## **Report of Joint Inspection Team**

## **On its Visit to Gujarat**

## October, 2010





NATIONAL HORTICULTURE MISSION MINISTRY OF AGRICULTURE DEPARTMENT OF AGRICULTURE & COOPERATION KRISHI BHAWAN, NEW DELHI

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#### <u>Report of the Joint Inspection Team (JIT) of National Horticulture</u> <u>Mission on its inspection visit to Gujarat during October, 2010</u>

#### **Introduction**

The Joint Inspection Team (JIT) of National Horticulture Mission (NHM) comprising of the following members visited Gujarat State during 3rd, October to  $7^{th}$  October, 2010 to review the progress of implementation of the NHM programme in the State:

Dr. B. S. Negi	Deputy Commissioner (NHM), Ministry of Agriculture, New Delhi			
Dr. L.R. Verma	Professor & Head, Department of Horticulture, SK Agriculture University, Banaskantha			
Dr Tamil Selvan,	Director, Arecanut and Spices Development , Calicut			
Dr R. G Patil	Professor and Principal Investigator, Precision Farming Development Centre(PFDC), Gujarat Agriculture University, Navsari			
Shri S. S Ganvit	Joint Director (Horticulture), Vadodra, Gujarat			

The JIT visited Navsari, Valsad and Surat districts of south Gujarat along with the field level officers of concerned districts. Before commencement of the visit, preliminary discussions were held at Navsari for briefing the members about the objective of the visit and the methodology to be adopted. A set of Proforma developed by the Department of Agriculture and Cooperation (DAC) for the use of JIT was provided to the SHM representative for providing required information.

#### Horticulture in Gujarat

State has achieved considerable growth rate in horticulture during last five years because of serious efforts made by the State Govt. The area & production of horticulture crop was 5.89 lakh ha (5 % of total cropped area) & 59.49 lakh tons in 1998-1999 which increased upto 13.12 lakh ha. & 138.04 lakh tons respectively in 2008-09. State has strong cooperative credit & marketing structure, along with 213 cold storages having 9.50 lakh MT storage capacities, 42 fruit & vegetable cooperative marketing societies and 197 Agriculture Produce Market Committees (APMCs) are dealing with selling & buying of horticulture produce in the State.

Agriculture Export Zones (AEZs) for dehydrated onion and for fruits & vegetables have been established, which will be the back bone to boost horticultural development in the State. Gujarat is having ample potential to export various horticultural produce. The main produces are fresh fruits which includes Mangoes (Kesar and Alphonso), Sapota, Aonla and Dates (khalal). The vegetables viz. okra, beans, bitter gourd, onion fresh as well as flacks and powder, garlic powder and gourds. The spices viz. cumin, fennel and garlic also have potential for export.

In floriculture, major flowers grown in the State are Roses (Deshi & Hybrid), Lily, Marigold, Jasmine & Tuberose. Flowers like carnation, gerbera & rose are also cultivated by using Hi-tech Green house technology in some of the districts. Isabgol Aloevera, Senna, Gugal, Safed musali, Ashvagandha, Kadu-kariyatu, Kaucha, and kalmegh etc. are also being cultivated in the different parts of the State. But the assured market is the major constraints for the development of these crops. However, Isabgol has now found the way to the world market.

Dehydrated vegetables, canned vegetables, Mango Pulp, Juices, Pickles -Chuteny (Sauce) & Ketchup are the important processed products of the State. Onion dehydration industry of the State is biggest in the country & it comprises 80% of total onion dehydration units, which process nearly one lakh ton onion and one lakh ton fruits and vegetables annually. Nearly half of the produce is being exported. Approximately 0.10 lakh ton of Isabgol husk is processed and 0.06 lakh ton of husk is exported to various countries. Mango, Banana, Guava, Sapota, Papaya, Potato, Onion, Garlic, Cumin, Fennel, & Isabgol are the focused crops for the value addition.

Grapes, cashew, medicinal & aromatic crops like Aloe Vera, Palmarosa are emerging as a new potential crops in suitable areas of the State. Investment in Greenhouses, floriculture & medicinal plant projects, tissue culture units, fruit & vegetable processing units has been initiated in the State which show shining future of horticulture sector in the State. Details of Area, production, value shown of State and its leading production of Horticulture crops in the State is given in the Table I to Table 4.

#### Table – 1: Details of Area, Production & Value of Horticulture Crops during X Plan Period.

Sr.	Year	Area	Production	Value	Value
No.	i cui	Aica	rioduction	Value	Growth
NO.					
					Rate%
1	2001-02	6.91	60.98	3368	
2	2002-03	7.54	67.16	3577	6.20
3	2003-04	9.47	85.44	4840	35.30
4	2004-05	9.69	93.48	5376	11.07
5	2005-06	11.03	115.46	6485	20.62
6	2006-07	11.24	121.04	7737	19.30
Cum	ulative Growth	10.5	14.4	15.6	18.50 Avg.
Rate	(CGR) %				

Area in lakh ha Production in lakh MT Value in Rs (rore)

#### Table – 2: Details of Area, Production & Value of Horticulture Crops during XI Plan period.

	(Area in lakh ha, Production in lakh t, Value in Rs. Crore)						
Sr. No.	Year	Area	Production	Value	Value Growth Rate %		
1	2007-08	12.46	144.74	9871	27.58		
2	2008-09	13.12	138.04	10500	7.67		

(Area in Jakh ha, Broduction in Jakh t, Value in Bc, Crore)

Crop	Production (lakh MT)		Share in %	Rank
	Gujarat	India		
Sapota	2.55	13.08	19.5	3
Onion	14.1	135.65	10.4	3
Lime	3.5	25.72	14	2
Рарауа	7.22	36.38	20	2
Banana	35.72	262.17	13.6	3

Gujarat is enjoying leading position in some of the fruit and vegetable crops in all India productivity rank.

Crop	Productivit	Rank	
	Gujarat	India	
Onion	24.5	16.3	1
Potato	25.4	18.8	1
Banana	58.7	37.0	2
Pomegranate	9.8	7.4	3
Tomato	24.4	18.6	2
Guava	15.4	11.1	3
Lime	9.9	8.1	3
Рарауа	51.1	37.1	3
Sapota	9.6	8.4	5

#### Table- 4: Leading position of Gujarat in major Fruits & Vegetable

(Source: NHB Data Base-2009)

#### **NHM Intervention in Gujarat**

The National Horticulture Mission (NHM) was launched in the State during the year 2005-06 in 10 districts. 5 more districts were added in 2006-07 and 2007-08. At present, NHM is being implemented in 15 potential districts covering 10 important crops of the State viz Mango, Sapota, Aonla, Banana, Papaya, Citrus (Lime), Pomegranate, Date palm, Spices, Aromatic Plants and Flowers.

The year-wise details of funds allocated as per Annual Action Plan, funds released and expenditure incurred during 2005-06 to 2009-10 are given in **Table-5.** 

#### Table- 5: Details of funds provided to SHM, Gujarat

			(Rs. in crore)
Year	Sanctioned	Release	Exp.(GOI
	AAP (GOI)	GOI	share)
2005-06	68.44	32.39	9.44
2006-07	87.96	25.77	27.85
2007-08	69.18	19.54	36.38
2008-09	85.00	35.32	35.58
2009-10	63.75	25.21	34.22
Total	437.23	138.23	143.47

Out of Rs. 138.23 crore released by the DAC, the SHM has incurred an expenditure of Rs. 143.47 crore so far. The component wise details of expenditure incurred during 2005-06 to 2009-10 are given in **Table-6**.

## Table-6: Component wise details of progress under NHM in Gujarat during2005-06 to 2009-10.

SI.		Component	Phy	Physical		nancial
No.			(Ha/No.)		(Rs.	in Lakh)
			Target	Achmt	Release	Expenditure
1	Nursery		44	23	205.78	198.28
2	Establish Garden	nment of New	163307	106378	16694.03	9342.88
3	Rejuven	ation	4034	605.10	545.57	62.05
4	Commu	nity Tanks		445	2247.87	2224.61
5	Protecte	d Cultivation	857	629.63	215.64	137.29
6	Promotio	on of INM/IPM	18113	20753	428.73	435.53
7	IPM infrastructure		11	7	259.86	227.51
8	Organic Farming		728	1001.16	136.27	159.91
9	Pollination Support to Bee Keeping		1750	520	13.1	4.16
10	Technolo through	ogy Dissemination FLD (No)	5	5	17.27	17.27
11	Post Har	vest Management				
	(a)	pack houses	2	2	11.075	11.075
	(b)	cold storages	32	32	1601.92	1601.92
	(c)	MA storage	1	1	113	113
	(d)	ref van	1	1	10.57	10.57
	(e)	mobile/primary processing units	4	4	17.05	17.05
	(f) ripening chambers		4	4	58.44	58.44
	Sub	total				
12	Rural Ma	arket	1	1	3.75	3.75

#### **Planting Material Scenario**

The SHM have indicated that they have sufficient planting material for establishment new gardens during 2010-11. The total requirement of planting material required for establishing new gardens and gap filling is being produced from the nurseries under the public sector and private sector and there is no shortage. There are 29 no of fruit nurseries in public sector and 289 nos. of nurseries in private sector in Gujarat State. Sufficient planting material is available in the State. Voluntarily certification of fruits grafts scheme is being implemented in

the State by the Department of Horticulture. No central purchase system of planting material is under taken by the SHM in the State. Farmers are purchasing from the surrounding and near by fruit nurseries at district level for establishment of new gardens. The District Mission Committee needs to ensure that necessary quality of the nursery, supply of planting material checks are under taken by the experts, so that further get the quality material. The details of availability of planting material are given in **Table-7**.

Table – 7:	Requirement	Availability	of planting	material	for fruit	crops in
Gujarat.						

Сгор	Area Propose d in 2010-11	Requirement planting material	Availability of planting material during 2010-11		Excess/ Deficit lakh no.
Perennial Fruits	3750	Grafts	11.00 lakh	Grafts	33.87 lakh
		Plants	5.00 lakh	Plants	50.36 lakh
Non Perennial Fruits (Banana and Papaya)	3350	T.C. Plants	71.00 lakh (Banana) 25.00lakh (Papaya)	T.C. Plants	250.00 lakh

#### Area Expansion

The year wise detail of physical and financial progress under establishment of new gardens is given in **Table-8**.

 Table-8: Coverage under New Gardens

(Area in ha and Rs. in lakh)

Year	Tai	rget	Achievement		
	Physical	Financial	Physical	Financial	
2005-06	24383	2718.35	11591	843.88	
2006-07	14961	1795.41	19935	1979.55	
2007-08	11616	1011.12	24389	2572.95	
2008-09	19976	1792.41	24392	2163.05	
2009-10	22700	1784.50	19797	1344.35	
2010-11	11328	1261.98	7901	541.75	
Total	104964	10363.77	108005	9445.53	

The programme for establishment of new gardens is being taken up in identified clusters, for which assistance is being provided to the farmers. As per NHM norms, the assistance for area expansion was provided @75% of cost subject to a maximum of Rs. 22500/- per ha for perennial crops and @50% of cost ,subject to maximum of Rs. 15000/- per ha in the case of non perennial crops, which was disbursed in three installments in the ratio of 50:20:30 in the first, second and third year respectively depending upon the desired survival percentage. From 2010-11,

the cost norms and pattern of assistance has been revised and assistance is being provided ranging from 50% to 75%5 of cost depending upon the crop(cost intensive and normal spacing).

#### **Rejuvenation**

The year wise detail of physical and financial progress under rejuvenation of old and senile orchards is given in **Table-9**.

Table-9:	Rejuvenation programme undertaken in the State (area in ha, Rs.
in lakh)	

Year	Target		Achievement	
	Physical	Financial	Physical	Financial
	(Hectare)	(Rs. in	(Hectare)	(Rs. in
		Lakhs)		Lakhs)
2005-06	500	75.00	0	0
2006-07	1550	232.50	8.00	1.20
2007-08	1334	200.10	136.95	20.54
2008-09	500	75.00	209.73	23.11
2009-10	150	22.50	190.89	22.20
2010-11	2000	300.00	243.13	27.01
(Up to Aug- 2010)				

#### **Community Tanks**

Construction of community tanks is a major attraction among the farmers of Gujarat. Since the State has been experiencing frequent spell of droughts, the community tanks come in handy for providing supplemental irrigation. As per the NHM norms, assistance @Rs. 10.00 lakh is available for constructing a community tank, which has the capacity to provide irrigation to 10 ha of land.

As many as 550 community tanks have been constructed in the State under NHM during last 5 years. The Micro Irrigation programme is compulsorily linked with the tanks.

#### Post Harvest Management

#### Pack Houses

The State is lacking in the construction of Pack houses. The available assistance under NHM is 50% of the cost subject to a maximum of Rs. 1.5 lakh per unit. So far, only two pack houses have been constructed under NHM, out of which one is integrated pack house with ripening chamber. SHM needs to play a proactive role in mobilizing the farmers for this important PHM component.

#### **Cold Storages**

Though not much afford has been made for construction of cold storages under NHM, however, so far, under NHM, 32 cold storages and one modified atmosphere storage unit has been sanctioned in the State during 2005-06 to 2009-10, which have been completed.

As per the information provided by the SHM, at present 213 cold storages with 9.50 MT storages capacity are available in the State. However, much more needs to be done in this area to reduce post harvest losses.

#### **Other PHM projects**

During last 5 years, project for only one ref. van has been sanctioned to the State. Besides, 4 primary processing units for horticulture produce have been sanctioned to the State, which have been set up. One more primary processing unit has been sanctioned in 2010-11. During 2009-10, 4 Ripening chambers were sanctioned and have been completed. During 2010-11, 5 more ripening chambers have been sanctioned.SHM needs to play a pro active role in mobilizing the entrepreneur for setting up of more such units.

#### **Market Infrastructure**

Marketing is one of the important components in the NHM scheme. However, so far, only one rural market has been sanctioned in the private sector for the State. The proposal for one wholesale market at Jamnagar is in the pipeline. This project has been approved in principle by the Executive Committee (EC) of NHM. However, required Bank loan has not been ensured for the project. Only one Rural market was sanctioned during 2007-08 in private sector and completed. As per the information provided by the SHM, at present 42 Fruits and Vegetable Cooperative Marketing Society and 197 Agriculture Produce Market Committees exists in the State, which are dealing with the selling and buying in the horticulture produce. However, SHM needs to ensure that the proposed horticulture clusters are linked with the existing infrastructure for PHM and marketing including AEZ, Food Parks and similar facilities set up by the private sector.

Details of various project activities taken up under NHM during 2005-06 to 2009-10 are given at **Annexure.** 

## <u>FIELD VISIT</u> NAVSARI DISTRICT

Navsari District is well known for Horticulture Fruit crops. Main fruits are mango, sapota and banana. Besides, large area is under vegetables and floriculture. Navsari is endowed with fertile land, well developed irrigation facility, good rain, well co-operative infrastructure etc. Farmers of the districts are very progressive. Presence of Agriculture University has an added advantage to the farmers. The Navsari district was included under NHM during 2005-06.

A total cultivable land is 1, 46,966 hectare, out of which 63,099 hectare area is under irrigation. Main source of irrigation is through canals, and tube wells.

Horticulture area since last three years in the district is here under:

#### DETAILS OF NAVSARI DISTRICT "HORTICULTURE SCENARIO"

SR. NO.	DETAILS OF DISTRICT	AREA/NO.
1.	Total Cultivated Area in Hectare	146966
2.	Irrigation Area covered in Hectare	63099
3.	Total Land holding Families	94777
(a)	Marginal Farmers (No.)	54600
(b)	Small Farmers (No.)	18880
(c)	Scheduled Tribe (%)	32
(d)	Scheduled cast (%)	3
4.	Main Agriculture crops	Paddy, Sugarcane
5.	Horticulture crops	Year 2009-10
Α.	Fruits crops	Hectare
	1. Mango (ha)	19060
	2. Sapota (ha)	5880
	3. Banana (ha)	450
	4. Coconut (ha)	350
	5. Papaya & others fruits crops (ha)	205
В.	Vegetables (Kharif, Rabi, Summer) (ha)	9661
C.	Spices (Chillies, Ginger, Turmeric) (ha)	320
D.	Floriculture crops	1309
	(Rose, Marigold, Spider Lilly) (ha)	
Ε.	Aromatic & Medicinal Crops (ha)	30
	Total Horticulture Crops in Hectare	37,345

On 04.10.2010, team first visited State Agricultural University, Navsari. Following projects were visited by the Team:

#### Navsari Agriculture University

#### 1. Model Nursery

#### i. Name and address of Beneficiary

Regional Horticultural Research Station, ASPEE College of Horticulture and Forestry, Navsari Agricultural University, Navsari.

## ii. Year of implementation

2005-06

#### iii. Components.

Green house, net house, mist chamber, mother block,

#### iv. Irrigation Facility

Micro irrigation (Drip, Sprinkler)

## v. Total amount of subsidy assistance due to the beneficiary as

18.00 lakh



2. Model Nursery (ornamental) Floriculture and Landscaping

ASPEE College of Horticulture and Forestry, NAU, Navsari



i. Year of implementation

2006-07

## ii. Components.

Green house, Net house, Shed net house for Heliconia, Tunnels, Polyhouse, Propagation unit, Shades for succulent plants, mist chamber, mother block

## iii. Irrigation Facility

Micro irrigation (Drip, Sprinkler)

## iv. Total amount of subsidy assistance due to the beneficiary as 18.00 lakh

## 3. Model Nursery for Medicinal and Aromatic Plants

ASPEE College of Horticulture and Forestry,



NAU, Navsari

- i. Year of implementation 2008-09
- ii. Components.

Green house, net house, mist chamber, mother block,

iii. Irrigation Facility

Micro irrigation (Drip, Sprinkler)

iv. Total amount of subsidy assistance due to the beneficiary as

18.00 lakh



4. Name and address of Beneficiary whose field visited:

Balvantbhai Bhikhabhai Patel Sukhai Ta. Chikli, Navsari.

- i. Crop Cluster under which covered Mango
- ii. Total land available with the beneficiary (ha.)2:35:40 ha
- iii. Name and Variety of crop plantedMango, Kesar
- iv. Source of planting material Grafted plants from approved Nursery
- v. Number of plants planted and spacing 190 (10 m x10 m)
- vi. Date of planting 2008-09
- vii. Number of plants which survived (also indicate percentage survival). 175 (92 %)
- viii. Total amount of subsidy assistance due to the beneficiary as

Rs 6725/- (First year Rs. 4819, Second year Rs.1906)

#### ix. Amount of paid and date of payment

Rs 4819 (Feb' 2009) Rs. 1906 (Sept'09)

x. Mode of payment

Cheque

xi. Source of irrigation water (Bore well/Tube well/ Canal)

Bore well

## xii. Whether Drip/Sprinkler system in use.

Drip

xiii. Other inputs provided

No

xiv. Whether assistance availed for organic farming.

No

xv. If, so area covered.

N.A.

xvi. Assistance availed.

nil

xvii. Available marketing facility for the crop.

Easily Marketable at Local Market

xviii. Other infrastructure available in the vicinity.

Co-operative Society, local market, ripening chamber

#### xix. General upkeep of the plot:

Very good

#### xx. Any other relevant observation by the JIT

5. Name and address of Beneficiary whose field visited:

Amrutbhai Bhikhabhai Patel Sukhai Ta. Chikli, Navsari.

i. Total land available with the beneficiary (ha.)3.15 ha

# ii. Crop Cluster under which covered Mango.



- iii. Name and Variety of crop planted Mango Kesar variety.
- iv. Source of planting material Grafted plants from reputed approved nursery
- v. Number of plants planted and spacing 211 (10 m x 10 m)
  - vi. Date of planting.

July 2008

- vii. Number of plants which survived (also indicate percentage survival).202 (95 %)
- viii. Total amount of subsidy assistance due to the beneficiary as(Rs.) Rs 9303

#### ix. Amount of paid and date of payment

First installment: Rs 6647 Feb- 2009,

x. Mode of payment

Cheque

xi. Source of irrigation water (Bore well/Tube well/ Canal)

Bore well

xii. Whether Drip/Sprinkler system in use.

Drip

xiii. Other inputs provided

No

xiv. Whether assistance availed for organic farming.

No

#### xv. If, so area covered.

N.A.

#### xvi. Assistance availed.

nil

xvii. Available marketing facility for the crop.

Local Market available

## xviii. Other infrastructure available in the vicinity.

Ripening Chamber, Co-operative Societies

#### xix. General upkeep of the plot:

Very good

#### xx. Any other relevant observation by the JIT

#### 6. Name and address of Beneficiary whose field visited:

Chhotubhai Kanjibhai Patel Sukhai Ta. Chikli, Navsari.

- i. Total land available with the beneficiary (ha.)3:64:07 ha
- ii. Crop Cluster under which covered Mango.
- iii. Name and Variety of crop planted Mango Kesar.
- iv. Source of planting materialGrafted plants from reputed nursery
- v. Number of plants planted and spacing 523 (10 m x 10 m)
- vi. Date of planting.

August 2008

vii. Number of plants which survived (also indicate percentage survival). 498 (95 %)

viii. Total amount of subsidy assistance due to the beneficiary as (Rs.) Rs 13609/-

ix. Amount of paid and date of payment

First installment :	Rs 9734 Feb- 2009,
Second installment:	Rs. 3875 Sep-2009

#### x. Mode of payment

Cheque

xi. Source of irrigation water (Bore well/Tube well/ Canal)

Bore well

xii. Whether Drip/Sprinkler system in use.

No

xiii. Other inputs provided

No

xiv. Whether assistance availed for organic farming.

No

#### xv. If, so area covered.

N.A.

xvi. Assistance availed.

nil

#### xvii. Available marketing facility for the crop.

Local Market available

#### xviii. Other infrastructure available in the vicinity.

Ripening Chamber, Co-operative Societies

#### xix. General upkeep of the plot:

Very good.

#### xx. Any other relevant observation by the JIT

#### 7. Name and address of Beneficiary whose field visited:

Thakorbhia Sukhabhai Patel Sukhai Ta. Chikli, Navsari.

- i. Total land available with the beneficiary (ha.)2:90:52 ha
- ii. Crop Cluster under which covered Mango.

iii. Name and Variety of crop planted
Mango, Alphanso.
iv. Source of planting material
Grafted plants from reputed nursery
v. Number of plants planted and spacing
640 (10 m x 10 m)
vi. Date of planting.
July, 2008
vii. Number of plants which survived (also indicate percentage
<b>survival).</b> 615 (96 %)
viii. Total amount of subsidy assistance due to the beneficiary as
(Rs.)
Rs 17560/-
ix. Amount of paid and date of payment
First installment : Rs 12560 Feb- 2009,
Second installment: Rs. 5000 Sep-2009
Total : Rs. 17560/-
x. Mode of payment
Cheque
xi. Source of irrigation water (Bore well/Tube well/ Canal)
Bore well
xii. Whether Drip/Sprinkler system in use.
No
xiii. Other inputs provided
No
xiv. Whether assistance availed for organic farming.
No
xv. If, so area covered.
N.A.
xvi. Assistance availed.
nil
xvii. Available marketing facility for the crop.
Local
xviii. Other infrastructure available in the vicinity.
xix. General upkeep of the plot:
Very Good



#### 8. Name and address of Beneficiary whose field visited:

Jhaverbhai Kalabhai Patel Gandevi Ta. Gandevi, Navsari.

- i. Total land available with the beneficiary (ha.)5:71:62 ha
- ii. Crop Cluster under which covered Gerbera in 1008 Sqm area
- iii. Name and Variety of crop plantedGerbera in Green house
- iv. Source of planting material Tissue culture from K. F. Biotech
- v. Number of plants planted and spacing 6683
- vi. Date of planting.

September, 2010

vii. Number of plants which survived (also indicate percentage survival).

95% (Replanting done)

viii. Total amount of subsidy assistance due to the beneficiary as(Rs.) Rs 467500/-

#### ix. Amount of paid and date of payment

Rs 467500/- Oct, 2010

x. Mode of payment

Cheque

xi. Source of irrigation water (Bore well/Tube well/ Canal)

Bore well

xii. Whether Drip/Sprinkler system in use.

Drip irrigation

#### xiii. Other inputs provided

No

xiv. Whether assistance availed for organic farming.

No

xv. If, so area covered. N.A.



xvi. Assistance availed.

nil

xvii. Available marketing facility for the crop.

Local market

- xviii. Other infrastructure available in the vicinity.
- xix. General upkeep of the plot:

Very good

xx. Any other relevant observation by the JIT

#### 9. Model Nursery Pvt.

Name and address of Beneficiary whose field visited:
 Samirbhai Anilbhai Vashi
 Ambeti Ta. Gandevi, Navsari



# ii. Year of implementation 2006-07

#### iii. Components.

Green house, net house, mist chamber, mother block

#### iv. Irrigation Facility

Micro irrigation (Drip, Sprinkler)

## v Total Project Cost:

Rs. 14.30 lakh

vi. Total amount of subsidy assistance due to the beneficiary as Rs 7.70 lakh

First installment : Rs 385000,

- Second installment: Rs. 385000
- vi. Name and Variety of crop planted

Fruit crops - mango

sapota

## **10.** Processing Unit Funded by NHB

## i. Name & Location :

Patson Foods (India) Pvt. Ltd. supported by NHB Sisodra, Navsari.

## ii. Project Cost /Amount Released by DAC/ Expenditure incurred

Project Cost : Rs. 265 Lakh Amount Released by NHB : Rs. 25.00 Lakh (First installment 2006 & second installment in 2008)



## iii. Commodity

Fruit pulp, fruit slice in sugar syrup, pickles, chutneys, canned vegetables, tomato products, Pastes, sauces, jams and jellies.

## iv. Condition of infrastructure

Very Good

v.	Wheth	ner NHB	Logo d	displayed	- Yes

Whether funds disbursed to Agency - Yes

## **11. Processing Unit Funded by NHM**

i. Name & Location :

Name: Ajitaben Sanjaybhai Nayak,

Gandevi Ta. Gandevi

District: Navsari

## ii. Project Cost / Amount Released by DAC/ Expenditure incurred

Project Cost:	Rs. 50.36 Lakh (2007-08)
Amount Released by DAC:	Rs. 7.99 Lakh

## iii. Capacity of unit

10 tonnes/day

iv. Commodity

Frozen Products, Mango pulp, Guava pulp, Jamun pulp, etc.

- v. Condition of infrastructure Very Good
- vi. Whether NHM Logo displayed Yes
- vi. Whether funds disbursed to Agency Yes
- **12.** Ripening Chamber
  - i. Name & Location :

Name: Kanayyalal Pokardas Hirani, APMC, Viraval, District: Navsari



ii. Project Cost / Amount Released by DAC/ Expenditure incurred

:

Rs. 78.22 Lakh (2010-

	11)		
iv.	Amount Released by DAC	:	Rs. 23.06 Lakh (under process)
ν.	Capacity of unit	:	90 ton
vi.	Commodity		:Banana

- vii. Condition of infrastructure : Very good
- viii. Whether NHM Logo displayed: Yes
- ix. Whether funds disbursed to Agency: Not yet

## 13. Grading and Collection Centre

#### i. Name & Location :

**Project Cost** 

iii.

Name: Kharel Vibhag Vivida Karyakari Sahkari Mandali Itd, Kharel, Ta. Gandevi, District: Navsari





- ii. Project Cost / Amount Released by DAC/ Expenditure incurred
- iii.Project Cost:Rs. 19.37 Lakh (2010-11)iv.Amount Released by DAC:Rs. 8.25 Lakh (under process)
- v. Capacity of unit : 10 tonnes/hr
- vi. **Commodity** : Chiku (sapota)
- vii. Condition of infrastructure : Good
- viii. Whether NHM Logo displayed: Yes
- ix. Whether funds disbursed to Agency: Not yet

#### Main Observations of JIT

- 1. There is sufficient potential in Navsari District for area expansion of various horticulture crops especially mango, banana and other activities like setting up of nurseries, construction of community water tanks, post harvest management and marketing. In the district all the major activities have been taken up.
- 2. Out of 13 projects visited by team, 12 were funded under NHM and 1 project was funded by NHB. No programme of NBM and CDB was implemented in the

district. The programme of Micro irrigation was linked with area expansion of NHM.

- 3. The Navsari Agriculture University has implemented18 projects under NHM from 2006-07 to 2008-09. Out of which 13 projects are implemented in the main campus and 5 off campus. Out of these 5 programmes relates to training, seminar, workshop, 2 projects on rehabilitation of existing tissue culture lab, 7 nurseries (4 small and 3 model), 1 leaf tissue analysis lab and 2 plants health clinic, 1 project on creation of water resources at University campus was also implemented during 2007-08. This activity is basically meant for farmers as community water tank. It is not understood how this activity was implemented by University. The clarification needs to be given by the SHM. During the visit, only projects on model nursery of fruits & vegetables, flowers, aromatic & medicinal plants and tissue culture lab were seen, which were found in good condition. Team also met Director of Research and other Principal Investigators of the projects being implemented by the University. University should focus on development of new varieties of various horticulture crops suitable for the different agro-ecological region of the State and can take up the programmes of front line demonstrations in University farms as well as farmer's field. Vegetable seed production programme can also be taken up by the University. University should collaborate with the SHM for providing the technical back stopping for effective implementation of NHM programme in the State.
- 4. The quality of implementation of the programme at field level is satisfactory and beneficiaries are appreciable of the programme activities.
- 5. There is need for construction of community water tanks/ponds in the district to tap the rain water and also link these structures with permanent water source wherever feasible to make the water available for horticulture crops in the lean period. These community tanks/ponds could be constructed under NHM or under MNREGS and funds for lining could be availed under NHM for the tanks constructed under MNREGS. These tanks should invariably be linked with Micro Irrigation programme for horticulture crops.
- 6. Keeping in view the vast area under horticulture crops in the district and additional area being brought under cultivation in NHM, there is a good scope for setting up of PHM and marketing infrastructure in the district. Though, during last two years quit a few projects of cold storages and ripening chambers have come up in the district, District Mission Committee (DMC) needs to play a pro active role in mobilizing the farmers/entrepreneurs, towards these activities.
- 7. In the farmer's field, sign board along with NHM logo was not seen in many places. The DMC needs to ensure that proper sign boards are erected at each site. Deputy Director (Horticulture) of the district has assured to put the sign board at each project site.
- 8. The training of farmers on various aspect of horticulture needs to be conducted by involving SAU, KVKs and ATMA.

#### VALSAD DISTRICT

Valsad district is well known for Alphanso Mango. Farmers are very progressive, and are mango crop growers since long. Agro-climatic condition of the district is suitable for Mango, Sapota, and vegetable crops. Out of total cultivated area of 1.63 lakh ha, 45365 ha is under horticulture crop. Therefore, this district is known as horticulture hub in the state.

S. No.	DETAIL OF DISTRICT	AREA/No.
1.	Total Cultivated Area (ha)	163419
2.	Irrigation Area covered (ha)	58051
3.	Total Land holding Families (No.)	96728
(a)	Marginal Farmers (No.)	54753
(b)	Small Farmers (No.)	19418
(c)	Scheduled Tribe (No.)	53470
(d)	Scheduled cast (No.)	3280
(e)	Normal (Big) (No.)	22555
4.	Main Agriculture crops	Paddy, Sugarcane
5.	Horticulture crops	
Α.	Fruits crops	
	1. Mango (ha)	25410
	2. Sapota (ha)	3223
	3. Banana (ha)	630
	4. Coconut (ha)	2865
	5. Papaya & others fruits crops (ha)	2490
В.	Vegetables (Kharif, Rabi, Summer) (ha)	7229
с.	Spices (Chillies, Ginger, Turmeric) (ha)	177
D.	Floriculture crops (ha)	116
	(Rose, Marigold, Spider Lilly)	
Е.	Aromatic & Medicinal Crops (ha)	30
	Total Horticulture Crops in Hectare	45,365

#### DETAIL OF VALSAD DISTRICT "HORTICULTURE SCENARIO"

#### **Rejuvenation**

#### 1. Name and address of Beneficiary whose field visited:

Shri Rajeshbhai Ratanchand Shah

Kalgam, Fansa, Ta Umargam,

Valsad.

- i. Total land available with the beneficiary (ha.): 4 ha
- ii. Crop Cluster under which covered: Mango.
- iii. Name and Variety of crop planted: Mango (Alphanso)

iv. Source of planting material : Grafted plants from approvedNursery

v. Number of plants rejuvenated : 200 in 2 ha area

vi. Date of rejuvenated : June, 2006

vii. Number of plants which survived after rejuvenation (also indicate percentage survival): 100 %

viii. Amount of paid and date of payment : Rs 30000/- Feb 2007

- ix. Mode of payment : Cheque
- x.
   Source of irrigation water (Bore well/Tube well/ Canal)

   Bore well
- xi. Whether Drip/Sprinkler system in use. Drip



xii. Other inputs provided

No

xiii. Whether assistance availed for organic farming.

No

xiv. 19. If, so area covered.

N.A.

xv. Assistance availed.

nil

#### xvi. Available marketing facility for the crop.

Easily Marketable at Local Market and also sent to Mumbai

#### xvii. Other infrastructure available in the vicinity.

Co-operative Society, local market, Ripening chamber, Cold Storage

#### xviii. General upkeep of the plot:

Very good

#### **Rejuvenation**

#### 2. Name and address of Beneficiary whose field visited:

Shri Ratanchand Maganlal Shah Kalgam, Fansa, Ta Umargam, Valsad.

- i. Total land available with the beneficiary (ha.)4 ha
- ii. Crop Cluster under which covered Mango.

#### iii. Name and Variety of crop planted

Mango (Alphanso)



- iv. Sources of planting material Grafted plants
- v. Number of plants rejuvenated 200 in 2.0 ha area
- vi. Date of rejuvenated

June, 2006

vii. Number of plants which survived after rejuvenation (also indicate percentage survival).

100 %

#### viii. Total amount of subsidy assistance due to the beneficiary :

Rs 30000/-

#### ix. Amount of paid and date of payment

Rs 30000/- Feb -2007

#### x. Mode of payment

Cheque

xi. Source of irrigation water (Bore well/Tube well/ Canal)

Bore well

#### xii. Whether Drip/Sprinkler system in use.

Drip

#### xiii. Other inputs provided

No

xiv. Whether assistance availed for organic farming.

No

#### xv. If, so area covered.

N.A.

#### xvi. Assistance availed.

nil

#### xvii. Available marketing facility for the crop.

Easily Marketable at Local Market

#### xviii. Other infrastructure available in the vicinity.

Co-operative society, local market, Ripening chamber and cold storage

## xix. General upkeep of the plot:

Very good

#### Area Expansion

#### 3. Name and address of Beneficiary whose field visited:

Shri Yamunaben Ratanchand Shah

Kalgam, Fansa, Ta Umargam,

Valsad.

#### i. Total land available with the beneficiary (ha.)

4 ha

## ii. Crop Cluster under which covered

Mango.

## iii. Name and Variety of crop planted

Mango (Alphanso)

#### iv. Sources of planting material

Grafted plants

#### v. Number of plants rejuvenated

200 in 2 ha area

#### vi. Date of rejuvenated

2006-07

vii. Number of plants which survived after rejuvenation (also indicate percentage survival).

100 %

#### viii. Total amount of subsidy assistance due to the beneficiary:

Rs 30000/-

#### ix. Amount of paid and date of payment

Rs 30000/-

### x. Mode of payment

Cheque

#### xi. Source of irrigation water (Bore well/Tube well/ Canal)

Bore well

#### xii. Whether Drip/Sprinkler system in use.

Drip

#### xiii. Other inputs provided

No

#### xiv. Whether assistance availed for organic farming.

No

#### xv. If, so area covered.

N.A.

#### xvi. Assistance availed.

nil

#### xvii. Available marketing facility for the crop.

Easily Marketable at Local Market

#### xviii. Other infrastructure available in the vicinity.

Co-operative society, local market, Ripening chamber, cold storage

#### xix. General upkeep of the plot:

Very good

#### Area Expansion

4. Name and address of Beneficiary whose field visited:

Shri Rajeshbhai Ratanchand Shah

Kalgam, Fansa, Ta Umargam,

Valsad.

#### i. Total land available with the beneficiary (ha.)

29

4 hac

## ii. Crop Cluster under which covered

## Mango.

#### iii. Name and Variety of crop planted

Mango (Kesar)



iv. Source of planting material

Grafted plants from approved Nursery

v. Number of plants planted and spacing

160 (m x m)

vi. Date of planting

August - 2010

- vii. Number of plants which survived (also indicate percentage survival). 156 (99%)
- viii. Total amount of subsidy assistance due to the beneficiary as Rs 25168/-

#### ix. Amount of paid and date of payment

- Rs. 12568/- Feb-2008
- Rs. 5000/- Aug-2008
- Rs. 7600/- July -2009

#### x. Mode of payment

Cheque

- xi. Source of irrigation water (Bore well/Tube well/ Canal) Bore well
- xii. Whether Drip/Sprinkler system in use.

Drip

xiii. Other inputs provided

No

xiv. Whether assistance availed for organic farming.

No

#### xv. If, so area covered.

N.A.

## xvi. Assistance availed.

nil

## xvii. Available marketing facility for the crop.

Easily Marketable at Local Market

## xviii. Other infrastructure available in the vicinity.

Co-operative society, local market, Ripening chamber, cold storage

## xix. General upkeep of the plot:

Very good

## Area Expansion

## 5. Name and address of Beneficiary whose field visited:

Shri Ratanchand Maganlal Shah

Kalgam, Fansa, Ta Umargam,

Valsad.

## i. Total land available with the beneficiary (ha.)

4 ha

# ii. Crop Cluster under which covered Mango.

iv. Name and Variety of crop planted

Mango (Kesar)

v. Sources of planting material

Grafted plants from reputed and approved nursery

vi. Number of plants planted and spacing

163 (m x m)

vii. Date of planting/rejuvenated

August -2007

- viii. Number of plants which survived (also indicate percentage survival). 99 %
- ix. Total amount of subsidy assistance due to the beneficiary as

Rs 12610/-	Feb-2008
Rs. 5000/-	Aug-2008
Rs. 7600/-	July-2009

x. Amount of paid and date of payment

Rs 12610/-

xi. Mode of payment

Cheque

xii. Source of irrigation water (Bore well/Tube well/ Canal)

Bore well

xiii. Whether Drip/Sprinkler system in use.

Drip

xiv. Other inputs provided

No

xv. Whether assistance availed for organic farming.

No

xvi. If, so area covered.

N.A.

xvii. Assistance availed.

nil

#### xviii. Available marketing facility for the crop.

Easily Marketable at Local Market

#### xix. Other infrastructure available in the vicinity.

Co-operative society, local market, Ripening chamber and cold storage

xx. General upkeep of the plot:

Very good

#### Area Expansion

#### 6. Name and address of Beneficiary whose field visited:

Manubhai Dayalji Bhai Patel

Namdha, Ta Pardi,

Valsad.

# a. 2. Total land available with the beneficiary (ha.)

b. 3. Crop Cluster under which covered Mango.

#### ii. Name and Variety of crop planted

Mango (Alphanso)

#### iii. Sources of planting material

Grafted plants from reputed approved nursery

#### iv. Number of plants planted and spacing

260 plants in 2.6 ha area (10 m x 10 m)

#### v. Date of planting/rejuvenated

August 2010

vi. Number of plants which survived (also indicate percentage survival).

vii.	Total amount of subsi	dy assistance due to the beneficiary as
	On process	
viii.		ate of payment: Yet to be paid
	On process	
ix.	Mode of payment	: By Cheque
x.	Source of irrigation w	ater (Bore well/Tube well/ Canal)
	Bore well	
xi.	Whether Drip/Sprinkl	er system in use.
	Drip	
xii.	Other inputs provided	
	No	
xiii.	Whether assistance a	vailed for organic farming.
	No	
xiv.	If, so area covered.	
	N.A.	
XV.	Assistance availed.	
	nil	
xvi.	Available marketing fa	acility for the crop.
	Easily Mark	etable at Local Market
xvii.	Other infrastructure a	vailable in the vicinity.
	Co-operativ	ve society, local market, Ripening chamber and cold
	storage	
xviii.	General upkeep of the	e plot:
	Very good	
	PHM Projects:	Cold Storage
7.	Name & Location :	
	Name: Home Agro Indu	stries Itd.
	Sarigam Ta. Umargam	
	District: Valsad	
i.	Project Cost / Amou	nt Released by DAC/ Expenditure incurred
	Project Cost	: 500.00 Lakh (2010-11)

Amount Released by DAC: 45.00 Lakh (2010-11) Only First installment disbursed

## ii. Capacity of unit

10000 M.tonnes/day

iii. Commodity

Mango, Banana, Potato, Apple, peas, and frozen food (Fruit pulps, peas, okra) etc.

### iv. Condition of infrastructure

Under construction

- v. Whether NHM Logo displayed Yes
- vi. Whether funds disbursed to Agency Yes



#### Main Observations of JIT :

- 1. Valsad district is a major hub for mango, sapota, coconut, papaya and vegetables.
- 2. There is good potential for further increase under these fruits for export as the new port is coming up very near to the district. Lots of post harvest management infrastructure is coming up in the district especially cold storage unit, ripening chambers and processing/value addition units. There is also scope for the setting up of wholesale / terminal markets in the district.
- 3. No programme of NBM and CDB was implemented in the district. The programme of Micro irrigation was linked with area expansion of NHM.
- 4. The quality of implementation of NHM programme at field level has been found satisfactory and beneficiaries have appreciated the programme activities.
- 5. It was also observed that there has been good linkages with the micro irrigation programme and all the orchards are linked with micro irrigation.
- 6. The programme of rejuvenation undertaken by Shri Rajeshbhai Ratanchand Shah was very good. He is very progressive farmer and has been awarded by the State Government. some pruned trees are more than 100 years old, though fruiting is very good (aprox. 140 kg/tree). It can be a good venue for training of farmer for rejuvenation. Farmer has also constructed a pack house/on-farm collection centre. However, he is

yet to receive subsidy under NHM. SHM should release subsidy at the earliest as per NHM norms.

- 7. There is good rainfall in the area, hence there is need for construction of community water tanks/ponds to tap the rain water and also link these structures with permanent water source, wherever feasible to make the water available for horticulture corps in lean period. These community tanks/ponds could be constructed under NHM or under MNREGS and funds for lining could be availed under NHM for the tanks constructed under MNREGS. The community tanks needs to be necessarily linked with Micro Irrigation and horticulture crops.
- 8. Keeping in view the vast area under horticulture crops in the district and additional area being brought under cultivation in NHM, there is good scope for up scaling the PHM and marketing infrastructure in the district. DMC needs to play a pro active role in mobilizing the farmers, entrepreneurs, towards these activities.
- 9. Lots of farmers are doing organic cultivation in the district. The area adopted under organic farming needs to be certified and projects may be submitted under NHM.
- 10. Except few places, the sign board along with NHM logo was not seen in the places visited. The DMC needs to ensure that proper sign board are erected at each site. Deputy Director (Horticulture) of the district has assured to put the sign board at each project site.

#### SURAT DISTRICT

Surat a 'Diamond City' is full of progressive farmers. It has well flourished Textile industry and previously had good belt of cotton growers. Now majority of farmers are doing hi-tech farming, and are growing banana with modern technology. Farmers are growing high value crops with plastic culture technology. There is very good scopes of value addition due to presence of cold storage, ripening chamber and processing units.

SR. NO.	DETAIL OF DISTRICT	AREA/NO.
1.	Total Cultivated Area in Hectare	259574
2.	Irrigation Area covered in Hectare	158000
3.	Total Land holding Families	127790
(a)	Marginal Farmers	46232
(b)	Small Farmers (No.)	35615
(c)	Normal (Big) (No.)	45943
(d)	Scheduled Tribe (%)	35528
(e)	Scheduled cast (%)	3854
4.	Main Agriculture crops	Paddy, Sugarcane
5.	Horticulture crops	
Α.	Fruits crops	
	1. Mango (ha)	7135
	2. Sapota (ha)	2040
	3. Banana (ha)	10815
	4. Coconut (ha)	146
	5. Papaya (ha)	1340
	6. Others fruits crops (ha)	294
В.	Vegetables (Kharif, Rabi, Summer) (ha)	19520
C.	Spices (Chillies, Ginger, Turmeric etc) (ha)	2249
D.	Floriculture crops (ha)	789
	(Rose, Marigold, Spider Lilly etc)	
Е.	Aromatic & Medicinal Crops (ha)	77
	Total Horticulture Crops in Hectare	44405

#### DETAIL OF SURAT DISTRICT "HORTICULTURE SCENARIO"

#### Visit date of JIT Team: 6/10/2010

#### Area Expansion

1. Name and address of Beneficiary whose field visited:

Maganbhai Narotambhai Patel Gotiya, Palsana, Surat

- i. Total land available with the beneficiary (ha.) 2.61ha
- ii. Crop Cluster under which covered Banana
- iii. Name and Variety of crop planted Banana G-9
- iv. Source of planting material

Tissue Culture

v. Number of plants planted and spacing

3100 (1.8 m x 1.8 m)

vi. Date of planting.

June, 2010

vii. Number of plants which survived (also indicate percentage survival).

99 % (replantation done)

viii. Total amount of subsidy assistance due to the beneficiary as (Rs.)

Rs. 31200

ix. Amount of paid and date of payment

Rs. 31200

x. Mode of payment

Cheque

- xi. Source of irrigation water (Bore well/Tube well/ Canal) Bore well
- xii. Whether Drip/Sprinkler system in use.

Drip

xiii. Other inputs provided

Fertilizer, manure, pesticides, IPM/INM

xiv. Whether assistance availed for organic farming.

No

xv. If, so area covered.

N.A.

xvi. Assistance availed.

nil

xvii. Available marketing facility for the crop.

Contract farming

xviii. Other infrastructure available in the vicinity.

Ripening chamber

xix. General upkeep of the plot:

Very good





#### Area Expansion

#### 2. Name and address of Beneficiary whose field visited:

Parimalbhai Balvantbhai

Gotiya, Palsana, Surat

#### i.Total land available with the beneficiary (ha.)

1 ha

#### ii. Crop Cluster under which covered

Banana

#### iii. Name and Variety of crop planted

Banana G-9

#### iv.Source of planting material

Tissue Culture (Ratoon)

#### v.Number of plants planted and spacing

3100 (1.8 m x 1.8 m)

vi.Date of planting.

July, 2009

#### vii.Number of plants which survived (also indicate percentage survival).

99 % (replantation done)

#### viii. Total amount of subsidy assistance due to the beneficiary as (Rs.)

Rs. 7500

#### ix.Amount of paid and date of payment

Rs. 7500

#### x.Mode of payment

Cheque

#### xi.Source of irrigation water (Bore well/Tube well/ Canal)

Bore well

### xii.Whether Drip/Sprinkler system in use.

Drip

#### xiii. Other inputs provided.

Fertilizer, manure, pesticides, IPM/INM





xiv.Whether assistance availed for organic farming.

No

xv. If, so area covered.

N.A.

#### xvi. Assistance availed.

nil

#### xvii.. Available marketing facility for the crop.

Contract farming

#### xviii.. Other infrastructure available in the vicinity.

Ripening chamber

#### xix. General upkeep of the plot:

Very good

#### 3. Name and address of Beneficiary whose field visited:

Shri Laxmi Floritech Laxmiben Sureshbhai Parmar, Tundi, Palsana, Surat

# i. Total land available with the beneficiary (ha.)

#### ii. Crop Cluster under which covered

Green house, Gerbera 1000 s.m.

iii. Name and Variety of crop planted

Gerbera

#### iv. Source of planting material

Tissue Culture from reputed company (K.F. biotech)

#### v. Number of plants planted and spacing

5455 ( )

#### vi. Date of planting.

September 2010

## vii. Number of plants which survived (also indicate percentage survival).

99 % (replantation done)

## viii. Total amount of subsidy assistance due to the beneficiary

Rs. 467500

#### ix. Amount of paid and date of payment

Rs. 467500

#### x. Mode of payment

#### Cheque

- xi. Source of irrigation water (Bore well/Tube well/ Canal) Bore well
- xii. Whether Drip/Sprinkler system in use.

Green house, Drip, sprinkler, foggers.

xiii. Other inputs provided

No Whether assistance availed for organic farming. xiv. No If, so area covered. XV. N.A. Assistance availed. xvi. nil Available marketing facility for the crop. xvii. All over India xviii. Other infrastructure available in the vicinity. Farmers group have Refer- van, cold storage, pre-cooling system General upkeep of the plot: xix. Very good

#### xx. Any other relevant observation by the JIT

Progressive Farmer, Member of Floriculture group for easy marketing



## 4. Name and address of Beneficiary whose field visited:

Ramdev Floritech

Dahyabhai Somabhai Parmar,

Tundi, Palsana, Surat

## i. Total land available with the beneficiary (ha.)

0.21 ha

## ii. Crop Cluster under which covered

Green house, Dutch Rose 1000 sqm

iii. Name and Variety of crop planted

Dutch Rose

iv. Source of planting material

42

v. Number of plants planted and spacing

3500

vi. Date of planting.

2007-08

- vii. Number of plants which survived (also indicate percentage survival). 95 % (replantation done)
- viii. Total amount of subsidy assistance due to the beneficiary as (Rs.) Rs. 325000
  - ix. Amount of paid and date of payment

Rs. 325000

x. Mode of payment

Cheque

- xi. Source of irrigation water (Bore well/Tube well/ Canal) Bore well
- xii. Whether Drip/Sprinkler system in use.

Green house Drip, sprinkler, foggers.

xiii. Other inputs provided

No

xiv. Whether assistance availed for organic farming.

No

xv. If, so area covered.

N.A.

xvi. Assistance availed.

nil

xvii. Available marketing facility for the crop.

Nearby city like Surat, Mumbai, Navsari, Valsad

xviii. Other infrastructure available in the vicinity.

Farmers group have Refer- van, cold storage, pre-cooling system

xix. General upkeep of the plot:

Very good

#### xx. Any other relevant observation by the JIT

Progressive Farmer, Member of Floriculture group for easy marketing





### 5. Name and address of Beneficiary whose field visited:

Kaushikbhai Ramjibhai Patel,

Parvat, Choryasi, Surat

## i.Total land available with the beneficiary (ha.)

1.90 ha

ii.Crop Cluster under which covered

Banana Tissue (Mulching)

## iii.Name and Variety of crop planted

Banana G-9

### iv.Source of planting material

Tissue Culture plants

#### v.Number of plants planted and spacing

3100 ( )

#### vi.Date of planting.

June, 2010

vii.Number of plants which survived (also indicate percentage survival).

99 % (replantation done)

viii.Total amount of subsidy assistance due to the beneficiary as (Rs.)

Rs. 23250 (75 %)for 1.00 Ha Under R.K.V.Y.

#### ix.Amount of paid and date of payment

Rs. 23250

x.Mode of payment

Cheque

#### xi.Source of irrigation water (Bore well/Tube well/ Canal)

Bore well

#### xii.Whether Drip/Sprinkler system in use.

Drip

#### xiii.Other inputs provided

Fertilizer, manure, pesticides, IPM/INM

#### xiv.Whether assistance availed for organic farming.

No

#### xv.If, so area covered.

N.A.

#### xvi.Assistance availed.

Nil

#### xvii.Available marketing facility for the crop.

#### Contract farming

#### xviii.Other infrastructure available in the vicinity.

Ripening chamber

#### xix.General upkeep of the plot:

Very good

#### xx.Any other relevant observation by the JIT

Progressive Farmer.

#### 6. Name and address of Beneficiary whose field visited:

Umeshbhai Khimjibhai Patel

Parvat, Choryasi, Surat

#### i. Total land available with the beneficiary (ha.)

ha

ii. Crop Cluster under which covered

Banana Tissue with Mulching

iii. Name and Variety of crop planted

45

#### Banana G-9

iv. Source of planting material

Tissue Culture plants

#### v. Number of plants planted and spacing

3100 (1.8 m x 1.8 m)

vi. Date of planting.

June, 2010

- vii. Number of plants which survived (also indicate percentage survival). 99 % (replantation done)
- viii. Total amount of subsidy assistance due to the beneficiary as (Rs.)

Rs. 23250 (75 %)for 1.00 Ha Under R.K.V.Y.

#### ix. Amount of paid and date of payment

Rs. 23250

x. Mode of payment

Cheque

xi. Source of irrigation water (Bore well/Tube well/ Canal)

Bore well

xii. Whether Drip/Sprinkler system in use.

Drip

xiii. Other inputs provided

Fertilizer, manure, pesticides, IPM/INM

xiv. Whether assistance availed for organic farming.

No

xv. If, so area covered.

N.A.

xvi. Assistance availed.

Nil

xvii. Available marketing facility for the crop.

Contract farming

xviii. Other infrastructure available in the vicinity.

Ripening chamber

xix. General upkeep of the plot:

Very good

#### xx. Any other relevant observation by the JIT

Progressive Farmer, bunch cover used (blue bag).



## **INM Infrastructure**

## 7. Bio Control Lab: Pramukh Agri Clinic

i. Project Cost

Above Rs. 80 lacks

ii. Amount Released by DAC/

Rs. 33.27 lacks

#### iii. Expenditure incurred

Above Rs. 80 Lacks



- iv. Whether trained manpower deployed: Yes
- v. Arrangements made to meet recurring cost : From Sales of product
- vi. Name of agents produced :

- Biofertilisers, Bio Fungicides
- FB Sudo (Bacterial based Bio-fungicide)
- FB Nemakill (Fungus based bio-nematicide)
- FB Parade (Fungus based bio-insecticide)
- FB Tricozone (Fungus based bio-insecticide)
- FB Tricohurz (Fungus base insecticide)



#### vii. Quantity sold:

Sales of bio-product in 2007-08 – Rs. 76.33 lacks Sales of bio-product in 2008-09 – Rs. 2.79 crores Sales of bio-product in 2009-10 – Rs. 76.33 crores

#### Amount realized through sale

#### General condition of Lab during the time of inspection

Very Good

#### PHM Projects

#### 8. Ripening Chamber (private sector)

- i. **Name**: Sardar Bagayat Seva Sahkari Mandali Ltd, Sardar Baug, Bardoli, District: Surat
- ii. Project Cost / Amount Released by DAC/ Expenditure incurred

Capacity of unit		
Amount Released by DAC	:	Rs. 2.33 Lakh
Amount Sanctioned by DAC	:	Rs. 4.65 Lakh
Project Cost	:	Rs. 11.63 Lakh (2007-08)

13 tonnes/day

iii.



iv. Commodity

Banana

v. Condition of infrastructure

Very Good

vi.	Whether NHM Logo displayed	- Yes

vii. Whether funds disbursed to Agency - Yes

#### Main Observations of JIT

- 1. Surat district is a major hub for mango, banana, papaya and vegetables. Due to availability of some retailers who are offering contract farming and other facilities like quality inputs, assured markets, during last 3 years, large area has come up under tissue culture banana. As a result, many ripening chambers have also been set up in recent past and most of them under NHM.
- 2. Shri Maganbhai Narotambhai Patel is a progressive Farmer and he used bunch cover (blue bag) to prevent from insects and disease, Pair row system adopted.
- 3. In Surat, many farmers have ventured for floriculture under green houses in a cluster mode. Large no of such units have been supported by NHB and NHM.
- 4. NHB have also funded many Green house projects in Surat district. No programme of NBM and CDB was implemented in the district. The programme of Micro irrigation was linked with area expansion of NHM.
- 5. There is good potential for further increase under fruits like banana and mango for export as the new port is coming up very near to the district. Lots of post harvest management infrastructure is coming up in the district especially cold storage unit, ripening chambers and processing/value addition units. There is also scope for the setting up of wholesale / terminal markets in the district.SHM need to play proactive role in this regard.
- 6. The quality of implementation of the programme at field level has been found satisfactory and beneficiaries have appreciated the programme activities.
- 7. Except few places, the sign board along with NHM logo was not seen in the places visited. The DMC needs to ensure that proper sign board is

erected at each site. Deputy Director (Horticulture) of the district has assured to put the sign board at each project site.

On 7<sup>th</sup> October,2010 while going to Ahmadabad, the project on bio control lab established by Pruthvi Fertilizer Pvt. Ltd. at Anand was also visited. The project was funded under NHM. In the lab bio control agents like Trichoderma, pseudomonas verticillium and bio fertilizers like Rhizobium, Azospirillium Azotobacter, phosphate solubilizing bacteria etc are being produced. The lab is maintaining quality standards for the products and supplying the bio agents to the farmers of the district.

#### Wrap up Meeting

On 7<sup>th</sup> October, 2010, the team met Shri S. R. Chaudhary, Director, Horticulture and Mission Director, SHM Government of Gujarat at his office and briefed him about the observations of the field visit. Overall progress of NHM programme being implemented in the State was discussed with him. Shri Chaudhary has promised to take necessary corrective steps to expedite the implementation of the scheme. In the meeting Shri R. J. Asari, Mission Director, Bamboo Mission, Department of Forest, Shri Shyamal Tikadar, General Manager, Gujarat Green Revolution Company (GGRC) and Shri D.K Pal, Assistant Director, NHB were also present. In the meeting the progress of implementation of the programme on National Bamboo Mission, National Mission on Micro Irrigation, Coconut Development Board and National Horticulture Board was also discussed and reviewed.

Shri R. J. Asari informed that the National Bamboo Mission is being implemented in the district of Bharuch, Dang, Surat, Tapi and Valsad. Under the Mission during 2007-08 to 2010-11, an amount of Rs. 1015.06 lakh was released and Rs. 9.95 lakh was accrued as interest. Against this, an amount of Rs. 1014.26 lakh has been spent. Under physical progress against the total target of 10334 ha, an area of 13502 ha area has been developed in both forest and non forest lands. He further, mentioned that the grant under the Mission is always received late and is insufficient. The Action Plan is also sanctioned late and is almost 50% of the proposed by the State. He further mentioned that grant should not be deducted for handy craft and marketing for the Kotwalia tribe, which is primitive tribe.

Shri Tikadar informed that the Micro Irrigation programme is being implemented in all the 26 district of the State and is successfully being implemented. He informed that under the programme during 2005-06 to 2009-10, an area of 2.49 lakh ha has been covered under drip and sprinkler system in horticulture and non horticulture crops and 1.53 lakh beneficiaries have covered under the programme. Regarding the financial achievement he informed that against the total release of Rs. 252.6 crore, an amount of Rs.233.82 crore was spent during 2005-06 to 2009-10.

Shri D. K. Pal, Assistant Director, NHB informed that to cater the need of the farmers of Gujarat. NHB has two officers located in Ahmadabad and Surat. He informed that under the scheme of development of commercial horticulture through production and post harvest management, so far, for the project upto Rs. 20.00 lakh and LOI has been issued to 4492 projects and subsidy has been released to 1312 projects. For the projects above Rs. 20.00 lakh so far, 355 projects have been inspected. Under the scheme on capital investment subsidy construction/modernisation/expansion of cold storages for horticulture produce during 2008-09 to 2010-11, 12 units have been funded through NABARD with estimated subsidy of Rs. 293.11 lakh.

## Recommendations based on observations made during field visit and review of overall progress of NHM scheme in the State.

- i. Overall progress of implementation of the NHM programme in these three districts is satisfactory. However, keeping in view the potential for horticulture development in these districts, more efforts needs to be made by the District Mission Committees (DMC), especially in the area of post harvest management and marketing. The entire production cluster needs to be linked with PHM & Marketing infrastructure including existing & new one.
- ii. The District Horticulture Mission Committee needs to monitor the progress of implementation of the NHM programme. Proper coordination between the District Mission Committee and GGRC, who is responsible for implementation of Micro Irrigation scheme, needs to be ensured.
- iii. A good progress has been made under the mission in area expansion of fruits like mango, banana and papaya in these districts. Efforts should be made by SHM to promote PHM projects, especially ripening chambers for banana. Success story for these crops should be prepared and submitted to NHM.
- iv. Farmers are also coming forward for the cultivation of flowers under green houses. Such projects need to be taken up in a cluster mode. Efforts should also be made for cultivation of vegetables under green houses in the peri urban area of metros and big cities, so that good quality vegetables is available for the urban consumers.
- v. Under rejuvenation, there is very slow progress in the State. Hence, needs to be expedited. The programme of rejuvenation undertaken by Shri Rajeshbhai Ratanchand Shah at village Kalgam, Tahsil, Umargaon of district Valsad is worth replicating. It can be a good venue for training of farmers for rejuvenation.
- vi. The cultivation of tissue culture banana by some farmers in Surat district by adopting pair row system and bunch cover (blue bag) to prevent from insects, pests and disease, is also worth replicating.
- vii. Though Bharuch, Anand and Narmada districts are covered for crop insurance for banana, Surat district is not notified for the same. SHM needs to take up the matter with the concerned authority.
- viii. A large number of projects have been sanctioned to 4 State Agriculture Universities. However, the pace of implementation of these projects is very slow. Therefore, SHM may nominate Dr. L. R. Verma, who is also the member of JIT, to monitor and review the progress of these projects sanctioned to SAUs and submit a report to SHM.
- ix. Pit diggers to be allowed under mechanization.
- x. NIT, Surat has been declared by NHB as resources Institute for appraising the PHM projects. Therefore, SHM may also avail the services of this Institute.
- xi. More projects needs to be submitted for creation of PHM and Marketing infrastructure. However, cold storage projects to be appraised as per the new standards recommended by NHB.
- xii. In order to ensure that farmers apply the appropriate/prescribed quality and quantity of inputs in the area expansion programme, necessary monitoring mechanism is put in place. DMC needs to ensure that necessary quality checks for supply of planting material to farmers are under taken by the experts.

- xiii. Programmes of adoption of organic farming should be linked with the vermi compost units and certification in the identified and compact clusters and not in an isolated manner. The comprehensive guideline on organic farming issued recently needs to be strictly adopted.
- xiv. The District Mission Committee of all the 3 districts have maintained the records of various activities taken up under NHM, assistance being provided in the forms of package to farmers under different components, block wise and village wise details of farmers, area covered and items provided. However, Khasra No. also needs to be indicated in all cases. This needs to be maintained for real time monitoring.
- xv. Proper technical guidance from the nearby stations/centre of State Agriculture University, PFDC, NRC, Krishi Vigyan Kendra and ATMA should be obtained by the field level implementing officers and implemented in the field.
- xvi. Farmers should be advised to go for intercropping of legumes or vegetables in the newly established orchards.
- xvii. Rigorous skill up gradation training of staff is needed to develop their technical competence. Staff engaged in the implementation of NHM programme at Head quarter and field level should be imparted orientation training in different aspects of horticulture. For this purpose, training calendar for 2011-12, should be drawn up.
- xviii. For smooth functioning of the NHM programme, there is urgent need for creating a batch of dedicated staff with electronic connectivity and expertise at the SHM headquarter as Project Coordination Unit (PCU) for rigorous monitoring and coordination with District authorities and NHM. At district head quarter, there is also need of creation of a Project Implementation Unit (PIU) for implementation of NHM programme in a Mission mode. SHM officers should regularly visit the project area in the field for inspection & verifications.
- xix. Proper sign board with NHM logo indicating the name of beneficiary, activity, cost, assistance provided, year, etc. needs to be displayed at each work site.
- xx. To ensure transparency in implementation of various activities under NHM, details about the activities approved in the village, cost of work, subsidy available, name of beneficiaries, area covered and year of implementation needs to be displayed at the common places in the village viz. Panchayat Bhavan, School Building etc.
- xxi. Since, sufficient staff is not available for monitoring of NHM programme; SHM can appoint the domain specific consultants under TSG component.
- xxii. As per NHM guidelines, there is provision for engagement of experienced persons in technical support group at SHM head quarter or if need be few of them can even be posted in the districts on contractual basis.
- xxiii. The annual report of the NHM programme and success stories of various NHM interventions needs to be submitted to DAC at the earliest.

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## Details of various project activities taken up under NHM in Gujarat during 2005-06 to 2009-10.

## **<u>1. Nursery/ Vegetable seed production/ Seed Infrastructure</u>**

Year	Number of Nurseries	Total Subsidy Cost (Rs. in Lakhs)	Amount Released (Rs. in Lakhs)	Expenditure Incurred (Rs. in Lakhs)
2005-06	Small-9	26.98	26.98	26.98
	Model- 3	54.00	54.00	54.00
2006-07	Small-5	13.50	13.50	13.50
	Model- 3	54.00	54.00	54.00
2007-08	Small-1	1.50	1.50	1.50
	Model- 2	11.91	11.91	11.91
2008-09	Small-5	15.00	15.00	15.00
	Model- 1	18.00	18.00	18.00
2009-10	Small-4	10.50	10.50	10.50
	Model- 3	30.86	30.86	30.86
2010-11	Small-4	8.10	2.05	2.05
(Up to Aug- 2010)	Model- 2	19.00	5.00	5.00
	TOTAL	263.35	243.3	243.3

Name of Project: N	urseries Establishment
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## **Status of Nurseries Project**

Sr. No.	Name of project	Name of Implementing Agency and Location	Amount Released and Expenditure Incurred (Rs. in Lakhs)	Status of the project	Year of Implementation
		Public Sect	tor (Model Nu	rsery)	
1	Model Nursery	Regional Horticultural Research Station, ASPEE College of Horticulture and Forestry, Navsari Agricultural University, Navsari	18.00	Completed	2005-06
2	Model Nursery	Department of Horticulture, College of Agriculture, Junagadh Agricultural University,	18.00	Completed	2005-06

					[
	M a -1 - 1	Junagadh	10.00	Constal	
3	Model Nursery	Department of Horticulture B.A.	18.00	Completed	2005-06
		College of			
		Agriculture, Anand			
		Agricultural			
		University, Anand			
4	Model	Main Spices	18.00	Completed	2006-07
	Nursery	Research,			
		SardarKrishinagar			
		Dantiwada			
		Agricultural			
		University, Jagudan, DistMehsana			
5	Model	C. P. College of	18.00	Completed	2006-07
5	Nursery	Agriculture,	10.00		2000-07
	Nuisery	SardarKrishinagar			
		Dantiwada			
		Agricultural			
		University,			
		Dantiwada, Dist			
		Banaskantha		ļ	
6	Model	For Floriculture and	18.00	Completed	2006-07
	Nursery	Landscaping,			
		ASPEE College of			
		Horticulture and			
		Forestry, NAU, Navsari			
7	Model	For Medicinal and	18.00	Completed	2008-09
'	Nursery	Aromatic Plants,	10.00		
		ASPEE College of			
		Horticulture and			
		Forestry, NAU,			
		Navsari			
8	Model	Krishi Vigyan	18.00	Completed	2009-10
	Nursery	Kendra,			
		S.D. Agricultural			
		University,			
		AtKhedbrahma, DistSabarkantha			
<u> </u>		DISL-JANAI KAIILIIA		<u> </u>	
		Public sector s	<u>Sector (Small</u>	<u>Nursery)</u>	
1	Small	Research Station,	3.00	Completed	2005-06
	Nursery	Junagadh,			
		Agricultural			
		University, Mahuva			
2	Small	Department of	3.00	Completed	2005-06
	Nursery	Botany, College of			
		Agriculture,			
		Junagadh			
		Agricultural			
		University,			
3	Small	Junagadh Research Station,	3.00	Completed	2005-06
	Nursery	Navsari Agricultural	5.00		2003 00
	nuisciy	Havbarr Agriculturur		1	l

<b></b>					
		University, Gandevi,			
1	Cmall.	DistNavsari	2.00	Completed	2005.06
4	Small Nursery	Research Station, Junagadh	3.00	Completed	2005-06
	Nuisery	Agricultural			
		University, Dhari,			
		DistAmreli			
5	Small	Krishi Vigyan	2.98	Completed	2005-06
	Nursery	Kendra,		-	
		SardarKrishinagar			
		Dantiwada			
		Agricultural			
		University, Khedbrahma, Dist			
		Sabarkantha			
6	Small	Department of	3.00	Completed	2005-06
	Nursery	Horticulture,			
		B. A. College of			
		Agriculture, Anand Agricultural			
		University, Anand,			
		DistAnand.			
7	Small	Agricultural	3.00	Completed	2005-06
	Nursery	Research Station,			
		Anand Agricultural			
8	Small	University, Devataj Model Farm, Anand	3.00	Completed	2005-06
0	Nursery	Model Farm, Anand Agricultural	5.00	Completed	2003-00
		University,			
		Vadodara			
9	Small	Krishi Vigyan	3.00	Completed	2005-06
	Nursery	Kendra At. Paria,			
		Navsari Agricultural			
10	Small	University, Navsari Krishi Vigyan	3.00	Completed	2006-07
10	Nursery	Kendra, Ambheti,	5.00		2000-07
		Ta : Kaparada,			
		Dist: Valsad			
11	Small	Krishi Vigyan	3.00	Completed	2006-07
	Nursery	Kendra, Ganpat			
		Vidhyanagar,			
		Kherva, Dist. Mehsana			
12	Small	Nursery for fruit and	3.00	Completed	2006-07
	Nursery	vegetable, Krishi			
		Vigyan Kendra			
		Junagadh			
		Agricultural University,			
		DistAmreli			
13	Small	Narmada Irrigation	3.00	Completed	2006-07
-	Nursery	Research, Anand	-		
	,	Agricultural University,			

		Khandha, Dist.			
		Vadodara			
14	Small Nursery	At Achaliya, Navsari Agriculture University, Dist : Bharuch	3.00	Completed	2008-09
15	Small Nursery	Krishi Vigyan Kendra, Navsari Agriculture University, Navsari, DistNavsari	3.00	Completed	2008-09
16	Small Nursery	District Agriculture Officer, District Panchayat Bhavan, Juna Thana, Navsari	3.00	Completed	2008-09
17	Small Nursery	Krishi Vigyan Kendra, At- Dethali, Ta- Matar, Dist-Kheda	3.00	Completed	2009-10
18	Small Nursery	Krishi Vigyan Kendra , Mangalbharti Golagamdi, Ta- Sankheda, Dist- Vadodara	3.00	Completed	2009-10
19	Small Nursery	Agricultural Research Station, At- Thasra, AAU, DistKheda	3.00	Completed	2009-10
		Private sec	<u>tor (Model Nu</u>	<u>irsery)</u>	
1	Model Nursery	Suresh S. Rathod At. Fariyadka, Ta. & Dist Bhavnagar	7.89	Completed	2007-08
2	Model Nursery	Samir Farm and Nursery At. Ambheti, Ta. Gandevi Dist. Navsari	7.15	Completed	2007-08
З	Model Nursery	Neelam Seed Corporation, Anand, DistAnand	4.76	Completed	2007-08
4	Model Nursery	M/s .Krupli Farm & Nursery, At. Dulsad, Dist Valsad	5.36	Completed	2009-10
5	Model Nursery	M/S Chaudhary Ghemarbhai Govabhai, AtPamol, Ta Vijapur DistMehsana	7.50	Completed	2009-10
6	Model		Sanctioned:	Continued	2010-2

	Nurser	Nurcony At Ators	10		1
	Nursery	Nursery, AtAjarai,	10 Released:		
		TalGandevi, DistNavsari	5.00		
7	Model		Sanctioned:	Continued	2010-11
/	Nursery	Sagar Farm & Nursery, At	10.29	Continued	2010-11
	Nuisery	Vadsagar, Tal	Released:0		
		Gandevi,	Keleaseu.0		
		DistNavsari			
		<u>Private sec</u>	tor (Small Nu	<u>rsery)</u>	
1	Small	M/S Chaudhary	1.50	Completed	2006-07
	Nursery	Ghemarbhai			
		Govabhai,			
		AtPamol, Ta			
		Vijapur			
-	Cmart	DistMehsana		Compation	2007.00
2	Small Nursery	Patel Manibhai Iswarbhai	1.50	Completed	2007-08
	nuisery	At. Vasai, Ta.			
		Vijapur			
		Dist. Mehsana			
3	Small	Dahyabhai	3.00	Completed	2008-09
	Nursery	Narnanbhai Patel			
	,	At. Titodar,			
		Ta. Vijapur, Dist.			
		Mehsana			
4	Small	Babubhai	3.00	Completed	2008-09
	Nursery	Pratapbhai Morvadia			
		At. Dungarpur			
		Dist. Junagadh			
5	Small	Bhikhabhai Jivabhai	1.50	Completed	2009-10
	Nursery	Bhutadiya,	1.50	Completed	2009-10
	litarscry	At. –Changa, Ta			
		Vadgam,			
		Dist Banaskantha			
6	Small	Shree Ram Farm &	Sanction	Continue	2010-11
	Nursery	Nursery,	1.60		
		At. Vadsar, Ta	Releases		
		Gandevi, Dist.	0.80		
	Cmall	Navsari	Conction 2 F	Continue	2010 11
7	Small	Tulsi Farm &	Sanction 2.5 Releases	Continue	2010-11
	Nursery	Nursery, At. Khundh, Tal	1.25		
		Chikhli,	1.23		
		DistNavsari			
6	Small	Vasundhara Farm &	Sanction	Continue	2010-11
Ŭ	Nursery	Nursery,	2.00	Sontando	
		At. Motibhamti Ta	Releases 0.0		
		Vansda , Dist.			
		Navsari			
7	Small	Urmilaben Nursery,	Sanction	Continue	2010-11
	Nursery	At. Kaccholi, Tal	2.00		
		Gandevi, Dist	Releases 0		

Navsari	
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## 2. Vegetable Seed Production

Year	Name of Project and Location	Crops for which seeds produced	Amount Released (Rs. in Lakhs)	Expenditure Incurred (Rs. in Lakhs)	Seed Produced	Quantity sold
2010-11	Vegetable Seed Production Main Vegetable Research Station, Anand Agricultural University,	Okra, Cluster bean, Bottle gourd, Cow pea, Chilli, Brinjal, Cucumber	2.50	2.50	Continue	Continue
	Anand					

## 3. <u>Technology Dissemination through FLD</u>

Sr No	Name of Project & Year	Implementing agency & Location	Total project Cost (Rs. in Lakh)	Amount Released by DAC (Rs. in Lakh)	Expenditure incurred (Rs. in Lakh)
		Year-2005-0	)6		
1	Technology dissemination through on farm Demonstration	Krishi Vigyan Kendra, Khedbrahma, SDAU, Dantiwada	7.60	7.60	7.60
		Year-2006-0	)7		
1	Front line demonstration on vegetable crops	B. A. college of Agriculture Anand Agriculture University, Anand	1.60	1.60	1.60
2	Front line demonstration on Horticulture crops	Vegetable Research Station, Junagadh Agriculture University, Junagadh	2.85	2.85	2.85
		Year-2007-0	)8		
1	Front line demonstration on Horticulture crops	KVK, At. Devataj Anand Agriculture University, Anand	1.80	1.80	1.80
		Year-2009-1	0		
1	FLD of Okra Guj Hy2	Junagadh Agricultural University, Junagadh.	3.42	3.42	3.42
	TOTAL:-		17.27	17.27	17.27

Sr. No.	Name of HRD projects	Implementing Agency & Location	
	Year-2006		1
1	Fruit , flower & vegetable shows & technical seminar on vegetable cultivation technology	NAU , Navsari	2.45
2	National Workshop on mango production technology	NAU , Navsari	1.60
3	Short term training program for farm women on fruits & vegetable preservation	NAU , Navsari	1.61
4	Short term training program for pre & post harvest technology of fruit crops	NAU , Navsari	0.945
5	Short term training program for pre & post harvest technology of vegetable crops	NAU , Navsari	0.55
6	Establishment of HRD center through Hi-tech Horticulture training	C.P. college of Agri. SDAU Dantiwada	25.65
7	Training on packaging for identified farmers for the development of export quality product	GAIC Ahmadabad	0.43
8	Training program for entrepreneurs in tissue culture	Deptt. Of Botany , JAU , Junagadh	12.70
	Year-2007	-08	
1	International Horticulture Expo-2008, New Delhi	Proposal from GAIC, Ahmadabad	10.00
2	Training in post harvest tech. for value addition in Date	Date Research center , Mundra , Kutch	10.00
3	Florex India-2007	WIFA, Pune	1.03
	Year-2008	-09	
1	Farmer oriented work shop 1. Organic farming in Horticulture crops	AAU, Anand	1.00
2	Project on gardener 's training	KVK , Ambheti Ta: Kaprada Di. Valsad	13.525
3	Project on Hi-tech organic farming	KVK Randheja	0.60
4	Project on training on medicinal & aromatic plants	KVK Randheja	0.65
5	IFlora Expo-2008nternational Exhibition organized by Media to Day Pvt. Ltd, New Delhi - Stall booking	NCIC complex, New Delhi	3.19
6	Flora Expo-2008 International	NCIC complex,	0.60

	Exhibition organized by Medic to D	New	
	Exhibition organized by Media to Day	New New Delhi	
	Pvt. Ltd, New Delhi Decoration, Poster & extension activities by Gujarat	New Deim	
	Floriculture Association , Navsari		
7	HRD Training - on food and health	AMA, Auditorium,	0.19
/	security for a better tomorrow -Saket	Ahmedabad	0.19
	project ltd. Ahmedabad	Anneuabau	
	Year-2009	-10	
1	HRD Training - on food security	AMA, Auditorium,	0.08
-	through water security -Saket project	Ahmedabad	0100
	Itd. Ahmedabad		
2	Workshop on organic farming.	Anand Agricultural	0.10
		University, Anand	
3	Seminar on Horticultural Crops in the	S. D. Agricultural	0.50
	North Gujarat: Opportunity and Thrusts	University, S. K.	
		Nagar	
4.	Seminar on Date palm	KVK, Sadau, Dist	0.39
		Kutch	
5.	Pomegranate Training	Suryanagar Co-	0.11
		operative Society,	
		Idar,	
		DistSabarkantha	
6.	Awareness Programme	KVK, Ambuja	0.18
		Foundation,	
		Kodinar, Dist	
		JUnagadh	0.40
7.	Awareness Programme	APEDA, New	0.13
	Year-2010	Mumbai	
1	Farmer's Training on Vegetable	K.V.KDethali,	0.08
Ŧ	Transplanting Growing	Gujarat Vidhyapith,	0.00
		Ta: Matara,	
		District: Kheda	
2	Workshops on Crop Production of	Department of	1.50
-	Horticultural Crops	Biocontrol, Anand	1.50
		Agriculture	
		University, Anand	
3	Farmer's Training on Green House	NIPHT's,	1.50
	under NHM-2010-11	Horticulture	
		Training Centre,	
		Pune	
4	Seminar On Vegetable Crop Cultivation	K.V.KAmbheti,Ta:	0.29
		Kaparada, District:	
		Valsad	
5	National Seminar on Production	K.V.KGanapat	1.50
	Technology and Marketing of Acid Lime	University, Ta:	
	in India	Kherva, District:	
_		Mehsana	
6	Training of Farmers	KVK-	0.50
		Mangalbharati,	
		At:- Golagamadi,	
		Ta:- Sankheda,	
		Dist:- Vadodara	E 07
	TOTAL		5.37

## 5. Creation of Water Resources

> Name of Implementing Agency: Gujarat Land Development

corporation, Gandhinagar

> Location of Project: All the Districts of NHM

Sr. No.	Year	Amount Released by DAC	Developed water recourses on community basis	Expenditure incurred (Rs. in Lakhs)
1	2006-07	425	116	287.40
2	2007-08	400	61	520.14
3	2008-09	700	141	704.59
4	2009-10	722.87	127	712.48
5	2010-11 (Up to July- 2010)	750.00	105	442.55
	TOTAL	2997.87	550	2667.16

#### **IPM/INM Infrastructure:**

## 6. Bio Control Lab: (Rs. In Lakh)

S r. N o.	Name of Implementing Agency & Location of Project	Year of Implem entation	Total Subsidy Cost	Amount Released by DAC/ Expenditure incurred
1	Dry farming Research Station , SDAU , Dantiwada	2007-08	27.49	
2	Pramukh Agri Clinic, At. Madhi , Ta. Bardoli Dist. Surat	2007-08 2008-09	16.30 <u>16.67</u> <b>33.27</b>	
3	Department of Entomology , JAU, Junagadh	2008-09	80.00	
4	Pruthvi Fertilizer Pvt Ltd. Unit Pro Bio International	2008-09 2009-10	37.50 <u>17.75</u> <b>55.25</b>	
5	Anand Agriculture University, Anand	2009-10	80.00	
	TOTAL		276.01	

## 7. Plant Health Clinic :

Sr. No.	Name of Implementing Agency & Location of Project	Year of Implementa tion	Amount Released by DAC/ Expenditure incurred
1	Rapid tissue testing lab, JAU, Junagadh	2006-07	9.00
2	Agri. Experimental station, Paria , Valsad, NAU, Navsari	2007-08	13.50
3	KVK, Vyara, Surat, NAU, Navsari	2007-08	15.50
4	B.A. College of Agriculture, AAU, Anand	2008-09	10.00
5	Krishi Vigyan Kandra, At. Datheli, Ta. Matar, Dist .Kheda	2009-10	20.00
	TOTAL		68.00

## 8. Leaf tissue culture analysis Lab.

Sr. No.	Name of Implementing Agency & Location of Project	Year of Implementa tion	Total Project Cost/ Amount Released by DAC/ Expenditure incurred
1	Micronutrient project (ICAR) Anand	2006-07	20.00
	Agricultural University , Anand		
2	Loyola Centre for Research and Development St. Xavier's College Campus, Navrangpura, Ahmedabad- 380 009	2009-10	2.15
3	KVK, At. Dethli, Ta. Matar, Dist. Kheda	2010-11	20.00
	TOTAL	1	42.15

## 9. Organic farming/Vermi composting Units

Sr. No.	Name of Implementing Agency & Location of Project	Year of Implementation			
1	Agricultural Finance Corporation Ltd.,	2010-11			
	Mumbai				
	TOTAL				

## 10. Post Harvest Management

(Pack house/Cold Storage/CA storage/ Ref. Van/Primary/mobile Processing Unit)

Sr. No	Name of Project	Name of Implementing Agency & Location of Project	Total Project Cost/ Amoun t Releas ed by DAC/ Expend iture incurre d	Project Status	Year of Impleme ntation
	I	Cold Stora			
1	Cold Storage (Private Sector)	Laxmi cold storage At. Sabalpur, Ta. Modasa Dist. Sabarkantha	48.00	Completed	2006-07
2	Cold Storage (Private Sector)	Palbro International Pvt. Ltd. At. Tadkuva, Ta, Vyara, Surat	24.00	Completed	2007-08
3	Cold storage (Private Sector)	Kisan Cold storage At. Tatithaya Ta. Palsana Di. Surat	42.50	Completed	2007-08
4	Cold storage (Private Sector)	Ambika Cold storage At. Shinol Ta. Dhansura Di. Sabarkantha	50.00	Completed	2008-09
5	Cold storage (Private Sector)	Balram Cold storage At. Vadgam Ta. Dhansura Di. Sabarkantha	50.00	Completed	2008-09
6	Cold storage (Private Sector)	expansion – Ambika cold storage At. Navagam, Ta. Kapadvanj, Di. Kheda	15.00	Completed	2008-09
7	Modified cold storage (Private Sector)	Saurastra -Kutch Vividhilaxi Co. Op. Mandali. Bhavnagar	113.00	Completed	2008-09
8	Cold storage (Private Sector)	Saurastra cold storage Opp. Of market yard, Opp. Of central warehouse,	25.24	Completed	2009-10

9	Cold storage (Private Sector)	Village: Hapa, Taluka : Jamnagar Rajendra Agro Storage Kalavad Road, GIDC, Metoda, Plot No.G.539,	41.00	Completed	2009-10
		Taluka : Lodhika Dist.: Rajkot			
10	Cold storage (Private Sector)	Krushi Cold Storage At: Sabalpur, Modasa-Himatnagar Road, Taluka: Modasa, Dist.: Sabarkantha	50.00	Completed	2009-10
11	Cold storage (Private Sector)	Dharti Cold Storage At: Mahadevpura, Taluka: Modasa, Dist.: Sabarkantha	50.00	Completed	2009-10
12	Cold storage (Private Sector)	Hariom Cold Storage At: Harsol, Taluka: Talod, Dist.: Sabarkantha	50.00	Completed	2009-10
13	cold storage (Private Sector)	Arbuda Cold Storage At: Kansari, Dhanera Road, Taluka: Deesa, Dist.: Banaskantha	50.00	Completed	2009-10
14	cold storage (Private Sector)	Shri Laxman Cold Storage At: Kansari, Dhanera Road, Taluka: Deesa, Dist.: Banaskantha	50.00	Completed	2009-10
15	cold storage (Private Sector)	Siddhi Cold Storage Private Limited At: Lorwada, Taluka: Deesa, Dist.: Banaskantha	50.00	Completed	2009-10
16	cold storage (Private Sector)	Rahi Cold Storage At: Jorapura, Tharad Road, Taluka: Deesa, Dist.: Banaskantha	50.00	Completed	2009-10
17	Expansion of cold storage (Private Sector)	Jai Mataji Cold Storage At: Rajpur, Ranpur Road, Taluka: Deesa, Dist.: Banaskantha	35.88	Completed	2009-10
18	Cold storage (Private Sector)	Shree Jay Hanuman Cold Storage At: Kansari, Dhanera Road, Taluka: Deesa, Dist.: Banaskantha	50.00	Completed	2009-10

19	cold storage (Private Sector)	Gokul Freezing House Pvt. Ltd. At: Parbatpura, Taluka: Mansa, Dist.: Gandhinagar	50.00	Completed	2009-10
20	Expansion of Cold Storage (Private Sector)	M/S Prabhukishan Agro Products P. Ltd., At. Sampa,Taluka: Dehgam, Dist: Gandhinagar	50.00	Completed	2009-10
21	Cold storage (Private Sector)	Ramjyoti Shitalaya Pvt. Ltd.,At: Sampa,Taluka: Dehgam, Dist.: Gandhinagar	45.33	Completed	2009-10
22	Cold storage (Private Sector)	M/s Rameshwar cold storage At. Dama, Tal .Deesa Dist: Banaskantha.	69.95	Completed	2009-10
23	Cold storage (Private Sector)	M/s Shri Sainath Cold Storage, At: Dama, Tal: Deesa Dist: Banaskantha	50.00	Completed	2009-10
24	Cold storage (Private Sector)	M/s Vaishnodevi Cold Storage, At: Malgadh, Tal: Deesa, Dist: Banaskantha	50.00	Completed	2009-10
25	Cold storage (Private Sector)	M/s Shree Ambica Cold Storage, At: Kant, Tal: Deesa, Dist: Banaskantha	50.00	Completed	2009-10
26	Cold storage (Private Sector)	M/s Jay Satima Cold Storage, At: Jorapura, Tal: Deesa, Dist: Banaskantha	50.00	Completed	2009-10
27	Cold storage (Private Sector)	M/s Gajanand Cold Storage, At: Ranpur, Tal: Deesa, Dist: Banaskantha	50.00	Completed	2009-10
28	Cold storage (Private Sector)	M/s Kamdhenu Cold Storage, At: Jorapur, Tal: Deesa, Dist: Banaskantha	50.00	Completed	2009-10
29	Cold storage (Private Sector)	M/s Bansidhar Cold Storage, At: Malgadh, Tal: Deesa, Dist: Banaskantha	50.00	Completed	2009-10

30	Cold storage	M/s Parmeshwar	50.00	Completed	2009-10
	(Private Sector)	Cold Storage, At: Jorapur, Tal:			
	Sector)	Deesa,			
		Dist: Banaskantha			
31	Cold storage	M/s Jay	50.00	Completed	2009-10
	(Private	Dwarkadhish Cold		•	
	Sector)	Storage, At: Dama,			
		Tal: Deesa, Dist:			
		Banaskantha	50.00		
32	Cold storage	M/s Jay Narayan	50.00	Completed	2009-10
	(Private Sector)	Cold Storage, At: Kansari, Tal:			
	50000)	Deesa,			
		Dist: Banaskantha			
33	Expansion of	M/s Shree Ajanta	42.02	Completed	2009-10
	Cold storage	Cold Storage,			
	(Private	At: Bhoyan, Tal:			
	Sector)	Deesa,			
	т	Dist: Banaskantha	1601.9		
		JIAL	2		
			-		
	Proces	sing Unit/Pack house			
1	Primary	Primary Processing	1.56	Completed	2008-09
	Processing	unit, Mehta Agro			
	unit (Private Sector)	food product, Amalsad, Gandevi,			
	Sector)	Navsari			
2	Minimal	Minimal Processing	6.00	Completed	2008-09
	Processing	Unit M/s Prafulbhai		•	
	Unit (Private	R. Patel			
	Sector)				
3	Primary	Primary Processing	7.99	Completed	2008-09
	Processing unit (Private	unit of Mango ,			
	Sector)	Guava , Chiku and Banana by Deep			
	50000)	Fresh Frozen			
		Products, Gandevi			
		,Navsari ( Tribal )			
4	Patchouli	Patchouli Processing	1.50	Completed	2008-09
	Processing	unit M/s Pranav			
	unit (Private	Narendra Shethaji			
5	Sector) Refrigerated	Refrigerated Van -	3.28	Completed	2008-09
	Van (Private	Laxmi cold chain At.	5.20	Completed	2000 09
	Sector)	Tundi , Palsana ,			
	,	Surat			
6	Integrated	Integrated project	9.325	Completed	2008-09
	project on	on pack House,			
	pack (Private	Multi grading ,			
	Sector)	packing centre and Binoping chambors			
		Ripening chambers of Banana, Krishna			
		Bagayat Sahkari			
		Mandali , Panetha,			

		Zagdiya, Bharuch			
7	Pack House (Private Sect)	Pack House - Payal Flora by M/s Payal Flora at Paradi (Arak) Di. Navsari	1.75	Completed	2008-09
8	Apani Mandi /marketing (Private Sector)	Apani Mandi/ marketing infrastructure - Amalsad vibhag Vividh karyakari Khedut mandali , Amalsad ,	3.75	Completed	2007-08
9	Ripening chamber(Priv ate Sector)	Mahavir Fruit Agency Plot No. D/204-205, Radhakrishna Raw House, Kamrej Char Rasta, At: Kholwad, Taluka: Kamrej, Dist.: Surat	20.00	Completed	2009-10
10	Ripening chamber(Priv ate Sector)	Mother Shree Cold Storage Plot No. 49/50, Phase- II, B/H Jai hind Metals, GIDC, Naroda, Ahmedabad- 382330	12.91	Completed	2009-10
11	Ripening chamber(Priv ate Sector)	PALBRO International At: Tadkuva, Taluka: Vyara, Dist: Surat	14.96	Completed	2009-10
12	Ripening chamber(Priv ate Sector)	Mohanlal Ishwardas Village: Shakt- Shanala Taluka: Morbi, Dist: Rajkot	10.57	Completed	2009-10
13	Ripening Chamber & Integrated Cold Chain (Private Sector)	Shreeji Fruits & Agro Food Processors, At- Pipodara GIDC, Ta. Mangrol, Dist Surat	Sanctio ned:11 1.76 Release d: 55.60	Completed	2010-11
14	Ripening chamber(Priv ate Sector)	Sardar Bagayat Sahkari Mandali Ltd., Sardar Baug, Station Road, Dist Surat	Sanctio ned:4.6 5 Release d 2.33	Completed	2010-11
15	Ripening Chamber & Integrated Cold Chain	Mahavir Banana Ripening & Cold Storage, At-Kamrej, DistSurat	Sanctio ned: 86.58 Release	Completed	2010-11

	(Private Sector)		d 43.39		
16	Ripening chamber(Priv ate Sector)	Shakshi Banana Ripening Center, At- Asodar, TaAnklav, DistAnand	Sanctio ned:30. 01 Release d 14.00	Completed	2010-11
17	Ripening chamber(Priv ate Sector)	Shiv Fruit Agencies, Lala Nagar, Rajpipla Chokdi, At- Ghadkhol, Tal Ankleshwar, Dist Bharuch	Sanctio ned: 47.33 Release d 23.50	Completed	2010-11
18	Primary Processing Unit (Private Sector)	Rajhans Food Products, At Pipodar, Ta. Mangarol, Dist Surat	Sanctio ned: 9.60 Release d 3.80	Completed	2010-11
TOTAL			Released Amount 236.215		