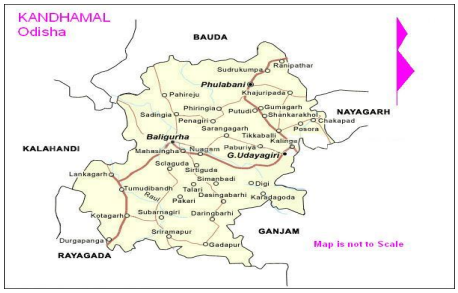
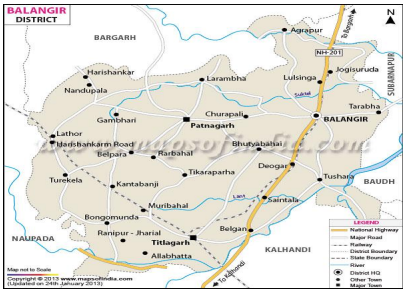
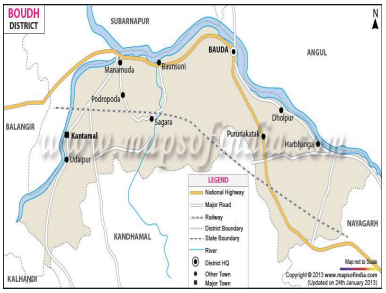
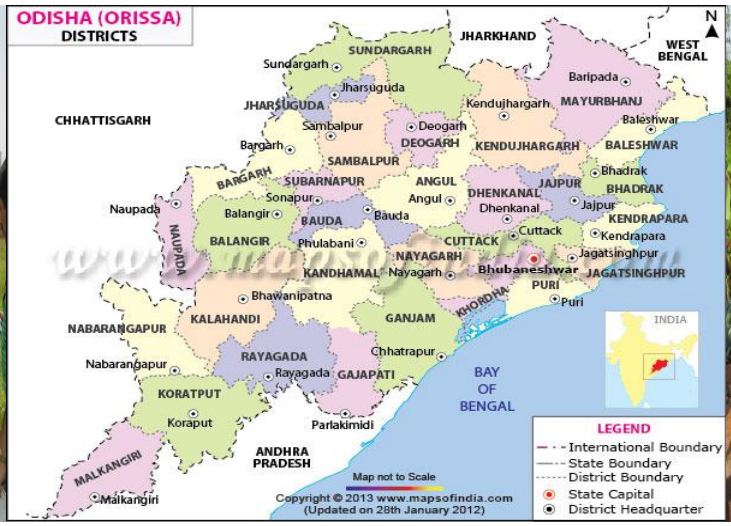
Report of the Joint Inspection Team on their inspection visit to Kandhamal Balangir, Bauda district of Odisha during May, 2013 (12th May to 18th May, 2013).









National Horticulture Mission
Department of Agriculture and Cooperation (DAC),
Krishi Bhawan, New Delhi

Report of the Joint Inspection Team on their inspection visit to Kandhamal Balangir, Bauda district of Odisha during May, 2013 (12th May to 18th May, 2013).

The joint Inspection Team (JIT) consisting of the following members visited during 12th-18th May 2013 to Kandhamal Balangir, Bauda district of Odisha for monitoring NHM, RKVY, NMMI, and NBI porgress for the state of Odisha.

1. Dr. R.C.Upadhyaya, Chief consultant (NHM), Ministrey of Agricultural, Krishi Bhawan, New Delhi.
2. Dr. D.K. Dora, Professor and Head, PI, PFDC, Department of PHM, College of Agriculture, OUAT, Bhubaneswar, Odisha.
3. Dr.Jatindranath Das, Prof.Dept.of floriculture and landscaping,OUAT, Bhubaneswar.
4. Sri. Alok Mishra, SPO, NCPAH, DAC, N.Delhi.
5. Dr.Homey Cheriyan, Director I/C, Directorate of Arecanut and Spices Development, west Hill, Calikat, Kerala.
6. Sri Subash Chandra Mohanta, ADH and Nodal Officer, JIT Bhubaneswar
7. Sri Ranjan Kumar Das Mahapatra, DDH, Bolangiri

Odisha State Profile:

Odisha is the 10th largest state in area and 11th in population in the country, accounting for 5% of the geographical area and 4% of the population of the country. The state has a geographical area of 1.56 lakh sq. km and population of 3.68 crores as per 2001 census. Administratively the state is divided into 30 districts, 58 subdivisions, 314 CD blocks, 171 tahasils, 35 municipalities and corporations, 6234 gram panchayat and 11349 villages. Out of the total population, Scheduled Caste and Scheduled Tribes constitute 17% and 22% of the total population respectively.85% of the population lives in rural area. Cultivators and agricultural labourers constitute 65% of the total workforce. The total literacy percentage is 63.08. The state is located in the eastern region of the country and spreads 450 kms along the Bay of Bengal.

Horticulture consisting of fruits, vegetables, spices, floriculture, root & tuber crops, mushrooms, medicinal & aromatic plants, as well as plantation crops has emerged as a core sector in agriculture due to its substantial increase both in area and production. Today horticulture has established its credibility in improving income through increased productivity, generating employment and in enhancing export besides providing household nutritional security. The

growing economic importance of horticultural crops especially fruits; vegetables and flowers could be attributed to the increasing demand arising from domestic as well as overseas markets. The increasing domestic demand could be attributed to the increase in income, population growth, changing consumption pattern and growing awareness for better nutrition. At national level horticulture sector has emerged as a potential player in the Indian economy contributing 30% to GDP in agriculture from more than 8.5% area under horticultural crops as well as a means of diversification in overall development of agriculture. The earlier seasonal availability of fruits and vegetables has now extended to all the year round, increasing the per capita consumption of fruits and vegetables. The national goal of achieving 4% growth in agriculture can be achieved through the major contribution in growth from horticulture.

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

Climate and Soil: The climate of the state is tropical, characterized by high temperature, high humidity, medium to high rainfall and a mild winter. The normal rainfall is 1482.2 mm distributed over 72 rainy days. South West monsoon contributes about 81-83 % of the annual rainfall in 53-57 days during June-September. The mean annual temperature of the State is 26.89^0 C with mean annual maximum of 32.56^0 C and mean annual minimum of 21.30^0 C.

From the physio-graphic point of view, the State consists of four Zones, viz. (i) Northern Plateau (ii) Eastern Ghat zone (iii) Central Table lands, and (iv) Coastal plain zone. However, on the basis of climate, soil, rainfall, topography and crops suitability, the state has been divided into ten Agro- Climatic zones. The soil types differ widely from highly acidic to slightly alkaline and from light sandy to stiff clays. The soils are mainly acidic with the degree of acidity varying widely. Further, about 4 lakhs hectares are exposed to saline inundation, 3.54 lakh ha. To flooding and 0.75 lakh ha. to water logging particularly in the deltaic areas.

Land Availability: The state has a total cultivable area of 61.65 lakh hectares. Out of this, 15.57 lakh hectares are low lands, 19.14 lakh hectares are medium lands and 26.94 lakh hectares are high lands. In Odisha generally Agricultural crops particularly Paddy are grown in the Low & Medium land area in a consolidated manner. So there is vast scope to convert the Up lands and waste lands of the state for Horticultural crops. It was envisaged during the preparatory phase of NHM to cover at least 7.0 lakh ha. lands, out of which we have achieved only 3.10 lakh ha. Under NHM and other schemes during last 5 year. Hence, there is immense scope for crop diversion particularly to horticultural crops.

Farming structure: According to the agricultural census there were 40.66 lakh operational farm holdings occupying 50.81 lakh ha with an average land holding of 1.25 ha the marginal and small farmers constitute 85% of the farmers who have access about 50% of the operational area. Thus the remaining 50% is occupied by only 15% of landholders as depicted.

FARM HOLDINGS- CATEGORY WISE

Category of farmers	Holding size (ha)	Nos (Lakh)	Area (Lakh ha)
Marginal	< 1.0	22.95	11.55
Small	1.0-2.0	11.13	15.44
Semi-medium	2.0-4.0	5.00	13.44
Medium	4.0-10.0	1.45	8.18
Large	> 10.0	0.13	2.20
Total	**1.25**	**40.66**	**50.81**

Irrigation: The total irrigation potential created so far from all sources is about 39.31 lakh ha. (Kharif 26.65 lakh ha. & Rabi 12.66 lakh ha.). The gross irrigated cropped area is 27 lakh ha. Which is about 68% of the potential created? The source wise irrigation potential created so far (up to 2004-05) is indicated below.

Area in lakh hects

Sr. No.	Sources	Kharif	Rabi
1.	Major & Medium	12.38	5.63
2.	Minor (Flow)	4.98	0.71
3.	Minor (Lift)	3.64	2.19
4.	Other sources	5.65	4.13
TOTAL		**26.65**	**12.66**

Potential for Horticulture: The agro-climatic diversity in the State with its high rain fall distributed over a four-month monsoon and a reasonably moderate winter allows for growing a variety of horticultural crops. The agro-climatic conditions are immensely suitable for perennial fruit crops like mango, litchi, guava, oranges and limes; annual fruit crops like banana, pineapple and papaya ; spices like ginger, turmeric and chilly, a variety of roots and tubers and a whole range of vegetables. The low-temperature hilly areas at higher altitude offer ideal conditions for growing off-season vegetables. Of late floriculture is also showing excellent prospects. The State thus enjoys a natural comparative advantage for horticulture with possibilities for growing a diversified basket of fruits, vegetables, spices, tubers and flowers; whose potential has not been fully exploited.

Status of National Horticulture Mission:

- The State has not only become self sufficient in production of quality planting material of mango, cashew nut, ginger & turmeric etc. but also started exporting the quality planting material to the states of Chhatisgarh, West Bengal & Jharkhand.
- 142 nos. public sector nurseries have been upgraded with water supply, shadenet, farm equipments, irrigation facilities etc.
- Floriculture has come up in big way particularly gladiolous, marigold, tuberose & rose etc.
- Spices cultivation – ginger & turmeric has been popularized in Kandhamal & Koraput districts.

Financial achievements – Year-wise (Fig. in lakh Rs.)

Year	Central share receipt	State share receipt	Total	Expenditure
2005-06	3611.91	Nil	3611.91	599.21
2006-07	4450.00	Nil	4450.00	1711.61
2007-08	3812.16	659.07	4471.23	3016.75
2008-09	2341.00	412.94	2753.94	5922.57
2009-10	3500.00	617.64	4117.64	6405.32
2010-11	3259.00	575.11	3834.11	5434.98
2011-12	5355.00	944.99	6299.99	5119.70
Total	**26329.07**	**3209.75**	**29538.82**	**28210.14**

Major cumulative achievements under NHM during 2005-06 to 2011-12

Fruit Plantation	146537.43 ha.
Vegetable seed Production (Distribution of Vegetable minikit)	1125000 nos.
Spices	7468.13 ha.
Nursery	121 nos.
Floriculture	11292.59 ha.
Vermi compost	3416 nos.
Training & Visit of Farmers	22363 nos.
Onion Storage Structure	3795 nos.

Area and production of Horticultural Crops

Name of the Crop	Before NHM (2006-07)			After NHM 2007-08 to 2011-12		
	Area (Ha.)	Production M.T.	Productivity	Area (Ha.)	Production M.T.	Productivity
Mango	6750	28269	4.19	8900	48950	5.5
Cashew	4600	3450	0.75	6750	6410	0.95
Guava	240	2704	11.27	250	2800	11.2
Citrus	895	7782	8.7	950	8550	9
Litchi	6	18	3	10	27	2.7
Sapota	72	285	3.96	75	290	3.87
Banana	408	5141	12.6	410	5830	14.22
Coconut	1508	51 Lakh nuts	3382 nuts per Ha.	1700	71 Lakh nuts	4176 nuts per Ha.
Papaya	20	197	9.85	30	310	10.34
Pineapple	23	234	10.17	25	250	10
Others	1266	10881	8.6	1266	10881	8.6
Total	**15788**	**58961 & 51 Lakh nuts.**	**4.12**	**20366**	**84928 & 71 Lakh nuts.**	**4.5**

National Vegetable Initiative Programme

S.N.	Components	Activities	Outputs	Outcome & Impact
1	Mobilising farmers in groups and build their associations (FPOs) to plan and implement product specific cluster/ commercial crop cycles	• Organic farmers into informal groups (FIGs) • Train members and leaers in matters relating to group functioning, group norms systems • From associations/ FPOs of FIGs • Train members and leader of FPOs to nurture FIGs and mediate vis-à-vis external resource institutions and markets	• 3000 farmers form 8-10 villages in close geographic cluster organised into FIGs prepared for intensive vegetable/pulse based livelihood interventions • FIGs organised into FPOs/ informal associations supporting productivity, efficient acess to input and output linkages with agricuture programs • 75% met or exceed quality benchmarks on group functioning	Farmers in 80% FIGs confident and keen to postively change their current condition and have devloped plans to synergise planning and market access on the cluster identified products.
	Strengthen farmer capacity through agricutural best practices for enhaanced productivity	• Conduct exposure for selected men and women from project villages to villages/ farms practicing modern techniques and intensive farming • Discuss alternate farming systems with groups of their specific situations and generate household farming plans/ 'portfolios' • Identify training and extension needs and potential LRPs to function as community based extension agents • Train LRPs to provide extension support to farmers adopting new farming systems • Helping families access working capital form SHG/MFI, banking sector and other sources	• 60% of all families interested to take up improved crops have acess to quality inputs • 40% of participant land broguht into intensive farming • 80% families cultivate a diversified basket of locally suitable crops. • LRP taining modules being implemented in larger number • Trained LRPs supporting implementation of the household and culster level farm plans	• High adoption rates of new practices promoted under this project • 75% project families report over 50% increase in yields in pre existing crops • 75% project families have diversified their cropping pattern to cluster identified crop • The expertise and services of a cadre of rainend LRPs being utilised by the community effectively

	Ensuring access to and usage of quality inputs and services for intensive agricuture enhancing cluster competitiveness	• Link/develop supply channels for inputs and services • On field handholding support by LRPs to ensure appropriate usage of quality inputs • Demonstration of usage and effectiveness of relevant farm mechanisation practices	• 70% of participating families using quality/inputs • FPOs/ producer aggregations promoted • Families covered by these colelctives • Gross crop output per hectare increase by 100% in ruppe value terms	• Participating families have assured supply of quality inputs and services • Network of input and services delivery mechanisms developed in the local area • Participating families feel confident to intensify their agriculture
	Facilitate access to fair and remunerative markets including linking producer groups to marketing opportunities by market aggregators	• Developing production clusters for producing significant volume of marketable surplus • Identifying and building aggregation/ desegregation centers in production cluster wherever required • Linking these clusters with market players (eg. Vegetable traders, commission agents, retailer's etc.) • Producer collectives taking output marketing • Formation of FPOs	• Intensive, market oriented production clusters developed • Surplus produce marketed at remunerative prices participant families engaged in coordinated market oriented production • Producers collectives aggregate and market produce from members • Market aggregators/ retail chains buy produce form produce collectives	• Sustainable and competitive linkages for marketing exist for produce • Families in production clusters have multiple options to sell farm produce • The prevailing rates in the cluster are fair vis-à-vis large markets in the region.

The project intervention in Odisha has shown a remarkable progress and has already oriented total of 1500 farmers in jaipur and 2000 farmers in Cuttack district. The stakeholders have actively intervened to open group accounts and inter initiate inter lending activites within in the groups. The FIG members have closen their leader representatives among whom a board of directors has been selected for the FPO registration. Both the FPOs at Cuttack and Jaipur would get the DIN numbers shorty.

Elevenretail outlets have been opened and runing sucessfully in Bhubaneswar. The Government has mooted outlets for Cuttack too. The outlets are being managed throug PPP model and have been offering a fair price procuring vegetables directly form farmers and eradicating middlemen.

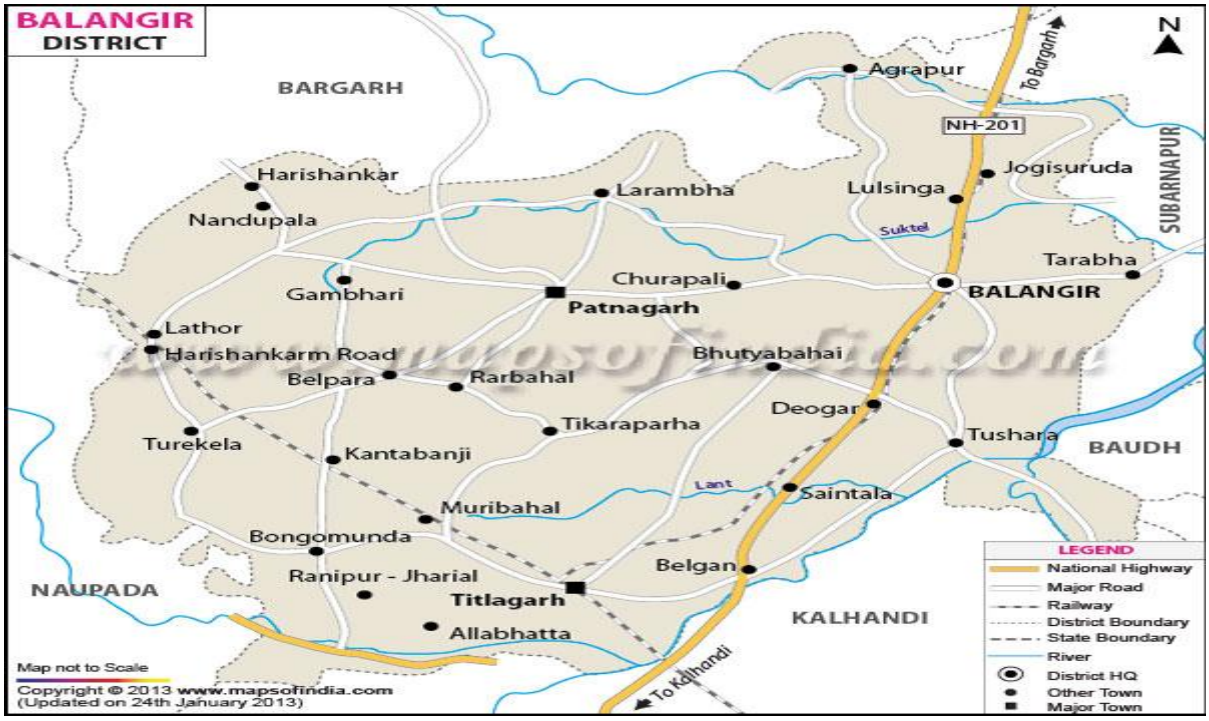
Impacts of intervention

- Almost all the FIG leaders have acquired skills on updating records and monthly group records are properly maintained.
- Role clarity among the executive body members on group management.
- After attending the HRD trainings, the FIG members (30%) have adopted soil testing measures.
- FIG members have started using potash for cabbage cultivation and vermicompost were not in use erlier.
- Extension use of pheromone trap as pest control measure among FIG members has been observed.
- Vegetable growers have adopted use of staking in Tomato and wire in case of creepers for better production.
- As per control measure nearly 69% of farmers have adopted deep oloughing, soil firing during soil preparation and seed treatment.
- Eleven FIG group members have started preparing organic fertilisers like Panchgavyaand have also used it in their farms.
- Few farmers have constructed compost pits.
- 71 farmers have applied for poly house structure and vermin compost units
- Many of the farmers are using crates in order to check post harvest loss and are practicing proper grading, sorting and packaging of vegetables. They are fetching better market price because of these practices.
- Farmers are showing interest in collective marketing.

- Unity has increased among FIG members. Inter group interaction is leading to sharing of knowledge and resource on vegetable cultivation, production and marketing.
- Increased rapport with horitculture department resource organisations and plant pathologists for advice.
- Increased knowledge among farmers on Horticulture schemes and provisions.

District Balangir:

The district is bounded by Sonepur and Boudh in the east, Nuapada in the west, Kalahandi in the south and Bargarh is in the north and lies between 20º09'N to 21º05' N latitude and 82º41' E to 83º42' E longitude.Bolagir district has an area of 5,165 km² and a population of 1,648,574(2011 census). The district of Balangir is flanked in the north-west by the Gandhamardan hills, and in the north-east by the rock-infested Mahanadi. It is traversed by many hill streams and is interspersed with the evergreen forest. The main forest area stretches along the western boundary bordering the Nuapada, Kalahandi district and then turns to the east running parallel to the Gandhamardan range. The crest of the range of Gandhamardan hills is fine platue, some ten miles long, with an average height of 3000 feet. For most part of this district lies on the north-west bank of river Tel, which form the boundary between his district and the district of Kalahandi, Sonepur, Boudh and Kandhamal. Balangir District in the western part of Odisha comprises of three Revenue sub-divisions namingly, Balangir, Titilagarh and Patnagarh. The district can be divided into two distinct physiographical regions, namely rolling plains and hilly areas of western and southern part of the district. The plain areas again are divided into two parts, namely; irrigation plains enjoying irrigation facilities due to Hirakud canal system and Ang medium irrigation project. A sizeable portion of the district is occupied by forest, which is mostly found in western and southern parts of the district. District is having 14 Blocks in 3 (three) Sub- divisions. The river Mahanadi and its tributaries such as Tel and Suktel are the principal rivers of the District. The Tel River flows across the eastern boundary and joins the river Mahanadi. The Suktel River originating from the hill ranges on the western side flows through Patnagarh.



Climate and Soil:

Balangir District comes under Western Central Table Land Zone comprising of two types of Agro climatic situations.

(i) Rainfed - Balangir Sub-Division
(ii) Dry area – Titilagarh & Patnagarh Sub – Division.

The climate of the District is characterised by very hot summer and fairly cold winter. The highest temperature ranges from 44 to 46 degree Celsius and lowest from 10 to 12 Degree Celsius. The rain fall starts mostly from mid June and continues up to mid October and the average annual rain fall is 1235mm per year.

Climate:

Balangir District has been divided in to four Agro– ecological situations (AES) and characterized by a hot dry summer and highly erratic rainfall distribution of south–west monsoon rains:

- **(i)** Plain land irrigated.
- **(ii)** Plain land Rainfed.
- **(iii)** Drought Prone undulating plain.
- **(iv)** Rainfed undulating sub– mountaineous tract.

Agro climate/ Ecologial zone: Gujarat Hills, Bandakaranya & Eastern Ghats hod moist sub humid eco sub-region, Eastern plateau and hillls region (VII), West central Table land zone (OR-9)

Weather- Highest Temperature (summer)	:-	48.7^{o} C
Lowest Temperature (winter)	:-	16.6^{o} C
Rainfall-	:-	1235 mm (60 dys)

Broadly the district has Red & Yellow, Red & Black, and Black Late–rite and Brown forest soil.
Average Soil Test Values of the district is given below

No of samples analysed	Sample under different PH category percent			Av. nutrient index		
	Acid	Natural	Alkaline	Org.C(N)	Av. P	Av. K
55190	39	45	16	1.67	2.15	2.36

LAND Use Pattern: (000ha.)

1. Geographical area: 679
2. Cultivable area: 346.00
3. Forest area: 154
4. Land under agriculture use: 53
5. Permanent pastures: 46
6. Cutivable wasteland: 18
7. Land under Misc. Tree crops and groves: 4
8. Barren and uncultivable land: 23
9. Current fallows: 22
10. Other fallows: 13

Major soils (common names)	Area ('000 ha)	Percent (%) of total
Mixed red and yellow	196.38	30
Red and black	189.33	29
Black	101.56	15
Laterite and lateritic	54.59	9

Agricultural land use	Area ('000 ha)	Cropping intensity %
Net sown area	324	146
Area sown more than once	148	
Gross cropped area	472	
Irrigated area	**Area ('000 ha)**	**Percent (%)**
Net cultivated area	346	52.66(of geographical area)
Net irrigated area	53.92	15.58(of net cultivated area)
Gross irrigated area	84.04	12.79(of geographical area)
Rainfed area	270	84.39(of net cultivated area)

Net Irrigation (Rabi) :

Source	Ayout area in ha.	Coverage area in ha.
Major I.P	350	350
Medium I.P	707	706
Minor I.P	1765	1534
Lift I.P	15162	13661
Dug well	11849	12097
Other sources	8664	9054
Total	**38497**	**37402**

Horticulture at a Glance in Balangir District

The total cultivated area of the district is 04, 73,793 hect. out of which high land is 2,37,115 hect. (50.05%) which is very much suitable for horticultural crops like Mango, Kagji Lime, Guava, Pomegranate, Banana etc. The soil of the District may be divided into two broad groups i.e. Heavy Black Cotton soils and Red Lateritic soils.

Productivity & Production of Fruit Crops for 2012-13.

Sl. No	Name of the Crop	Area in ha.	Fruit Bearing Area in ha.	Productivity in terms / Ha.	Production in MT.
1	Anola	194	38	1.940	73.72
2	Banana	1560	1436	20.56	29524
3	Citrus	684	529	9.49	5020
4	Guava	258	244	7.45	1818
5	Litchi	35	29	4.05	117
6	Mango	9354	4561	5.34	24356
7	Papaya	108	97	23.60	2289
8	Pineapple	14	13	10.00	130
9	Pomegranate	13	9	4.40	40

10	Sapota	300	292	5.14	1500
11	Other Fruit Crops	4202	3475	10.37	36036
12	Sweet Potato	864	870	9.24	7983
13	Coconut	910	462	0.061	28.18
14	Cashew	26	15	0.661	10

Productivity & Production of vegetables Crops for 2012-13.

1	Brinjal	4517	16.26	73446
2	Cabbage	1816	27.53	49994
3	C.Flower	1360	14.62	19883
4	Okra	2320	8.70	20184
5	Pea	236	9.04	2133
6	Tomato	4186	13.83	57892
7	Onion	8548	14.42	123262
8	Potato	289	13.84	4000
9	Radish	402	9.94	3996
10	Bitter Ground	743	10.75	7987
11	Bottle Ground	560	12.94	7246
12	Beans	436	5.67	2472
13	Watermelon	1075	20.16	21672
14	Muskmelon	10	17.00	170
15	Cucumber	64	13.86	887
16	Pointed Gourd	36	12.36	445
17	Carrot	6	10.97	66
18	Capsicum	3	16.25	49
19	Tapioca	3	17.00	51
20	Other Vegetables	13216	11.12	146962
21	Coriander	542	0.64	347
22	Ginger	65	5.21	339
23	Garlic	396	3.52	1394
24	Turmeric	26	6.79	177
25	Chilli	2361	0.84	1983

Farmers visited:

S.N.	List of Farmer/Address	Crop/Component	Area	Remark
1	Raja Bhagat patel, Village:- Siker	K. Lime	2 ha.	Drip needs proper water source and orchard needs spray of fungicided
2	Susil Padhan, At:- Sargada , Po;- Bangomunda,	Mango	4 ha.	Farmers still use traditional drip system .No.water

	Block- Gudvella			source
3	Sambhu Prasad Jain ,At/Po:- Tusura Block:- Gudvella	Mango	1.2 ha.	Crop was maintained properly and needs drip support.
4	Subha Karan Jain, At/Po:- Tusura Block:- Gudvella	Mango	2 Ha.	Not properly rejuvenation is done and cut be tree by local implements only .No pasting of fungicides
5	Sri Ram Kumar Dash Village:- Bhanpur, Block:- Bolangir	Mango	4.8 Ha. 2 ha.	Crop maintained properly
6	Sri Sanjeev Kumar Guru : Village/: - Bandapada , Block:- Puintala	Mango – 3.4 ha. , K. Lime – 0.4 ha.	6.00 Ha. 3.8 ha.	Water source is not properly linked with drip**.**Farmer aintained orchard properly.
7	Sri Promod Kumar Singh Village:- Sanburka bahal, Block – puintala	Water Tank(Individual)	Size 20m X 20m X 3m	Not properly designed and lining not provided.
8	Sri Promod kumar Singh Village;- Sanburkabahal, Block :- Puintala	Amrapali, Dashehari	Medium Density Mango Plantation	Well maintained and intercroped with vegetables**.**
10	Sri Narayana Gheevela Village:- Sanburkabahal, Block:- Puintala	Medium Density Mango Plantation	Mango-0.8ha.	Well maintained and intercroped with vegetables**.**
11	Sri Prahallad Bag Village:- Sanburkabahl, Block:- Puintala	Amrapali, Dushehari	Medium Density Mango Plantation	Water source is not properly linked with drip
12	Sri Bhagabat Chhatria Village:- Sanburkabahal, Block :- Puintala	Water pond (Individual)	15m x10m x 3m size	Water tank is not yet completed and lining not provide to retain water .Crop maintained on tradition irrigation.

1. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl.No.	Details	
1	Name & address of Beneficiary whose field visited	Raja Bhagat patel, Village:-Siker
2	Total land available with the beneficiary (Ha.)	2 Ha.
3	Crop cluster under which covered	K. Lime
4	Name & Variety of crop planted	Kuliyane
5	Source of planting material	Horticulture Dept.
6	Number of Plants Planted	400 No.
7	Date of Planting	2008-09
8	Number of Plants which survived (Also indicate percentage Survival)	360 Plant
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	16,875.00
10	Amount paid and date of payment	In three installments i
11	Mode of payment	A/c Cheque
12	Source of irrigation water (Bore well/Tubewell/Canel)	Dug Well
13	Whether Drip/Sprinkle System in use	Drip
14	Other inputs provided	
15	Whether assistance available for Organic Farming	-No-
16	If so, area covered	
17	Assistance available	
18	Available marketing facility for the crop	Titilagarh
19	Other infrastructure available in the vicnity	
20	General up keep of the plot. Very good/ Good/Average/Poor	Farmers still use traditional drip system .No.water source Good
21	Any other relevant observation by the JIT	Drip needs proper source

Kagzi Lime plantation in farmers field supported with drip

Source of drip irrgation from ground well and filter

2. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl. No.	**Details**	
1	Name & address of Beneficiary whose field visited	Susil Padhan, At:- Sargada , Po;- Bangomunda, Block- Gudvella
2	Total land available with the beneficiary (Ha.)	4 ha.
3	Crop cluster under which covered	Mango
4	Name & Variety of crop planted	Mango (Amrapali, Mdlika, Dusheri)
5	Source of planting material	Horticulture Dept.
6	Number of Plants Planted	250 nos.
7	Date of Planting	2009-10: 150 nos. 2012-13 : 100 nos.
8	Number of Plants which survived (Also indicate percentage Survival)	250 nos. (100%)
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Rs. 34,650.00
10	Amount paid and date of payment	paid
11	Mode of payment	A/C Payee Cheque & RTGS
12	Source of irrigation water (Bore well/Tubewell/Canel)	Bore well

13	Whether Drip/Sprinkle System in use	Drip Irrigation System
14	Other inputs provided	Vermi Compost Unit
15	Whether assistance available for Organic Farming	Vermi Compost Unit
16	If so, area covered	
17	Assistance available	
18	Available marketing facility for the crop	Local Market
19	Other infrastructure available in the vicnity	
20	General up keep of the plot. Very good/ Good/Average/Poor	Good
21	Any other relevant observation by the JIT	

3. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl. No.	**Details**	
1	Name & address of Beneficiary whose field visited	Sambhu Prasad Jain ,At/Po:- Tusura Block:- Gudvella
2	Total land available with the beneficiary (Ha.)	1.2 ha.
3	Crop cluster under which covered	Mango
4	Name & Variety of crop planted	Mango 80 Nos.(Mallika, Dasheri, Amrapalli)
5	Source of planting material	Horticulture Deptt.
6	Number of Plants Planted	80 nos.
7	Date of Planting	2009-10
8	Number of Plants which survived (Also indicate percentage Survival)	80 nos.(100 %)
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Rs. 19,800.00
10	Amount paid and date of payment	Paid 3 installment
11	Mode of payment	A/c payee cheque
12	Source of irrigation water (Bore well/Tubewell/Canel)	Bore well
13	Whether Drip/Sprinkle System in use	No

14	Other inputs provided	
15	Whether assistance available for Organic Farming	No
16	If so, area covered	NA
17	Assistance available	NA
18	Available marketing facility for the crop	Local Market
19	Other infrastructure available in the vicnity	
20	General up keep of the plot. Very good/ Good/Average/Poor	Crop was maintained properly and needs drip support.
21	Any other relevant observation by the JIT	

4. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl. No.	**Details**	
1	Name & address of Beneficiary whose field visited	Subha Karan Jain, At/Po:- Tusura Block:- Gudvella
2	Total land available with the beneficiary (Ha.)	2 Ha.
3	Crop cluster under which covered	Mango
4	Name & Variety of crop planted	Mango (Amrapali, Dusheri, B. Palli, Fazil,Totapuri)
5	Source of planting material	Horticulture Deptt.& Hyderbad
6	Number of Plants Planted	Mango – 150, Sapota – 40, Litchi - 10
7	Date of Planting	1982-83 : 30 … 1992-93: 120 40 10
8	Number of Plants which survived (Also indicate percentage Survival)	200 (100 %)
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Not Availed
10	Amount paid and date of payment	Na
11	Mode of payment	Na
12	Source of irrigation water (Bore well/Tubewell/Canel)	Dug well
13	Whether Drip/Sprinkle System in use	Nil

14	Other inputs provided	Nil
15	Whether assistance available for Organic Farming	No
16	If so, area covered	Na
17	Assistance available	Rejuvenation on of old mango orchard for 1 ha. area
18	Available marketing facility for the crop	Local Market
19	Other infrastructure available in the vicnity	
20	General up keep of the plot. Very good/ Good/Average/Poor	Not properly rejuvenation is done and cut be tree by local implements only .No pasting of fungicides
21	Any other relevant observation by the JIT	

5. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl. No.	**Details**	
1	Name & address of Beneficiary whose field visited	Sri Ram Kumar Dash Village:- Bhanpur, Block:- Bolangir
2	Total land available with the beneficiary (Ha.)	4.8 Ha. 2 ha.
3	Crop cluster under which covered	Mango
4	Name & Variety of crop planted	Mango (Amrapali, Dusheri)
5	Source of planting material	
6	Number of Plants Planted	200
7	Date of Planting	25th to 30th July 2012
8	Number of Plants which survived (Also indicate percentage Survival)	192 95.5 %
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Rs. 16,500.00 for 3 years
10	Amount paid and date of payment	
11	Mode of payment	Through Bankers Cheque
12	Source of irrigation water (Bore	Boar Well With Electric Motor

	well/Tubewell/Canel)	
13	Whether Drip/Sprinkle System in use	Drip
14	Other inputs provided	
15	Whether assistance available for Organic Farming	through subsidy
16	If so, area covered	
17	Assistance available	
18	Available marketing facility for the crop	Local Market
19	Other infrastructure available in the vicnity	
20	General up keep of the plot. Very good/ Good/Average/Poor	Crop maintained properly-good
21	Any other relevant observation by the JIT	·

6. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl. No.	**Details**	
1	Name & address of Beneficiary whose field visited	Sri Sanjeev Kumar Guru : Village/: - Bandapada , Block:- Puintala
2	Total land available with the beneficiary (Ha.)	6.00 Ha. 3.8 ha.
3	Crop cluster under which covered	
4	Name & Variety of crop planted	Mango – 3.4 ha. , K. Lime – 0.4 ha.
5	Source of planting material	Balangir T.N, Balangir
6	Number of Plants Planted	Mango – 340 nos, k. lime – 160 nos.
7	Date of Planting	July 2011 & Aug. 2012
8	Number of Plants which survived (Also indicate percentage Survival)	Mango – 306 nos., K. lime – 140 nos. (90%) (88%)

9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Mango – Rs.56,100/- in 3 years K. lime – Rs.10,000/- in 3 years
10	Amount paid and date of payment	2011-12 to 2012-13 (March 2013)
11	Mode of payment	Banker Cheque
12	Source of irrigation water (Bore well/Tubewell/Canel)	Tank / Bore Well with pumpset
13	Whether Drip/Sprinkle System in use	Yes, Drip Installed
14	Other inputs provided	
15	Whether assistance available for Organic Farming	no
16	If so, area covered	Does not arise
17	Assistance available	Nil
18	Available marketing facility for the crop	Local Market
19	Other infrastructure available in the vicnity	
20	General up keep of the plot. Very good/ Good/Average/Poor	Crop well maintained and need drip.
21	Any other relevant observation by the JIT	

Mulching with drip in mango and papaya cultivation

Mulching with drip in mango and papaya cultivation

7. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl. No.	Details	
1	Name & address of Beneficiary whose field visited	Sri Promod Kumar Singh Village:- Sanburka bahal, Block – puintala
2	Total land available with the beneficiary (Ha.)	1ha.
3	Crop cluster under which covered	Size 20m X 20m X 3m
4	Name & Variety of crop planted	Mango/Papaya
5	Source of planting material	Swadhin Nursery , Dhenkanal
6	Number of Plants Planted	1.6 ha.and 0.4 ha.
7	Date of Planting	2012-13
8	Number of Plants which survived (Also indicate percentage Survival)	940%
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Estimated Cost 0.93358 Lakhs Subsidy (50%) 0.46679 Lakhs
10	Amount paid and date of payment	Ist instalment paid
11	Mode of payment	Bankers Cheque
12	Source of irrigation water (Bore well/Tubewell/Canel)	From the catchment Area Through mosonary Inlet
13	Whether Drip/Sprinkle System in use	drip
14	Other inputs provided	
15	Whether assistance available for Organic Farming	
16	If so, area covered	
17	Assistance available	
18	Available marketing facility for the crop	Local
19	Other infrastructure available in the vicnity	
20	General up keep of the plot. Very good/ Good/Average/Poor	Water source is not properly linked with drip.Farmer

		aintained orchard properly
21	Any other relevant observation by the JIT	Not properly designed and lining not provided.

8. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl. No.	Details	
1	Name & address of Beneficiary whose field visited	Sri Promod kumar Singh Village;- Sanburkabahal, Block :- Puintala
2	Total land available with the beneficiary (Ha.)	Medium Density Mango Plantation
3	Crop cluster under which covered	Amrapali, Dashehari
4	Name & Variety of crop planted	Swadhin Nursery , Dhenkanal
5	Source of planting material	160
6	Number of Plants Planted	02.08.2012 to 15.08.2012
7	Date of Planting	
8	Number of Plants which survived (Also indicate percentage Survival)	156 nos. 97.5%
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	1.016 lakhs for 3 Years
10	Amount paid and date of payment	2012-13 to 2014-15
11	Mode of payment	Through RTGS
12	Source of irrigation water (Bore well/Tubewell/Canel)	Dug well, Farm Pond
13	Whether Drip/Sprinkle System in use	No
14	Other inputs provided	Yes
15	Whether assistance available for Organic Farming	No
16	If so, area covered	
17	Assistance available	
18	Available marketing facility for the crop	Local Market
19	Other infrastructure available in the vicnity	
20	General up keep of the plot. Very good/	Good

	Good/Average/Poor	
21	Any other relevant observation by the JIT	Well maintained and intercroped with vegetables**.**

9. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl. No.	**Details**	
1	Name & address of Beneficiary whose field visited	Sri Narayana Gheevela Village:- Sanburkabahal, Block:- Puintala
2	Total land available with the beneficiary (Ha.)	2acres
3	Crop cluster under which covered	Mango
4	Name & Variety of crop planted	Medium Density Mango Plantation
5	Source of planting material	Swadhin Nursery Dhenkanal
6	Number of Plants Planted	80 Nos.
7	Date of Planting	02.08.2012 to 10.08.2012
8	Number of Plants which survived (Also indicate percentage Survival)	79. 99%
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	1.016 lakhs for 3 Years
10	Amount paid and date of payment	2012-13 to 2014-15
11	Mode of payment	Through RTGS
12	Source of irrigation water (Bore well/Tubewell/Canel)	Dug well, Farm Pond
13	Whether Drip/Sprinkle System in use	No
14	Other inputs provided	Kalsimeal, Chlorophyriphos
15	Whether assistance available for Organic Farming	No
16	If so, area covered	
17	Assistance available	
18	Available marketing facility for the crop	Local Market
19	Other infrastructure available in the vicnity	
20	General up keep of the plot. Very good/	Good

	Good/Average/Poor	
21	Any other relevant observation by the JIT	Well maintained and intercroped with vegetables**.**

10. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl. No.	**Details**	
1	Name & address of Beneficiary whose field visited	Sri Prahallad Bag Village:- Sanburkabahl, Block:- Puintala
2	Total land available with the beneficiary (Ha.)	
3	Crop cluster under which covered	Medium Density Mango Plantation
4	Name & Variety of crop planted	Amrapali, Dushehari
5	Source of planting material	Swadhin Nursery ,Dhenkanal
6	Number of Plants Planted	160
7	Date of Planting	02.08.2012 to 15.08.2012
8	Number of Plants which survived (Also indicate percentage Survival)	155 97%
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	1.016 Lakhs for 3 Years
10	Amount paid and date of payment	2012-13 to 2014-15
11	Mode of payment	Through RTGS
12	Source of irrigation water (Bore well/Tubewell/Canel)	Dug Well & Farm Pond
13	Whether Drip/Sprinkle System in use	Drip Irrigation
14	Other inputs provided	Kalsimeal, Chlorophyriphos
15	Whether assistance available for Organic Farming	No
16	If so, area covered	
17	Assistance available	
18	Available marketing facility for the crop	Local Market within the District
19	Other infrastructure available in the vicnity	
20	General up keep of the plot. Very good/	Very good

	Good/Average/Poor	
21	Any other relevant observation by the JIT	Water source is not properly linked with drip

11. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl. No.	Details	
1	Name & address of Beneficiary whose field visited	Sri Bhagabat Chhatria Village:- Sanburkabahal, Block :- Puintala
2	Total land available with the beneficiary (Ha.)	Mano orchard
3	Crop cluster under which covered	size 15m X 10m X 3m
4	Name & Variety of crop planted	Dashehri
5	Source of planting material	Swadhin Nursery ,Dhenkanal
6	Number of Plants Planted	100
7	Date of Planting	2011-12
8	Number of Plants which survived (Also indicate percentage Survival)	100%
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Estimated Cost -0.45283 Lakhs Subsidy (50%) -0.22641 Lakhs
10	Amount paid and date of payment	31.03.2012
11	Mode of payment	Banker Cheque
12	Source of irrigation water (Bore well/Tubewell/Canel)	From the catchment Area Through masonary Inlet
13	Whether Drip/Sprinkle System in use	Drip
14	Other inputs provided	given
15	Whether assistance available for Organic Farming	no
16	If so, area covered	
17	Assistance available	
18	Available marketing facility for the crop	local

19	Other infrastructure available in the vicnity	
20	General up keep of the plot. Very good/ Good/Average/Poor	Water tank is not yet completed and lining not provide to retain water .Crop maintained on tradition irrigation.
21	Any other relevant observation by the JIT	

12. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl. No.	Details	Remarks
1	Name of the Project	Adoption & Certification of Organic Farming (NHM) Scheme
2	Year of Implementation	2012
3	Project Period	3 Years
4	Name of Implementing Agency	SUVIDHA
5	Location of Project	Balangir (Saintala Block) Deng & Trustapalli
6	Total Project cost	57,20,000
7	Amount Released by DAC	20,02,000
8	Expenditure incurred	20,02,000
9	Status	Farmers are not able to get higher price being organic, since area is in remote locality.
	• Crop Covered	Banana, Mango, Pointed Gurd, etc.
	• No. of farmers involved	201
	• Name and Address of Certifying Agency	CUC, Bombay
	• Whether any Certification Made	C1 Certificate Obtained
10	Whether funds disbursed	Yes

ORGANIC FARMING / VERMI COMPOSTING UNITS:

Society for the Upliftment of Villagers & Devepolment of Himalayan Areas (SUVUDHA) - an NGO organization from Uttrakhand has taken up supervision of organic vegetable production at village –TrustaPalli& Deng block Saintala and their representation supervise field activities keeping frmers record.Crops are supported with drip and cluster of 15 farmers are supervised.JIT recorded crpos in very small plots and farmers informed that they are getting only market price and not premium price of organic production.Organic Vegetable production area is far from market and also to a backward district.Market is a poblem for such a small production.

Annual Action Plan 2012-13:

NAME OF THE SCHEME:			NATIONAL HORTICULTURE MISSION 2012-13						MONTH:		Up to 31/03/2013		
Sl. No	Name of the A.D.H	Name of the component	Unit	Phy. Target	Phy. Achivement	Req. of funds / to spend (Rs)	Expend. Incurred (Rs)	Balance to Spend (Rs)	No. of beneficiaries				
									SC	ST	OC	Total	W
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Setting of New TC Unit		Nos	1	0	2500000	0	2500000					
	Dist: Total for TC Unit: -					**2500000**		**2500000**					
2	**Establishment of New Gardens**												
a.		Banana T.C											
	Patnagarh		Ha.	10.00	9.676	301911	298601	3310	0	2	20	22	0
	Dist. Total for Banana T. C			**10.00**	**9.676**	**301911**	**298601**	**3310**	**0**	**2**	**20**	**22**	**0**
b.	Bolangir	Mango	Ha.	20.00	20.00	198000	190480	7520	0	0	25	25	0
	Titlagarh		Ha.	20.00	20.00	198000	192240	5760	4	5	34	43	0
	Patnagarh		Ha.	20.00	20.00	198000	196200	1800	0	2	19	21	2
	Dist. Total for Mango			**60.00**	**60.00**	**594000**	**578920**	**15080**	**4**	**7**	**78**	**89**	**2**
c.	Bolangir	Citrus (K. Lime)	Ha.	4.00	4.00	60012	58772	1240	1	3	5	9	0
	Titlagarh		Ha.	3.00	3.00	45009	45000	9	0	2	4	6	0
	Patnagarh		Ha.	3.00	3.00	45009	43642	1367	0	0	6	6	0
	Dist. Total for Citrus (K.lime)			**10.00**	**10.00**	**150030**	**147414**	**2616**	**1**	**5**	**15**	**21**	**0**
d.	Bolangir	Papaya	Ha.	4.00	2.00	72000	71998	2	0	0	8	8	0
	Titlagarh		Ha.	3.00	0.00	54000	54000	0	1	4	3	8	0
	Patnagarh		Ha.	3.00	0.00	54000	49226	4774	3	1	6	10	0
	Dist. Total for Papaya			**10.00**	**2.00**	**180000**	**175224**	**4776**	**4**	**5**	**17**	**26**	**0**

	Dist. Total for All Plantation:		**Ha.**	**90.00**	**81.68**	**1225941**	**1200159**	**25782**	**9**	**19**	**130**	**158**	**2**
	Titlagarh		Ha.	2.00	2.00	90000	0	2400	3	3	14	20	1
	Patnagarh		Ha.	1.00	3.00	45000	0	3600	2	2	10	14	1
	Dist. Total for Gladioli (SF/MF)			**5.00**	**7.00**	**225000**	**0**	**8400**	**5**	**5**	**24**	**34**	**2**
d.	Bolangir	Gladioli (Other)	Ha.	4.00	4.00	118800		2480				0	
	Titlagarh		Ha.	3.00	3.00	89100		1860	5	6	19	30	1
	Patnagarh		Ha.	3.00	4.00	118800		2480	1	2	17	20	1
	Dist. Total for Gladioli (Other)			**10.00**	**11.00**	**326700**	**0**	**6820**	**6**	**8**	**36**	**50**	**2**
	Dist. Total for all Flowers			**25.00**	**18.00**	**842700**	**0**	**306220**	**11**	**13**	**60**	**84**	**4**
4	**Rejuvenation of Old Orchard**												
a.	Bolangir	Old Orchard	Ha.	15.00	15.00	225000	225000	0	1	2	24	27	0
	Titlagarh		Ha.	15.00	15.00	225000	221250	3750	1	2	12	15	0
	Patnagarh		Ha.	20.00	13.50	300000	191750	108250	1	9	9	19	5
	Dist. Total for Rejuvenation			**50.00**	**43.50**	**750000**	**638000**	**112000**	**3**	**13**	**45**	**61**	**5**
	Dist. Total for Farm Pond			**250**	**60**	**15000000**	**3312043**	**11687957**	**0**	**0**	**0**	**0**	**0**
6	**Protected Cultivation**												
	Dist. Total for Green house (Bambo structure)			**330**	**0**	**61875**	**0**	**61875**	**0**	**0**	**0**	**0**	**0**
	Dist. Total for Green house (Tubular structure)			**2000**	**0**	**935000**	**0**	**935000**	**0**	**0**	**0**	**0**	**0**
c.	Bolangir	Shade House (Bamboo Structure) 20mt. X 10mt X 3.0mt. Subsidy @ Rs. 150/Sqm.	Sqm.	2200	0	330000	75000	255000	0	0	1	1	0
	Titlagarh		Sqm.	2300	0	345000	30000	315000	0	0	1	1	0
	Patnagarh		Sqm.	2305	0	345750	0	345750	0	0	0	0	0
	Dist. Total for Shadenet House (Bamboo structure)			**6805**	**0**	**1020750**	**105000**	**915750**	**0**	**0**	**2**	**2**	**0**
d.	Bolangir	Shade House (Tubular Structure) 20mt. X 10mt X 3.0mt. Subsidy @ Rs. 300/Sqm.	Sqm.	300	0	90000	0	90000	0	0	0	0	0
	Titlagarh		Sqm.	400	1876	120000	562800	-442800	0	0	2	2	0
	Patnagarh		Sqm.	300	0	90000	0	90000	0	0	0	0	0
	Dist. Total for Shadenet house (Tubular structure)			**1000**	**1876**	**300000**	**562800**	**-262800**	**0**	**0**	**2**	**2**	**0**
e.	Bolangir	Plastic	ha	80.00	87.80	800000	875962	-75962	24	64	123	211	0

	Titlagarh	Mulching	ha	70.00	54.50	700000	537915	162085	18	80	37	135	0
	Patnagarh		ha	50.00	45.50	500000	455100	44900	9	35	51	95	1
	Dist. Total for Plastic Mulching			**200.00**	**187.80**	**2000000**	**1868977**	**131023**	**51**	**179**	**211**	**441**	**1**
	Dist. Total for Protected Cultivation					**4325625**	**2536777**	**1788848**	**51**	**179**	**215**	**445**	**1**
7	**Promotion of INM & IPM**												
1	Bolangir	Promotion of INM / IPM in Mango / Cashew / Banana	ha.	8	8	8000	8000	0	0	1	7	8	0
	Titlagarh		ha.	9	9	9000	8266	734	1	2	6	9	0
	Patnagarh		ha.	8	7	8000	4480	3520	1	4	5	10	3
	Dist. Total for IPM/INM			**25**	**24**	**25000**	**20746**	**4254**	**2**	**7**	**18**	**27**	**3**
8	**Organic Farming**												
a.	Bolangir	Organic Cultivation & Certification	ha.	0	0	0	7000000	-7000000	0	0	0	0	0
	Titlagarh		ha.	1000	1000	7000000	0	7000000	0	0	0	0	0
	Patnagarh		ha.	0	0	0	0	0	0	0	0	0	0
	Dist. Total for Organic Cultivation			**1000**	**1000**	**7000000**	**7000000**	**0**	**0**	**0**	**0**	**0**	**0**
b.	Bolangir	HDPE Vermi Beds @ Rs. 4000/-	Nos	275	275	1375000	1100000	275000	0	0	275	275	0
	Titlagarh		Nos	200	200	1000000	800000	200000	0	0	200	200	0
	Patnagarh		Nos	150	150	750000	600000	150000	0	0	0	0	0
	Dist. Total for HDPE Vermi Beds			**625**	**625**	**3125000**	**2500000**	**625000**	**0**	**0**	**475**	**475**	**0**
	Dist. Total for Organic Farming			**1625**	**1625**	**10125000**	**9500000**	**625000**	**0**	**0**	**475**	**475**	**0**
9	**Pollination Support through Bee-Keeping**												
	Dist. Total for Honey Bee Colony			**900**	**895**	**1350000**	**1342500**	**1350000**	**0**	**0**	**0**	**0**	**0**
	Dist. Total for Honey Equipment with Extractur			**65**	**0**	**455000**	**0**	**455000**	**0**	**0**	**0**	**0**	**0**
	Dist. Total for Bee Keeping			**965**	**895**	**1805000**	**1342500**	**1805000**	**0**	**0**	**0**	**0**	**0**
10	**Horticulture Mechanisation**												
	Dist. Total for Power Operated Machines			**18**	**23**	**315000**	**1131300**	**-816300**	**0**	**0**	**22**	**22**	**0**
	Dist. Total for Hort. Mechanisation			**38**	**23**	**1515000**	**1131300**	**383700**	**0**	**0**	**22**	**22**	**0**
11	**Human Resources Development**												
a.	DDH Bolangir	Gdr Training	Nos	10	9	300000	0	300000				0	
	Dist. Total for Gardener Training			**10**	**9**	**300000**	**0**	**300000**	**0**	**0**	**0**	**0**	**0**
b.	Bolangir	Training of Farmer inside the district @ Rs. 400/-	Nos	50	50	20000	20000	0			50	50	0
	Titlagarh		Nos	50	50	20000	20000	0	10	17	23	50	0
	Patnagarh		Nos	50	50	20000	20000	0	3	21	26	50	0

	Dist. Total for Inside District Training			**150**	**150**	**60000**	**60000**	**0**	**13**	**38**	**99**	**150**	**0**
c.	Bolangir	Training of Farmer inside the state on IPM/ INM/ Plantation/ PHM @ Rs. 2000/-	Nos	30	30	60000	60000	0	0	0	30	30	0
	Titlagarh		Nos	25	25	50000	50000	0	1	6	18	25	
	Patnagarh		Nos	20	20	40000	40000	0	0	8	12	20	
	Dist. Total for Inside State Training			**75**	**75**	**150000**	**150000**	**0**	**1**	**14**	**60**	**75**	**0**
	Dist. Total for H.R.D			**271**	**225**	**740000**	**210000**	**230000**	**14**	**52**	**159**	**225**	**0**
12	**Integrated Post Harvest Management**												
a.													
b.													
	Dist. Total for P.H.M			**111**	**67**	**11950000**	**6400000**	**5550000**	**0**	**0**	**0**	**0**	**0**
13	**Estt. of Marketing Infrastructure**												
	Dist. Total of Marketing Infrastructure			**4**	**0**	**845000**	**0**	**845000**	**0**	**0**	**0**	**0**	**0**
14	**Activities of the Commemorate of Horticulture Year**												
a.		Dist. Level Veg. Exhibition	Nos	1	1	100000	100000	0					
b.		Hort. Mela	Nos	1	0	100000		100000					
c.		Dist. Level Flower Show	Nos	1	1	100000	100000	0					
	Dist. Total:			**3**	**2**	**300000**	**200000**	**100000**	**0**	**0**	**0**	**0**	**0**
15	**Mission Management**												
a.	DDH Bolangir	Dist Level show	Nos	1	1	200000	180000	20000				0	
	Dist. Total			**1**	**1**	**200000**	**180000**	**20000**	**0**	**0**	**0**	**0**	**0**
	Grand District. Total					**52149266**	**26671525**	**25983761**	**90**	**283**	**1124**	**1497**	**15**
A.	**New Garden (Fruits) 1st yr. Maintainance**												
1	Bolangir	Mango	Ha.	230.00	172.70	569910	569910	0			124	124	
	Titlagarh		Ha.	340.00	261.70	863610	862290	1320				0	
	Patnagarh		Ha.	230.00	212.40	700920	700920	0	3	81	161	245	19
	TOTAL			**800.00**	**646.80**	**2134440**	**2133120**	**1320**	**3**	**81**	**285**	**369**	**19**
2													
	TOTAL			**10.00**	**9.00**	**45009**	**30001**	**15008**	**0**	**1**	**4**	**5**	**0**
3	Bolangir	Banana T.C	Ha.	0.00	0.00	0	0	0				0	
	Titlagarh		Ha.	3.00	3.00	31200	31200	0				0	
	Patnagarh		Ha.	7.00	3.00	72800	31200	41600	0	1	6	7	0

	TOTAL		**Ha.**	**10.00**	**6.00**	**104000**	**62400**	**41600**	**0**	**1**	**6**	**7**	**0**
4	Bolangir	Banana Sucker	Ha.	0.00	0.00	0	0	0	0	0	0	0	0
	Titlagarh		Ha.	30.00	30.00	168750	168750	0	0	0	0	0	0
	Patnagarh		Ha.	20.00	20.00	112500	112503	-3	5	17	27	49	0
	TOTAL		**Ha.**	**50.00**	**50.00**	**281250**	**281253**	**-3**	**5**	**17**	**27**	**49**	**0**
	Sub Total		**Ha.**	**870.00**	**711.80**	**2564699**	**2506774**	**57925**	**8**	**100**	**322**	**430**	**19**
B.	**Establishment of New Garden (Fruits) 2nd Yr. Maint.**												
1	Bolangir	Mango	Ha.	279.70	200.40	661320	661320	0					
	Titlagarh		Ha.	581.90	424.60	1401180	1401180	0					
	Patnagarh		Ha.	346.70	269.80	890340	890340	0	7	100	160	267	24
	TOTAL			**1208.30**	**894.80**	**2952840**	**2952840**	**0**	**7**	**100**	**160**	**267**	**24**
	Sub Total			**1208.30**	**894.80**	**2952840**	**2952840**	**0.00**	**7**	**100**	**160**	**267**	**24**
	TOTAL						**858412**						
	Grand District. Total					**57666805**	**32989551**	**26041686**					
C.	**Model & Small Nursery (2009-2012)**												
	TOTAL			**3**	**3**	**5400000**	**5400000**	**0**	**0**	**0**	**0**	**0**	**0**
2	Bolangir	Model Nursery (private sector) (2009-2012)	Nos	0	0	0	0	0				0	
	Titlagarh		Nos	1	1	900000	675000	225000			1	1	
	Patnagarh		Nos	1	1	625000	245000	380000			1	1	
	TOTAL			**2**	**2**	**1525000**	**920000**	**605000**	**0**	**0**	**2**	**2**	**0**
3	Bolangir	Small Nursery (public sector) (2009-2012)	Nos	1	1	300000	300000	0				0	
	Titlagarh		Nos	2	2	600000	600000	0				0	
	Patnagarh		Nos	2	2	600000	600000	0				0	
	TOTAL			**5**	**5**	**1500000**	**1500000**	**0**	**0**	**0**	**0**	**0**	**0**
4	Bolangir	Small Nursery (Private sector) (2009-2012)	Nos	2	2	300000	300000	0			2	2	
	TOTAL			**2**	**2**	**300000**	**300000**	**0**	**0**	**0**	**2**	**2**	**0**
		Sub Total: -				**11677840**	**13579614**	**605000**	**7**	**100**	**164**	**271**	**24**
		Grand Total: -				**63827106**	**40251139**	**26588761**	**97**	**383**	**1288**	**1768**	**39**

Photographs of Bolangir District:

Mango plantation in upland area during 2012-13

Mango plantation in upland area with out drip 2012-13

Water storage Tank for drip irrgation

Amrapalli mago in fruiting in farmers field

Mango planted with drip during 2011-12

Farmers own nursery for grafted mango seedlings

Vermi compost unit in farmers field

Vvermi bed of plastic for organic cultivation of vegetables

NGO with farmers for organic vegetable and Banana production in farmers field

Lime cultivation with drip planted in 2008-09

Torned shadenet in farmers field

Kandhamal District:

The district Kandhamal is one of the centrally located districts of Orissa and lies between 19045' and 20030' North latitudes and 83045' and 84030' East longitudes. It is bounded by Baudh district on the north, Rayagada, Gajapati & Ganjam districts on the south, Nayagarh, and Ganjam districts on the east and Kalahandi & Balangir districts on the west.The district having an area of 8021 sq. kms and a population of 731,952 (according to the 2011) . Most inhabitants belong to the Kandha tribes.Kandhamal District is one of the most backward districts of Odisha. The district is a Scheduled-V district and majority of population of the district belongs to two ethnic groups i.e. Kandho (ST) and Pano (SC). The district also has large concentration of minority community belonging to Christian religion. The district consists of 12 Blocks, 153 Gram Panchayats. No. of Blocks-12 (Phulbani; Phiringia; Khajuripada,Balliguda; Tikabali, Chakapad; G. Udayagiri; Raikia; Daringibadi; K.Nuagaon; Kotagarh; Tumudibandha) . District has geographical area of 7,649 Sq. Km. and its population is only 6.48 lakh (2001 census).

The district of Kandhamal is bestowed with the beauty of nature. It has wild life, scenic beauty, healthy climate, and serpentine ghat roads for the tourists who need to relax and unwind. It has attractions, like panoramic coffee gardens, pine jungles, Ghats,hills and waterfalls, virgin forest and typical tribal village life. Almost 66% of the land area of the district is covered with dense forest and towering mountains which provide shelter to the inhabitants like Kondhas, classified under the ancient Gondid race of proto Austroloid group, rich in green meadows at the attitude of 2000 ft to 3000 ft, the terraced valleys thronged with these colourful tribal in their natural heritage, dancing and sporting has its own appeal. Kandhamal is also famous for handicrafts such as Dokra, Terra Cotta, Cane and Bamboo work.

Climate and Soil:

Kandhamal district comes under the North-Eastern Ghats Agro-Climatic Zone (Zone No. 5) of the state and the altitude ranges from 300 meters to 1100 meters from the Mean Sea level (MSL). The district is located in central part of Orissa and comes under North-East Ghat Agro-Climatic Zone of the state. The terrain of the district is hilly and highly inaccessible. The altitude ranges from 3.00 mtrs. to 1100 mtrs. Mean Sea level. Kandhamal District has Sub-tropical climate characterized by hot and dry summer, medium to high rainfall and prolonged cold and dry winter. Peak rainfall period is 15th June to end September . Average Annual Rainfall-

1522.95 mm • Normal Rainfall-1427.90 mm • Average No. of Rainy Days-79 days. Kandhamal District has Sub-tropical climate characterized by hot and dry summer, medium to high rainfall and prolonged cold and dry winter. The peak rainfall period is 15th June to end September. The Normal rainfall of the district is 1427.9 mm distributed in 74 rainy days where as in 2010 rainfall was 1486 mm received in 84 rainy days. This year the rainfall is 749.58 mm till 23rd august which is 22.51% less than the Normal rainfall for corresponding period of the year. The climate is sub-tropical characterized by hot and dry in Summer, cold & dry in Winter. The normal rainfall of the district is 1427.9 mm distributed in 74 rainy days where as last year 1486 mm rainfall was received in 84 rainydays. In the district most of the soils are red soils which are light textured and acidic having pH 5.3 to 6.5. The soil is very porous with low water holding capacity subject to heavy runoff and soil erosion during Kharif season. The people of the district are economically backward with higher percentage of ST & SC families. Most of the people of the district depend upon major and minor forest produces for their livelihood. The irrigation potential is 20.33% during Kharif season Aand 4.7% in Rabi season.

In the district most of the soil type is red sandy soils which are light textured and acidic having pH 5.3 to 6.5.The soil is very porous with low water holding capacity subject to heavy runoff and soil erosion during Kharif season.The soil is mostly Red-laterite group, which is porous having organic matters contents. As such, the water holding capacity is very low. The PH value of the soil varies 5.3 to 6.5, which is acidic in nature. The big chunk of land consists of red-laterite sandy loam soils being exposed to constant soil erosion and run off devoid of humus contents render in fertile and turn into barren wastelands.

- Cultivated land -127790 Ha. (33.16 %)
- Irrigated Land -25462.30 Ha
- Forest area -5709.83 Sq. Km (71.18 %).
- Reserve Forests - 2010 Sq. Km.
- Demarcated Protected Forests - 1583 Sq. Km.
- Un-demarcated Forests - 202 Sq. Km.
- Other Forests - 1914.83 Sq. Km.

Horticulture:

During this year a production target of 50,000 mango grafts 10,000 fruit seedlings has been fixed for this district for which steps have been taken to achieve the same in the existing 6 nos. of departmental farms and 7 nos. of nurseries.

Potato seed multiplication and vegetable seed at Govt. farm: During khariff 99 vegetable seed production of bhindi has been taken up in 1 ha. area at Kotagarh farm. Breeder seed of B.O.-2 variety has been received from Director of Horticulture. Crop growth is good. First inspection has been completed by seed certification agency. Expected seed yield is around 5 quintals. It is proposed to take up potato seed multiplication (breeder to foundation) in 2 ha. area at Kotagarh farm and 2 ha. vegetable seed production of brinjal at Kotagarh and G.Udayagiri farms during Rabi season.

Potato Cultivation: During this year an area of 600 ha. has been targeted to be covered under potato cultivation through normal extension,where in it is proposed to supply 300 quintals of high yielding varieties of seed potato at approved rate of Government towards seed replacement.

Floriculture: Enough scope exists for development of floriculture in Kandhamal district because of the congenial climate, temperature etc. prevailing in the zone. Profitable cultivation of flowers like rose, gladioli, tuberose, and marigold can be taken up in G.Udayagiri and Daringbadi area through out the year.

Integrated Tribal Development Agency: There is a programme for 120 units banana plantation, 240 units of hybrid vegetable cultivation and 270 units back yard plantaion to be covered under ITDA assistance involving 630 nos. of S.T. beneficiaries during this year out of which 270 units of backyard plantation has been achieved in G.Udayagiri and Balliguda area in 6 blocks during Khariff'99.Hybrid vegetable cultivation and banana plantation will be taken up during Rabi season.

. **Geographical Profile:**

i)		Total geographical Area	7, 64,900 ha.
ii)		Forest land	2, 68,337 ha.
		Reserve Forest	98,402 ha.
		Protected Forest	57,859 ha.
iii)		Cultivated Land	1, 27,790 ha.
iv)		Irrigated Land	25,462 ha.

Farmers visited:

S.N.	List of Farmer/Address	Crop/Component	Area	Remark
1	Ram krishna Pattanaik,Village: sartaguda, GP: tudipaju Block: photabari	Pack house cum shorting & grading unit	One unit	Banana crop .structure completed
2	Goibali, ballignda	Cold storage (Mini)	Integrated Tribal Development Agency St/Sc	Not yet functional.work in progress

			Dept. cold room	
3	Integrated Tribal Development Agency Village -K. Nhagaon(Maha Singh,)	Refrigrated Van (2 Nos)	Ferrigerated Van For vegetable supply.	Van are purchased and lying idle and not in operation
4	Bishnu Lenka, Village -Sartaguda	Banana G-9	1.0 ha.	Very good crop ,.
5	Maduka malik and 7others(Group) Village-limaripadar, K. Nhagaon.Jain drip irrigation ,	Banana G-9	06.00 ha . With drip irrigation	Very good crop ,managed on community basis
6	Jaganath ponda and 14 other Vill.-Lanka munda,Balligunda	Banana G-9	14 .00 ha. With drip irrigation	Well maintained crop

1. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl.No	Details	
1	Name of the Project	Ram krishna Pattanaik,Village-Srtaguda,Tudipaju,Block - Photabari
2	Year Implementation	2012-13
3	Project Period	5 year
4	Name of implementing agency	Horticulture Dept. Govt of Orissa
5	Location of Project	Village: sartaguda, GP: tudipaju Block: photabari
6	Total Project Cost	Rs. 3,00,000/-
7	Amount Released & date	50% Rs. 1,50,000/- .
8	Expenditure incurred	Rs. 3,00,000/-
9	Status	completed
10	Capacity of unit	300 q.
11	Commodity	Vegetable, Fruits

12	Condition of infrastructure	Newly constructed
13	Whether NHM Logo displayed	No
14	Whether funds disbursed to agency	yes

2. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl.No	Details	
1	Name of the Project	Cold storage (Mini)
2	Year Implementation	2012-13
3	Project Period	10 year
4	Name of implementing agency	Integrated Tribal Development Agency St/Sc Dept. Horticulture Dept.
5	Location of Project	Goibali, ballignda
6	Total Project Cost	10 lakh
7	Amount Released & date	5.50 lakh(55%)
8	Expenditure incurred	5.50 lakh
9	**Status**	Working condition
	Capacity of unit	10 MT
	Commodity	Vegetable, spices, Fruits
	Condition of infrastructure	Very Good
	Whether NHM Logo displayed	No
	Whether funds disbursed to agency	yes

3. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl.No	Details	
1	Name of the Project	Refrigrated Van - 2 Nos
2	Year Implementation	2012-13
3	Project Period	10 year
4	Name of implementing agency	Integrated Tribal Development Agency St/Sc Dept. Horticulture Dept
5	Location of Project	K. Nhagaon (Maha singh)
6	Total Project Cost	48.00 lakh
7	Amount Released & date	26.40 lakh
8	Expenditure incurred	26.40 lakh
9	**Status**	Running condition
	Capacity of unit	6 MT each
	Commodity	Vegetable, spices, Fruits
	Condition of infrastructure	Purchased recently
	Whether NHM Logo displayed	No
	Whether funds disbursed to agency	yes

4. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl. No.	Details	
1	Name & address of Beneficiary whose field visited	Bishnu Lenka, Sartaguda
2	Total land available with the beneficiary (Ha.)	1.0 ha
3	Crop cluster under which covered	1.0 ha

4	Name & Variety of crop planted	Banana,Cv. G-9
5	Source of planting material	Jain irrigation,Jalgaon
6	Number of Plants Planted	3086
7	Date of Planting	2012-2013
8	Number of Plants which survived (Also indicate percentage Survival)	3086 (100%)
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Rs. 31202/- (input subsidy)
10	Amount paid and date of payment	Input supplied in month of Reb. 2013
11	Mode of payment	-
12	Source of irrigation water (Bore well/Tubewell/Canel)	Deep bore well
13	Whether Drip/Sprinkle System in use	Drip irrigation
14	Other inputs provided	Supported as per cost norms
15	Whether assistance available for Organic Farming	No
16	If so, area covered	-
17	Assistance available	-
18	Available marketing facility for the crop	Kandhmal market
19	Other infrastructure available in the vicnity	Fencing, borewell, poly green house
20	General up keep of the plot. Very good/ Good/Average/Poor	Very good
21	Any other relevant observation by the JIT	yes

5. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl. No.	**Details**	
1	Name & address of Beneficiary whose field visited	Maduka mallick and 7others Limaripadarill.- limaripadar Bolck-K.Nnagon
2	Total land available with the beneficiary (Ha.)	12.0 ha, Community basis

3	Crop cluster under which covered	Banana
4	Name & Variety of crop planted	Banana G-9
5	Source of planting material	Jain irrigation, jalgaon
6	Number of Plants Planted	18500
7	Date of Planting	2012-2013
8	Number of Plants which survived (Also indicate percentage Survival)	100%
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Rs. 18500
10	Amount paid and date of payment	Yes
11	Mode of payment	
12	Source of irrigation water (Bore well/Tubewell/Canel)	Bore well 4 nos
13	Whether Drip/Sprinkle System in use	Drip Irrigation
14	Other inputs provided	As per NHM cost norm
15	Whether assistance available for Organic Farming	-
16	If so, area covered	-
17	Assistance available	-
18	Available marketing facility for the crop	Khandhmal
19	Other infrastructure available in the vicnity	Fencing, borewell under RKVY
20	General up keep of the plot. Very good/ Good/Average/Poor	Very good crop
21	Any other relevant observation by the JIT	Community basis and crop is managed properly .Intercrop of vegetable taken.

6. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl. No.	**Details**	
1	Name & address of Beneficiary whose field visited	Jaganath panda and others Vill.-Lankamunda ,Block-Balligaon
2	Total land available with the beneficiary	2 ha.

	(Ha.)	
3	Crop cluster under which covered	Banana
4	Name & Variety of crop planted	Banana Cv. G-9
5	Source of planting material	Jain irrigation,Jalgaon
6	Number of Plants Planted	6172
7	Date of Planting	2012
8	Number of Plants which survived (Also indicate percentage Survival)	6172
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	100%
10	Amount paid and date of payment	Paid in full
11	Mode of payment	cheque
12	Source of irrigation water (Bore well/Tubewell/Canel)	Deep Bore well 4 nos
13	Whether Drip/Sprinkle System in use	Drip
14	Other inputs provided	As pe NHM mandate
15	Whether assistance available for Organic Farming	-
16	If so, area covered	-
17	Assistance available	-
18	Available marketing facility for the crop	Khandamal
19	Other infrastructure available in the vicnity	Fencing borewell, pabour cottage (poly green house)
20	General up keep of the plot. Very good/ Good/Average/Poor	Very Good
21	Any other relevant observation by the JIT	Well managed

PHYSICAL & FINANCIAL PROGRESS OF SCHEMES OPERATED FOR THE YEAR 2012-13 under NHM												
Name of the District: **Kandhamal**												
				Month:		**March**	**2013**					
Sl. No.	**Name of the Scheme**	**Unit**	**Physical**		**Financial (Lakh Rs.)**			**No. of Beneficiary**				
			Target	**Achieve**	**Target**	**Sanctioned**	**Achieve**	**SC**	**ST**	**OC**	**Total**	**W**
			Total	**Total**	**Total**	**Total**	**Total**	**Total**	**Total**	**Total**	**Total**	**Total**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
1	**Fruit Plantation**											

	Banana Tissue Culture	ha.	10	1.68	3.086	0.51844	0.51844	0	0	2	2	0
	Pineapple Sucker	ha.	0	0	0	0	0	0	0	0	0	0
	Mango Normal	ha.	90	60	5.94	5.94	5.529	4	74	10	88	2
	Mango High Density	ha.	3	3	0.72	0.72	0	0	2	1	3	0
	1st yr. Maintenance											
	1st year Maint. of Mango	ha.	1146.7	1049.1	37.6361	37.6361	34.6199	108	938	152	1198	27
	1st year Maint. of Litchi	ha.	5.75	3.75	0.15959	0.16483	0.16483	2	5	2	9	2
	1st year Maint. of Citrus	ha.	6.16	5.36	0.26816	0.26816	0.26816	0	5	10	15	0
	1st year Maint. of Banana Sucker	ha.	15.42	9.67	0.46687	0.53997	1.20482	4	26	6	36	0
	1st year Maint. of Banana T.C.	ha.	0	0	0	0	0	0	0	0	0	0
	2nd year Maintenance											
	2nd year Maint. of Mango	ha.	737.6	737.6	21.78495	21.78495	24.3413	62	650	74	786	30
	2nd year Maint. of Litchi	ha.	0	0	0	0	0	0	0	0	0	0
	2nd year Maint. of Citrus	ha.	0	0	0	0	0	0	0	0	0	0
	2nd year Maint. of Cashew	ha.	56.55	47.55	1.902	1.902	1.902	0	18	10	28	0
2	**Flowers**											
	Rose - Small & Marginal Farmers	ha.	5	0	1.75	0	0	0	0	0	0	0
	Rose- Other Farmers	ha.	5	0	1.16	0	0	0	0	0	0	0
	Gladioli - Small & Marginal Farmers	ha.	16	16	7.2	0	7.2	8	45	7	60	0
	Gladioli - Other Farmers	ha.	42	42	12.474	0	12.474	44	130	12	186	0
7	**Spices**											
	Ginger	ha.	0	0	0	0	0	0	0	0	0	0
	Turmeric	ha.	1900	2500	312.5	312.5	312.5	1235	6558	331	8124	0
8	**Creation of Water Resources**											
	Use of plastic lining on farm pond	nos.	2	25	30	125	125	0	0	0	0	0
	Water Harvesting System for Individual	nos.	70	63	42	37.8	37.8	0	49	14	63	0
9	**Protected Cultivation**											
	Green House Structure											
	Bamboo Structure	Sqm.	800	3600	2.8	6.75	2.85	3	28	5	36	0
	Wooden Structure	Sqm.	0	0	0	0	0	0	0	0	0	0
	Tubular Structure	Sqm.	2500	0	11.69	4.675	0	0	0	0	0	0
	Plastic Mulching	ha.	1000	785	100	78.5	78.5	0	0	0	0	0

	Shadenet House											
	Bamboo Structure	Sqm.	7425	1600	11.14	9.9	1.005	0	0	0	0	0
11	**Adoption Organic Farming**											
	Organic Cultivation	ha.	2200	2200	88	88	88	0	3044	0	3044	0
	Assistance for 2nd year on Organic Farming	ha.	0	0	0	0	0	0	0	0	0	0
	HDPE Vermi bed (12'x4'x2')	nos.	1100	784	55	32.76	31.36	76	642	66	784	0
	Certification	ha.	2200	2200	66	66	66	0	3044	0	3044	0
	Assistance for 2nd year on Certification	ha.	0	0	0	0	0	0	0	0	0	0
12	**Pollination support through Bee Keeping**											
	Honey Bee Colony	nos.	400	476	2.8	0	0	0	0	0	0	0
	Hives	nos.	400	476	3.2	0	0	0	0	0	0	0
	Equipment including honey extractor (4 frame)	nos.	40	0	2.8	0	0	0	0	0	0	0
13	**Horticulture Mechanisation**											
	Power operated machines/ Tools including Power Saw and Plant Protection equipments etc.	nos.	20	180	3.5	13.679	13.67882	19	132	29	180	0
	Power Machine (up to 20BHP) with rotavator/ equipment	nos.	15	13	9	7.8	15	2	10	1	13	0
14	**Humar Resource Development**											
	Gardeners Training	nos.	30	0	4.5	0	0	0	0	0	0	0
	Farmers Training	nos.	300	100	1.4	0.4	0.34	11	74	15	100	0
	Expo. Visit Farmers within State	nos.	180	0	3	0	0	0	0	0	0	0
	Expo. Visit Farmers Outside State	nos.	60	0	3	0	0	0	0	0	0	0
	Expo. Visit Officials within State	nos.	0	0	0	0	0	0	0	0	0	0
	Expo. Visit Official Outside State	nos.	0	0	0	0	0	0	0	0	0	0
15	**Integrated Post Harvest Management**											
	Pack House	nos.	35	37	52.5	85.5	55.5	8	17	10	35	0
	Pre Cooling Unit	nos.	3	3	18	19.3	19.3	0	0	0	0	0
	Zero Energy Cool Chamber	nos.	500	95	10	1.9	1.9	0	95	0	95	0
	Evaporation / Low Energy Cool Chamber (8MT)	nos.	1	0	2	0	0	0	0	0	0	0
16	**Estt. of Marketing Infrastructure for**											

	Horticulturual Produce											
	Estt. of Terminal Market	nos.	0	0	0	0	0	0	0	0	0	0
	Functional Infrastructure for collection, orting, grading, packing etc.	nos.	1	4	6	44	44	0	0	0	0	0
	Up gradation of Mandi	nos.	1	14	8	192.5	192.5	0	0	0	0	0
	Static/ Mobile Vending Cart / platform with cool chamber	nos.	4	5	0.6	32.175	32.175	0	0	0	0	0
	Market Extension, quality awareness & market led extension activities for fresh products	nos.	0	0	0	0	0	0	0	0	0	0
17	**Activities of the Commemorate of Horticulture year**											
	Training-cum-Workshop on Bee Keeping	nos.	3	1	0	0	0	8	38	4	50	0
	District level Workshop on Productivity Improvement in Horticulture	nos.	1	1	0	0	0	3	36	11	50	0
	TOTAL		**0**	**0**	**987.8777**	**1240.863**	**1205.631**	**1597**	**15660**	**772**	**18029**	**61**

Provisional Physical and Financial Programme for 2013-14 under NHM for Kandhamal District						
Item		**Max. Permissible cost per unit (Rs.)**	**Amount of Asst.**	**Unit**	**Target**	
					Physi-cal	**Financial (Lakh)**
2		**3**	**4**	**5**	**6**	**7**
Production of Planting material						
i)	**Seed Production and distribution for Vegetables @ Rs. 50000/ha. (Pvt. Sector)**	**50000**	**25000**	**ha.**	**10**	**2.5**
ii)	**Establishment of new gardens (Area expansion) Cost intensive crops/ Banana**	**83204**	**41602**	**ha.**	**15**	**4.68**
iii)	**Frout crops other than cost intensive crops using normal spacings (60:20:20)**					
a.	Mango 10m x10m	22000	9900	ha.	10	0.99
b.	Litchi 7.5m x7.5m	29230	13150	ha.	10	1.315
c.	Papaya (1.8m. X 1.8m.)	40000	18000	ha.	20	3.6
iv)	**Bulbous Flowers**					
a.	S & M category	90000	45000	ha.	15	6.75
b.	Other category	90000	29700	ha.	15	4.455
v)	**Spices**					
a.	Ginger	25000	12500	ha.	100	12.5
b.	Turmeric	25000	12500	ha.	1000	125

c.	Perennial spices (Black pepper, Cinnamon, Clove & Nutmeg)	40000	20000	ha.	3	0.6
vi)	**Rejuvenation/ replacement of senile plantation**	**30000**	**15000**	**ha.**	**20**	**3**
vii)	**Creation of water resources (in conjuction with NREGS)**					
a.	Community Tank/ on Farm ponds/ on Farm water reservoires with use of plastic lining (100m x100m x3m)	1500000	1500000	no	1	15
b.	Water harvesting system for individuals for storage of water in (20m x20m x3m) ponds/ dogwells	120000	60000	no	75	45
viii)	**Protected cultivation**					
a.	Green house structure/ Tubular structure limited to 4000 Sqm.	935	467.5	Sq.m	1000	4.675
b.	Plastic mulching @20000 per ha. max. 2 ha. per beneficiary	20000	10000	ha.	870	87
c.	Shadenet house/ Tubular structure	600	300	Sq.m	4000	12
ix)	Promotion of Intigrated Nutrient Management (INM)/ Intigrated Pest Management (IPM)	2000	1000	ha.	50	0.5
x)	Organic Farming					
a.	Assistance for 1st year on Organic farming	20000	4000	ha.	500	20
b.	Assistance for 2nd year on Organic farming		3000	ha.	2200	66
	Assistance for 1st yr. On certification	10000	3000	ha.	500	15
	Assistance for 2nd year on certification	1000	3000	ha.	2200	66
c.	Vermi compost Unit permanent structure 30' x8' x2.5'		30000	no	1	0.3
d.	HDPE Vermi Bed 12'x 4'x 2'		5000	no	50	2.5
xi)	**Pollination support through Bee Keeping**					
a.	Honey Bee Colony @ Rs. 1400/Colony of 4 frame, maximum 50 colony per beneficiary.	1400	700	no	200	1.4
b.	Hives @ Rs. 1600/ hive maximum 50 colony/ beneficiary	1600	800	no	200	1.6
c.	Equipement including honey extractor (4 frame) good grade container (30 Kg.), net etc. @ Rs. 14000/set max. 1 set per beneficiary	14000	7000	no	5	0.35
xii)	**Horticulture Mechanisation**					
a.	Power operator machines/ tools including power saw & plant protection equipment etc. @ 35,000/set limited 1set/ Beneficiary.	35000	17500	no	10	1.75
b.	Power machine (Upto 20 BHP) with rotavator/ equipment @ 1.2 lakh per set limited 1 set per beneficiary	120000	60000	no	10	6
xiii)	**Human Resource Development (HRD)**					
a.	HRD for Gardeners @ 1500000/ Training	1500000	1500000	no	1	15
b.	Training of farmers					

	i) Within the District @ 400/day/farmer	400	400	no	150	0.6
	ii) Within the State @ 750/day/farmer	750	750	no	25	0.1875
	iii) Outside the State@ 100/day/ farmer	1000	1000	no	10	0.1
c.	Exposure visit of Farmers					
	i) Within the District @ 250/day/farmer	250	250	no	20	0.05
	ii) Within the State @ 300/day/farmer (3days)	900	900	no	20	0.18
	a) Transportation within the State @ 100/day/ farmer	100	100	no	20	0.02
	iii) Outside the State@ 600/day/ farmer (5days)	3000	3000	no	20	0.6
	a) Transportation outside the State @ 2000/ farmer	2000	2000	no	20	0.4
xiv)	**Integrated Post Harvest Management**					
	Pack House/ On farm collection & Storage unit (9m X 6m)	300000	150000	no	15	22.5
	Pre Cooling unit @ 1500000/ 6 MT	1500000	825000	no	4	33.0
	Refrigerator Van / Container (6MT)	2400000	1320000	no	1	13.2
	Primary/ Mobile / Minimal processing unit	2400000	1320000	no	1	13.2
	Evaporative / Low Energy Cool Chamber (8MT) @ 4,00,000/ Unit	400000	200000	no	7	14.0
	Low cost Onion Storage Structure (25MT)	100000	50000	no	50	25.0
	Pusa Zero Energy Cool Chamber (100 Kg)	4000	2000	no	500	10.0
xv)	**Estt. of marketing Infrastructure for Horticultural Produce**					
a.	Rural Market/ Apni Mandi/ Direct Market	2000000	1100000	no	1	11.0
xvi)	**Mission Management**					
a.	District Level at two days event	200000	200000	no	1	2.0
	Total					**671.5025**

Photographs of Kandhmal District:

Drip irrigation in banana field ,2012-13

Crop performance at hilly terrain in tirbal area

Refrigerated van procurred by Integrated Tribal Development Agency

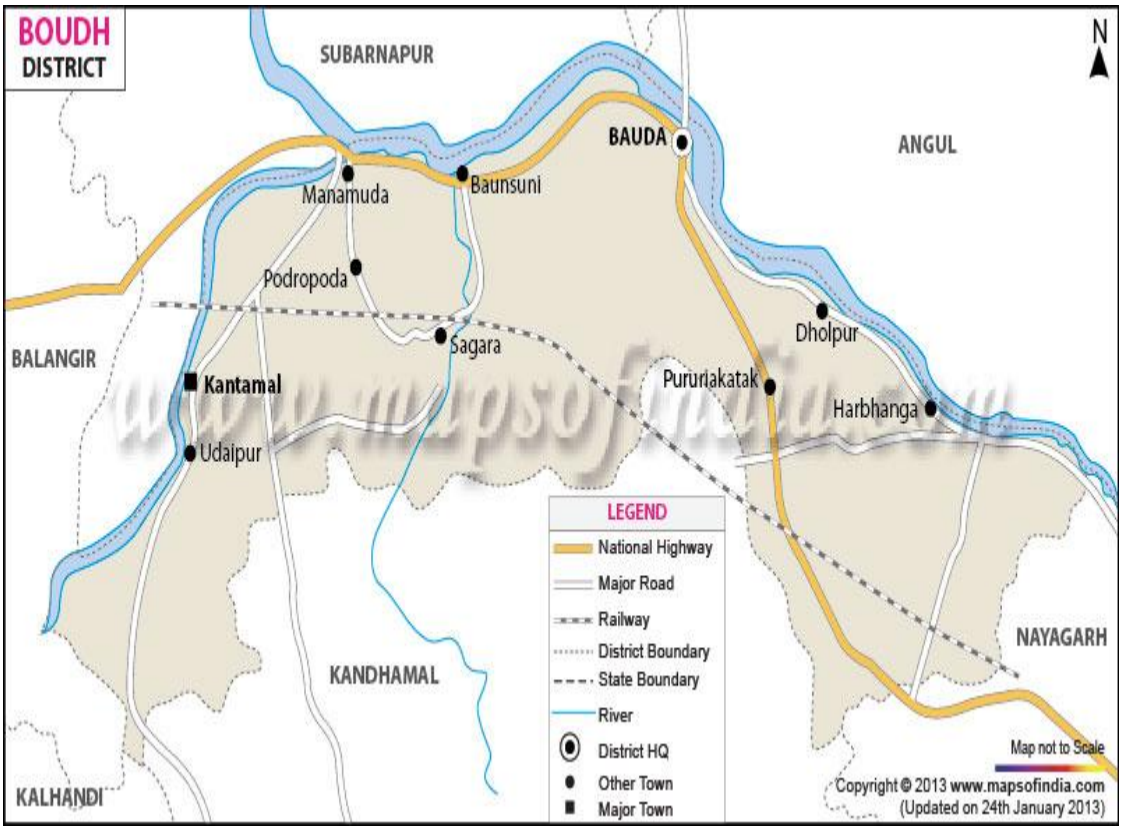
Pre Processing storage of organic turmeric

Branding of organic turmeric for export market

After processing the Quality of powder

Boudh District:

Boudh district extends from Latitudes 20º.22’ to 20º.50’N and Longitudes 83º.34’ to 84º.49’E. According to the 2011 census Boudh district has a population of 439,917 and geographical area of 3098 square kilometres. The district lies in central Orissa, to the south of the Mahanadi River, which forms the western and northern boundary of the district. Across the Mahanadi lay the districts of Bolangir to the west, Subarnapur to the northwest, and Angul to the northeast. Nayagarh District lies to the southeast, Phulbani District to the south, and Kalahandi district to the southwest.It is bounded by RiverMahanadi & Anugul District to the north, Kandhamal District to the south, Nayagarh District to the east and River Tel & Subarnapur District to the west. It is one of the 19 districts in Orissa currently receiving funds from the Backward Regions Grant Fund Programme (BRGF).



Climate:

The Climatic condition of this district is subtropical, hot and dry in summer, cold dry in winter and hot humid in rainy season. In summer, temperature reaches to 45°c and temperature may come down to 10°c. The rainfall is not normal and variation. However basing on the climatic condition and uneven distribution of rainfall, the cropping programme has been chalked out.

Rashtriya Krushi Vikash Yojana (RKVY):

Forty nos Vermi Compost unit and one no Vermi Hatchery has also been programmed for establishment in three blocks of Boudh District under the Scheme RKVY 2010-11 in 50% subsidy limited to Rs. 4000/- per unit of Vermi Compost & Rs. 27500/- per Vermi Hatchery .

Boudh, one of the thirty districts in the State covers a and lies in central region of Odisha surrounded by the Mahanadi river and Angul district on its north, Kandhamal district on south, Nayagarh district in the East and river Tel and Subarnapur district in the West. The district, which was a subdivision under the erstwhile Boudh-Kandhamal district, was declared a separate district from 2 January1994. The district has three blocks (Boudh, Harabhanga & Kantamal) comprising 1186 villages, 63 Gram Panchayats, one Urban Local Body (Notified Area Council Boudh)

Productivity & Production of Fruit Crops for 2012-13.

Sl. No	Name of the Crop	Area in ha.	Fruit Bearing Area in ha.	Productivity in terms / Ha.	Production in MT.
1	Banana	287	274	24.59	6738
2	Citrus	301	270	9.92	2678
3	Guava	232	227	8.27	1877
4	Litchi	16	15	4.5	68
5	Mango	2218	1795	5.24	9406
6	Papaya	38	26	25.87	931
7	Pineapple	6	5	13.2	66
8	Pomegranate	8	6	5.28	32
9	Sapota	10	7	5.17	36
10	Cashew	774	653	0.721	471
11	Other Fruit Crops	1153	1108	9.98	11058
	Total	**5043**	**4386**	**112.741**	**33361**

Productivity & Production of vegetables Crops for 2012-13.

Sl. No	Name of the Crop	Area	Productivity	Production
1	Brinjal	4426	16.89	71377
2	Cabbage	1426	28.8	41069
3	C.Flower	1048	14.57	15269
4	Okra	2102	8.84	18582
5	Pea	140	8.79	1237
6	Tomato	2376	13.84	32884
7	Potato	207	14.61	3024
8	Sweet Potato	379	8.92	3381
9	Radish	241	10.97	2644
10	Bitter Ground	221	9.83	2172
11	Bottle Ground	218	14.26	3109
12	Beans	234	4.29	1004
13	Watermelon	300	18.94	5682
14	Cucumber	36	13.51	486
15	Pointed Gourd	51	14.16	722
16	Carrot	4	12.75	51
17	Capsicum	6	13.59	82
18	Other Vegetables	3210	11.56	37108
	Total	**16425**	**239.12**	**239883**

Medicinal plant:

Sl. No	Name of the Crop	Area	Fruit Bearing Area in ha.	Productivity	Production
1	anola	44	6	1.8	10.8
	Total	**44**	**6**	**1.8**	**10.8**

Ornamentals:

Sl. No	Name of the Crop	Area	Productivity	Production
1	Rose	21	1.92	40
2	Gladioli	20	0.99	19.8
3	Tubero	2	22.1	45
4	Marigold	13	91.89	1195
	Total	**56**	**116.9**	**1299.8**

Spices:

Sl. No	Name of the Crop	Area	Productivity	Production
1	Onion	863	13.91	12004
2	Corriander	419	0.47	195
3	Ginger	144	6.14	884
4	Garlic	154	3.49	537
5	Turmeric	223	6058	1467
6	chilli	972	0.87	846
	Total	**1912**	**6068.97**	**3929**

List of Farmers visited:

S.N.	List of Farmer/Address	Crop/Component	Area	Remark
1	Upendra Ku. Bhanja Village:Girasinga,GP: Badhigaon,Block:Boudh,	Pack House	Mango Fruits	Needs racks in pack house
2	Hrudananda Barik,Vill: Jubarajpur,GP: Lunibahal Block: Harabhanga	Low cost Onion storage	25MT.	Structure is temperary type .Design and site is not proerly designed
3	Sudhir Pradhan,Vill: Jubarajpur,GP: Lunibahal Block: Harabhanga	Low cost Onion storage	25MT.	Structure is temperary type .Design and site is not proerly designed
4	Maguni Pradhan,Vill: Jubarajpur,GP: Lunibahal Block: Harabhanga	Low cost Onion storage	25MT.	Structure is temperary type .Design and site is not proerly designed
5	Upendra Kumar Bhanj	Crop-Mango, Cv.-ambrapali,Dushehri	7.0 Ha.	Performance is good
6	Pankaj Lochan Mohanty Vill: Lokapada,GP: Banibhusanpur, Block: Harabhanga	Poly Green House (Cut flowers of roses and Gerbera)	4.0 Ha.	Classic Agricon Pvt.Ltd.Industrial house.Structures and crop is manager by appointed staff
7	Sidhartha Mohanty Vill: Lokapada,GP: Banibhusanpur,Block: Harabhanga	Shade net house	0.4 Ha.	Classic Agricon Pvt.Ltd.Industrial house.Structures and crop is manager by appointed staff
8	Sidhartha Mohanty Vill: Lokapada,GP:	Poly green house	0.4 Ha.	Classic Agricon Pvt.Ltd.Industrial

	Banibhusanpur,Block: Harabhanga			house.Structures and crop is manager by appointed staff
9	Sadhu Charan Sahu, Villaga-Bhawanipur, G.P-Purunakatak	Mango Cv.Amrapalli and Dushehri	0.4 Ha	Crop well managed
10	Benudhara Mahalik, Villaga-Krushanapali, G.P-Tileswar Block: Harabhanga	Mango intercroped with Banana and Vegetable	2.0 Ha	Crop well managed.Inter crop with Banana and Vegetable

1. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl.No	**Details**	
1	Name of the Project	PACK HOUSE
2	Year Implementation	2012-13
3	Project Period	1 year
4	Name of Beneficiary	Upendra Ku. Bhanja
5	Location of Project	Village: Girasinga,GP: Badhigaon, Block: Boudh,
6	Total Project Cost	Rs. 3,00,000/-
7	Amount Released & date	Rs. 1,50,000/-
8	Expenditure incurred	Rs.1,50,000/-
9	**Status**	
10	Capacity of unit	300 q.
11	Commodity	Mango Fruits
12	Equipments purchased	Weighing Machine,Plastic creates etc.
13	Condition of infrastructure	As per NHM Guidelines
14	Whether NHM Logo displayed	No
15	Whether funds disbursed to agency	yes

2. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl.No	Details	
1	Name of the Project	Low Cost Onion Storage Structure (25 MT)
2	Year Implementation	2012-13
3	Project Period	1 Year
4	Name of Beneficiary	Hrushikesh Barik
5	Location of Project	Vill: Jubarajpur,GP: Lunibahal Block: Harabhanga,Dist: Boudh
6	Total Project Cost	Rs. 1,00,000/-
7	Amount Released & date	Rs. 50,000/- dt. 31.03.13
8	Expenditure incurred	Rs. 1,00,000/-
9	**Status**	
	Capacity of unit	25 MT
	Commodity	Onion
	Equipments purchased	Nothing
	Condition of infrastructure	Structure is temperary type .Design and site is not proerly designed,
	Whether NHM Logo displayed	Yes
	Whether funds disbursed to agency	yes

3. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl.No	Details	
1	Name of the Project	Low Cost Onion Storage Structure (25 MT)
2	Year Implementation	2012-13

3	Project Period	1 Year
4	Name of Beneficiary	Sudhir Pradhan
5	Location of Project	Vill: Jubarajpur GP: Lunibahal Block: Harabhanga Dist: Boudh
6	Total Project Cost	Rs. 1,00,000/-
7	Amount Released & date	Rs.50,000/- dt. 31.03.13
8	Expenditure incurred	Rs. 1,00,000/-
9	**Status**	
	Capacity of unit	25 MT
	Commodity	Onion
	Equipments purchased	Nil
	Condition of infrastructure	Structure is temperary type .Design and site is not proerly designed
	Whether NHM Logo displayed	Yes
	Whether funds disbursed to agency	yes

4. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl.No	Details	
1	Name of the Project	Low Cost Onion Storage Structure (25 MT)
2	Year Implementation	2012-13
3	Project Period	1 Year
4	Name of Beneficiary	Maguni Pradhan
5	Location of Project	Vill: Jubarajpur GP: Lunibahal Block: Harabhanga Dist: Boudh
6	Total Project Cost	Rs. 1,00,000/-

7	Amount Released & date	Rs.50,000/- dt. 31.03.13
8	Expenditure incurred	Rs. 1,00,000/-
9	**Status**	
	Capacity of unit	25 MT
	Commodity	Onion
	Equipments purchased	Nil
	Condition of infrastructure	Structure is temperary type .Design and site is not proerly designed
	Whether NHM Logo displayed	Yes
	Whether funds disbursed to agency	yes

5. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl.No	Details	
1	Name & address of Beneficiary whose field visited	Upendra Kumar Bhanj
2	Total Land available with the beneficiary (ha.)	7.0 ha.
3	Crop Custer under which covered.	Mango
4	Name & variety of crop planted.	Crop-Mango Cv.-ambrapali,Dushehri
5	Source of planting material.	State nursery
6	Number of planting material.	2200 nos
7	Number of plants planted/rejuvenated.	800 nos
8	Date of plants which survived (also indicate percentage survival).	
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Rs. 29,500/-
10	amount paid and date of payment	Rs. 29,500/-

11	Mode of payment	A/C Payea Cheque
12	Source of Irrigation Water (Bore well/Tube well/ Canel)	Bore well
13	Whether Drip/Sprinkle System in use.	Drip System
14	Other inputs provided.	
15	Whether assistance available for Organic Farming	No
16	If so, area covered	-
17	Assistance available	-
18	Available marketing facility for the crop.	Boudh Mandi
19	Other infrastructure abailable in the vicinity.	Drip
20	General up keep of the plot. Very good/Good/Avrage/Poor	Very Good
21	Any other relevant observation by the JIT.	Crop performance is good

6. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl.No	Details	
1	Name & address of Beneficiary whose field visited	Pankaj Lochan Mohanty Vill: Lokapada GP: Banibhusanpur Block: Harabhanga
2	Total Land available with the beneficiary (ha.)	1 ha.
3	Type of Projected cultivation activity (Hi-tech/ Normal GH, Shadenet, Plastic tunnel…….)	Poly green House
4	Year of establishment	2012-13
5	Size of Structure (Sqm)	4000 sqm.(0.4ha.)

6	Total Cost	Rs.37,40,000/-
7	Agency involed in fabrication and installation	Classic Agricon Pvt.Ltd
8	Total subsidy paid and date of payment.	Rs. 18, 70,000 /-dt. 28.02.2013
9	Crop being grown	Floriculture
10	Condition of structure	Good
11	Condition of Crop	Good
12	Tie up with market	Yes
13	General upkeep (Very good/Good/Average/ Poor)	Very Good
14	Any other relevant observation by the JIT.	

7. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl.No	Details	
1	Name & address of Beneficiary whose field visited	Sidhartha Mohanty Vill:Lokapada GP: Banibhusanpur Block: Harabhanga District: Boudh
2	Total Land available with the beneficiary (ha.)	1 ha.
3	Type of Projected cultivation activity (Hi-tech/ Normal GH, Shadenet,Plastic tunnel…….)	Shade net House
4	Year of establishment	2012-13
5	Size of Structure (Sqm)	4000 sqm.
6	Total Cost	Rs.24,000/-
7	Agency involed in fabrication and installation	Classic Agricon Pvt.Ltd
8	Total subsidy paid and date of payment.	Rs. 12,000/- dt.28.02.2013

9	Crop being grown	Floriculture
10	Condition of structure	Good
11	Condition of Crop	Good
12	Tie up with market	Yes
13	General upkeep (Very good/Good/Average/ Poor)	Very Good(Professionaly managed)
14	Any other relevant observation by the JIT.	Classic Agricon Pvt.Ltd.Industrial house.Structures and crop is manager by appointed staff

8. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

Sl.No	Details	
1	Name & address of Beneficiary whose field visited	Sidhartha Mohanty Vill: Lokapada GP: Banibhusanpur Block: Harabhanga District: Boudh
2	Total Land available with the beneficiary (ha.)	1 ha.
3	Type of Projected cultivation activity (Hi-tech/ Normal GH, Shadenet,Plastic tunnel…….)	Polygreen House
4	Year of establishment	2012-13
5	Size of Structure (Sqm)	4000 sqm.
6	Total Cost	Rs.37,40,000/-
7	Agency involed in fabrication and installation	Classic Agricon Pvt.Ltd
8	Total subsidy paid and date of payment.	Rs. 18,70,000/-dt. 28.02.2013
9	Crop being grown	Floriculture
10	Condition of structure	Good

11	Condition of Crop	Good
12	Tie up with market	Yes
13	General upkeep (Very good/Good/Average/ Poor)	Very Good
14	Any other relevant observation by the JIT.	Classic Agricon Pvt.Ltd.Industrial house.Structures and crop is manager by appointed staff

9. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

SL.No.	Details	
1	Name & address of benificiary visited	Sadhu Charan Sahu, Villaga-Bhawanipur, G.P- Purunakatak
2	Total land available with the benificiary (ha)	0.4 ha
3	Type of MI system available Drip / Sprinkler	Drip
4	Crop(s) covered	Mango
5	Total area covered (ha)	0.4 ha
6	Crop Spacing (for drip)	5 mtr x 5 mtr.
7	Year of establishment	2013-14
8	Name of Manufacturer/ Supplier	OASIS Irrigation Equipment Co. Ltd.
9	Total subsidy paid and date of payment	Not Paid
10	Mode of payment	
11	Status of crop	Good
12	General upkeep / (Very good / Good / Avarege/Poor)	Very Good
13	Any other relevant observation by JIT.	

10. Check list for Reviewing Progress on Area Expansion and Rejuvenation Activities under National Horticulture Mission (NHM) by joint inspection

SL.No.	Details	
1	Name & address of benificiary visited	Benudhara Mahalik, Villaga-Krushanapali, G.P- Tileswar Block: Harabhanga Dist: Boudh
2	Total land available with the benificiary (ha)	2 ha
3	Type of MI system available Drip / Sprinkler	Drip
4	Crop(s) covered	Mango/Banana/Vegetable
5	Total area covered (ha)	2 ha
6	Crop Spacing (for drip)	5 mtr x 5 mtr.
7	Year of establishment	2011-12
8	Name of Manufacturer/ Supplier	Primer Irrigation adritec Pvt. Ltd.
9	Total subsidy paid and date of payment	Rs. 63,328/- dt.30.03.2012
10	Mode of payment	Online Payment
11	Status of crop	Good
12	General upkeep / (Very good / Good / Avarege/Poor)	Very Good
13	Any other relevant observation by JIT.	Crop is managed properly

Photographs of Boudh District:

Mango Cv. Amrapalli in farmers field

Mango established orchard as mother block

Mango nursery raised by farmers with exotic varieties

Onion low cost storage in farmers field near house

Onion low cost storage in farmers field near house

Multistori racks to store onion in low cost storage

Mango orchard intercroped with vegetables

Mango orchard with drip system in field

Large Scale drip with fertigation system for poly houses

Storage tank with poly propelinr linings in field

Shimla mirch cultivation in poly house

Shade net house for vegetable production

Poly House for vegetable production in field

Gerbera cultivation in poly house

Large Scale plantation of Thai Guava (Kg. Guava) Cv.BNR Selection for demonstration for commercial production.

Field Observations:

Micro Irrigation

- Micro Irrigation technologies are promoted under area expansion & inter-crop programme under NHM.Subsidies for Micro Irrigation are given under convergence through NMMI & MNAREGA programmes of Govt. of India. Currently small & marginal beneficiaries are given @ 90% subsidies to promote improved MI for cultivation of vegetables & also as inter crops in orchards.

- Majority of the mango orchards under new plantation in the Bolangir, Boudh, and Kandhamal districts are not having integration of drip irrigation system.

- Under Cluster Borewell programmes, beneficiaries are using drip irrigation system to grow off-season vegetables which has helped them with higher farm gate realization from local mandis& prospects of linking their supplies to UDYAN FRESH – an initiative under National Vegetable Initiative (NVI).

- While interacting with the beneficiaries in districts under JIT programme found that agronomic practices, orientation cum training programmes, users' manual on MI in local language neither was available nor provided by the MI system suppliers.

- For meeting field requirements after installation of MI system, there is poor & delayed response received by the beneficiaries as the company field representatives are not stationed at the Dist. level.The companies operating in the districts covered during JIT visit are yet to set up service centres to provide technological / agronomical support at the grass-root level.

- In many of the sites noticed that the emitters (drip irrigations system) were not placed properly, faulty& outside the root zone of the plants.In absence of proper maintenance of system, there weresalt deposition / clogging of emitters noticed in beneficiaries' field.By-pass is used in the drip irrigation systemsas a result farmer (beneficiary) is not able to adjust to control pressure for properdischarge of water through emitters.

Shadenet House – Dist. Bolangir

- The height of the shadenet house is 2.87m which is less than minimum requirements of 3.5m height.
- The Pipes used in structure is less than 40mm, while the minimum requirements is BIS marked 60mm to withstand 130kms wind with crop load of 25kg/m^2.
- The proposed site did not had water& power supply.
- Structure is damaged & many of the main / supportpipes are not properly grouted.
- Shadenet used in the structure is of 75 per cent shade factor.
- As told by the DDH, Bolangir, Govt. of Odishathe applicant constructed the shade net house on his own.

Pond lined Structures

- Lining film needs to be used while constructing farm ponds under the NHM programme and Farm Ponds to be integrated with Micro Irrigation system to optimize the water use efficiency in different crops.

Plastic Mulching

- Hundred micro silver-black PE mulching was seen in Mango / Banana new plantations.25 micron Mulching needs to be introduced in short duration vegetables.Bed preparation& anchoring of mulch film was not found for effective in situ moisture conservationThe mulch film needs to cover effective root zone of the plants.In case of drip irrigation with mulch, placing of emitter and lateral needs to be placed below the mulch film.

Canopy Management

- Canopy Management – cutting of branches were not done properly.Information on canopy management needs to be provided at the beneficiaries & Horticulture Extension Workers (HEW) level for better outcome.KVKs / KGK etc need to be support implementation of this programme.PFDC, OUAT, Bhubaneswar would provide do’s / don;ts in local language on canopy management of Mango.

HDPE Vermi Bed

- During the field of Organic Farming, SUVIDHA – an NGO from Uttarakhand has installed Tarpaulin based vermi bed which does not confirm to the available Agro textile - HDPE woven bed for vermin culture - IS 15907:2010.

- Vermi bed needs to be placed little raised from the ground level so that collection of vermi wash is easy for the beneficiary.There should be a roof or shade to cover the vermi be so that it effective composting process mediated through activities of earthworms.

Onion Structures:

- JIT observed that Onion structuresare not properly design with the cost and NHM norms and suggested to re- design semi permanent type structures.

General Observations of JIT:

- The planting material being prepared in the established nurseries should be properly lebelled with name of Variety, date of seed sowing and grafting. Accreditation of nursery programme may be expedited in consultation with National Horticulture Board. SHM should ensure that all the beneficiaries are supplied with quality planting material well before the planting season.
- The area expansion propgramme in case of mango may be taken up for varieties suitable for processing like cultivar Totapari to avoid glut in the market during the harvesting time, Since table purpose varieties of mango fruit crop is major component in tribal areas.Diversiication for area expansion programme may be taken up for fruit crops like Litchi, Guava, pineapple, Banana, and cashew for sustainable development and marketing.
- A higher target for rejuvenation/replacement of senile plantations is urgently needed for old and declined orchards of mango. Seedling mango trees of the area need top working and grafting with exotic varieties. Farmers are to be regularly trained and rejuvenation programme may be demonstrated at KVK, s. Effort should be made to rejuvenate in a phased manner by selecting few trees every year, instead of rejuvenating the entire orchard at initial stage.

- For construction of green house and shade net house, the technology, design needs to be adopted as recommended by universities. The farmers may be provided training on management of green house, poly house, shade net, plastic tunnel, and mulching. Training on fertigation scheduling and application is also suggested.

- Primary processing of turmeric, cashew, and local mango may be initiated on priority basis in large scale on cottage basis.

- There is a good scope for establishing water harvesting tanks with linings in conjunction with micro-irrigation, which needs to be promoted. Strategic plan may be formulated for convergence with other schemes for solar pump installation, since electrical supply is not regular..Adequate training need to be imparted to the beneficiaries availing subsidy for micro irrigation system,post installation maintenance and fertigation application scheduling.

- Farmers associations may be formed for better organized support of post harvest management and marketing of their produce.Traders and growers interface meeting may be organized regularly for better market link to get better return of their produce.
- Display boards need to be placed with the information of crop/component; beneficiaries name date and technical details of components.
- Annual progress report of the NHM progress for 2012-13 including success stories of various NHM interventions needs to be submitted to DAC at the earliest.
- For Project scrtiny there is a stong need for creation of monitoring cell at State level, to sruitinize, supervise, and monitor the progress of all the horticulturral schems where subsiary is provided.The unit may have mechanism for surprise checks.