

**Report of
NHM Joint Inspection
Team (JIT) to
Goa
30 June to 2 July, 2011**

INDEX

S. No.	Topic	Page No.
1.	Background	3 – 5
2.	Potential of Horticulture in Goa	6 – 8
3.	Progress of NHM in Goa	8 – 9
4.	Field Visits	10 – 21
5.	Observations and Recommendations	22 – 23

Report of the Joint Inspection Team (JIT) on its visit to Goa during 30 June to 2 July, 2011

The Joint Inspection Team (JIT) comprising Shri S.K.Kaul, AD (NHM) and officers of SHM Goa visited during 30 June to 2 July to review progress under National Horticulture Mission programme in the State. Dr. Orlando Rodrigues, Deputy Director, Agriculture, Shri Shiwanand Waghle, Shri R. B. Desai, Shri Promod R. Joshi, Shri Shaba Venukar and Shri Anant Hoble of Agriculture/Horticulture Department of Goa joined the inspection team. A meeting was also held with Shri S. S. P. Tendulkar, Director (Agriculture) and Mission Director, SHM, Goa on 01.07.2011 at Caranzalem, Goa.

Background and Introduction:



Goa has two Districts: North Goa district – comprising of Tiswadi, Bardez, Pernem, Bicholim, Sattari, and Ponda talukas and the South Goa district comprising of Sanguem, Canacona, Quepem, Salcate and Mormugao talikas. There are 402 revenue villages in Goa.

Goa receives rain from the South-West monsoons. The average rainfall is 2776.9 mm. Rainy season is spread over four months from June to September. Occasional thunder showers are experienced in May and October. Goa experiences warm and

humid tropical climate. The summer temperature ranges from 24⁰C to 30⁰C. The average relative humidity is 75.90%.

In Goa, the land elevation ranges from sea level to 1022 meters. The highest point is the Wagheri hills in Sattari taluka. The Ghat section of NH-\$, rises to 650 meters MSL near Anmod. Khazans or lands along the estuaries (rivers with sea water in their lower reaches) are below sea level and are protected by bunds or dykes and sluice gates. The main tourist season is from November to February, when the weather is pleasant and not rainy or hot.

The soils of Goa are mostly lateritic (81%). They are sandy loam to silt-loam in texture, well drained and highly acidic (5.5 to 6.5 pH). These soils have moderate organic carbon but are poor in phosphorus and potash. About 11% of the soils located along the seacoast and estuaries are sandy-to-sandy loams. They include the Kher lands and beach fronts. The remaining 8% of the soils are alluvial in nature. The Khazans and adjoining areas have alluvial soils with high water tables and are subject to inundation by saline water.

More than half the farmer have less than half-hectare land each. Thus 56% of the people own less than 11% of the land. On the other hand 20A% of the owners posses about 30% of the land with a holding size of one to five hectares each. Only 2% people own more than 5 hectares land.

The “Comunidade” is an institution peculiar to Goa. The land is held as a common property of the “Gaonkars” or “Joneiros” who are the original inhabitants of a given village or group of villages. The land is leased out and the receipts thereof are utilized to (i) run the comunidade administration (ii) provide funds to local church or temple and (iii) pay a dividend (Jons) to the members.

In Goa traditional sources of irrigation were storage tanks, small diversion bandharas, natural springs and wells. For rabi paddy (Vaigon) irrigation was mostly from storage tanks located in Salcete and Bardez. The usual practice is to cultivate kharif paddy in tank bed and the water weir is closed early in September after harvest of Kharif paddy. In Ponda, Sanguem and Bicholim small kucha “diversion” works are constructed on Nalas to irrigate paddy fields during Rabi. Considerable area under arecanut depends on various springs at higher altitudes.

Agriculture is the major economic activity contributing 6% to the SDP, only after Tourism & Mining. 16.6% people are engaged in Agriculture in 2001 compared to 27.5% in 1991. Area under food grain cultivation is decreasing, as farmers prefer horticultural crops as less labour intensive. About 80% of the Kharif & rabi cultivation is under HYV.

As tourism is a good source of income, farmers in the villages are leaving the lands fallow & move towards tourism sector.

AGRICULTURE SCENARIO & LAND UTILIZATION IN GOA
PATTERN OF LAND AREA IN ha.

Total area for land utilization	361113
Forest cover	125473 – 34.74%
Land not available for cultivation	37137
Permanent pastures & other grazing land	1305
Cultivable waste land	52829
Net Area Sown	134208
Area Sown more than once	35310
Food grain crops	63830 ha - 37.65%
Horticulture crops	100934 ha – 59.54%
Sugarcane, oil seeds	4754 ha – 2.81%
Irrigated Area	36000 ha – 22%
Rainfeed Area	78%
Population supported by Agriculture	16%
Holding upto 2 ha	92%
Total cropped Area	169518 – 46.94%

Area & Average Yield of various crops in Goa

S. No.	Name of the crop	Area in ha	Average Yield (kgs/ha)
1.	Cashew Nut	55612	395
2.	Coconut	25545	4995 Nos.
3.	Arecanut	1677	1590
4.	Mango	4494	4204
5.	Banana	2398	9791
6.	Pineapple	341	16258
7.	Vegetables	5547	10100
8.	Other fruits (Chickoo, papaya, lemon etc.)	3699	10783
9.	Oil palm	823	2529
10.	Black pepper	666	312
11.	Trees spices	101	26
12.	Vanilla	31	18

Potential of Horticulture

The production and productivity of most of the crops especially agronomic crops has remained static for years. There is limited scope for expansion of the area under these crops. Coupled with this is the high labour wages and shortage of labour due to alternate employment opportunities in mining tourism and industrial sector. The high literacy level has also resulted in demands for higher wages. The cost of cultivation of the cereal crops in Goa is therefore higher compared to other adjoining states. Paddy, which is the staple food and primary agriculture crop is therefore mainly grown for self use and not commercially.

The younger generation is shy of agriculture and has no respect for this profession. At present only 15% of the population is directly engaged in Agriculture. The draft animals are getting phased off in course of time. Due to small size of holdings and undulating terrain mechanization has limited scope. These factors have led to development of horticulture sector especially perennial horticulture.

The Horticulture crops occupy about 60.5% of the total cropped area with fruits, vegetable, cashew, coconut and spices. Cashew is major crop covering 55672 ha followed by coconut which occupies 25608 ha.

Fruits: Mango, Cashew, Coconut, Banana, Pineapple, Chickoo, Jackfruit, Papaya, Arecanut etc.

Field Crops: Paddy, Ragi, Sugarcane, Goundnut, Cowpea, Oil Palm etc.

Vegetables: Brinjal, Bhendi, Chillies, Cucumber, Pumkin, Gourds, Musk melons, Red, amaranthus, raddish, Knol-Kohl, Bottle gourd, long beans, cluster beans etc.

Flowers: Chrysanthemums, Jasmine, Crossandra, Dahlia, Roses, Hibiscus, Marigold, Orchids, Gerbera, Anthuriums, Gladiouls, Tuberose, Daisy, Zinnia, Bougainvillea etc.

Spices: Black Pepper, Nutmeg, Kokum, Cardamom, Ginger, Turmeric, all Spices, Cinnamon, Clove etc.

Tubers: Colocasia, Yam, Elephant foot, Suran, Kange, Sweet Potato, Madi etc.

Being a tourist destination and a state with better living standard and higher per capita income, horticulture products have a very good local market. The total population of the state is 13.47 lakh as per 2001 census. Besides this state handles about 18 to 20 lakhs tourist annually, The demand of fruits, vegetables, coconut, cashew-nuts to this large population of 32 lakh annually is tremendous. At present about 90000 tons of vegetables (300 ton per day), 30000 tons of fruits (100 tons per day) and 5-6 lakh tender coconuts (36000 per week) are brought in annually from other States to meet the

needs of locals and tourists. Vegetables find their entry into the hotels for culinary purpose, and the fruits are largely used for table purpose or for juice. Though all the type of vegetables or fruits brought in from other States may not be commercial viable in Goa due to agro-climatic factor, some of the vegetables, fruits can be successfully cultivated, which can generate better economic returns.

Due to limitation of the availability of land the need is to identify some few types of vegetable and fruits or plantation crops with emphasis on large-scale cultivation. This will help in generation of tradable volume, development of skills for cultivation and help in reduction of the purchases from other states. The crops like cashew-nut, coconut, mango, jackfruit, aowla, chickoo, papaya, banana, pineapple, black pepper, nutmeg, dry chillies some medicinal plants, flowers like orchids, anthuriums and vegetable like Okra, cucurbits and gourds, sweet corn could be promoted successfully for cultivation in Goa.

Goa is known in the tourism industry as land of spices, cashew nuts, coconuts and tropical fruits, besides the beaches. Many of the foreign as well as domestic tourists prefer to visit such plantation to know more about them and to be with nature. This is being developed as a new sector to sell the horticulture as Eco-tourism or Agro tourism. The perennial horticulture crops and tropical flowers play a major role in this concept and has vast potential to divert beach tourism to Eco tourism in the hinterland of State of Goa. Already about a dozen of horticulture farms have started selling this concept, which is paying rich dividends.

The use of chemical fertilizer and pesticide in Goa is limited. This has become a promotional factor in selling the local products to the tourists who prefer organic foods. The cultivation of Horticulture crops under organic concept is more sustainable and remunerative which needs to be promoted.

The food processing industry largely depends on the horticultural crops. The industry has large scope for employment generation through processing and value addition. In goa the largest single horticultural product used for processing is the cashew-nut. The crop generates employment at all stags from its cultivation to marketing. The crops like cashew therefore need to be promoted for large-scale cultivation, to support processing industry and to cater to the tourism industry.

Due to needs of various non-agricultural activities like tourism, mining, housing and industry, Goa faces a tremendous pressure on the cultivable land. Added to this is the undulating terrain and non-availability of adequate irrigation facilities. The land holdings are also small to promote any commercial cultivation of cereal or pulse crop. Considering these factors promotion of horticulture is most potential sector that needs to be promoted for rural upliftment.

Area and Production for 2010-11

S. No.	Crop	2010-11 (Likely)		2011-12 (Targeted)	
		Area (000 ha)	Production (000 ton)	Area (000 ha)	Production (000 ton)
1.	Fruits				
	Mango	4.80	18.90	4.82	19.06
	Banana	2.53	23.50	2.75	25.00
	Pineapple	0.38	5.50	0.40	5.70
	Other fruits like jack fruit, papaya, chickoo	3.80	39.90	3.85	40.40
2.	Vegetables	5.61	57.12	5.80	58.43
3.	Spices	0.83	0.21	0.86	0.22
4.	Mushroom		200.00		200.00
5.	Plantation crops				
6.	Cashew	56.09	22.00	56.20	22.10
7.	Coconut	25.57	127.60	26	130.00
			Million nuts		Million nuts
	Total	99.61		100.68	

Progress of NHM in Goa

(` in lakh)

Year	Funds released	Amount utilized	Amount balance at the end of financial year GOI share
2005-06	315.20	112.91	202.29
2006-07	200.00	182.27	220.02
2007-08	3.19	154.423	68.787
2008-09	100.45	164.05	5.183
2009-10	150.00	145.77	9.413
2010-11	212.00	180.00	

Production of Plating Material

Under National Horticulture Mission (NHM), 2 Modal Nurseries and 6 Small Nurseries were established in the Public Sector in Goa. The Nurseries are well established with enough of mother plants and other facilities required for carrying out propagation of good quality planting material. The vegetable seed production of local strains is done on departmental farms whereas high yielding and hybrid seeds are made available by National Seed Corporation and Maharashtra State Seed Corporation.

Besides, there are 3 big well established nurseries in the private sector producing very good quality cashew and mango grafts recognised by the State under Nursery Act 1995. ICAR Goa is also establishing a model nursery for production of cashew and mango grafts on their Krishi Vigyan Kendra Farm at Ela Old Goa.

The planting materials required for the NHM programme are obtained from the Public and Private Sector nurseries. A technical committee with the assistance of ICAR has been nominated by the Director of Agriculture to inspect and reserve the required planting material for different schemes of the Directorate.

Rejuvenation /Replacement of Senile plantation including canopy management

Out of 55800 hectares of area under cashew crop in the State, about 30000 ha is by seedling progeny. Out of 30000 ha about 10000 ha is under Goa Forest Development Corporation Ltd., who are provided technical support and assistance by Directorate of Cashew & Cocoa Development, Kochi.

Integrated Post Harvest Management

The major horticulture produce in the state is cashew which is processed within the available processing units which has the processing capacity of more than 40000 tons annually however the present processing is short by almost 15000 tons. Hence, there is no scope for post harvest intervention on large scale in cashew. However for crops like banana, pineapple, mango there is a scope of promoting ripening chambers. Collection and storage centers could also be promoted amongst the progressive farmers with large holdings. The vegetables and fruits which are marketed require to be transported in refrigerated vans to avoid post harvest losses and the consumers get the fresh produce.

Establishment of Marketing Infrastructure for Horticultural produce

The state has sufficient markets to cater to the use of local producers which have been constructed by APMB and local governing bodies. The concept of satellite markets with air cooled facilities is taking shape in some parts of state. The retail market chain/supermarkets are well established hence the need for new markets is not felt as the produce is either lifted directly from the farm gate or is sold in APMB/weekly markets where most of the facilities are available. However, it is felt necessary to promote mobile vending carts with cool chambers at strategic locations in the major cities and towns and are required to be promoted under the above programme.

Field Visits

Joint Inspection Team (JIT) visited the sites of beneficiaries under National Horticulture Mission programme in north and south districts of Goa on 30.06.2011 and 01.07.2011 which includes Ponda, Bicholim, Canacona, Valpoi and Nanoda. The sites visited included area expansion, nursery, protected cultivation, ripening chamber, refer van and mushroom unit.

Visit to Bicholim

Sl. No.	COMPONENT	2005-06		2006-07		2007-08		2008-09		2009-10		2010-11		2011-12	
		Area	Value	Area	Value	Area	Value	Area	Value	Area	Value	Area	Value	Area	Value
1	New Area under Cultivation	11.67	32	26.53	61	16.71	23	17.08	27	14.71	14				
2	Area under Mango	-	-	2.50	14	2.29	13								
3	Area under Cashew	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	New Area under Cultivation	4.8	64	5.54	36	6.63	42	5.24	26	4.57	31	4.49	25		
5	Area under Pineapple	-	-	0.2	3	2.22	8								
6	Area under Sapota	-	-	-	-	6.63	36			1.62	2	2.94	1		
7	Subsidies of Cashew	23.4	80	27.27	85	28.64	53	27.12	53	27.12	34	40	53		
8	Subsidies of Organic Farming	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Training to Farmers														
10	Within the State		180		186		123								
11	Outside the State														

TO AVAIL ASSISTANCE UNDER NATIONAL HORTICULTURE MISSION CONTACT ZONAL AGRICULTURE OFFICE

Date 30.06.2011

Sl No.	Details	Remarks
1.	Name & address of Beneficiary whose filed visited	Mukund G. Pirankar, Kumyemal, SAL Bicholim
2.	Total land available with the beneficiary (ha)	1.5 ha
3.	Crop cluster under which covered	Banana, Cashew and vegetables
4.	Name & variety of crop planted	Banana – Cocac Sacdati, Maimdoli
5.	Source of planting material	Government Farm, Ponda
6.	Number of planting material	100 Nos – 0.5 ha
7.	Number of plants planted/rejuvenated	100 Nos – 0.5 ha
8.	Date of plants which survived (also indicate percentage survival)	100% Survival
9.	Total amount of subsidy assistance due to the beneficiary as (`)	` 10000 from NHM
10.	Amount paid and date of payment	March, 2011

11.	Mode of payment	Cheque
12.	Source of irrigation water (Bore well/Tube well/Canel)	Canal Ticcari
13.	Whether Drip/Sprinkle System in use	Flood
14.	Other inputs provided	Nil
15.	Available marketing facility for the crop	Local market
16.	Other infrastructure available in the vicinity	
17.	General upkeep of the plot; Very good/good/average/poor.	Very Good
18.	Any other relevant observation by the JIT	
		Spacing 7 x 7 mt
		No Micro Irrigation is used and planting material is suckers and not tissue culture.



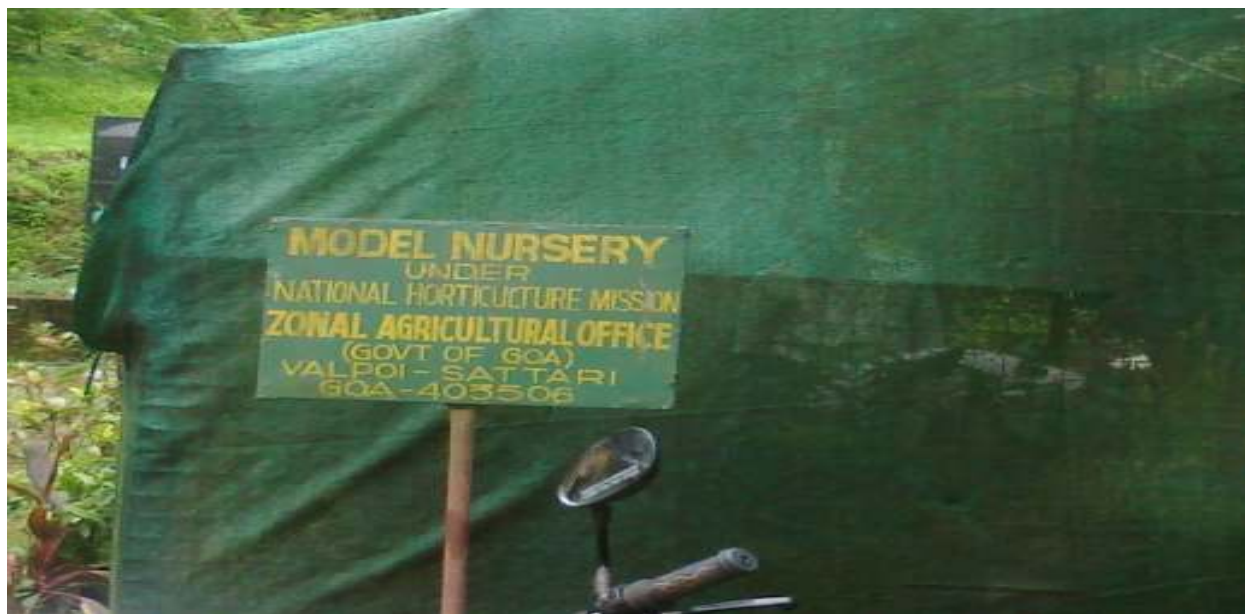


Date 30.06.2011

Sl No.	Details	Remarks
1.	Name & address of Beneficiary whose filed visited	Mukund G. Pirankar, Bicholim
2.	Total land available with the beneficiary (ha)	1.5 ha

3.	Crop cluster under which covered	Banana, Cashew
4.	Name & variety of crop planted	Cashew V-4, Banana local, Saldati
5.	Source of planting material	Government Farm, Ponda
6.	Number of planting material	1250 Nos – 0.5 ha
7.	Number of plants planted/rejuvenated	1250 Nos – 0.5 ha
8.	Date of plants which survived (also indicate percentage survival)	100% Survival
9.	Total amount of subsidy assistance due to the beneficiary as (`)	` 11250 from NHM
10.	Amount paid and date of payment	March, 2011
11.	Mode of payment	Cheque
12.	Source of irrigation water (Bore well/Tube well/Canel)	Canal Ticcari
13.	Whether Drip/Sprinkle System in use	Flood
14.	Available marketing facility for the crop	Local market
15.	General upkeep of the plot; Very good/good/average/poor.	Very Good
16.	Any other relevant observation by the JIT	
		Spacing 2.5 x 2.5 mt
		No Micro Irrigation is used and planting material is suckers and not tissue culture.

Visit to Valpoi



Date 30.06.2011

Sl No.	Details	Remarks
1.	Name of the project	Small Nursery ZAO Valpoi, Satoni
2.	Year of Implementation	2006-07
3.	Project period	
4.	Name of implementing Agency	Zonal Agriculture Officer
5.	Location of project	Dhave
6.	Total project cost	` 7.00 lakh
7.	Amount Released by DAC	` 3.00 lakh
8.	Expenditure incurred	` 7.00 lakh
9.	Status	
	Name of Nursery and crop for which plants are produced	Mango – Mankurat, Ratnagiri, Alphonso Coconut – sapling – Banouli Pepper cuttings – 25000 plants/year
	Name of crops for which seeds produced	
	Quality produced	26000 plants/year
	Quantity sold	Whole sold
	Rate	Mango @ 40/graft Coconut @ 25/sapling Pepper @ 5/cutting

	Amount realized through sale	
	Whether NHM logo displayed	Yes
		The nursery is running excellently and able to supply quality plant material to farmers at reasonable rates.



Visit to Nanoda



Date 30.06.2011

Sl No.	Details	Remarks
1.	Name & address of Beneficiary whose field visited	Shri Mandhar Vishnu Joshi Vill. Nanoda North Gate
2.	Total land available with the beneficiary (ha)	8 Acre
3.	Type of Protected cultivation	Normal Green House
4.	Year of establishment	2011-12
5.	Size of structure (Sq. M.)	1000 Sq. M.
6.	Total cost	8.0388 lakh
7.	Agency involved in fabrication and installation	Kumar Floritech, Ponda Shri Deshmukh Satara Mahiarabhho

8.	Total subsidy paid and date of payment	Subsidy - ` 3.988 lakh and Cultivation cost – ` 0.96 lakh, the total subsidy sanctioned is ` 4.94 lakh which is yet to be released
9.	Crop being grown	Gerbera
10.	Condition of structure	The structure has been completed, earth work was being done which will be followed by plantation.
11.	General upkeep	Very Good
12.	Any other relevant observation by JIT	
		SHM Goa, has sanctioned funds at State Level.
		Funds are yet to be released.
		Planting material is yet to be sourced
		Technical collaboration with SESA Goa (An NGO)and marketing facilitation
		The establishment of poly house has been completed
		Funds as sanctioned for construction part can be released to beneficiary to facilitate plantation.

Visit to Ponda



Date 01.07.2011

Sl No.	Details	Remarks
1.	Name of the project	M/s SBS Cold Room
2.	Year of Implementation	2010-11
3.	Project period	
4.	Name of implementing Agency	Mr. Bala Krishna S. Shet Shirsad Partnership firm (4 Partners)
5.	Location of project	Ponda, Curti, Goa
6.	Total project cost	6 chambers – 51.40
7.	Expenditure incurred	` 51.40 lakh
8.	Status	
9.	Capacity of Unit	180 MT
10.	Commodity	Banana, Mango
11.	Equipment Purchased	Puf panel, cold room, crates, cooling system
12.	Condition of infrastructure	Very good
13.	Whether NHM logo displayed	Yet to be displayed.
14.	Whether funds disbursed to agency	Proposal under consideration.
	Observations	
		6 chamber – 180 MT
		Goa Urban Coop – Bank Ltd. has sanctioned a term loan of ` 26.00 lakh dated 11.01.2010.
		T/L – 26.00 lakh

		CC – 4.00 lakh
		Cooling – Freon, compressor reciprocating type
		The Project has stated commercial production in 26.06.2011.
		Marketing for Goa Horticulture Board.
		T/L Availed all Term Loan
		1st Installment in 2010 August paid.
		Using 20 kg crates.
		Application submitted to SHM Goa, January – 2011
		Application forwarded to NHM by SHM in the month of April, 2011.
		Subsidy yet to be sanctioned.
		The project is complete and entrepreneurs is ripening banana, mango in the ripening chamber.

Date 01.07.2011

Sl No.	Details	Remarks
1.	Name of the project	M/s SBS Cold Room
2.	Year of Implementation	2010-11
3.	Project period	
4.	Name of implementing Agency	Mr. Bala Krishna S. Shet Shirsad
5.	Location of project	Ponda, Curti, Goa
6.	Total project cost	Ref. van – 3 MT – with cost of ` 12.61 lakh Ref. Van – 6MT – with cost of ` 15.52 lakh
7.	Expenditure incurred	` 28.13 lakh
8.	Status	
9.	Capacity of Unit	1 – 3 MT 2 – 6 MT
10.	Commodity	Banana, Pineapple and Citrus
11.	Equipment Purchased	Chasis - Sawraj Mazda Chasis - Leyland
12.	Condition of infrastructure	On working good condition
13.	Whether NHM logo displayed	Yet to be
14.	Whether funds disbursed to agency	Yet to be sanctioned
15.	Observations	
		One vehicle purchased and being used for transportation of fruits and vegetables. Another vehicle is being purchased.
		Application forwarded by SHM to NHM in the month of April, 2011.

Visit to Canacona



Date 01.07.2011

Sl No.	Details	Remarks
1.	Name of the project	Zauri Foods & Farm Pvt. Ltd. Tal Canacona – Distt South Goa
2.	Year of Implementation	2010-11
3.	Project period	
4.	Name of implementing Agency	SHM, Goa
5.	Location of project	Canacena
6.	Total project cost	` 185.00 lakh
7.	Amount Released by DAC	Sanctioned ` 23.50 lakh
8.	Expenditure incurred	` 185.00 lakh
9.	Whether trained manpower employed	Dr. Karede is the technical support. Skilled manpower of 12 persons
10.	Arrangements made to meet recurring cost	Bank has sanctioned CC ` 50.00 lakh
11.	Status	
	Commodity	Button Mushroom
	Whether NHM logo displayed	Yes
	Whether funds disbursed to agency	SHM is yet to release subsidy amount
12.	Observations	
		Spawn lab completed & working
		Pasteurized compost unit complete and working
		Processing/packing/handling unit established and working
		Cold room completed
		Refrigerated growing room
		Refrigerated plant complete
		Bank – Canara Bank Sanctioned T/L ` 130.00 lakh
		1st Installment or repayment due in August, 2011
		Project has been completed and commercial production started.
		Production 400 MT/year – expected 600 MT
		Market Panjim, Bangalore, Mangalore.
		Tie – up supply vegetable to hotels, self distributors 50%, Distributer other cities 50%
		Cost of produce – 1 kg – 75/kg
		Cost of selling - ` 90/kg
		Since the project is complete SHM can process the release of subsidy after seeking completion certification from lending Bank.

OBSERVATIONS AND RECOMMENDATIONS

1. Goa has large floating population, which required fresh fruits and vegetables. The produce is imported from Karnataka, Maharashtra. There is demand-driven market due to increased purchasing power of the local people due to high per capita income and rapid industrialization/urbanization in the state. The tourism sector is well developed for consumption of locally produced fruits and flowers.

There is need for promoting protected cultivation for increasing the production and productivity of vegetables. State needs to promote Mushroom cultivation on a large scale.

2. Climatic condition favours growing horticultural crops like cashew, mango, banana and flower crops like orchids and anthurium.

Limited use of chemical fertilizers and pesticides giving scope for large scale organic certification specially in cashew crop.

3. State needs to promote beekeeping for pollination of horticulture crops thereby increasing the productivity.
4. Good network of road, rail, waterways and air which needs to be leveraged for creation of infrastructure for horticulture crops.
5. Existing network of departmental and private nurseries need to be accredited for quality planting material. The system of production and supply of quality planting material, particularly for fruits like Banana and cashew etc. needs to be streamlined.
6. Nurseries being set up under National Horticulture Mission, both under Public and Private Sector should have permanent infrastructure besides mother block for producing section material.
7. At present most of the planting material for banana is through suckers. State needs to promote Tissue culture unit for production of banana tissue culture plants.
8. Convergence of the state government schemes for effective implementation of NHM.
9. More focus needs to be given on HRD of farmer groups. Many farmers are taking up Horticulture venture for the first time.

10. More focus is needed on Post Harvest Management activities. Setting up of Ripening Chamber and refer vans is a welcome sign. Disbursement for such infrastructure projects involving credit should be completed in a speedy manner.
11. State needs to promote refer vans and mobile vending carts with cool chambers at strategic locations in the major cities and towns.
12. Use of ICT for programme monitoring of National Horticulture Mission activities at the Districts level needs to be activated. None of the districts are presently reporting progress on the National Horticulture Mission website.
13. The State does not have separate Department for Horticulture. Efforts need to be made for creation of separate Department of Horticulture. Till that time State should make arrangements for contractual staff and hiring of vehicles under mission management component.
14. There is a need to publicize the National Horticulture Mission programmes through print and electronic media.
15. National Horticulture Mission logo and boards need to be displayed wherever assistance has been provided