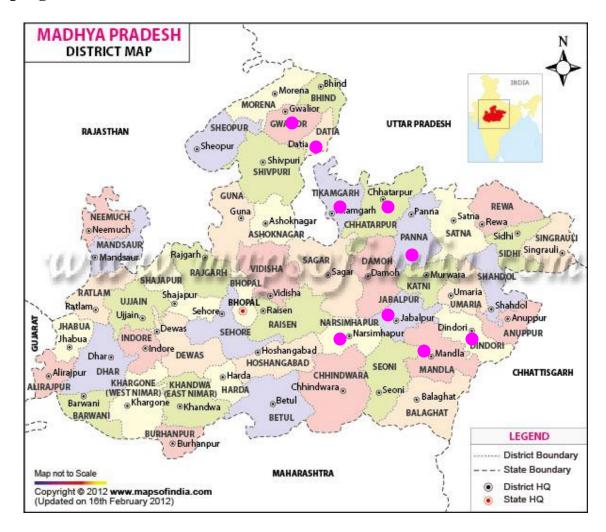
Report of the Joint Inspection Team on its visit to Madhya Pradesh during 21-29th November, 2012 and 9-17th December, 2012 to review the progress under the National Horticulture Mission



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

1. Jabalpur 2. Dindori 3. Narshinghpur 4. Mandla 5. Chhattarpur 6. Pannna 7. Tikamgarh 8. Datia 9. Gwalior



National Horticulture Mission
Ministry of Agriculture
Department of Agriculture & Cooperation
Krishi Bhawan, New Delhi-110001

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ACTIONABLE ISSUES

- 1. Incidence of Fruit Spot disease (Aonla) has been noticed in Kundeshwar, needs special attention to control the disease as and when occur.
- 2. There has been a good response in setting up of onion storage; costing Rs. 3.20 lakh such infrastructure is being used for demonstration purpose without storing onion. Structure needs to be fully utilized by the department under PPP mode.
- No note worthy progress has been made under PHM, bee keeping, rejuvenation of old and senile orchards and establishment of marketing infrastructure. Priority needs to be given and monitored them more frequently by SHM.
- 4. Indiscrimate use of toxic pesticides by vegetable growers for short term profit has been observed around Jabalplur. To overcome with this problem, IPM programme needs to be augmented to reduce the pesticide load. More serious strategies need to be worked out in collaboration with SAUs /KVK's for promotion of IPM. A training module and calendar needs to be developed for this purpose.
- 5. Small nursery sanctioned to KVK, Mandla has been found non functional. Effort needs to be taken to revive the nursery for production of elite planting material. NHM funded nurseries should be made fully functional to produce quality planting material and vegetable seedlings for holistic development of horticulture in the state. More over, planting material required for area expansion progarmme under NHM should be procured only through accredited nurseries.
- 6. Crop like custard apple needs to be introduced in Dindori and Mandla districts.
- 7. Under Area Expansion Programme, technical support and supervision need to be improved and cluster approach as per NHM norms need to be strictly followed.

- 8. NHM programmes are not being effectively implemented for want of field level staff. SHM has been advised to fill all vacant posts for effective implementation of NHM programme.
- 9. Farmers are unaware about the NHM scheme due to lack of publicity in remote pockets of districts. There is an urgent need to publicize the schemes and its components in the remote areas among the farmers for enabling them to avail full benefits of the scheme.
- 10. The programme implementing officials in the districts are not being trained in horticulture properly to implement the NHM programme systematically. Regular orientation courses imparting training are required to be conducted at all levels for better performance of programme.
- 11. There is a need to conduct survey on the density of existing old orchard in the state. To enhance the productivity of fruit crops, rejuvenation of senile orchards need to be taken up in a phased manner by selecting few trees every year in farmers field instead of going for whole orchard in one go.
- 12. NHM logo needs to be displayed on the sites developed with NHM assistance and periodic visits of officials on the sites of beneficiaries are recommended for imparting technical know-how / support.

Report of the Joint Inspection Team on its visit to Madhya Pradesh during 21-29th November, 2012 and 9-17th December, 2012 to review the progress under the National Horticulture Mission

The Joint Inspection Team (JIT) comprising Dr. Om Prakash, Chief Consultant, National Horticulture Mission and Dr. R.P. Singh (STA), DAC, Dr. B.L Sahu (SMS) and Dr. G. Malviya, KVK, Tikamgarh as JIT members visited Madhya Pradesh during 21-29th November, 2012 and 9-17th December, 2012 to review the progress under National Horticulture Mission programmes in the State. Shri M.P. Khare & Shri J.D. Joshi, Assistant Director (Horticulture) from M.P. Government coordinate the visits of the team in Chhattarpur, Panna, Tikamgarh, Datia, Gwalior, Jabalpur, Dindori, Mandla and Narsinghpur districts.

Madhya Pradesh

Introduction

Landlocked in the central part of the country, it is bounded by the states of Rajasthan to the northwest, Uttar Pradesh to the north, Chhattisgarh to the east and Maharashtra to the south, and Gujarat to the west.

Madhya Pradesh is the second largest state and ranks seventh in population. The State is primarily an agriculture State. About 73% population of the state is rural, which is directly or indirectly depends on agriculture. Thus Agriculture Sector is the main Stay of the State economy. The Agriculture and allied services contributes about 44% share in state economy and 78% of its working force is directly engaged in Agriculture. Thus Agriculture sector forms the backbone of MP economy.

Madhya Pradesh is having a geographical area of 30.75 million hectares, which is divided into 45 district of the state and 9 revenue divisions. The state has 313 development blocks which are the units for development activities. The forests occupies in the States 8.49 million hectares which is 27.2 % of the Geographical area of the state where as the cultivated

area is about 49 %. The major perennial rivers of the State namely Mahi, Narmada, Tapti, Chambal, Betwa, Sone, Wainganga, Ken., and Pench Originate in Madhya Pradesh and flow to the seven bordering states

Madhya Pradesh has a topography that is crossed from north to south by plains separated by upland areas. The state has three main seasons: winter (November through February), summer (March through May), and the monsoon season (June through September). During the winter average temperatures range from 10° to 27° C (50° to 81° F). Summers are hot, with an average temperature of 29° C (85° F) and a high temperature that at times reaches 48° C (118° F). During the monsoon season temperatures average 19° to 30° C (66° to 86°). Madhya Pradesh receives as average annual rainfall of about 1200 mm (nearly 50 in), of which 90 percent falls during the monsoon season. The capital of the state is Bhopal.

Economy and Infrastructure

Agriculture is the basis of Madhya Pradesh economy. Less than half of the land area is cultivable, however, and its distribution is quite uneven because of variations in topography, rainfall, and soils. The main cultivated areas are found in the Chambal valley, the Malwa Plateau and the Rewa Plateau. The Narmada valley, covered with river-borne alluvium, is another fertile area.

The most important crops are rice, wheat, sorghum (jowar), corn (maize), pulses (legumes such as peas, beans, or lentils), and peanuts (groundnuts). Rice is grown principally in the east, where there is more rainfall, while in western Madhya Pradesh wheat and sorghum are more important. The state is the largest soybean producer in India. Other crops include linseed, sesame, sugarcane, and cotton, as well as inferior millets, which are grown in hilly areas. The state is a large producer of opium (in the western district of Mandasor, near Rajasthan) and marijuana (in the southwestern district of Khandwa [East Nimar]). Madhya Pradesh is rich in minerals, though these resources have not yet been fully exploited. There are large reserves of coal and important deposits of iron ore, manganese ore, bauxite,

limestone, dolomite, copper, fireclay, and china clay. Diamond reserves at Panna are of particular interest.

The major industries of the state are electronics, telecommunications, petrochemicals, food processing and automobiles. The state has also taken a lead in the production of cement. The state is also famous for its traditional handicrafts and handlooms manufactured at Chanderi and Maheshwar.

The state is well endowed with potential hydroelectric power. Main hydroelectric projects (jointly developed with other states) are the Babanthadi with Maharashtra, the Ban Sagar with Bihar and Uttar Pradesh, the Chambal Valley with Rajasthan, the Narmada Sagar with Gujarat and Rajasthan, and the Rajghat and Urmil with Uttar Pradesh. The Hasdeo Bango, Bargi, and Birsinghapur thermal power projects are also within the state. The Narmada Sagar project has been a source of controversy because of its potential for damaging the environment.

In comparison with other Indian states, Madhya Pradesh is well served with transport and communications facilities. The main railroads that pass through the state were originally laid down to connect the ports of Madras, Bombay, and Calcutta with their hinterlands. Important railway junctions include Bhopal, Ratlam, Khandwa, Bilaspur, and Katni. Also connecting the state with other parts of India are airports at Bhopal, Gwalior, Indore, Jabalpur, Rewa, and Khajuraho, as well as several national highways.

Major Produce of Madhya Pradesh

Cereals: Wheat, Rice, Pulses, Jowar. **Oilseeds:** Soyabean, Niger, Mustard.

Vegetables Green Peas, Cauliflower, Okra, Tomato, Potato,

: Eggplant, Onion, Gourd.

Fruits: Mango, Guava, Orange, Melon, Papaya, Banana.

Spices: Garlic, Coriander, Ginger, Tur

Flower: Tube Rose, Roses, Marigold, Gladiolus

Status of Horticulture in Madhya Pradesh

Madhya Pradesh is producing about 7.69 m MT of horticulture produce from an area of 0.75 m ha. and accounts for 3.20 % of total horticulture production of the country. The major share of horticulture produce is from vegetables (48.08%) and fruits (43.85%).

- 2.47 lakh MT of fruits have been traded in organized markets with average price of Rs. 18.44/MT.
- 9.99 lakh MT of vegetable have been traded in organized markets with average price of Rs. 8.06/MT.

Potato

- Madhya Pradesh is the sixth largest potato producing State accounting for 2% of total production of potato in the country. State produces 0.74 m MT of potato from an area of 0.06 m ha. with the productivity of 12.0 t/ha.
- The major potato producing belts in the state are Sidhi, Satana, Rewa, Raigarh, Sagar and Tilkamgarh.
- 2.21 lakh MT of potato have been traded in organized markets with average price of Rs. 4.69/MT.

Onion

- State is the fifth largest onion producing state in the country and accounts for 7 % of total production of onion in the country. Madhya Pradesh is producing about 1.02 m MT of onion from an area of 0.06m MT with the productivity of 17.5 t/ha
- The major onion producing belts in the state are Khargone and Khandwa.
- 4.53 lakh MT of onion have been traded in organized markets with average price of Rs. 6.58/MT.

Peas

- Madhya Pradesh is the fourth largest producer of peas in the country and accounts for 7.1% of total production of peas in the country.
- State produces about 0.25 m Mt of peas from an area fo 0.02 m. ha. having productivity of 11 MT/ha.
- Major peas growing belts in the state is Ujjain.
- 0.17 lakh MT of peas have been traded in organized markets with average price of Rs. 18.42/MT.

Brinjal

- State produces about 3% of total Brinjal produce of the country with the production of 0.28 m MT from an area of 0.02 m ha having productivity of 12.00 MT/ha.
- 0.11 lakh MT of brinjal have been traded in organized markets with average price of Rs. 15.91/MT.

• 0.03 lakh MT of brinjal have been traded in organized markets with average price of Rs. 6.24/MT.

Guava

- Madhya Pradesh is the second largest producer of guava after Maharashtra and accounts for 11.4% of the total production of Guava in the country.
- State produces 0.28 m MT of Guava from an area of 0.010 m ha having productivity of 29 MT ha which is the highest among the Guava producing States.
- Main Guava producing belts in the State are Rewa and Jabalpur.
- 0.004 lakh MT of guava have been traded in organized markets with average price of Rs. 8.50/MT.

Papaya

- Madhya Pradesh contributes 5.4% of papaya in the total production in the country.
- State produces 0.28 m MT of papaya from an area of 0.002 m ha having productivity of 115.5 MT/ha which is the second highest after Tamil Nadu.
- The production of papaya is concentrated in Dhar, Khandwa, Rattam and Guna.
- 0.07 lakh MT of papaya have been traded in organized markets with average price of Rs. 6.49/MT.

Banana

- Madhya Pradesh is the sixth major banana producing state in the country and accounts for 5.8% of the total production of the country.
- State is producing about 1.72 m MT of banana from an area of about 0.04 m. ha. with the productivity of 45.2 t/ha.
- Mostly Cavendish varieties are grown with drip irrigation to some extent.
- The major banana producing belts in the State are Bhuranpur, Barwani and Dhar.
- 1.82 lakh MT of banana have been traded in organized markets with average price of Rs. 5.19/MT.

Citrus

- Madhya Pradesh is second leading producer of orange mandarin and accounts for 21% of the production of orange mandarin production in the country with productivity of 18.00 MT/ha.
- Madhya Pradesh is the fourth largest citrus producing state in the country and accounts for 10.7% of the total production in the country.
- State is producing 0.80 m MT of citrus form an area of 0.05 m ha. with the productivity of 17.7 t/ha.
- The major citrus producing belts in the state are Mandasaur , Shajapur, Chindwara, Khandwa and Hosangabad.

- State accounts for 5% of total production of lime/lemon in the country.
- Production of orange in the state accounts for 21 % of the total production in the country and is the second largest orange producer after Punjab in the country.
- State is producing about 0.68 m MT of orange from an area of about 0.04 m. ha. with the productivity of 18 t/ha.
- Major orange (Mandarin) producing belts in the state are Chhindwada, Mandsaur, Betul, Ujjain and Shajapur.
- Gummosis has affected the crop yield.
- 0.46 lakh MT of citrus have been traded in organized markets with average price of Rs. 10.09/MT.

Spices

- Madhya Pradesh is the fifth largest producer of spices in the country and accounts for 7.73 % of total production of spices in the country.
- State produces about 0.41 m. MT of spices from an area of 0.29 m ha. with productivity of 1.4 MT/ha.

Area, Production and Productivity of horticulture crops-2011-12

S. No.	Name of Crops	Name of Crops Area Produ		Productivity
	Horticulture Crops			
1	Fruits	154.9	3947.06	25.48
2	Vegetables	360.58	4701.46	13.04
3	Spices	299.91	461.17	1.54
4	Flowers (Loose)	9.16	7.14	0.78
5	Aromatic plants	39.96	239.73	6.00

Quantity of Agri-Products sold in Agricultural Markets

S. No.	Name of the	Produced sold in agricultural Markets (in MTs)							
	Crop	As on 31.03.2009	2009	2010	2011				
1	Fruits		462198.54	470197.83	246486.84				
2	Vegetables		308334.69	675236.97	998637.53				
3	Flowers		2.00	0.00	0.00				
4	Spices		387334.99	659588.81	1447581.27				

Source: nhm.nic.in through Agmarknet

NHM interventions in Madhya Pradesh

The Centrally Sponsored Scheme of National Horticulture Mission (NHM) is being implemented in 39 districts on a Mission mode approach to address all the issues related to holistic development of Horticulture in the State since 2005-06

The programme in the State of Madhya Pradesh is being implemented by the State Horticulture Development Society through District Mission Committees involving farmers, Societies, Grower Associations, SHGs, State institutions etc. The programme is being implemented in 34 districts with cluster approach. The district covered under the programme includes Betul, Bhopal, Hoshangabad, Sagar, Jabalpur, Ujjain, Jhabua, Dewas, Indore, Chhindwara, Mandsaur, Shajapur, Badwani, Ratlam, Burhanpur, Dhar, Khargone, Khandwa Mandla, Dindori, Chhatarpur, Harda, Rewa, Gwalior, Rajgarh, Neemach, Satna, Guna, Sehore, Sidhi, Alirajpur, Singroli, Ashoknagar, and Vidisha.

The crops identified under the programme include Mango, Orange, Aonla, Guava, Ber, Custard Apple, Banana, Garlic, Coriander, Chillies and Flowers.

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

Physical Progress

Salient progress till 2011-12 is as follows:-

- An additional area of 1.33 lakh ha of identified horticulture crops are covered.
- 178 nurseries have been established for production of quality planting materials.
- An area of 14731 ha. has been covered under rejuvenation of old and senile orchards.
- Organic farming has been adopted in an area of 10407 ha for promotion of organic cultivation of horticultural crops.

- IPM practices have been adopted in an area of 28977 ha.
- 5 IPM/INM infrastructure facilities such as Leaf tissue analysis labs, disease forecasting units have been created.
- 747 community water structures have been created.
- Harvest Under the component of Post Management, 208 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.
- 17 market infrastructures have been set up.

Financial Progress

During 2005-06 to 2011-12, an amount of Rs. 328.48 crore was released to the State. The State has reported an expenditure of Rs. 326.64 crore till March 2012.

Year-wise details of Outlay, Funds Released and Expenditure under NHM in Madhya Pradesh

(Rs. In crore)

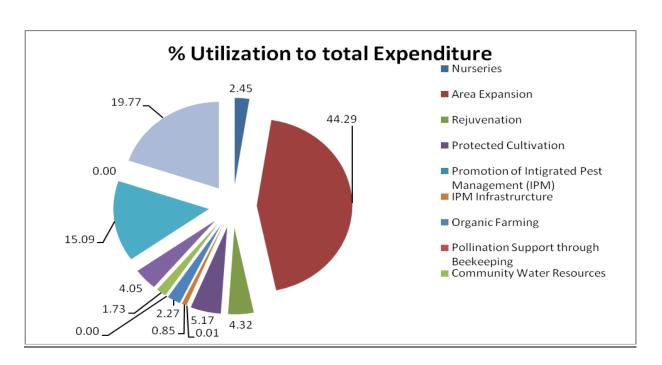
Year	Outlay	Releases	Expenditure
2005-06	59.71	28.40	4.12
2006-07	74.27	42.92	47.36
2007-08	117.90	55.37	43.06
2008-09	104.00	60.00	56.71
2009-10	68.00	35.45	60.27
2010-11	85.02	51.00	55.65
2011-12	72.25	55.34	59.47
2012-13	55.25	22.25	5.33

An allocation of Rs. 65.00 crore has been approved including GOI share of Rs.55.25 crore for Annual Action Plan 2012-13. Funds to the tune of Rs. 22.25 crore has been released during the current financial year and out of which SHM has reported an expenditure of Rs. 5.33 crore so far.

Percentage utilization of funds during 2011-12

(Rs. In Lakh)

S.No	Component	Financial	Funds	Expenditure	% Utilization
		Outlay as per	Released		to total
		AAP, 2011-12			Expenditure
1	Nurseries	393.75	119.54	145.88	2.45
2	Area Expansion	2741.86	2330.58	2633.77	44.29
3	Rejuvenation	300.00	255.00	256.67	4.32
4	Protected Cultivation	1708.92	553.04	307.66	5.17
5	Promotion of Integrated	50.00	0.00	0.44	0.01
	Pest Management				
	(IPM)				
6	IPM Infrastructure	50.00	27.28	50.27	0.85
7	Organic Farming	188.50	0.00	135.20	2.27
8	Pollination Support	0.00	0.00	0.00	0.00
	through Beekeeping				
9	Community Water	0.00	0.00	102.85	1.73
	Resources				
10	Human Resource	372.65	202.22	241.10	4.05
	Development				
11	Post Harvest	1789.32	614.31	897.55	15.09
	Management				
12	Market Infrastructure	52.00	0.00	0.00	0.00
13	Others			1175.70	19.77
	Total			5947.09	100.00



Number of beneficiaries under NHM

(in no.)

Year	Gen	SC	ST	Woman	Total
2005-06	6593	516	514	706	8329
2006-07	45164	4274	10260	4447	64145
2007-08	35207	4265	7462	5319	52253
2008-09	48364	7239	8830	8725	73158
2009-10	42861	7611	8951	6371	65794
2010-11	37498	6193	9895	5036	58622
2011-12	46672	7952	7796	6445	68865

Physical and financial progress under National Vegetable initiative for Urban Clusters (NVIUC) programme during 2011-12

(Rs. In lakh)

S.	Name of component	Unit	Rate of	Total	Target	Total Ac	hievement
No.			Assistance				
				Physical	Financial	Physical	Financial
1	Seed Production of						
	Vegetables						
i	Public Sector	ha.	0.5	10	5	13	4.28
ii	Private Sector	ha.	0.25	10	2.5	11.38	1.5
	Sub Total			20	7.5	24.38	5.78
2	Vegetable seedling						
	production						
i	Public Sector	ha.	104	0.5	52	0	0
	Sub Total			0.5	52	0	0
3	Vegetable						
	Cultivation						
	Open field	ha.	0.225	140	31.5	130.5	15.77
	High breed seed	ha.	0.3375	635	214.31	833	135.1
	Sub Total			775	245.81	963.5	150.87
4	Protected						
	Cultivation						
	(a) Green House						
	Structure						
	(i) fan & pad system			0	0	0	0
	(ii) Naturally	Sq.	0.004675	46567	217.7	45000	63.12
	ventilated system	m.					
	(b) Shade net House			0	0	0	0
	(i) Tubular Structure	Sq.	0.003	45000	135	44000	70.5
		m.					

(c) Cost of planting material and other inputs of high value vegetables grown in green house/poly house/shadenet house	Sq. m.	0.000525	37000	19.43	6000	1.05
Sub Total			128567	372.13	95000	134.67
5 Organic Farming						
(i) Adoption of organic farming	ha.	0.0400	250	10	0	0
(ii) Organic Certification		0.0300	250	7.5	0	0
(iii) Vermi compost unit	Nos.	0.30000	81	24.3	75	18.75
Sub Total			581	41.8	75	18.75
6 Training of farmers within State	Nos.	0.0075	900	6.75	890	525
Sub Total			900	6.75	890	525
7 Post Harvest Management						
(i) Pack House	Nos.	1.500	99	149	93	109
(ii) Pre cooling unit	Nos.	6	1	6	0	0
(ii) Ref. Vans/containers	Nos.	9.6	1	9.6	0	0
(iv) Evaporative/low energy cool chambers	Nos.	2	2	4	0	0
(v) Low cost onion storage structures	Nos.	0.5	131	65.5	121	46.75
Sub Total			234.000	234.100	214.000	155.750
8 Markets						
(i) rural markets/apni mandi	Nos.	8	1	8	0	0
(ii) retail markets /outlets	Nos.	4	1	4	1	0
(iii) collection centre at production cluster @ Rs. 8 lakh/unit	Nos.	4	8	32	6	12
(iv) Mobile vending cart/platform with cool chamber	Nos.	0.15	25	3.75	25	3.75
(v) motorize vending cart	Nos.	0.5	20	10	2	1
Sub Total			55	57.75	34	16.75

9	(a) Promotion of farmers association/group of 15-20 farmers/ 20 ha	Nos.	0.4	270	108	258	100
	(b) base line survey	Nos.	10	1	10	1	5.19
	Sub Total			271	118	259	105.19
10	HRD-training of farmers (No.) @ Rs. 1500/farmer for 2 days	Nos.	0.015	600	9	300	4.5
	Sub Total			600	9	300	4.5
11	Technical support group-management & monitoring @5%			0	55.66	0	1.58
	Sub Total			0	55.66	0	1.58
	Grand Total				1200		598.84

Status of implementation of National Mission on Micro Irrigation (NMMI) in Madhya Pradesh (2011-12)

Year	No. of Benefic	Physi	Physical (ha)		es (Rs. In	lakh)	Expenditure			
	iary	Target	Achmt.	Central Share	State Share	Total	Central Share	State Share	Total	
2006-07	525	3528	875.31	580.32	123.94	704.3	134.81	29.8	164.61	
2007-08	4613	7486	7846.44	1101.64	1575.67	2677	1032.38	475.38	1507.76	
2008-09	19284	301.53	34971.61	4649.84	3884.63	8534	4334.22	3181.92	7516.14	
2009-10	19331	22742	35582.7	3474.58	3916.02	7391	4321.91	4474.05	8795.96	
2010-11	24131	46279	41178.24	7960.59	5076.54	13037	7475.9	5397.46	12873.4	
2011-12	33002	50521	52652.13	10964	7626.41	18590	9738.35	7751.78	17490.1	
2012-13 (upto August 2012)	5843	33979	14049.63	3175.36	7388.37	10564	3535.33	2020.21	5555.54	
Total	106729	164837	187156.1	31906.3	29591.6	61498	30572.9	23330.6	53903.5	

Physical and financial progress report on Micro Irrigation in Madhya Pradesh during 2012-13 (upto August 2012)

Phy. In ha./Fin.:- Rs. In lakh)

S. No.	Name of District			Cor	mponent			ny. m na./		otal
		Dı	rip	Sprii	ıkler	De	mo	Admn.		
		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Cost	Phy.	Fin.
1	Anuppur	0	0	0	4	0	0	0	0	4
2	Ashok Nagar	3.8	7.58	0	3.44	0	0	0	3.8	11.02
3	Badhwani	865.4	420.45	8	0.47	1	0.038	0	874.4	421.3
4	Balaghat	12.04	4.17	18	1.15	0	0	0	30.04	5.32
5	Betul	1.7	4.73	0	0	0	0	0.05	1.7	4.78
6	Bhind	0	0	0	0	0	0	0	0	0
7	Bhopal	9.8	27.23	0	0	0	0	0	9.8	27.23
8	Burhanpur	337015	502.25	4	0.79	0	0	3.36	341.15	506.4
9	Chhatarpur	0	0	0	0	0	0	0	0	0
10	Chhindwara	246	0	0	0	0	0	0	246	0
11	Damoh	55	24.21	611.5	54.12	0	0	0	666.5	78.33
12	Datia	63.4	25.83	147	7.65	0	0	0.25	210.4	33.73
13	Dewas	742	316.01	0	10.7	0	0	0.7	742	327.42
14	Dhar	1312	9	0	0	0	0	0	1312	9
15	Dindori	0	0	0	0	0	0	0	0	0
16	Guna	13.5	4.44	12	0.69	0	0	0.02	25.5	5.15
17	Gwalior	15.7	6.04	15.7	1.07	0	0	0	31.4	7.11
18	Harda	74.9	29.88	220.74	18.31	0	0	0	295.64	48.19
19	Hoshangabad	0	0	0	0	0	0	0	0	0
20	Indore	0	86.9	0	0	0	0	0	0	86.9
21	Jabalpur	0	0	61	4.05	0	0	0.09	61	4.14
22	Jhabua	578.45	0	0	0	0	0	0	578.45	0
23	Katni	6.15	0.51	3	0.23	0	0	0	9.05	0.74
24	Khandwa	852.35	171.02	90	5.76	0	0	0.36	942.35	177.14
25	Khargone	2691.5	923.94	0	0	0	0	0.75	2691.5	924.69
26	Mandla	0	0	0	0	0	0	0	0	0
27	Mandsaur	599.6	68.29	136	0	0	0	0	735.6	68.29
28	Morena	0	0	0	0	0	0	0	0	0
29	Narsingapur	109.7	10.8	25	0	0	0	0	134.7	10.8
30	Neemuch	0	44.76	0	0	0	0	0	0	44.76
31	Panna	21.5	8.88	101	6.06	0	0	0.12	122.5	15.06
32	Raisen	94.4	29.06	116	7.56	0	0	0	210.4	36.62
33	Rajgarh	145	0	76	0	0	0	0	221	0
34	Ratlam	410.8	231.05	0	0	0	0	0	410.8	231.05

35	Rewa	236.4	50.68	32	20.15	0	0	0	268.4	70.83
36	Sagar	118	48.5	335	31.91	0	0	0	453	80.41
37	Satna	14.4	4.82	0	0	0	0	0.03	144	4.85
38	Sehore	222.58	91.44	234	14.61	0	0	0	456.58	106.05
39	Seoni	16.5	3.13	0	0	0	0	0	16.5	3.13
40	Shahdol	5.9	2.42	0	0	0	0	0	5.9	2.42
41	Shajapur	1575.4	99.99	0	0	0	0	0	1575.4	99.99
42	Sheopur	0	0	0	0	0	0	0	0	0
43	Shivpuri	19.27	0	18.5	0	0	0	0	37.77	0
44	Sidhi	0	0	0	0	0	0	0	0	0
45	Tikamgarh	24.2	23.97	219	19.2	0	0	0.08	243.2	43.2
46	Ujjain	0	15.19	0	0	0	0	0	0	15.19
47	Umaria	0	0	0	0	0	0	0	0	0
48	Vidisha	36.7	20.04	0	0	0	0	0	36.7	20.04
49	Alirajpur	34.1	0	0	0	0	0	0	34.1	0
50	Singrauli	0	0	0	0	0	0	0	0	0
	Total	11565	3317.21	2483.4	211.93	1	0.38	5.81	14050	3535.33

JABALPUR DISTRICT

Geographical feature of Jabalpur

Climate: Satpura plateau and Kaimore hills

Situation of Jabalpur: 22⁰ 49" to 24⁰ 80" North latitude

Height from sea level: 394 meter

Geographical area: 519,757 ha

Agricultural area: 3,67,279 ha.

Irrigated area: 36%

Unirrigated: 64%

Average rainfall: 1274 m.m.

Temperature: maximum 41.9° C Minimum 5.4° C

Total area of horticultural crops: 42489 ha

Area under Horticultural crop in Jabalpur district

Sl.	Name of	Area	Name of	Area	Name of	Area	Name of	Area	Name of	Area	Total	
No.	Fruit	(ha)	vegetables	(ha)	spices	(ha)	medicinal		flower	(ha)	Name	Total
							crops		crops		of crop	area (ha)
1.	Mango	1824	1. potato	3857	1. Chilli	560	Aswagandha	107	Marigold	470	-	-
2.	Guava	1286	2. Sweet potato	10	2. Ginger	209	Safed mushli	43	Rose	192	-	-
3.	Aonla	473	3. Onion	280	3. Garlic	282	Chandrasur	160	Glardia	48	-	-
4.	Orange	0	4. Tomato	671	4. Turmeric	170	Tulsi	73	Rajnigandha	139	-	-
5.	Lemon	245	5. Okra	2100	5. Coriander	980	Kalmegh	88	Gladiolus	60	-	-
6.	S. Orange	0	6. Brinjal	2582	6. Maithi	40	Satawar	110	Others	99	-	-
7.	Banana	0	7. Cauliflower	3840	7. Others	97	Colius	190	-	-	-	-
8.	Pomegranate	0	8. Cabbage	3590	-	-	9 others	118	-	-	-	-
9.	Papaya	190	9. Colacacia	25	-	-	-	-	-	-	-	-
10.	Others	500	10. Pea	8089	-	-	-	-	-	-	-	-
11.	-	-	11. Bottlegourd	45880	-	-	-	-	-	-	-	-
	-	-	12. Bitter gourd	2500	-	-	-	-	-	-	-	-
	-	-	13. Others	1620	-	-	-	-	-	-	-	-
	Total	4518	Total	33744	Total	2338	Total	881	Total	10008	Grand Total	42489

National Horticulture Mission

Target & Achievement During the Year 2012-13 (Jabalpur)

							(Rs. in lakh)
Sl. No.		Name of component	Unit	Rate of	Targe	t	Achievement 2012-13
1.	Veg	etable Seed					2012 10
		duction:					
	i)	Public sector	Hect.	0.50		0.00	
	ii)	Private sector	Hect.	0.25		0.00	
2 (A)		ablishment of New					
` /	Gar	dens:					
	i)	Guava	Hect.	0.09878		0.00	
2 (B)		intenance of Garden year)					
	i)	Orange	Hect.	0.05301		0.00	
	ii)	Mango	Hect.	0.03300	25	0.825	
	iii)	Guava	Hect.	0.03293		0.00	
2 (C)	Mai	intenance of Garden year)					
	(i)	Orange	Hect.	0.05301		0.00	
	ii)	Mango	Hect.	0.03300		0.00	
	iii)	Guava	Hect.	0.03293		0.00	
2 (D)		h Density Plantation	11000.	0.03273		0.00	
2 (D)	i)	Mango(2.5x 2.5 M)	Hect.	0.2400		0.00	
	ii)	Guava(3x 3 M)	Hect.	0.2400		0.00	
3.	No	Perennials Fruits	11001.	0.2100		0.00	
	(i)	cond Year) Banana Tissue Culture	Hect.	0.1040		0.00	
4.	Flov	wer's					
	a)	Cut flower	Hect.	0.35	20	7.00	
	b)	Bulbous Flower	Hect.	0.45	15	6.75	
	c)	Loose Flower	Hect.	0.12	30	3.60	
5.	Pro	tected cultivation					
	(i)	Green House					
	a)	Tubular Structure	Hect.	46.75	1.0	46.75	1.00
	ii)	Plastic Mulching	Hect.	0.10		0.00	
	iii)	Shadenet House					
	a)	Tabular Structure	Hect.	30.00	2.5	75.00	
	b)	Plastic Tunnels	Hect.	1.500		0.00	
6.	Hor	ticulture					
	Med	chanization					
	a)	Power Operated Machine Tools	Nos	0.175		0.00	
	b)	Power Machine	Nos	0.600		0.00	

		upto 20 BHP						
	c)	Power Machine 20	Nos	1.500	2	3.00		
		HP & above						
7.	Miss	sion Management						
	a)	State & District	No.					
		Mission Officers						
		Exp.						
	b)	District level	NO.	2.00	1	2.00		
		exhibition						
		Grand Total	No.			144.925	1.00	0.00

Opening Balance	20.563
Release (2012-13)	0.00
Release by Try	5.240
Total Rs.	25.803
Expenditure (2012-13)	0.00
Expenditure (2011-12)	16.386
Expenditure (2010-11)	3.00
Expenditure Total	19.388
Balance	6.417

Progress % 75.13

National Horticulture Mission

Target & Achievement During the Year 2011-12 (Jabalpur)

							(Rs. in l	akh)		
Sl. No.		Name of component	Unit Rate of		Target		Achievement 2011-12		2012- 13	
					Phy	Fin.	Phy	Fin.		
1.	Veg	etable Seed								
	Pro	duction:								
	i)	Public sector	Hect.	0.5	5	2.5				
2	Esta	ablishment of New	Parenn							
(A)	Gar	dens:	ial							
	i)	Mango	Hect.	0.03300	95	3.14	12.250	0.388	0.016	0.388
2 (B)	Mai	ntenance of								
	Gar	den (1 st year)								
	i)	Mango	Hect.		0.03300	95	3.14	12.250	0.388	0.388
3.	Flov	ver's								
	a)	Cut flower	Hect.	0.35	40	14.00				
	b)	Bulbous Flower	Hect.	0.45	40	18.00				
	c)	Loose Flower	Hect.	0.12	40	4.80	39.750		4.770	4.770
4.	Spic	ees								
	a)	Chilli	Hect.	0.1250	50.00	6.25	50.000	6.250		6.250
5.	Pro	tected cultivation								
	(i)	Green House								

	a)	Tubular Structure	Hect.	46.7500	0.40	18.70	0.400	9.350	9.350	18.700
	ii)	Plastic Mulching	Hect.	0.1000	50.00	5.00				
6.		ticulture								
	_	chanization	NT	0.175	1	0.10				
	a)	Power Operated Machine Tools	Nos	0.175	1	0.18				
	b)	Power Machine 20 HP & above	Nos	1.500	1	1.50	1.000	1.500		1.500
7.	HR	D								
	i)	Training of Farmers								
	a)	With the District (2 Days)	No.	0.008	50	0.40	50.000	0.400		0.400
	b)	Outside the State (3 Days)	No.	0.030	50	1.50				
	ii)	Exposure visit of farmers								
	a)	Within the District (3 Days)	No.	0.0075	50	0.38	50.00	0.210		0.210
	b)	Within the State (6 Days)	No.	0.018	50	0.90	50.000	0.900		0.900
	c)	Outside the State (6 Days)	No.	0.036	50	1.80	50.00	1.500		1.500
8.	Post	t Harvest								
	Maı	nagement								
	i)	Pack hosue	No.	1.500	1.00	1.50	5.000	1.500	2.250	3.750
9.	Mis	sion Management								
	a)	State & District	No.			0.00		0.679		0.679
		Mission Officers Exp.								
	b)	District level exhibition & Fair	No.			0.00	3	3.50		3.499
		Grand Total				83.01		28.651	16.386	45.037

Opening Balance	37.26
Release (2011-12)	98.00
Release by Try	3.55
Release back	-4.00
Total Rs.	134.81
Expenditure (2011-12)	28.651
Expenditure (2010-11)	3.373
Expenditure (2009-10)	82.223
Expenditure Total	114.247
Balance	20.563

Progress % 84.75

J.I.T. visit to District Jabalpur

S.N	Name of the Beneficiary	Address	Стор	Year of Plantation	Area in Hect.	Nos plant- ed	Nos. survived as on date of	% age of survival	Remarks
1.	Nitin Dewvedi	Ramghat, Pipariya Pan, Magarmuha, Jabalpur	Ventilated poly houses (Gerbera, Rose)	2011-12	-	-	-	-	 Good cultivation of flowers. Subsidy amount Rs. 18.70 lakh availed. Heavy incidence of powdery mildew noticed in roses, advised to go for fungicidal spray and removal of weed affected by mildew.
2.	Mandi (Pea)	MPMC, Govt. of M.P.	Pea (Mandi)	2009-10	-		-		 Mandi organized by MPMC, every evening auction of pea is being done till the crop is available. During this month daily 50-60 truck load pea is sent to big cities whereas during peak 200-250 trucks pea is auctioned and

									sent to various places like Nagpur, Hyderabad, Bhopal, Gwalior, Bombay and Bangalore.
3.	Brijesh S/o Gaya Prasad Vishwakarma	Jatwan, Block Panagar, Jabalpur	Vermi compost (2 units)	2008-09	2.5 Acre area covered	400- 500 MT in 60 days.			 Subsidy amount Rs. 30,000/-availed for two units. After this farmer developed of its own infrastructure. Subsidy for shade net and pack house is demanded by farmer.
4.	Ajay S/o Gaya Prasad Vishwakarma	-do-	-	2008-09	2.5 Acre areas covered				-do-
5.	Shri Shyam Narain	Old Balkheda Thagra, Panagar, Jabalpur	Water storage Tank (10,000 Sq.m.) RKVY	2008-09	1 ha	Guava and Vegeta -ble	-	-	 Subsidy amount Rs. 10 lakh availed by the farmer. Constructed by RES, Jabalpur.
6.	Sri Budhasen S/o Chhakodi Lal	Nigri, Bargi Block	Rose C.V. (Noor- jahan)	2011-12	0.7	3000	-	-	 Subsidy amount Rs. 57023/- availed for drip. Pruning was delayed and

				ı		1	·	
								advised to spray
								pesticide to
7.	Anil Dhope,	Niconi Donoi	Citmia manaa	2010-11	1.7	250	230	control pests.
/.	Anil Dhope, Rashmi Dhope	Nigari, Bargi Jabalpur	Citrus, mango + Drip	2010-11	1.7	250	230	• Subsidy amount Rs. 1,11,423/-
	Rasiniii Diiope	Javaipui	(NMMI)	2011-12				availed.
								Fruit crops inter
								cropped with
								vegetables.
								• Plants to be
								trained initially to
								develop good
								canopy
								• Farmer needs
								poly house for
								nursery purpose.
8.	Maram Ashawa	Bargi block,	Drip + citrus,	2009-10	2.00	550	440	Subsidy amount
		Jabalpur	mango, aonla					Rs. 97767.00 +
		•	(NMMI)					Rs. 4590 was
								given to farmer
								by cheque.
								Pruning of dead
								unwanted
								branches to be
			~					removed.
9.	KC Dewani S/o	S/o Bagoda,	Sprinkler for	2009-10	2.5			• Progressive
	J.L Dewani	Panagar, Jabalpur	vegetables					vegetable farming
			(NMMI)					is done by the
								grower.
								• Subsidy amount
								Rs. 15750/-availed.
10.	Vijay Khodiar	Siwantola Bargi,	Sweet	2009-10	1.00	270	262	
10.	vijay Kiloular	Chirgawan Road	Oranges, Lime	2009-10	1.00	270	260	• Subsidy amount Rs. 9900/ availed.
		Chinga wan Koau	Cranges, Line			210	200	is. 3300/ availed.

			Pr mongo			100	90	a Dia baak muahlam
			& mango			100	90	• Die back problem
								was noticed in
								sweet orange and
								mango, advised
								to apply copper
								oxychloride after
								pruning.
								• Water suckers to
								be removed.
								• Advised to
								demonstrate
								guava
								rejuvenation in
								old plants.
11.	Vinay Patel and	Kuchneri, Jabalpur	Drip in Dutch	2010-11	1.0 Acre	-	-	• Good flowering
	Surendra Patel	•	Roses and	2011-12	1.00	100	100	in rose noticed.
			mango					• Subsidy amount
			(NMMI)					Rs. 9900 availed
			,					• Advised to spray
								copper fungicide
								for control of Tar
								spot in roses.

Jabalpur

Activities visited

- 1. Area expansion of mango, guava, citrus, Aonla etc.
- 2. Pea Mandi
- 3. Protected cultivation of rose
- 4. Vermi compost (RKVY)
- 5. Sprinkler & Drip (NMMI) in vegetable / fruit crops / floriculture.
- 6. Water Storage Ponds.

Observations

- 1. Good attempts have been made under protected cultivation around Jabalpur to grow roses / Gerbera / Vegetables etc. but there exists lack of trained man power to advise properly for control of pests problems. Powdery mildew found very serious in roses and tried to control the disease as per advice given by the officials. The disease could not be controlled properly probably due to presence of alternate host (Xanthium Sp.) in nearby area. Farmer has been advised to control disease pest and also removal of host plant growing nearby places.
- 2. There is good scope to provide better hygiene to traders engaged in pea mandi. This may be looked into.
- 3. Progressive farmer of Jatwan producing vermin compost to be encouraged by providing him pack house and shed net to cover vermin beds spread over in 2.5 acres.
- 4. Pruning needs to be done at proper time in roses. Staff working in the area may note this point.
- 5. There is lack of good nursery in the district. Private sector to be encouraged in this venture to come forward and produce quality planting material.
- 6. Newly developed orchard of sweet orange / mango had a problem of diseases, like die back, Gummosis, greening and viruses. The staff looking after the plantation had very poor knowledge of horticulture; need to be given training and good exposure in horticulture.
- 7. Advised to control powdery mildew, tar spot of rose, demonstration for rejuvenation and de-suckering in guava / citrus / aonla etc needs to be under taken.
- 8. No exposure of NHM due to lack of board with logo at beneficiary sites.

J.I.T. visit to Dindori district

S. N	Name of the Beneficiary	Address	Стор	Year of Plantation	Area in Hect.	Nos plan- ted	Nos. survive d as on date of inspect- tion	% age of survival	Remarks
1.	Govt. Model nursery	Karoundi block, Shahapur, Dindori	Mango, guava, lime, pear, sapota, sweet orange, pomegranate, pear and ornamental	4.05	383 mother plants				 In the name of model nursery, no infrastructure have been given by SHM. During 2011-12, 3.5 lakh revenue realized form the nursery. Old mango and guava needs rejuvenation.
2.	Nand Kumar Shukla	Shahapur, Dindori	Pond 20x20x3m	2010-11	Comm and Area 4.00				• Subsidy Rs. 60,000 given to farmer and 2 nd instalment is yet to be released.
3.	Nanhey Singh Dhurvey	Dantbirday pur, Dindori	Vegetable and drip (NMMI)	2011-12	5.0				 Subsidy amount Rs. 1.99 lakh availed by the grower. Problem of buckege rot in Tomato was very high, advised accordingly.
4.	Radhey Shyam Yadav	Tikaria, Dindori	Community water pond (RKVY)	2011-12	10,000 sq.m/				• Total 10.00 lakh spent on this pond, command area of this pond is about 25

									ha.
5.	Smt. Kamla Bai	Shahpura, Dindori	Aonla- 78 Nos	2011-12	-	35	0	50	• Only one variety of
			Mango- 100 Nos			43		90	Aonla is planted
									which may not fruit
									well.
									 Mango is planted on
									bund and mortability
									was very high.
									• Advised not to
									encourage mango on
									bund.

Dindori

Activities visited

- 1. Area expansion of mango, guava and Aonla.
- 2. Water Storage Tank
- 3. NMMI programme drip and Sprinklers
- 4. Small Govt. Nursery.

Observations

- 1. It is difficult to cover entire district with scanty staff. More trained staff are needed to manage the NHM programme in the tribal district.
- 2. Good exposure and training needs to be given to staff.
- 3. There is shortage of water in the district, emphasis need to be given on Storage Water tank so that rain water is harvested for irrigation.
- 4. Most of the place, JIT felt that under AEP, plants are planted on bunds instead of field, advised not to encourage such practice.
- 5. The survival of plants under AEP are very low. This may be looked into.
- 6. Crop like custard apple and citrus needs to be introduced in the district.
- 7. No display board of NHM noticed any where.

NARSINGHPUR DISTRICT

Basic informations

Geographical area	513651
Total Agriculture area	303898
Total irrigated area	188489
Total kharif area	175000
Total Rabi area	275000
Barron land for Agriculture	15909
Area under forest cover	72192
Total Barron land	11198
Mode of Irrigation	
No. of Cannals	13
No. of Tubewell	4730
No. of ponds	01
No. of well	25835
No. of well utilized for domestic purpose	2880
No. of well used for irrigation	3086
Total No. of villages	
Habitat village	1040
Forest village	12
No. of gram panchayat block wise	
Narsinghpur	86
Gotegaon	90
Chanwar Patha	85
Saikhera	61
Chichli	71
Total	457

No. of farmer	General	SC	ST	Total
No. of Small farmer	35491	5581	4648	45720
No. of marginal	34179	5175	6964	46318
No. of big farmer	39717	5576	2926	48219
Total	109387	16332	14538	140257
Temperature of district	Maximum	45	Minimum	9
Average rain fell	1105.02 M.N	Л.		

Total area of Horticultural crop in the district 2011-12- 8571.100 ha

Physical and Financial Target and achievements components wise under RKVY 2011-**12**

S. No.	Components	Unit	Physica	1	Finance	(Rs. in lakh)	Number of beneficiated	
			Target	Achievement	Target of given	Expenditure	farmers.	
1.	Hi-tech Pan cultivation	No.	160	160	48.00	48.0	160	
2.	Onion storage	No.	28	28	45.0	21.60	28	
3.	Protected cultivated	Sq. metre	1366	3334	10.0	10.00	4	
4.	Farmer visit	No.	90	90	2.25	2.25	90	
5.	Administrative expenditure	-	0	0	1.05	0.82	-	
7	Total	-	-	-	106.30	82.67	282	

Monthly progress report under CSS, Micro irrigation scheme 2011-12 (Narsinghpur)

Sl.	Name of Spacing		No. of	T	arget for F	inancial Ye	ear	A	chievem	ent Dur	ing mon	th	Progress	Progress up to Previous Month									
No.	crop			ben- efices	Target	Assistan lakh	ice in		No. of	Are a		Tota		No. of	Are a	Expen	diture			No. of	Area		
				(ha.)	GOI	State	Total	Benefi ciaries	(ha.)	GOI	Stat e	Total	Benefi ciaries	(ha.)	GOI	Stat e	Total	Benefi ciaries	(ha.)	GOI	State	Tota l	
A.	Drip	6x6		149	46.29	29.28	75.57	0	0.00	0.0	0.0	0	2	0.80	0.17	0.07	0.24	2	0.80	0.17	0.07	0.24	
		4x4					0.00	0.00	0.00	0.00	0.00	0	4	2.80 0	0.46	0.25	0.71	4	2.80 0	0.46	0.25	0.71	
	1.8 x 0.6						0.00	0.00	0.00	0.00	0.00	0	5	10.7 00	2.75	1.86	4.61	5	10.7 00	2.75	1.86	4.61	
	1.5x1.5						0.00	0.00	0.00	0.00	0.00	0	9	10.7 00	3.45	2.36	5.81	9	10.7 00	3.45	2.36	5.81	
	1.2x0.6						0.00	22	27.5 00	22.8 5	15.1 7	38.02	58	66.9 00	18.1 6	10.2	28.38	80	94.4 00	41.0 1	25.39	66.4	
	Demonstrati on	4x4		5	5.30		5.30	2	1.00 0	0.34	000	0.34	0	0.00	0.00	0	0	2	1.00 0	0.34	0.00	0.34	
	1.2x0.6																						
	Total Drip	-		154	51.59	29.28	80.87	29	31.0 0	26.9 3	15.1 7	42.1	81	93.4 00	24.9 9	14.7 6	39.75	110	124. 400	51.9 2	29.93	81.8 5	
B.	Sprinkler	-		100	9.66	5.72	15.38	1	1.00	1.63	1.11	2.74	79	97.0 0	5.98	3.90	9.88	80	98.0 00	7.61	5.01	12.6 2	
	Dimonstrati on			1	0.14	0	0.14	0	0.00	1.63	1.11	2.74	79	97.0 00	5.98	3.90	9.88	80	98.0 00	7.61	5.01	12.6 2	
	Total Sprinkler			101	9.8	5.72	15.52	1	1.00	1.77	1.11	2.88	80	98.0 000	5.98	3.90	9.88	81	99.0 00	7.75	5.01	12.7 6	
C.	Admin. Cost			0	0.56	0	0.56	0	0.00	0	0	0.61	0	0.00	0	0	0	0	0.00	0.61	0	0.61	
Grand	Total (A+B+C)	•		255.00	61.95	35.00	96.95	30.00	32.0 00	28.7 0	16.2 8	45.59	161	191. 400	30.9 7	18.6 6	49.63	191	223. 400	60.2 8	34.94	95.2 2	

J.I.T. VISIT to District Narsimhapur (Non NHM)

S.N	Name of the Beneficiary	Address	Стор	Year of Plantation	Area in Hect.	Nos plan- ted	Nos. survive d as on date of inspecti on	% age of survival	Remarks
1.	Suresh S/o Shankar Singh Raguvanshi	Kareli, Basti	Onion Storage, RKVY, (For seed production 50 MT)	2011-12	3.278	-	-		 Subsidy amount of Rs. 1.6000/- given to beneficiary. Storage is under used.
2.	Suresh S/o Shankar Singh Raguvanshi	Kareli, Basti	Vermi compost (RKVY) Pomegranate (under State Govt. Plan)	2009-10	3.2 ha (crop covered)	-		-	 Subsidy amount of Rs. 30,000 availed by the farmer. Compost is used for its own purpose. Onion storage and vermi compost are utilized properly. Pomegranate has been planted in one ha (625 plants) under State Govt. Plan.
3.	Shailesh Patel	Kanwash, Block-Chichli, Narsinghpur	Onion storage (50 Ton RKVY) & Vermi compost (2 units RKVY)	2009-10 2010-11	-	-	-	-	Onion storage and vermi compost are utilized properly

4.	Gajaraj Singh Patel	Kalyanpur, Narsinghpur	Pomegranate (Bhagwa) Drip (NMMI) onion storage (50 MT) (RKVY)	2011-12	1ha	500	500		 Presently farmer do not have any problem related to pest / disease, some tips have been given for growing pomegranate. Driip is under use. Subsidy Rs. 160000/- given for onion storage.
5.	Mohan Singh Patel	Kalyanpur Narsingh pur	Pomegranate (Bhagwa) Onion, Tomato, Chilli etc. (NMMI)	2011-12	4 ha	625	490		 Subsidy amount Rs. 10175/- given to farmer. Pomegranate health is good but pruning is needed. Plants need to be isolated form inter crops.
6.	Naresh Kumar	Kanwash, Narsinghpur	Pomegranate + Onion cultivation and storage (RKVY)	2010-11 2011-12	3.5				 Subsidy amount Rs. 160,000/- given to farmer for onion storage. Farmer produces seed of onion for sale.
7.	Naresh Kumar	Kanwash, Narsinghpur	Vermi compost (RKVY)	2011-12	One unit	-	-		Vermi unit is under production for its own use.
8.	Alphana Nema W/o Manoj Nema	Dubhghat, Narsinghpur	Drip (NMMI) + Onion and	2010-11	1 Acre	-	-	-	• Six hundred Kg onion seed produced beside other

			vegetable seed production				vegetables.
9.	Alphana Nema W/o Manoj Neema	-do-	Vermi compost unit (RKVY)	2009-10	One unit		 Subsidy amount of Rs. 15000/- availed by the farmer. Vermi compost is under production and used for vegetables seed production.
10.	Govt. Nursery Bhaisapala	Bhanisapala, Narsinghpur	Onion storage structure Tube well, shadenet (560 sq. m)	2009-10 2009-10 2010-11	One One One		 Onion storage, digging of tube well, shade net structures costing Rs. 793925/-developed. During 2011-12, Rs. 207062 was realized from sale of plants. Total numbers of mother plants are 5440. (Mango, Pomegranate, Aonla, Lime) Presently 393 plants including seedling are available in the nursery. Given the success story of three farmers.

Activities visited

- 1. Onion Storage (RKVY)
- 2. Vermi compost (RKVY)
- 3. Area Expansion of Pomegranate (under State plan)
- 4. Onion and other vegetable Seed production programme.
- 5. Drip and Sprinkler (NMMI)
- 6. Model Nursery, Bhainsapala

Observations

- 1. District has very potential for Sugarcane and vegetable seed production.
- 2. Presently pomegranate has been introduced in the district, though the soil is black and heavy in some blocks. Team observed that Pomegranate crop is coming up very well without any problem at present. After one or two years, when production starts, then we can recommend this crops as substitute of sugarcane for the district.
- 3. Vermi compost units and onion storage are properly used for seed production and storage of onion bulb for sale. More onion storages are needed to this district.
- 4. Sprinklers and drips are used in vegetable / sugarcane fields to take maximum production with minimum water use.
- 5. Team felt that nursery produced very less number of plants seeing the availability of infrastructures. Step need to be taken to produce more quality grafts so that it may able to supply to other districts.
- 6. NHM logo with board was present at most of beneficiaries' sites.
- 7. Team observed that under Small / Model nurseries, onion storage structure is present for demonstration costing 3.20 lakh each but the structure is kept empty without onion even while demonstration. It is felt that such infrastructure may be utilized by the departments under PPP mode to earn revenue.

MANDLA DISTRICT

Basic information

Sl.	Details	Unit	Quantity
No.			
1.	Geographical area	Thousand ha.	467.15
2.	Forest Area	Thousand ha.	80.6
3.	Agricultural land	Thousand ha.	243.8
4.	Kharif Area	Thousand ha.	165.0
5.	Rabi Area	Thousand ha.	105.0
6.	Area shown more than once	Thousand ha.	66.50
7.	Crop intensity	Percentage	131%
8.	Current fallow land	Thousand ha.	32.20
9.	Miscellaneous fallow land	Thousand ha.	37.40
10.	Total irrigated area	Thousand ha.	14.6
11.	Source of irrigation	Number	Nahar 63,
			Well 2030
12	Population	Number	779414
	(a) Schedule Tribe (57.8%)	Number	451193
	(b)Schedule caste (4.8%)	Number	37981
13.	Below poverty line families	Number	111534
14.	Total farmers		
	(a) Landless	Number	60941
	(b) Medium	Number	35521
	(c) Low	Number	15091
15.	Total population in village	Number	703470

Basic information of district Mandla

Sl. No.	Details	Number				
1.	Name of Block development	9				
	office					
2.	Number of Tehsils	5				
3.	Number of vilalges					
4.	a) Revenue village	1163				
5.	b) Forest village	84				
6.	c) Total	1247				
7.	Gram Panchayat	493				
8.	Nagar Panchayat	03				
9.	Reason for low productivity	1. Uneven and Sloppy area.				
		2. Dependent of irrigation				
		3. Low paying capacity for				
		Agriculture inputs.				

Horticultural crops area during 2011-12 (District Mandla)

S. No.	Name of	Spices	Vegetable	Flowers	Medicinal	Cut	Total
	block			(Loose)		flowers	
1.	Mandla	288.000	324.000	125.000	4.000	6.000	747.000
2.	Beachia	90.00	127.000	101.000	2.000	1.000	321.000
3.	Mawai	155.000	154.000	111.000	1.000	2.000	423.000
4.	Ghughri	201.00	201.000	140.00	2.00	3.000	547.000
5.	Mohgaon	228.000	350.000	142.000	2.00	2.000	724.000
6.	Nainpur	195.000	289.000	145.000	3.000	5.000	637.000
7.	Niwas	156.000	199.000	87.00	3.000	2.000	447.000
8.	Narainganj	83.000	163.000	66.000	3.000	1.000	316.000
9.	Beejadandi	109.000	141.000	57.000	3.000	2.000	312.000
Total		1505.00	19848.000	974.000	23.000	24.000	4474.000

Block wise nurseries in Mandla district

Sl. No.	Name of Nursery	Block	Year of	Total area in
			establishment	ha.
1.	Govt. Nursery Mandla	Mandla	1979-80	2.696
2.	Sanjay Nikunj	Niwas	1980-81	4.000
	Aamadangri			
3.	Govt. Nursery, Sijaura	Bechia	1981-82	1.520
4.	Sanjay Nursery Jamgaon	Nainpur	1982-83	4.500
5.	Sanjay Nursery	Mohgaon	1985-86	4.000
	Mohgaon			
6.	Sanjay Nikuj, Ghughri	Ghunghri	1985-86	4.000
7.	Sanjay Nursery Ghonta	Mawai	1986-87	4.000
8.	Sanjay Nursery Dewri	Narainganj	1988-89	4.000
9.	Sanjay Nikuj Faurk	Bechia	1993-94	4.000

J.I.T. Visited Mandla District

S. Name of the N Beneficiary	Address	Стор	Year of Plantation	Area in Hect.	Nos planted	Nos. survived as on date of inspection	% age of survival	Remarks
1. Jageshwar S/o Sohan	Newari, block Nainpur, Mandla	Onion Storage (50 MT) (RKVY)	2011-12	(17X72')				 Subsidy amount of Rs. 160000 is availed. The storage is under construction. Floor to be cemented.
2. Guklab S/o Kunji Lal	Bhurkarola, Aamanala, Mandla	Onion storage (50 MT) RKVY	2011-12	(17'X72')	-			• Subsidy amount of Rs. 395000 released to farmer.
3. Parwati Bai	Singhpur, Niwas, Mandla	Guava inter cropped with tomato	2012-13	-	-	-		 Planting of guava is done on Bund, to be discouraged. Leaf minor and early blight disease noticed, advised accordingly.
4. Vinod Agrawal	Mohan tola Kaihar pur, Mandla	Mango + Guava	2011-12	1 ha	50 50	42 42		Plants are coming up well.Advised to do staking and training of plants.
5. Arvind / Sathi Gulab Chander	Katangi, Mandla	Drip, vegetables & Guava (NMMI)	2011-12	0.5	150	140		 Guava plants not trained. Suckers to be removed. Proper basin is needed for irrigation. Good growth of
6. Puran/ Gokul	Sodhar, Bamhani,	Gauva	2012-13	0.5	150	140		• Good gr

		Narainganj, Mandla							plants, but Seedling observed.
7.	Community tank	Suraj Pura, Mandla block, Mandla	Pond 15.61 ha command area	2009-10	6053.11 sqm.	-		-	 Subsidy amount Rs. 9.89 lakh released. Being used for irrigation to nearby plots.
8.	Pack house	Mohaniapatpara, Mandla block	Pack house (9x6m)	2011-12	As per design.	-	-	-	• Subsidy amount Rs. 1.50 lakh availed by farmer.
9.	KVK, Mandla	KVK, Mandla		2006-07	-	-	-	-	• Small nursery was given to KVK but nothing was available except frame of shadenet etc. It was in very bad shape.

Activities visited

- 1. Area expansion of mango, guava etc.
- 2. Water storage pond (RKVY)
- 3. Drip / Sprinkler (NMMI) in vegetable / fruit crops.
- 4. Onion storage (RKVY)
- 5. Pack house

Observations

- 1. JIT felt that Mandla district is very potential but not much head way in horticulture has been made due to scanty, untrained staff.
- 2. Mango and guava planted under AEP are not properly attended, besides mortability problem. Staff is unaware about latest technique to be adopted in horticulture.
- 3. Some places, it was found that seedling guava has been planted instead of graft.
- 4. JIT visited small nursery sanctioned by SHM to KVK Mandla, Team did not find any infrastructure except shade net frame. No plants are being produced as informed by the Inchage, KVK.
- 5. NHM logo was not available at sites.

District Chhatarpur

S. N	Name of the Beneficiary	Address	Стор	Year of Plantation	Area in Hect.	Nos planted	Nos. survived as on date of inspection	% age of surviv al	Remarks
1.	Harish Chandra S/o Ramkishor Chorasiya	Newagaon, Chhatarpur	Poly House (RKVY)	2011-12	1000 sq. m	Pan cultivation	-	-	 During summer it is difficult to maintain humidity and temperature but in winter it works properly.
2.	Arvind S/o Harish Chandra Chorasia	Newagaon, Chhatarpur	Shed net (RKVY)	2011-12	1000 sq. m	Pan cultivation	-	-	Cultivation of pan under green house is successful doing well but under winter more protection is needed to avoid cold
3.	Chitranjan Chaurasia	Nibari, Rajnagar, Chhatarpur	Vermi compost (RKVY)	2011-12	-	-	-	-	 Rs. 30,000 subsidy given, making compost for own use regularly. Advised to take vermin wash too.
4.	Suman Kumar S/o Lambadar Das	Acona, Rajnagar, Chhatarpur	Vermi compost	2010-11	-	-	-	-	 Subsidy amount Rs. 30,000 received by the farmers. Vermi compost is being used in guava, mango and citrus crops.
5.	Ramesh Chandra Goswami	Budar, Chhatarpur	Integrated Post harvest unit	2012-13	2.50 lakh				Subsidy is yet to be releasedExtraction of aloevera

			(Juice extraction)						and Anola juice is done
6.	Smt. Ramkali W/o Kesav Singh	Laloni, Chhatarpur	Vegetables	2012-13	1.00	Chilli cultivaiton	-	-	• Still crop was in the field in very bad condition due to viral problems. Advised to use net tunnel for raising seedlings to avoid viruses.
7.	Suman Kumar Das	Acona, Rajnagar, Chhatarpur	Guava, (Allahabad Safeda) (High Density)	2011-12	1.4	1162	938		 Plant are not trained at an initial stage, need to be given training / pruning. Water shoot to be removed. Cleaning needs to be done around pits. Pea as intercrop taken in the orchard.
8.	Dr. Ayodhya Prasad Gupta	Rajnagar, Chhatarpur	Onion Storage, (17'x50') size (RKVY)	2011-12	50 MT cap.	-	-	-	 Out of 1.6 lakh, only 80,000 subsidy is given to farmers. Basic work is completed.
9.	Smt. Vimla Pathak	Jata Shankar, Cold storage	Potato, fruits, spices etc.	2011-12	2062 MT cap.	-	-	-	• Completed and functioning well, subsidy Rs. 49.2 lakh given to the owner.
10.	Sukman Kumar Das	Akona, Chhatarpur	Drip, Lime, mango and citrus (NMMI)	2010-11	1 ha	240/280	-	-	 Total subsidy of Rs. 45000/- paid by cheque. Plants are healthy but needs training and control of bacterial spots.

11.	Pyrelala,	Bhiyatal, Chattarpur	Chilli cv.	2011-12	0.250 ha		• The area is famous for
	Dashrath, Raiwar		Namdhari				vegetable cultivation
			NH 1701				but farmers do not have
			MH 105				scientific knowledge to
			Onion				produce vegetables.
			(CV)				Constant training is
							required to be given to
							farmers by local
							KVK/Departmental
							staff.
12.	Rameshwar	Tawari, Chhatarpur	Guava	2010-11	0.5	140	• Subsidy amount
	Singh		(A. Safeda)				released
							• Arhar taken as inter
							crop in the orchard.
							• Demonstration given to
							maintain the canopy of
							guava.

JIT visit to District Chhatarpur

Activity visited

- 1. Pan cultivation under shade net / poly house under RKVY.
- 2. Vermi compost units (RKVY).
- 3. Juice Extraction unit.
- 4. Area Expansion of Spices, Guava, Mango, Citrus
- 5. NMMI programmes
- 6. Onion Storage (RKVY)
- 7. Cold Storage

Observations

- 1. Pan cultivation is being practiced in large scale under shade net and poly house. The results are very encouraging but Pan Growers feel that more research is needed on these structures which suits to all weather for cultivation of Pan.
- 2. Vermi compost units constructed under RKVY are good but it is more useful if they take vermi wash also regularly.
- 3. Subsidy for juice extraction unit needs to be released as early as possible.
- 4. Chilli cultivation has been taken in a big way. It is noticed that 90% crops is badly damaged with virus, hence yield is also too much reduced. It is advised that seedling may be taken under net tunnels to avoid vectors responsible for spread of viruses.
- 5. Farmers are taking intercrop in the orchard; it is good sign to take more income till orchard comes into fruiting.
- 6. Invariably water suckers are not removed from the orchard plants.
- 7. Canopy management and plant architect are lacking. Staff are not trained enough to guide farmers properly on horticulture aspects.
- 8. Training on vegetable cultivation in Bhiyatal area is needed. Scientific input needs to be given by Horticulture Department or local KVK.
- 9. Regular field visits need to be done by staff at sites.
- 10. Team felt that there is no cluster approach in the district except pan cultivation.
- 11. No where NHM board was found at sites.

PANNA DISTRICT

Panna district is a district of the Sagar Division, within the Madhya Pradesh state in central India. The town of Panna is the district headquarters.

History

Panna District was created in 1950, shortly after Indian independence, from the territory of several former princely states of British India, including the states of Panna, Jaso, most of Ajaigarh, and a portion of Paldeo. Panna District was part of the new Indian state of Vindhya Pradesh, which was merged into Madhya Pradesh on November 1, 1956.

Geography

Panna district lies between 23° 45' and 25° 10' north latitudes and 79° 45' and 80° 40' east longitudes. [1] It has an area of 7,135 km

The Ken River flows through the district. The Pandav Falls and the Gatha Falls are located in the district. Panna National Park is a major tourist attraction in the district.

Economy

In 2006 the Ministry of Panchayati Raj named Panna one of the country's 250 most backward districts (out of a total of 640) It is one of the 24 districts in Madhya Pradesh currently receiving funds from the Backward Regions Grant Fund Programme (BRGF).

Divisions

Gram panchayats under Panna district

These intermediate subdivisions are also called block, intermediate panchayat, tehsil or tahsil. Inside Panna district, there are the following five subdivisions:

- Ajaigarh;
- Gunour
- Panna;
- Pawai;
- Shahnagar

Demographics

According to the 2011 census Panna District has a population of 1,016,028, roughly equal to the nation of Cyprus or the US state of Montana. This gives it a ranking of 442nd in India (out of a total of 640). The district has a population density of 142 inhabitants per square kilometer (370/sq mi). Its population growth rate over the decade 2001-2011 was 18.62%. Panna has a sex ratio of 907females for every 1000 males, and a literacy rate of 66.08%.

Languages

Among Panna's languages is Bundeli, which has a lexical similarity of 72-91% with Hindi (compared to 60% for German and English) and is spoken by about 7 800 000 people in Bagelkhand; and Bharia, a Dravidian language spoken by at least 200 000 members of the Bharia tribe and written in the Devanagari script. Panna district is famous for its diamond mines located in a belt of about 80 km across the Panna town. In olden days the most productive mines were located in the village of Sukariuh. Nowadays, Majhagaon is the only active diamond mine in Asia. [15]

Panna District

Total Geographical area	702924 ha
Reserve forest	1109
Concert forest	246951
Fallow land	10527 ha
Barren land	13317 ha
Non cropping	249594 ha

Double cropping area	44795 ha
Kharif area	92687 ha
Rabi area	201702 ha
Total	294389 ha
Irrigated area	
Cannel	14000 ha
Tube well	5875 ha
Well	16870 ha
Pond	6370 ha
Other sources	38406 ha
Total irrigated area	81521 ha
Source of Irrigation	
Canal	61
Tube well	380
Well	13329
Pond	92
Total	13862
Number of village	1148
No. of Panchayat	378
Small farmer	36837
Marginal farmer	57696
Others farmers	46862
Total No. of farmer	141395
S.C. farmer	24327
S.T. farmer	17786
Electric pump	9784
Diesel pump	18905
Co-operative Society	91
Fruit area	501

Vegetable area

Spices area	918
Medicinal area	111
No. of Tractors	3412

Visit of JIT to District Panna

S. N	Name of the Beneficiary	Address	Стор	Year of Plantation	Area in Hect.	Nos planted	Nos. survived as on date of inspection	% age of survival	Remarks
1.	Chanra Kirti Singh S/o Chhatar Pal Singh	Gajna Dharampur, Panna	Guava (H.D) 3X3 (Allahabad Safeda)	2011-12	4 ha	4444	4444	100% (gap filled)	 Subsidy Rs. 96000 given to farmer by cheque. Demonstrated the canopy management and training of guava in field. Good maintenance of plants.
2.	Bhan Singh	Aramganj, Ajay garh, Panna	Tomato under drip (flowering stage) (NMMI)	2010-11	2 ha	-	-	-	 Advised to take mulch to avoid weed problem. Raizing of seedling in Tunnels recommended to avoid viral problem. Subsidy Rs. 1.34000 given.
3.	Bhan Singh S/o Hanumant Singh	Aram Ganj, Ajaygarh, Panna	Tractor with Rotabator	2011-12	-	-	-	-	• Subsidy Rs. 150,000/- disbursed to farmer and both items are in use.
4.	Chenu Pal	Pratap-pur Guthla, Ajay Garh, Panna	Onion storage (50 MT) (RKVY)	2011-12	-	-	-	-	 Subsidy of Rs. 1.60,000/- given to farmer. Structure is being used for storing

									onion.
5.	Chenulal	Do	Vermi compost unit (RKVY)	2011-12	-	-	-	-	 Vermi pits are required to be cover from top. Vermi wash may also be tried to take maximum benefit.
6.	Shailesh Vikram Singh	Kothi Ajaygarh, Panna	Tomato/cauli flower Drip (1.6x0.6m)	2012-13	2ha.	-	-	-	• Subsidy amount Rs. 1.29896 get to be paid.
7.	Girija Devi Kushwaha	Bahadurganj, Ajaygarh, Panna	Guava (A. Safeda)	2012-13	0.250	278	250		 Good plantation and inter crop is being taken in the orchard. Advised to remove water shoots.
8.	Bhawani deep Kushwaha	Bahadurganj, Ajaygarh, Panna	Guava (A. safeda) (Drip) (NMMI)	2012-13	0.250	278	250		• Plants are growing well and advised to remove water shoots.
9.	Surendra Singh	Kalayanpur, Ajaygarh, Panna	Seed Produciton Programme (Pea C.V. arcle)	2012-13	0.800	-	-	-	 Total 0.70 quintal seed produced. Subsidy Rs. 34000 given to farmers.
10.	Smt Kalla Kandar	Vishramganj, Ajaygarh, Panna	Drip under potato (1.20 m spacing) (NMMI)	2012-13	0.800	-	-	-	 Netafim company has given the drip. Presently working alright Advised to use bund maker instead of manual labour.

JIT visit to District Panna

Activity visited by JIT

- 1. AEP of guava (H.D.)
- 2. Vegetable under drip / sprinkler (NMMI)
- 3. Seed production programme
- 4. Vermi compost
- 5. Mechanization
- 6. Onion storage (RKVY)

Observation

- 1. Permanent vermi composts unit run by farmer is without roof. Advised to put roof over vermin beds and take vermi wash also for use in horticultural crops.
- 2. Potato is taken under drip; it is good sign to save water.
- 3. Under mechanization progarmme, farmer was also told to use bund maker in potato crop.
- 4. In most of the places, NHM logo has not been displayed.
- 5. Farmers are unaware about the horticulture practices to be adopted to maintain the orchard properly.

JIT visit to District Tikamgarh

S. N	Name of the Beneficiary	Address	Стор	Year of Planta- tion	Area in Hect.	Nos planted	Nos. survived as on date of inspection	% age of survival	Remarks
1.	Sukh Dayal Kushwah	Hatta Baldevgarh, Tikamgarh	Chillies US 515	2011-12	0.5			90	Crop was fully damaged by viral disease, advised to grow seedling in net house to protect from viral vectors.
2.	Siya Ram Yadav S/o Kunn Lala yadav	Badagha Baldevgarh, Tikamgarh	Tractor cum rotabator mahindra (265 HP)	2011-12	-	-	-	-	Wilt problem was also observed advised to do crop rotation.
3	Smt. Rati Bai	Ladwari Baldevgarh, Tikam garh	Guava (Alahabad Safeda)	2012-13	0.5	140	140	100	 Subsidy Rs. 4939 given. Lanky growth of seedling plant supplied. Officers do not the exact site of plantation. Advised to replace the seedling plants.
4.	Prabhu Dayal S/o Bhagwan Das Kushwaha	Palera, Tikamgarh	Sprinkler (41 pipes 9 Nozzles (NMMI)	2009-10	2.0	-	-	-	 Subsidy Rs. 19094 has given to farmer. Presently pea crop has been taken in large scale.
5.	Raghuvir S/o Lxman Lodhi	Samera Khurd, Palera, Tikamgarh	Guava (A. Safeda)	2011-12	0.700	210	198	85	 Subsidy is yet to be paid Advised remove water suckers Canopy management

									needs to be done.
6.	Manoj Sharma S/o Ram Nath Sharma, Sharla Nursery	Jatara, Tikamgarh	Model Nursery (Samll) private + Onion storage (RKVY)	2011-12	1.00	Mango, guava, citrus etc.	Shade net (260 sq.m)		 Rs. 3.12 lakh subsidy given to grower. Grower not taking interest to produce plants. Onion storage is in use.
7.	Hansilala S/o Panjan Lal Chaurasia	Chandera Jatara, Tikamgarh	Guava (A. Safeda)	2011-12	0.5	140	140	100	• Planting material used as A. Safeda but it was seedling advised to replace the plant immediately.
8.	Paltu Ram Mahendra Kumar Chaurasia	Lidhaura, Tikamgarh	Pan Deshi/ Bangla	2010-11 (RKVY)	0.8				 Shed net, motor pump and sprayer were given under RKVY. Shade net + Grass roof top during winter working well.
9.	Kashuri Devi Tripathi W/o Shankar Dayal Tripathi	Ranipura, Tikamgarh	Guava (G 27 , H.D)	2012-13	1.00	1111	1000	98	 Subsidy amount Rs. 24000 given to farmer. Plants are of good quality. Advised for training of plants at an initial stage.
10.	Dhurbdeo Singh Jee Deo, Harendra Singh Jeedev	Majra Jaural Shah, Tikamgarh	Mango (MC, LD) Rejuvenation	2011-12 (1995)	1.00	100	100	100	 Proper rejuvenation not done in the orchard. Demonstrated the Technique of rejuvenation in the orchard. Advised to control pest disease in orchard. Newly planted grafts to

									be protected from frost. More drastic pruning is needed.
11.	Raj Bahadur Madhukar Shah jeedeo	-do-	Mango (M.C.D. Ratol, Surya, Aruna etc.)	2012-13	8.00	800	800	100	 Subsidy amount Rs. 48000 given on AEP of mango. Controls of diseases /
12.	Jej Singh S/o Balwant Singh Thakur	Jamdar, Kundeshwar, Tikamgarh	Pak hosue + Tractor with rotabator	2011-12					 pest are need of day. Subsidy Rs. 1.5 lakh released, Pack house is being used for fruit/ vegetable. Fruit spot was very serious in Aonla, (Chakaya cultivar), advised to control with fungicide.
13.	Anil Budkul S/o Kapur Chandra Jain	Sawantipur, Tikamgarh	Drip (HMMI)	2011-12	2.00	-	-	-	 Good management of drip Subsidy amount Rs. 62000 given. Plant looks healthy Water shoots to be removed.
14.	Anil Budkul S/o Kapur Chandra Jain	Sawantipur, Tikamgarh	Guava (G 27) (NMMI)	2011-12	4.00	2200	2200	100	 Plants are fruiting well. Advised to train plants as demonstrated. Subsidy 1.5 lakh given to farmers.
15.	Dr. D.K Tripathi / Smt. Asha Tripathi	Nachan Wara, Kundeshwar	Tractor + Rotabator (Mahindra)	2011-12	-	-	-	-	 Subsidy 1.5 lakh given to farmers Equipment is under use.

16.	Smt. Neema Bai	Sawantpur,	Pack house	2011-12	-		-	-	• Constructed and being
	W/o Kapur	Tikamgarh							used fully, Rs. 1.5 lakh
	Chandra jain								subsidy released.
17.	Hari Narain Naik	Sawanpur ,	Vermi compsot	2010-11	-	-	-	-	• Rs. 15000 given as a
	S/o Roop Narain	Tikamgarh	unit (RKVY)						subsidy on
	Naik								construction of vermi
									unit.
									Regularly taking vermi
									compost from unit.

District Tikamgarh

Activity visited

- 1. Area Expansion of spices, guava (H.D.), MANGO
- 2. Area expansion of Pan (under RKVY).
- 3. Vermi composts (RKVY)
- 4. Pack house (RKVY)
- 5. Model Nursery (Private)
- 6. Onion Storage (RKVY)
- 7. Rejuvenation of mango
- 8. Mechanization (Tractor and Rotabator) (RKVY)
- 9. NMMI proramme in vegetables / fruit crops sprinkler and drip etc.

Observations

- 1. Chilli crop was badly damaged by viruses probably not taken any preventive measure at an initial stage.
- 2. Tractor cum rotabator is being used for cultivation of vegetables as inter crops at an initial stage.
- 3. Team advised the nursery owner to produce grafts of guava / mango / aonla for local farmers, since owner did not have root stock for raising graft.
- 4. Display board with NHM logo to be placed in the nursery site.
- 5. Wilt disease was noticed in chillil, advised not to take regular Solanaceous crops in the same field.
- 6. In Ladwari, Baldevgarh, lanky growth of guava observed. Team also noticed that guava plants supplied to farmer are not of inferior quality. Such plants need to be removed with fresh planting.
- 7. Canopy management and tree architecture needs to be tried in the beginning.
- 8. Proper rejuvenation needs to be done in 35-40 years old mango plants. Removal of one or two branch may not help much in production related activity.
- 9. NHM logo was not available at sites.

- 10. In Aonla, fruit spot (cv. Chakaiya) was noticed in Kundeshwar area. All most 95% fruits were found to be affected. In fruiting season proper control measures should be followed as advised.
- 11. Processing unit for Aonla is needed in Sawantpur. SHM may look into the matter and make arrangement to needy farmers.

DATIA DISTRICT

About Datia

Datia is the District headquarters of the Datia District. The town is 69 Km from Gwalior, 325 Km south of new Delhi and 320 Km north of Bhopal. It is an ancient town, mentioned in the mahabharata as Daityavakra. The town is a market centre for food grains and cotton products. Handloom weaving is an important industry. Datia is a famed for the seven-storied palace built by Raja Beer Singh Deo in 1614. A pilgrimage spot for devotees, Datia has the sidhapeeth of shri peetambhara Devi, Buglamukhi Devi Temple and Gopeshwar temple. About 15 Km from Datia is the Sonagiri, a scared Jain hill. Datia is 34 km from jhansi, Uttar Pradesh and 52 Km from Orchha. The nearest airport is a at Gwalior. Datia railway station is on the Delhi-Chennai main line. Peetambra peeth is a famous shaktipitha located at the entrance of Datia in Madhya Pradesh. This pilgrimage spot features Buglamukhi Devi Temple. and Dhumavati Mai Temple established by Shri Golokwasi Swamiji Maharaj. Vankhandeshwar temple is a Mahabharat period temple of Lord Shiva which is situated at this place. Pitambra peeth is about 1 km from Datia Bus Station and 3 KM from Datia Railway Station.

Datia had formerly been a state in the bundelkhand region. The ruling family were Rajputs of the Bundela clan; they descended from a younger son of a former raja of Orchha. The state was administered as part of the Bundelkhand agency of Central India. It lay in the extreme north-west of Bundelkhand, near Gwalior, and was surrounded on all sides by other princely states of Central India, except on the east where it bordered upon the United Provinces. It was second highest in the rank of all the Bundela states after Orchha, with a 15-gun salute, and its Maharajas bore the hereditary title of Second of the Princes of Bundelkhand. The state suffered from famine in 1896-97, and again to a lesser extent in 1899-1900. After India's independence in 1947, the Maharaja of Datia acceded unto the dominion of India; it later merged with the union of India. Datia, together with the rest of the Bundelkhand agency, became part of the new state of Vindhya Pradesh in 1950. In 1956, Vindhya

Pradesh state was merged with certain other areas to form the state of Madhya Pradesh within the Union of India.

Datia District

1.	Geographical area	295874 ha
2.	Forest	24697 ha
3.	Fallow land	14981 ha
4.	Barren land	8845 ha
5.	Net Sown area	203935
6.	Double crop area	66658
7.	Total sown area	271994
8.	Irrigation area	173368

Area under horticulture crops

Total	14847.00
Medicinal	1840.00
Flower	125.00
Spices	1974.00
Vegetables	9018.00
Fruit	1890.00

Rain status

	Datia	Sewra	Bhandare	Total (Av.)
Rain distribution	784 MM	734 MM	876 MM	798 MM

JIT visit to District Datia

S. N	Name of the Beneficiary	Address	Стор	Year of Plantation	Area in Hect.	Nos planted	Nos. survived as on date of inspection	% age of surviv al	Remarks
1.	Lakhan Giri Mahanta	Dugarai, Datia	Sprinkler (Pipe- 52, Nuzzle-14 and Guava (L 49)	2011-12	4.0 + 0.5	510	510	100	 Subsidy amount Rs. 32506 given. Guava was good with proper staking and intercropped with Arhar and garlic. Beneficiary demanded pack house.
2.	Sri Kamlesh Rai S/o Gokkul Prasad	Ram Nagar, Datia	Guava (A. Safeda) H.D.	2011-12	0.5	520	520	100	 Subsidy Rs. 9416 given to farmer by cheque. Chilli is grown as inter crop with full of viral infection. Advised to use shed net / poly tunnel to grow seedlings.
3.	Kamlesh Prasad	Ram Nagar, Datia	Drip under Guava	2011-12	0.5				 Subsidy amount Rs. 36946 was given to farmer. Drip is under use. Intercrop of vegetables has been taken.
4.	Atar Singh / Ram Sewak	Unao Datia	Pack house	2011-12		-	-	-	 Subsidy Rs. 1.5 lakh released Being utilized for grading of fruits / vegetables.
5.	Jan	Hamirpur	Pack house,	2011-12	(50 MT)	-	-	-	• Subsidy amount Rs. 1.5

	Mohammaad / Shahid Mohammand	Unao Road Datia	Onion storage (RKVY)						lakh given for pack house and half subsidy Rs. 80,000 given for onion storage under RKVY.
6.	Smt. Nafeasha W/o Shahid Mohm.	Hamirpur Unao Road, Datia	Poly house (1000 Sqm)	2011-12					 Half subsidy amount Rs. 935000 / given The structure is not completed yet.
7.	Kamal Kishore S/o Babulal Sharma Smt. Uma W/o Kamal Kishore	Hamirpur Unao Road, Datia	Guava (A. Safeda)	2011-12 2012-13	1.00 0.5	1120 510	-	80 100	 Rs. 18833 paid as subsidy but subsidy for 2012-13 is yet to be paid. Plants are growing well but needs taking and desuckering.
8.	Smt. Kasturi Devi W/o Radhey Shyam Gupta	Govind Pur, Dat ia	Rose (Gladiator)	2011-12	1.00	2180	2180	100	 Subsidy amount Rs. 34885 given. Rose plants are coming up well.
9.	Smt. Kasturi Devi W/o Radhey Shyam Gupta	Govind Pur, Dat ia	Drip (1.2 x 0.6)	2011-12	2.00	-	-	-	 Subsidy amount Rs. 136636/ on dated 12-12-11 given. Drip is working smoothly.
10.	Smt. Kasturi Devi W/o Radhey Shyam Gupta	Govind Pur, Dat ia	Guava (H.D.), G 47 & A. Safeda	2011-12	1.00	1120	1120	100	 Subsidy amount Rs. 18833 given to farmer on 19.1.2012. Onion crop is taken as inter crop. Demonstrated the training and canopy management and soft

									wood grafting techniques.
11.	Smt. Kasturi Devi W/o Radhey Shyam Gupta	Govind Pur, Dat ia	Naturally ventilated poly house (11000 Sq. m)	2011-12	1000 Sqm	-	-	-	 Subsidy amount Rs. 467500/- given to farmer by cheque. Farmer is advised to take, off season vegetables and flower in the poly house instead of taking winter vegetable in this season.
12.	Smt. Kasturi Devi W/o Radhey Shyam Gupta	Govind Pur, Dat ia	Small model vermi compost unit (RKVY) Tractor, Rotavator (Lime, Guava, Aonla, Guava, Aonla, Mango and ornamental crops)	2011-12	210	-	-	-	 Subsidy amount Rs. 3.125 lakh given to farmer for nursery. Mother plants are coming up well. Grower also takes vermi wash and being used in vegetables / fruit production.

District Datia

Activity visited

- 1. Area Expansion programme of guava, rose
- 2. Drip and sprinkler under NMMI for vegetables and spices.
- 3. Pack house (RKVY)
- 4. Onion Storage (RKVY)
- 5. Model Nursery (Small) Private

Observation

- 1. Pruning and training in guava is not followed.
- 2. Nursery owners need exposure to other developed Institute outside State.
- 3. In onion storage, good quality and timely procured onion should be stored. Onion exposed to sun during summer should be taken for storage.
- 4. Vermi compost unit owned by Kasturi Devi is producing vermin wash, being utilized regularly in fruits / vegetables crops. Such practice need to be replicated in other places.
- 5. NHM log is not displayed.
- 6. In poly house winter vegetable should not be taken during winter. It may be used for off season or high value vegetables to get maximum return.

GWALIOR DISTRICT

About Gwalior

Gwalior City is a District in Madhya Pradesh State near Âgra. The new section of the city called Lashkar. Lashkar is few miles South from the old city. It is the site of factories producing cotton, yarn, paint, ceramics, chemicals, and leather products. The nucleus of Gwalior is a citadel crowning an isolated rock about 91 m (300 ft) high, 3.2 km (2 mi) long, and 823 m (2700 ft) wide. The rock is said to have been a strong hold for more than Ten Centuries and Old city is located in the Eastern base of the rock. The old city is covered with white sandstone Mosque, Palaces, rock temples and statues of archaeological and architectural interest. The Jiwaji University was built in Gwalior in the year 1964. Gwalior City was the Capital of the princely State of Gwalior until 1948 and the summer Capital of Madhya Bharat State from 1948 to 1956. When Madhya Bharat became part of Madhya Pradesh, it becomes separate District.

Gwalior's history is traced back to a legend in 8th century AD when a chief tain known as Suraj Sen was struck by a deadly disease and cured by a hermit-saint Gwalipa. As a gratitude for that incidence, he founded this city by his name. The new city of Gwalior became existence over the centuries. The cradle of great dynasties ruled the city Gwalior. With different Dynasty, the city gained a new dimension from the warrior kings, poets, musicians, and saints who contributed to making it renowned throughout the country. The city is also the setting for the memorials of freedom fighters such as Tatya Tope and the indomitable Rani of Jhansi. Today the old settings stand side by side with the trappings of modernity.

Provisional Census Figures 2011							
	Female						
Total	2030543	1090647	939896				
Rural	757803	409778	348025				
Urban	1272740	680869	591871				

Total Area Details						
Total Area	5214.00 sq.kms.					
Forest Area	1091.79 sq kms					
Net sown area	2601.42 sq.kms					
No. of Households	209.12 thousands					
Net irrigated area	911.93 sq.kms					

Gwalior District

Geographical area	456449 ha
Forest	109513 ha
Fallow land	42488 ha
Baren land	10067 ha
Gross irrigation area	107874
Total irrigated	117938
Agricultural land	234000
Horticultural land	9948
Area under fruits	576
Area under vegetables	6895
Area under spices	2024
Area under flower	216
Area under medicinal and aromatic plant	137

JIT visit to District Gwalior

S. N	Name of the Benefi-ciary	Address	Стор	Year of Plantat- ion	Area in Hect.	Nos planted	Nos. survived as on date of inspection	% age of survival	Remarks
1.	Smt. Suman Singh Shikarwar Arunoday Model Nursery (private)	Bharuwa Ghaigaon, Gwalior	Guava, Citrus, Aonla, Mango, Papaya, Ornamental and forest plants.	20111-12	3.0	-	-	-	 Subsidy amount Rs. 12.49 lakh given to farmer. Produce 2.5 lakh plants per year and sold to different agencies. Good fruiting of Aonla.
2.	Rambabu S/o Chironilal	Shekra Jagir, Gwalior	Poly house (Fan/Pad System)	2011-12	1000 Sqm.	-	-	-	• Subsidy amount Rs. 3.50 lakh paid but poly house is yet to be completed.
3.	Naresh Kumar S/o Bajrang Prasad	Shekra Jagir, Gwalior	Poly house (Fan / Pad system)	2011-12	1000 Sqm	-	-	-	• Total subsidy amount Rs. 7.32 lakh released and construction is completed.
4.	Smt. Radha S/o Ram Bambo	Shekra Jagir, Gwalior	Poly house (Fan & Pad)	2011-12	1000 Sqm	-	-	-	• Subsidy amount Rs. 7.32 lakh paid work completed.
5.	Rati Ram S/o Bhawani	Jangipur, Dabra, Gwalior	Guava + Drip (6x6m)	2011-12	0.04	110	110	100	 Desuckering needed. Canopy management needed.

									• Subsidy amount Rs. 11623 paid
									for drip.
6.	Amrit Lal S/o	Belauwa, Dabra	Guava + Drip	2011-12	0.5				• Subsidy amount
	Pran Singh		(6x6m)						Rs. 14467
									released.
									• Good growth of
									Guava plants.
									• Intercropping of vegetables is
									done.
7.	Pran Singh S/o	Belauwa, Dabra,	Aonla + Drip	2008-09	0.5	78	70	90	• Good growth of
	Rati Ram	Gwalior	(6x6m)						Aonla plantation.
									• Drip subsidy of
									Rs. 14467.00
8.	Basudev S/ o	Belauwa, Dabra,	Pan Baneja	2011-12	500COM				given to farmers.
8.	Basudev S/ o Sarman Lal	Gwalior	Pan Baneja Shadenet	2011-12	500SQM	-	-	-	• Pan grew well under shed net as
	Chaurasia	Gwanor	(RKVY)						seen by the team
									and feed back
									taken from Pan
									growers. It can
									take care of frost
9.	Umesh S/o Anant	Belauwa, Dabra,	Pan Shednet Strip	2011-12	500SQM				and hails etc.Total subsidy of
) J.	Lal	Gwalior	for 500 Sqm.	2011-12	3003QWI	-	-	-	Rs. 20500/- was
			101 000 24111						given for shed net
									under RKVY.
									• Growth of pan
					1				was good.
10.	Amrit Lal S/o	Belauwa, Dabra,	Guava	2011-12	0	140	130	90	• Guava is under
	Pran Singh	Gwalior							drip, good growth except side
									suckers to be
	1		1	l	I			l	55511515 60 00

									removed.
11.	Bajrang Prasad	Dabra	Citrus (Neebu)	2010-11	0.5	140	140	100	 Good growth but water suckers are dominating to be removed and spray of COC for canker disease to be done.
12.	Papendra S/o Chandan Singh	Amrol Biterwar, Gwalior	Guava + Drip	2011-12	0.4	110	110	100	 Subsidy amount paid to farmer. Plants are in good condition Inter crop of vegetable is taken.
13.	Narain Singh S/o Galli Ram Bhagat	Prem Pur Bheterwar, Gwalior	Guava + Drip	2010-11 2011-12	280	-	95		 Subsidy for drip is yet to be paid. Inter cropping of pea is taken. Growths of plants are good
14.	Smt. Kanti Devi	Kheria Keshaer Murar, Bhind, Road	Onion Storage (RKVY)	2011-12	50 MT	1.60 lakh	-		 Subsidy released (1.60 lakh) Construction work is completed.
15.	Satyendra Singh / S/o Sumer Singh	Amraul Bhiterwar, Gwalior	Onion Storage (RKVY)	2011-12	50 MT	1.60 lakh			-do-
16.	Hatam Singh S/o Amar Singh	Bhanwar, Bheeterwar, Gwalior	Pack house (Vegetables + Guava)	2011-12	0.4	140		100	 Subsidy amount Rs. 1.50 lakh released. Work completed. Winter vegetables

									are taken as inter crop in guava.
17.	Smt. Babita W/o Sanjay	Shekra Jagir, Gwalior	Poly house (pad & Fan)	2011-12	1000 sq. m.	-	-	-	 Subsidy Rs. 7.32 lakh given to grower. Work completed and ready for use
18.	Ved Prakash Gupta, Prakash Cold Storage	Ganga Malpur, Purani, Chuwani, Gwalior	Cold Storage (500 MT)	2011-12	5000 MT Cap	500 MT Cap		-	 1st installment of subsidy Rs. 18.75 lakh has been released and 2nd installment is due. Storage is utilized properly.
19.	Smt, Saroj Agrawal, Smt. Renu Agrawal, Smt. Rekha Agrawal	Agrawal Fruit / Vegetable Cold Storage, AB Road, Ghati Gaon, Bhind Road, Gwalior	Cold Storage (600 MT)	2010-11	6000 (MT)	-	-	-	 1ST installment of subsidy Rs. 23.75 lakh given. Second installment is due, to be given soon. Cold storage is being utilized.
20.	Sri Suresh Agrawal Arjun Singh Rawatq	Amrol, Bheeterwar, Gwalior	Guava (H.D.) 3X3 M	2012-13	0.4	250	-	-	 Suckers to be removed Subsidy amount rot given. Garlic grown as inter crop. Grower needed lemon for planting under AEP.
21.	Nawal Singh, Ranvir Singh s/o	Mouch Bhetrwar	Guava (6x6m) with drip	2011-12	0.4	110	-	-	• Distance of guava may be reduced

	Prahlad Singh							by planting another line.
22.	Janved, badri, Prabhu, Mansingh, Feran Singh, Jagdish (6)	farmers), Himmatgarh,	Drip + Lime (mass plantation of citrus	2011-12	0.40 (each farmer)	110 plants each farmer	105	 Subsidy for drip and plants given to all farmers. Entire plantation is healthy, advised to spray COC to control canker and removed water shoots, training was organized to train all farmers. Vegetable is also taken in the orchard crops.

Activity visited

- 1. Area expansion programme of guava, mango, Aonla, citrus, spices.
- 2. Pan cultivation under shade net.
- 3. Sprinkler and drip in vegetable / fruit (NMMI).
- 4. Onion Storage (RKVY)
- 5. Pack house
- 6. Cold Storage
- 7. Poly house (under NHM)

Observations

- 1. Plantation of Aonla / mango should not be done with single cultivar. We may have minimum 2-03 cvs as a pollinizer to have good fruiting.
- 2. Insect problem in Aonla/mango observed and advised time by control measures.
- 3. Pan grew well under shade net as observed by the team and also feed back taken from the farmers and concluded that shed net is better option to grow Plan instead of thatched bareza.
- 4. Advised to take vermi wash wherever vermi compost unit exists.
- 5. Citrus plantation done in a big way but we must provide technical know how to beneficiaries to have maximum production.
- Second installment of newly constructed cold storages may be released. It was not
 done due to some administrative reasons. Both cold storages are functioning well
 when team visited.
- 7. Bacterial disease has been noticed in citrus growing cluster. The entire cluster needs to be sprayed regularly as suggested during visits.
- 8. Pruning and training demonstrated in citrus should be practiced regularly to avoid water suckers etc.
- 9. NHM logo was not displayed.

GENERAL OBSERVATIONS

- In most places, it has been noticed that chilli crop is badly damaged by virus /
 wilt, advised to use shed net / tubular structure for raising disease free
 seedlings to avoid vector responsible for spread of viral disease. For control
 of wilt, crop rotation is advised to be practiced.
- 2. Guava planting material supplied to farmers at Ladwari, Baldevgarh are of inferior quality, such plants needs to be replaced with certified material.
- 3. Team noticed that there was no concept of canopy management and tree architecture in new orchards, advised to practice it from initial stage.
- 4. There is demand of Aonla processing unit in Sawantpur area (Tikamgarh), SHM may look into the matter and see the feasibility of establishing small unit under PPP mode.
- 5. Team observed that Poly houses were being used for cultivating winter vegetables during winter. SHM has been advised to train farmers to take off season vegetables under poly house to get maximum return.
- 6. Team noticed that subsidy for juice extraction unit was yet to be released to the beneficiary in Chhattarpur district.
- 7. Team observed that traditional vegetable cultivation was still in practice at Bhiyatal (Chhatarpur) area. Scientific inputs and proper training need to be given to farmers by horticulture department through local KVK.
- 8. Team also observed that there was no cluster approach in districts except Chhattarpur (Pan). Cluster needs to be developed for fruits / vegetables so that farmers get maximum return of their produce.
- 9. Cold storages established near Gwalior were yet to be given subsidy by SHM.
- 10. Pan cultivation was now practiced under shade net financed under RKVY. There was great demand of this component for cultivation of pan.
- 11. In Jabalpur, newly developed orchards of mango and sweet oranges had a problem of die back, greening and viral. The officials, who look after the orchards had very poor knowledge of horticulture, need to be given proper training on cultural operation of fruits crops.

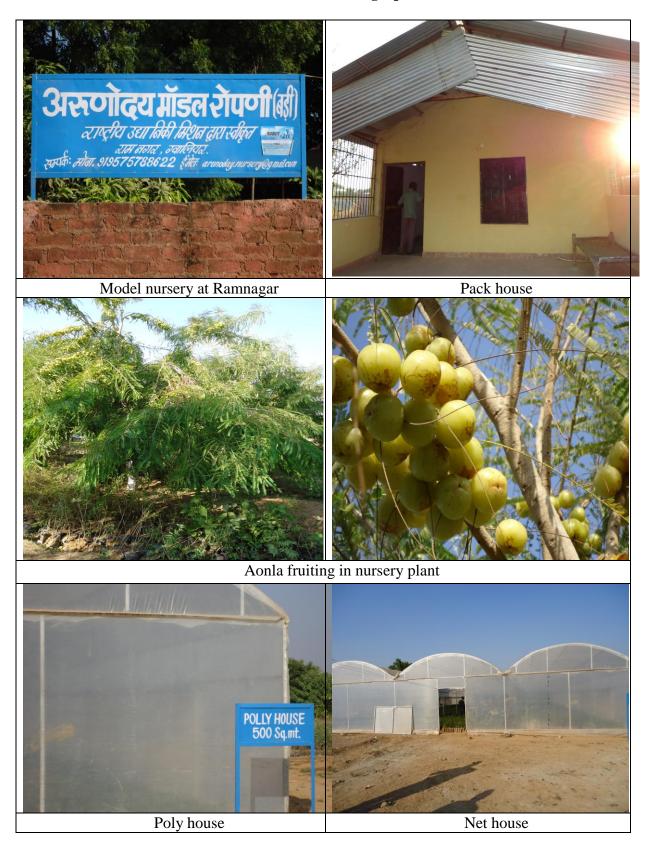
- 12. Rose cultivation around Jabalpur was spreading fast. There is a need to control diseases like Tar spot and powdery mildew.
- 13. Team also felt that programme implementing staff was not only meager but also untrained to implement the NHM programmes in districts.
- 14. JIT observed that the expenditure till December, 2012 is Rs 10.54 crore out of releases of funds amounting of Rs. 22.25 crore which is only 47.37%. Therefore it is suggested that efforts should be made to enhance the incurring of expenditure.
- 15. In most of places, it has been observed that Aonla was being cultivated with single cultivar which is basically in correct. At least, 2-3 cultivars are required to be planted in the orchard as pollinizer to get maximum fruit set.
- 16. Pruning, de suckering and training had not been practiced in citrus grown near Gwalior. Regular package of practices and spray schedule for control of citrus canker need to be followed.
- 17. JIT felt dissatisfaction with the supply of seedling planting material of guava to beneficiaries. Team advised them to replace it with certified material.
- 18. During visit, board displaying NHM logo and activities undertaken were not found at most of beneficiaries' sites.



Vegetable (Tomato) drip at Panna











Propagation of planting material



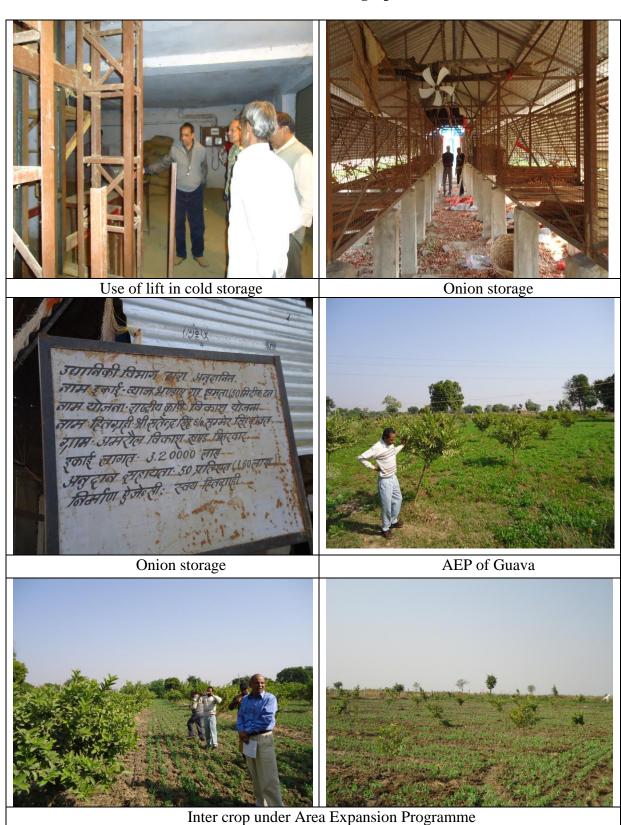


Cold Storage at Gwalior





Cold storage (inner view)





AEP of citrus

Area Expansion Programme of citrus

