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# NATIONAL FOOD SECURITY MISSION

# REPORT OF THE NATIONAL LEVEL MONITORING TEAM (NLMT)

# **CHHATTISGARH**



GOVERNMENT OF INDIA MINISTRY OF AGRICULTURE (DAC) DIRECTORATE OF PULSES DEVELOPMENT BHOPAL (M.P.)

(KHARIF, 2015)

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# **ABBREVIATIONS**

- 1. AICRP-All India Coordinated Research Project
- 2. AES Agro-Eco System
- 3. APC Agriculture Production Commissioner
- 4. ATMA-Agriculture Technology Management Agency
- 5. BGREI- Bringing Green Revolution to Eastern India
- 6. BLB-Bacterial Leaf Blight
- 7. CSBD-Cropping System Based Demonstration
- 8. CDDs- Crop Development Directorates
- 9. CIAE-Central Institute of Agriculture Engineering
- 10. CIPHET-Central Institute of Post-Harvest Engineering and Technology
- 11. CHCs-Custom Hiring Centre
- 12. CSBD-Centre for Small Business Development
- 13. DFSMEC-District Food Security Mission Executive Committee
- 14. DSR- Direct Seeded Rice
- 15. FIGs- Farmers Interest Group
- 16. FPOs-Farmer-Producer Organization
- 17. GOI- Government of India
- 18. GPS- Global Positioning System
- 19. HYV-High Yielding Varieties
- 20. ICAR-Indian Council of Agricultural Research
- 21. IGKVV- Indira Gandhi Krishi Vishva Vidyalaya
- 22. IPM-Integrated Pest Management
- 23. KVK- Krishi Vigyan Kendra
- 24. MIDH-Mission for Integrated Development of Horticulture
- 25. MULLaRP- Mungbean Urdbean Lentil Lathrus Rajmash & Pea
- 26. NRM- Natural Resource Management
- 27. NMAET National Mission on Agricultural Extension & Technology
- 28. NFSM-National Food Security Mission
- 29. NFSMEC-National Food Security Mission Executive Committee
- 30. NGOs-Non Government Organization
- 31. NLMT-National Level Monitoring Team
- 32. NMOOP National Mission on Oilseed & Oilpalm
- 33. NMSA- National Mission for Sustainable Agriculture
- 34. PACS-Primary Agriculture Cooperative Societies

- 35. PRIs- Panchayati Rajya Institutions
- 36. RCT-Resource Conservation Technology
- 37. RAEOs- Rural Agriculture Extension Officer
- 38. SAMETI- State Agriculture Management And Extension Training Institute
- 39. SAUs-State Agriculture University
- 40. SHGs- Self Help Group
- 41. SDA- State Department of Agriculture
- 42. SFSMEC-State Food Security Mission Executive Committee
- 43. SRI-System of Rice Intensification
- 44. SSC- State Seed Corporation
- 45. TA Technical Assistant
- 46. TOT-Transfer of Technology

## **PREFACE**

Government of India, Department of Agriculture, Co-operation and Farmers Welfare, Ministry of Agriculture and Farmers Welfare has constituted apex team/National Monitoring Team (NLMT) to monitoring the implementation/execution of National Food Security Mission (NFSM-Rice, Wheat, Pulses, Coarse Cereals and Commercial Crops) activities in respect of the NFSM states. The NLMT-Chhattisgarh comprises Director, Govt. of India, Directorate of Pulses Development, as Convener/Team Leader, Principal/Sr. Scientists from ICAR/SAUs and State NFSM Nodal officer visited the state from 08-11 September, 2015.

The Terms of Reference (TOR) of this Central Team include: i) The Director, Crop Development Directorate (CDD)/Directorate of Pulses Development, Bhopal MP to act as NLMT Convenor /Team leader; ii) undertaking field visis in the state at least once in each crop season; iii) to conduct in-depth inspection of the executed activities in consonance to Mission's mandate and Approved Action Plan and to study the "Local Initiatives"; iv) to study quantitative, qualitative achievements and impact of the delivery mechanism through supplementation of visuals and video films; v) To prepare analytical report on observations with suggestions/recommendations for further necessary corrections at the level of stake-holders for better implementation of the Mission and desired outcome.

The composition of this Central Monitoring Team was broad based and included the experts from research organizations/SAUs. The Team interacted with the farmers individually in the field and also by organising *kisan gosthies*. The Wrap-up meeting with district Collectors, the Chairman of the District Food Security Mission Executive Committee (DFSMEC) could not be lead due to communication gap between state HQ/DDA and district administration. However, at state level the wrap-up meeting was convened with Director SAMETI. The report has tried to capture the impact of NFSM during triennium ending 2014-15 (XII Plan) in comparison to XI five year Plan.

I am thankful to ACS/APC, Govt. of Chhattisgarh and Director (Agri), the VCs of IGKVV, Raipur; JNKVV, Jabalpur and RVSKVV, Gwalior, for nominating experts/SMSs to represent the NLMT and to members of the team for their valuable inputs in summarizing the report outcome. I also acknowledge the leadership of my Assistant Director Dr. A. K. Shivhare in leading the team and Dr. A. L. Waghmare, Shri Sarju Pallewar, SI, Smt Ashwini Bhowre, TA and Shri Sateesh Dwiivedi, TA (NFSM) of the Directorate of Pulses Development, Bhopal in bringing out the report publication.

Bhopal (M.P.) 6<sup>th</sup> November, 2015 (A. K.Tiwari) Director

# CHHATTISHGARH NATIONAL LEVEL MONITORING TEAM REPORT (KHARIF - 2015) TO REVIEW THE IMPLEMENTATION OF NATIONAL FOOD SECURITY MISSION (RICE, PULSESAND COARSE CEREALS) FROM 8-11<sup>th</sup> SEPTEMBER, 2015

#### 1. NFSM: BACKGROUND

- 1.1 The National Food Security Mission, a Centrally Sponsored Scheme (CSS) on Crop/commodity development programmes for Rice, Wheat and Pulses was launched during the 11<sup>th</sup> five year plan (2007-08 to 2011-12) consequent upon the recommendation of 53<sup>rd</sup> Meeting of National Development Council dated May 29<sup>th</sup>, 2007. The Mission envisaged to achieve additional foodgrain production of 20 million tonnes from the base year 2006-07 consisting of Rice, Wheat & Pulses by 10, 8 and 2 million tonnes respectively by the end of Eleventh Plan (2011-12). During 2011-12, the all India foodgrains production was 259.29 million tonnes, a hike of 42 MT additional production from the base year 2006-07. An Additional increase of 11, 19 and 2.89 million tonnes under rice, wheat and pulses respectively was recorded. Increase in per hectare yield of pulses was 0.87 kg (612 kg to 699 kg/ha) while increase in wheat and rice was 4.69 kg (3177 kg/ha) and 2.72 kg/ha (2393 kg).
- 1.2 **During 12<sup>th</sup> Plan**, (2012-13 to 2016-17) the NFSM, with the other four crop development Missions, viz. NMAET, NMSA, NMOOP & MIDH has been continued. The pattern of Central assistance till 2014-2015 was 100 per cent.

From 2014-15 the NFSM is implemented with five components viz. i) NFSM- Rice, ii) NFSM-Wheat, iii) NFSM-Pulses, iv) NFSM-Coarse Cereals (millets) and v) NFSM-Commercial Crops (Jute, Cotton, Sugarcane).

- 1.2.1 A target of an additional production of 25 million tonnes of food grains i.e. from 259.29 MT to 284.29 over the base year of XI Plan i.e. 2011-12 comprising Rice-10 million tonnes, Wheat- 8 million tonnes, Pulses- 4 million tonnes & Coarse Cereals-3 million tonnes, is targeted to be achieved at the end of 12<sup>th</sup> Plan (2016-17).
- 1.2.2 From 2015-16, the revamped NFSM under State Plan Scheme-Krishi Unnati Yojana (State Plan) with interim sharing pattern of 50:50 between Centre and State is under implementation in 28 states. A Central Share of Rs 1300 Crores has been approved during 2015-16. The existing CSS have also been rationalized and 03 schemes viz. (i) Krishi Unnati Yojana (ii) National Crop Insurance Programme (NCIP) and (iii) Pradhan Mantri Krishi Sinchai Yojana (PMKSY) are operational since 2015-16. NFSM-2015-16 is a part of Krishi Unnati Yojana (State Plan).
- 1.3 The basic strategy of the Mission is to focus onlow productivity high potential districts, promote and extend improved technology package, implementation of cropping system

centric interventions on technological package, agro-climatic zone wise planning and cluster approach demonstrations, Further 30% of total demonstrations would be Cropping System Based Demonstration (CSBD) with technical backstopping of ICAR/State Agricultural Universities (SAUs)/ on Rice, Wheat, Pulses; distribution of certified HYV seeds/Hybrid seeds, Resource Conservation Technology (RCT) tools, irrigation machineries/MIS, trainings and undertaking local initiatives to the tune of 5% of total budgetary allocation to improve productivity.

1.3.1 Special emphasis has also to be given by targeting reclamation of problematic soils, water logging areas and mitigation of adverse effect of climate change for high productivity areas, value chain integration (FPOs), assistance of Custom Hiring Centre (CHCs). 30% of budgetary allocation has to be earmarked for women beneficiaries.

# 2. Area of operation:2015-16

Commodities	All	Chattishgarh	
	No. of States	No. of District	(No. of districts)
NFSM-Pulse	28	642	27
NFSM-Rice (all districts of NE state with	25	199	13
>5000 ha area)			
NFSM- Coarse cereals (Maize, Small	26	182	09
Millet,Pearl Millet etc.)			
(districts covering 70% of state area)			

# 3. Monitoring Mechanism / Mission Structure

Structure	Formation	Composition	Frequency of Meeting
National Level	i) General Council (GC)	Minister of Agriculture - Chairman Mission Director – Member Secretary (NFSM)	Twice a year
	ii) NFSM- Executive Committee (NFSMEC)	Secretary (A & C)- Chairman Secretary (DARE)&DG (ICAR) Secretary (MoWR) Secretary (Deptt. of Fertilizer) Secretary (MoPR) Secretary (MoTA) Secretary (Deptt. of Social Justice & Empowerment) Secretary (MoW&CD) Adviser (Agriculture), Planning Commission Agriculture Commissioner Five Experts - Member Mission Director -Member Secretary	Quarterly
	iii) National Level	Director CDDs- Co-ordinator	Once in a crop
	Monitoring Team (NLMT)	Scientist SAUs/JDA –Member	season

Structure	Formation	Composition	Frequency of Meeting
State	State Food Security	Chief Secretary – Chairman	6 Monthly
Level	Mission Executive	State Mission Director - Member	
	Committee (SFSMEC)	Secretary	
District	District Food Security	District Collector/CEO-Chairman	Quarterly
Level	Mission Executive	Jila Parishad	
	Committee (DFSMEC)	DDA/DAO- Member Secretary	

# 4. NLMT Composition

Organization	Names and Designation		
Government of India	Dr. A.K. Shivhare		
(Department of Agri., Cooperation& Farmers Welfare)	Assistant Director -		
Ministry of Agriculture and Farmers Welfare	(Convenor/Team leader)		
Directorate of Pulses Development			
Vindhyachal Bhavan, Bhopal, (M.P.).			
SG College of Agriculture & Research Station, Jagdalpur	Dr. Aswani Thakur		
IGKVV, Raipur, (Chhatisgarh).	Scientist - (Member)		
Department of Genetics & Plant Breeding, College of	Dr. Sandeep Bhandarkar		
Agriculture, IGKVV, Raipur (Chhattisgarh)	Scientist - (Member)		
	. ,		
Joint Director Agriculture, Bilaspur Govt. of CG., Raipur.	Shri S. C. Padam-Member		

# 5. State Profile: CG

No. of districts	27
Agro-climatic zones (Nos.)	03
Geographical area (lakh ha)	138
Forest cover (lakh ha)	63.53
Net Cultivable area (lakh ha)	46.77
Cropping Intensity (%)	137
Net Area under Irrigation (lakh ha)	14.15
Double Cropped Area (lakh ha)	9.87
Gross Cropped Area (lakh ha)	64.26
Average rainfall (mm)	1373
Farm families (lakh)	37.36
Small & marginal farmers (%)	80

# 6. **SAMPLE DISTRICT PROFILE**: Raigarh, Jashpur and Surguja (Ambikapur).

# Area lakh ha

Particulars	Raigarh	Jashpur	Ambikapur
Geographical Area	5.03	6.46	3.75
Forest Area	0.93	2.30	1.15
Cultivable Area	2.98	2.84	1.72
Gross Cropped Area	4.32	3.19	2.14
Net Sown Area	2.69	2.84	1.72
Doubled Crop Area	1.34	0.54	0.39
Area under Kharif Crops	2.98	2.65	1.67
Area under Rabi crops	1.34	0.54	0.44
Total Irrigated Area	3.03	0.27	0.26
Cropping Intensity	145	112	125
Average Rainfall	1272.50 mm	1039.00 mm	1099.10 mm
Farm families (lakh)	1.89	1.26	1.33
Small & marginal farmers (%)	70	62	78
Major crops			
	Paddy, Maize,	Paddy, Maize, Tur,	Paddy, Maize,
	Tur, Moong, Urd,	Moong, Urd,	Tur, Moong, Urd,
Kharif	Kulthi, Ground	Kulthi, Ground	Kulthi, Ground
Kilaili	Nut, Sesamum &	Nut, Sesamum &	Nut, Sesamum
	Niger.	Niger.	Niger &
			Sugarcane.
	Wheat, Maize,	Wheat, Maize,	Wheat, Maize,
	Summer Paddy,	Summer Paddy,	Summer Paddy,
	Gram, Peas,	Gram, Peas, Lentil,	Gram, Peas,
	Lentil, Moong,	Moong, Urd,	Lentil, Moong,
	Urd, Kulthi,	Kulthi, Lathyrus,	Urd, Kulthi,
Rabi	Lathyrus,	Musturd, Linseed,	Lathyrus,
	Musturd, Linseed,	Sunflower,	Musturd, Linseed,
	Sunflower,	Sawflower, Ground	Sunflower,
	Sawflower,	Nut & Sugarcane.	Sawflower,
	Ground Nut &		Ground Nut &
	Sugarcane.		Sugarcane.

#### 7. MAJOR CROPS

#### 7.1 Crop Scenario: Plan analysis (XI-XII Plan)

(Area Lakh ha, Prod. Lakh tonnes, Yield kg/ha)

Crop	State	(20)	XI Plan	1 10)	(201	XII Plan*	17)	Increas	e/decrease	over XI
		. `	07-08 to 201		ì	2-13 to 2016-			plan (%)	
		A	P	Y	A	P	Y	A	P	Y
Kharif Cr	ops									
Paddy	CG	37.27	52.23	1402	34.12	63.52	1861	-8.45	21.62	32.74
	India	243.84	527.15	2162	435.81	1055.58	2 <b>422</b>	78.73	100.24	12.03
Sorghum	CG	0.05	0.06	1180	0.05	0.03	728	0.00	-50.00	-38.31
	India	30.65	33.38	1089	57.69	52.91	917	88.22	58.51	-15.79
Maize	CG	0.99	1.61	1618	1.13	2.22	1959	14.14	37.89	21.08
	India	68.36	149.29	2184	89.98	233.97	2600	31.63	56.72	19.05
Arhar	CG	0.55	0.27	497	0.52	0.32	623	-5.45	18.52	25.35
	India	37.89	26.64	703	38.14	29.92	784	0.66	12.31	11.52
Urd	CG	1.05	0.31	292	0.92	0.29	316	-12.38	-6.45	8.22
	India	22.94	10.81	471	24.05	12.98	540	4.84	20.07	14.65
Moong	CG	0.09	0.03	270	0.09	0.03	299	0.00	0.00	10.74
	India	26.41	10.49	397	21.10	8.63	409	-20.11	-17.73	3.02
Rabi Crop	os	•	•		•			•	•	•
Gram	CG	2.44	2.40	985	2.74	2.62	957	12.30	9.17	-2.84
	India	82.18	77.02	937	88.80	85.09	958	8.06	10.48	2.24
Lentil	CG	0.15	0.05	322	0.14	0.05	327	-6.67	0.00	1.55
	India	14.64	9.60	656	13.82	10.75	778	-5.60	11.98	18.60

(\*Average of Triennium ending 2012-13 to 2014-15)

The comparative analysis of XI<sup>th</sup> plan and TE 2014-15 of XII<sup>th</sup> plan reveal that the crop diversification has taken place under maize and gram crop with an increase in area at 14 % and 12% under maize and gram respectively. The crops replaced through this diversification are Paddy (>8%) Arhar (>5%) and Urd (> 12%) of concern here. However, diversion of paddy to other crop is a significant noticeable. Reduction in area under Arhar and Urd is a major cause of concern. The production trend for all crops has shown an increasing trend except sorghum and urd. The NFSM has paid dividends in the productivity of Paddy which was 32.7% higher during the TE (2011-12 to 2014-15) 12<sup>th</sup> Plan over its previous five year Plan. As regards the per hectare yield, quantum jump has been recorded under arhar, maize and moong and urd at>25, 21, 10 and 8% respectively. The state's gram productivity during the TE 2014-15 of XII Plan that of all India yield levels has been negative and here the state has to be more serious.

#### 7.2 Current Situation

7.2.1. The State received the first monsoon rains in the last week of June, but thereafter, there was a prolonged dry spell throughout the month of July. In the first half of August, the State received sporadic rains, which was followed by wide spread rains during the second half resulting in delayed sowing, transplantation of overage seedling, delayed transplantation and weeding operations.

- 7.2.2. This year a total rainfall of 866.6 mm has been registered till the vist11<sup>th</sup> September 2015 as against the average annual rainfall of 1040.6 mm for the corresponding period last year. Thus there has been a short fall of 17% against the preceding year.
- 7.2.3. Chhattisgarh has mainly 5 river basins and the storage in these reservoirs is the prime source of canal irrigation in this State. But due to scanty rainfall it has resulted in reduction in the level of storage in these reservoirs. Even the live capacity of river basin is regularly decreasing hence limited water has been released so far. The position of reservoirs in the State is shown in the table below:

S. No.	Name of the River Basin	Total Capacity (M. cum.)	Filled up (till date)	Position as on this date last year	% of live capacity against FRL
1	Mahanadi Project	1685.87	614.956	1577.782	36.47
2	Mahanadi Godavari Basin	1938.09	772.52	1807.76	39.86
3	Hasdeo Bango Basin	2955.95	2077.57	2789.00	70.28
4	Hasdeo Basin	648.904	436.365	579.52	67.24
5	Ganga Basin	380.799	227.63	310.52	59.77
	Total	7609.613	4129.041	7064.582	54.26

7.2.4. Overall position of water availability in the State's reservoirs for the current season is 4129.041M.Cum. as against last season's 7064.582 M. Cum. whereas the total capacity of the reservoirs is 7609.613 M. Cum.

# 7.3 Crop Coverage: (Kharif -2015 Rabi targets- 2015-16)

S.No	Crop	Area (lal	kh ha)	Production (Lakh tonnes)		Yie	ld (Kg/ha)
		Target	Achi.*	Target	Achi.*	Target	Achi.*
	Kharif						
1.	Paddy	36.45	37.18	76.54	66.03	2100	1783
3.	Maize	2.25	2.19	4.23	4.11	1880	1880
4.	Arhar	1.42	1.27	0.98	0.88	690	690
5.	Urd	1.64	1.55	0.76	0.72	465	465
6.	Moong	0.33	0.28	0.14	0.11	410	410
7.	Soybean	1.58	1.41	1.99	1.77	1260	1260
9.	Total Kharif	48.20	48.01	86.35	75.22	1791	1567
	Rabi						
10.	Wheat	1.60	-	2.26	-	1410	-
11.	Gram	3.60	-	4.10	-	1140	-
12.	Lathyrus	3.50	-	2.33	-	665	-
13.	Peas	0.50	-	0.29	-	575	-

14.	Rapeseed/	1.50	-	0.90	-	600	-
	Mustard						
15.	Sugarcane	0.35	1	0.97	-	2775	-
	Total Rabi	17.00	-	17.79	-	1047	-

<sup>\*- 1</sup>st Estimates, SDA, CG

### 8. Financial Progress

# 8.1 Allocation & Expenditure: (2014-15)

Rs. In Lakh

S. No.	Name of Crop/	Unspent	Provision	Total	Available	Expenditure	Unutilised
	Scheme	Balance as on 1.04.14		release	Amount		
1	Paddy	1743.71	5149.65	2574.83	4318.54	2811.37	1507.17
2	Pulses	1639.58	4252.61	2126.31	3765.89	2161.97	1603.98
3	Coarse Cereals		186.00	93.00	93.00	51.85	41.15
	Total	3383.29	9588.26	4701.14	8177.43	5025.19	3152.24

Details of physical and financial progress is at Annexure –I.

# 8.2 Allocation & Expenditure Kharif (2015-16)

#### Rs. In Lakh

S. No.	Name of Crop/	Unspent Balance as on	Allocation/ Sanction		Release		Available Amount	Expenditure (upto Sept.)
110.	Scheme	1.04.15	Sunction	CS	SS	Total	Amount	(upto Septi)
1	Paddy	1507.17	7224.04	1806.01	1806.01	3612.02	5119.19	799.70
2	Pulses	1603.98	4274.217	1068.55	1068.55	2137.10	3741.02	322.88
3.	Coarse	41.15	194.00	48.50	48.50	97.00	138.15	9.23
	Cereals	41.13						
	Total	3152.24	11692.257	2923.06	2923.06	5846.12	8998.36	1131.81

Details of physical and financial progress is at Annexure -II

#### 9. Details of field visit/ Activities

The National Level Monitoring Team (NLMT) visited the districts of Raigarh, Jashpur and Ambikapur(Surguja) from 8<sup>th</sup> September to 11<sup>th</sup> September, 2015. During the course of monitoring, the team extensively carried out field visit in the concerned districts and interacted with the District Agriculture Officers, officials responsible for implementation of the programme/components and with beneficiaries. Team also had Wrap-up meeting with Director NFSM, Govt. of Chhattisgarh. The details of activities/components visited by the team are at Annexure-III.

S.N.	District	Block	Village/Institute	Activities
1.	Raigarh	Pussuor	Kunjedabari	<ol> <li>Cluster Demo. NFSM- Rice LineTransplanting.</li> <li>Meeting with farmers of NFSM beneficiaries.</li> </ol>
				<u> </u>
			Ranbhatha	Cluster Demo. NFSM- Rice SRI
			Tilagi	Rotavator NFSM-2013-14
		Lailunga	Bagudega	1. Cluster Demo. NFSM- Rice Line Transplanting.
				2.Farmers meeting-FPO-Kelo Group –Organic rice
				production.

S.N.	District	Block	Village/Institute	Activities
2.	Jashpur	Patthalgaon	Mudapura	Cluster Demo. NFSM- Rice -Line Transplanting
				(Hybrid)
			Chandagarh	Cluster Demo. NFSM- Rice -Line Transplanting
		Pharsabahar	Singibahar	Cluster Demo. NFSM- Pulses –Urd-PU-31
3.	Ambikapur	Lundra	Dandgaon	Cluster Demo. BGREI- Rice Line Transplanting
	(Surguja)		Khalpodi	1. Cluster Demo. BGREI- Rice Line transplanting.
				2.NFSM –Coarse Cereals-Maize-Hybrid-Bioseeds-
				Prabal MO-1.
				3.Meeting with farmers of Women Self Help Group
			Urdara	Cluster Demo. BGREI- Rice Line transplanting.
		Batoli	Basajhal	1.Cluster Demo. BGREI- Rice Line transplanting
				(Organic rice).
				2.Meeting with farmers of Women Self Help Group
			Boda	Cluster Demo. NFSM- Pulses –Urd-PU-31.
			Narbadapara	FLD NFSM-Rice Hybrid KRH-4 conducted by
				KVK, Ambikapur.
		Udaipur	Jajga	Cluster Demo. BGREI- Rice Line transplanting.

# 10.Prescribed input cafeteria for cluster demonstration is at Annex-A and list of improved varieties is at Annex-B.

#### 11. Observations

- 11.1. The DFSMECs are duly constituted in all three visited districts but no meetings were conducted. Almost all visited districts opt the system of involvement of Panchayati Raj system.for the selection of beneficiaries.
- 11.2. Paddy varieties Samleswari, Indira Barani Dhan-1, Chandrahasni introduced in intercropping with Arhar in upland rainfed condition.
- 11.3. Paddy varieties PKV-HMT, IGKV-12444, IGKVR-2, IGKVR-1, NDR-8002, Karma Mashuri introduced in Cropping System Based Demonstration (CSBD).
- 11.4. There is ample scope to establish pulses in rice fallow lands. Uniform/Single types of nutrients have been distributed (eg. ZnSo4, FeSo4 & Sulphur) whereas the varied ecosituations such as low land or upland always vary in their available soil nutrients status. which shows that it's a blanket recommendation without Soil Test Report.
- 11.5. In situ Soil Moisture Conservation technology has been adopted through BBF.
- 11.6. Farmers received inputs but lack awareness about the technology, seed rate, fertilizer doses and variety under demonstration in Jashpur and Ambikapur district.
- 11.7. The farmers generally do not prefer tur as sole crop but preferring to grow as intercrop. Local initiative in visited districts are Power tiller, Reaper and Construction of godowns etc. The

- achievement under local initiative however, is nil in visited districts. The poor progress is also observed at state level under local initiatives.
- 11.8. The Direct Seeded Rice (DSR) is observed with severe problems of common weed wild rice (*Sadwa*) mixture, which matures prior to ripening/ harvesting of main rice resultantly its seeds shatters in the field and germinated again in next kharif.
- 11.9. Manual Transplanting of rice is becoming very expensive, equipments like paddy transplanter etc. need to be popularised.
- 11.10. The participation in cluster demonstration by NGO, KVK etc. are negligible or nil. The team recommends the participatory approach in organization of demonstrations.
- 11.11. Team observed unavailability of early variety seeds, also the varieties within 10 years of notification in Paddy, Pulse and Coarse Cereals under NFSM.
- 11.12. Other initiatives in visited districts like Value chain integration of small producers, assistance of custom hiring centres and marketing support for pulses and millets is nil in visited districts and disappointing state level.
- 11.13. Display boards were found installed properly at each cluster demonstration with all necessary information like date of sowing, area, variety, inputs, number of farmers etc mentioned.
- 11.14. Team interacted the women farmer *Smt.Neela Devi Ratre Village-Ranbhatha Block-Pussore*, a paddy cluster beneficiary who is too much interested in new technology. Such farmers may be prepared as extension agents.
- 11.15. *Kelo group* started organic farming three year back as informed that farmers are adopting new agro-techniques (organic farming) for achieving higher yield of paddy but accreditation of organic produce and its marketing has become a bottle neck.
- 11.16. About 6930 women are benefitted through various training during 2015-16 resulting in coverage of 1340.22 ha fallow land for cultivation by women farmers in Ambikapur district.
- 11.17. Seed production programme of paddycrops taken by 586 Women Self Help Group in 1805.4 ha during 2015-16 in Ambikapur district. Women groups are working very well, so it can be promoted in all districts.
- 11.18. During 2015-16, a total of 1866 soil samples were sent for analysis by DDA, Jashpur, results to these are still awaited. Thus the demonstrations have been conducted without soil test based fertilizer recommendation.
- 11.19. *Interacted with beneficiaries of FLD-Rice* Shri Baidnath Karav, Amrit Karav, and others Village- Narbadapara, Block- Ambikapur. They informed that only 5 kg seed was provided to them, other inputs were arranged by them at their level. The field day was was also not organized till date.
- 11.20. *Visited another cluster of FLD-Rice* area in 10 acre under Hybrid Rice KRH-4 sown in line transplanting. Crop condition was good. Blast occurrence was noticed. Average Tillers 10-15

- per plant. With similar status of input, even the demonstration display board was not put at the site.
- 11.21. Shri Rajesh Chauksey, SMS (Soil Science) and Mrs. Rajani Dharmendra Agashe SMS (Extension), KVK, Ambikapur informed that the FLD not conducted as per guideline due to release not received till today.

#### 12 SUGGESTION/RECOMMENDATIONS

- 12.1More attention need to be given on inclusion of new varieties under seed chain, organization of seed production programme, formulation of seed rolling plan for next five years.
- 12.2 Recently released varieties/pre-released varieties should be given preference under seed distribution, demonstration etc.
- 12.3 Team realized the benefits of FPO and suggested to popularize it in a big way.
- 12.4 To increase the production of the pulse and cereal crops, irrigation facilities should be increased through Farm Ponds, Sprinkler sets and drip irrigation systems. Promotion of mechanised farming such as ridge and furrow, BBF etc.
- 12.5 In rural area, construction of godown for storage, value addition facilities like cleaning/grading. Dal mills, processing plants etc. need special promotion to fetch good prices, economic benefits & increasing the living standard.
- 12.6 The Planning of demonstration should be done well in advance. The package of practices for new varieties should be provided to field functionaries with wide publicity.
- 12.7 The nutrient/micronutrients etc. should be soil test based, recommended time of irrigation, proper layout, sowing of test as well as check variety at the same time, need to be given more attention during the organization of demonstrations.
- 12.8The staff involved under National Food Security Mission needs further improvement in terms of their skill upgradation in laying out demonstrations although few demonstrations were found more than satisfactory/in good shape
- 12.9 Team observed enthusiasm among staff and farmers during the visit. However, it requires intensification.
- 12.10 The team feels that strict and frequent monitoring at state/district level is essential for ensuring the flow of fund & interactions so as to increase effective TOT to targeted beneficiary.
- 12.11 The vacant posts of District Consultant, Technical Assistants provided under scheme needs to be filled up immediately.
- 12.12 The scheme has time bound targeted objectives, so more attention need to be given at Head Quarter as well as district level on implementation of the scheme to fulfil the same.

- The DFSMEC meetings should be held regularly and the DC who is also the Chairman of the NFSM DFSMEC, should have a wrap-up meeting with the NLMT.
- 12.13 Promotion of local scented land races (Dubraj sel.1, Badshabhog sel 1, Tarunbhog sel-1 released by SVRC in 2015, should be emphasised in organic farming. And also promotion of organic poha by local bold seeded rice variety (Chepti gurmatiya & Barhasal).
- 12.14 SHGs especially women's can be encouraged for organic farming. Team realised that the involvement of women in agriculture increase self confidence of women's and decrease wine consumption in visited village of Ambikapur as benefits of schemes given to women's farmers on priority basis.
- 12.15 There is need to promote Oilseed crop like ground nut in light soil in Ambikapur and Jashpur district. Simlarly Potato seed production programme can be taken at *Main Pat* area of Ambikapur district.
- 12.16 Only recommended varieties / Hybrids should be used in demonstrations. Nutrient rich cereals and pulses viz., high Zn and Fe varieties developed recently, should be incorporated under such demonstrations.
- 12.17 Under SRI demonstrations all recommended practices should be followed carefully. Similarly, according to land situation and infestation of insect/pest resistance varieties, drought tolerant variety of **Red Rice**., India's 1<sup>st</sup> high zinc variety developed by IGKV, Raipur, etc. should be incorporated under NFSM demonstrations.
- 12.18 Seed is the major and basic input of agriculture as supply of quality seed not only increases the yield but also checks the disease and pest infestation etc. Each varietal demonstration should be registered in seed production programme.
- 12.19 Pure seed can also be produced in self pollinated crops in NFSM/other demonstrations.
- 12.20 There is need to introduce inter crop with pulses-pigeon pea to increase production of pulses to provide a cushion for risk bearing capacity against the crop loss due to natural calamities at one side and to enhancing the soil productivity on the other.
- 12.21 Farmer's perception of use of more fertilizer to get the bumper crop yield ,need to be changed by advocating /demonstrating balanced fertilizer on the basis of soil testing report and demonstrating use of the green manure crop i.e. Dhaincha (*Susbeniaaculata* and *rostata*) for sustained the soil life.
- 12.22 Organic farming may one of the best alternatives for visited tribal districts like, Ambikapur, Raigarh and Jashpur where fertilizer consumption is observed to be very low.
- 12.23 *Cereal-pulse cropping system* in alternate year, to gain soil fertility and sustainable production system, is highly recommended. The state and DFSMEC is advised to critically monitor the NRM issues and suggest cropping systems suited to the eco-system of the region on sustainable basis.

- 12.24 On Coarse Cereals /Millets, there is need of identification of niche areas, bridging yield gaps through availability of quality seeds of promising location specific varieties both grain and fodder varieties/hybrids; streamlining seed production ; listing the best management practices etc.;
- 12.25 Labour is the main problem in visited areas, need attention of the CIAE/ CIPHET (ICAR) for development of suitable machines to help and reducing the cost of cultivation, output and value addition to fetch better prices.
- 12.26 Introduction of suitable high yielding varieties, introduction of soil and water conservation techniques, crop rotation, crop diversity, organic farming and introduction of mechanized farming is the urgent need for sustainable agriculture. Wild rice eradication, soil amendment, integrated pest management for insect, diseases & weeds—are the production constraints lacking in the demonstration, it should be considered.
- 12.27 Farmers are showing interest in adopting novel techniques in Agriculture. Mode of input availability and present system of govt. subsidy should be simplified, quality assurance of inputs and their availability should be provided in the form of demonstration kit. GPS data of beneficiaries plot may be given for all the field demonstration programmes in their respective official documents for its authenticity and verification.
- 12.28 Potential increase in area under irrigation by way of intervention of efficient water application tools (sprinkler, pipes, pumpsets) need to be compiled in order to evaluate the impact of these interventions. The subsidy benefits under the interventions of efficient water application tools, including 3 HP electric pump, is not given to farmers and need to be extended to all categories of farmers on pro-rata basis.
- 12.29 Single box seed drills should be replaced by double box seed drill (Seed-cum-fertilizer drill). *Mixing of seed and fertilizer together in one box is common practice and not recommended as it may damage to seeds due to hygroscopic nature of fertilizers.*
- 12.30 For wider publicity and long lasting impact of demonstrated activities (cluster/implements, variety) display of flexi boards both at village panchayat buildings and demonstration site, is highly recommended.
- 12.31 Herbicides (weedicides) are well known among farmers but with limited knowledge, the Team therefore recommends to organize a good number of demonstrations on available herbicides use (other than regular) as continuous use of same herbicides create tolerance in weeds and hence replacement after every 2-3 years, should be the strategy under state NFSM plan.
- 12.32 The earlier popular *Rice-lathyrus cropping system*is now diverting to *rice-gram system*. Lathyus is non-resilient to climate, the rains, therefore, vitiate the standing crop whereas gram is comparatively more reliable to the present climatic scenario subject to management practices to control *Helicoverpa armigera and recommended* dose of fertilizers to harness (15-20 g/ha) yield potential in rice- gram sequence.

#### 12 Wrap-up meeting

The Team also had a wrap-up meeting with Shri. S. R. Verma, Director NFSM at Bilaspur on 11.09.2015.

- 13.1. To establish and sustain the SRI cultivation and pigeon- pea- bund cultivation in the state, the SAU may be advised to devise the technology package modified package of SRI suited to C.G.
- State in view of varied Agro-eco-situations of Chhattisgarh.
- 13.2. The parallel district level / block level extension functionaries like ATMA, DDA, KVK need to conduct participatory mode of Demonstration. Reputed NGOs may also be given the participation in TOT activities under NFSM.
- 13.3. The future need of Resource conservation technologies need Mechanism, CHC, is the need of the hour for CG state.
- 13.4.Ensuring seed rolling plan and availability of quality seeds of wilt resistant cultivars of pulses, inclusion of short duration varieties of paddy and Mid to early variety of pigeonpea to increase cropping intensity, seed treatment of pulses with *Trichoderma*, mandatory follow-up of IPM in place of sole dependency on pesticides, is strongly recommended.
- 13.5.To harness the potential of Coarse Cereals /Millets, there is need of identification of niche areas, bridging yield gaps through availability of quality seeds of promising location specific varieties/hybrids (both grain and fodder); streamlining seed production ;listing the best management practices etc.;
- 13.6.In rice, the System of Rice Cultivation under SRI need suitable agronomic modification for varied Agro-eco-situations (AES) of Chhattisgarh. The contiguous fields with high outer bunds, flooded with water have a system of drainage continuously from one field to other involving whole Rice area. The Technique of SRI need suitable adjustment for Chhattisgarh conditions. It was observed that under SRI spacing was little wider (25 X 25cm) which need to be according to the varieties with high tillers.
- 13.7.Research attempts needed for improved package of practices, width of bunds, spacing, seed rate, IPM etc to sustain the bunding system of pigeonpea cultivation.
- 13.8.Introduction of suitable high yielding varieties, introduction of soil and water conservation techniques, crop rotation, crop diversity, organic farming and mechanized farming should be considered for sustainable agriculture.
- 13.9. The SAUs may be advised to "standardize the cropping systems" round the year, based on varietal selection, of rice-fieldpea-wheat-moong/urd cropping to accommodate the sowing time and management of crop duration based on the available agro-resources.

- 13.10. SRI cultivation technique of paddy, with varied AES in all the 03 Agro-climatic Zones of the state, need suitable modifications in consultation with the IGKVV, Raipur (CG) SAUs. The input cafeteria prescribed for cluster demonstrations under NFSM should specific and may also differ from one Agro-eco-situation (AES) to other.
- 13.11. To sustain the bund cultivation of Pigeonpea, the conduct of cluster demonstration need a perfect standardization with the help of SAUs/KVKs for each districts. The package of practices, standard width/ size of bunds, seed rate, method of sowing and most suited time/sowing window need to be worked out. August sown pigeonpea crop encounter with moisture stress to adversely affect production.
- 13.12. To control prominent weed such as *Saccharum spontanem*, *Ageratum conzoidos*, *Pathenium hysterophorus*, *Eclipta alba*, *Blunia oxidenta*, *Ocimum sanctum*, *Commelina bengalensis*, *Cleome viscose*, pre-& post emergence weedicide should be demonstrated effectively.
- 13.13. In view of Farmers' intent to go for novel techniques in Agriculture, more aggressive extension transfer and IT enable technology transfer and information system is the demand of the time. GPS data of beneficiaries plot may be given for all the field demonstration programmes in their respective official documents for its authenticity and verification.
- 13.14. Economics of cost of cultivation both from the existing and latest technology should be worked out. Cost:Benefit ratio of rotavator, power tiller, paddy transplanter and other such high cost machineries should be regularly brought out by state Directorate of Engineering/IGKVV, Raipur. The documentation of best practices, with reduced input costs should be published under NFSM for further replication across the state/country to motivate the farmers.
- 13.15.GPS data of beneficiaries plot may be given for all the field demonstration programmes in their respective official documents for its authenticity and verification and the name of scheme and relevant description should be written over the implements.
- 13.16. The NFSM programme should be replicated in KVK & NGO for comparison. Involvement of Village Panchayat is useful in deciding the cluster demonstration site.
- 13.17. The organic growers in the state may be facilitated in terms of the accreditation, marketing and strengthening of the organic manures, vermin-compost preparation and skill up-gradation etc.
- 13.18. Single box seed drills should be replaced by double box seed drill (Seed-cum-fertilizer drill). *Mixing of seed and fertilizer together in one box is common practice and not recommended as it may damage to seeds due to hygroscopic nature of fertilizers.*
- 13.19. Under **local initiatives** Godown, Reaper & Power tiller have been distributed, processing, value addition, control of wild animal menace etc should also be thought of under this component.
- 13.20. Economics of SRI cultivation in Chhattigarh such as cost of cultivation, total production etc. should be studied at the end of demonstration to ensure sustainability of the system, as also to conclude its suitability for Chhattisgarh.

- 13.21. Under **local initiative** to promote value addition/processing by giving mini dal mills to SHG/FIG may be taken up to increase livelihood through enhanced processing activities with custom hiring component and uplift the socio-economic status of tribal farmer.
- 13.22. The state Mission's Director has suggested on inter-componential change flexibility at the level of 30% from the existing 20% so as to intervene on inter location specific requirements in a districts.
- 13.23. About 80% farmers in the state small & marginal and average land holding is below 0.4 ha. Criteria for subsidy may be reduced from 0.4 ha. to 0.2 ha. The team suggested diversified cropping and integrated farming system should be adopted in the visited districts as well as in the state so that risk minimizing in agriculture and more employment generate in this sector.
- 13.24. Soil testing kit permitted in programme where soil testing facility not available subject to complete authenticity, accuracy in results, economic viability and feasibility. As 150000 soil sample testing capacity is required and only testing capacity available 90000 in the state.
- 13.25. Subsidy limit amount permitted in place of subsidy limit Rs or 50% of the cost which is less.



Meeting with farmers in Village-Kunjedabri, Block-Pussuor, District-Raigarh



Display Board on paddy cluster demonstration in Village-Kunjedabri, Block-Pussuor, District-Raigarh



Team visited paddy cluster demonstration in Village-Kunjedabri, Block-Pussuor, District-Raigarh



Meeting with farmers in Village-Ranbhatha, Block-Pussuor, District-Raigarh



Team visited paddy cluster demonstration in Village-Ranbhatha, Block-Pussuor, District-Raigarh



Interaction with Rotavator beneficiary in Village-Tilagi, Block-Pussuor, District-Raigarh



Team visited urad cluster demonstration in Village-Singibahar, Block-Pharsabr, District-Jashpur



Team visited urad cluster demonstration in Village-Boda, Block-Batoli, District-Ambikapur



Team interacted with Women SHGs in Village-Khalpodi, Block-Lundra, District-Ambikapur



Team visited NFSM -Maize cluster demonstration in Village-Khalpodi, Block-Lundra, District-Ambikapur



Team interacted with Women SHGs in Village-Basajhal, Block-Batoli, District-Ambikapur



Team visited FLD-Paddy in Village-Narbadapaa, Block-Ambikapur, District-Ambikapur

# CAFETERIA OF INTERVENTIONS FOR CLUSTER DEMONSTRATIONS FOR 2015-16

A. Arhar (Improved varieties)

S.No.	Activity/Particular	Unit Cost	Cost Norms (Rs./ha)
1	Land Preparation	Rs. 1000/ha	1000
2	Line Sowing	Rs. 500/ha	500
3	Seed @ 20kg/ha) including seed treatment	Rs. 91.47/kg	1830
4	Fertilizer (N:P:K) (20:50:20)**	Urea-Rs. 284.30/bag or Rs. 5.686/kg SSP-Rs.348.06 /bag or Rs. 6.9612/kg MOP- Rs. 840.00/bag or Rs. 16.80/kg	To be purchased by farmers
5	Integrated Nutrient Management including ZnSO4,Sulphur, Borax, Sodium Molybdate, considering soil test value	-	1420
6	Weedicide/Weed Management	Rs. 1000/ha	1000
7	Integrated Pest Management including biopesticides, pesticides, pheromone traps etc.	Rs. 850/ha	850
8	Rhizobium + PSB culture	Rs. 100/ha	100
9	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contingency, Visit of Scientists/state officials	Rs. 800/ha	800
	Total		7500

# B. Intercropping of Arhar with Soybean (2 rows Arhar and 6 rows Soybean)

S.No.	Activity/Particular	Unit Cost	Cost Norms (Rs./ha)
1	Land Preparation	Rs. 1000/ha	1000
2	Line Sowing	Rs. 500/ha	500
3	Seed (Arhar @ 5 kg/ha) including seed treatment	Rs. 91.47/kg	458
4	Fertilizer (N:P:K) (20:50:20)**	Urea-Rs. 284.30/bag or Rs. 5.686/kg SSP-Rs.348.06 /bag or Rs. 6.9612/kg MOP- Rs. 840.00/bag or Rs. 16.80/kg	To be purchased by farmers
5	Integrated Nutrient Management including ZnSO4,Sulphur, Borax, Sodium Molybdate, considering soil test value	-	1467
6	Weedicide/Weed Management	Rs. 1000/ha	1000
7	Integrated Pest Management including biopesticides, pesticides, pheromone traps etc.	Rs. 850/ha	850
8	Rhizobium + PSB culture	Rs. 25/ha	25
9	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contingency, Visit of Scientists/state officials	Rs. 800/ha	800
	Total		6100

# C. Intercropping of Arhar with Urd (2 rows Arhar and 4 rows Urd)

S.No.	Activity/Particular	Unit Cost	Cost Norms (Rs./ha)
1	Land Preparation	Rs. 1000/ha	1000
2	Line Sowing	Rs. 500/ha	500
3	Seed (Arhar @ 7 kg/ha) (Urd @ 13 kg/ha) including seed treatment	Rs. 91.47/kg (Arhar) Rs. 94.20/kg (Urd)	1865
4	Fertilizer (N:P:K) (20:50:20)**	Urea-Rs. 284.30/bag or Rs. 5.686/kg SSP-Rs.348.06 /bag or Rs. 6.9612/kg MOP- Rs. 840.00/bag or Rs. 16.80/kg	To be purchased by farmers
5	Integrated Nutrient Management including ZnSO4,Sulphur, Borax, Sodium Molybdate, considering soil test value	-	1385
6	Weedicide/Weed Management	Rs. 1000/ha	1000
7	Integrated Pest Management including biopesticides, pesticides, pheromone traps etc.	Rs. 850/ha	850
8	Rhizobium + PSB culture	Rs. 100/ha	100
9	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contingency, Visit of Scientists/state officials	Rs. 800/ha	800
	Total		7500

# D. Intercropping of Arhar with Rice (Upland Unbunded Rice fields) (1 rows Arhar and 4 rows Rice)

S.No.	Activity/Particular	Unit Cost	Cost Norms (Rs./ha)
1	Land Preparation	Rs. 1000/ha	1000
2	Line Sowing	Rs. 500/ha	500
3	Seed (Arhar @ 4 kg/ha) (Urd @ 48 kg/ha) including seed treatment	Rs. 91.47/kg (Arhar) Rs. 20/kg (Urd)	1325
4	Fertilizer (N:P:K) (20:50:20)**	Urea-Rs. 284.30/bag or Rs. 5.686/kg SSP-Rs.348.06 /bag or Rs. 6.9612/kg MOP- Rs. 840.00/bag or Rs. 16.80/kg	To be purchased by farmers
5	Integrated Nutrient Management including ZnSO4,Sulphur, Borax, Sodium Molybdate, considering soil test value	-	2000
6	Weedicide/Weed Management	Rs. 1000/ha	1000
7	Integrated Pest Management including biopesticides, pesticides, pheromone traps etc.	Rs. 850/ha	850
8	Rhizobium + PSB culture	Rs.25/ha	25
9	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contingency, Visit of Scientists/state officials	Rs. 800/ha	800
	Total		7500

# **E.Cultivation of Arhar on Rice Bunds**

S.No.	Activity/Particular	Maximum rate of assistance (Rs.) for one hectare paddy bunds	Maximum rate of assistance per hectare bund area(10 ha paddy fields (Rs.)
1	Cleaning and preparation of bunds and seed sowing	150	1500
2	Seed (@ 2 kg/ha-Rs. 91.47/kg) including seed treatment	182.94	1829.4
3	Fertilizer (N:P:K) (20:50:20)**	Urea-Rs. 284.30/bag or Rs. 5.686/kg SSP-Rs.348.06 /bag or Rs. 6.9612/kg MOP- Rs. 840.00/bag or Rs. 16.80/kg	To be purchased by farmers
4	Integrated Nutrient Management including bio-fertilizer	117.06	1170.6
5	Rhizobium + PSB culture	10	100
6	Weed Management/Weedicide	80	800
7	Integrated Pest Management including bio-pesticides, pesticides, pheromone traps etc.	130	1300
8	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contingency, Visit of Scientists/state officials	80	800
	Total	750	7500

# F. ArharDemonstration on Ridge Furrow v/s Farmers Practices

S.No.	Activity/Particular	Unit Cost	Cost Norms (Rs./ha)
1	Land Preparation	Rs. 1000/ha	1000
2	Line Sowing	Rs. 500/ha	500
3	Seed (Arhar @ 4 kg/ha) including seed treatment	Rs. 91.47/kg (Arhar)	1830
4	Fertilizer (N:P:K) (20:50:20)**	Urea-Rs. 284.30/bag	To be purchase by
		or Rs. 5.686/kg	farmers themselves
		SSP-Rs.348.06 /bag	
		or Rs. 6.9612/kg	
		MOP- Rs.	
		840.00/bag	
		or Rs. 16.80/kg	
5	Integrated Nutrient Management including	-	1420
	ZnSO4,Sulphur, Borax, Sodium Molybdate,		
	considering soil test value		
6	Weedicide/Weed Management	Rs. 1000/ha	1000
7	Integrated Pest Management including bio-	Rs. 850/ha	850
	pesticides, pesticides, pheromone traps etc.		
8	Rhizobium + PSB culture	Rs.100/ha	100
9	Demonstration Board, Training materials,	Rs. 800/ha	800
	Farmers Training, Field day, POL, vehicle hiring		
	and other contingency, Visit of Scientists/State		
	officials		
	Total		7500

# G. Urd (Upland Rainfed Condition)/ Improved Varieties v/s Local Varieties.

S.No.	Activity/Particular	Unit Cost	Cost Norms (Rs./ha)
1.	Land Preparation	Rs. 1000/ha	1000
2.	Line sowing	Rs. 500/ha	500
3.	Seed (@ 20kg/ha) including seed treatment	Rs. 94.20/kg	1984
4.	Fertilizer (N : P : K) (20 : 50 : 20)	Urea – Rs. 284.30/bag or Rs. 5.686/kg SSP – Rs. 348.06/bag or Rs. 6.9612/kg MOP– Rs. 840.00/bag or Rs. 16.80/kg	To be purchase by farmers themselves
5.	Integrated Nutrient Management including ZnSo4, Sulphur, Borex, Sodium Molybdate, considering soil test value.	-	1266
6.	Weedicide/ Weed Management	Rs. 1000/ha	1000
7.	Integrated Pest Management including bio-pesticides, pesticides, pheromone traps etc.	Rs. 850/ha	850
8.	Rhizobium + PSB culture	Rs. 100/ha	100
9.	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contingency, Visit of Scientists/state officials.	Rs. 800/ha	800
	Total		7500

# H. Pea (Rainfed - Semi – irrigated Condition) / Improved Varieties v/s Local Varieties.

S. No.	Activity/Particular	Unit Cost	Cost Norms (Rs./ha)
1.	Land Preparation	Rs. 1000/ha	1000
2.	Line sowing	Rs. 500/ha	500
3.	Seed (@100kg/ha) including seed	Rs. 42/kg	4200
	treatment		
4.	Fertilizer (N : P : K) (20 : 40 : 20)	Urea – Rs. 284.30/bag	To be purchase by farmers
		or Rs. 5.686/kg	themselves
		SSP – Rs. 348.06/bag	
		or Rs. 6.9612/kg	
		MOP– Rs. 840.00/bag	
		or Rs. 16.80/kg	
5.	Integrated Nutrient Management		940
	including ZnSo4, Sulphur, Borex, Sodium	-	
	Molybdate, considering soil test value.		
6.	Weedicide/ Weed Management	-	To be purchase by farmers
			themselves
7.	IPM including bio-pesticides, pesticides,	-	To be purchase by farmers
	pheromone traps etc.		themselves
8.	Rhizobium (3 Pkt) + PSB culture (2 Pkt)	Rhizobium – Rs. 10/150 g	60
		Pkt PSB – Rs. 12/250 g Pkt	
9.	Demonstration Board, Training materials,	Rs. 800/ha	800
	Farmers Training, Field day, POL, vehicle		
	hiring and other contingency, Visit of		
	Scientists/state officials.		
	Total		7500

# I. Chickpea/Gram (Rainfed - Semi – irrigated Condition) /Improved Varieties v/s Local Varieties.

S. N.	Activity/Particular	Unit Cost	Cost Norms (Rs./ha)
1.	Land Preparation	Rs. 1000/ha	1000
2.	Line sowing	Rs. 500/ha	500
3.	Seed (@ 75 kg/ha) including seed treatment	Rs. 42/kg	3150
4.	Fertilizer (N : P : K) (20 : 40 : 20)**	Urea – Rs. 284.30/bag or Rs. 5.686/kg SSP – Rs. 348.06/bag or Rs. 6.9612/kg MOP– Rs. 840.00/bagor Rs. 16.80/kg	To be purchase by farmers
5.	INM including ZnSo4, Sulphur, Borex, Sodium Molybdate, considering soil test value.	-	1140
6.	Weedicide/ Weed Management	-	To be borne by farmers
7.	IPM including bio-pesticides, pesticides, pheromone traps etc.	Rs.850/ha	850
8.	Rhizobium (3 Pkt) + PSB culture (2 Pkt)	Rhizobium – Rs. 10/150 g Pkt PSB – Rs. 12/250 g Pkt	60
9.	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contingency, Visit of Scientists/state officials.	Rs. 800/ha	800
	Total		7500

 $\textbf{J.} \underbrace{\textbf{Rice} - \textbf{Pea} \text{ (Rainfed - Semi-irrigated Condition)/ Demonstration on Cropping System.}$ 

S. No.	Activity/Particular	Activity/Particular Unit Cost N			
	•		Kharif (Rice)	Rabi (Rice)	
1.	Land Preparation	Rs. 1000/ha	1000	0	
2.	Sowing	Rs. 500/ha	500	500	
3.	Seed(Rice-@60kg/ha)- Line Sowing	Rs. 20/kg for Rice and	1200	4200	
	(Pea-@100kg/ha)-Line sowing inc. seed	Rs. 42/kg for Pea			
	treatment				
	Fertilizer (N : P : K)	Urea – Rs. 284.30/bag or Rs.			
4.	(Rice - 60 : 40 : 20)**	5.686/kg	To be purchase	e by farmers	
	(Pea - 20: 40: 20)**	SSP – Rs. 348.06/bag or Rs.	_		
		6.9612/kg			
		MOP– Rs. 840.00/bag or Rs.			
		16.80/kg			
5.	INM including use of bio-fertilizers	ZnSo4 @ 2 kg/ha – Rs.850	1850	0	
	during kharif	Lime @ qtl/ha – Rs.1000			
6.	Weed Management / Weedicide	-	700	500	
7.	IPM including biopesticides, pesticides,	-	600	590	
	pheromone traps etc.				
8.	Rhizobium + PSB culture	-	0	60	
9.	Demonstration Board, Training	Rs. 800/ha	800		
	materials, Farmers Training, Field day,				
	POL, vehicle hiring and other				
	contingency, Visit of Scientists/state				
	officials.				
	Total		6650	5850	

# K. Rice - Chikpea/Gram (Rainfed - Semi - irrigated Condition) /Demonstration on Cropping System.

S. No.	Activity/Particular	Unit Cost	Cost Norms (R	s./ha)
			Kharif (Rice)	Rabi (Rice)
1.	Land Preparation	Rs. 1000/ha	1000	0
2.	Sowing	Rs. 500/ha	500	500
3.	Seed(Rice-@60kg/ha)- Line Sowing (Gram-@75kg/ha)-Line sowing including seed treatment	Rs. 20/kg for Rice and Rs. 42/kg for Pea	1200	3150
4	Fertilizer (N : P : K) ( Rice - 60 : 40 : 20)** ( Pea – 20 : 40 : 20)**	Urea – Rs. 284.30/bag or Rs. 5.686/kg SSP – Rs. 348.06/bag or Rs. 6.9612/kg MOP– Rs. 840.00/bag or Rs. 16.80/kg	To be borne	by farmers
5.	Integrated Nutrient Management including use of bio-fertilizers during kharif	ZnSo4 @ 2 kg/ha – Rs.850 Lime @ qtl/ha – Rs.1000 #	1850	0
6.	Weed Management / Weedicide	-	100	750
7.	Integrated Pest Management including biopesticides, pesticides, pheromone traps etc.	-	800	890
8.	Rhizobium + PSB culture	-	0	60
9.	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contingency, Visit of Scientists/state officials.	Rs. 800/ha	800	0
	Total		6650	5850

# L. Demonstration on Intercropping of Groundnut with Arhar (Upland Rainfed Condition) (5 rows Groundnut and 2 rows Arhar).

S.No.	Activity / Particular	Unit Cost	Cost Norms (Rs./ha)
1	Land Preparation	Rs. 1000/ha	1000
2	Line sowing	Rs. 500/ha	500
3	Seed (Groundnut @ 80 kg/ha) (Arhar @ 4 kg/ha) Incl. seed treatment	Rs. 80/kg for Groundnut and Rs. 80/kg for Arhar	4500
4	Fertilizer (N : P : K) (20:50:20)**	<b>Urea -</b> Rs. 284.30/bag or Rs.5.686 / kg <b>SSP -</b> Rs.348.06 /bag or Rs. 6.9612 /kg <b>MOP -</b> Rs.840.00 /bag or Rs.16.80 / kg	To be born by farmers themselves
5	INM incl. ZnSO4, Sulphur, Borax, Sodium Molybdate, considering soil test value.	-	Through
6	Weedicide / Weed Management	Rs. 1000/ha	convergence
7	IPM including biopesticides, pesticides, pheromone traps etc.	Rs. 850/ha	600
8	Rhizobium + PSB culture	Rs. 100/ha	100
9	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contingency, Visit of Scientists / state officials	Rs. 800/ha	800
_	Total		7500

# $\label{eq:main_eq} \textbf{M. Rice - LentilRainfed} - \textbf{Semi-irrigated Condition}$

S.No.	Activity / Particular	Unit Cost	Cost Norms (Rs./ha	
			Kharif (Rice)	Rabi (Lentil)
1	Land Preparation	Rs. 1000/ha	1000	1000
2	Sowing	Rs. 500/ha	500	0
3	Seed (Rice - @ 60 kg/ha) – Line Sowing (Lentil - @ 35 kg/ha) – Line Sowing Including seed treatment	Rs. 20/kg for Rice and Rs. 55/kg for Lentil	1200	2400
4	Fertilizer (N : P : K) (Rice - 60:40:20) ** (Lentil – 20:50:20) **	<b>Urea -</b> Rs. 284.30/bag or Rs.5.686 / kg <b>SSP -</b> Rs. 348.06/bag or Rs.6.9612 /kg <b>MOP -</b> Rs.840.00 /bag or Rs.16.80 / kg		by farmers selves
5	INM including use of biofertilizers during kharif	ZnSO4 @ 25 kg/ha - Rs. 850 Lime @ 2 qtl/ha - Rs.1000 #	1850	0
6	Weed Management / Weedicide	-	1000	1000
7	IPM including biopesticides, pesticides, pheromone etc.	-	800	850
8	Rhizobium + PSB Culture	-	0	100
9	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contigency, Visit of Scientists / state officials	Rs. 800/ha	800	0
	Total		7150	5350

# N. Soybean - Gram Rainfed - Semi-irrigated Condition

			Cost Norms	(Rs./ha)
S.No.	Activity / Particular	Unit Cost	Kharif (Soybean)	Rabi (Gram)
1	Land Preparation	Rs. 1000/ha	0	0
2	Sowing	Rs. 500/ha	500	500
3	Seed (soybean - @ 80 kg/ha) – (Gram - @ 75 kg/ha) – Line Sowing Including seed treatment	Rs. 65/kg for Rice and Rs. 42/kg for Gram	2600	3150
4	Fertilizer (N : P : K) (Soybean - 20:75:40) **  (Gram - 20:40:20) **	Urea - Rs. 284.30 / bag or Rs. 5.686 / kg SSP - Rs. 348.06 / bag or Rs. 6.9612 / kg MOP - Rs. 840.00 / bag or Rs. 16.80 / kg	To be born b	
5	Integrated Nutrient Management including use of biofertilizers during kharif	ZnSO4 @ 25 kg/ha - Rs. 850 Lime @ 2 qtl/ha - Rs.1000 #	1850	0
6	Weed Management / Weedicide	-	700	750
7	Integrated Pest Management including biopesticides, pesticides, pheromone etc.	-	700	890
8	Rhizobium + PSB Culture	-	0	60
9	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contigency, Visit of Scientists / state officials	Rs. 800/ha	800	0
	Total		7150	5350

# ${\bf O.Rice-Lentil Rainfed-Semi-irrigated\ Condition}$

S.No.	Activity / Particular	Unit Cost		s or Rate of ce (Rs./ha)
			Kharif (Rice)	Rabi Lentil
1	Land Preparation	Rs. 1000/ha	1000	1000
2	Sowing	Rs. 500/ha	500	0
3	Seed (Rice - @ 60 kg/ha) – Line Sowing (Lentil - @ 35 kg/ha) – Line Sowing Inc.seed treatment	Rs. 20/kg for Rice and Rs. 42/kg for Lentil	1200	2400
4	Fertilizer (N : P : K) (Rice - 60:40:20) ** (Lentil – 20:40:20) **	<b>Urea -</b> Rs.284.30/bag or Rs.5.686/ kg <b>SSP -</b> Rs.348.06/bag or Rs.6.9612/kg <b>MOP -</b> Rs.840.00 /bag or Rs.16.80/kg		by farmers selves
5	Integrated Nutrient Management including use of biofertilizers during kharif	ZnSO4 @ 25 kg/ha - Rs. 850 Lime @ 2 qtl/ha - Rs.1000 #	1850	0
6	Weed Management / Weedicide	-	1000	1000
7	Integrated Pest Management including biopesticides, pesticides, pheromone traps etc.	-	800	850
8	Rhizobium + PSB Culture	-	0	100
9	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contigency, Visit of Scientists / state officials	Rs. 800/ha	800	0
	Total		7150	5350

# ${\bf P. Soybean-Lentil Rainfed-Semi-irrigated\ Condition.}$

C N-	Activity / Doutionlan	Unit Cost	Cost Norms or Rate of Assisstance (Rs./ha)	
S.No.	Activity / Particular	Cint Cost	Kharif Soybean	Rabi Lentil
1	Land Preparation	Rs. 1000/ha	0	1000
2	Sowing	Rs. 500/ha	500	0
3	Seed (Soybean - @ 80 kg/ha) – Line Sowing (Lentil - @ 35 kg/ha) – Line Sowing Including seed treatment	Rs. 65/kg for Rice and Rs. 42/kg for Lentil	2600	2400
4	Fertilizer (N : P : K) (Soybean - 20:75:40) ** (Lentil - 20:40:20) **	Urea - Rs. 284.30 / bag or Rs. 5.686 / kg SSP - Rs. 348.06 / bag or Rs. 6.9612 / kg MOP - Rs. 840.00 / bag or Rs. 16.80 / kg	To be born themse	•
5	Integrated Nutrient Management including use of biofertilizers during kharif	ZnSO4 @ 25 kg/ha - Rs. 850 Lime @ 2 qtl/ha - Rs.1000 #	1850	0
6	Weed Management / Weedicide	-	700	1000
7	Integrated Pest Management including biopesticides, pesticides, pheromone traps etc.	-	700	850
8	Rhizobium + PSB Culture	-	0	100
9	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contigency, Visit of Scientists / state officials	Rs. 800/ha	800	0
	Total		7150	5350

## Q. Rice- UplandRainfed – Semi-irrigated Condition (Line sowing with HYVs).

S.No.	Activity / Particular	Unit Cost	Cost Norms or Rate of Assistance (Rs./ha)
1	Land Preparation	Rs. 1000/ha	1000
2	Line sowing	Rs. 500/ha	500
3	Seed (@ 60 kg/ha) Including seed treatment	Rs. 20/kg	1200
4	Fertilizer (N : P : K) (60:40:20)**	Urea - Rs. 284.30 / bag or Rs. 5.686 / kg SSP - Rs. 348.06 / bag or Rs. 6.9612 / kg MOP - Rs. 840.00 / bag or Rs. 16.80 / kg	To be born by farmers themselves
5	Integrated Nutrient Management (including need based soil ameliorants and biofertilizers).	ZnSo4 @ 25kg/ha-Rs. 850 Lime @ 2qtl/ha-Rs.1000	1850
6	Integrated Pest Management including biopesticides, pesticides, pheromone traps etc.	Rs.950/ha	950
7	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contingency, Visit of Scientists / state officials	Rs. 800/ha	800
	Total		7500

# R. Rice- Midland Assured Irrigated Condition (Line transplanting with HYVs).

S.No.	Activity / Particular	Unit Cost	Cost Norms or Rate of Assistance (Rs./ha)
1	Land Preparation (inc. Nursery preparation)	Rs. 1000/ha	1000
2	Line Transplanting		To be born by farmers themselves
3	Seed (@ 15 kg/ha) Including seed treatment	Rs. 250/kg	3750
4	Fertilizer (N : P : K) (100:60:40)** /FYM	<b>Urea -</b> Rs.284.30 /bag or Rs.5.686 /kg <b>SSP-</b> Rs.348.06/bag or Rs. 6.9612 /kg <b>MOP -</b> Rs.840.00 /bag or Rs.16.80 /kg	To be born by farmers themselves
5	INM (for Zinc & others Micronutrient considering soil test including biofertilizer)	-	1000
6	IPM including biopesticides, pesticides, pheromone traps etc.	950/ha	950
7	Weed Management (use of weeder)		To be born by farmers themselves
8	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contingency, Visit of Scientists / state officials	Rs. 800/ha	800
	Total		7500

# $S.\ Rice-\ Midland\ Assured\ Irrigated\ Condition\ (SRI\ with\ HYVs).$

S.No.	Activity / Particular	Unit Cost	Cost Norms or Rate of Assistance (Rs./ha)
1	Land Preparation (including Nursery preparation)	Rs. 1500/ha	1500
2	Transplanting for SRI	Rs. 1000/ha	900
3	Seed (@ 6 kg/ha) Including seed treatment	Rs. 20/kg	120
4	Fertilizer (N : P : K) (100:60:40)** /FYM	<b>Urea -</b> Rs. 284.30 / bag or Rs. 5.686 / kg <b>SSP -</b> Rs. 348.06 / bag or Rs. 6.9612 / kg <b>MOP -</b> Rs. 840.00 / bag or Rs. 16.80 / kg	To be born by farmers themselves
5	INM (including need based soil ameliorants and bio-fertilizers).	ZnSo4 @ 25kg/ha-Rs. 850 Lime @ 2qtl/ha-Rs.1000	1850
6	IPM including bio-pesticides, pesticides, pheromone traps etc.	Rs.950/ha	950
7	Weed Management (use of weeder)		1380
8	Demonstration Board, Training materials, Farmers Training, Field day, POL, vehicle hiring and other contingency, Visit of Scientists / state officials	Rs. 800/ha	800
	Total		7500

## List Of Improved Varieties (<10 Year Age) Recommended For Chhattisgarh

A. Pigeonpea (Arhar)

S.	Variety	Years	Developed by	Special Features	Notification No. &
No.		of			Date
		Release			
1	BDN 708	2004	A.R.S.	Moderate resistant to Wilt	S.O.122 (E) 6.2 2007
			Badnapur	and Sterility Mosaic	
			(Maharashtra)	Disease	
2	GTH-1	2004	SDAU, Gujrat	Resistant to Wilt, Sterility	S.O.1703 (E)05.10
	(Hybrid)		_	Mosaic Disease and Pod	2007
				Borer	
3	JKM 189	2006	RARS,	Drought tolerant,	No. 17-10/S.D.IV
			Khargone	Resistant and Moderate	06.08.2007
			(M.P.)	resistant to Wilt, S.M.D.	
				and Phytophthora Blight	
4	Vipul	2006	MPKV,	Resistant to Wilt, Tolerant	-
			Rahuri	to S.M.D. and less	
			(Maharashtra)	damage by Pod Borer	
5	TJT 501	2008	RARS,	Tolerant to Pod Borer and	S.O.2187 (E) 2.7 2009
			Khargon	Pod Fly	
			(M.P.)		
6	Rajeev	2011	IGKV, Raipur	Resistant to Wilt and	S.O. 632 (E)
	Lochan			SMD	25.03.2011
7	Phule T	2012	MPKV,	Moderate resistant to	-
	0012		Rahuri	Fusarium Wilt, SMD and	
			(Maharashtra)	tolerant to Pod Borer and	
				Pod Fly	
8	VLA-1	2007	ICISAT	135-140 days duration	S.O. 1703 (E) 2007
	(ICPL				
	88039)				
9	Pusa 991	2005	IARI	Tolerant to Wilt,	-
				Phytophthora Blight and	
				SMD	

## B. Urd

S.	Variety	Years of	Developed by	Special Features	Average grain yield
No.		Release			(qtls/ha)
1	PU - 31	2005	GBPUA&T,	Resistant to MYMV	10
			Pantnagar		
2	PU-40	2005	GBPUA&T,	Resistant to MYMV	10
			Pantnagar		
3	NUL 7	2009	Nirmal Seeds	Resistant to MYMV &	11
				Powdery Mildew	

## C. Field Pea

S. No.	Variety	Years of Release	Developed by	Special Features	Average grain yield	Notification No. & Date
1	IFPD 99- 13	2005	IIPR, Kanpur	Resistant to Powdery Mildew, Mid. Duration	(qtls/ha) 23	-
2	IFPD 1-10	2006	IIPR, Kanpur	Resistant to Powdery Mildew and Rust, Mid. Duration	22	
3	Paras	2006	IGKV, Raipur	Resistant to Powdery Mildew and Rust, Mid. Duration 103 days	15-20 (Irrigated) 10-15 (rainfed)	S.O. 599 (E) 25.04.2006

## D. Lentil

S. No.	Variety	Years of Release	Developed by	Special Features	Average grain yield (qtls/ha)	Notification No. & Date
1	IPL -316	2013	-	-	-	S.O. 312 (E)
						01.02.2013

E. Chickpea (Gram)

S. No.	Variety	Years of Release	Developed by	Special Features	Average grain yield (qtls/ha)	Notification No. & Date
1	JG- 63	2004	JNKVV, Jabalpur	-	-	-
2	JG-1	2006	JNKVV, Jabalpur	-	15	-
3	JGK-2	2006	JNKVV, Jabalpur	Kabuli, Bold Seed	-	-
4	Pusa Subhra	2006	IARI, New Delhi	-	18	S.O. 1572 (E)
5	JG -14	2009	JNKVV, Jabalpur	Mid. Bold, Wilt Resistant, Tolerant to heat	18	S.O. 449 (E)
6	JG-6	2009	JNKVV, Jabalpur	-	20	S.O. 449 (E)
7	ICPK 2002-29	2009	IIPR, Kanpur	-	21	S.O. 2187 (E)
8	ICPK 2004-29	2010	IIPR, Kanpur	-	20	S.O. 2137(E)
9	Phule G 0517	2010	MPKV, Rahuri (Maharashtra)	-	18	S.O. 2137(E)
10	JSC 55	2012	RAK, COA, Sehore (M.P.)	-	20	-
11	JSC 56	2012	RAK, COA, Sehore (M.P.)	-	19	-

## F. Rice

F. K	ice					
S. No.	Variety	Dura tion days	Yield (t/hac)	Suitability	Average grain yield (qtls/ha)	Notification No. & Date
1	Samleshwari	105- 112	3 - 3.5	Direct seeded in rainfed upland and rainfed bunded matasi,dorsa & kanhar planting with 20-25 days seedling	Resistant to Gall Midge biotype 1 &	` ′
2	Jaldubi	135- 140	4 - 4.5	Direct seeded in rainfed shallow & semi-deep water ecosystem of Surguja division	and Gall midge biotype 1	20.07.2007
3	Chandrahasini	120 - 125	4 – 4.5	Irrigated condition, rainfed bunded, dorsa and kanhar soils	Tolerant to Blast, Brown Spot & Sheath rot. Resistant to Gall Midge biotype 1	S.O. 1178 (E) 20.07.2007
4	Sampada	135	4.5–5.0	Rainfed low land, Irrigated	Tolerant to Gall Midge	S.O. 2458 (E) 16.10.2008
5	Karma Masuri	125- 130	4.5-5.0	Irrigated and Rainfed bunded, medium to heavy textured soils of Chhattisgarh	WBPH, Resistant to Gall midge biotype	S.O. 2458 (E) 16.10.2008
6	IGKV R-1244 (Maheshwari)	130- 135	5.0-5.5	Rainfed-heavy	Resistant to Brown Spot, Blast, Sheath rot, BPH and stem borer	
7	IGKV R-1 (Improved Mahamaya)	120- 125	5.0-5.7	Irrigated and Rainfed-heavy soils	to blast, brown spot and Gall midge, Tolerant to Neck Blast	7.2 2011
8	IGKV R-2	130- 135	5.0-5.5	Irrigated condition	Tolerant to sheath rot, sheath blight and BLB. Resistant to Gall midge	
9	Indira Barani Dhan-1	111- 115	4.0-4.5	Rainfed shallow lowlands, rainfed in dorsa and kanhar soils	Blast, BLB, Gall midge and stem borer	S.O. 456 (E) 16.3 2012
10	PKV-HMT	130- 135	4.0	Irrigated condition	Follow IPM	S.O. 2458 (E) 16.10.2008

#### 1. NFSM-Rice

Rs. In lakh

S.	Interventions	Unit	Tar	get	Achiev	ement	% Achi.
No.	THE VEHELOIS	Cint	Physical	Financial	Physical	Financial	(Fin.)
1.	Cluster demonstration by state depa	utmant a	, and the second				( )
1.	ICAR/SAUs/IRRI(one cluster of 100		i agriculture w	itii tile teciliid	ai backstoppi	iig oi	
	(a) Direct seeded Rice/Line	, 11u).	26174.00	1963.05	25125.00	1293.93	65.91
	Transplanting/ SRI (Target 1.5 % of	ha					
	area of district)						
	(b)Cluster demonstrations on hybrid		5000.00	375.00	5000.00	301.01	80.27
	rice (one cluster of 100 ha) target	ha					
	0.5% of area of district.		0.00	0.00	0.00	0.00	0.00
	(c)Cluster demonstrations on Swarna sub-1/ Sahbhagi dhan of	ha	0.00	0.00	0.00	0.00	0.00
	100 ha each.	11a					
	(d)Cropping System based		8016.00	1002.00	7016.00	624.09	62.28
	demonstration	ha					
	Sub Total 1 (a) to 1 (d)		39190.00	3340.05	37141.00	2219.03	208.47
2.	NEED BASED INPUTS						
	Seed distribution:						
	(a) Hybrid rice seed	Qtls	4754.40	237.72	1317.25	59.18	24.89
	(b) HYVs seeds	Qtls	26228.00	262.28	17687.00	45.18	17.23
	Sub Total 2 (a) to 2 (b)		30982.40	500.00	19004.25	104.36	42.12
3.	Plant and soil protection manageme		T	T	T		
	(a)Micronutrients and Biofertilizers	ha	20000.00	100.00	10375.62	49.12	49.12
	(b) Liming in acidic soils	ha	4000.00	40.00	964.00	8.96	22.40
	(c) Plant protection chemicals and bio-agents	ha	40000.00	200.00	16109.14	75.98	37.99
	(d) Weedicides	ha	15000.00	75.00	5932.68	26.83	35.77
	Sub Total 3 (a) to 3 (c)	114	79000.00	415.00	33381.44	160.89	145.28
4.	Resource conservation techniques/ t	ools					
	(a) Conoweeders	Nos.	4000.00	24.00	1680.00	9.87	41.13
	(b) Manual Sprayer	Nos.	4000.00	24.00	3510.00	19.13	79.71
	(c) Power Knap sack sprayers	Nos.	500.00	15.00	357.00	7.21	48.07
	(d) Multi crop planters	Nos.	25.00	3.75	0.00	0.00	0.00
	(e) Seed drills	Nos.	300.00	45.00	187.00	27.75	61.67
	(f) Power weeders	Nos.	80.00	12.00	2.00	0.45	3.75
	(g) Zero till multi crop planters	Nos.	75.00	11.25	0.00	0.00	0.00
	(h) Drum seeder	Nos.	300.00	4.50	0.00	0.00	0.00
	(i) Rotavators	Nos.	300.00	105.00	258.00	82.95	79.00
	(j) Laser land levelers  Sub Total 4 (a) to 4 (j)	Nos.	0.00 <b>9580.00</b>	0.00 <b>244.50</b>	0.00 <b>5994.00</b>	0.00 <b>147.36</b>	0.00 <b>313.32</b>
5.	(a) Incentive for pump sets	Nos.	800.00	80.00	395.00	32.18	40.23
٥.	(b) Pipe for carrying water from		1200000.00	300.00	100298.00	19.03	6.34
	source to the field	Mtr.	120000.00	500.00	100270.00	17.03	0.54
	Sub Total 5 (a) and (b)		1200800.00	380.00	100693.00	51.21	46.57
6.	Paddy thresher/multi-crop	NI	70.00	28.00	71.00	26.40	94.29
	thresher	Nos.					
7.	Self propelled Paddy transplanter	Nos.	20.00	15.00	9.00	0.75	5.00

S.No.	Turkoumontiono	T I 24	Tar	get	Achiev	vement	% Achi.
	Interventions	Unit	Physical	Financial	Physical	Financial	(Fin.)
8.	Cropping system based trainings (four sessions i.e. one before kharif, one each during kharif and rabi crops and one after rabi harvest.)	Nos.	150.00	21.00	115.00	13.30	63.33
	<b>Total of Need Based Inputs (2 to 8)</b>		1320602.40	1603.50	159267.69	504.27	709.91
9.							
	(a) Project management team and other miscellaneous expenses at district level		0.00	0.00	0.00	0.00	0.00
	(b) Project management team and other miscellaneous expenses at state level	No.	0.00	0.00	0.00	0.00	0.00
	Sub Total (9a to 9b)		0.00	0.00	0.00	0.00	0.00
10.	Local initiatives						
	(a) Construction of Godowns	Nos.	100.00	150.00	73.00	42.00	28.00
	(b) Distribution of Reaper	Nos.	51.00	25.50	47.00	21.47	84.20
	(c) Distribution of Power Tiller	Nos.	51.00	30.60	43.00	24.60	80.39
	Sub-Total 10 (a) to (c)		202.00	206.10	136.00	88.07	192.59
11.	Other Initiatives						
	(a) Demonstration by NGOs	ha	0.00	0.00	0.00	0.00	0.00
	(b) Assistance for custom hiring (For Land preparation and Line sowing)	ha	0.00	0.00	0.00	0.00	0.00
	(c) Specialized projects		0.00	0.00	0.00	0.00	0.00
	<b>Sub Total 11 (a) to 11(c)</b>		0.00	0.00	0.00	0.00	0.00
	Total Financial (1 to 11)		1359994.40	5149.65	196571	2811.37	54.59

## 2. NFSM- Coarse Cereals

S. No.	Interventions	Unit		posed by the ate		chieved by tate	% Achievement (Financial)
			Physical	Financial	Physical	Financial	, ,
1.	Demonstration on improved package:	ha	2880.00	144.00	2480.00	50.63	35.16
2.	Distribution of certified seeds:						
	(a) HYVs Seeds	Qtl	0.00	0.00	0.00	0.00	0.00
	(b) Hybrid Seeds		840.00	42.00	66.88	1.22	2.90
	Sub Total 2(a) and 2(b)		3720.00	186.00	2546.88.	51.85	27.88
3.	(a) Project management team at district level		0.00	0.00	0.00	0.00	0.00
	(b) Project management team at state level		0.00	0.00	0.00	0.00	0.00
	Sub Total 3(a) and 3(b)		0.00	0.00	0.00	0.00	0.00
4.	<b>Local initiatives</b> (Activity to be specified by the district)		0.00	0.00	0.00	Qtl	0.00
5.	Other Initiatives						
	(a)Demonstration by NGOs		0.00	0.00	0.00		0.00
	(b) Assistance for custom hiring		0.00	0.00	0.00		0.00
	(c) Marketing support		0.00	0.00	0.00		0.00
·	(d) Specialized projects		0.00	0.00	0.00		0.00

(e) Value chain integration	0.00	0.00	0.00	0.00	0.00
Sub-Total 5 (a) to 5 (e)	0.00	0.00	0.00	0.00	0.00
Total Financial (1 to 5)	3720.00	186.00	2546.88	51.85	27.88

#### 3. NFSM-Pulses

Rs in Lakh

S.No.	Interventions	Unit	Target		Achie	% Achi.	
D-11 10.	mer tending	- Cint	Physical	Financial	Physical	Financial	(Fin.)
1	Demonstration on improved techno	ologies:	Thysicar	1 manetar	1 Hysicai	1 munciui	( )
-	(a) Cluster Demonstrations (of 100 ha each)	ha	19285.00	1446.38	18888.30	909.31	62.87
	(b) Cropping system based demonstrations	ha	5152.00	619.00	4052.00	330.81	53.44
	Sub-Total 1 (a) and 1 (b)		24237.00	2065.38	22940.30	1240.12	60.04
	NEED BASED INPUTS						
2	Distribution of certified seeds:						
	HYVs Seeds	Qtl	23800.00	595.00	12509.71	298.30	50.13
3	Integrated Nutrient Management (	INM)					
	(a) Micro-nutrients	ha	18000.00	90.00	5204.00	30.66	34.07
	(b) Gypsum/ 80% WG Sulphur	ha	10000.00	75.00	913.00	5.46	7.28
	(c) Lime	ha	2500.00	25.00	385.00	2.94	11.76
	(d) Bio-fertilizers	ha	80000.00	80.00	73023.15	57.09	71.36
	Sub Total INM 3 (a) to 3 (d)		110500.00	270.00	79525.15	96.15	35.61
4	<b>Integrated Pest Management (IPM</b>						_
	(a) Distribution of PP chemicals	ha	30000.00	150.00	10902.16	61.20	40.80
	(b) Weedicides	ha	8000.00	40.00	2356.00	10.29	25.73
	Sub Total 4 (a) and 4 (b)		38000.00	190.00	13258.16	71.49	37.63
5	Resource conservation technologies		T	T		T	
	(a) Manual Sprayer	Nos.	8000.00	48.00	8180.00	45.78	95.38
	(b) Power Knap sack sprayers	Nos.	500.00	15.00	448.00	6.17	41.13
	(c) Zero till seed drills	Nos.	5.00	0.75	8.00	1.20	160.00
	(d) Multi crop planters	Nos.	0.00	0.00	0.00	0.00	0.00
	(e) Seed drills	Nos.	500.00	75.00	409.00	59.85	79.80
	(f) Zero till multi crop planters	Nos.	0.00	0.00	0.00	0.00	0.00
	(g) Ridge furrow planters	Nos.	15.00	2.25	0.00	0.00	0.00
	(h) Chiseller	Nos.	6.00	0.48	0.00	0.00	0.00
	(i) Rotavators	Nos.	150.00	52.50	151.00	47.45	90.38
	(j) Laser land levelers	Nos.	6.00	9.00	0.00	0.00	0.00
	(k) Tractor mounted sprayer	Nos.	0.00	0.00	0.00	0.00	0.00
	(1) Multi crop thresher	Nos.	150.00	60.00	115.00	32.38	53.97
	Sub total of Machinery 5(a) to 5 (l)		9332.00	262.98	9311.00	192.83	73.32
6	Efficient water application tools:	1	2005.00	200.50	502.70	C1.05	20.20
	(a) sprinkler sets	ha	2995.00	299.50	582.70	61.05	20.38
	(b) pump sets (c) Pipe for carrying water from	Nos.	350.00 475000.00	35.00 118.75	188.00 33813.00	9.72	33.17
	source to the field	Mtr.					8.19
	(d) Mobile Rainguns	Nos.	0.00	0.00	0.00	0.00	0.00
	Sub Total 6 (a) to 6 (d)		478345.00	453.25		82.38	18.18
7	Cropping system based trainings (four sessions i.e. one before kharif, one each during kharif and rabi crops and one after rabi harvest.)	Nos.	100.00	14.00	85.00	9.60	68.57
	Sub Total of Need Based Inputs (2 to 7)		660077.00	1785.23		750.75	42.05

8	Miscellaneous expenses:						
	(a) Project management team and other miscellaneous expenses at district level	No. of District	17.00	205.99	11.00	28.05	13.68
	(b) Project management team and other miscellaneous expenses at state level	1	1.00	17.00	1.00	9.29	54.65
	Sub-Total 8(a) to (b)		18.00	221.99	11.00	37.34	16.82
9	Local initiatives						
	(a) Construction of Godowns	Nos.	100.00	150.00	65.00	46.50	31.00
	(b) Distribution of Reaper	Nos.	0.00	0.00	0.00	0.00	0.00
	(c) Distribution of Power Tiller	Nos.	50.00	30.00	41.00	18.00	60.00
	Sub-Total 9(a) to (c)		150.00	180.00	106.00	64.50	35.83
10	Other Initiatives						
	(a) Demonstration by NGOs	ha	0.00	0.00	0.00	0.00	0.00
	(b) Assistance for custom hiring (For Land preparation and Line sowing)	ha	0.00	0.00	0.00	0.00	0.00
	(c) Marketing support		0.00	0.00	0.00	0.00	0.00
	(c) Marketing support (d) Specialized projects		0.00	0.00	0.00	0.00	0.00
			0.00		0.00		0.00
	(d) Specialized projects		0.00	0.00	0.00	0.00	0.00
	(d) Specialized projects (e) Value chain integration		0.00	0.00 0.00	0.00	0.00	0.00
	(d) Specialized projects (e) Value chain integration  Sub-Total 10 (a) to 10 (e)		0.00 0.00 <b>0.00</b>	0.00 0.00 <b>0.00</b>	0.00	0.00 0.00 <b>0.00</b>	0.00

## Physical and Financial Progress during 2015-16 (upto Sept., 2015)

#### 1. NFSM-Rice

S.	Interventions	Unit	Tar	Target		Achievement		
No.			Physical	Financial	Physical	Financial	(Fin.)	
1.	Cluster demonstration by state depa	artment o	f agriculture w	ith the technic	al backstoppi	ng of	•	
	ICAR/SAUs/IRRI(one cluster of 10							
	(a) Direct seeded Rice/Line		18544.00	1390.80	18194.00	220.66	15.86	
	Transplanting/ SRI (Target 1.5 % of	ha						
	area of district)							
	(b)Cluster demonstrations on hybrid	_	8200.00	615.00	8200.00	215.91	35.10	
	rice (one cluster of 100 ha) target	ha						
	0.5% of area of district.		700.00	52.50	700.00	2.07	5.65	
	(c)Cluster demonstrations on	1	700.00	52.50	700.00	2.97	5.65	
	Swarna sub-1/ Sahbhagi dhan of 100 ha each.	ha						
	(d)Cropping System based		7800.00	975.00	7250.00	82.72	8.48	
	demonstration	ha	7800.00	973.00	7230.00	02.72	0.40	
	Sub Total 1 (a) to 1 (d)		35244.00	3033.30	34344.00	522.26	17.21	
2.	NEED BASED INPUTS		33244.00	3033.30	34344.00	344.40	1/.41	
2.	Seed distribution:							
	(a) Hybrid rice seed	Qtls	10300.00	515.00	1096.42	4.30	0.83	
	(b) HYVs seeds	Qtls	93200.00	932.00	16738.85	45.13	4.48	
	Sub Total 2 (a) to 2 (b)	Qus	103500.00	1447.00	1783.27	49.43	3.41	
3.	Plant and soil protection manageme	nte	103300.00	1447.00	1/03.2/	47,43	3.41	
Э.	(a)Micronutrients and Biofertilizers	ha	50000.00	250.00	13623.00	45.68	0.33	
	(b) Liming in acidic soils	ha	20000.00	200.00	1600.00	0.00	0.00	
	(c) Plant protection chemicals and	11a	70000.00	350.00	9936.34	20.00	5.71	
	bio-agents	ha	70000.00	330.00	7730.34	20.00	5.71	
	(d) Weedicides	ha	56600.00	283.00	14694.00	32.06	11.32	
	Sub Total 3 (a) to 3 (d)	1100	196600.00	1083.00	39853.34	97.74	9.02	
4.	A. Resource conservation technique	s/ tools w	1					
	(a) Conoweeders	Nos.	25000.00	150.00	573.00	2.51	1.67	
	(b) Manual Sprayer	Nos.	25000.00	150.00	13725.00	49.25	32.83	
	(c) Power Knap sack sprayers	Nos.	600.00	18.00	267.00	1.50	8.33	
	(d) Multi crop planters	Nos.	18.00	2.70	0.00	0.00	0.00	
	(e) Seed drills	Nos.	500.00	75.00	26.00	0.90	1.2	
	(f) Power weeders	Nos.	34.00	5.10	0.00	0.00	0.00	
	(g) Zero till multi crop planters	Nos.	43.00	6.45	0.00	0.00	0.00	
	(h) Drum seeder	Nos.	6200.00	93.00	0.00	0.00	0.00	
	(i) Rotavators	Nos.	500.00	175.00	83.00	27.55	15.74	
	(j) Laser land levelers	Nos.	8.00	12.00	0.00	0.00	0.00	
	(k)Paddy thresher /	Nos.	100.00	40.00	37.00	8.80	22.00	
	Multi-crop thresher							
	(I)Self propelled paddy transplanter	Nos.	100.00	75.00	1.00	0.75	100	
	B. Other Machinery Approved und					1		
	(a). Distribution of Reaper	Nos.	50.00	25.00	13.00	0.88	3.52	
	(b) Distribution of Power Tiller	Nos.	50.00	30.00	6.00	1.18	3.93	
	Total Machinery 4 A + 4 B		58203.00	857.25	14731.00	93.32	10.88	

5.	Water Application Tools						
	(a) Incentive for pump sets	Nos.	1000.00	100.00	64.00	1.57	1.57
	(b) Pipe for carrying water from Mtr.		725000.00	181.25	27740.00	3.270	1.80
	source to the field	17111.					
	Sub Total 5 (a) and (b)		842406.00	281.25	27804.00	4.840	1.72
6.	Cropping system based trainings		516.00	72.24	349.00	26.29	36.39
	(four sessions i.e. one before kharif,	Nos.					
	one each during kharif and rabi	1,00.					
	crops and one after rabi harvest.)					-	
	Sub Total 5		516	72.24	349.00	26.29	36.39
7.	Miscellaneous expenses:						
	(a) Project management team and		0.00	0.00	0.00	0.00	0.00
	other miscellaneous expenses at						
	district level						
	(b) Project management team and		0.00	0.00	0.00	0.00	0.00
	other miscellaneous expenses at	No.					
	state level		0.00	0.00	0.00		0.00
	Sub Total 7a to 7b		0.00	0.00	0.00	0.00	0.00
8.	Local initiatives						
	(a). Construction of Godowns	Nos.	300.00	450.00	52.00	6.00	1.33
	Sub Total 8		300.00	450.00	52.00	6.00	1.33
9	Other Initiatives						
	(a) Demonstration by NGOs	ha	0.00	0.00	0.00	0.00	0.00
	(b) Assistance for custom hiring		0.00	0.00	0.00	0.00	0.00
	(For Land preparation and Line ha						
	sowing)						
	(c) Specialized projects		0.00	0.00	0.00	0.00	0.00
	Total Financial (1 to 9)			7224.040	134968.610	799.700	11.06

#### 2. NFSM-Coarse Cereals

S.No.	Interventions Unit		Targets proposed by the state			chieved by ate	% Achievement (Financial)
			Physical	Financial	Physical	Financial	
1.	Demonstration on improved	ha	2716.00	135.80	1781.00	9.23	6.79
	package:						
2.	Distribution of certified seeds:						
	(a) HYVs Seeds	Qtl	270.00	4.05	0.00	0.00	0.00
	(b) Hybrid Seeds	Qtl	1083.00	54.15	0.00	0.00	0.00
	Sub Total 2(a) and 2(b)		4069.00	58.20	0.00	0.00	0.00
3.	(a) Project manag. team at district	level	0.00	0.00	0.00	0.00	0.00
	(b) Project manag. team at state le	vel	0.00	0.00	0.00	0.00	0.00
	Sub Total 3(a) and 3(b)		0.00	0.00	0.00	0.00	0.00
4.	<b>Local initiatives</b> (Activity to be		0.00	0.00	0.00	0.00	0.00
4.	specified by the district)						
5.	Other Initiatives						
	(a)Demonstration by NGOs		0.00	0.00	0.00	0.00	0.00
	(b) Assistance for custom hiring		0.00	0.00	0.00	0.00	0.00
	(c) Marketing support		0.00	0.00	0.00	0.00	0.00
	(d) Specialized projects		0.00	0.00	0.00	0.00	0.00
	(e) Value chain integration		0.00	0.00	0.00	0.00	0.00
	Sub-Total 5 (a) to 5 (e)		0.00	0.00	0.00	0.00	0.00
	Total Financial (1 to 5)			194.00	1781.00	9.23	4.75

#### 3. NFSM-Pulses

	Demonstration on improved technology (a) Cluster Demonstrations (of 100 ha each)	ologies:	Tar Physical	Financial	Physical	Financial	(Fin.)
	(a) Cluster Demonstrations (of 100 ha each)	ologies:	•				
	ha each)						
	(b) Champing avestom board	ha	12967.00	972.525	5452.53	89.35	9.18
	(b) Cropping system based demonstrations		5370.00	671.25	5070.00	115.57	17.21
	Sub-Total 1 (a) and 1 (b)		18337.00	1643.78	10522.53	204.92	12.46
	NEED BASED INPUTS		10007100	1010170	10022.00	2011/2	12.10
	Distribution of certified seeds:						
	HYVs Seeds	Qtl	33216.00	830.40	1346.48	10.11	1.21
	Sub-Total Seed Distribution	<u></u>	33216.00	830.40	1346.48	10.11	1.21
	Integrated Nutrient						
	Management (INM)						
	(a) Micro-nutrients	ha	16000.00	80.00	1235.00	1.92	1.25
	(b) Gypsum/ 80% WG Sulphur	ha	10000.00	75.00	1700.00	2.25	3.00
	(c) Lime	ha	5000.00	50.00	200.00	0.00	0.00
	(d) Bio-fertilizers	ha	117800.00	117.80	26847.00	9.67	8.20
	Sub Total INM 3 (a) to 3 (d)		148800.00	322.80	29982.00	13.84	
	Integrated Pest Management (IPM)						
	(a) Distribution of PP chemicals	ha	50000.00	250.00	3491.76	5.22	2.08
	(b) Weedicides	ha	10000.00	50.00	880.00	1.09	2.18
	Sub Total 4 (a) and 4 (b)		60000.00	300.00	4371.76	6.31	4.28
5	Resource conservation						
	technologies /tools						
	(a) Manual Sprayer	Nos.	12992.00	77.95	6769.00	24.73	93.64
	(b) Power Knap sack sprayers	Nos.	150.00	4.50	121.00	0.60	13.33
	(c) Zero till seed drills	Nos.	0.00	0.00	0.00	0.00	0.00
	(d) Multi crop planters	Nos.	0.00	0.00	0.00	0.00	0.00
	(e) Seed drills	Nos.	200.00	30.00	74.00	4.05	13.5
	(f) Zero till multi crop planters	Nos.	0.00	0.00	0.00	0.00	0.00
	(g) Ridge furrow planters	Nos.	0.000	0.00	0.00	0.00	0.00
	(h) Chiseller	Nos.	0.00	0.00 63.00	0.00 110.00	0.00 15.40	0.00 24.44
-	(i) Rotavators (j) Laser land levelers	Nos.	0.00	0.00	0.00	0.00	0.00
	(k) Tractor mounted sprayer	Nos.	0.00	0.00	0.00	0.00	0.00
	(l) Multi crop thresher	Nos.	200.00	80.00	58.00	4.40	505
	(m) sprinkler sets	ha	2510.00	251.00	74.06	0.00	0.00
	(n) pump sets	Nos.	250.00	25.00	22.00	0.00	0.00
	(o) Pipe for carrying water from source to the field	Mtr.	365400.00	91.35	0.00	0.00	0.00
	(p) Mobile Rainguns	Nos.	0.00	0.00	0.00	0.00	0.00
	Subtotal of Machinery 5(a) to 5(p)	2.30.	368160.00	622.80	7228.06	49.18	7.89
	Cropping system based trainings		296	41.44	161	10.33	
	(four sessions i.e. one before kharif, one each during kharif and rabi crops and one after rabi harvest.)	Nos.	270	71.77	101	10.00	24.92
	Miscellaneous expenses:						
	(a) Project management team and other miscellaneous expenses at district level	No. of District	(17 PMT District+ 10 Non Pmt	205.00	2.00	13.42	6.54

			District=27				
	(a) Project management team and other miscellaneous expenses at district level			17.00	17.00	0.00	0.00
	Sub Total 7 (a) to 7 (b)			222.00	19	13.42	6.04
8	Local initiatives						
	(a) Construction of Godowns	Nos.	170.00	255.00	31.00	13.5	5.29
	(b) Distribution of Reaper	Nos.	0.00	0.00	0.00	0.000	0.00
	(c) Distribution of Power Tiller	Nos.	60.00	36.00	43.00	1.20	3.33
	Sub-Total 8(a) to 8 ( c)		230.00	291.00	74.00	14.70	5.05
9	Other Initiatives						
	(a) Demonstration by NGOs	ha	0.00	0.00	0.00	0.00	0.00
	(b) Assistance for custom hiring (For Land preparation and Line sowing)	ha	0.00	0.00	0.00	0.00	0.00
	(c) Marketing support		0.00	0.00	0.00	0.00	0.00
	(d) Specialized projects		0.00	0.00	0.00	0.00	0.00
	(e) Value chain integration		0.00	0.00	0.00	0.00	0.00
	<b>Sub-Total 10 (a) to 10 (e)</b>		0.00	0.00	0.00	0.00	0.00
	Total Financial (1 to 10)			4274.217	53704.830	322.880	7.55

#### **Annexure-III**

# NLMT Visit at a glance

Name &Address	Component/Activity	Farmers / Agency opinion	Observations/Recommendation
District – Raigarh	8-9 <sup>th</sup> September, 2015		
08.09.2015  Shri M.R. Bhagat  D.D.A., Raigarh	Briefing about the implementation of NFSM program in the District	<ul> <li>DFSMEC has been formed.</li> <li>Post of consultant &amp; two TAs are vacant.</li> <li>For the selection of beneficiaries, involvement of Panchayati Raj has been done on the village level as per the guidelines.</li> <li>As on 07.09.2015 rainfall received 1111.77 mm which is 8% above of last year and 11% less of Normal Season rains.</li> <li>Total kharief coverage 2.91 lakh ha. which is 98% of targeted kharif area.</li> </ul>	<ul> <li>District consultant &amp;Technical assistantshould be recruited.</li> <li>Major prevalent paddy varieties are Swarna, MTU-1010, MTU-1001, PKVHMT, Karma Mashuri &amp; Mahamaya.</li> <li>Arhar-LRG-41, UPAS-120 &amp; Asha.</li> <li>Urd-Azad-3, PU-31, TAU-1 &amp; T-9.</li> <li>Moong-HUM-1, SML-668 &amp;GM-4.</li> <li>Maize-MM-1107.</li> </ul>
Shri Madhusudan Patel, Modhan Patel, Ravindra Patel, Bhushan &others( about 25 farmers)  Village- Kunjedabari  Block- Pussore	Cluster demo. Line transplanting of Paddy under NFSM – Rice.	<ul> <li>100 ha. Cluster demonstration given to farmers from 3 adjoining villages.</li> <li>Variety- Swarna Sub-1.</li> <li>Foundation seed used.</li> <li>Farmers are satisfied.</li> <li>Date of nursery-15/07/15,</li> <li>Transplanting-02/08/15.</li> <li>Tillers – average 15,</li> <li>Used pre emergence herbicide <i>ei</i>. Pretilachlor 1.5ai/ha, Zinc sulphate used @25 kg/ha.</li> </ul>	<ul> <li>30 ha in visited village.</li> <li>Most of the crop was excellent, no insect pest observed.</li> <li>Proper spacing was maintained.</li> <li>Geometry 20*25 cm.</li> <li>Display board of demonstration was found on demonstration plot.</li> <li>As per farmer productivity is expected about 40-50 quintal from demonstration Field of 1 ha.</li> <li>Awareness level of farmers are satisfactory regarding use of new technology like seed, nutrient, micronutrients IPM etc.</li> <li>Ideal site of demonstration (road side) selected.</li> <li>Each and every demonstration should be registered for seed production programme.</li> <li>Looking to labour problem in Raigarh, DSR and mechanized farming should be encouraged.</li> <li>There is requiring custom hiring centre.</li> </ul>
Shri Ram Prasad Patel Village-Tilagi Block-Pussore	Rotavator	<ul> <li>Rotavator NFSM-2013-14.</li> <li>Farmer opinion is positive as increased efficiency, save time and cost.</li> </ul>	<ul> <li>In good condition.</li> <li>Cost of Rotavator Rs.1.04000/</li> <li>Subsidy Rs. 30000/-</li> <li>Used only for own purpose.</li> <li>Good for field preparation.</li> </ul>

09.09.2015	Cluster demo. Hybrid	a Hybrid WND 2245		Sown on 57 ha of land
09.09.2015		• Hybrid-VNR-2245.	-	Number of tillers was less than the Swarna Sub-1
Shri Ganjam,	rice in line	• Date of nursery-01/07/15,	•	
Dinesh Bhagat	transplantation under	• Transplanting-25/07/15.	•	Nitrogen deficiency were seen in the field
Ü	NFSM -Rice	• Crop condition was good.	•	Balance fertilizer should apply on the basis of soil
and others		• Crop was in Booting(Gabhot) stage		health card
Village-Bagudega		Average 4-5 tlillers/ hill	•	This area is potential for scented rice, govt. Can
Block- Lailunga		25 days old seedlings were used		promote organic scented rice in this area.
<del></del>		Good coordination of RAEO's with farmers	•	Increase Direct Seeded Rice area (DSR)
FPO-Kelo Jaivik	Interacted with group	Seven SHGs groups working on organic rice (Javaful /Jeeraful	•	Team realized the benefits of FPO and suggested to
Chawal Group	leader and members	scented local land race) production with 218 ha and registration was		popularize in a big way.
Village-	of FPO – Kelo Jaivik	under process.	•	Local bold seeded rice land races are available, these
Bagudega	Chawal Group	• 12 % decrease in purchase of inputs and about 15 % premium price in		land races can be used for making organic Poha (value
Block- Lailunga		marketing of outputs was obtained.		addition).
Ç		Easily assessed the market, credit flow and value addition by the	•	Dubraj sel.1, Badshabhog sel 1, Tarunbhog sel-1 has
		group.		been released by SVRC in 2015, so these varieties
	office of the second se			should be used in organic farming.
	O <sup>th</sup> September, 2015			
Shri R.K.	Briefing about the	DFSMEC has been formed.	•	District consultant & Technical assistantshould be
Gonekar, D.D.A.,	implementation of	Post of consultant & two TAs are vacant.		recruited.
Jashpur	NFSM program in	• For the selection of beneficiaries, involvement of Panchayati Raj has	•	Major prevalent paddy varieties are MTU-1010,
	the District	been done on the village level as per the guidelines.		MTU-1001, IR-64, Mahamaya, Safari-7
		• As on 07.09.2015 rainfall received 771.6 mm which is 10.2% above		Bambleshwari &Samleswari.
		of last year in same period and 26.3% less of Normal Season rains.	•	Arhar-ICPL-87, ICPL-151, UPAS-120 Asha, PRG-
		• Total kharief coverage 2.525 lakh ha. which is 95% of targeted kharif		158 & Rajivlochan.
		area.	•	Urd-Azad-3, PU-31 &TAU-1
		Paddy yield increased from 1652Kg/ha to 1727Kg/ha., Kharif pulses	•	Maize-JM-216, Saktiman-1, NSC-6002 & JM-12.
		yield increased from 714Kg/ha to 769 Kg/ha and Rabi pulses yield	•	Sugarcane-Madhumati, COS-767, CO PANT-90223
		increased from 700 Kg/ha to 878 Kg/ha after inception of		& CO-8371.
		programme.	•	Allocation still not received but programme
				implementing by unspent balance of 2014-15.

Shri Jual Kujur	Cluster	Variety- VNR-2245.	Less number of tillers
	demonstration on	Booting stage	• Geometry was 30 x 10 cm instead of 20 x 20 or 20 x
Village-	Hybrid line	Apply ZnSo4 @25 kg ha <sup>-1</sup>	30
Mudapara, Block-	transplanting of	• Pre-emergence weedicide, Butachlor was used @1.5 kg ai ha <sup>-1</sup>	• This area having undulated, there is scope for soil and
Pathalgaon	Paddy under NFSM -	Number of tillers-4-5	water conservation structures
	Rice		• Rainfed tomato is very common, processing unit can
			increase livelihood of meagre farmers of this area
			Use new molecules for weed control
			<ul> <li>Only recommended Hybrids developed by reputed companies should be used in the demonstration.</li> </ul>
Shri Sobhnath	Cluster	• Var-MTU-1010	Farmer not applies balanced fertilizer.
Singh Vill-	demonstration on line	Nutrient deficient	Number of tillers was very less.
Chandagarh	transplanting of	Line transplanting	Fertilizer should be used based on soil testing.
Block-	Paddy under NFSM -	Area was seven acres.	
Patthalgaon	Rice		
Shri Jaiprakash	Cluster	Blackgram –PU-31	• Demonstration in 25 ha.
Ram and others	demonstration on	Crop was excellent	Good coordination among agril. officers and farmers
Village-	Urad under NFSM -	Used post emergence herbicide Imazetypar	Use YVM resistant varieties.
Singibahar	Pulses	Stage-pod filling	Introduce intercropping with pigeonpea.
Block-		Line sowing	
Pharsabahar		Farmers was very much happy	
		Affected by jassid	
	the	Very less per cent of YVM (less than 2%)	
	ur 10-11 <sup>th</sup> September, 20		
Shri S. P. Veera	Briefing about the	DFSMEC has been formed.	District consultant &Technical assistantshould be
<b></b>	implementation of	Post of consultant & two TAs are vacant.	recruited.
D.D.A.,	NFSM program in	• For the selection of beneficiaries, involvement of Panchayati Raj has	Major prevalent paddy varieties are MTU-1010,
Ambikapur	the District	been done on the village level as per the guidelines.	MTU-1001& IR-36.
		About 6930 women are benefitted through various training during  2015 16	• Arhar-ICPL-87, ICPL-151, UPAS-120 Asha, PRG-
		2015-16 resulting about 1340.22 ha fallow land used for cultivation by women farmers.	158 & Rajivlochan.  • Urd-Azad-3, PU-31 &TAU-1
		<ul> <li>Seed production programme taken by 586 Women Self Help Group in</li> </ul>	Ord-Azad-3, PU-31 &TAU-1     Maize-Pratap, Hybrid.
		1805.4 ha. during 2015-16.	<ul> <li>Sugarcane grown under rainfed condition.</li> </ul>
		• As on 07.09.2015 rainfall received 807 mm which is 19% above of last year in same period and 36% less of Normal Season rains.	
		<ul> <li>Total kharief coverage 1.60 lakh ha. which is 97% of targeted kharif</li> </ul>	
		area.	
	<u> </u>	arca.	

Vill-Dandgaon	Cluster	Hybrid-JKRH-401,	Fungicide was not used
Block- Lundra	demonstration on	• 100 ha rice- Line transplanting	Field become dry
Block- Lundra	Hybrid line	• Crop was good	Apply tricyclazole on blast affected field
	transplanting of	• Women SHGs	Provide irrigation facilities
	Paddy under	<ul> <li>PE herbicide pendimethaline were used @ 1.5 kg ai ha<sup>-1</sup></li> <li>Average tillers-10-12</li> </ul>	Pre emergence herbicide Pyrazol sulfuron is more effective than the other Pre emergence herbicides in
Farmers- 192	BGREI - Rice	Blast was seen but not above 3 scale	rice field
		Geometry was 25 x 15 cm	Only recommended Hybrids developed by reputed
		Geometry was 25 % 15 cm	companies should be used in the demonstration.
Vill-Khalpodi	Cluster	Variety: Hybrid-Bioseeds-Prabal MO-1	Cluster demonstration on 60 ha. area,
Block- Lundra	Demonstration	Inputs supplied timely and sufficient.	Farmers are aware about the inputs supplied and
Farmers- 18		• Expecting yield of 35-40 qtl./ha.	technology demonstrated.
women groups	on seed	Crop was excellent and good crop growth.	Value addition by seed production is found
each group	production under	Used atrazin as a pre emergence herbicide.	beneficial.
having-10-15	NFSM-Coarse	• Last dose of N should be apply at tassel stage.	Crop condition was healthy. Plots were free from weeds, pests and diseases.
leady members	Cereals- Maize.		<ul> <li>Display boards were installed.</li> </ul>
Vill-Urdara	Cluster	Variety : Maheswari	Ideal example of SHG activity
Block- Lundra	Demonstration	Excellent crop	They were took seed production programme on 100
Diock- Lunura	Demonstration	Very active women groups	ha where 131 farmers are involved.
Farmers- 131	on Rice	Crops under tillering stage	Labour problem solved as work to each other plots
women farmers	Transplanting for	Nmber of tillers-10-15	as per need "Ädla badeli".
women farmers	seed production	The group of farmers is happy since they have developed confidence.	Women groups are working very well, so it can be promote in all districts.
	under BGREI		Fast extension of technology by SHG.
			Such activities should be multiplied and popularized
			in the farmers.
Shri Rageswar,	Cluster demo. Urd	• Variety-PU-31.	• Area 25 ha.
Sampat & others	under NFSM-	Crop condition was very poor.	• 120 farmers were involved.
Vill- Ghutrapara	Pulses,	Affected by weeds and YVM.	Use YVM resistant varieties.
D1 1 D . 1'		Plant population was higher than the recommended rate.  Health in Particular and the recommended rate.	For weed control apply Imazathypar as a post
Block- Batoli		<ul><li>Herbicide Pendimethline used.</li><li>Herbicide was ineffective due to rainfall</li></ul>	<ul><li>emergence.</li><li>Powdery mildew also seen.</li></ul>
Shri Jaiprakash,	Cluster demo. of	Varieties Joyphul & Jeeraphool.	Good efforts by the farmer and excellent
Nubarsai and	paddy for seed	<ul> <li>Farmers of Women Self Help Group125 acre under state deptt. and</li> </ul>	management.
others Vill-	production under	150 acre under KVK, Organic rice production in both scented and	This activity to be expanded on large scale.
Basajhal	BGREI	conventional varieties.	Employment generation for family members and
Dasajiai	DORLI	Crop condition is normal	others.
Block- Batoli		Some patches affected by stem borer.	It should be popularized.
		Some plots variety MU1010 observed.	Some farmers sown conventional varieties.
		Used vermin-compost 2 bag/acre.	Drainage system should isolated so it cannot be

		<ul> <li>Field operation work done together as Adla Badli.</li> <li>Registration under process.</li> </ul>	<ul> <li>contaminated the organic field.</li> <li>Organic area should be isolated from conventional or inorganic crop growing areas.</li> <li>Continue watching and care during conversion period.</li> <li>Use only bio pesticides.</li> <li>Dubraj sel.1, Badshabhog sel 1, Tarunbhog sel-1 has been released by SVRC in 2015, so these varieties should be used in organic farming.</li> </ul>
11.09.2015  Shri Baijnath, Amrit Karav and others  Vill- Narbadapara  Block- Ambikapur	FLD under NFSM- Rice – Hybrid rice conducted by KVK, Ambikapur	<ul> <li>Area 10 acre.</li> <li>Var- KRH-4.</li> <li>Good crop condition.</li> <li>Blast occurrence.</li> <li>Tillers – average-10-12.</li> <li>Only 5 Kg seed provided to the each selected farmers other inputs arranged by farmers own their level</li> </ul>	<ul> <li>Display board not installed.</li> <li>Suffered by water stress.</li> <li>Interacted with Shri Rajesh Chauksey, SMS (Soil Science) and Mrs. Rajani Dharmendra Agashe SMS (Extension) they informed that the FLD on NFSM-Rice conducted in 30 acres. Two varieties of hybrid rice KRH-4 and Indira Sona given to farmers 5 Kg of seed for line transplanting on 26.06.2015. No field day was organized till date.</li> <li>Shri Rajesh Chauksey, SMS (Soil Science) and Mrs. Rajani Dharmendra Agashe SMS (Extension) informed that the FLD not conducted as per guideline due to release not received till today.</li> </ul>
Shri Chetan Ram and others Village- Jajga Block- Udaipur	Cluster Demo. on Rice Transplanting under BGREI	<ul> <li>Variety: Maheswari/MTU1010.</li> <li>Crops under tillering stage.</li> <li>Number of tillers-15-20</li> <li>Transplanting mid July, 2015.</li> </ul>	<ul> <li>Area 130 ha.</li> <li>Farmers 145.</li> <li>Blast occurrence.</li> </ul>
Shri S.R.Verma, Director, NFSM Chhattisgarh	Wrap-up meeting with Director NFSM and Team member at Bilaspur.	<ul> <li>About 80% farmers in the state small &amp; marginal and average land holding is below 0.4 ha. Criteria for subsidy may be reduced from 0.4 ha. to 0.2 ha.</li> <li>More than 80% inputs goes to large &amp;medium farmers.</li> <li>Soil testing kit permitted in programme where soil testing facility not available. As 150000 soil sample testing capacity is required and only testing capacity available 90000 in the satate.</li> <li>Subsidy amount mentioned limited Rs or 50% of the cost whichis less may be given only subsidy amount.</li> </ul>	<ul> <li>All District consultant and TAs should be recruited.</li> <li>Contact farming concept may be promoted and processing plant should be created in tomato producing areas.</li> <li>Checkdam &amp; stop dam may be popularized.</li> <li>Non hybrid varities should also be popularised.</li> <li>All demonstration should be registered for seed production programme.</li> <li>Advance planning should be prepared for each programme.</li> <li>Soil testing based recommendation should be applied in the field.</li> </ul>