total					5386.29
Component	Unit	Implementing Agency	Physical	Programme Rate of Assistance / ha. / unit	Financial
B. Integrated Post Harvest Mar	nageme	nt			
1. Pack House / On farm collection & storage unit (9 x 6m)	Nos.	DHO	30	50% of the capital cost	45.00
2. Pre Cooling Unit (capacity 6 MT) in general area	Nos.	DHO	2 (Rs.15.00 lakh for 6 MT capacity)	Credit linked back -ended subsidy @ 40% of the cost of project in general case and 55% in the case of hilly & schduled areas for individucal	12.00
3. Cold Storage Units (Const. / expansion / modernisation) (capacity 5000 MT) Gen area	Nos.	DHO	2 (Rs.6000 / MT)	entreprenuers	240.00
4. Mobile Pre Cooling Unit (Capacity 5 MT) Gen area	Nos.	DHO	2 (Rs.24.00 lakh / unit for 5 MT capacity)	Credit linked back -ended subsidy @ 40% of the cost of project in general areas for 5MT capacity	19.20
5. Refer Vans / containers (6MT) Gen area	Nos.	DHO	2 (Rs.24.0 lakh / unit for 6 MT capacity)	Credit linked back -ended subsidy @ 40% of the cost of project in general areas	19.20
6. Ripening Chamber (2000 MT) Gen area	Nos.	DHO	1 (Rs.6000 / MT)	Credit linked back -ended subsidy @ 40% of the cost of project in general areas	48.00
7. Cashew nut Processing Unit	Nos.	DHO	10	Credit linked back -ended subsidy @ 40% of the cost of project in general areas	60.00
8. Preservation Unit (low cost) (Up gradation)	Nos.	DHO	20	50% of the cost of Rs.1.00 lakh per unit	10.00
9. Preservation Unit (low cost) (New)	Nos.	DHO	20	50% of the cost of Rs.2.00 lakh per unit	20.00
10. Low Cost Onion Storage Structure (25 MT)	Nos.	DHO	30	50% of the cost of Rs.1.00 lakh per unit	15.00



11. Pusa Zero Energy Cool Chamber (100 kg.)	Nos.	DHO	200	50% of the cost of Rs.4000 per unit	4.00
C. Estt. of marketing infrastructure for hoproduce	orticult	ural			
i. Estt of Terminal market	Nos.	DHO	1	25% to 40% (limited to Rs.50.0 crore ) as PPP mode / Capital cost Rs.150.0 crore / project	50.00
ii. Retail markets / outlets (environmentally controlled)	Nos.	DHO	4	Credit linked back -ended subsidy @ 40% of the cost of project in general	16.00
iii. Functional Infrastructure for collection, sorting, grading, packing etc.	Nos.	DHO	20	case and 55% in the case of hilly & schduled areas for individual entreprenuers	120.00
iv. Market extension,quality awareness & market led extension activities for fresh products	Nos.	DHO	2	100% assistance to Public sector / Capital cost Rs.3.00 lakh per event	6.00
Sub-Total					684.40
C. Mission Management					
1. State & District Mission Offices and implementing agencies for administrative expenses, project preparation, computerisation, contingency etc.	LS	DHO		5% of the total annual expenditure (100%)	315.32
2. Institutional strengthening, hire/purchase of vehicles, hardware / software	LS	DHO		Project based	40.00
3. Seminar, Conference, Workshop, Exhibition	on, Kissa	ın Mela, I	Hort. Shows	s, honey festivals etc.	
State Level	Nos.	DHO	2	100% assistance / Rs.3.00 lakh / event of 2 days	6.00
District Level	Nos	DHO	24	100% assistance / Rs.2.00 lakh / event of 2 days	48.00
4. Technical support group (TSG) at State level for hiring experts / staffs, studies, monitoring & evaluation, mass medica, publicity, video confeence etc.	LS			100% of the cost - Project based	20.00
Sub-Total					429.32
Grand Total					6500.0
				CS	5525.0
				SS	975.00

## **3.5.1. Progress of major activities under NHM** (2005-06 to 2009-10)

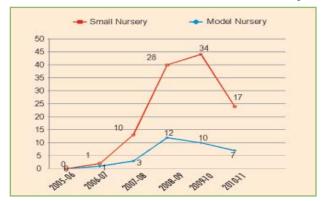
Progress has been achieved under different components of Horticulture, since the period of inception of National Horticulture Mission in the state i.e. in the year 2005-06 to 2009-10. The component wise achievement of different horticultural activities starting from nursery establishment to human resource development is cited in the table below:-

Sl.No.	Component	Unit	2005-06	2006-07	2007-08	2008-09	2009-10
1	Establishment of Nursery						
	Model Nursery - Deptt.	nos.		1	3	12	10
	Small Nursery - Deptt.	nos.		1	10		
	Model Nursery - Private	nos.				20	2.4
	Small Nursery - Private	nos.				28	34
2	Vegetable Seed Prodn.						
	Vegetable Minikit	nos.	300000	290000	250000	53000	232000
		ha.	379.9	59.01	175.81	820.83	432.42
3	Fruits						
	Mango	ha.	2738.87	10674.72	13813.93	24360.67	23488.00
	Aonla	ha.			332.49	764.19	31.46
	Litchi	ha.			0.58	318.86	170.03
	K.Lime	ha.			23.23	556.44	479.45
	Orange	ha.	260.07	1272.71	1601.26	321.13	102.29
	Banana Sucker	ha. ha.	369.07	1272.71	1691.36	1848.64	1430.16
	Banana Tissue Culture						67.62
4	Cashew	ha.	1081.49	4780.62	4642.1	7895.98	5476.74
5	Floriculture						
	Rose	ha.	38.49	179.28	236.03	744.98	204.44
	Gladioli	ha.	130.87	142.01	658.75	1004.38	1499.73
	Tuberose	ha.	27.75	112.38	33.32	110.08	305.72
	Marigold	ha.	37.75	159.67	486.03	1179.59	772.49
	Goldenrod, Asparagus etc.	ha.					
6	Spices						
	Ginger & Turmeric	ha.		180.02	2657.33	1874.91	1900.87
7	Rejuvenation	_					
	Cashew	ha.			520.95	388.48	
8	Vermi Compost						
	Big	nos.		74	292	207	167
	Small	nos.				769	1407
9	HRD						
	Exp. Visit inside the State	nos.	245	1279	2892	4704	2686
	Exp. Visit outside the State	nos.		36	200	1534	1355
	Plantation Training	Grp	119	201			
	IPM / INM Training	Grp	30	29		377	176
10	Onion Storage Structure	nos.		676	1465	1432	39



## 3.5.2. Graphs showing achievements under different components of NHM

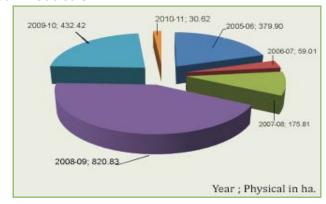
## **Nursery Establishment**





## **Vegetable Seed Production**





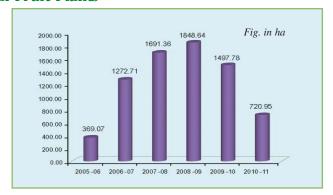
### **Perennial Fruit Plants**



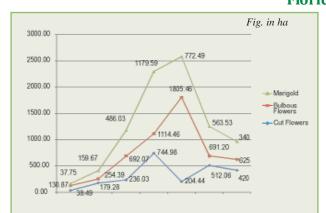


#### **Non-Perennial Fruit Plants**





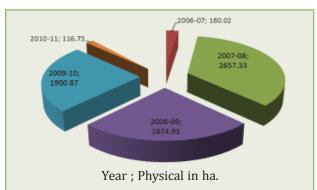
## **Floriculture**



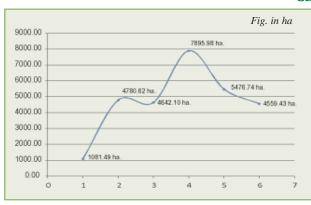


## **Spices**





#### **Cashew**





## **Expenditure Position of NHM**







#### 3.6 State wise yearly Total Progress Report on Physical/Financial Targets & Achievements.

The National Horticulture Mission programme was being implemented under Orissa Horticulture Development Society. As it is a society, the financial matter was dealt by a Chartered Accountant and it was audited by another Chartered Accountant. The achievement made in the respective component is arrived basing on the expenditure incurred. The figures both physical and financial are indicated in the table as per audit report.

State: Orissa Financial Year: 2010-11

Components	Unit	Phy	Financial(` in Lakh)		GOI	
Components		Target	Achmt	Target	Achmt	Share
		Ü		Ü		(`in Lakh)
A. PLANTATION INFRASTRUCTURE & DEVELOPMENT	Γ					
1. Production of planting material						
1.1 Planting Material						
(a) Public sector						
i. Model nursery (4 ha)	No.	-	7	-	154.150	133.88
iv. Small Nursery (1 ha.)	No.	-	-	-	-	-
(b) Private sector						
i. Model nursery (4 ha)	No.	-	-	-	-	-
iv. Small Nursery (1 ha.)	No.	-	17	-	45.300	38.51
1.2 Vegetable seed production						
(a) Public Sector (ICAR, SAUs & State Depts.)	На.	-	30.62	-	13.010	11.06
2. Establishment of new gardens						
2.1 Fruits						
(a) Fruits (Perennial)						
i. New Plantation	На.	-	20761.11	-	1760.880	1496.75
ii. 1st Year Maintenance	На.	9535.00	16543.44	364.710	632.790	537.87
iii.2nd Year Maintenance	На.	7570.50	8987.08	434.400	515.630	438.29
(b) Fruits (Non-Perennial)						
i. New Plantation	На.	-	720.95	-	112.320	95.47
ii.1st Year Maintenance	На.	656.00	728.76	25.090	27.870	23.69
iii. 2nd Year Maintenance	На.	656.00	178.21	25.090	6.820	5.80
(d) Banana (TC), Pineapple, Strawberry, etc.						
i.New Plantation	На.	450.00	-	119.350	-	-
(e) Banana (sucker) & Papaya, etc.						
i. New Plantation	На.	500.00	-	71.720	-	-
(g) Fruit crops other than cost intensive crops using normal sp	pacing.					
i. New Plantation	На.	12350.00	-	1052.080	-	-
2.2 Flowers						
(a) Cut Flower						
i. Small Scale Farmers	На.	100.00	282.78	29.750	84.130	71.51
ii. Other farmers	На.	100.00	229.28	19.640	45.020	38.27
(b) Bulbulious Flower						
i. Small Scale Farmers	На.	200.00	347.77	76.500	155.920	132.53
ii. Other farmers	На.	150.00	343.44	37.870	86.700	73.70
(c) Loose Flower						
i. Small Scale Farmers	На.	50.00	-	5.100	-	-
ii. Other farmers	На.	200.00	563.53	13.460	37.940	37.94
2.3 Spices						
i. Seed spices(cumin, fennel, etc)	На.		116.73	-	12.400	10.54
iii. Rhizomatic spices (Ginger, Garlic, Turmeric etc)	На.	1000.00	-	106.260	-	-
2.6 Plantation crops including coastal horticulture						
i. New Plantation	На.	4000.00	4559.43	408.000	465.060	395.30
ii. 1st Year Maintenance	На.	4500.00	3294.86	86.060	63.010	53.56
iii. 2nd Year Maintenance	Ha.	3850.00	2614.76	110.450	75.010	63.76
3. Rejuventation/ replacement of senile plantations	На.	600.00	-	76.500	-	-
4. Creation of water resources sources						
4.1 Community tanks, ponds, on farm water reservoirs with us	e of plastic					
lining	N				1 500	
(a) General Areas	No.	-	2	-	1.530	1.30
5. Protected cultivation						
5.1 Hi-tech Green House(Fan & Pad System)						
(c) All Category	На.	-	1.19	-	18.960	16.12
5.3 Mulching	На.	-	133.31	-	11.330	10.78

Components	Unit	Phys Target	<b>ical</b> Achmt	Financial(₹ in Lakh) Target Achmt		GOI Share (₹ in Lakh)	
5.5 Plastic Tunnel	На.	-	0.40	-	0.170	0.17	
5.6 Shade Net House							
(c) Bamboo Structure	На.	-	0.65	-	8.280	7.04	
7. Promotion of INM/IPM							
7.2 Promotion of IPM	На.	-	-	-	-	-	
8. Organic Farming							
8.2 Vermi compost units(No.)	No.	-	496	-	59.130	50.26	
8.3 Certification							
i. Organic Certification (1st year)	No.	-	2	-	0.190	0.16	
11. HRD including Horticulture Institute							
11.1 Training of Supervisors	No.	-	-	-	0.090	0.09	
11.3 Training of Gardeners	No.	1	1	7.230	16.440	13.97	
11.5 Training of Farmers							
(a) Within the State	No.	-	544	-	9.250	7.86	
(b) Outside the State	No.	-	328	-	13.960	11.87	
(c) Within the District	No.	1400	-	4.760	-	-	
11.6 Exposure visit of farmers							
ii.Within the State	No.	400	-	8.500	-	-	
iii.Outside the State	No.	500	-	22.950	-	-	
11.7. Training / Study tour of technical staff / field functionaries							
i. Within the State	No.	50	-	0.090	-	-	
ii.Outside the State	No.	50	-	1.930	-	-	
10. Pollination support through beekeeping (Lakh units) 10.3 Distribution of colonies with hives	No.						
B. INTEGRATED POST HARVEST MANAGEMENT	110.					_	
1. Pack houses / On farm collection & storage unit	No.		1		1.600	1.60	
12. Pusa Zero energy cool chamber (100 kg)	No.		16	_	0.270	0.23	
i. New Unit	No.		3	_	2.550	2.17	
4. Cold storage units	No.		1	_	60.960	51.82	
6. Ref. vans /containers (6 MT)	No.			_	-	51.62	
7. Primary/ Mobile/ Minimal Processing Units	No.				_	_	
6. Functional Infrastructure for collection, grading etc.	No.					_	
	Project						
7. Extension, Quality awareness and market led extension	Troject				-	-	
activities for fresh and pocessed products  E MISSION MANACEMENT							
E.MISSION MANAGEMENT  1. State & Districts Mission Structure including additional	No.			151.510	77.820	66.15	
1. State & Districts Mission Structure including additional	INU.	•		131.310	77.020	66.15	
manpower & project preparation cost	No.				0.100	0.00	
3. Institutional Strengthening, hire/purchase of vehicles,	NO.	-	-	-	0.100	0.09	
hardware/software  4. Technical Support Group (TSG)	No						
4. Technical Support Group (TSG)	No.	-	-	-	-	-	
6. Seminars confrences, workshops, exhibitions, Kisan Mela,							
Horticulture Shows, Honey festivals etc.	NI-		_		4.640	2.04	
(a) State Level	No.	-	2	•	4.640	3.94	
(b) District Level	No.	-	13	-	22.550	19.17	
F. Approved by 'EC'	N				0.200	0.15	
1.	No.	-	1	•	0.200	0.17	
2.	No.	-	-	-	2.170	1.84	
3.	No.	-	71	-	3.000	2.55	
4.	No.	-	18	-	1.220	1.04	
5.	No.	-	-	-	6.850	5.82	
6.	No.	-	-	-	2.490	2.12	
Total				3259.00	4619.71	3936.76	

#### 3.7 Auditor's Report



404, Sahid Nagar, Bhubaneswar-7 Ph.: 0674-2548945, Mob.: 9437001945 E-mail: pkdpattnaik@yahoo.com

## AUDITOR'S REPORT

We have audited the attached Balance Sheet of M/s. Orissa Horticulture Development Society (OHDS) as at 31<sup>51</sup> March, 2011 and also the Income and Expenditure account for the year ended on that date annexed thereto read with notes there on. These financial statements are the responsibility of the Society's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statement. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

#### Further subject to:

- Bank balance confirmations not made available to us, and income tax deduction at source on interest a) credited by bank were not made available for our audit purpose.
- b) Reference is invited to point number B2 to notes on accounts, paid vouchers in have were shown under cash in hand, amounting to Rs. 17,33,918/-.
- c) Amount collected from farmers in form of (farmers share / token money / transportation cost / sale proceeds / application fee) etc in earlier years have been parked separately for "Trainig.Faciliation and marketing linkage for farmers". This is vide decision taken In meeting held on 21.06.2011. Accordingly Rs.12,10,21,332.00 is transferred to the said account.
- d) Advance shown under "Mission advance" (as per schedule - 8 to the balance sheet) amounting to Rs. 1,09,08,569.50 represents money remittances made at the year end remaining in transit and accounted in the subsequent year.
- Also reference is invited to point nos. B3 and B4 of notes on accounts on "Other advance" (as per e) schedule - 5 to the balance sheet) amounting to Rs. 5,80,34,595.25 and "Non-Mission advance" (as per schedule - 7 to the balance sheet) amounting to Rs. 1,69,738.00.





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- All grant receipts; unutilized grant and fresh grants received from central and state shares all are f) accounted in one single account in the books of the society. The grants should have been accounted for on scheme wise and central and state share wise.
- g) Interest accrued on Bank balance out of unspent grants have been accounted / treated as the Society's income till last year. However, as per the letter No. F.No.20-12/2007 - Hort. II, Govt. of India, Deptt. of Agr. And Co-op (Hort. Div.) dated 11 th August 2009 the said interest needs to be separately kept and cannot be treated as society income. As a result the interest accrued and accounted for till last year needs to be reversed and kept separately. The accumulated deficit of the society shall be increased to that extent;

#### We report that :-

- We have obtained all the information and explanations, which to the best of our knowledge and beliefwere necessary for the purpose of our audit.
- In our opinion, proper books of account have been kept by the society so far as appears from our (ii) examination of those books of the head office. We have relied on the yearly returns received from branches, where we have not visited.
- (iii) The balance sheet dealt with by this report are in agreement with the books of account.
- (iv) In our opinion and to the best of our information and according to the explanations given to us, the said accounts together with notes on accounts thereon the attached thereto, give a true and fair view in conformity with the accounting principles generally accepted in India.
- In the case of Balance Sheet, of the state of affairs of the society as at 31 st March, 20 11. a)
- b) In the case of Income & Expenditure Account, Excess of Expenditure over Income of the society for the year ended on that date.

For **DAS PATTNAIK & CO.** 

CHARTERED ACCOUNTANTS

(CA. P.K. DAS PATNAIK)

PARTNER.

M.No.085406

FRN:321097E

Dated: 15.11.11 Place: Bhubaneswar





# **Directorate of Horticulture**

Orissa Horticulture Development Society Udyan Bhawan, Bhubaneswar - 751015, Odisha Ph.: 0674-2551831, Fax: 2551978/2551726 e-amil: udyanhort@sify.com

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