



## *REPORT OF JOINT INSPECTION TEAM ON THEIR VISIT TO JHARKHAND DURING 8-12 OCTOBER 2012*



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**REPORT OF JOINT INSPECITON TEAM UNDER THE LEADERSHIP OF DR. JOSE C. SAMUEL, CHIEF CONSULTANT (NHM) WHICH VISITED JHARKHAND DURING 8-12 OCTOBER, 2012**

The Joint Inspection Team (JIT) comprising of the following Members visited Jharkhand during 8-12 October, 2012 to review the progress of implementation of National Horticulture Mission (NHM) and other Centrally funded schemes:-

**Members of JIT**

1. Dr. Jose C. Samuel, Chief Consultant (NHM), DAC, New Delhi
2. Shri Naresh Modi, Senior Project Officer, NCPAH (from 9.10.2012), New Delhi
3. Shri Minto Job, PI, PFDC, Birsa Agriculture University, Ranchi
4. Shri P.S. Kohli, Resource Person, DAC, New Delhi

Besides reviewing the progress of various schemes, the Team visited the districts of Ranchi, East Singhbhum and Saraikela. Dr. D.S. Munda, State Consultant, SHM, Jharkhand accompanied the Team during visit to these districts.

No one from Department of Horticulture, Birsa Agriculture University joined the JIT despite advance intimation.

**A. REVIEW MEETING AT RANCHI**

On 8<sup>th</sup> October, 2012 the JIT reviewed the progress under various Centrally sponsored schemes. The following were present during the discussions:

1. Dr. Prabhakar Singh, Mission Director, SHM, Jharkhand
2. Sh. B. K. Mishra, Dy. Director, Jharkhand State Forest Development Corporation Ltd.,(JSFDCL), Ranchi
3. Shri R.P. Singh, AD, NHB
4. Dr. Mintoo Job, PI, PFDC

Deputy Director, JSFDCL highlighted the following with regard to implementation of National Bamboo Mission (NBM) scheme in Jharkhand State:

- (i) While JSFDCL was the Nodal agency for implementing NBM scheme in the State, at the district level the scheme was being implemented through the Joint Forest Management Committees (JFMC) with the involvement of Forest Department. Under the NBM an amount of Rs. 11.27 crore was released to the against which an expenditure of Rs. 10.01 crore has been incurred. An amount of Rs. 0.64 crore was released during 2012-13.
- (ii) The main bamboo species being grown in Jharkhand in *Dendrocalmus strictus*. *Bambosa bambos* variety was being promoted to a limited extent in some parts of the State.
- (iii) About 8% of area in the State was under bamboo, located mostly in forest areas.
- (iv) Not much of bamboo cultivation was taking place in private lands. Farmers were not willing to take up cultivation of bamboo on agriculture lands due to low returns from bamboo as compared to other crops. Moreover, the subsidy amount was low under NBM for area expansion activities.
- (v) JSFDCL was planning to set up industry for making incense sticks from bamboo.
- (vi) Training on bamboo handicrafts was being provided to artisans and the products thereof are supplied to JHARCRAFT.
- (vii) There was no provision in NBM for Mission Management, as a result of which they were finding it difficult to meet the overhead expenditure.

As regards National Horticulture Board (NHB) activities, Shri R P. Singh, AD, NHB mentioned that a few projects on commercial horticulture including floriculture and projects on cold storage have been implemented. However, most of the projects were being implemented under NHM on account of higher subsidy. There was good coordination between NHB and SHM in the State.

With regard to National Horticulture Mission (NHM), Mission Director, SHM, highlighted the following:

- (i) State has very good potential for development of horticulture and could be declared as a horticulture state.
- (ii) With concerted efforts, large area has been brought under cashew plantation. With the setting up of cashew processing industry, there was good demand from farmers for taking up of cashew plantation.
- (iii) Lack of regular field staff was a serious constraint. Hence, most of the SHM projects are being implemented by NGOs.
- (iv) Proposal for sanctioning new posts for horticulture was being processed by the State Government.
- (v) The discrepancies in posting of physical and financial progress resulting in excess expenditure to the tune of Rs. 30 crore was being sorted out, for which two consultants have been engaged.
- (vi) Schemes on NMMI and VIUC were being implemented by another wing, hence there was no coordination with NHM. Moreover, the District Horticulture officers (DHOs) were under the control of Director of Agriculture.
- (vii) During 2010-11, some funds were released under RKVY to take up horticulture activities in non-NHM districts. However, though provisions were made in Annual Plans of 2011-12 and 2012-13, no funds have been released under RKVY scheme during these years for horticulture.
- (viii) PI, PFDC mentioned that farmers were reluctant to invest for drip irrigation and for setting up of infrastructures under protected cultivation on account of high capital costs involved.

Representative dealing with National Mission on Micro Irrigation (NMMI) and Vegetable Initiative for Urban Clusters (VIUC) were not present during the meeting. A visit was made to the office of VEGFED on 9.10.2012 to review the progress under VIUC scheme.

## **B. REVIEW OF VIUC SCHEME**

Vegetable Initiative for Urban Cluster is being implemented by the Jharkhand State Tribal Co-operative Vegetable Marketing Federation Ltd. (VEGFED), a society created within Marketing Department of Jharkhand. Interactions were held with Shri R. N. Jha, Managing Director of VEGFED on 9.10.2012. He highlighted the following:-

- Base Line Survey work has been completed by CITRAN Consulting Ltd.
- Formation of FLD and FPO were being facilitated through two agencies viz. CITRAN Consulting Ltd., Ranchi and Indian Grameen Services.
- Fifteen retail outlets are being launched in Ranchi. Six hundred and twenty eight FIGs and four FPOs have been formed. 100 cooperative societies have been registered.
- Annual Action Plan for 2012-13 has been approved by SLEC with an outlay of Rs. 12 crore out of which Rs. 6 crore has been released by DAC.
- Activities like vegetable seed production, vegetable production, development of vegetable infrastructures, setting of outlets and training of farmers are being taken up.
- VEGFED has taken the initiative for production of vegetable seedling in 15, 000 sq. mtr. in poly house, which is under construction. A seed infrastructure facility is being developed at cost of Rs. 2 crore.
- An manual Vending Cart was being developed and would be launched shortly in Ranchi.

Shri Sudhanshu Shekhar Tiwary, Consultant from CITRAN Consulting Ltd, who was present during the discussions mentioned that they have facilitated formation of 50 cooperative societies of vegetable growers comprising of 250 FIGs @ five FIGs in each cooperative society. The process of formation of FPO was on.

Shri Lalit Kumar Mahto, Secretary of Vegetable Growers Cooperative Society, Lohardga mentioned that availability of quality seeds was one of the major problems. With VIUC assistance they have taken up vegetable seed production of peas and other

vegetables. He added that the facility for production of vegetable seedlings will be a boon to the farmers. Moreover, the seed infrastructure facility will help in proper packaging and marketing of vegetable seeds being produced by the farmers.

Other basic facts of VIUC activities in Jharkhand is summarized below:

### **Basic Fact about Vegetable Initiative for Urban Clusters in Jharkhand**

**1. BLS conducted by CTRAN Consulting Pvt. Ltd.**

**2. FPO Formation:** 1. CTRAN Consulting Pvt. Ltd.

2. Indian Grameen Services

Farmers mobilized 9607 against target of 10,000 farmers

FIGs formed 574

**3. Salient facts of BLS**

District included for VIUC in Ranchi comprising of 11 Blocks.

Farmers prefer to sell it in bulk to traders

**4. Financial position**

Rupees in lakh

<b>Year</b>	<b>Outlay</b>	<b>Release</b>	<b>Expenditures</b>
2011-12	12.00	12.00	7.75
2012-13	12.00	6.00	

**Market arrival at Ranchi (Agmark) (MT)**

	<b>Qty (MT)</b>	<b>Price (Rs/ q)</b>
March, 2011	6.9	610.00
March, 2012	6.2	664.00

An attempt was made to cross check the arrival of vegetables at Ranchi, in the office of VEGFED but could not succeed due to non functioning of internet connectivity. MD, VEGFED said that he will look into the arrival and price of vegetables in Ranchi.

Glimpses of some of the activities visited by JIT under VIUC scheme is given in the following pages.

### VIUC Activities in Ranchi - Development of Vending Cart



VEGFED, the Nodal agency involved in implementation of VIUC scheme is in the process of developing a rikshaw mounted Vending cart at a local workshop. The cart is being developed based on the design adopted by Smridhi, Patna after taking into consideration local requirements.



It was informed that the cart is more rugged as compared to Smridhi model. The latter was fabricated out of fibre glass, hence less durable. The cart will have provision for solar powered weighing balance. A rate display card will also be provided. The cart will have a capacity of about 500 kg.



### VIUC-Vegetable Seeds and Seedling Production Initiatives



View of vegetable seedling production unit under fabrication by Green Tech India with a covered area of about 15,000 sq. m. The unit was expected to start production of vegetable seedling in a period of three months. Seedlings are proposed to be distributed to vegetable growers. During the time of visit, the ground was saturated with water due to rains.



View of seed infrastructure facility being created by VEGFED at a cost of Rs. 2.00 crore for grading, packing, storage and pouch making of vegetable seeds

Presently, seed packing is being out sourced. Picture shows 10 kg bag of green pea seeds.

### C. REVIEW OF IMPLEMENTATION OF NHM SCHEME

NHM scheme is being implemented in 17 out of 24 districts in the State since 2005-06. The main focus has been on area expansion. Reportedly, so far an area of 0.95 lakh ha has been covered under area expansion in the State at an expenditure of Rs. 140.59 crore. Summary details of physical and financial progress of major components of NHM scheme is given in **Table 1**. An outlay of Rs. 75.00 crore has been approved for 2012-013 including GOI share of Rs. 63.75 crore. An amount of Rs. 26.50 crore has been released towards first installment during 2012-13.

**Table 1: Physical and financial progress under NHM in Jharkhand during 2005-06 to 2012-13 (Sep.)**

(Rs. in crore)

S. No.	Name of Component	Physical		Financial		
		Target	Achievement	Release	Exp.	GOI share
					Total	
1.	Area Coverage (Ha.)	82343	95438	128.23	158.57	137.66
2	Nursery (No.)	148	156	6.64	7.28	7.07
3.	Vegetable seed production, seed infrastructure	951	1831	7.54	13.16	11.88
3.	Rejuvenation (Ha.)	575	150	0.73	0.24	0.20
4	Organic farming (Ha.)	850	172	0.74	2.13	1.81
5	IPM (Ha.)	4807	617	0.42	0.09	0.09
6	IPM Infrastructure (No.)	20	17	4.10	4.05	3.86
7	Protected Cultivation (Ha.)	3075	2386	6.91	9.84	7.84
8	Water Resources (No.)	688	608	54.60	69.93	62.44
9	Post Harvest Management (no.)	206	218	8.12	4.03	3.45
10	Market Infrastructure (No.)	17	35	7.14	1.12	1.04
	Others			18.81	41.66	37.32
	<b>Total</b>			<b>243.98</b>	<b>312.10</b>	<b>274.66</b>

A typical feature of implementation of NHM scheme in Jharkhand, unlike other States, is that the scheme is implemented through NGOs at the districts, without the involvement of District Horticulture Officer (DHO). Funds are released directly from State Horticulture Mission (SHM) Headquarter, Ranchi to the NGOs. The matter gets compounded on account of the reason that two to three NGOs function in the same district. These NGOs do not have any linkage between each other nor with the District Administration. As a result, the DHOs are in the dark about implementation of NHM activities in the districts. DHOs are, however, responsible for implementing other schemes like NMML.

Presently 44 NGOs are working in NHM districts. The list of NGOs along with districts covered by them is given in **Annexure I**.

All these NGOs report their monthly progress to SHM, Jharkhand, who in turn compile the information for uploading on NHM web site. Due to lack of proper verification of records, there has been discrepancy in reporting of progress by SHM, Jharkhand. **Table 2** indicates the details of release and expenditure.

**Table 2. Financial progress reported by SHM, Jharkhand**

(Rs. in crore)				
Year	Releases	Expenditure	Balance	Audited Expenditure
<b>2005-06</b>	30.30	0.00	30.30	0.03
<b>2006-07</b>	40.00	23.84	46.46	19.48
<b>2007-08</b>	7.81	22.40	31.87	23.51
<b>2008-09</b>	50.00	52.63	29.24	52.01
<b>2009-10</b>	30.84	41.93	18.15	39.15
<b>2010-11</b>	16.00	45.55	-11.40	26.47
<b>2011-12</b>	42.16	64.87	-34.11	Awaited
<b>2012-13</b>	26.50	23.44	-31.05	
<b>Total</b>	<b>243.61</b>	<b>274.66</b>	<b>-</b>	<b>-</b>

As per the above table, SHM, Jharkhand is reflecting negative balance of Rs. 31.05 crore. The physical progress achieved (**Table 1**) with reference to unaudited

expenditure which needs reconciliation, particularly since the expenditure reported is abnormally high on activities such as area expansion, vegetable seed production, creation of water resources and other activities. SHM was requested to reconcile the figures during 2011-12 again and while approving their Annual Action Plan 2012-13, in April, 2012.

Mission Director mentioned that they have engaged two consultants exclusively to reconcile this data and the work has expected to be completed in about two to three weeks time.

The JIT leader spent some time with one of the consultants to find out the progress made in this regard. It was observed that the data was being compiled on excel sheets, based on the reports given by the NGOs. They were having difficulty on account of the large number of NGOs involved. Since regular internet connectivity was not there, work was being carried out on a lap top. Mission Director was impressed upon to expedite the work by reconciling the data for each starting with 2006-07 and upload the same on NHM web site. It was agreed that data for at least one year will be reconciled before the Team completed its visit in the State. This has however, not been done so far.

Serious anomaly in monitoring of progress coupled with lack of coordination with the District Administration calls for a shift from the present system of implementation through NGOs to implementation through the District Administration with the active involvement of DHOs. Since NMMI scheme is being implemented through District Administration, there should not be any problem in implementing NHM scheme also in a similar manner.

While weaning out the NGOs, it would be relevant to have a thorough verification of the NGOs vis-à-vis their capability and experience in implementing horticulture programmes. Some of the NGOs such as Adarsh Bal Vikash Shiksha Sansthan (Ranchi), Andhkar Vinash (Gumla), Chhotanagpur Craft Development Society (Ranchi,

Khunti, Lohardaga), Sharamik Viyapeeth (Ranchi), as per their names, do not seem to qualify for implementing horticulture related activities.

For effective implementation of NHM activities, the Horticulture wing at the District level as well as State HQ would need further strengthening in terms of manpower and infrastructure. Some of the DHOs did not have proper office accommodation, which need to be addressed immediately.

#### **D. STATUS OF NMMI IN JHARKHAND**

Micro irrigation Scheme was initiated in Jharkhand State during 2006-07. An outlay of Rs. 4.60 crore was allocated for the State during 2006-07 and an amount of Rs. 2.30 crore was released. However, no expenditure was incurred till the year 2008-09. However, no expenditure was incurred till the year 2008-09. Till 2011-12, an amount of Rs. 13.71 crore was released to the State against which an expenditure of Rs. 13.71 crore has been incurred upto March, 2012 for covering in area of 8161 ha.

During 2012-13, out of the allocation of Rs. 25.00 crore an amount of Rs. 22.00 crore was released in two installments. An expenditure of Rs. 9.96 crore has been incurred during the year for covering an area of 1622 ha. Year wise details of release and expenditure is given in **Table 3**.

**Table 3: Year wise released and expenditure under NMMI in Jharkhand.**

<b>Year</b>	<b>Release</b>	<b>Expenditure</b>
2006-07	2.30	0.000
2007-08	0.00	0.00
2008-09	0.00	0.00
2009-10	0.00	0.00
2010-11	1.50	3.18
2011-12	22.00	9.50
<b>Total</b>	<b>35.71</b>	<b>23.21</b>

## E. VISIT TO DISTRICTS

Summary details of observations made by JIT during visit to Ranchi, East Singhbhum and Saraikela districts are placed at **Appendix I**, **Appendix II** and **Appendix III** respectively.

### 1. Ranchi District

Mango, Litchi and Papaya are the main NHM crop identified for development in Ranchi district. The comparative details of area, production and productivity of various horticulture crop in Ranchi district during 2004-05 and 2011-12 are given in **Table 4**.

**Table 4 Area, production and productivity of horticulture crops in Ranchi district**

Area (ha), Production (MT), Productivity (MT/ha)

		2004-05			2011-12			% Difference		
		Area	Prod.	Pvty.	Area	Prod.	Pvty.	Area	Prod.	Pvty.
<b>A.</b>	<b>Fruits</b>									
	Mango *	1493	17916	12	6508	27463	4.22	335.90	53.29	-64.83
	Guava	796	9552	12.38	878	9658	11	10.30	1.11	-11.15
	Litchi *	149	1788	12	1199	4748	3.96	704.70	165.55	-67.00
	Citrus	337	3370	10						
	Papaya *	0	0	0	1174	2218	1.89			
	Banana	206	4320	20	206	1858	9.22	0.0	-56.99	-53.90
<b>B.</b>	<b>Spices</b>									
	Chilli	1933	23196	12						
	Ginger	110	9570	87						
	Turmeric *	70	5390	77						
<b>C.</b>	<b>Flowers</b>									
	Loose Flower *	245	3920	16						
<b>D.</b>	<b>Plantation</b>									
	Cashew nut	0	0		0	0	0			

\* NHM crop

Source: SHM, Jharkhand

While there has been increase in the area and production of fruits in the district, productivity of all the fruit crops has gone down.

SHM was requested to provide to latest data with regard to spices and flowers. However, the same could not be provided.

JIT visited Palma village, Ilaki Block where a number of activities such as area expansion, protected cultivation, vermin composting, micro irrigation and pack house was taken up by a group of seven to eight farmers, covering an area of about 1.5 ha. PETCI, Ranchi was the NGO involved in implementation of the works.

Shri Shyam Dhani Mahto, who was present during the visit mentioned that all the work were carried out by the NGO. The land was acquired on lease basis by the farmer group for a period of 10 years for taking up horticulture activities. Area expansion included fruit crops like mango and guava besides floriculture. Planting material for fruit crops was sourced from Birsa Agriculture University and Horticulture Agro Research Programme (HARP), Palandu.

JIT visited some of the plots where micro irrigation was adopted for vegetable crops.



### Glimpses of Activities Visited in Ranchi District



Cultivation of floriculture plants under protected cover cluster comprising of about 1.5 hectares. Different types of activities have been taken up in the cluster. Land is taken on lease basis by a group of farmers for a period of 10 years. A vermi compost unit has also been established in one of the shade net structures. Since the life of the structure was not over, marigold was cultivated for a season.



Open field cultivation of gladiolous has been taken up in the cluster. A Pack house has also been constructed out of pre-fabricated structure. The pack house, however, did not have any ventilation.



### Glimpses of Activities Visited in Ranchi District



Shri Shyamo Dhani Mahto has taken up meadow orchard of guava (Alabhabad Safeda) during 2011-12. The plants needed pruning and canopy management, which was demonstrated to him during the field visit. Farmers needed training on this aspect. There was need to control attack of pests like leaf borer.



View inside the pack house where chillies have been stored in plastic crates. The farmer informed that they did not incur any expenditure on the activities taken up in the cluster, as it was on demonstration basis. Moreover, their labour contribution was accounted as farmer's share of contribution. Field Consultant was unable to provide details of actual cost incurred.

### Glimpses of Micro Irrigation Activities in Ranchi District



Shri Dubraj Mahto, Village Tape has taken up drip irrigation in about 1.5 ha for tomato, cauliflower, peas and cabbage crops. System supplier was Netafim India. Due to early planting, the cabbage crop did not get the desired head formation. Proper lateral spacing as per crop requirement was also not adopted.



Another farmer in the same village has also adopted drip irrigation for vegetable crops. It was, however, observed that the farmers did not get any training on running and maintenance of drip system. They also needed training on crop management, as some of the crops were affected due to viral diseases. The encouraging feature is that farmers are willing to take up drip irrigation in close spaced crops like vegetable.

## 2. East Singhbhum District

Comparative details of area, production and productivity of horticulture crops in East Singhbhum district are given in **Table 5**.

**Table 5: Area, Production and Productivity of horticultural crops in East Singhbhum District**

Area (ha), Production (MT), Productivity (MT/ha)

		2004-05			2011-12			% Difference		
		Area	Prod.	Pvty.	Area	Prod.	Pvty.	Area	Prod.	Pvty.
<b>A.</b>	<b>Fruits</b>									
	Mango *	162	1944	12	2442	7863	3.22	1407.41	304.48	-73.17
	Guava	184	2208	12	204	2241	10.99	10.87	1.49	-8.42
	Litchi *	0	0	0	0	0				
	Citrus	462	4620	10	462	1076	2.44	0.00	-76.71	-75.60
	Papaya *	0	0	0	135	182	1.35			
	Banana	134	2680	20	134	1342	10.22	0.00	-49.93	-48.90
<b>B.</b>	<b>Spices</b>									
	Chilli	839	10068	12						
	Ginger	60	4340	72						
	Turmeric *	50	3600	72						
<b>C.</b>	<b>Flowers</b>									
	Loose Flower *	135	2025	15						
<b>D.</b>	<b>Plantation</b>									
	Cashew nut				4004	5605	1.4			

\* NHM crop

**Source:** SHM, Jharkhand. Latest data for Spices and Flowers could not be provided.

Mango, litchi, papaya, spices, floriculture and cashew are the identified crops for development in the district. Substantial area has been brought under cashew plantation in the district.

JIT made a visit to the office of the DHO, East Singhbhum before proceeding for field visits. It was observed that the office lacked basic facilities.

Shri Kujur, DHO called on the JIT in the evening. He mentioned that NHM activities in the district were not being implemented through the DHO, as the same was being implemented through the NGOs. The targets were fixed at the HQ level and the funds were released to the NGOs directly. NGOs never interacted with the DHO. However, a circular has been issued recently by the District Administration directing the DHOs to start planning of horticulture development activities in the district and to supervise all the NHM activities being implemented through the NGOs.

DHO mentioned that the scheme on NMMI was being implemented through DHO without any problem. Some activities such as distribution of equipment was also being implemented as per the directions of MD, SHM.

DHO was requested to provide details of district profile of East Singhbhum district along with latest information on area, production and productivity of horticulture crops. However, this information could not be provided.

JIT interacted with Shri Debdoot Mohanty, Head Rural Services, Tata Steel Limited which is one of the NGOs implementing NHM programmes in the district. He mentioned that although Tata Steel has earmarked some funds for taking up agriculture / horticulture related activities, assistance from NHM has facilitated in development of horticulture cluster, particularly cashew in the district. They were planning to develop a Centre of Excellence where farmers will be able to get information on all aspects of agriculture along with testing facilities.

JIT inspected some of the plots where micro irrigation was adopted for vegetable crops. Team also visited a Mushroom Spawn Production Unit.



### Glimpses of Activities Visited in East Singhbhum District



District Horticulture Officer, East Singhbhum is functioning from a Mali's quarter at Jamshedpur



The office accommodation as well as the surrounding area needs immediate facelift for proper functioning of a District level office

### Glimpses of Activities Visited in East Singhbhum District



Predominantly a paddy area, farmers have taken up cultivation of vegetable like tomatoes, peas, cabbage etc.



Field preparation activities are on for cultivation of tomatoes. During the time of visit, the drip laterals were removed for facilitating field operations. It was expected to be installed again within a months time.



Mushroom spawn production and Training Centre which was established by TRCSC, Jamshedpur, an NGO working in East Singhbhum District. The unit cost Rs. 25.00 lakh has a capacity to produce 2.2 kg / day. Production commenced on 01.10.2012

### 3. Sarai Kela- Kharsanwa District

Detail of area, production and productivity of horticulture crops in Sarai Kela district is given in **Table 6**.

**Table 6. Area, Production and Productivity of horticultural crops in Sarai Kela District**

Area (ha), Production (MT), Productivity (MT/ha)

		2004-05			2011-12			% Difference		
		Area	Prod.	Pvty.	Area	Prod.	Pvty.	Area	Prod.	Pvty.
<b>A.</b>	<b>Fruits</b>									
	Mango *	78	1691	13.98	2398	7146	2.98	2974.36	322.59	-78.68
	Guava	78	933	11.96	148	1314	8.88	89.74	40.84	-25.75
	Litchi *	0	0	0	0	0	0			
	Citrus	173	1730	10	0	0	0			
	Papaya *	0	0	0	0	0	0			
	Banana	41	825	20.12	41	365	9.55	0.00	-55.76	-52.53
<b>B.</b>	<b>Spices</b>									
	Chilli	189	2267	11.99						
	Ginger	50	3550	71						
	Turmeric *	70	4970	71						
<b>C.</b>	<b>Flowers</b>									
	Loose Flower *									
<b>D.</b>	<b>Plantation</b>									
	Cashew nut									

\* NHM crop

**Source:** SHM, Jharkhand. Latest data on Spices and Flowers could not be provided.

Mango, Litchi, Papaya, spices and floriculture are the crops identified for improvement in production of mango. No data was available for Litchi and papaya. Latest data on Spices and Flowers could not be provided.

Shri Arun Kumar, DHO, Sarai Kela accompanied the JIT during field visit to see the activities under NHM in the district. He mentioned that TRCSC and Sunrise are two NGOs involved in implementing NHM activities in the district. Summary details of physical and financial progress of NHM activities taken up during 2011-12 and 2012-13 are given in **Table 7**.

**Table 7: Details of Physical and Financial progress under NHM in Saraikela-Kharsawan District**

Area in ha, Rs. in lakh

Sl. No.	Item	2011-12		2012-13	
		Physical	Financial	Physical	Financial
1.	Area Expansion				
	a) Mango	240	13.440	335	13.76
	b) Guava (Normal)	70	2.122	20	0.42
	c) Guava (HD)	5	0.341	3	0.16
	D) Sapota	20	1.090		
	e) Flowers				
	Bulbulous flowers	20	4.50		
	Cut Flower	27	4.725		
	Loose Flower	44	2.680		
	f) Aromatic Plants	45	1.280		
	g) Plantation (cashew)	550	38.080	230	11.780
2.	Protected cultivation	9.350			
3.	Cultivation of flower in GH	0.325			
4.	Vermi compost unit (No.)	150	7.500		
5.	Organic farmer	-	-	300	4.50
	<b>Total</b>				

JIT visited Radia village in Chandel Block where a Model Nursery and one small nursery was being developed since 2010-11. A group of 36 farmers were involved in the cluster where area expansion activity of cashew and mango was taken up.



### Glimpses of Activities Visited at Sarai Kela District



Construction of green house in model Nursery at Chandel Block. It was observed that substandard material was being used for constructing the green house. The champs were rusted. There was no BIS marketing on GI pipes. Cladding material did not have required thickness. The Fabricator was requested to rectify the defects immediately.



Mother plant of mango at Model Nursery. Guava and Cashew are other crops for which planting material is proposed to be propagated in the nursery. The Nursery needed weeding operations. It was observed that substandard material was being used for constructing the green house. The champs were rusted. There was no BIS marketing on GI pipes. Cladding material did not have required thickness. The Fabricator was requested to rectify the defects immediately.

### Glimpses f Activities Visited at Sarai Kela District



Cultivation of Tube Rose and Aloe Vera by farmers at Radia village.



Cultivation of tube rose supported with drip irrigation. A patch of land was under development for fresh planting.



Two Green houses have been established for flower cultivation by Shri Samjan Mahto, Sh. Gayaram Mahto, Sh. Lal Mohan Mahto and Shri Jai Chand Mahto. Due to non availability of planting material for tube rose, gerbera and capsicum, the farmers were growing spinach. Vegetable seedlings was also being produced.

### Glimpses of Activities Visited At Sarai Kela District





Cultivation of mango and ginger by Shri Ashok Kumar Mahto at Burudi village covering an area of about 4 ha. High density planting of guava has also been taken up in the area.



View of community tank constructed by PETS, an NGO working in Sarai Kela district.



The tank did not have any lining as a result of which heavy soil erosion of embankment was taking place. The NGO was contacted over phone and asked to repair the tank and provide lining material, as stipulated in NHM guidelines, which was agreed to.

#### 4. Visit to see NBM activities, Ranchi

The National Bamboo Mission is being implemented in Jharkhand by State Forest. Details of fund released to Jharkhand since the year 2006-07 and expenditure incurred is given in **Table 8.**

**Table 8. Details of Funds released and expenditure incurred under NBM in Jharkhand**

(Rs. in crore)

<b>Year</b>	<b>Funds Released</b>	<b>Expenditure</b>
2007-08	1.00	1.00
2008-09	2.766	2.766
2009-10	1.091	1.091
2010-11	3.520	3.52
2011-12	2.250	1.632
2012-13	0.640	-
<b>Total</b>	<b>11.267</b>	<b>10.009</b>

Details of physical achievements for major components of NBM are given in **Table 9.**







**Table 9: Achievement under NBM in Jharkhand**

<b>Components</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>Total</b>
Nurseries (nos)	6	14				20
Plantation in forest areas (ha)	550	832	850	1600	460	4292
Plantation in non-forest areas (ha)			12			12
Improvement of existing stock (ha)	790	875	344	1000	101	3110
Training of farmers (nos)			50	20		70

Shri Chandramouli Prasad, Assistant Conservator of Forest, Ranchi who accompanied the JIT during the visit to Getal Sud area mentioned that due to lack of availability of planting material, it was procured from outside the State.



### Glimpses of NBM Activities Visited at Ranchi District

		
New planting of Bamboo at Gtal Sud (2011-12)	New planting of bamboo in forest land (2010-11) at Maheshpur.	
		
Cattle trench for protecting the bamboo plantation	A drying platform provided by the Forest Department as entry point activity.	Bamboo is used extensively as a fencing material and for preparing tree guards.

## Summary of observations and Action Points

### A. National Horticulture Mission (NHM)

1. Jharkhand State has good potential for development of horticulture. Efforts being made under NHM in concentrated around area expansion, which has enabled to introduced non traditional crops like cashew.
2. Lack of adequate manpower is a major constraint in effective implementation of NHM scheme in the state. Although the scheme has been in operation for more than six years with annual expenditure of over Rs. 30-35 crore, no effective steps seem to have been taken by the State Government to deploy adequate manpower at State HQ as well as at the field level.
3. There is lack of coordination between the Line Departments and different Wings in the same Department. Better linkage was needed between NHM, NMMI and VIUC schemes.
4. In order to make good shortage of manpower, NHM scheme was being implemented through a large number of NGOs to whom funds are released directly by SHM HQ. Lack of proper monitoring mechanism has resulted in sub-standard works being executed by the NGOs. Poor management of Green house cultivation in Ranchi, poor quality establishment of nursery and poor quality construction of community tank at Sarai Kela have been witnessed by the JIT.
5. DHOs need to be involved in planning and supervising the NHM activities, even if it is implemented by NGOs.
6. Selection of NGOs need to be made after proper scrutiny about their background, experience and capability to deliver.
7. DHOs need to be provided with basic facilities in terms of proper office room, internet connectivity, mobility and communication. Office of DHO, East Singhbhum visited by JIT lacked proper facilities.
8. Anomaly in progress reporting, which has resulted due to reporting of progress by a large number of NGOs without proper verification and uploading on NHM web site, needs to be reconciled immediately.

9. Effective mechanism needs to be put in place to collect horticulture statistics.
10. Flow of funds for development of horticulture through RKVY scheme needs to be augmented.

#### **B. Vegetable Initiative for Urban Cluster (VIUC)**

1. JIT observed good enthusiasm among some of the FIG members in carrying forward the objective of establishing an effective supply chain for vegetables in respect of Ranchi City.
2. Proto type of vending cart being developed locally need to be commissioned quickly.
3. Vegetable seedling production unit and seed infrastructure facilities being established by VEGFED is expected to provide good quality vegetable seeds and seedlings to the farmers. Trained manpower need to be deployed for running there units. The green house structure being constructed for production of vegetable seedlings with an area of 15000 sq. m. should have proper drainage facilities. Moreover, an assessment of vegetable seedling requirement need to be made to ensure capacity utilization of the facility on a sustainable basis.

#### **C. National Mission on Micro Irrigation (NMMI)**

1. Adoption of drip irrigation by the farmers for close spaced crop like vegetables is an encouraging feature, which needs to be upscaled.
2. There needs to be better integration between NHM and NMMI schemes to ensure better penetration of the MI technology in newly planted areas.
3. Proper after sales services and training of farmers in running and maintenance of drip irrigation system was necessary. Farmers also needed training on crop management under drip irrigation. Operation manual need to be provide by the system manufactures.
4. Unspent balance to the tune of Rs. 12.50 crore need to be utilized expeditiously.

**C. National Bamboo Mission (NBM)**

1. Area expansion of bamboo has remained confined in forest areas. Better incentives were needed to attract farmers for taking up bamboo cultivation.
2. Despite establishment of nurseries for bamboo, planting material was being outsourced from other states. This trend needs to be discouraged.
3. Development of bamboo products is an area which needs focus.



## Annexure I

## List of NGOs implementing NHM scheme in Jharkhand Districts

S.No.	Name of NGO	District
1	ADDWA	Pakur, Dumka
2	Abhinav Vikas Sewa Sansthan	Latehar
3	Adarsh Balvikas Shiksha Sansthan	Ranchi
4	Andhkar Vikas	Gumla
5	Citizen Foundation	Ranchi
6	Chhotanagpur Craft Development Society	Ranchi, Kunti, Lohardaga
7	Gramothan Vikas Sansthan	Gumla, Hazaribagh
8	Gariman Sewa Sangh	Ramgarh
9	Harijan Adivasi Khadi Gramudyan Sangh	Deogarh, Pakur
10	HEAD	Ranchi, Kunti
11	IDEA	Simdega
12	Jharkhand Hill Resource Development Society	Ranchi
13	Jan Kalayan	Jamtara
14	Jan Jagran Kendra	Pakur, Hazaribagh
15	Kalyankari Manav	Gumla
16	KHOJ	Dumka, Deogarh
17	Lok Prerna	Dumka, Deogarh
18	Manav Kalyan Kendra	Dumka
19	Minority samarga	Palamu
20	MASSP	Deogarh
21	Nav Kiran	Jamtara
22	PETCI	Ranchi, Chatra
23	Pink Welfare	Chatra
24	Parivesh Society	Ranchi, Gumla, Ramgarh
25	Parvatiya Durgam Siksha Vikas	Ranchi
26	RACHNA	Deogarh
27	Samarpan Charitable Trust	Ranchi, W. Singhbhum, Gumla
28	Sharamik Vidyapeeth	Ranchi
29	SITARA	Gumla
30	Social Welfare Development Society	Dumka, Pakur
31	Samaj Kalyan Kendra	Jamtara
32	Singhbhum Gramudhyog Vikas Sansthan	West Singhbhum
33	Serva Samaj Seva Sansthan	West Singhbhum, Latehar
34	Sunrise	Saraikela
35	Srijan	Palamau
36	SEEDS	Palamau

37	Tagore Society for Rural Development	Pakur
38	Technoly Resource Communication and Service Centre	Saraikela
39	Tata Steel Rural Development Service	East Singhbhum
40	VEGFED	Ranchi, Gumla
41	Vegetable Growers Co.Op. Society	Gumla
42	Viakas Bharati	Jamtara, Latehar, Gumla
43	VIEWS	Pakur
44	Welfare Point	Chatra

## Proforma for use by JIT

## Area expansion, Protected Cultivation, Pack House

Date of visit: 9.10.2012

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Shri Shyam Dhani, Village Talma, Block Itaki, Ranchi
2	Total land available with the beneficiary (ha).	4 Acre (1.5 ha.) – Demonstration Plot taken on lease. @ R. 8000/year
3	Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel .....)	Naturally ventilated Green House and Shade net house. Vermi compost unit made of HDPE. Earthworms procured from M/s RK Mission @ Rs. 500/kg.
4.	Year of establishment	2009-10
5.	Size of Structure (Sq. m)	1000 Sq. mtr.
6.	Total cost	Not provided
7.	Agency involved in fabrication and installation	Through PETCI, Ranchi
8.	Total subsidy paid and date of payment.	
9.	Crops being grown	Floriculture – Marigold, Gladiolus Open field : Organic turmeric, Guava (HD)
10.	Condition of Structure	Not well maintained
11.	Condition of Crop	Gladiolus in open field, condition good, Marigold in Green house under neglected condition,
12.	Tie up with market	Marketed in Ranchi, Gladiolous @Rs. 3/- per stick and a Garland of marigold @Rs. 4/- per kg.
13.	General upkeep (Very good/ Good/ Average/ Poor)	Average
14	Any other relevant observation by JIT.	<ul style="list-style-type: none"> <li>• The Green House structure needed better upkeep.</li> <li>• Source of irrigation is bore well, Drip under NMMI used in 1 ha</li> </ul>

## Proforma for use by JIT

## Area Expansion

Date of visit: 9.10.2012

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	S/Shri Parikshit Mahto, K. S. Mahto, Raghupati Mahto, Bindeshwar Mahto, Laxmi Mahto, Bireshwar Mahto and Haripado Mahto
2	Total land available with the beneficiary (ha).	17 ha.
3	Crop Cluster under which covered.	Mango and Guava
4	Name & variety of crop planted.	Mango: Malda, Langra, Amarpalli Guava: Allhabad safeda
5	Source of planting material.	BAU, Ranchi
6	Number of planting material.	1000 mango 1667 guava
7	Number of plants planted/ rejuvenated.	1000 mango 1667 guava
8	Date of plants which survived (also indicate percentage survival).	2009-10 80-98% survival
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Rs. 99,000 /- for mango area expansion
10	Amount paid and date of payment.	Not provided. Beneficiary mentioned that they contributed labour and no expenditure was incurred by them.
11	Mode of payment.	
12	Source of Irrigation Water (Bore well/ Tube well/ Canel)	Borewell/pond
13.	Whether Drip/ Sprinkle System in use.	No
14.	Other inputs provided.	Shade net foe vegetable seedling, small pond, pack house
15.	Whether assistance available for Organic Farming	Organic farming of turmeric taken up in 2011-12
16	If so, area covered	1 ha.
17.	Assistance available	
18.	Available marketing facility for the crop.	Ranchi Market
19.	Other infrastructure available in the vicinity.	
20.	General upkeep of the plot; Very good/ Good / Average/ Poor.	Good
21.	Any other relevant observation by the JIT.	<ul style="list-style-type: none"> <li>• Training need to be imparted on managing HD guava,</li> <li>• Pack house needed ventilation</li> </ul>

**Proforma for use by JIT****Micro Irrigation**

Date of visit: 9.10,2012

<b>Sr. No.</b>	<b>Details</b>	<b>Remarks</b>
1	Name & address of beneficiary visited.	Shri Dhubraj Mahato, Village: Tape, Block: Ormanjee, Ranchi
2	Total land available with the beneficiary (ha).	4 acre (1.5 ha.)
3	Type of MI system availed Drip/ Sprinkler	Drip
4	Crop(s) covered	Tomato, cauliflower, peas, cabbage
5.	Total area covered (ha)	4 acre (1.5 ha.)
6	Crop Spacing (for drip)	
7	Year of establishment	2011-12
8	Name of Manufacturer/ Supplier	Netafim
9	Total subsidy paid & date of payment	
10	Mode of payment	
11	Status of crop	Recent peas planted
12	General upkeep (Very good/ Good/ Average/ Poor)	Good
13.	Any other relevant observation by JIT.	<ul style="list-style-type: none"> <li>Farmer needed training on maintenance of drip system and crop management.</li> <li>Gap filling in tomato required</li> </ul>

**Proforma for use by JIT****Micro Irrigation**

Date of visit: 10.10,2012

<b>Sr. No.</b>	<b>Details</b>	<b>Remarks</b>
1	Name & address of beneficiary visited.	Shri Madhusudan, Village: Basgarh, Block: Patamade, Jamshedpur, District: East Singhbhum
2	Total land available with the beneficiary (ha).	3 acre
3	Type of MI system availed Drip/ Sprinkler	Drip – NMMI- (Lift Irrigation) Pumpset ; RKVY
4	Crop(s) covered	Tomato
5.	Total area covered (ha)	3 acre
6	Crop Spacing (for drip)	On line
7	Year of establishment	2012-13
8	Name of Manufacturer/ Supplier	Jain Irrigation System Ltd.
9	Total subsidy paid & date of payment	Not provided
10	Mode of payment	Not provided
11	Status of crop	Newly planted
12	General upkeep (Very good/ Good/ Average/ Poor)	Well maintained field
13.	Any other relevant observation by JIT.	<ul style="list-style-type: none"> <li>• Drip lines were removed for field preparation</li> <li>• Farmer needed training on crop management with drip as well as maintenance of drip irrigation system.</li> <li>• Farmer suggested for providing assistance for close spacing and also includes spacing as per farmers' choice.</li> <li>• Operation manual for drip system to be provided by manufacturer.</li> </ul>

**Proforma for use by JIT****Micro Irrigation**

Date of visit: 10.10.2012

<b>Sr. No.</b>	<b>Details</b>	<b>Remarks</b>
1	Name & address of beneficiary visited.	Shri Y. Gorai, Village: Basgarh, Block: Patamade, Jamshedpur, District: East Singhbhum
2	Total land available with the beneficiary (ha).	1 ha.
3	Type of MI system availed Drip/ Sprinkler	Drip – (Source: Lift irrigation)
4	Crop(s) covered	Beans
5.	Total area covered (ha)	1 ha.
6	Crop Spacing (for drip)	
7	Year of establishment	2011-12
8	Name of Manufacturer/ Supplier	Jain Irrigation System Ltd.
9	Total subsidy paid & date of payment	Not provided
10	Mode of payment	Not provided
11	Status of crop	Newly planted bean crop
12	General upkeep (Very good/ Good/ Average/ Poor)	Good
13.	Any other relevant observation by JIT.	<ul style="list-style-type: none"> <li>• Drip lines were removed for field preparation</li> <li>• Farmer needed training on crop management with drip as well as maintenance of drip irrigation system.</li> <li>• Farmer suggested for providing assistance for close spacing and also includes spacing as per farmers' choice.</li> <li>• Operation manual for drip system to be provided by manufacturer</li> </ul>

**Proforma for use by JIT****Mushroom Spawn Production Unit  
(Public / Private Sector)**

Date of visit: 11.10.2012

<b>Sr. No.</b>	<b>Details</b>	<b>Remarks</b>
1	Name of the project	Mushroom Lab – NHM –(Spawn cum Training Centre)
2	Year of Implementation	2012-13
3	Project Period	
4	Name of Implementing Agency	M/s Technology Resource Community Centre (TRCS)
5	Location of Project	Mango, Dimna, Jamshedpur, East Singhbhum
6	Total Project Cost	Rs. 15.02 lakh
7	Amount Released by DAC	Rs, 6.298 lakh dt. 4.6.2012
8	Expenditure incurred	Rs. 15.02 lakh
9	List of equipments procured	Autoclave, Laminor flare
10	Whether trained manpower employed	Yes
11	Arrangements made to meet recurring cost	Avilable
12	<b>Current status</b>	
	• Quantity produced	100 pkts/day
	• Quantity sold	All sold
	• Amount realized through analysis	Rs.20/pkt of 250 gm. Rs. 40,000/ realized.
13	General condition of lab during the time of inspection	Very Good
14	Whether funds disbursed	Yes



**Proforma for use by JIT**  
**Production of Planting Material**  
**Nursery**

Date of Visit: 11.10.2012

Sr. No.	Details	Remarks
1	Name of the project	Nursery development (Cluster of 36 farmers)
2	Year of Implementation	2010-11
3	Project Period	
4	Name of Implementing Agency	Technology Resource Communication & Service Centre (TRCSC)
5	Location of Project	Village: Rudia, Block; Chandil, District: Saraikela
6	Total Project Cost	1 Model Nursery - 4ha. – Rs 25 lakh, 1 Small Nursery- 1 ha.- Rs 6.00 lakh, Total: Rs. 31.00 lakh.
7	Amount Released by DAC	
8	Expenditure incurred	
9	<b>Status of Project</b>	
	<ul style="list-style-type: none"> <li>Name of Nursery and crop for which plants are produced</li> </ul>	Mother plants from Department Mango: 350 plants (Langra, Amarpalli, Chausa) Cashew: 400 plants (B-4 and H-2/16) from Cashew Board, Orissa Guava: 140 plants (L-49)
	<ul style="list-style-type: none"> <li>Name of crops for which seeds produced</li> </ul>	
	<ul style="list-style-type: none"> <li>Quantity produced</li> </ul>	Under establishment
	<ul style="list-style-type: none"> <li>Quantity sold</li> </ul>	Under establishment
	<ul style="list-style-type: none"> <li>Rate</li> </ul>	
	<ul style="list-style-type: none"> <li>Amount realized through sale</li> </ul>	
	<ul style="list-style-type: none"> <li>Whether NHM logo displayed</li> </ul>	Board displayed.
	<ul style="list-style-type: none"> <li>Other observations of JIT</li> </ul>	<ul style="list-style-type: none"> <li>Layout map not available at site.</li> <li>Hi-tech Green House and two shade net houses are under construction.</li> <li>Inferior construction material of Green house. UV Film of 200 micron is required.</li> <li>Proper anchoring of UV film required</li> </ul>

**Proforma for use by JIT****Area Expansion**

Date of visit: 11.10.2012

<b>Sr. No.</b>	<b>Details</b>	<b>Remarks</b>
1	Name & address of Beneficiary whose field visited.	Shri Yadhushiter Singh Mahto, Vill: Rudra, Block:Chandil, Saraikela
2	Total land available with the beneficiary (ha).	160 Sq. mtr.
3	Crop Cluster under which covered.	Floriculture – 2012-13
4	Name & variety of crop planted.	Tuberose, Aloe vera
5	Source of planting material.	Own arrangement
6	Number of planting material.	
7	Number of plants planted/ rejuvenated.	
8	Date of plants which survived (also indicate percentage survival).	
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Not provided
10	Amount paid and date of payment.	
11	Mode of payment.	
12	Source of Irrigation Water (Bore well/ Tube well/ Canal)	
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	
18.	Available marketing facility for the crop.	Local market
19.	Other infrastructure available in the vicinity.	
20.	General upkeep of the plot; Very good/ Good / Average/ Poor.	Average
21.	Any other relevant observation by the JIT.	<ul style="list-style-type: none"> <li>• Disease infected , drying of plants</li> <li>• Drip recommended.</li> </ul>

**Proforma for use by JIT****Protected Cultivation**

Date of visit: 11.10.2012

<b>Sr. No.</b>	<b>Details</b>	<b>Remarks</b>
1	Name & address of Beneficiary whose field visited.	Shri Jaichand Mahato, Shri Lal Mohan, Vill: Kunti, Saraikela
2	Total land available with the beneficiary (ha).	1 ha.
3	Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel .....)	Poly House - Floriculture
4.	Year of establishment	2011-12
5.	Size of Structure (Sq. m)	1024 Sq.. mtr.
6.	Total cost	Not provided
7.	Agency involved in fabrication and installation	
8.	Total subsidy paid and date of payment.	
9.	Crop being grown	Gerbera Tuberose (1.4 acre)
10.	Condition of Structure	Good
11.	Condition of Crop	Planting material was awaited. Hence spinach was being grown
12.	Tie up with market	
13.	General upkeep (Very good/ Good/ Average/ Poor)	Good
14	Any other relevant observation by JIT.	<ul style="list-style-type: none"> <li>• At present, spinach, coriander, marigold planted in poly house.</li> <li>• Drip is being installed under NMMI</li> <li>• Capsicum plantation proposed to be taken up in poly house.</li> <li>• Farmers are being motivated for floriculture in Kunti</li> </ul>

**Proforma for use by JIT**

**Area Expansion**

Date of visit: 11.10.2012

<b>Sr. No.</b>	<b>Details</b>	<b>Remarks</b>
1	Name & address of Beneficiary whose field visited.	Shri Ashok Kumar Mahato, Vill: Barudi, Block: Bundu, (Cluster of 15 farmers)
2	Total land available with the beneficiary (ha).	15 ha, Development of barren land
3	Crop Cluster under which covered.	High Density Guava Plantation, 2011-12
4	Name & variety of crop planted.	Guava, Mango
5	Source of planting material.	PETSI (NGO – Implementing agency)
6	Number of planting material.	Mango-250 plants (Langra, Amarpalli, Malda)
7	Number of plants planted/ rejuvenated.	
8	Date of plants which survived (also indicate percentage survival).	
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	
10	Amount paid and date of payment.	
11	Mode of payment.	
12	Source of Irrigation Water (Bore well/ Tube well/ Canel)	Borewell
13.	Whether Drip/ Sprinkle System in use.	
14.	Other inputs provided.	Community Tank, Vermi bed, Shadenet- during 2011-12
15.	Whether assistance available for Organic Farming	No
16	If so, area covered	
17.	Assistance available	
18.	Available marketing facility for the crop.	
19.	Other infrastructure available in the vicinity.	
20.	General upkeep of the plot; Very good/ Good / Average/ Poor.	Average
21.	Any other relevant observation by the JIT.	<ul style="list-style-type: none"> <li>• Area needed better management</li> <li>• Drip recommended.</li> </ul>

**Proforma for use by JIT**

**Water Resources Development**

Date of visit: 11.10. 2012

<b>Sr. No.</b>	<b>Details</b>	<b>Remarks</b>
1	Name of the project	Shri A, K. Mahto with cluster of 15 farmers, Vill: Barudi
2	Year of Implementation	2010-11
3	Project Period	
4	Name of Implementing Agency	PETSI
5	Location of Project	Vill: Barudi, Bundu
6	Total Project Cost	Not provided
7	Amount Released by DAC	
8	Expenditure incurred Status	
9	<b>Current Status of Project</b>	
	• Dimension (L x B x W)	250'x200'x10'
	• Capacity	
	• Command Area	
	• Whether linked with new plantation or old plantation	
	• Whether funds disbursed	
	• Observation by JIT	The tank was in bad shape. No lining was provided. The embankments were eroding

**Proforma for use by JIT****Micro Irrigation**

Date of visit: 12.10. 2012

<b>Sr. No.</b>	<b>Details</b>	<b>Remarks</b>
1	Name & address of beneficiary visited.	Shri Goverdhan, Vill:Jenu, Block: Ungariha, Ranchi, Landless introduced by NABARD
2	Total land available with the beneficiary (ha).	3.5 acre
3	Type of MI system availed Drip/ Sprinkler	Drip (NMMI) & Small Poly House (NHM)
4	Crop(s) covered	Seedlings of chilli, cucerbites
5.	Total area covered (ha)	Poly House; 96 Sq, mtr.
6	Crop Spacing (for drip)	
7	Year of establishment	2011-12
8	Name of Manufacturer/ Supplier	
9	Total subsidy paid & date of payment	
10	Mode of payment	
11	Status of crop	
12	General upkeep (Very good/ Good/ Average/ Poor)	Good
13.	Any other relevant observation by JIT.	<ul style="list-style-type: none"> <li>• Vermi compost unit sanctioned in 2011-12 not functioning.</li> <li>• Space under tomato plantation underutilized.</li> </ul>



**Proforma for use by JIT****Micro Irrigation**

Date of visit: 12.10,2012

<b>Sr. No.</b>	<b>Details</b>	<b>Remarks</b>
1	Name & address of beneficiary visited.	Shri Belram, Vill: Jenu, Block: Ungariha, Ranchi
2	Total land available with the beneficiary (ha).	1 ha. (Cluster of 25 farmers with 6 ha. land)
3	Type of MI system availed Drip/ Sprinkler	Drip
4	Crop(s) covered	Tomato, Cauliflower
5.	Total area covered (ha)	1 ha.
6	Crop Spacing (for drip)	
7	Year of establishment	2011-12
8	Name of Manufacturer/ Supplier	
9	Total subsidy paid & date of payment	
10	Mode of payment	
11	Status of crop	
12	General upkeep (Very good/ Good/ Average/ Poor)	Very Good
13.	Any other relevant observation by JIT.	<ul style="list-style-type: none"> <li>Farmer earned Rs. 12,000/- from selling tomato @ Rs. 20/kg.</li> </ul>

## Proforma for use by JIT

## Area Expansion under National Bamboo Mission

Date of visit: 12.10.2012

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	JFMC, Getalsud
2	Total land available with the beneficiary (ha).	
3	Crop Cluster under which covered.	Bamboo
4	Name & variety of crop planted.	D. Strictus
5	Source of planting material.	Outsourced
6	Number of planting material.	
7	Number of plants planted/ rejuvenated.	17,040
8	Date of plants which survived (also indicate percentage survival).	
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Not provided.
10	Amount paid and date of payment.	Not provided
11	Mode of payment.	
12	Source of Irrigation Water (Bore well/ Tube well/ Canel)	Rainfed
13.	Whether Drip/ Sprinkle System in use.	No
14.	Other inputs provided.	
15.	Other infrastructure available in the vicinity.	Cattle proof trench constructed to protect the young plants.
16		
17.		
18.		
19.		
20.	General upkeep of the plot; Very good/ Good / Average/ Poor.	Good
21.	Any other relevant observation by the JIT.	Bamboo is used locally for fencing purpose