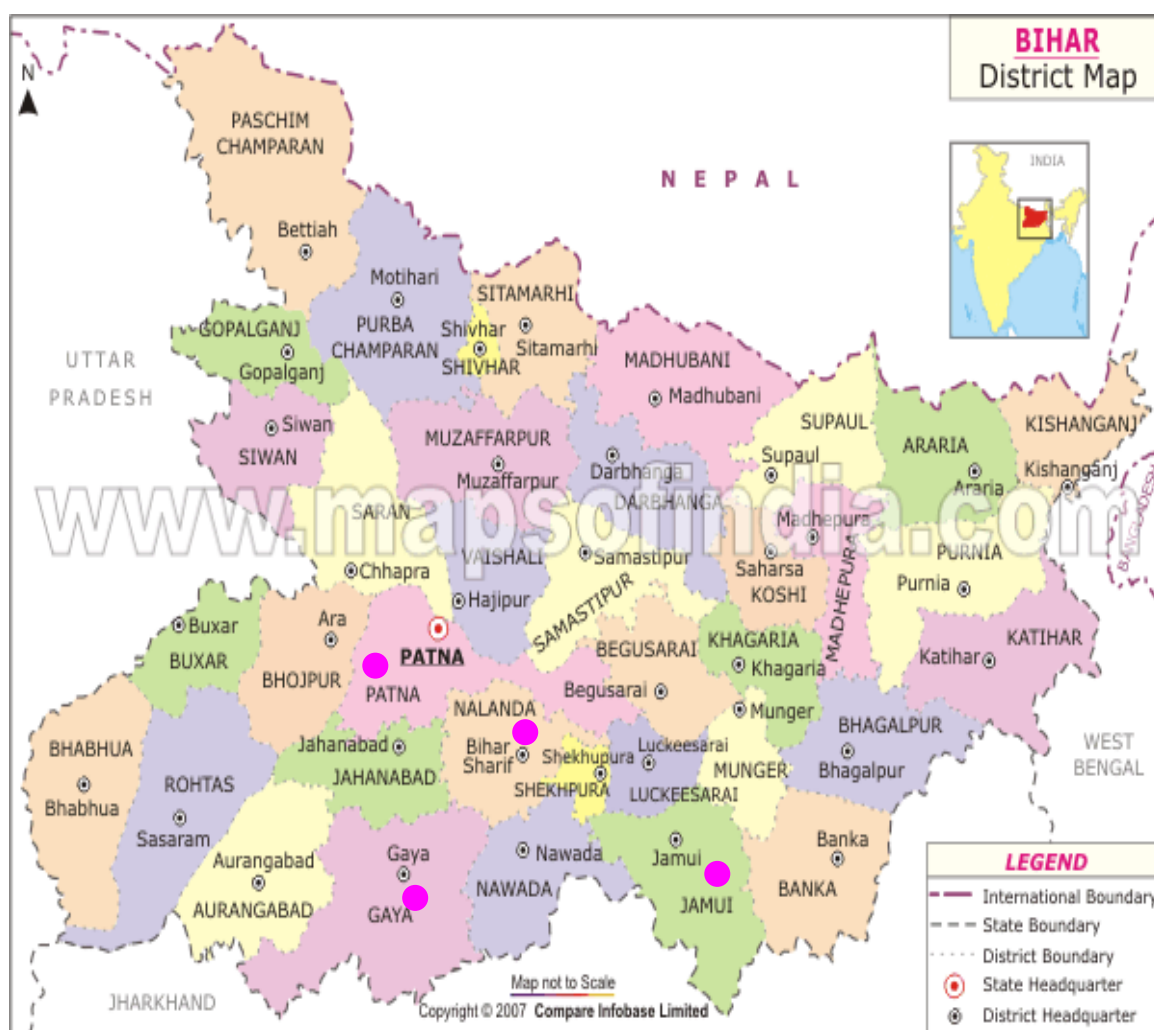


Report of the Joint Inspection Team on its visit to Bihar during 19th November to 25th November, 2013 to review the progress under the National Horticulture Mission



Districts visited by J.I.T of National Horticulture Mission ●

1. Jamui 2. Patna 3. Nalanda 4. Gaya



National Horticulture Mission

Ministry of Agriculture

Department of Agriculture & Cooperation

Krishi Bhawan, New Delhi-110001

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Observations

- Farmers may be educated in respect of crops to be taken in Green House Viz. off season crops, (High value crops) which may fetch them good price.
- DHOs and Headquarter has to work in mission mode. Headquarter may endorse a copy to DHOs regarding project approved / sanctioned by Headquarter along with decisions taken and policy formulated.
- Shalimar cold storage, out of Rs. 42.50 lakh funds sanctioned, beneficiary has received only Rs. 19.21 lakh so far. Rest of the subsidy may be released after submission of completion report.
- Similarly, Rs. 20 lakh may be released on furnishing of completion report in respect of Bio-control lab to the Department of Botany, Patna University. Rs. 26 lakh have already been released to University, against an approval of Rs. 46.00 lakh.
- Monitoring of infrastructures establishment with the assistance of NHM funds is required in the State.
- Seed infrastructure in Bakhtiarpur was found closed on the day of visit. It needs to be made functional. For this purpose, arrangements may be made for technical expertise and provision of funds for running cost.
- There is more demand for targets under area expansion of banana in Nalanda District. Provision for increased targets may be considered. Similarly, more targets may be allotted to District for establishment of Green House and creation of water ponds.
- It is learnt that NHM funds approved under Beekeeping and Mushroom components have been diverted to ATMA for implementation of these components, whereas formation of Group & their identification (ground work) is carried out by SHM but the subsidy pattern is taken care of by ATMA. This does not work in a mission mode.

- Mushroom growers in Nalanda are facing problem of marketing. Large scale production of mushroom, at present, is not feasible because of lack of availability of demand and marketing facilities. Mushroom marketing may be explored by SHM before sanctioning the project.
- Seed infrastructure established at Nalanda is just white elephant. It is not functional inspite of huge investment. At present, there is no power connectivity, arrangement for technical expertise & running cost may be made. Seed unit established by the Agriculture Department, just adjacent to NHM seed unit, is also non-functional due to above reasons.
- Centre of Excellence for Vegetables is being established at Jalalpur, Block Chandi, Nalanda. Land has been acquired for the purpose.
- Horticulture College is being established at Noorsarai, Nalanda which is under construction.
- Seeds for Kharif onion may be made available to willing farmers.
- Jamui District needs more targets for creation of water resources, and establishment of low cost onion storages.
- Farmers need training in IPM practices in Jamui District.
- Publicity of NHM programme is needed in Jamui District and needs acceleration of implementation.
- There is no posting of DHO in Gaya District. Project Director, ATMA is looking after implementation of NHM programme, it is felt that there is not much inclination to implement NHM programme. DHO needs to be posted in the District immediately.
- Cluster approach needed in implementation of NHM programme in the Gaya District.
- Wholesale market may be established for betelvine in Gaya itself taking into consideration the production of betelleaf in the District (Gaya), so that farmers may not have to go to far flung areas for marketing like Varanasi.

- It has been observed that farmers do not fix plastic lining while construction of ponds established with assistance of NHM funds, after availing subsidy. Henceforth, funds may not be released as plastic lining, is mandatory under norms of NHM. If not practised, it would be violation of NHM guidelines / norms. Subsidy may be released only after inspection and completion of ponds as per specified norms. At present, so far established ponds have no sustainability. Cracks have developed on the walls & sides are on the verge of collapsing. This may be seriously looked into.
- Poly houses in Gaya District have not been fully completed, much of work including installation of drip is required but subsidy has been released. This needs to be looked into.

Actionable issues

- District Horticulture Officers and Headquarter should work in mission mode by endorsing a copy of the projects approved / sanctioned along with decisions taken and policy formulated.
- Districts need to be well equipped with sufficient trained manpower and infrastructure facilities' to provide necessary extension support to the farmers.
- Jamui district needs more target for creation of water resources and establishment of low cost onion storage.
- Bio control lab sanctioned five years ago to the Department of Botany Patna University is still awaiting completion, due to non payment of remaining balance funds of Rs. 20 lakhs. It is advised to submit the report in this case to DAC.
- Monitoring of infrastructures developed with the assistance of NHM funds need to be undertaken in the State.
- Training on protected cultivation, including production technologies in green house cultivation need to be imparted to farmers & field functionaries.
- Seed infrastructures developed at Bankhtharpur and Nalanda costing about one crore each are yet to be made functional. SHM should ensure that both units are made functional, thereby making available the technical expertise and provision for running cost.
- Whole sale market needs to be developed for betelvine in Gaya in view of the production of betel leaves in the district, so that betel growers may not have to go to far flung areas for marketing like Varanasi
- The installation of drip and sprinkler need to be supported with training of field functionaries as well as farmers about functioning and maintenance of the system, crop-irrigation schedule. It also needs to be ensured that the drip system is installed as per the required specifications.

- Subsidy for water ponds need to be released only after completion of plastic lining and fencing work.
- Since the setting up of terminal market sanctioned at Potahi, has been cancelled, fund released needs to be returned to NHM.
- There is an over whelming response for adoption of protected cultivation and mushroom production in the districts visited, which needs to be supported with additional allocation of funds.
- The efforts being made under the schemes need to be documented and well publicised. Moreover, proper display boards with logo need to be displayed at the project sites for generating awareness among the farmers.

Report of the Joint Inspection Team on its visit to Bihar during 19th November to 25th November, 2013 to review the progress under the National Horticulture Mission

The Joint Inspection Team (JIT) comprising Dr. Om Prakash, Chief Consultant, National Horticulture Mission and Shri P.S. Kohli, Senior Resource Person (NHM), DAC, Govt. of India, New Delhi visited Bihar during 19-25th November, 2013 to review the progress under National Horticulture Mission programme in the State. Shri D.N. Mahto, DHO (Hort.), Patna coordinated the visit of Team in Patna, Jamui, Nalanda and Gaya of Bihar State.

The JIT covered the district of Patna, Nalanda, Jamui, and Gaya. Activities which were visited in different districts are as follows:-

NHM- Nursery, vegetable seed production, Bio control lab, Area expansion of mango, Litchi, Guava, Banana, Protected cultivation, Water Ponds, Vermi compost units, Mushroom spawn production unit, Mushroom production, Onion storage, Cold storage and Precooling unit.

NMMI- Drip irrigation in vegetables / fruit crops.

VIUC- Area Expansion, Protected cultivation, Organic farming, Onion storage

The team interacted with Shri Ajay Yadav, Mission Director and Director of Horticulture, Govt. of Bihar on 25th November, after completion of visit. Team appraised the SMD about the observations and recommendations of the team.

Status of National Mission in Bihar

The Centrally Sponsored Scheme of National Horticulture Mission (NHM) is being implemented in 23 district of Bihar since 2005-06.

The scheme is being implemented in twenty three identified potential districts with cluster approach. The districts covered under NHM include East Champaran, West Champaran, Muzaffarpur, Samastipur, Vaisali, Darbhanga, Araria, Purnia, Kishanganj, Katihar, Bhagalpur, Banka, Munger, Patna, Nalanda, Aurangabad, Jamui, Khagaria, Gaya, Madhubani, Rothas, Begusarai and Saharsa.

The focus crops identified under the programme include Mango, Litchi, Banana, Guava, Pineapple, Makhana, Beal, Betel vine and Aonla.

Major activities being undertaken in the programme are production and distribution of planting material, vegetable seed production, area expansion, rejuvenation of senile orchards, creation of community water resources, protected cultivation, IPM/INM, organic farming, pollination support through bee-keeping, development of infrastructure on post harvest management & marketing and human resources development.

Physical Progress

Salient progress till 2012-13 is as follows:-

- An additional area of 0.46 lakh ha of identified horticulture crops are covered.
- 85 nurseries have been established for production of quality planting materials.
- An area of 628 ha. has been covered under rejuvenation of old and senile orchards.
- Organic farming has been adopted in an area of 1170 ha for promotion of organic cultivation of horticultural crops.
- IPM practices have been adopted in an area of 6614 ha.
- 17 IPM/INM infrastructure facilities such as Leaf tissue analysis labs, disease forecasting units have been created.
- An area of 547 ha has been covered under protected cultivation.
- 599 community water structures have been created.
- Under the component of Post Harvest Management, 190 units including pack houses, cold storage units, refrigerated vans, primary / mobile processing units, ripening chambers, pre cooling units attach to cold storages and mobile pre cooling units) have been established.
- 5 market infrastructures have been set up.

Financial Progress

An amount of Rs. 179.33 crore was released to the State till 2012-13 against which an expenditure of Rs. 163.50 crore has been reported.

Progress during 2013-14

An allocation of Rs. 50 crore has been approved including GOI share of Rs. 42.50 crore for Annual Action Plan 2013-14. Funds to the tune of Rs. 5.00 crore has been released during the current financial year, out of which an expenditure of Rs. 23.06 has been reported.

Physical progress under NHM-2012-13

Components	Unit	Target as per AAPs 2012-13		Targets as per releases						Component wise % utilization of fund
		Phy.	Fin.	Physical		% Achmt.	Financial		% Achmt.	Component wise % utilization of fund
				Tar	Achmt.		Tar	Achmt.		
Nursery	No.									
Model		1	21.30	0	1		0.00	21.25		0.82
Small		5	13.28	0	4		0.00	10.52		0.41
Total		6	34.58	0	5.00		0.00	31.77		1.23
Area Expansion	Ha.									0.00
Fruits Perennial		1300	265.20	1300	1371	105.46	528.780	432.01	81.71	16.75
Fruits Non Perennial		1100	282.64	1100	1160.7	105.52	315.16	315.20	100.01	12.22
Flowers		500	51.00	500	500	100.00	51.00	60.00	117.65	2.33
Spices		500	53.13	500	500	100.00	53.13	53.13	100.00	2.06
Aromatic & Medicinal		500	53.13	500	500	100.00	53.13	53.13	100.00	2.06

Plantation crops										
Total		3900.00	705.10	3900	4031.7	103.38	1001.12	913.47	91.24	35.42
Rejuvenation	Ha.	1500	191.25	1500	142.87	9.52	191.25	21.43	11.21	0.83
Creation of water resources	No.	200	102.00	200	200	100	102.00	102.00	100.00	3.95
Protected cultivation	Ha.	516	369.33	516	456.83	88.53	88.53	479.20	325.92	68.01
Promotion of IPM	Ha.	2500	21.25	2500	2300	92.00	21.25	23.00	108.24	0.89
Disease Forecasting Units										
Bio Control Labs										
Plant Health Clinics		1	17.00	0	1		0.00	17.00		0.66
Leaf / Tissue analysis Lab		1	17.00	0	1		0.00	17.00		0.66
Total	0	2	34.00	0.00	2.00		0.0	34.00		1.32
Adoption of Organic Farming	Ha.	2500	85.00							0.00
Vermi compost unit	No.	2000	85.00	2000	2000	100.00	85.00	79.99	94.11	3.10
HRD	No.	2938	84.79	2930	2169	74.03	33.80	45.13	133.52	1.75
Pollination support through beekeeping	No.	10000	127.50	10000	9599	95.99	127.50	125.24	98.23	4.86
FLD		40	238.00	0	46	0	0.00	254.740		9.88
Horticulture Mechanization	No.	150	31.88	150	71	47.33	59.51	41.75	70.16	1.62
Post Harvest Management	No.									
Pack house		20	25.50							0.00
Cold Storage		6	612.00	0	0					0.00
CA/MA										

Storage										
Refrigerated Vans		12	97.90	5	5	100.00	40.85	43.50	106.62	1.69
Market Intelligence										0.00
Ripening Chamber										0.00
Primary/mobile processing units		8	65.30							0.00
Low cost onion storage structures		120	51.00	0	120		0.00	51.00		1.98
Pre cooling units attached to cold storage					9	0	0.00	45.90	0.00	0.00
Total		46	800.70	14	125	892.86	86.70	94.50	109.00	3.66
Market infrastructure	No.									0.00
Wholesale / Terminal market										0.00
Retail Markets / outlets		15	51.00				0.00	15.30		0.59
Rural / Apni Mandis		10	68.00	0	3					0.00
Functional Infrastructure		4	20.40							0.00
Extension, quality awareness										0.00
Others			1695.34						470.95	18.26
Total		29	1834.74						486.25	18.85
Grand Total			4660.12						2579.15	100.00

Progress under National Mission on Micro Irrigation (NMMI) scheme in Bihar, 2012-13

S. No.	Items	Physical (ha)	Financial (Rs. in lakh)
1.	Drip Irrigation	1136.16	925.96
2.	Sprinkler Irrigation	40235.43	6345.72
3.	Demonstration	19.80	8.14
4.	Farmer's Training	2.00	1.24
5.	Administrative cost	-	26.01
6.	Total		7307.07

Progress under National Vegetable Initiative for Urban Clusters (NVIUC)- Patna-2012-13.

S. No.	Components	Targets (Nos /ha)		Achievement (Rs in lakh)	
1.	(a) Open Field	8000	1800.00	8000	1245.47
	(b) Hybrid vegetables	1000	337.50	1000	256.50
2.	Protected cultivation				
	(a) GH-Tubular Structure	100	420.75	100	69.43
	(b) Cost of planting material	100	26.25	70	2.63
3.	Post Harvest Management				
	(a) Low cost onion storage	292	262.80	292	100.35
4.	Collection Centre	2	14.40	-	-
5.	HRD	1970	29.35	2038	13.71
	Total		2891.25		1688.08

Area, Production & Productivity of Makhana in Bihar

Sl. No.	District	Area (in ha.)	Production (in Qt.)	Productivity of Makhana seeds (Qt/ha)
1.	Darbhanga	3850	115500	30.00
2.	Madhubani	4565	136950	30.00
3.	Katihar	1156	28900	25.00
4.	Purnia	972	24300	25.00
5.	Sitamarhi	85	2125	25.00
6.	Supaul	792	22176	28.00
7.	Araria	382	7640	20.00
	Total	11802	337591	Average productivity- 26.14 Qt./ Ha.

Note:- On popping the final produce recovery is about 40% of the seeds.

Visit of JIT to Seed Infrastructures

JIT visited sites of seed infrastructure located at Patna on 22nd November, 2013 and other seed infrastructure unit in Nalanda District on 24th November, 2013. As informed by DHOs of respective districts that these infrastructures have been completed by the headquarters and recently handed over to district authorities for making them functional. Subsidy to the tune of Rs. 1 crore each from NHM funds has been provided for the projects.

It was pointed out that these units were not functioning because for technical expertise and lack of funds required for maintenance and running cost. DHOs have to consult their headquarters for taking steps. SHM has to look into and provide support to make them functional as sufficient NHM funds have been incurred for their construction.

JAMUI DISTRICT

- Geographical Area- 3,106,494.15 ha
- Cultivable Area 77862.92 ha
- Net area sown 73670.40 ha
- Cultivable waste land 22886.35 ha
- Current fallow 91159.74 ha

• Forest area	82933.49 ha
• Area under misc. fruits	4724.30 ha
• Non cultivable land	36927.35 ha
• Permanent Pasture and grazing land	50,385 ha
• No. of Block	10
• No. of Panchayat	153
• No. of villages	152
• Main crops	Paddy, wheat, maize, Gram, Moong, Arhar, Masour, Sugar cane, ured & Vegetables
Total Agriculture produced	250 MT.

Area, production & Productivity of horticulture crops in Jamui District

(a) Fruits

Area in ha, Production in MT

S. No.	Name of commodity	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
1.	Mango	949	8826	9.30	1092	8081	7.40	15.0	(-)8.44
2.	Guava	198	1663	8.40	227	1771	7.80	14.65	6.49
3.	Lemon	163	114	7.00	189	1342	7.10	15.95	17.62
4.	Banana	201	6492	32.30	178	8259	46.40	(-) 11.44	27.22
5.	Papaya	9	162	18.00	18	418	23.22	100.00	158.02
6.	Aonla	16	139	8.69	24	216	9.00	50.00	55.40
7.	Litchi	162	1037	6.40	142	973	6.85	(-) 12.35	(-)6.17
8.	Other	423	3384	8.00	480	4262	8.88	13.35	25.95
	Total	2121	22844	10.77	2350	25322	10.77	10.80	10.85

(b) Vegetable

Area in ha, Production in MT

S. No.	Name & District	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
1.	Jamui	9277	141597	15.24	9231	157069	17.02	(-) 0.50	10.93

(b) Flowers

Area in ha, production, Loose flower in MT, cut flowers in lakh spikes, productivity in MT/ha

S. No.	Name of commodity	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
A.	Cut flowers								
	1. Rose	0.35	0.38	1.09	0.95	1.06	1.12	171.43	178.95
	2. Gladiolous	0.10	0.20	2.00	0.40	0.80	2.00	300.00	300.00
B	Loose Flowers								
	3. Marigold	0.70	12.32	17.60	1.75	29.93	17.10	150.00	142.94
	4. Jasmine	0.20	0.52	2.60	0.85	2.24	2.64	325.00	330.76
	5. Tuberose	0.10	0.45	4.50	0.75	3.41	4.55	650.00	657.78
	6. Others	0.60	5.64	9.40	1.70	12.33	7.25	183.33	118.62
	Total	1.60	18.93	11.83	5.05	47.91	9.49	215.63	153.09

(c) Spices

Area in ha, Production in MT

S. No.	Name of District	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
1.	Jamui	119	388	3.26	158	889	5.63	32.77	129.12

Progress under NHM in Jamui District-2012-13 (Upto July, 2012)

S. No.	Components	Targets		Financial (Rs in lakh)	
1.	Maintains of Fruits orchards	307	8.19	5	0.28
2.	Creation of Water Research (Nos)	4	2.40	-	-
3.	Protected cultivation				
	(a) GH-Tubular structure (sq.mtr)	2000	9.35	-	-
	(b) Cost of planting material of House (sq.mtr)	2000	5.00	-	-
4.	Pollination support through Beekeeping (Nos)				
	(a) Honey bee colonies with houses	450	6.75	-	-
	(b) Equipment	450	6.75	-	-
5.	Horticulture Mechanization (Nos)	2	2.10	-	-
6.	HRD (Nos)	113	1.13	-	-
7.	Mission Management		1.70	-	0.11
	Total		37.54		0.39

As per information is provided by SHM, in Jamui district has incurred only Rs. 0.28 lakh on maintenance of orchards & no other activity of NHM has been taken up in the District during 2012-13 i.e., upto July, 2012.

Progress of NMMI in District 2012-13

Sl. No.	Item	Physical (ha)	Financial (Rs. in lakh)
1.	Drip Irrigation	10.00	0.00
2.	Sprinkler irrigation	663.00	96.78
3.	Demonstration	5.00	2.50
4.	Farmer's Training	0	0
5.	Administrative cost	0	0
	Total		99.28

PATNA District

- Geographical area: 317236 ha
- Forest area: - 58 ha.
- Total non-Agriculture:- 172685 ha
- Banner uncultivable land: 12389 ha
- Permanent Pastures and grazing land: 113 ha
- Land under misc. use:- 1002 ha
- Cultivable waste land:- 764 ha
- Fallow land:- 81039 ha
- Net area sown:- 144551 ha
- Total cropped area:- 180688 ha.
- Area sown more than once:- 36137 ha

Area, production & Productivity of horticulture crops in Patna District

(a) Fruits

Area in ha, Production in MT

S. No.	Name of commodity	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
1.	Mango	3718	36622	9.85	3978	34211	8.60	6.99	(-)6.58
2.	Guava	1024	9011	8.80	1092	9173	8.40	6.64	1.80
3.	Lemon	548	3946	7.20	574	4420	7.70	4.74	12.01
4.	Banana	552	19872	36.00	599	28632	47.80	105.26	117.73
5.	Papaya	38	874	23.00	78	1903	24.40	8.51	44.08
6.	Aonla	19	171	9.00	29	273	9.41	52.63	59.65
7.	Other	1418	12620	8.90	1519	14557	9.58	7.12	15.35
	Total	7317	83116	11.36	7869	93169	11.84	7.54	12.10

(b) Vegetable

Area in ha, Production in MT

S. No.	Name of District	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
1.	Patna	38917	765936	19.68	40342	753143	18.67	3.66	(-) 1.67

(b) Flowers

Area in ha, production, Loose flower in MT, cut flowers in lakh spikes, productivity in MT/ha

S. No.	Name of commodity	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
A.	Cut flowers								
	1. Rose	1.80	2.36	1.31	4.60	6.44	1.4	155.56	172.88
	2. Gladiolous	3.05	6.10	2.00	9.15	18.30	2.0	200.00	200.00
	Total	4.85	8.46	1.74	13.75	24.74	1.8	183.50	192.43
B	Loose Flowers								
	3. Marigold	24.15	449.19	186.00	56.20	1056.56	18.80	132.71	135.21
	4. Jasmine	3.65	10.99	3.01	5.70	19.38	3.40	56.16	76.34
	5. Tuberose	1.20	6.12	5.10	5.20	28.08	5.40	333.33	358.82
	6. Others	3.60	35.28	98.00	7.85	72.22	9.20	118.05	104.70
	Total	32.60	501.58		74.95	1176.24	15.69	129.91	134.51

(c) Spices

Area in ha, Production in MT

S. No.	Name of District	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
1.	Patna	646	5152	7.98	704	7192	10.22	8.98	39.60

Progress under NHM-PatnaDistrict-2012-13 (Upto July, 2012)

S. No.	Components	Targets		Achievement	
		Phy.	Fin.	Phy.	Fin.
1.	Veg. seed production (ha)	28.00	7.00	-	-
2.	Veg. seedling production (ha) including infrastructure	400	300.00	-	-
3.	Area Expansion (ha)				
	(a) Banana TC	40	12.48	-	-
	(b) High Density Planting mango (ha)	100	31.20	-	-
	(c) Maintenance	691	21.36	-	-
4.	Distribution of compost and spawn pack for mushroom	20,000	12.00	-	-
5.	Creation of water resources (No.)	4	2.40	-	-
6.	Protected cultivation				
	(a) GH-Tubular structure (sq. mtr)	15,000	70.10	-	-
	(b) Plastic mulching (ha)	200	20.00	-	-
	(c) Cost of planting material for veg. (ha)	2000	1.05	-	-
	(d) cost of planting material for flowers (ha)	13,000	32.50	-	-
7.	Promotion of INM/IPM	500	5.00	-	-
8.	Distribution of plastic crates	5000	5.00	-	-
9.	Distribution of Leno bags	25,000	1.25	-	-
10.	Distribution of Fruit Trap bags	10,000	0.50	-	-
11.	Vermi Bed (Nos)	500	25.00	-	-
12.	Pollination support through beekeeping				
	(a) Distribution of bee colonies with hives (Nos)	450	6.75	-	-
	(b) Equipment	10	0.70	-	-
13.	Horticulture Mechanization (Nos)	14	5.83	-	-
14.	HRD	151	2.18	-	-
15.	Low cost onion storage (Nos)	10	5.00		
16.	Mission Management	-	28.00	-	0.68
	Total		605.80		0.68

SHM did not provide the progress of NHM activities in the District for the year 2012-13 (i.e, upto March, 2013). As per the progress available upto July, 2012, no activity of NHM programme was implemented excess an expenditure of Rs. 0.68 lakh reported under Mission Management.

Progress of NMML in District 2012-13

Sl. No.	Items	Physical (ha)	Financial (Rs. in lakh)
1.	Drip irrigation	61.0	75.19
2.	Sprinkler irrigation	2245.0	608.49
3.	Demonstration	0.00	0.00
4.	Farmer's Training	0.00	0
5.	Administrative costs	-	2.60
	Total		686.28

Visit of JIT to Bio Control lab, Patna

JIT visited Bio Control lab of Department of Botany, Agriculture University of Bihar, Patna on 23.11.2012. This Bio Control lab was approved by EC of NHM to University in 2009-10 with an outlay of Rs. 46 lakh with the condition that adequate manpower would be made available.

JIT had discussion with Dr. Choudhry Sharfuddin, Principal Investigator, Department of Botany, regarding the progress made under the project. It was mentioned that the renovation work of the bio control lab was in progress and it would functioning in due course of time. The following details were provided in respect of laboratory:-

Amount sanctioned- Rs. 46 lakh

Amount released: Rs. 21 lakh

(i) Rs. 21 lakh for renovation

(ii) Rs. 5 lakh for vehicle

Expenditure

- (i) Tender amount for civil work: Rs. 12.46 lakh
- (ii) Tender amount for electric work: Rs. 5.92 lakh

Payment made till date for renovation of lab:-

- (i) For civil work: Rs. 4.56 lakh
- (ii) For electric work: Rs. 1.27 lakh
- (iii) For purchasing vehicle: Rs. 4.99 lakh

Balance in hand: Rs. 3 lakh

An balance amount of Rs. 20 lakh will be released on submission of utilization certification of amount incurred i.e. Rs. 26 lakh.

NALANDA DISTRICT

- Total Geographical area: 232732 ha
- Forest area:- 4640 ha
- Total area under non agriculture use: 75674 ha
- Barren unculturable area 1160 ha
- Permanent pastures & grazing land: - 4 ha
- Land under misc. groves: 1272 ha
- Culturable waste land: 209 ha
- Fallow land: 23440 ha
- Net area sown:- 157058 ha
- Total cropped area:- 194843 ha
- Area sown more than once: 37785 ha
- Area under vegetable crops: 59713 ha
- Area under fruit crops: 6481 ha
- Area under Floriculture:- 23.7 ha

Area, production & Productivity of horticulture crops in Nalanda District

(a) Fruits

Area in ha, Production in MT

S. No.	Name of commodity	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
1.	Mango	2629	24186	9.20	2897	23755	8.20	10.19	(-) 1.78
2.	Guava	1427	12272	8.60	1469	11899	8.10	2.94	(-) 3.04
3.	Lemon	386	2702	7.00	409	2986	7.30	5.96	10.51
4.	Banana	403	13702	34.00	451	21400	47.45	11.91	56.18
5.	Papaya	22	462	21.00	38	916	24.10	72.73	98.27
6.	Aonla	21	187	8.91	28	260	9.29	33.33	39.04
7.	Other	1172	10431	8.90	1283	12005	9.36	9.47	15.09
	Total	6060	63942	10.55	6575	73221	11.14	8.50	14.51

(b) Vegetable

Area in ha, Production in MT

S. No.	Name of District	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
1.	Nalanda	58404	1180012	20.20	60047	1190483	19.83	2.81	0.89

(b) Flowers

Area in ha, production, Loose flower in MT, cut flowers in lakh spikes, productivity in MT/ha

S. No.	Name of commodity	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
A.	Cut flowers								
	1. Rose	0.50	0.60	1.20	2.70	3.78	1.40	440.00	530.00
	2. Gladiolous	0.20	0.40	2.00	4.90	9.80	2.00	2350.00	2350.00
	Total	0.70	1.00	1.43	7.60	13.58	1.79	985.71	1258.0
B	Loose Flowers								
	3. Marigold	3.30	58.08	17.60	8.80	163.68	18.60	166.67	181.82
	4. Jasmine	1.80	5.04	2.80	3.40	10.88	3.20	88.89	115.87
	5. Tuberose	0.30	1.53	5.10	3.10	15.97	5.15	933.33	943.79
	6. Others	0.95	9.22	9.71	3.70	33.26	8.99	289.48	260.74
	Total	6.35	73.87	11.63	19.00	223.79	11.78	199.21	202.95

(c) Spices

Area in ha, Production in MT

S. No.	Name of District	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
1.	Nalanda	635	4095	6.45	706	6079	8.61	11.02	48.45

Progress under NHM- Nalanda District-2012-13 (Upto July, 2012)

S. No.	Components	Targets		Achievement	
		Phy.	Fin.	Phy.	Fin.
1.	Veg. seed production (ha)				
	(a) Public sector	20	10.00	-	1.91
	(b) Private sector	16	4.00	-	-
2.	Seed Infrastructure (Nos)	1	100.00	-	-
3.	Centre of Excellence for vegetable & fruits under Indo-Israel project	1	250	-	-
4.	Area Expansion (ha)				
	(a) High Density plantation of mango	50	15.60	-	-
	(b) Maintenance (ha)	527	14.65	-	0.15
	(c) Flower (ha)	100	12.00	-	-
5.	Creation of water resources (No.)	4	2.40	-	-
6.	Protected cultivation				
	(a) GH-Tubular structure (sq. mtr)	6000	28.04	-	44.93
	(b) Cost of planting material of vegetables	2000	1.05	-	-
	(c) Cost of planting material of flowers	4000	10.00	-	-
7.	Vermi Bed (Nos)	500	25.00	-	0.40
8.	Pollination support through Beekeeping (Nos)				
	(a) Honey bee colonies with hives	450	6.75	-	-

	(b) Equipment	10	0.70	-	-
9.	Horticulture Mechanization (Nos)	14	5.83	-	-
10.	Technology Dissemination through demonstration	10	70.00	-	-
11.	HRD (Nos)	128	2.11	-	-
12.	Low cost onion storage (Nos)	10	5.00	-	0.67
13.	Mission Management	-	28.40	-	3.42
	Total	-	612.10	-	51.48

Information in respect of progress under NHM activities for the year 2012-13 may provided up to July, 2012. As per report district authorities have utilized funds to the tune of Rs. 51.48 lakh in the component of vegetable seed production, maintenance of fruit orchards, protected cultivation, vermi compost units and selling up of low cost onion storages including Rs. 3.42 lakh in mission management.

Progress of NMMI in Nalanda District 2012-13

Sl. No.	Items	Physical (ha)	Financial (Rs. in lakh)
1.	Drip irrigation	142.22	130.32
2.	Sprinkler irrigation	1127.0	222.04
3.	Demonstration	0.00	0.00
4.	Farmer's Training	0.00	0
5.	Administrative costs	-	0.96
	Total		353.32

Visit of JIT to Mushroom Village

JIT visited mushroom village in Sarilchak village in Shilow block of Nalanda district on 24th November, 2013. Village is inhabited by cluster of 25 women engaged in mushroom production in their respective houses.

Identification of beneficiaries and training in mushroom production is being provided by National Horticulture Mission (NHM) to these growers. The cluster is facing problem of marketing of mushroom because of less demand in the area and

as a result, large scale production of mushroom is not possible. At present, they were selling the mushroom @ Rs. 80/kg. JIT feels that clusters must go for compost making for which technical support has to be provided.

It is mentioned that mushroom making programme is being taken care of by ATMA in the State. NHM funds allocated for mushroom component are transferred to ATMA by headquarter and in turn subsidy is provided to mushroom growers in the village.

GAYA DISTRICT

Total Geographical Area-493774 ha

- Total cultivable land:- 228643 ha
- Forest area: 77836 ha
- Barren and uncultivable land: 3321 ha
- Non agriculture land:- 35,142 ha
- Cultivable barren land:- 11,500 ha
- Current fallow:- 9308 ha
- Land under cultivation:- 1,81,130 ha
- Land sown more than once: 95950 ha
- Land under irrigation:- 145000 ha
- Tubewells:- 71690
- Total under irrigation:- 145000 ha
- Total Farmers:- 352,668
- Agriculture families:- 2,54,062
- Small Farmers:- 3195
- Marginal favours:- 1,14,585

Area, production & Productivity of horticulture crops in Gaya District

(a) Fruits

Area in ha, Production in MT

S. No.	Name of commodity	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
1.	Mango	1149	10111	8.80	1347	10507	7.80	17.23	3.92
2.	Guava	622	5411	8.70	658	5198	7.90	5.79	(-) 3.94
3.	Lemon	363	2396	6.60	383	2796	7.30	5.51	16.69
4.	Banana	211	7596	36.00	232	10834	46.70	9.95	42.63
5.	Papaya	12	238	19.83	31	735	23.71	158.33	208.82
6.	Aonla	31	282	9.10	46	423	9.20	48.39	50.00
7.	Other	927	8436	9.10	1011	8097	8.01	9.06	(-)40.18
	Total	3315	34770	10.49	3708	39590	10.68	11.86	13.86

(b) Vegetable

Area in ha, Production in MT

S. No.	Name of District	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
1.	Gaya	25700	411385	16.01	25488	436357	17.12	(-) 0.82	6.07

(b) Flowers

Area in ha, production, Loose flower in MT, cut flowers in lakh spikes, productivity in MT/ha

S. No.	Name of commodity	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
A.	Cut flowers								
	1. Rose	0.95	1.24	1.31	2.40	2.88	1.2	152.63	132.26
	2. Gladiolous	0.90	1.80	2.00	4.80	9.60	2.0	433.33	433.33
	Total	1.85	3.04	1.64	7.20	12.48	1.73	289.19	310.53
B	Loose								

	Flowers								
	3. Marigold	10.85	203.98	18.8	18.15	330.33	18.2	67.28	61.94
	4. Jasmine	2.95	9.44	3.2	7.30	21.17	2.9	147.46	124.26
	5. Tuberose	0.90	4.36	4.84	5.35	25.15	4.70	494.44	476.83
	6. Others	1.35	12.02	8.90	4.25	34.85	8.2	214.81	189.93
	Total	16.05	229.80	14.32	35.05	411.50	11.74	118.38	79.07

(c) Spices

Area in ha, Production in MT

S. No.	Name of District	2006-07			2011-12			% increase / decrease in Area	% increase / decrease in production
		Area	Produ.	Pvty.	Area	Produ.	Pvty.		
1.	Gaya	671	3928	5.85	707	5742	8.12	5.37	46.18

Progress under NHM in Gaya District during 2012-13 (Upto July, 2012)

S. No.	Components	Targets		Achievement	
		Phy.	Fin.	Phy.	Fin.
1.	Veg. seed production (ha)	8	2.00	3.60	0.76
2.	Area Expansion (ha)				
	(a) Guava	25	6.00	-	-
	(b) Maintenance (ha)	639	16.22	98.14	3.23
	(c) Flower (ha)	100	12.00	-	-
5.	Creation of water resources (No.)	4.00	2.40	-	2.73
6.	Protected cultivation				
	(a) GH-Tubular structure (sq. mtr)	6000	28.04	-	7.22
	(b) Plastic mulching (ha)	6000	15.00	-	-
	(c) Cost of planting material for veg. (ha)	6000	15.00	-	-
7.	Vermi Bed (Nos)	100	-	-	0.90
8.	Pollination support through Beekeeping (Nos)				
	(a) Honey bee colonies with hives	450	6.75	30	0.81
	(b) Equipment	10	0.70	-	-
7.	Horticulture Mechanization (Nos)	7	3.01	-	-
8.	Technology Dissemination (Nos)	10	70.00	-	-
9.	HRD (Norms)	118	1.97	-	-
10.	Low cost onion storage	10	5.00	-	-
11.	Mission Management		9.10	-	1.02
	Total		177.51		16.68

As per information provided by SHM, funds to the tune of Rs. 16.68 lakh have been incurred during the year 2012-13 (upto July, 2012) under NHM activities of vegetables seed production, maintenance of orchards, creation of water resources, protected cultivation, vermi compost units, pollination support through beekeeping including Rs. 1.02 in mission management.

Progress of NMMI in Gaya District 2012-13

Sl. No.	Items	Physical (ha)	Financial (Rs. in lakh)
1.	Drip irrigation	15.00	11.36
2.	Sprinkler irrigation	1188.50	169.83
3.	Demonstration	-	-
4.	Farmer's Training	-	-
5.	Administrative costs	-	0.20
	Total	-	181.39

Wrap up meeting with Mission Director, SHM, Government of Bihar

A wrap up meeting of JIT was held on 27th November, 2013 with the Mr. Ajay Yadav, Mission Director, SHM, Government of Bihar in his chamber.

- The observations made by JIT during its visits to Patna, Gaya, Nalanda and Jamui districts of the State were apprised to the Mission Director.
- Working of Headquarter & District Horticulture authorities in mission mode was mentioned. Mission Director assured JIT that information in respect of project proposals sanctioned in their respective Districts will be forwarded along with other important decisions taken to implement NHM efficiently in the State.
- The functioning of Seed infrastructures was discussed. Mission Director mentioned that these infrastructures are being made functional on Public Private Partnership (PPP) mode.
- In the context of the lesser targets under creation of water resources, Mission Director mentioned that various institutes / bodies were establishing these resources. ATMA is involved in implementation of activities of NHM viz. Water Resource establishment, mushroom cultivation and beekeeping in the State.
- Mission Director was requested for monitoring of projects / infrastructures established with funds of NHM in the State.
- It was mentioned that targets of water, resources area expansion and protected cultivation components may be allotted taking into view the potential / demand of the beneficiaries.
- For supply of onion seeds, NHRDF is being requested to supply specified seeds for Rabi & Kharif seasons.
- Mission Director mentioned that a proposal in respect of establishment of whole sale market for betel in Gaya is being considered taking into view the production of betel and its marketing in the District.

- Regarding Hortnet, it was mentioned that SHM is in touch with NIC for customization.
- Mission Director stated that the project relating to setting up of Terminal market of Potahi has been cancelled. Funds released for the purpose would be returned to NHM.
- Mission Director mentioned that Audited Utilization Certificate for the year 2012-13 has been furnished to NHM and information in respect of status of project proposals sanctioned by EC would be furnished to NHM on due course of time.
- During the Review meeting of Bihar at New Delhi, Mission Director & Joint Secretary, NHM mentioned that in VIUC, gap between farmer's price and consumer price is very less. During discussion, it was mentioned that there is no scope for intermediaries (Commission agents). Farmers are engaged in traditional farming and are resource rich farmers. They transport & sell their products of their own. Further, there is no paramount role of aggregator in price mechanism of vegetable prices.
- Mission Director mentioned that intensive awareness of NHM is being created among farmers through advertisement in local newspapers.
- It was mentioned in the meeting that Chief Secretary had directed that plants of mango, litchi & guava may be supplied through nurseries of the agriculture Universities viz. Rajendra Agriculture University, Pusa, Samastipur, BAU, Sabour (Bhagalpur) and their KVKs.
- State is self sufficient as far as mango & litchi planting material are concerned in comparison to demand but for planting material of other fruits, state has to enhance production of those plants in Government nurseries to make available quality planting to beneficiaries. Outsourcing of planting material is not permitted in the State.

ANNEXURE- I

District: Jamui

Area Expansion/WHS

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Sh Ajay Kumar, Vill: Malehpur, Block: Berhat, Jamui
2	Total land available with the beneficiary (ha).	1 ha
3	Crop Cluster under which covered.	Fruit
4	Name & variety of crop planted.	Mango; Malda, Dusheri, Amarpalli, Malika, Jardallu
5	Source of planting material.	Deptt. Nursery , Samastipur
6	Number of planting material.	100
7	Number of plants planted/ rejuvenated.	100
8	Date of plants which survived (also indicate percentage survival).	95%/ , 2010-11
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	NA
10	Amount paid and date of payment.	Rs. 22500/-
11	Mode of payment.	
12	Source of Irrigation Water (Bore well/ Tube well/ Canel)	Tube well
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.	
19.	Other infrastructure available in the vicinity.	Water tank, 2012-13 (50x50x3)
20.	General upkeep of the plot; Very good/ Good / Average/ Poor.	
21.	Any other relevant observation by the JIT.	<ul style="list-style-type: none"> Gap filling required. Subsidy of Rs. 1.08 lakh given for water tank Beneficiary has mother block of guava and nursery training Inter crop: Gram Small Nursery recommended. Small nursery may be considered. Vegetative malformation noticed.

Area Expansion/WHS

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Sh Devi Singh, Vill: Malehpur, Block: Berhat, Jamui
2	Total land available with the beneficiary (ha).	1 ha
3	Crop Cluster under which covered.	Fruit
4	Name & variety of crop planted.	Mango; malda, dusheri, amarpalli, malika
5	Source of planting material.	Deptt. Nursery , Samastipur
6	Number of planting material.	100
7	Number of plants planted/ rejuvenated.	100
8	Date of plants which survived (also indicate percentage survival).	95%/ , 2010-11
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	NA
10	Amount paid and date of payment.	Rs. 22500/-
11	Mode of payment.	
12	Source of Irrigation Water (Bore well/ Tube well/ Canel)	Tube well
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.	
19.	Other infrastructure available in the vicinity.	Water tank, 2012-13 (50x50x3)
20.	General upkeep of the plot; Very good/ Good / Average/ Poor.	
21.	Any other relevant observation by the JIT.	<ul style="list-style-type: none"> Gap filling required. Subsidy of Rs. 1.08 lakh given for water tank Inter crop: Gram

Area Expansion/WHS

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Jai Mala Devi, Somo Block: Somo, Jamui
2	Total land available with the beneficiary (ha).	1.8 ha
3	Crop Cluster under which covered.	Fruit
4	Name & variety of crop planted.	Mango; malda, dusheri, amarpalli, malika
5	Source of planting material.	Deptt. Nursery , Samastipur
6	Number of planting material.	180
7	Number of plants planted/ rejuvenated.	180
8	Date of plants which survived (also indicate percentage survival).	95%/ , 2010-11
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	NA
10	Amount paid and date of payment.	Rs. 26500/- 3 rd installment is due
11	Mode of payment.	
12	Source of Irrigation Water (Bore well/ Tube well/ Canel)	Tube well
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.	
19.	Other infrastructure available in the vicinity.	
20.	General upkeep of the plot; Very good/ Good / Average/ Poor.	
21.	Any other relevant observation by the JIT.	<ul style="list-style-type: none"> • Gap filling required. • Well maintained.

Protected Cultivation - NHM

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Rajesh Majhi Vill: Mararo, Somo, Jamui
2	Total land available with the beneficiary (ha).	2 ha
3	Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel)	Poly House
4.	Year of establishment	2012-13
5.	Size of Structure (Sq. m)	1500 sq. mtr.
6.	Total cost	Rs. 14.02 lakh
7.	Agency involved in fabrication and installation	Sasang Bio-tech Ltd.
8.	Total subsidy paid and date of payment.	Rs 12.62 lakh
9.	Crop being grown	Cucumber and vegetables
10.	Condition of Structure	Good
11.	Condition of Crop	Good
12.	Tie up with market	Local
13.	General upkeep (Very good/ Good/ Average/ Poor)	Good
14	Any other relevant observation by JIT.	<ul style="list-style-type: none"> • Non -traditional crops taken in GH is a good sign. • Well maintained • Optimum utilization of area in GH • Capsicum will be taken after harvesting • Rs. 25000 earned in 6 months • Potato under drip irrigation • Mildew in cucumber problem. • No target for onion storage.

Water Resources Development

Sr. No.	Details	Remarks
1	Name of the project	Water Harvesting Storage
2	Year of Implementation	2012-13
3	Project Period	One year
4	Name of Implementing Agency	Sanjay Kumar Singh
5	Location of Project	Vill: Balthaar, Distt: Somo
6	Total Project Cost	NA
7	Amount Released by DAC	Rs. 90000
8	Expenditure incurred Status	As above
9	Current Status of Project	
	• Dimension (L x B x W)	50x50x3
	• Capacity	50 lakh ha.
	• Command Area	10 ha.
	• Whether linked with new plantation or old plantation	Paddy
	• Whether funds disbursed	Yes
	• Observations of JIT	<ul style="list-style-type: none"> • No plastic lining in tank • Selection of site not favorable for water pond • Poor maintenance

Micro Irrigation

Sr. No.	Details	Remarks
1	Name & address of beneficiary visited.	ShYogender Bhaske,Vil: Mohalia, Block: Chikai, Jamui
2	Total land available with the beneficiary (ha).	2 ha.
3	Type of MI system availed Drip/ Sprinkler	Drip
4	Crop(s) covered	Vegetables
5.	Total area covered (ha)	2 ha.
6	Crop Spacing (for drip)	NA
7	Year of establishment	2013-14
8	Name of Manufacturer/ Supplier	Netafim
9	Total subsidy paid & date of payment	Rs. 40000/-
10	Mode of payment	cheque
11	Status of crop	poor
12	General upkeep (Very good/ Good/ Average/ Poor)	Good
13.	Any other relevant observation by JIT.	<ul style="list-style-type: none"> • Drip in working condition. • Inferior seeds, poor plants • Rs 12, 000 realized by selling chillies • Local Market • Training in plantation/IPM required. • Poly House recommended for cluster plantation • More water pond needed in Berhut, Shikandra and Aliganj blocks.

ANNEXURE- II

District: Patna

Protected Cultivation - NVIUC

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Sh Dhaneshwar Singh, Vill: Chirora, Naubatpur, Patna
2	Total land available with the beneficiary (ha).	5 ha.
3	Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel)	Poly House
4.	Year of establishment	2011-12
5.	Size of Structure (Sq. m)	3600sq. mtr.
6.	Total cost	Rs. 33.66 lakh
7.	Agency involved in fabrication and installation	Agri Plast India Pvt. Ltd.
8.	Total subsidy paid and date of payment.	Rs. 30.29 lakh
9.	Crop being grown	Capsicum – Indira variety
10.	Condition of Structure	Good
11.	Condition of Crop	Good
12.	Tie up with market	Local
13.	General upkeep (Very good/ Good/ Average/ Poor)	Good
14	Any other relevant observation by JIT.	<ul style="list-style-type: none"> • Borewell. Drip (Netafim) • 1st crop sold @Rs. 45/kg and Rs. 50,000/- realized. • Other varieties recommended • Leaf curl problem need to control.

Protected Cultivation - NHM

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Sh Renu Kumari, Vill: Chirora, Naubatpur, Patna
2	Total land available with the beneficiary (ha).	4 ha.
3	Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel)	Poly House
4.	Year of establishment	2012-13
5.	Size of Structure (Sq. m)	3150 sq. mtr.
6.	Total cost	Rs. 29.45 lakh
7.	Agency involved in fabrication and installation	Agri Plast India Pvt. Ltd.
8.	Total subsidy paid and date of payment.	Rs. 26.51 lakh
9.	Crop being grown	Gerbera
10.	Condition of Structure	Good
11.	Condition of Crop	Good
12.	Tie up with market	Local
13.	General upkeep (Very good/ Good/ Average/ Poor)	Good
14	Any other relevant observation by JIT.	<ul style="list-style-type: none"> • Selling about 20,000 flowers @Rs. 5/per stick per month. • Marigold plantation recommended • Healthy Plants • Pack house recommended.

Protected Cultivation – NHM/ NVI

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Sh Vivek Vishal, Vill: Chirora, Naubatpur, Patna
2	Total land available with the beneficiary (ha).	5 ha.
3	Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel)	Poly House
4.	Year of establishment	2012-13
5.	Size of Structure (Sq. m)	2800sq. mtr.
6.	Total cost	Rs. 26.18 lakh
7.	Agency involved in fabrication and installation	Agri Plast India Pvt. Ltd.
8.	Total subsidy paid and date of payment.	Rs. 23.56 lakh
9.	Crop being grown	Gerbera
10.	Condition of Structure	Good
11.	Condition of Crop	Good
12.	Tie up with market	Local
13.	General upkeep (Very good/ Good/ Average/ Poor)	Good
14	Any other relevant observation by JIT.	<ul style="list-style-type: none"> • Good plantation

Protected Cultivation - NHM/ NVI

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Sh Chandra Mohan, Vill: Chirora, Naubatpur, Patna
2	Total land available with the beneficiary (ha).	0.4 ha.
3	Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel)	Poly House
4.	Year of establishment	2012-13
5.	Size of Structure (Sq. m)	600sq. mtr.
6.	Total cost	Rs. 5.61 lakh
7.	Agency involved in fabrication and installation	Agri Plast India Pvt. Ltd.
8.	Total subsidy paid and date of payment.	Rs. 5.05 lakh
9.	Crop being grown	Cucumber
10.	Condition of Structure	Good
11.	Condition of Crop	Good
12.	Tie up with market	Local
13.	General upkeep (Very good/ Good/ Average/ Poor)	Good
14	Any other relevant observation by JIT.	<ul style="list-style-type: none"> Sold cucumber @ Rs. 20-30/kg. Rs. 1 lakh realized Fungicide, copper based spray recommended for control Pseudocercospora disease.

Micro Irrigation

Sr. No.	Details	Remarks
1	Name & address of beneficiary visited.	Ganeshwar Prasad, Vill: Chirora, Naubatpur, Patna
2	Total land available with the beneficiary (ha).	0.4 ha.
3	Type of MI system availed Drip/ Sprinkler	Drip
4	Crop(s) covered	Banana, G-9, 1216 plants
5.	Total area covered (ha)	0.4 ha.
6	Crop Spacing (for drip)	
7	Year of establishment	2013 - 2014
8	Name of Manufacturer/ Supplier	Netafim
9	Total subsidy paid & date of payment	Subsidy yet to be released
10	Mode of payment	
11	Status of crop	Borer leaf cutting weevil noticed
12	General upkeep (Very good/ Good/ Average/ Poor)	Good
13.	Any other relevant observation by JIT.	Tank/pond recommended Spray recommended

Post Harvest Management

Pack House/Cold Storage/Ref Van/ Primary processing/Ripening chamber Units

Sr. No.	Details	Remarks
1	Name of the project	Multipurpose Cold Storage
2	Year of Implementation	2010-11
3	Project Period	One year
4	Name of Beneficiary	Shalimar Cold Storage
5	Location of Project	Patna
6	Total Project Cost	Rs. 325 lakh
7	Amount Released & date	Rs.42.50 lakh
8	Expenditure incurred	NA
9	Status	
	Capacity of unit	60000 c ft.
	Commodity	Dairy products, fruits, vegetables
	Equipments purchased	
	Condition of infrastructure	Good
	Whether NHM logo displayed	No
	Whether funds disbursed to agency	Full subsidy yet not disbursed, Rs 19.42 lakh paid.
	Observations made by JIT	Completion report yet to be submitted.

Mushroom Cultivation

Sr. No.	Details	Remarks
1	Name of the project	Mushroom Spawn Lab
2	Year of Implementation	2012-13
3	Project Period	One year
4	Name of Implementing Agency	Deepak Kumar, Renaissance Bi-tech Pvt. Lab, Patna
5	Location of Project	Anisabad, Patna
6	Total Project Cost	Rs 15 lakh
7	Amount Released by DAC	Rs 13.50 lakh
8	Expenditure incurred	NA
9	Capacity	150 kg/day
10	Observation of JIT	<ul style="list-style-type: none"> • Oyster and button mushroom • Marketing at Gaya, Nawada, Nalanda, @ Rs 80/kg. • Equipment purchased • Needs extension of lab • Funds for training and compost making recommended. • Capacity under utilization as demand for mushroom does not exists.

Post Harvest Management

Pack House/Cold Storage/Ref Van/ Primary processing/Ripening chamber Units

Sr. No.	Details	Remarks
1	Name of the project	Pre cooling unit
2	Year of Implementation	2010-11
3	Project Period	One year
4	Name of Beneficiary	I G International Pvt. Ltd.
5	Location of Project	Mussalapur Bazar Samiti, Patna
6	Total Project Cost	Rs. 137.25 lakh
7	Amount Released & date	Rs.45.90 lakh
8	Expenditure incurred	NA
9	Status	
	Capacity of unit	80 MT of 9 precooling units
	Commodity	Imported fruits
	Equipments purchased	
	Condition of infrastructure	Good
	Whether NHM logo displayed	No
	Whether funds disbursed to agency	Yes
	Observations made by JIT	<ul style="list-style-type: none"> • Capacity fully utilized • Marketing in entire Bihar, West Bengal • Ripening chamber recommended.

ANNEXURE- III

District: Nalanda

Area Expansion

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Sh RK Sinha, Vill: Nehusa, Harnaut, Nalanda
2	Total land available with the beneficiary (ha).	2 ha
3	Crop Cluster under which covered.	Fruit
4	Name & variety of crop planted.	Banana, Malbhog, G-9
5	Source of planting material.	Bhagalpur, Kolkata
6	Number of planting material.	6250
7	Number of plants planted/ rejuvenated.	6250
8	Date of plants which survived (also indicate percentage survival).	100%
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Rs.149766/-
10	Amount paid and date of payment.	As above
11	Mode of payment.	By Cheque
12	Source of Irrigation Water (Bore well/ Tube well/ Canel)	Tube well
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.	
19.	Other infrastructure available in the vicinity.	Mulching, Vermi bed, Poly House, Individual tank
20.	General upkeep of the plot; Very good/ Good / Average/ Poor.	
21.	Any other relevant observation by the JIT.	<ul style="list-style-type: none"> • Vermi bed not functional • Nutrient deficiency noticed • Sigatoka in banana plants noticed • Cucumber plantation in poly house • Thrips, mites in cucumber noticed • GH damaged, require repairs • Subsidy of Rs 1.08 lakh provided for tank

Area Expansion

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Sh SK Sinha, Vill: Chainpur, Chandi, Nalanda – cluster of 18 farmers
2	Total land available with the beneficiary (ha).	2 ha
3	Crop Cluster under which covered.	High density plantation of Fruit
4	Name & variety of crop planted.	Guava, Allahabad Safeda, L- 49
5	Source of planting material.	Deptt. Nursery
6	Number of planting material.	440
7	Number of plants planted/ rejuvenated.	440
8	Date of plants which survived (also indicate percentage survival).	100%/ 2012-13
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	Rs.3.42 lakh-
10	Amount paid and date of payment.	As above
11	Mode of payment.	By Cheque/20.6.12
12	Source of Irrigation Water (Bore well/ Tube well/ Canel)	Tube well
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.	
19.	Other infrastructure available in the vicinity.	Mulching, Poly House – 1000 sq. mtr., beekeeping
20.	General upkeep of the plot; Very good/ Good / Average/ Poor.	
21.	Any other relevant observation by the JIT.	<ul style="list-style-type: none"> • Papaya as inter crop • Good health of plants, pruning required. • In poly house, root stocks of guava, lime, mango • Wilt in guava needs to be controlled.

Protected Cultivation - NHM

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Vill: Jalalpur, Chandi, Nalanda – cluster of 7 farmers
2	Total land available with the beneficiary (ha).	1000 sq mtr each (7000 Sq. mtr.)
3	Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel)	Poly House
4.	Year of establishment	2012-13
5.	Size of Structure (Sq. m)	1000 sq. mtr.
6.	Total cost	NA
7.	Agency involved in fabrication and installation	Gobind Greenhouse Construction Pvt. Ltd.
8.	Total subsidy paid and date of payment.	NA
9.	Crop being grown	Vegatables
10.	Condition of Structure	Good
11.	Condition of Crop	Good
12.	Tie up with market	Local
13.	General upkeep (Very good/ Good/ Average/ Poor)	Good
14	Any other relevant observation by JIT.	Technical support is to be provided in respect of high value crops grown in poly house during different seasons to farmers.

Protected Cultivation - NHM

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Nirmal Ltd., Vill: Nehusa, Harnaut, Nalanda
2	Total land available with the beneficiary (ha).	1000 sq mtr each (7000 Sq. mtr.)
3	Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel)	Poly House
4.	Year of establishment	2011-12
5.	Size of Structure (Sq. m)	1000 sq. mtr.
6.	Total cost	Rs. 3.51 lakh
7.	Agency involved in fabrication and installation	NA
8.	Total subsidy paid and date of payment.	Rs 3.51 lakh
9.	Crop being grown	Cucumber
10.	Condition of Structure	Good
11.	Condition of Crop	Good
12.	Tie up with market	Local
13.	General upkeep (Very good/ Good/ Average/ Poor)	Good
14	Any other relevant observation by JIT.	Mites problem.

Project Status of Organic Farming

Sr. No.	Details	Remarks
1	Name of the project	Vermi Compost Unit
2	Year of Implementation	2007-08
3	Project Period	One year
4	Name of Implementing Agency	Sh Surendra Ram
5	Location of Project	Vill: Deep nagar, Behar Sharif, Nalanda
6	Total Project Cost	Rs 60,000
7	Amount Released by DAC	Rs. 30,000/-
8	Expenditure incurred	Rs 60000 /-
9	Status	
	• Crops covered	Vegetables
	• No of farmers involved	one
	• Name & address of certifying agency	
	• Whether any certificate issued	
	• Observations by JIT	<ul style="list-style-type: none"> • Worms from KVK, Beghusarai • Compost for self consumption and selling @ Rs 6/kg., Rs 202.5 lakh realized per annum

Post Harvest Management

Pack House/Cold Storage/Ref Van/ Primary processing/Ripening chamber Units

Sr. No.	Details	Remarks
1	Name of the project	Low cost Onion Storage
2	Year of Implementation	2012-13
3	Project Period	One year
4	Name of Beneficiary	Sh Surendra Ram
5	Location of Project	Vill: Deep nagar, Behar Sharif, Nalanda
6	Total Project Cost	Rs. 60000
7	Amount Released & date	Rs.30000
8	Expenditure incurred	NA
9	Status	
	Capacity of unit	25 MT
	Commodity	Onion
	Equipments purchased	
	Condition of infrastructure	
	Whether NHM logo displayed	No
	Whether funds disbursed to agency	yes
	Observations made by JIT	Being utilized properly

Post Harvest Management

Pack House/Cold Storage/Ref Van/ Primary processing/Ripening chamber Units

Sr. No.	Details	Remarks
1	Name of the project	Low cost Onion Storage
2	Year of Implementation	2012-13
3	Project Period	One year
4	Name of Beneficiary	Sh Anil Kumar
5	Location of Project	Vill: Sohdhee, Behar Sharif, Nalanda
6	Total Project Cost	Rs. 60000
7	Amount Released & date	Rs.30000
8	Expenditure incurred	NA
9	Status	
	Capacity of unit	25 MT
	Commodity	Onion
	Equipments purchased	
	Condition of infrastructure	
	Whether NHM logo displayed	No
	Whether funds disbursed to agency	yes
	Observations made by JIT	Fully functional

Area Expansion

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Sh Surender Kumar, Vill: Deepnagar, Nalanda
2	Total land available with the beneficiary (ha).	2 ha
3	Crop Cluster under which covered.	Fruit
4	Name & variety of crop planted.	Mango; malda, dusheri, amarpalli
5	Source of planting material.	Deptt. Nursery
6	Number of planting material.	60
7	Number of plants planted/ rejuvenated.	60
8	Date of plants which survived (also indicate percentage survival).	100%/ 2007-08
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	NA
10	Amount paid and date of payment.	
11	Mode of payment.	
12	Source of Irrigation Water (Bore well/ Tube well/ Canel)	Tube well
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.	
19.	Other infrastructure available in the vicinity.	beekeeping
20.	General upkeep of the plot; Very good/ Good / Average/ Poor.	
21.	Any other relevant observation by the JIT.	<ul style="list-style-type: none"> • Water pond recommended • Beneficiary requested for Green House.

Mushroom Cultivation

Sr. No.	Details	Remarks
1	Name of the project	Mushroom Spawn Lab
2	Year of Implementation	2011-12
3	Project Period	One year
4	Name of Implementing Agency	Madhu Patel, Bhudha Mushroom Spawn Lab.
5	Location of Project	Panditpur, Rajgir, Nalanda
6	Total Project Cost	Rs 16 lakh
7	Amount Released by DAC	Rs 8 lakh
8	Expenditure incurred	NA
9	Capacity	100 kg/day
10	Observation of JIT	<ul style="list-style-type: none"> • Shitake and button mushroom produced • Marketing at Bihar, Jharkhand, UP, @ Rs 80/kg. • Ganoderma may be taken up and tie up with pharmaceuticals recommended

Post Harvest Management

Pack House/Cold Storage/Ref Van/ Primary processing/Ripening chamber Units

Sr. No.	Details	Remarks
1	Name of the project	Low cost Onion Storage – 3 farmers
2	Year of Implementation	2012-13
3	Project Period	One year
4	Name of Beneficiary	Sh Rakesh Kumar
5	Location of Project	Vill: Sohdhee, Behar Sharif, Nalanda
6	Total Project Cost	Rs. 60000 each
7	Amount Released & date	Rs.30000 each
8	Expenditure incurred	NA
9	Status	
	Capacity of unit	25 MT each
	Commodity	Onion
	Equipments purchased	
	Condition of infrastructure	
	Whether NHM logo displayed	No
	Whether funds disbursed to agency	yes
	Observations made by JIT	<ul style="list-style-type: none"> Organic farming in potato (3ha.) and kharif onion (0.25 ha.) being cultivated. 1st crop of kharif onion sold Seeds of kharif onion not available NHRDF to be requested for supply of certified seeds of onion Inter cropping of bitter gourd

ANNEXURE- IV

District: Gaya

Post Harvest Management

Pack House/Cold Storage/Ref Van/ Primary processing/Ripening chamber Units

Sr. No.	Details	Remarks
1	Name of the project	Low cost Onion Storage
2	Year of Implementation	2012-13
3	Project Period	One year
4	Name of Beneficiary	Sh Anil Kumar
5	Location of Project	Vill: Mirajpur, Vazirganj, Gaya
6	Total Project Cost	Rs. 1 lakh
7	Amount Released & date	Rs.90000
8	Expenditure incurred	Rs. 1.01 lakh
9	Status	
	Capacity of unit	25 MT
	Commodity	Onion
	Equipments purchased	
	Condition of infrastructure	Good
	Whether NHM logo displayed	No
	Whether funds disbursed to agency	yes
	Observations made by JIT	<ul style="list-style-type: none"> Well maintained Newly constructed, onion yet to be stored.

Protected Cultivation - NHM

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Dhananjay Kumar, Vill: Bairka, Atri Gaya
2	Total land available with the beneficiary (ha).	2 ha
3	Type of Protected cultivation activity (Hi-tech / Normal GH, Shade net, Plastic tunnel)	Poly House
4.	Year of establishment	2012-13
5.	Size of Structure (Sq. m)	1000 sq. mtr.
6.	Total cost	Rs. 9.35 lakh
7.	Agency involved in fabrication and installation	Safal Bio-tech Ltd.
8.	Total subsidy paid and date of payment.	Rs 8.41 lakh
9.	Crop being grown	Vegetables yet to be planted
10.	Condition of Structure	Good
11.	Condition of Crop	
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"> • GH completed without installation of drip inside. Flooding done for transplanting of vegetables. • Subsidy should have not been released without completion • Bed under construction, vegetables will be planted. • Beneficiary needs technical support for plantation in GH.

Area Expansion/WHS

Sr. No.	Details	Remarks
1	Name & address of Beneficiary whose field visited.	Martunjaya Singh, Vill: Titeekh, Gaya
2	Total land available with the beneficiary (ha).	1 ha
3	Crop Cluster under which covered.	Fruit
4	Name & variety of crop planted.	Guava – Allahabad Safeda, G-49,
5	Source of planting material.	Deptt. Nursery
6	Number of planting material.	440
7	Number of plants planted/ rejuvenated.	440
8	Date of plants which survived (also indicate percentage survival).	400, 2012-13
9	Total amount of subsidy assistance due to the beneficiary as (Rs.)	NA
10	Amount paid and date of payment.	1 st installment of Rs. 1100 paid 2 nd and 3 rd installment due
11	Mode of payment.	
12	Source of Irrigation Water (Bore well/ Tube well/ Canel)	Tube well
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.	
19.	Other infrastructure available in the vicinity.	
20.	General upkeep of the plot; Very good/ Good / Average/ Poor.	
21.	Any other relevant observation by the JIT.	<ul style="list-style-type: none"> • Weeding and pruning required. • Training in canopy management required.

Technology Dissemination through FLD

Sr. No.	Details	Remarks
1	Name of the project	Shadenet - 1000 sq. mtr.
2	Year of Implementation	2012-13
3	Project Period	One year
4	Name of Implementing Agency	NERAMAC – Sh. Shivpujan
5	Location of Project	Vill: Pipra, Block: Virajganj, Gaya
6	Total Project Cost	7 lakh
7	Amount Released by DAC	7 lakh
8	Expenditure incurred	7 lakh
9	Status of Project	
	<ul style="list-style-type: none"> Name of crop 	Beetle vine cv. Maghai
	<ul style="list-style-type: none"> Technology adopted 	Drip and fogger
	<ul style="list-style-type: none"> Whether location easily approachable 	yes
	<ul style="list-style-type: none"> Whether NHM logo displayed 	yes
	<ul style="list-style-type: none"> Observation made by JIT 	<ul style="list-style-type: none"> Beneficiary needs changes in shade net structure 1st crop of betel due In December. 2013 Problem of marketing Presently marketed in Varanasi due to non availability of market. More protection needed. Well maintained

Water Resources Development

Sr. No.	Details	Remarks
1	Name of the project	Individual Water Harvesting Storage
2	Year of Implementation	2012-13
3	Project Period	One year
4	Name of Implementing Agency	Dharmender Kumar
5	Location of Project	Vill: Shankar Digha, Vajirganj, Gaya
6	Total Project Cost	1.20lak
7	Amount Released by DAC	Rs. 1.08 lakh
8	Expenditure incurred Status	1.20 lakh
9	Current Status of Project	
	• Dimension (L x B x W)	50x50x3
	• Capacity	50 lakh ha.
	• Command Area	NA
	• Whether linked with new plantation or old plantation	Paddy
	• Whether funds disbursed	Yes
	• Observations of JIT	<ul style="list-style-type: none"> • No plastic lining in tank • No cemented boundary • No fencing, not well maintained • Tank not sustainable • Logo displayed

Mushroom Cultivation

Sr. No.	Details	Remarks
1	Name of the project	Integrated Mushroom Unit
2	Year of Implementation	2011-12
3	Project Period	One year
4	Name of Implementing Agency	Ms Suman Singh,
5	Location of Project	Shankar Bigada, Vajirganj, Gaya
6	Total Project Cost	Rs 50 lakh
7	Amount Released by DAC	No subsidy released
8	Expenditure incurred	NA
9	Capacity	10 ton compost
10	Observation of JIT	<ul style="list-style-type: none"> • Completion report submitted, subsidy yet to be released • Modification needed in mushroom lab to avoid contamination in mushroom • Mushroom production taken. • Spawn production is yet to be taken up. • All the equipments purchased

ANNEXURE-V

PHOTOGRAPHS

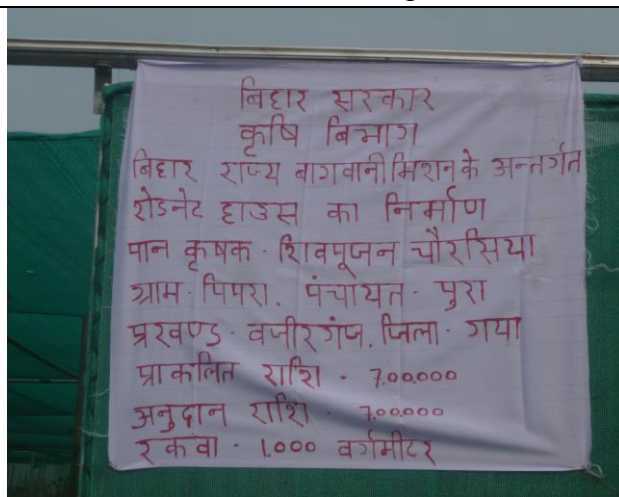
JIT Bihar



Onion storage (low cost)



Discussion with Pan growers



Pan cultivation under shed net



Shed net for Bareza



View of Pan Bareza

JIT Bihar



Discussion with Pan growers



Capsicum cultivation



Soaking of straw for mushroom composting



Mushroom cultivation in newly constructed room

JIT Bihar



View of mushroom lab



Water pond without polythene lining & fencing



Poly house with flood irrigation inside

JIT Bihar



Gerbera cultivation



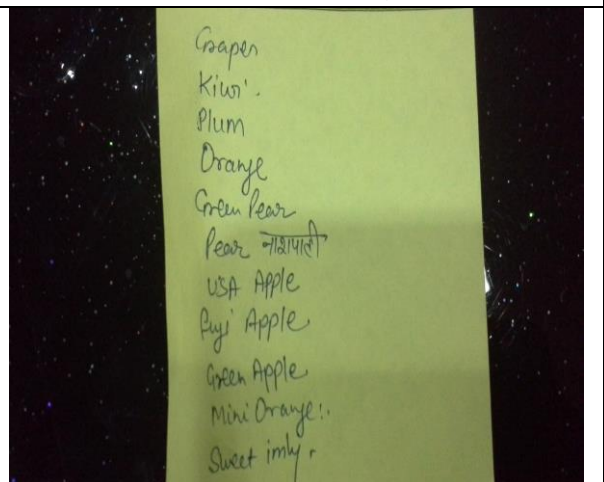
Banana cultivation under AEP



CA cold storage



Imported fruits inside chamber



List of imported fruits