

NATIONAL FOOD SECURITY MISSION

NATIONAL LEVEL MONITORING(NLMT) REPORT



STATE-CHHATISGARH

NLMT-KHARIF : 2016



सत्यमेव जयते

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE & FARMERS WELFARE
(DEPARTMENT OF AGRICULTURE, COOPERATION & FARMERS WELFARE)
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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 KrishiVishvaVidyalyaya
22. IPM-Integrated Pest Management
23. KVK- KrishiVigyan Kendra
24. MIDH-Mission for Integrated Development of Horticulture
25. MULLaRP- MungbeanUrdbean Lentil LathyrusRajmash&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. PPVFRA- Protection of Varieties and Farmer’s Rights Acts
36. PRIs- PanchayatiRajya Institutions

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

PREFACE

The Government of India, Department of Agriculture, Co-operation and Farmers Welfare, Ministry of Agriculture & Farmers Welfare is implementing various agricultural development schemes/ programmes like NFSM, NMOOP, BGREI, NMSA, RKVY, PKVY, PMKSY, NMAET (SMAM, SMSP & Extension Reforms/ATMA), NHM, PMFBY, SHC, NAM etc. The major crop development interventions during 2016-17 are through NFSM, NMOOP and RKVY. To effectively monitor the implementation of these interventions at the field level, the DAC&FW has constituted National Level Monitoring Team (NLMT) under the National Food Security Mission (*NFSM-Rice, Wheat, Pulses, Coarse Cereals and Commercial Crops*). The NLMT comprises of the Director, Crops Development Directorates (Directorate of Pulses Development) as Convener/Team Leader, 03 Principal/Sr. Scientists as Subject Matter Specialist (SMSs) representing ICAR/SAUs and State Mission Director, NFSM/Nodal Officer.

The Terms of Reference (TOR) of this Central Team suggest mandatory monitoring at least once in each crop season (*Kharif, Rabi & Spring/Summer*); 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", to study quantitative, qualitative achievements and impact of the Transfer of Technology (ToT) delivery mechanism in totality taking all CSS/CS/State plan schemes in a district, and providing analytical report on observations and suggestions/recommendations for further necessary corrections at the level of state stake-holders for better implementation of the Mission and desired mandated outcome.

The Team visited the state of Chhattisgarh between 26th September to 1st October, 2016. The composition of the 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 ACS/APC of Govt. of Chhattisgarh was also convened at the end of the field visit. The report has tried to capture the impact of NFSM implementation, during XIIth five year plan(tetra- ending 2015-16) over to XIth plan programme implementation.

I am thankful to the ACS/APC, Secretary Agri. & Director (Agri.), Director (SAMETI) Govt. of Chhattisgarh for facilitating the monitoring/visit and the respective Vice Chancellor & DRS of IGKVV, Raipur for nominating experts/scientists to represent the NLMT. I acknowledge the contribution of my technical officers, Dr. A.K. Shivhare & Shri. Vipin Kumar, AD; Sarju Pallear, SI; Dr. Sandip Silawat, Ms. Divya Sahare, STAs, Smt. Ashwini Bhoware and Shri. Sateesh Dwivedi, TAs, and Shri. Ajay Kumar, LDC, Directorate of Pulses Development, Bhopal in bringing out the report publication.

Bhopal (M.P.)
24th October, 2016

(A.K.Tiwari)
Director

CHHATTISHGARH NATIONAL LEVEL MONITORING TEAM REPORT (KHARIF - 2016) TO REVIEW THE IMPLEMENTATION OF NATIONAL FOOD SECURITY MISSION (RICE, PULSES AND COARSE CEREALS) FROM 28th-30th SEPTEMBER, 2016

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 11th five year plan (2007-08 to 2011-12) consequent upon the recommendation of 53rd Meeting of National Development Council dated May 29th, 2007. The Mission envisaged to achieve additional food-grain 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 12th Plan, the NFSM with the other four Missions, viz. NMAET, NMSA, NMOOP & MIDH is continued. The pattern of Central assistance under NFSM has been 100 per cent up-till 2014-15.
 - 1.2.1 The Twelfth Plan NFSM (2012-13 to 2016-17), revamped from 2014-15 and is under implementation 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).
 - 1.2.2 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 - 08 million tonnes, Pulses - 04 million tonnes & Coarse Cereals-03 million tonnes, is targeted to be achieved at the end of 12th Plan (2016-17).
 - 1.2.3 The existing Centrally Sponsored Scheme have also been rationalized and 03 schemes viz. (i) KrishiUnnatiYojana (ii) National Crop Insurance Programme (NCIP) and (iii) Pradhan MantriKrishiSinchaiYojana (PMKSY) are operational since 2015-16. NFSM-2015-16 is a part of KrishiUnnatiYojana (State Plan). From 2016-17, the revamped NFSM under State Plan Scheme – KrishiUnnatiYojana (State Plan) with interim sharing pattern of 60:40 between Centre and State is under implementation in 29 states. A Central Share of Rs. 1700 Crores has been approved during 2016-17.

- 1.3 **The basic strategy of the Mission is to focus on low 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 9% 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 effects of climate change for high productivity areas, value chain integration (FPOs) and assistance to Custom Hiring Centre (CHCs). 30% of budgetary allocation has to be earmarked for women beneficiaries. To ensure equity, of the total budgetary allocation to a district proportionate expenditure under Special Component Plan (SCP) for SCs, Tribal Sub Plan (TSP) – SMF and Women farmers at 16%, 8%, 33% and 30% respectively is mandatory.
- 1.3.2 Strengthening of infrastructure at ICAR/SAUs/ATARI/KVKs by *Breeder Seed Production Programme, Seed hubs, Cluster Front Line Demonstration.*

2. Area of operation:2016-17

Commodities	All India		Chhattisgarh (No. of districts)
	No. of States	No. of District	
NFSM-Pulse	29	638	27
NFSM-Rice (all districts of NE states with 5000 ha area)	25	206	13
NFSM- Coarse cereals (Maize, Small Millet, Pearl Millet etc.) (districts covering 70% of state area)	28	265	09

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 &	Quarterly

		Empowerment) Secretary (MoW&CD) Adviser (Agriculture), Planning Commission Agriculture Commissioner Five Experts - Member Mission Director -Member Secretary	
	iii) National Level Monitoring Team (NLMT)	Director CDDs- Co-Coordinator Scientist SAUs/JDA –Member	Once in a crop season

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

4. NLMT Composition

S. No.	Organization	Names and Designation
i.	Government of India Directorate of Pulses Development Ministry of Agriculture and Farmers Welfare (DAC&FW), Vindhyachal Bhavan, Bhopal.	Dr. A.K. Tiwari Director -Convenor/Team leader
ii.	Department of Entomology, College of Agriculture, IGKVV, Raipur	Dr. Sanjay Sharma , Principal Scientist (Rice - Entomology) - Member
iii	SG College of Agriculture & Research Station, Jagdapur, IGKVV, Raipur	Dr.Adikant Pradhan Scientist (Agronomy) - Member
iv.	SAMETI, Govt. of Chhattisgarh Krishak Nagar, Labhandi, Raipur-492012	Shri. M.D. Dhurve Joint Director (NFMS) - Member

5. State Profile

Particulars		STATUS	
Population(Crore)	2.56(Male- 1.29, Female-1.28)		
Population Growth (%)	22.61 – 2011		
Revenue Districts(Nos.)	27		
Block/ Janpad Panchayat (Nos.)	146		
Village Panchayat (Nos.)	9737		
Tehsil (Nos.)	149		
Total Village (Nos.)	20307		
KrishiUpajMandi(Nos.)	73		
Annual Rainfall (Ave.)	1134 mm		
Land Use Pattern (Area : lakh ha)		Agricultural land use (Area -lakh ha)	
Geographical Area	137.90	Net sown area	46.81
Cultivable area	65.66 (47.61%)	Double Cropped Area	10.47
Forest area	45.36 (32.89%)	Gross cropped area	57.28
Land under non-agricultural use	7.25 (5.25%)	<i>Kharif</i> Area	47.71
Permanent pastures	8.63 (6.25%)	<i>Rabi</i> Area	16.55
Cultivable wasteland	3.58 (2.59%)	Cropping Intensity	123%
Barren and uncultivable land	5.22 (3.78%)		
Current fallows	2.67 (1.93%)		
Irrigation (Area: lakh ha)		Source of Irrigation (Area : lakh ha)	
Net irrigated area	14.49	Canals	9.03 (61.55%)
Gross irrigated area	17.25	Tanks	0.43 (2.93%)
Rainfed area (to Cultivable Area)	46.04 (70%)	Open wells	0.20 (1.37%)
		Bore wells/ Tube Wells	4.28 (29.17%)
		Other Sources	0.73 (4.98%)
		Total Irrigated Area	14.67
Soil Type (Area - lakh ha)			
Alluvial Soil (Kachhar)	1.38 (2.7%)	Inceptisols (Matasi)	13.54 (26.9%)
Entisols (Bhata)	10.02 (20%)	Vertisols (Kanhar)	11.43 (22.8%)
Alfisols (Dorsa)	13.82 (27 %)	Land Classif. Total	50.19
Major Agricultural crops			
Kharif	Paddy, Pigeonpea, Soyabean, Maize, Mung, Urd, Kulthi		
Rabi	Wheat, Gram, Mustard, Safflower, Lathyrus, Field Pea, Lentil, Linseed, Groundnut		
Development Programme CSS / CS			
NFSM	NFSM-Paddy (13) ; Pulses (27); Coarse Cereals (09); PMT District- 27		
NMOOP	Mini Mission I- (Oilseeds) Mini Mission II- (Oilpalm) Mini Mission III- (TBOs)		
(*Source- ENVIS, Centre of M.P. State.)			

Note: Farm Families-37.46 lakh (80% small & Marginal farmers); > 57 % soil is medium to light Soil (i.e. Entisols, Alfisols & Inceptisols)

6. PROFILE :SAMPLE DISTRICTS

Particulars	Mungeli	Janjgir-Champa	Baloda-Bazar	Bilaspur
Population (Crore)	0.71	0.16	0.13	0.19
Block/Janpad Panchayat	03	09	06	07
Village Panchyat	301	576	611	645
Tehsil	03	10	06	08
Total Villages	711	906	965	933
KrishiUpajMandi	01	02	04	05
Annual Rainfall	1164.4	1281.6	1041.17	1198.90
Land Use Pattern (000 Ha)				
Geographical Area	275.00	446.60	359.39	581.85
Cultivable area	208.00	260.00	331.68	295.75
Forest area	1.90	89.10	25.07	111.19
Land under non-agricultural use	11.60	35.30	37.48	30.13
Permanent pastures	17.60	37.60	32.48	47.96
Cultivable wasteland	-	-	20.24	5.39
Barren and uncultivable land	0.20	10.9	10.99	11.78
Current fallows	1.50	4.90	6.96	13.68
Other Fallows	2.60	6.20	12.50	-
Agricultural Land Use (000 ha)				
Net sown area	127.90	260.70	233.92	233.94
Double Cropped Area	80.10	70.40	84.30	61.81
Gross cropped area	208.00	330.50	321.68	295.75
Cropping Intensity (%)	162	127	137	126
Irrigation (000 Ha)				
Net irrigated area	60.98	190.46	109.90	100.20
Gross irrigated area	68.47	236.89	170.83	191.02
Rainfed area (to Cultivable Area)	139.54 (67%)	98.63 (38%)	160.85 (49%)	104.02 (35%)
Source of Irrigation (000 Ha)				
Canals	51.43	213.10	104.30	105.82
Tanks	0.04	3.50	1.35	9.41
Open wells	0.43	4.20	5.18	1.83
Bore wells/ Tube Wells	16.50	13.30	27.64	73.84
Other Sources	-	2.50	32.35	0.82
Total Irrigated Area	68.40	236.60	170.82	191.72
Major Crops				
Kharif	Paddy, Tur	Paddy, Arhar	Paddy, Arhar	Paddy
Rabi	Wheat, Tiwada	Wheat, Tiwada	Gram, Tiwada	Wheat

7. Crop Scenario: Plan analysis (XI-XII Plan)

A. Kharif Crops

(A-Lakh ha, P-Lakh tonnes, Y-kg/ha)

S. No.	Crops	Districts/ State	XI th Plan (2007-08 to 2011-12)			XII th Plan (2012-13 to 2015-16 ^{**})			Increase/decrease over XI th Plan		
			A	P	Y	A	P	Y	A	P	Y
A. Cereals											
1	Paddy	CG	37.27	52.23	1402	38.03	62.08	1632	2.04	18.85	16
		All India	436.53	972.49	2228	461.39	1114.19	2415	5.69	14.57	8
2	Jowar	CG	0.05	0.06	1180	0.05	0.04	770	2.01	-33.44	-35
		All India	73.42	69.71	949	58.00	51.75	892	-21.00	-25.76	-6
3	Bajra	CG	0.001	0.001	1000	0.001	0.001	1000	0	0	0
		All India	91.24	92.03	1009	73.16	86.56	1183	-19.81	-5.94	17.3
4	Maize	CG	1.03	1.61	1567	1.14	2.15	1892	10.41	33.32	21
		All India	85.46	203.65	2383	95.00	244.01	2568	11.17	19.82	8
5	Ragi	CG	0.08	0.02	269	0.07	0.02	252	-18.04	-23.25	-6
		All India	13.27	20.79	1566	11.92	19.42	1629	-10.17	-6.58	4
6	Small millet	CG	1.65	0.35	212	1.15	0.24	208	-30.48	-31.93	-2
		All India	8.80	4.57	519	7.03	4.56	648	-20.11	-0.17	25
7	*Kha. CC	CG	2.82	2.05	727	2.41	2.45	1017	-14.55	19.50	40
		All India	272.20	390.73	1435	245.12	406.30	1658	-9.95	3.98	15
8	Total Cereals	CG	40.09	54.28	1354	40.44	64.53	1596	0.88	18.87	18
		All India	708.73	1363.22	1923	706.51	1520.49	2152	-0.31	11.54	12
<i>*Kharif Coarse Cereals incl. (Jowar, Bajra, Maize, Ragi, Small Millets)</i>											
B. Pulses											
1	Arhar	CG	0.55	0.27	497	0.56	0.35	621	0.99	26.18	25
		All India	37.90	26.66	703	40.28	29.80	740	6.30	11.78	5
2	Urd	CG	1.05	0.31	292	0.93	0.29	313	-10.94	-4.66	7
		All India	23.24	11.09	477	25.28	12.92	511	8.75	16.54	7
3	Moong	CG	0.09	0.02	270	0.09	0.03	340	3.07	30.08	26
		All India	26.41	10.50	397	23.47	9.42	401	-11.16	-10.25	1
4	Kulthi	CG	0.48	0.14	298	0.45	0.14	312	-6.07	-1.89	4
		All India	3.29	1.43	433	2.32	1.05	453	-29.55	-26.24	5
5	*Other Pulses	CG	0.05	0.02	317	0.04	0.01	319	-22.25	-21.88	0
		All India	20.69	7.70	372	21.73	8.64	397	5.02	12.11	7
6	Total Pulses	CG	2.22	0.76	344	2.07	0.82	397	-6.62	7.68	15
		All India	111.53	57.37	514	113.07	61.83	547	1.38	7.77	6
<i>*Other Pulses incl. (Mothbean, Other & Other Pulses)</i>											
C. Oilseeds											
1	Soybean	CG	0.93	0.92	995	1.10	0.93	844	18.31	0.38	-15
		All India	95.70	111.60	1166	115.54	117.26	1015	20.73	5.07	-13
2	Ground nut	CG	0.29	0.38	1349	0.26	0.36	1368	-8.86	-7.63	1
		All India	58.15	74.06	1274	49.26	70.98	1441	-15.28	-4.17	13
3	Sesamum / Til	CG	0.21	0.07	354	0.18	0.06	325	-11.81	-18.96	-8
		All India	19.07	7.38	387	18.11	7.85	433	-5.03	6.33	12
4	Niger/ Ramtil	CG	0.70	0.12	173	0.64	0.11	174	-9.17	-8.42	1
		All India	3.87	1.08	280	2.72	0.88	321	-29.64	-19.12	15
5	Total Oilseeds	CG	2.12	1.50	708	2.17	1.45	667	2.63	-3.32	-6
		All India	176.79	194.13	1098	185.64	196.95	1061	5.00	1.46	-3

**** XIIth Plan is the Avg. figure of Tetra Ending of 2012-13 to 2015-16.**

The comparative analysis of crop performance during the XIth Plan period and Tetra ending 2015-16 of the twelfth plan reveal that the NFSM interventions since 11th Plan has paid dividends in the production and yield of Paddy which is 18% and 16% higher during Tetra ending 2015-16 over its previous five year Plan and also seen under maize crop with an increase in area, production and yield at 10 %, 33% and 21% respectively. The crops replaced through diversification by maize and soyabean in kharif season are Ragi (>18%) Small Millets (> 30%), Urd (> 10%), Kulthi (>6%), Groundnut (> 8%), Til (> 11%) and Niger (>9%) of concerned here. Reduction in area under Urd and Kulthi is a major cause of concern. The production trend for kharif crops has shown an increasing trend in Paddy, Maize, Tur and Mung. As regards the per hectare yield, quantum jump has been recorded under Paddy, Maize, Arhar, and Moong at >16, 21, 25 and 26 % respectively.

B. Rabi Crops

(A-Lakh ha, P-Lakh tonnes, Y-kg/ha)

S. No.	Crops	Districts/ State	XI Plan			XII Plan			Increase/decrease over XI Plan		
			A	P	Y	A	P	Y	A	P	Y
A. Cereals											
1	Wheat	CG	1.03	1.15	1116	1.01	1.37	1356	-1.82	19.31	22
		All India	286.38	843.65	2946	304.02	931.88	3065	6.16	10.46	4
2	Barley	CG	0.03	0.03	833	0.03	0.02	950	-19.87	-8.65	14
		All India	6.58	15.06	2289	6.92	17.19	2483	5.24	14.14	8
3	Total Cereals	CG	1.06	1.17	1107	1.03	1.39	1346	-2.35	18.69	22
		All India	292.95	858.71	2931	310.94	949.06	3052	6.14	10.52	4
B. Pulses											
1	Urd	CG	0.04	0.01	255	0.06	0.02	232	49.88	36.36	-9
		All India	7.84	4.11	524	8.06	5.94	737	2.76	44.39	41
2	Moong	CG	0.07	0.02	229	0.06	0.01	226	-12.18	-13.58	-2
		All India	7.54	3.34	443	9.91	5.96	602	31.50	78.48	36
3	Kulthi	CG	0.03	0.01	295	0.03	0.01	246	9.06	-9.09	-17
		All India	2.11	1.08	512	2.28	1.10	485	8.02	2.20	-5
4	Gram	CG	2.44	2.22	908	2.78	2.68	964	13.80	20.78	6
		All India	82.18	72.42	881	88.43	82.92	938	7.61	14.50	6
5	Lentil	CG	0.16	0.05	322	0.14	0.05	327	-10.55	-9.00	2
		All India	14.64	9.60	655	13.90	10.93	786	-5.06	13.87	20
6	Lathyrus	CG	3.39	1.99	589	3.32	2.29	689	-2.12	14.59	17
		All India	5.16	3.42	662	4.93	3.84	779	-4.47	12.39	18
7	Peas	CG	0.16	0.06	352	0.15	0.05	370	-7.94	-3.23	5
		All India	7.16	6.22	869	11.50	10.36	901	60.63	66.56	4
8	*Total Pulses	CG	6.31	4.36	691	6.56	5.11	778	4.04	17.15	13
		All India	133.57	104.52	783	166.16	151.79	914	24.40	45.23	17
<i>*Total Pulses incl. (Other Pulses)</i>											
C. Oilseeds											
1	Rapeseed /Mustard	CG	0.53	0.22	409	0.48	0.25	534	-10.42	16.94	31
		All India	61.01	68.85	1128	62.64	73.73	1177	2.67	7.10	4
2	Linseed	CG	0.45	0.14	301	0.29	0.11	366	-36.34	-22.79	21
		All India	3.80	1.57	413	2.93	1.48	507	-23.04	-5.62	23
3	*Other	CG	0.30	0.11	385	0.01	0.00	370	-96.19	-96.33	-4

	Oilseeds	All India	26.14	24.94	954	20.05	23.74	1184	-23.31	-4.81	24
4	Total	CG	1.28	0.47	365	0.77	0.36	469	-39.41	-22.22	28
	Oilseeds	All India	90.95	95.36	1048	85.61	98.95	1156	-5.87	3.77	10
5	Sugarcane	CG	0.10	0.26	2491	0.13	0.35	2627	27.67	34.65	5
		All India	47.14	3258.30	69119	50.78	3529.68	69508	7.72	8.33	1
6	Jute & Mesta	CG	0.01	0.03	1972	0.01	0.02	1878	-14.93	-19.01	-5
		All India	9.09	110.86	12193	8.42	112.68	13376	-7.35	1.65	10
*Other Oilseeds include: Safflower, Sunflower & Castor)											

**** XIIth Plan is the Avg. figure of Tetra Ending of 2012-13 to 2015-16.**

The comparative analysis of crop performance during the XIth Plan period and Tetra ending 2015-16 of the twelfth plan reveal that the NFSM interventions since 11th Plan has paid dividends in the production and yield of Wheat which is 19% and 22% higher during Tetra ending 2015-16 over its previous five year Plan and also seen under Urd and Sugarcane crop with an increase in area and production at 50 % & 36% and 28% & 35% respectively. The crops replaced through this diversification in rabi season are Barley (>19%) Moong (>12%), Lentil (> 10%), Lathyrus (> 2%), Mustard (>10%) and Linseed (>36 %) of concern here. The production trend for kharif crops has shown an increasing trend in Wheat, Urd, Gram, Lathyrus, Mustard & Sugarcane. As regards the per hectare yield, quantum jump has been recorded under Wheat, Gram, Lathyrus, Rapeseed and Linseed at >22, 6, 17, 31 and 21 % respectively.

KHARIF CROPS SCENARIO: XIth&XIIthPLAN – CHHATTISGARHAREA

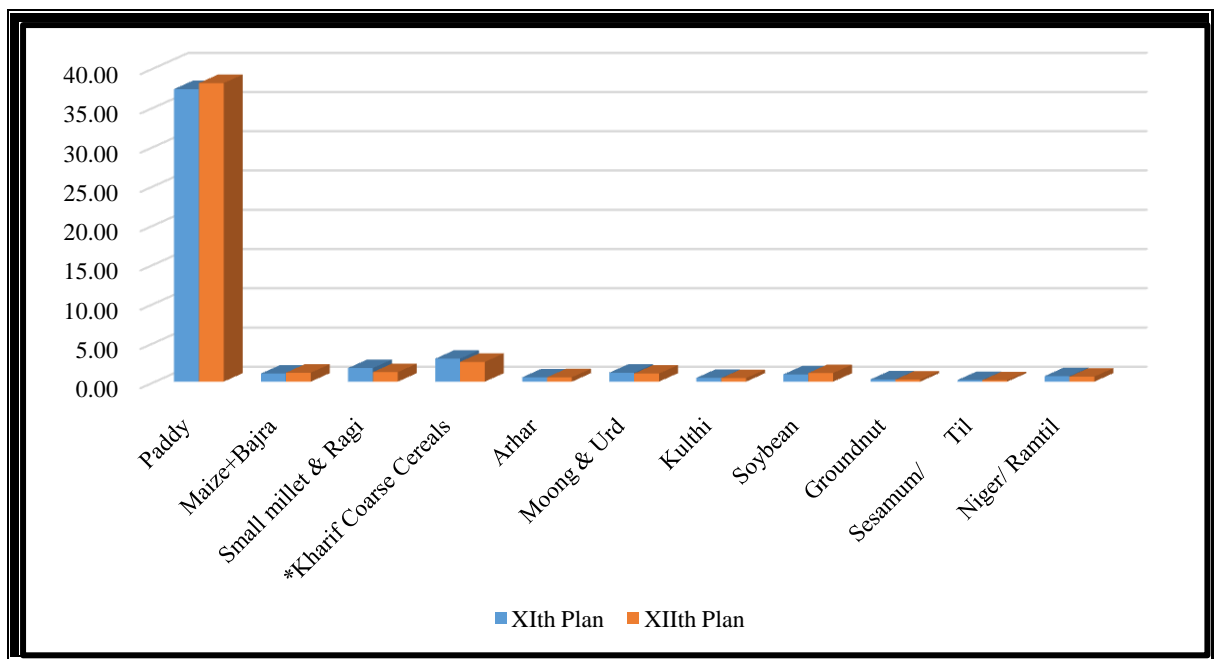


Fig 01: Area under crops during XIth and XIIth plan (Area: Lakh ha)

PRODUCTION

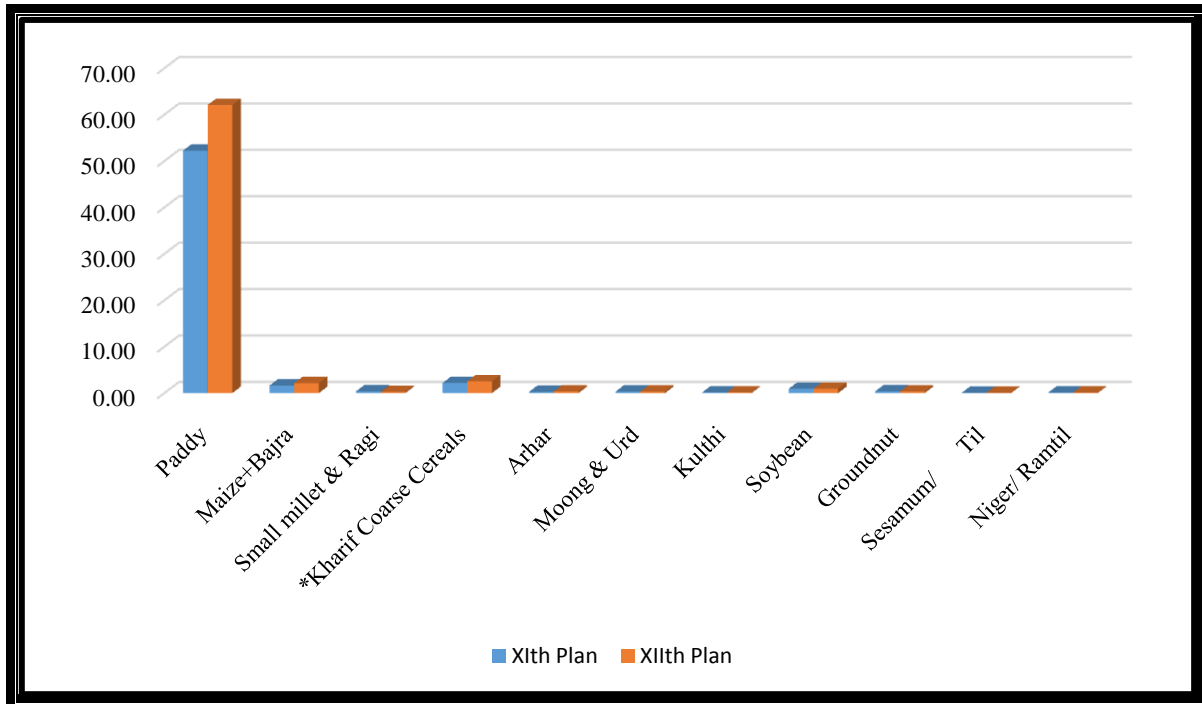


Fig 02: Production of crops during XIth and XIIth plan (Production: Lakh tones)

YIELD

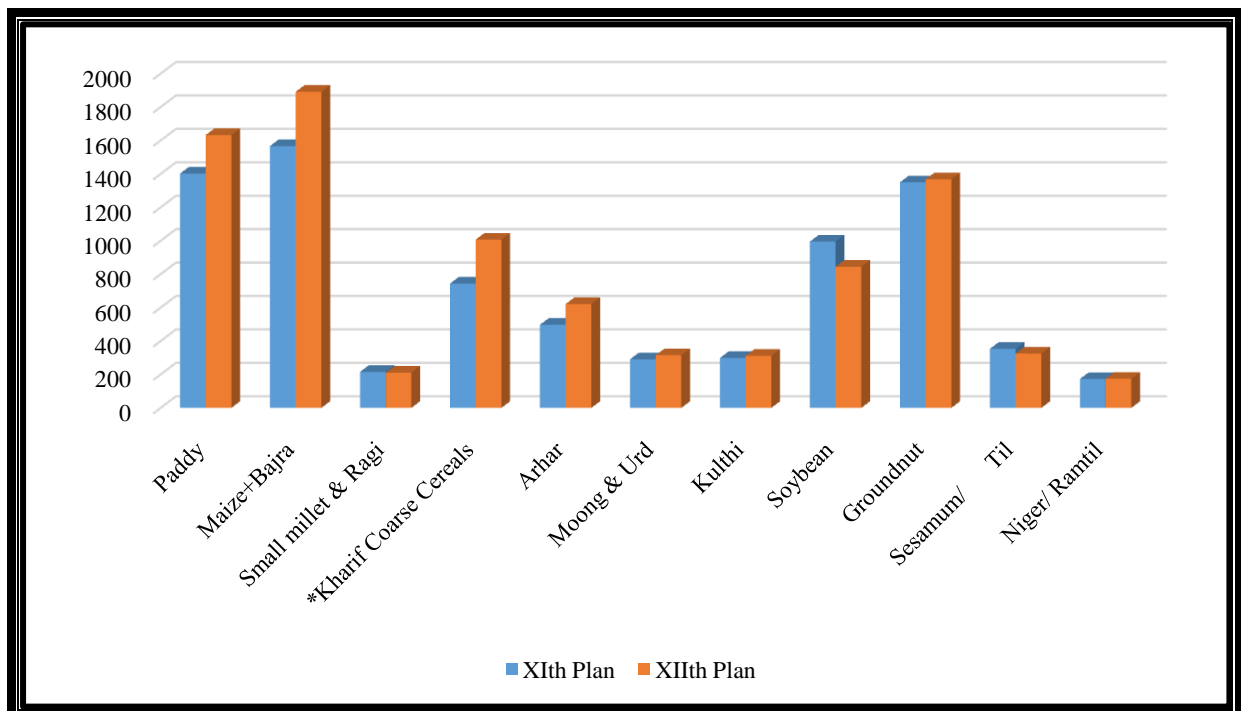


Fig 03: Yield of crops during XIth and XIIth plan (Yield: kg/ha)

RABI CROP SCENARIO: XIth&XIIthPLAN - CHHATTISGARH

AREA

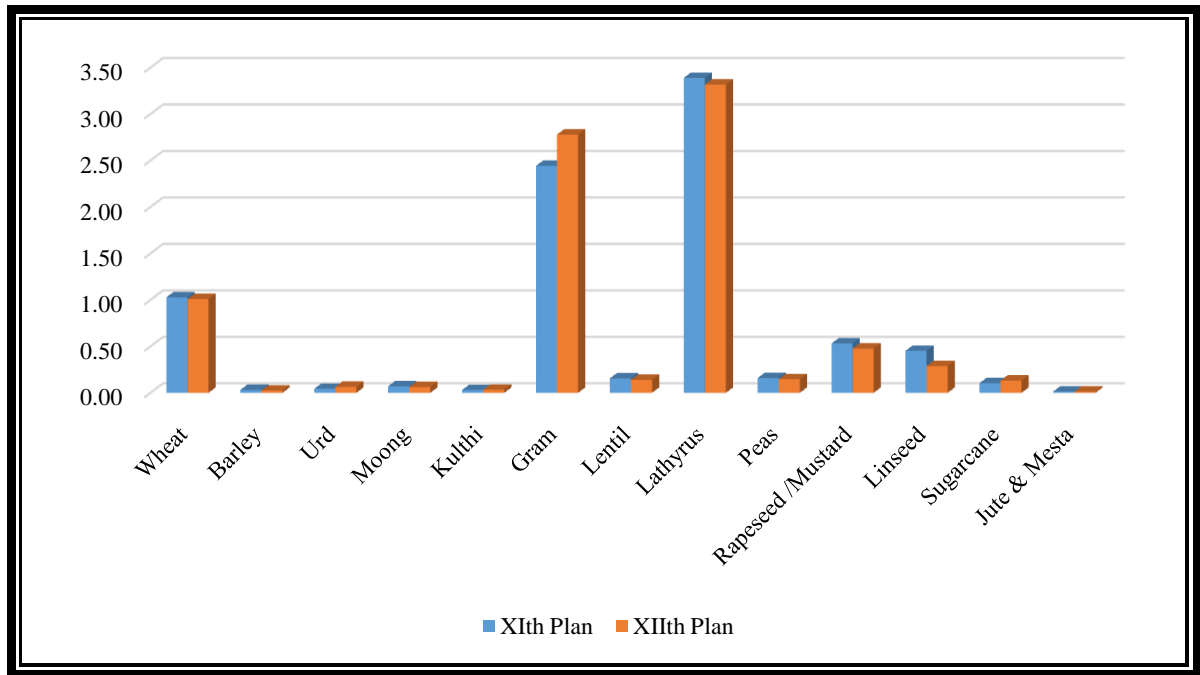


Fig 04: Area under crops during XIth and XIIth plan (Area: Lakh ha)

PRODUCTION

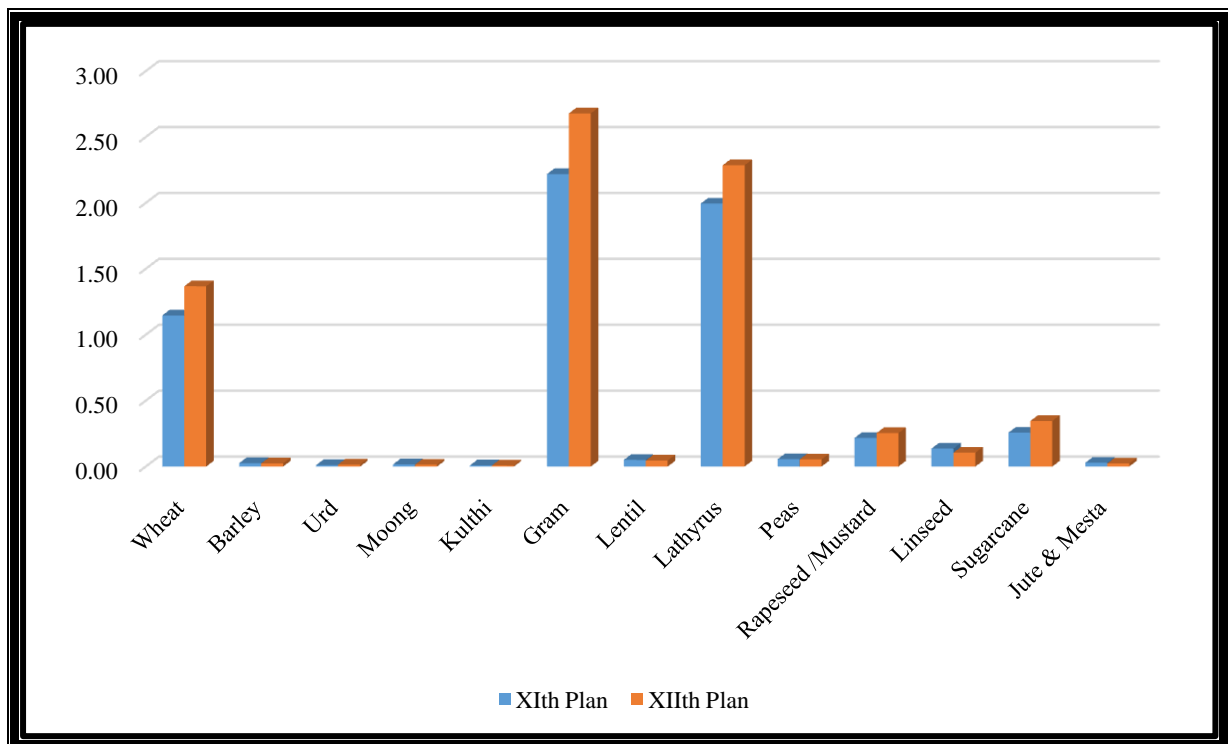


Fig 05: Production of crops during XIth and XIIth plan (Production: Lakh tones)

YIELD

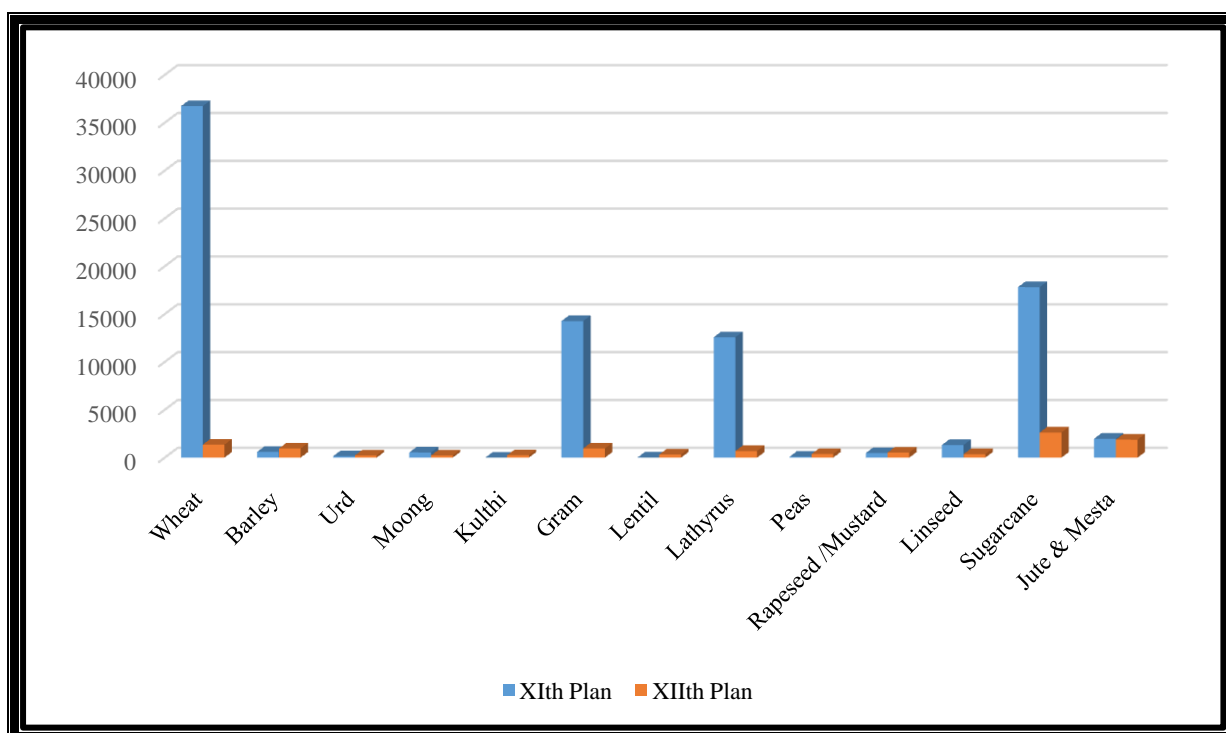


Fig 06: Yield of crops during XIth and XIIth plan (Yield: kg/ha)

8. CROP COVERAGE

8.1 KHARIF CROP SCENARIO: 2015 & 2016

(A-lakh ha, P-lakh tonnes)

Crops	Area				Production			
	2015 Achieve.	2016 Target	2016 Est.	% incr./decre. over 2015	2015 Achieve.	2016 Target	2016 Est.	% incr./decre. over 2015
Rice	37.09	36.26	36.88	-1	41.92	76.88	67.53	61
Maize	2.08	2.24	2.25	8	3.65	4.27	4.25	16
Minor Millets	0.83	0.92	0.61	-27	0.12	0.39	0.24	100
Total Cereals	40.00	39.42	39.74	-1	45.69	81.54	72.02	58
Arhar	1.25	1.45	1.40	12	0.75	1.01	0.91	21
Urd+ Moong	1.80	2.00	1.80	0	0.58	0.93	0.82	41
Kulthi (Horse Gram)	0.37	0.43	0.45	22	0.13	0.20	0.20	54
Total Pulses	3.42	3.88	3.65	7	1.46	2.14	1.93	32
Soybean	1.37	1.52	1.35	-1	0.82	1.96	1.74	112
Niger	0.63	0.81	0.80	27	0.10	0.25	0.25	150
Other Oilseeds	0.90	1.05	0.96	7	0.75	1.07	1.00	33
Total Oilseeds	2.90	3.38	3.11	7	1.67	3.28	2.99	79
Vegetable & Other Crops	1.37	1.42	1.40	2				
Grand Total	47.69	48.10	47.90	0	48.82	86.96	76.94	58

8.2 Kharif 2016 1st Advance Estimate : 2016- 17

Crops	Area	Production	Yield
Rice	36.88	67.53	1831
Maize	2.25	4.25	1889
Minor Millets	0.61	0.24	393
Total Cereals	39.74	72.02	1812
Arhar	1.40	0.91	650
Urd+ Moong	1.80	0.82	456
Kulthi (Horse Gram)	0.45	0.20	444
Total Pulses	3.65	1.93	529
Soybean	1.35	1.74	1289
Niger	0.80	0.25	313
Other Oilseeds	0.96	1.00	1042
Total Oilseeds	3.11	2.99	961
Vegetable & Other Crops	1.40		
Grand Total	47.90	76.94	3302

8.3 Rabi Target: 2016-17

(A-lakh ha, P-lakh tonnes)

Crop	Area	Production	Productivity
Wheat	178.0	258.1	1450
Maize	75.0	147.4	1965
Summer Rice	175.0	684.3	3910
Coarse Cereals	7.0	5.8	830
Total Cereals	435.0	1095.54	2518
Gram	400.0	460.0	1150
Pea	55.0	31.9	580
Lentil	30.0	14.7	490
Moong	25.0	10.3	410
Urd	15.0	5.9	390
Kulthi	30.0	13.5	450
Lathyrus	350.0	234.5	670
Total Pulses	905.0	770.70	852
Rapeseed/Mustard	155.0	93.8	605
Linseed	70.0	34.3	490
Safflower	10.0	3.1	305
Sunflower	15.0	9.8	655
Seasame	5.0	2.3	450
Groundnut	30.0	46.8	1560
Total Oilseeds	285.0	190.0	667
Total Rabi Crops	1625.00	2056.25	1265
Sugarcane	35.0	97.3	2780
Others (Incl. Vegetables)	170.0	0.0	0.0
Grand Total	1830.0	2153.55	1177

Source: SDA, CG

9. Financial Progress

9.1 Allocation & Expenditure : (2015-16)

Rs. In Lakh

S. No.	Name of Crop/ Scheme	Revalidate	Allocation	Total Release	Available Amount	Expenditure	Unspent Balance as on 01.04.2015
1	Paddy	1819.2	7224.00	3612.02	5431.22	4626.78	804.44
2	Pulses	1785.24	4274.22	2137.10	3922.34	2707.62	1214.72
3	Additional Pulses	827.21	1654.42	827.21	1654.42	1327.51 (326.909)*	0.00
4	Coarse Cereals	36.22	194.00	97.00	133.22	133.22	0.00
	Total	4467.87	13346.637	6673.33	11141.2	9122.04	2019.16

* Utilized under regular NFSM pulse

9.2 Allocation & Expenditure Kharif (2016-17)

As on 31.08.2016

Rs. In Lakh

S. No	Name of Crop/ Scheme	Revalidate	Allocation	Release	Available Amount	Expenditure	Unspent Balance as on 01.08.2016
1	Paddy	804.44	4659.00	2202.87	3007.31	563.70	2443.61
2	Pulses	1214.72	6130.00	3022.55	4237.27	190.94	4046.33
3	Additional Pulse	0.00	700.00	-	-	-	
4	Coarse Cereals	0.00	260.00	130.00	130.00	12.50	117.5
	Total	2019.16	11049.00	5355.42	7374.58	767.14	6607.44

10. Summary field visit/ Activities

District	Place	Events organized/activities exhibited to NLMT	Remarks/Observations
Mungeli	Pandarbhata	i) Construction of godown under innovative component of NFSM (<i>Subsidy- 1.5 Lac. was given to the farmer</i>). ii) Tube well dug in the farmers' field is not supplying continuous water with submersible pump in the month of September.	i) The structure shown was not the real godown structure. ii) The underground water source available in this area is unsuitable for tube well. iii) Proper survey through GPS is required and structures may be formed for water recharging in this area.

	Deore	<p>i) Cluster demonstration of rice variety Swarna Sub-1, Rajeshwari, Maheshariwas taken in different villages.</p>	<p>i) Inputs Package provided under the demonstrations not used due to delay in distribution.</p> <p>ii) Proper training of RAEO's required to deliver the technologies in the field.</p>
		<p>i) Pigeonpea cultivation in new bunds (<i>only Tur seed was provided to the farmer</i>).</p>	<p>i) Rice field bunds are comparatively wider in this district.</p> <p>ii) The improved techniques of Pigeonpea cultivation in bunds should have to be demonstrated in this area.</p>
		<p>i) SRI method of rice cultivation in hybrid rice variety Arise-Dhani in 5 acre area, only seed was provided to the farmer.</p>	<p>i) All necessary steps of SRI were not adopted, it was not the true SRI.</p>
		<p>i) Under Farm mechanization scheme of NFSM Multi crop Thresher and Rotavator was provided</p>	<p>i) Farmers are using these implements and also providing services to the others for rent.</p>
	Pendarakapa	<p>i) Organic farming self-sustaining model established by Shri V. V. Vaishnav to support his sweet shop situated at Mungeli.</p>	<p>i) Vermi-Composting, Biogas plant, Dairy farming organic farming and Net house cultivation of vegetables are nicely arranged.</p> <p>ii) This farmer is also facilitating farmers training for organic cultivation.</p>
	Dharampura	<p>i) Soil testing laboratory is functioning in two shift for target achievement of Soil Health Card.</p>	<p>i) Lack of skill in operating sophisticated instrument like Atomic Absorption Spectrophotometer needs training and AMC for machine.</p>
Janjgir-Champa	Jarwe	<p>i) Pigeonpea cultivation in rice bunds, variety – Asha and cluster demonstration of rice.</p>	<p>i) It is farmers believe that Pigeonpea can be grown on new bunds, but the farmers are impressed with the package of practices</p>

			standardized for bund cultivation, they can get pulse for their own use and weed free bund is also helpful in reducing pest problem of rice crop.
	Puchale	<p>i) Cluster demo. of Pigeonpea variety LRG-41 through broadcasting method.</p> <p>ii) Urd is mixed with pigeonpea crop.</p> <p>iii) Crop was moderately suffering from leaf folder damage</p>	<p>i) This is the traditional area of pigeonpea cultivation.</p> <p>ii) Long duration variety will not be suitable for the area and line sowing is suitable for intercropping.</p> <p>iii) The farmers were advised for spraying of neem formulation provided under the scheme.</p>
	Lakhurre	i) Meeting with the innovative farmer Shri Ramprakash Kasharwane having Custom Hiring Center and send several traditional varieties/Land races for PPVFR registration.	i) The farmer is awarded with <i>Khubchand Baghelaward of Chhattigarh Government</i> , owing Custom Hiring Center, mini dal mill also involved in organic farming.
	Janjgir	i) Soil testing laboratory functioning at DDA office in two shifts.	i) Skill development in instrumentation is necessarily required for the staff engaged for soil health card.
Bilaspur	Kota	i) Visited SADO office and interaction with the staff regarding programme implementation.	i) The packet of Micro-nutrient procured for distribution is not depicting about the formulation
		i) Check dam constructed under BGREI scheme.	i) The structure needs repairing, the water use efficiency can be increased by introducing micro-irrigation system, farmers are looking for electrification, and solar pump may also be useful for this area.

11. OBSERVATIONS

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.
2. Paddy varieties PKV-HMT, IGKV-12444, IGKVR-1, IGKVR-2, NDR-8002, Karma Mashuri introduced in Cropping System Based Demonstration (CSBD).
3. 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.
4. 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.
5. Availability of seeds of recommended HYV perspective crop and animal based agriculture development plan in the areas with soil and water conservation infrastructures (Check dams/ Stop dam/MIT) crop rotation, crop diversity, organic farming and mechanized farming should be considered for sustainable agriculture.
6. To control prominent weed such as *Saccharumspontaneum*, *Ageratum conyzoides*, *Partheniumhysterophorus*, *Ecliptaalba*, *Bluniaoxidenta*, *Ocimum sanctum*, *Commelinabenghalensis*, *Cleome viscosa*, pre-& post emergence herbicide should be demonstrated effectively.
7. Water table of many villages in Mungeli district has gone down, even below 400 feet. In the district, the lower portion of soil i.e. the parental rock strata is porous which causes/ collapsing of bore or require more casing under tube well.
8. Prospective plan and impact assessment part is lacking in the programme, it should be the integral part of all Govt. Supported development programmes.
9. Soil health card preparation work is going well, however, in most of the visited labs, it was noticed that the micronutrients analysis is not being done. Also, AAS, at many STLs are not in order either due to maintenance issue or non-engagement of skilled manpower having analytical background.
10. The rice crop suffered at vegetative stage due to delayed rains during September. For the last 2-3 years, delayed or irregular rainfall scenario in rice growing region has been observed.
11. Almost after 9 years of the implementation of the programme, proper documentation i.e. no of demo conducted and number of farmers covered, VRR introduction of

cropping system as a consequence of the CSBD, implement distributed, employment generation and impact assessment on cost of cultivation is lacking at district level.

12. After the field visit also wrap up meeting with ACS/APC and members of NLMT and other officials related with the programme. In meeting all technical and administrative issues discussed are given as under:

Scope of Review : *NFSM/BGREI/RKVY/CSS/State Plan, Other NFSMfunded Projects*

Districts visited : *Baloda bazaar, Mungeli, Janjgir-Champa and Bilaspur.*

➤ ***NFSM-funded Projects to ICAR/ATARI***

I) ICAR

(a) SEED HUB REVIEW:

- i) Creation of seed hubs of (2016-17 to 2018-19) for increasing indigenous production of pulses in India. (Rs.150 crores) Target pulses viz; Tur, Pea, Mung, Lentil and Lathyrus: **Implementation (IGKV, KVK Bhatapara, Ambikapur, Rajnandgaon and Kawardha).***
- ii) Enhancing Breeder seed Production for Increasing Indigenous Production of Pulses in India.*

II) ICARDA

- Enhancing grass pea Production in Eastern/NE for animal feed, safe human food and sustainable Rice based Production System (2010-2011 to 2015-16).*
- Enhancing Lentil Production in Eastern and NE states for nutritional security and sustainable rice based production system.*

(b) FLD: (ATARI/SAU, Kharif-2016)- *The ATARI/ SAU/KVK FLDs were conducted in an area of 1106 ha and almost 2851 farmers were the beneficiaries. The major issues in the FLDs were registration of farmers with SSC seed certification for seed certification and lifting tie-up arrangement of seed between State Seed Corporation (SSC) + (SAU) + KrishiVigyan Kendra.*

(c) FLD: ICAR (TSP)

(d) FLD: ICAR Regular

➤ **Crop Scenario:** *i) Over all excellent for oilseeds and pulses.*

iii) Paddy excellent, except about 10 % loss in dry spell area.

➤ **Programme Implementation/Intervention wise Feedback:**

- Seeds: Breeder seed purchase/ identification of variety : Non-involvement.*
- Production of foundation and certified seed : Non -involvement of DDAs*
- Distribution of HYVs/Certified seeds : Quality is not varietal issue/
timeliness fixation of seed
rate.*

➤ **Technology Demonstration:**

a) **Sole Demonstration**

- *Input Cafeteria* : To be decided at district level.
- *Site selection* : Representative of soil type / Fertility status.
- *Ensuring input availability other than seed* : Package and accessibility.
- *INM application* : Soil test based.
- *Integrated Pest Management* : Demonstration/ timely use.
- *Herbicide/ weed management* : Demonstration/ timely use.
- *Agronomical practices* : Line sowing and Plant population.
- *Missing clusters Area* : Pulses and Oil seeds.
- *Control (Comparison plot)* : Variety, method of planting and sowing time.
- *Field day* : Documentation
- *PMT* : Recruitment/ involvement/ quality.
- *Apathy of DFSMEC in quality TOT* : GPS/ Documentation.

b) **CSBD**

- *Missing criteria of 30 %*
- *Missing Linkage with IFS/CSR recommendations: Cropping system, INM and Climate change.*
- *Lacking Concept* : Problematic area, saline/alkalin soils, waterlogged etc.
- *Lacking consolidated evaluation impact/new* : Varieties, method of planting system recommendations sowing, time manipulation, inter-cropping etc.
- *Economise cost of cultivation* : C:B ratio not documented.

➤ **INM: Revisit input cafeteria:**

- *ST based recommendation.*
- *Trichoderma has no relevance in submergence.*
- *Paddy field.*
- *Micronutrient application high zinc plus. (Akash labs Raipur)*
Zn- 5 %, B- 1.6%, Cu, Fe- 5 % and Mn- 3 %.

➤ **RCT/Tools:**

- *10000/- subsidy tool (Multi crop planter, Power tiller, Seed drills, Power weeder, Zero till multi-crop planter, Rotavator, Reaper, Tractor Mounted Sprayer, Ridge- furrow planter, Laser land leveller, Tractor mounted sprayer Should have user group.*
- *Impact evaluation (after 2-4 years) (on cost cutting, employment generations, increase in mechanisation)*
- *Repair/maintenance / trainings under local initiatives/state plan.*

- **Efficient water application tools:**
 - Excellent Sprinkler set (@ Rs 10000/ ha), Pump set (@ Rs 10000/unit), pipeline @ Rs. 15000 or Rs 50 permupto 600 meter
 - Tie up with stop dam, check dam and MIT.
 - Evaluation of potential increase
- **CSBD training:** Non-strategic/incommensurate
- **Local initiatives:**
 - Good performance.
 - Evaluate utilization status.
 - Converge as local input hub by SHG/FPO.
- May include land consolidation, community threshing yard through NGO/SHG Mgmt., Mini dal mill/ branding unit etc.
- **Pradhan MantriFasalBimaYojna (PMFBY):**
 - Flexi-boards in Panchayats and village (Rates, crops etc.)
 - Extending Non- loanee cover
 - Involve accountability of Revenue department
 - Aadhar seeded data.
- **Direct Benefit Transfer (DBT):**
 - March 2017
 - Aadhar seeded beneficiaries

Other Suggestions:

- Timely release of funds by Govt. of India and States.
 - Involvement of ATM/BTM (ATMA) in demo of NFSM.
 - Involvement of KVK/NGO.
 - Exchange of demo list (Deptt. + KVK).
 - Perspective plan for Soil & Water conservation infrastructure- (Check dam/ Stop dam).
 - Activation of Water User Association (WUA)/ Pani Panchayat.
 - 3 years maintenance provision of check dam/stop dam.
 - Accountability of quantity/ maintenance of block level (BMPC)- (e.g Kota).
 - Providing funds on furnishing to DDA B/d Mungeli.
 - Position of M.Sc. (Soil Science) RAEO with STL to run AAS/ Double beam photometer.
 - Mandatory 5% referral sampling of results of SHG from
- Mrida-
Parikshak.
- Target issued delayed: 1st instalment without conditionally of UC.

12. RECOMMENDATIONS/SUGGESTIONS

1. Quality seed production activities were undertaken which can give direct benefit to farmers if adopted in large areas in effective ways. Such state initiative is appreciable.
2. **Arhar cluster demonstration** under variety LRG 41, Asha and Rajeev Lochanboth as sole and on rice bunds (@ 10 percent of total rice area as bunds) have been targeted under NFSM pigeonpea demonstration with wider sowing window during kharif (7th July to 28th August), the Arhar as rainfed crop is being popularized by the state and adopted by the farmers. The crop stand was found good at many places.
3. In rainfed ecosystem, medium to late maturing Tur varieties (180-200 days) restrict the option for succeeding rabi crop with low yield levels i.e. 6-7 q/ha yield in a whole year. Thus early varieties of pigeon pea are needed for CG which would facilitate chickpea in rabi season.

Economics of total annual harvest in a unit area is the main reason of its area declining in the state. ***In Arhar, farmers need mid-early varieties maturing within 140-150 days.***

4. The visited SRI as cluster demonstration in village Devari has not been demonstrated with proper principles and practices of SRI, i.e. i) Age of seedlings 8-14 days, ii) Field preparation (50% organic and 50% inorganic), iii) Square planting (20x20 cm or 25x25 cm), iv) Inter-row weeding and v) Water management i.e., alternate wetting and drying, watering only when hair line cracks appear in the field. 35 days old seedlings were transplanted that is why only 18 tillers were observed under SRI method of rice cultivation, even no square planting. Trichoderma is being applied in rice field under demonstration as one of the inputs. However, Trichoderma is not recommended under water logging conditions. This indicates that the district level field extension functioning's need skill development trainings at one hand and more stringent monitoring of the programme at the level of Directorate of Agriculture.
5. DSR demonstration with *var. Sahbhagi* has been demonstrated. As a major resource conservation of resources, DSR planting technique is need of the state and should be popularized.
6. Based on the experience/outcomes of NFSM/BGREI CSBD, district-wise "***Cropping systems may be standardised***" in the existing ***rice-fieldpea-wheat-moong/urd cropping*** appropriate varietal selection, sowing time, method of planting and other crop management manipulations may be worked out for all 03 agro-climatic zones of CG.
7. Custom hiring of machineries/equipments is gaining popularity as hiring tractor with implements is easier than maintaining a pair of bullocks throughout year.
8. To establish and sustain ***the SRI cultivation and pigeon-pea- bund*** cultivation in the state, the SAU, devised technology package/ modified package of SRI suited to CG. State in view of varied ***Agro-eco-situations*** of Chhattisgarh.
9. The parallel district level / block level extension functionaries like ATMA and KVK have not been associated in conduct of participatory mode of Demonstrations. Even

Reputed NGOs may also be involved in the TOT activities especially in problematic areas like Bastar region under NFSM.

10. GPS based documentation of all cluster demonstrations and also for machinery beneficiaries is recommended for effective ToT and transparency.
11. To promote mechanizations, especially as first step in mechanization seed-cum-fertilizer drill and power tiller should be made available to farmers. This may not only reduce the cost of cultivation but would propagate Resources Conservation Technology.
12. 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. The team recommends involvement of KVKs/SAUs in drawing proper AES based technologies at field level to address gap in planning and execution of the Mission activities.
14. Rotavator is in high demand for doing agricultural operations and reduction of labour cost under dwindling labourers in the region.
15. Every implement distribution to farmers should be properly labelled indicating the programme, component, subsidy details, etc. Further, no of particular implements/machineries such as rotavator, straw reaper or costing > Rs.10000/- subsidy should not be more in one village to ensure higher utilization efficiency of machines and also equitable distribution and demonstration of resource to other villages/farmers.
16. Selection of site for Cluster Demonstration both under sole and CSBD as per situational recommendation of variety, medium duration rice was grown in lowland areas, which need specific attention of the SDA.
17. Missing links like synergistic extension efforts, lack of skill amongst extension functionaries/in selection of site, organization of cluster demonstration; documentation and season based trainings to farmers etc. are the issue needing attention of the State deptt. of Agriculture.
18. The mandatory soil health cards must be distributed to all the participating farmers under NFSM cluster demonstration. The status of soil health, thus, was not taken into consideration while recommending the balance nutrition.
19. The organic growers in the state must be facilitated in terms of the accreditation, marketing and strengthening of the organic manures, vermin-compost preparation and skill up-gradation etc.
20. Organic Certification Agency is lacking in the division this is highly useful for preparation of environment for promotion of organic cultivation.
21. Soil testing report generated by MridaParikshak (Mini Lab) may be randomly conformed by the referral laboratories for its authenticity.
22. Soil testing report must be given at least for the demonstration crop where micronutrients are being applied blindly.
23. Skill development in the field of instrumentation is advised for the staff involved in soil testing work and similarly, annual maintenance contract (AMC) for the sophisticated instruments like AAS and double beam Photometer etc. should be provided for the district soil testing laboratories

24. To contain major diseases like Blast, Neck blast, BLB, Brown spot, False smut, Wilt, Root Knot etc. effectively, demonstration on cultural, mechanical, bio-intensive & chemical methods need to be conducted as well as Community IPM approach may be advocated.
25. The earlier popular *Rice-lathyrus cropping system* is now diverting to *rice-gram system*. Lathyrus 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 q/ha) yield potential in rice-gram sequence.
26. Economics of SRI cultivation in Chhattisgarh such as cost of cultivation, manpower used, total production and economic return etc. should be studied at the end of demonstration to ensure sustainability of the system, as also to conclude its suitability for Chhattisgarh.
27. *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 ecosystem of the region on sustainable basis.
28. The districts like Janjgir having > 92% area under assured irrigation, proper crop plan for whole year i.e. rice succeeding pulse excess moisture and increase should be prepared to utilize cropping intensity.
29. In all the sample districts visited by the Team, it is noticed that execution of cropping system based cluster demonstration (mandatory 30% of total demonstration in a district has not been done. The objective of CSBD system in the mission was aimed at a definite support to rapipulses for higher total system productivity. The state need to look seriously to this component.
30. Local Initiative components should have wider shelves of activities on the basis of local needs and efficiency. In Mungeli district the godown under this component does not confirm the norms and publicity board. The team suggests that this component should be evaluated in terms of its utility, reduction in storage loss, and as local seed storage hub etc. Crop like arhar safer in weather vagaries and survive well in scarcity of rainfall with higher remunerative prices and yield security owing to deep root system etc as compared to rice under low rainfall, need to be promoted in uplands and upland topography as a policy to diversify cropping pattern.
31. As a long term soil and water conservation measures, each Stop dam/ Check dam structures should have a budgetary provision of 10% of the total construction cost for maintenance & repair. For proper execution and maintenance of Pani Panchayat and Water Use Committee should also be energised.
32. Check dam, stop dam, MIT or other such soil water conservation structures should be assessed in terms of quantum of water stored, duration of water availability potential irrigation through MIS, recommended crop cultivation and livelihood security of the farmers in that vicinity.
33. Pre-emergence application of Pendimethalin and 2,4-D as post emergence application was demonstrated under cluster demonstration.
34. Karga (Wild rice) is one of the severe problems in rice cultivation which involve more cost in rouging and managing the crop. *Shyamala* variety of rice should be used for karga (wild rice) which is violative in colour and initial stage of identification will

support to farmers because they generally used to remove rice at flowering and later stage.

35. Chemical or microbial degradation of wild rice seed is a researchable issue for the effective control of wild rice problem in rainfed areas of Chhattisgarh.
36. Except seed other inputs like seed treatment material and herbicides for early stage weed control could not be made available well in time, have no use at later stage.
37. Bund cultivation of Arhar (10 % of rice field areas considered under bunds for NFSM-Pulse) should be standardized in terms of seed rate, time of sowing, spacing, methods of planting, bund-bed preparation etc. So that every demonstration can follow the package. As of now only seed rate is a major parameter whereas the other agronomical operations are not documented as follow up action under the demonstration.
38. In village **Pindarika (Mungeli)**: team visited VaishnavKrishi Farm (owner-Shri VidhyabratVaishnav) and saw the integration of broad based agriculture with organic farming viz. AHD (150 nos. of Sahiwal cows with less no. of HF) with cultivation of fodder grass and sugarcane fodder using cow dung as biogas for running Confectionary unit. In fact such models need replications.
39. Contingent crop planning for rice under weather variation like early, mid and late season water deficit by giving them proper training under vagaries of rainfall and crop selection varieties, method selection should be kept in mind for combating situation.
40. The team suggested that actual allotment and performance of demonstrations by SADO and subordinate staff based on input criteria would be detailed in register and purchasing and demand placing so that things will be clear. As per the norm of cluster demonstration 30% area should be under cropping system based demonstration.
41. Seed grower's societies are lacking in the Bilaspur division, suitable environment should be made for promoting seed production work by farmer's participatory approach.
42. Seed availability for demonstration purpose should be made as per the local recommendation of concerned KVK. The position of Plant Breeder should be made in the KVK.
43. 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.
44. To sustain the bund cultivation of Pigeonpea, the conducts of cluster demonstration need perfect standardization with the help of SAUs/KVKs for each district. 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.
45. The post of DCs, TA under PMT should be filled- up. The state HQ/Mission Director may seriously monitor such technical requirements in the NFSM in the interest of conduct of quality cluster demonstration in the state not merely the achievements of targets.



ROTAVATOR GIVEN UNDER NFSM



BIOGAS PLANT OF 45 CUBIC METERS



JEVIK KRISHI OF KARELA BY SLURRY OF BIOGAS



VERMI-COMPOST AFTER SIEVING



CLUSTER DEMONSTRATION OF RICE



ARHAR DEMONSTRATION UNDER NFSM



MONITORING OF CHECK DAM



VISIT OF VILLAGE – CHHARVE



SAMPLE ANALYSIS FOR SOIL TESTING



SAMPLE ANALYSIS FOR SOIL TESTING



REVIEW MEETING OF SEED-HUB PROGRAMME



VISIT TO AGRICULTURE MUSEUM, IGKV, RAIPUR

APPROVED COST NORMS & INPUT CAFETERIA : 2016-17**A. CLUSTER DEMONSTRATIONS****1. Cluster Demonstration : Rice -Direct seeded/Line sowing with HYVs.****Farming situation:** Upland Rainfed/Midland Rainfed-semi-irrigated Condition.

(Amount in Rs.)

S. No.	Activity/Particular	Unit cost	Maximum Assistance (Rs./ ha)
1.	Seed (@60 kg/ha)	Rs. 20/kg	1200
2.	Arhar seed for bund cultivation	2 kg	300
3.	Fertilizer (N: P: K) (60:40:20) **	-	To be borne by farmers themselves
4.	Ambika/Conoweeder	50 % maximum Rs 600	600
5.	Integrated Nutrient Management	Soil test based use of micro nutrient/lime	1750
6.	Weedicide		1900
7.	Integrated pest Management	Plant protection chemicals and bio-agents	950
8.	Field day/publicity material/visit of scientists/staff	Rs. 800/ha	800
TOTAL			7500

2. Cluster Demonstration : Rice -Transplanting with HYVs.**Farming situation:** Midland Semi-irrigated Condition/Midland irrigate Condition.

(Amount in Rs.)

S. No.	Activity/Particular	Unit cost	Maximum Assistance (Rs./ha)
1.	Seed (@40 kg/ha)	Rs. 20/kg	800
2.	Arhar seed for bund cultivation	2 kg	300
3.	Fertilizer (N: P: K) (60:40:20) **	-	To be borne by farmers themselves
4.	Marker	50 % of the cost	800
5.	Integrated Nutrient Management	Soil test based use of micro nutrient/lime	1750
6.	Weedicide	-	1900
7.	Integrated pest Management	Plant protection chemicals and bio-agents	1150
8.	Field day/publicity material/visit of scientists/staff	Rs. 800/ha	800
TOTAL			7500

Note: Any amount saved in any above mentioned component can be utilized in other components but not exceeding to upper limit of Rs. 7500/ha.

3. Cluster Demonstration: Rice -SRI with HYVs.

Farming situation: (E) Midlandassured irrigated Condition.

(Amount in Rs.)

S. No.	Activity/Particular	Unit cost	Maximum Assistance (Rs./ha)
1.	Seed (@15kg/ha)	Rs. 20/kg	300
2.	Arhar seed for bund cultivation	2 kg	300
3	Fertilizer (N: P: K) (100:60:40) **	-	To be borne by farmers themselves
4.	Marker	50 % of the cost	800
5.	Integrated Nutrient Management	Soil test based use of micro nutrient/lime	2500
6.	Weedicide	-	1200
7.	Integrated pest Management	Plant protection chemicals and bio-agents	1600
8.	Field day/publicity material/visit of scientists/staff	Rs. 800/ha	800
TOTAL			7500

4. Cluster Demonstration : Rice -SRI/Line Transplanting with Hybrids-Rice

Farming situation:Midlandassured irrigated Condition.

(Amount in Rs.)

S. No.	Activity/Particular	Unit cost	Maximum Assistance (Rs./ha)
1.	Seed (@10 kg/ha)	Rs. 275/kg	2750
2.	Arhar seed for bund cultivation	2 kg	300
3	Fertilizer (N: P: K) (60:40:20) **	-	To be borne by farmers themselves
4.	Integrated Nutrient Management	Soil test based use of micro nutrient/lime	1450
5.	Weedicide	-	1200
6.	Integrated pest Management	Plant protection chemicals and bio-agents	1000
7.	Field day/publicity material/visit of scientists/staff	Rs. 800/ha	800
TOTAL			7500

Note: Any amount saved in any above mentioned component can be utilized in other components but not exceeding to upper limit of Rs. 7500/ha.

5. Cluster Demonstration : Pulses Intercropping of Arhar : Soybean (2:6)

Farming situation:Upland RainfedCondition.

(Amount in Rs.)

S. No.	Activity/Particular	Unit cost	Maximum Assistance (Rs./ha)
1.	Seed (Arhar @5 kg/ha) seed (Soybean @ 60 kg/ha)	Rs. 135/kg Rs. 64/kg	675 3840
2.	Fertilizer (N: P: K) (20:50:20) **	-	To be borne by farmers themselves
3.	Integrated Nutrient Management including ZnSO ₄ , Sulphur, Borax, Sodium Molybdate, considering soil test value	-	885
4.	Weed Management/Weedicide	Rs 700/ha	700
5.	Integrated pest Management including bio pesticides, Pesticides, Pheromone traps etc.	Rs 500/ha	500
6.	Rhizobium + PSB culture	Rs. 100/ha	100
7.	Field day/publicity material/visit of scientists/staff	Rs. 800/ha	800
TOTAL			7500

6. Cluster Demonstration : Pulses- Intercropping (2 rowsMaize/Moong, Urd:

Arharand 1 rows)

Farming situation:Upland RainfedCondition.

(Amount in Rs.)

S. No.	Activity/Particular	Unit cost	Maximum Assistance (Rs./ha)
1.	Seed (Moong, Urd/Maize @ 15 kg/ha) (Arhar @ 4 kg/ha) Including seed treatment		4000
2.	Fertilizer (N: P: K) (20:50:20) **	-	To be borne by farmers themselves
3.	Integrated Nutrient Management including ZnSO ₄ , Sulphur, Borax, Sodium Molybdate, considering soil test value	-	900
4.	Weed Management/Weedicide	Rs 700/ ha	700
5.	Integrated pest Management including bio pesticides, Pesticides, Pheromone traps etc.	Rs 1000/ha	1000
6.	Rhizobium+PSB culture	Rs. 100/ha	100
7.	Field day/publicity material/visit of scientists/staff	Rs. 800/ha	800
TOTAL			7500

Note: Any amount saved in any above mentioned component can be utilized in other components but not exceeding to upper limit of Rs 7500/ha.

B. CROPPING SYSTEM BASED DEMONSTRATIONS

1. CSBD : Rice-Pea /Rice-Gram /Rice -Lathyrus

Farming situation: Rainfed Semi- irrigated/irrigated Condition.

(Amount in Rs.)

S. No.	Activity/Particular	Unit cost	Rate Assist. (Rs./ha)	
			Kharif (Rice)	Rabi (Pea)
1.	Seed Rice- @60 kg/ha+ Arhar 2 kg for bund Pea/gram/lathyrus- @ 80 kg/ha)	Rs. 20/kg- Rice Rs. 50/kg- Pea/ Gram/Lathyrus	1500	4000
2.	Weeder/sprayer/Marker (600+600+700)	50 % of cost	800	1100
3.	Fertilizer (N: P: K) Rice- (60:40:20) ** (Pea/gram/lathyrus- 20:40:20)**	-	To be borne by farmers themselves	
4.	Integrated Nutrient Management	-	1000	850
5.	Weed Management/Weedicide	-	1200	0
6.	Integrated pest Management including bio pesticides, Pesticides, Pheromone traps etc.	-	600	650
7.	Field day/publicity material/visit of scientists/staff	Rs. 800/ha	400	400
TOTAL			5500	7100

2. CSBD : Rice-Maize

Farming situation: Rainfed /Semi- irrigated/irrigated Condition.

(Amount in Rs.)

S. No.	Activity/Particular	Unit cost	Rate Assist. (Rs./ha)	
			Kharif (Rice)	Rabi (Pea)
1.	Seed Rice- @60 kg/ha+Arhar 2 kg for bund Hybrid Maize @ 20 kg/ha	Rs. 20/kg-Rice Rs. 200/kg- Maize	1500	4000
2.	Fertilizer (N: P: K) Rice- (60:40:20) ** (Maize- 100:60:40)**	-	To be borne by farmers themselves	
3.	Integrated Nutrient Management	-	1000	850
4.	Weed Management/Weedicide	-	1900	1000
5.	Integrated pest Management including bio pesticides, Pesticides, Pheromone traps etc.	-	600	850
6.	Field day/publicity material/visit of scientists/staff	Rs. 800/ha	400	400
TOTAL			5400	7100

Note: Any amount saved in any above mentioned component can be utilized in other components but not exceeding to upper limit of Rs. 12500/ha.

3. CSBD : Improved Varieties Vs Local Varieties (Arhar /Urd / Moong)

Farming situation:Upland RainfedCondition.

(Amount in Rs.)

S. No.	Activity/Particular	Unit cost	RateAssist. (Rs./ha)
1.	Seed (@20 kg/haincluding seed treatment	Rs. 135/kg	2700
2.	Fertilizer (N: P: K) (20:50:20) **	-	To be borne by farmers themselves
3.	Integrated Nutrient Management including ZnSO4, Sulphur, Borax, Sodium Molybdate, considering soil test value	-	1050
4.	Gypsum	-	1000
5.	Weed Management/Weedicide	Rs 1000/ha	1000
6.	Integrated pest Management including bio pesticides, Pesticides, Pheromone traps etc.	Rs 850/ha	850
7.	Rhizobium+PSB culture	Rs. 100/ha	100
8.	Field day/publicity material/visit of scientists/staff	Rs. 800/ha	800
TOTAL			7500

4. CSBD : Improved Varieties Vs Local Varieties (Gram/Pea)

Farming situation:Upland RainfedCondition.

(Amount in Rs.)

S. No.	Activity/Particular	Unit cost	Rate Assist. (Rs./ha)
1.	Seed (@80 kg/haincluding seed treatment	Rs. 50/kg	4000
2.	Fertilizer (N: P: K) (20:50:20) **	-	To be borne by farmers themselves
3.	Integrated Nutrient Management including ZnSO4, Sulphur, Borax, Sodium Molybdate, considering soil test value	-	1050
4.	Weed Management/Weedicide	Rs 1000/ha	700
5.	Integrated pest Management including bio pesticides, Pesticides, Pheromone traps etc.	Rs 850/ha	850
6.	Rhizobium+PSB culture	Rs. 100/ha	100
7.	Field day/publicity material/visit of scientists/staff	Rs. 800/ha	800
TOTAL			7500

Note: Any amount saved in any above mentioned component can be utilized in other components but not exceeding to upper limit of Rs 7500/ha.

5. **CSBD : (A) Rice-Gram (B) Rice-Pea (C) Rice-Moong/Urd**
Farming situation: Rainfed /Semi-irrigated Condition.

(Amount in Rs.)

S. No.	Activity/Particular	Unit cost	Rate Assist. (Rs./ha)	
			Kharif (Rice)	Rabi (Pea)
1.	Seed (Moong, Urd/Maize @ 15 kg/ha) (Arhar @ 4 kg/ha) Including seed treatment		1500	4000
2.	Weeder/Sprayer/Marker	50% of cost	800	1100
3.	Fertilizer (N: P: K) (Rice-60:40:20) ** (Pea/Gram/Lathyrus-20:40:20)**	-	To be borne by farmers themselves	
4.	Integrated Nutrient Management	-	1000	850
5.	Weed Management/Weedicide	-	1200	0
6.	Integrated pest Management including bio pesticides, Pesticides, Pheromone traps etc.	-	500	590
7.	Rhizobium + PSB culture	-	0	60
8.	Field day/publicity material/visit of scientists/staff	Rs. 800/ha	400	400
TOTAL			5400	7100

6. **CSBD : (A) Rice-Gram (B) Rice-Pea (C) Rice-Moong/Urd**
Farming situation: Rainfed /Semi-irrigated Condition.

(Amount in Rs.)

S. No.	Activity/Particular	Maximum assistances (Rs./ha)	
		Maize	Millets
1.	Seed	4000.00	1200.00
3.	Integrated Nutrient Management /Micro nutrients/ Bio-fertilizers	0.00	2000.00
3.	Culture (Rhizobium and PSB)	200.00	0.00
4.	Integrated pest Management Plant protection (pp chemicals or bio-pesticides)	0.00	1000.00
5.	Field day/publicity material/visit of scientists/staff	800.00	800.00
TOTAL		5000.00	5000.00

Note: Any amount saved in any above mentioned component can be utilized in other components but not exceeding to upper limit of 5000/ha.

State Subsidy for Adoption of System of Rice Intensification Technique (SRI)

(Amount in Rs.)

S.No.	Particulars	Quantity	Subsidy / ha
1	N.P.K.	2 Bags	1700.00
2	Urea	1 Bag	280.00
3	Zinc Sulphate	20 kg	850.00
4	Herbicides	-	570.00
5	PSB	-	100.00
Total			3500.00

Physical and Financial Progress during 2016-17

1. NFSM-Rice

Month-August 2016

(Rs. In lakh)

S. No.	Intervention	Approved rate of assistance	Unit	Physical		Financial	
				Target	Achi.	Target	Achi.
1	Cluster demonstration by state department of agriculture (one cluster of 100 ha).						
	(i) Direct seeded Rice	Rs. 7500/ha	ha	1898	1898	142.35	10.83
	(ii) Rice Line Transplanting	Rs. 7500/ha	ha	2450	2405	183.75	20.01
	(iii) Rice SRI	Rs. 7500/ha	ha	1750	1705	131.25	64.22
	Sub Total a(i) to a (iii)			6098	6008	457.35	95.06
	(b) Cluster demonstrations on hybrid rice (one cluster of 100 ha)	Rs. 7500/ha	ha	8250	8250	618.75	155.90
	(c) Demonstrations on stress tolerance variety	Rs. 7500/ ha	ha	500	500	37.50	5.17
	(d) Cropping System based demo						
	(i) Rice-Gram	Rs. 12500/ha	ha	2200	2150	275.00	18.94
	(ii) Rice-pea	Rs. 12500/ ha	ha	1200	1200	150.00	21.35
	(iii) Rice-Maize	Rs. 12500/ha	ha	2200	1900	275.00	15.93
	(iv) Rice-Lathyrus/Groundnut/ Rabi Arhar	Rs. 12500/ha	ha	400	350	50.00	1.72
	Sub Total d (i) to d (iv)			6000	5600	750.00	57.94
2	Seed distribution:						
	Hybrid Rice	Rs. 5000/Qtl	Qtls	2500	270	125.00	0.00
	HYV Seed	Rs. 1000/Qtl	Qtls	80680	13467.4	806.80	0.00
	Sub Total 2 (a) to 2 (b)			83180	13737	931.80	0.00
3	Plant and soil protection management:						
	(a) Micronutrients	Rs. 500/ha	ha	53770	7300	268.85	13.00
	(b) Liming in acidic soils	Rs. 1000/ ha	ha	6000	2250	60.00	8.43
	Sub Total 3 (a) to 3 (b)			59770	9550	328.85	21.43
	(c) Plant protection chemicals and bio-agents	Rs. 500/ ha	ha	34000	2440	170.00	11.50
	(d) Weedicides	Rs. 500/ ha	ha	40000	10273	200.00	36.36
	Sub Total 3 (c) to 3 (d)			74000	12713	370.00	47.86
	Sub Total (a) to 3 (d)			133770	22263	698.85	69.29
4	A. Resource conservation techniques/ tools unde NFSM						
	(a) Conoweeders	Rs. 600/Unit	Nos.	3800	100	22.80	0.00
	(b) Manual Sprayer	Rs. 600/Unit	Nos.	14890	7743	89.34	9.97
	(c) Power Knap sack sprayers /Foot sprayer	Rs. 3000/Unit	Nos.	1546	964	46.38	0.20
	(d) Multi crop planters	Rs. 15000/Unit	Nos.	15	0	2.25	0.00
	(e) Seed drills	Rs. 15000/Unit	Nos.	400	11	60.00	1.05
	(f) Power weeders	Rs. 15000/Unit	Nos.	35		5.25	0.00
	(g) Zero till multi crop planters	Rs. 15000/Unit	Nos.	22	0	3.30	0.00
	(h) Drum seeder	Rs. 1500/Unit	Nos.	100	0	1.50	0.00
	(i) Rotavators	Rs. 35000/Unit	Nos.	500	267	175.00	61.55
	(j) Laser land levelers	Rs. 150000/Unit	Nos.	15	0	22.50	0.00
	(k) Paddy thresher/multi-crop thresher	Rs. 40000/Unit	Nos.	300	98	120.00	37.60
	(l) Self propelled Paddy transplanter	Rs. 75000/Unit	Nos.	30	3	22.50	2.25
	SubTotal 4 (a) to (l)			21653	9186	570.82	112.62
4	(B) Other Machinery Approved under SMAM(Sub-Mission on Agriculture Mechanisation)						
	(a) Distribution of Power Tiller (8 BHP & above)	Rs 75000 for SC,ST,Small & Marginal Farmers,Women and Rs. 60000/Unit for oter beneficiary or 50% of cost whichever is less	Nos.	57	18	34.20	12.00
	Total Machinery (4a + 4b)			57	18	34.20	12.00

S. No.	Interventions	Approved rate of assistance	Unit	Total Phy. & Fin.			
				Physical		Financial	
				Target	Achi.	Target	Achi.
5	Water Application Tools						
	(a) Incentive for pump sets	Rs. 10000/Unit	Nos.	500	36	50.00	3.00
	(b) Pipe for carrying water from source to the field	50 to 70 mm max cost Rs 32.0 per meter subsidy 50% maximum Rs 16 per m as per C.G Rajay beej evam krishi vikas nigam Ltd approved Rate	mtr.	111875	300	44.75	0.00
	Sub Total 5(a) To 5(b)					94.75	3.00
	Sub Total 4 To 5					699.77	127.62
6	Cropping system based trainings (four sessions).						
		Rs. 3500/- session, Rs. 14000/- training	Nos.	332.00	193	46.48	13.72
	Sub Total 6			332.00	193	46.48	13.72
7	Miscellaneous expenses:						
	(a) Project management team and other miscellaneous expenses at district level			0	0	0.00	0.00
	(b) Project management team and other miscellaneous expenses at State level			0	0.00	0.00	0.00
	Sub Total 7(a) To 7(b)			0	0	0.00	0.00
8	Local initiatives						
	(a) Construction of Godowns	Maximum Rs 1.50 lakh or 50% of cost whichever is less	Nos.	140	34	210.00	39.00
	(b) Assistance for construction of water harvesting structure like farm pond with lining 20mx20mx3m as per NHM norms	50% maximum subsidy Rs.75 lakh per farmer	Nos.	278	0	208.50	0.00
	Sub Total 8(a) To 8(b)			418	34	418.50	39.00
9	Other Initiatives						
	(a) Demonstration by NGOs	Rs. 7500/ha	ha	0	0	0.00	0.00
	(b) Assistance for custom hiring	Rs. 1500/ha	ha	0	0	0.00	0.00
	(c) Specialized projects			0	0	0.00	0.00
	Grand Total					4659.00	563.70

Target Amount = 4659.00 Lakh
Allotment = 2202.87 Lakh
Expenditure = 563.70 Lakh
Achievement = 25%

2. NFSM-Pulses

Month-August 2016

(Rs. In lakh)

S. No.	Interventions	Approved rate of assistance	Unit	Physical		Financial		
				Target	Achi.	Target	Achi.	
1.	(a) Cluster Demonstrations (of 100 ha each)	Rs. 7500/ha	ha	10300	2450	772.50	17.38	
	Arhar			1000	900	75.00	10.14	
	Gram			6000	0	450.00	0.00	
	Urd			1000	850	75.00	7.12	
	Moong			900	700	67.50	0.12	
	Letil			0	0	0.00	0.00	
	Pea			1400	0	105.00	0.00	
	(b) Demonstration on Intercropping	Rs. 7500/ha	ha	3332	2532	249.90	30.77	
	(i) Arhar+Soybean			800	800	60.00	7.37	
	(ii) Arhar +Maize			1500	1000	112.50	15.19	
	(iii) Moong/Urd+ Maize			1032	732	77.40	8.21	
	(c) Cropping system based demonstrations	Rs. 12500/ha	ha	6000	5700	750.00	28.68	
	(Name the crop Sequences							
	(I)Rice-Gram			3400	3300	425.00	121.27	
(I)Rice-pea			2000	1900	250.00	5.58		
(I)Rice-moong/urd			600	500	75.00	1.92		
Sub-Total 1 (a) and 1 (c)				19632	10682	1772.40	76.82	
2	Production and Distribution of HYVs seeds:							
	Assistance for seed Production	Rs. 2500/qtl	Qtl	35448	174.35	886.20	0.31	
	Arhar			7000	174.35	175.00	0.31	
	Gram			20000	0	500.00	0.00	
	Urd			3000	0	75.00	0.00	
	Moong			1000	0	25.00	0.00	
	Lentil			1000	0	25.00	0.00	
	Pea			3448	0	86.20	0.00	
2	Distribution of HYVs Seeds	Rs. 2500/qtl	Qtl	35448	798.96	886.20	0.00	
	Arhar			7000	424.68	175.00	0.00	
	Gram			20000	0	500.00	0.00	
	Urd			3000	229	75.00	0.00	
	Moong			500	145.28	12.50	0.00	
	Lentil			500	0	12.50	0.00	
	Pea			4448	0	111.20	0.00	
Sub Total Seed Distribution and Production				70896	973.31	1772.40	0.31	
3	Integrated Nutrient Management (INM)							
	(a) Micro-nutrients	Rs. 500/ ha	ha	45009	13898	225.05	17.24	
	(b) Gypsum/ 80% WG Sulphur	Rs. 750/ha	ha	10110	1200	75.825	2.25	
	(c) Lime	Rs. 1000/ ha	ha	11339	3400	113.39	2.95	
	(d) Bio-fertilizers	Rs. 300/ha	ha	43857	12503	131.57	0.00	
Sub Total INM 3 (a) to 3 (d)				110315	31001	545.83	22.44	
4	Integrated Pest Management (IPM)							
	(a) Distribution of PP chemicals	Rs. 500/ha	ha	38080	9967	190.40	12.35	
	(b) Weedicides	Rs. 500/ha	ha	30000	8100	150.00	6.25	
Sub Total 4 (a) and 4 (b)				68080	18067	340.40	18.60	
Sub Total 3 and 4				178395	49068	886.23	41.04	
5	Resource conservation technologies /tools							
	(a) Manual Sprayer	Rs. 600/Unit	Nos.	20000	8050	120.00	12.30	
	(b) Power Knap sack sprayers	Rs. 3000/Unit	Nos.	2498	772	74.94	0.20	
	(c) Zero till seed drills	Rs. 15000/Unit	Nos.	20	0	3.00	0.00	
	(d) Multi crop planters	Rs. 15000/Unit	Nos.	13	0	1.95	0.00	
	(e) Seed drills	Rs. 15000/Unit	Nos.	298	45	44.70	3.60	
	(f) Zero till multi crop planters	Rs. 15000/Unit	Nos.	10	0	1.50	0.00	

S. No	Interventions	Approved rate of assistance	Unit	Physical		Financial	
				Target	Achi.	Target	Achi.
5	Resource conservation technologies /tools						
	(g) Ridge furrow planters	Rs. 15000/Unit	Nos.	22	0	3.30	0.00
	(h) Chiseller	Rs. 8000/Unit	Nos.	0	0	0.00	0.00
	(i) Rotavators	Rs. 35000/Unit	Nos.	250	106	87.50	14.70
5	Resource conservation technologies /tools						
	(j) Laser land levelers	Rs. 150000/Unit	Nos.	6	0	9.00	0.00
	(k) Tractor mounted sprayer	Rs. 10000/Unit	Nos.	4	0	0.40	0.00
	(l) Multi crop thresher	Rs. 40000/Unit	Nos.	331	72	132.40	12.35
Sub Total 5 (a) to 5 (i)				23452	9045	478.69	43.15
(B) Other Machinery Approved under SMAM (Sub-Mission on Agriculture Mechanisation)							
	(iii) Distribution of Power Tiller (8 BHP & Above)	Rs 75000 for SC,ST,S. & M. Farmers, Women and Rs. 60000/Unit for other beneficiary or 50% of cost whichever is less	Nos.	50	6	30.00	0.00
6	Efficient Water Application Tools						
	(a) sprinkler sets	Rs. 10000/ha	ha	2124	72.97	212.40	0.65
	(b) pump sets	Rs. 10000/Unit	Nos.	780	122	78.00	0.70
	(c) Pipe for carrying water from source to the field	50 to 70 mm max cost Rs 32.0 per meter subsidy 50% maximum Rs 16 per m as per C.G Rajay beej evam krishi vikas nigam Ltd approved Rate	Mtr.	212250	4500	84.90	0.43
	(d) Mobile Rainguns	Rs. 15000/Unit	Nos.	16		2.40	
Sub Total 6 (a) to 6 (d)				215170	4694.97	377.70	1.78
Sub Total 5 to 6						886.39	44.93
7	Cropping system based trainings (4 sessions i.e. one before kharif, one each during kharif and rabi crops and one after rabi harvest.)	Rs. 3500/- session, Rs. 14000/- training	Nos.	422	173	59.08	9.12
8	Miscellaneous expenses:						
	(a) Project management team and other miscellaneous expenses at district level	Rs. 12.058 Lakh per district	No. of Dist.	17	2	205.00	12.72
	(b) Project management team and other miscellaneous expenses at state level	-	-			17.00	
Sub-Total 8 (a) to 8 (b)				17	2.00	222.00	12.72
9	Local initiatives						
	(a) Construction of Godowns	Maximum Rs 1.50 Lakh or 50% of the cost whichever is less	Nos.	287	40	430.50	6
	Distribution of set of mini mills	Rs.100000/unit	Nos.	101	4	101.00	0
Sub-Total 9(a) to 9(b)				388	44.00	531.50	6.00
10	Other Initiatives						
	(a) Demonstration by NGOs		ha	0	0	0	0
	(b) Assistance for custom hiring		ha	0	0	0	0
	(c) Marketing support			0	0	0	0
	(d) Specialized projects				0	0	0
	(e) Value chain integration			0	0	0	0
Sub Total 10 (a) to 10 (e)				0	0.00	0.00	0.00
Total Financial (1 to 10)						6130.00	190.94

Target Amount = 6130.00 Lakh	Expenditure = 190.94 Lakh
Allotment = 3022.55 Lakh	Achievement = 6%

3. NFSM-Coarse Cereals

Month-August 2016

(Rs. In lakh)

S. No	Interventions	Approved rate of assistance	Unit	Physical		Financial	
				Target	Achi.	Target	Achi.
1	Demonstration on improved package:						
	(i) Maize	Rs. 5000/ha	ha	2700	1600	135	12.5
	(ii) Finger millet	-,-		500	250	25	0
	(iii) Kodo	-,-		400	200	20	0
	Sub Total (i) to (iii)			3600	2050	180	12.5
2	Distribution of certified seeds:						
	(a) HYVs Seeds	Rs. 1500	Qtl	1000	200	15.00	0
	(b) Hybrid Seeds	Rs. 5000	Qtl	1300	200	65.00	0
	Sub Total 2(a) and 2(b)			2300	400.00	80.00	0.00
3	(a) Project management team at district level		No. of district	0	0	0	0
	(b) Project management team at state level			0	0	0	0
	Sub Total 3 (a) and 3 (b)				0		0
4	Local initiatives (Activity to be specified by the district)				0		0
5	Other Initiatives						
	(a) Demonstration by NGOs			0	0	0	0
	(b) Assistance for custom hiring			0	0	0	0
	(c) Marketing support			0	0	0	0
	(d) Specialized projects			0	0	0	0
	(e) Value chain integration			0	0	0	0
	Sub-Total 5 (a) to 5 (e)			0	0	0	0
	Total Financial (1 to 5)					260.00	12.50

Allotment	= 130.00 Lakh
Expenditure	= 12.50 Lakh
Achievement	= 10%

SEED & FERTILIZER AVAILABILITY**A. CROP-WISE TARGET FOR KHARIF PULSES – 2016**

(Quantity- Qtls)

Crop	Seed Distribution - 2015	2016			
		Target-2016	Total Availability	Distribution	Balance
Arhar	3743	5132	5985	5231	754
Urd	1354	3119	1816	1801	15
Mooong	844	1446	813	746	67
Total Pulses	5941	9697	8614	7778	836

B. CROP-WISE TARGET FOR RABI PULSES – 2016

(Quantity- Qtls)

Crop	Req.	Source of availability (Qtls.)				Gaps
		SSC	Other Agency	Private	Total	
Wheat	64,400	33,731	7,031	23,945	64,707	307
Maize	14,580			14,630	14,630	50
Total Cereals	78,980	33,731	7,031	38,575	79,337	357
Gram	41,490	10,755	3,392	27,350	41,497	7
Lentil	940	370	0	575	945	5
Peas	2,850	496	327	2,030	2,853	3
Moong+Urd	1,455	240	310	920	1,470	15
Lethyrus	1,100	72	278	750	1,100	0
Other Pulses	70	30	40	10	80	10
Total Pulses	47,905	11,963	4,347	31,635	47,945	40
Mustard+Toriya	1,890	356	435	1,110	1,901	11
Groundnut	1,170	200	175	800	1,175	5
Linseed	325	145	180	0	325	0
Other Oilseeds	580	183	154	255	592	12
Total Oilseeds	3,965	884	944	2,165	3,993	28
Grand TOTAL	130,850	46,578	12,322	72,375	131,275	425

C. CG: FERTILIZER - DEMAND AND AVAILABILITY (RABI 2016-17) (Coop.+Pvt. Sector)

(Unit : Lakh MT)

Particulars	Urea	DAP	NPK	MOP	SSP	Others	Total
Rabi 2015-16 Distribution	1.61	0.81	0.33	0.21	0.88	0.05	3.89
Rabi 2016-17 Target	2.50	1.10	0.80	0.50	1.10	0.00	6.00
Availability	1.53	0.72	0.36	0.00	0.00	0.00	2.61

LIST OF IMPROVED VARIETIES (<10 YEAR AGE) RECOMMENDED FOR CHHATTISGARH

A. Pigeonpea (Arhar)

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

B. Urd

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

C. Field Pea

S.No.	Variety	Years of Release	Developed by	Special Features	Average grain yield (qtls/ha)	Notification No. & Date
1	IFPD 99-13	2005	IIPR, Kanpur	Resistant to Powdery Mildew, Mid. Duration 102 days	23	-
2	IFPD 1-10	2006	IIPR,	Resistant to Powdery	22	

			Kanpur	Mildew and Rust, Mid. Duration 110 days		
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

S. No.	Variety	Duration 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	Tolerant to Brown spot & Neck blast, Resistant to Gall Midge biotype 1 & 4	S.O. 1178 (E) 20.07.2007
2	Jaldubi	135-140	4 - 4.5	Direct seeded in rainfed shallow & semi-deep water ecosystem of Surguja division	Resistant to blast and Gall midge biotype 1	S.O. 1178 (E) 20.07.2007

3	Chandrasahini	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	Tolerant to BPH, WBPH, Resistant to Gall midge biotype 1,4 & 5	S.O. 2458 (E) 16.10.2008
6	IGKV R-1244 (Maheshwari)	130-135	5.0-5.5	Irrigated and Rainfed-heavy dorsa and kanhar soils	Resistant to Brown Spot, Blast, Sheath rot, BPH and stem borer	S.O. 456 (E)16.3 2012
7	IGKV R-1 (Improved Mahamaya)	120-125	5.0-5.7	Irrigated and Rainfed-heavy soils	Moderately resistant to blast, brown spot and Gall midge, Tolerant to Neck Blast	S.O. 283 (E) 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	S.O. 283 (E) 7.2 2011
9	Indira Barani Dhan-1	111-115	4.0-4.5	Rainfed shallow lowlands, rainfed in dorsa and kanhar soils	Tolerant to Neck 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

ANNEXURE-V

Chhattisgarh

S. No.	Districts	Name of Pulse Crop	Area (In 000 ha)	Prevalent Varieties	Recommended Varieties (ICAR/SAUs)
1.	Raipur	Pigeonpea	0.45	Asha, UPAS-120, LRG-41	Rajeev Lochan, TJT-501
		Urdbean	0.88	TAU-1, Shekhar	Azad Urd-3, TU-94-2
		Moongbean	0.37	HUM-1, SML-668, K-851	HUM-1, Pragma
		Chickpea	7.03	JG-74, JG-14, Vishal	JG-74, JG-14, Vishal
		Lentil	1.70	K-75, JL-3	Pant Lentil-7, 8, JL-3
		Peas	1.75	IP-885, Prakash, Arkel, Rachna	Rachna, Prakash, Arkel
		Lathyrus	22.38	Prateek, Ratan	Mahatiwada, Prateek
		Other Pulses	0.00		
		Total Pulses	34.56		
2.	Baloda Bazar	Pigeonpea	5.29	Asha, LRG-41	LRG-41, BSMR-863
		Urdbean	2.24	TU-94-2, T-9	PU-31, PU40 Indira Urd-1
		Moongbean	1.19	K-851, Pusa Vishal	HUM-12, HUM-16
		Chickpea	10.07	JG-74, ICCV-2, Vaibhaw, Vijay, Vishal	JG-11, JG-74, Vaibhaw
		Lentil	1.95	IPL-81, K-75	Lens-4076, DPL-62
		Peas	4.65	Arkel, Rachna	Vikash, Prakash, Aparana
		Lathyrus	38.70	Prateek	Mahatiwada
		Other Pulses	0.00		
		Total Pulses	64.09		
3.	Gariyaband	Pigeonpea	4.80	Asha, LRG-41	MAL-13, UPAS-120
		Urdbean	5.61	PU-31, TAU-2, TAU-1	TAU-2, TAU-1
		Moongbean	10.02	HUM-1, SML-668, K-851	HUM-12, HUM-16, Paury Moong
		Chickpea	2.21	JG-14, JG-63, JAKI-9218	JAKI-9218, BG-391
		Lentil	0.98	-	-
		Peas	2.36	Prakash, Arkel	IP-885, Arkel
		Lathyrus	7.95	-	-
		Other Pulses	4.10		
		Total Pulses	38.03		

S. No.	Districts	Name of Pulse Crop	Area (In 000 ha)	Prevalent Varieties	Recommended Varieties (ICAR/SAUs)
4.	Mahasamund	Pigeonpea	0.91	Asha, UPAS-120	BSMR-736, UPAS-120
		Urdbean	11.64	TAU-1, T-9	PU-31, TPU-4, TAU-1, TU94-2
		Moongbean	4.56	HUM-1, K-851	HUM-12, HUM-16, SML-668
		Chickpea	1.02	JG-74, JG-14, Vaibhaw	JAKI-9218, BG-391
		Lentil	0.00	-	-
		Peas	0.62	Ambika, Arkel, Rachna	Pant Pea-25, Ambika
		Lathyrus	5.33	-	-
		Other Pulses	0.47		
		Total Pulses	24.55		
5.	Dhamtari	Pigeonpea	3.71	Asha, Laxmi	Laxmi, BDN-708, Rajiv Lochan
		Urdbean	0.56	T-9, TU-94-2	T-9, TU-94-2
		Moongbean	0.35	HUM-1, K-851, Pusa Vishal	HUM-16, Pragya
		Chickpea	7.04	JG-74, JG-11, Vijay	JAKI-9218, BG-391
		Lentil	0.46	K-75, JKL-3	Pant Lentil-7, 8, Lens-4076
		Peas	1.08	-	-
		Lathyrus	16.90	-	-
		Other Pulses	0.21		
		Total Pulses	30.31		
6.	Durg	Pigeonpea	2.01	Asha, Laxmi, UPAS-120	UPAS-120, BDN-711, Asha, LRG41
		Urdbean	0.38	TAU-1, TU-94-2	TPU-4, PU-30
		Moongbean	0.19	HUM-1, K-851, Pusa Vishal	HUM-12, HUM-16, SML-668
		Chickpea	16.68	JG-74, JG-11, Vijay	JAKI-9218, Vaibhaw, Digvijay
		Lentil	1.38	-	-
		Peas	0.17	-	-
		Lathyrus	12.90	Prateek, Ratan	Mahatiwara, Prateek
		Other Pulses	0.01		
		Total Pulses	33.72		

S. No.	Districts	Name of Pulse Crop	Area (In 000 ha)	Prevalent Varieties	Recommended Varieties (ICAR/SAUs)
7.	Balod	Pigeonpea	3.27	Asha, ICPL-87	ICPL-87, ICPL-151, TJT-501
		Urdbean	4.37	T-9, TU-94-2, TAU-1	Azad Urd-3, TU-94-2
		Moongbean	1.10	-	-
		Chickpea	11.63	JG-74, JG-11, Vaibhaw, Vishal	JG-74, JG-11, Vaibhaw, Vishal
		Lentil	2.08	-	-
		Peas	0.81	Arkel, Rachna	Vikash, Prakash, Aparna
		Lathyrus	39.86	-	-
		Other Pulses	0.83		
		Total Pulses	63.95		
8.	Bemetara	Pigeonpea	2.85	Asha, Laxmi	ICPH-8, Rajeev Lochan, LRG-41, Asha
		Urdbean	0.29	-	-
		Moongbean	0.09	-	-
		Chickpea	84.89	JG-74, JG-11, Vaibhaw	JG-74, JG-11, Digvijay
		Lentil	2.88	K-75, JL-3	Pant Lentil-7, 8, JL-3
		Peas	0.32	-	-
		Lathyrus	15.03	-	-
		Other Pulses	0.00		
		Total Pulses	106.35		
9.	Rajnandgaon	Pigeonpea	14.88	Asha, Laxmi	GT-100, PDN-711, MAL-13, TJT-501
		Urdbean	8.87	TAU-1, Shekhar, TAU-94-2	PU-30, PU-31
		Moongbean	3.41	HUM-1, K -851	HUM-12, HUM-16, SML-668
		Chickpea	72.95	JG-74, JG-11	Digvijay, Vishal
		Lentil	3.42	K-75, JL-3	Pant Lentil-7, 8, JL-3
		Peas	1.79	Prakash, Arkel	Pant Peas-25, Arkel, IP-885,
		Lathyrus	31.16	Prateek, Ratan	Mahatiwara, Prateek
		Other Pulses	4.59		
		Total Pulses	140.95		

S. No.	Districts	Name of Pulse Crop	Area (In 000 ha)	Prevalent Varieties	Recommended Varieties (ICAR/SAUs)
10.	Kawardha	Pigeonpea	10.72	Asha, Laxmi, UPAS-120	ICPH-8, Rajeev Lochan, LRG-11
		Urdbean	1.62	TAU-1, TAU-94-2	PU-2, PU-31 TAU-94-2
		Moongbean	0.19	-	-
		Chickpea	74.90	JG-74, JG-11, JG-226	JG-74, JG-11, Digvijay, Vishal
		Lentil	2.78	-	-
		Peas	0.77	Prakash, Rachna	IP-885, Rachna
		Lathyrus	2.80	-	-
		Other Pulses	0.00		
		Total Pulses	93.78		
11.	Bilaspur	Pigeonpea	3.69	Asha, Laxmi	MAL-13, UPAS-120, Rajeev Lochan
		Urdbean	1.66	TAU-1 TAU-94-2, Azad Urd-3	PU-31 TAU-94-2
		Moongbean	0.31	HUM-1, HUM-2	HUM-12, HUM-16
		Chickpea	4.82	JG-74, JG-14, Vijay	JG-63, JG-74, Digvijay, JAKI-9218
		Lentil	0.75	-	-
		Peas	1.66	Prakash, Arkel, Aparna	Prakash, Parash
		Lathyrus	32.52	-	-
		Other Pulses	1.06		
		Total Pulses	46.47		
12.	Mungeli	Pigeonpea	2.53	Asha, Laxmi, UPAS-120	Rajeev Lochan, LRG-41
		Urdbean	0.16	TAU-1 TAU-94-2, Azad Urd-3	TAU-1, Azad Urd-3
		Moongbean	0.09	K-851, HUM-1	HUM-12, HUM-16, HUM-1
		Chickpea	27.00	JG-130, JG-226	JG-11, JG-74, Digvijay, Vishal
		Lentil	0.83	-	-
		Peas	0.47	-	-
		Lathyrus	56.67	Prateek, Ratan	Mahatiwara, Prateek
		Other Pulses	0.10		
		Total Pulses	87.75		

S. No.	Districts	Name of Pulse Crop	Area (In 000 ha)	Prevalent Varieties	Recommended Varieties (ICAR/SAUs)
13.	Janjgir	Pigeonpea	1.60	Asha, Laxmi, , LRG-41	Rajeev Lochan, LRG-41, Asha, UPAS-120
		Urdbean	1.95	TAU-1, Azad Urd-3	TAU-1 TAU-94-2, Azad Urd-3, PU-31
		Moongbean	0.99	HUM-2, HUM-1, Pusa Vishal	HUM-12, HUM-16, Paury Moong
		Chickpea	0.66	JG-11, JG-74	JG-11, JG-74, Digvijay
		Lentil	0.06	-	-
		Peas	0.36	Arkel	Prakash, Arkel
		Lathyrus	19.19	Prateek, Ratan	Mahatiwara, Prateek
		Other Pulses	0.07		
		Total Pulses	24.88		
14.	Korba	Pigeonpea	2.39	UPAS-120, Laxmi, Asha	Asha, Laxmi, , LRG-41, UPAS-120
		Urdbean	4.86	TU-9, TAU-94-2	TAU-1 TAU-94-2, Azad Urd-3, PU-31
		Moongbean	0.66	K-851, HUM-1, Pusa Vishal	HUM-12, HUM-16, SML-668
		Chickpea	0.91	JG-11, JG-74, Vaibhaw	JAKI-9218, BG-391, JG-74
		Lentil	0.12	-	-
		Peas	0.77	-	-
		Lathyrus	13.32	-	-
		Other Pulses	4.13		
		Total Pulses	27.16		
15.	Raigarh	Pigeonpea	8.97	Asha, Laxmi, UPAS-120	Asha, Laxmi, , LRG-41, UPAS-120
		Urdbean	32.87	TU-1, TAU-94-2, Shekhar	PU-40, Azad Urd-3, PU-31
		Moongbean	8.90	K-851, HUM-1, SML-668	HUM-12, HUM-16, Pragya
		Chickpea	3.00	JG-216, JG-63, JG-11	JAKI-9218, Digvijay, JG-74
		Lentil	1.27	-	-
		Peas	5.60	IP-885, Prakash, Arkel, Vikash	Vikash, Prakash, Aparna
		Lathyrus	6.20	-	-
		Other Pulses	17.31		
		Total Pulses	79.06		

S. No.	Districts	Name of Pulse Crop	Area (In 000 ha)	Prevalent Varieties	Recommended Varieties (ICAR/SAUs)
16.	Jashpur	Pigeonpea	8.80	Mal-13, BDN-711, Asha, UPAS-120	
		Urdbean	23.25	T-9, TAU-94-2, Mash-479	PU-30, PU-31, TAU-94-2
		Moongbean	0.04	HUM-1, Pusa Vishal	HUM-12, HUM-16, Pusa Vishal
		Chickpea	5.31	JAKI-9218, JG-11	JAKI-9218, JG-74
		Lentil	0.56	-	-
		Peas	3.76	Arkel, Pant Pea-43	Shubhra, Prakash, Arkel
		Lathyrus	3.08	Mahatiwara, Prateek	Mahatiwara, Prateek
		Other Pulses	2.97		
		Total Pulses	46.88		
17.	Sarguja	Pigeonpea	7.39	Asha, UPAS-120	Asha, UPAS-120, PRAGATI
		Urdbean	5.66	T-9, TAU-1	TAU-1, Azad Urd-3
		Moongbean	0.30	HUM-1, K-851	HUM-1, HUM-12, K-851
		Chickpea	3.67	Vijay, Vishal	JG-74, Vijay, Digvijay
		Lentil	2.10	-	-
		Peas	3.05	-	-
		Lathyrus	0.21	-	-
		Other Pulses	2.86		
		Total Pulses	25.24		
18.	Surajpur	Pigeonpea	7.32	Asha, Laxmi, UPAS-120	Asha, BSMR-736, UPAS-120
		Urdbean	6.54	T-9, TAU-1	TAU-1, Azad Urd-3
		Moongbean	0.49	HUM-1, K-851	HUM-1, HUM-12, K-851
		Chickpea	3.31	JG-74, Vijay, Vishal	JG-11, JG-74, Digvijay, Vishal
		Lentil	0.83	JL-1, JLS-3	Pant Lentil-7 & 8, JL-3
		Peas	2.02	Arkel, Rachna	Rachna, Prakash, Arkel
		Lathyrus	0.85	-	-
		Other Pulses	2.22		
		Total Pulses	23.56		

S. No.	Districts	Name of Pulse Crop	Area (In 000 ha)	Prevalent Varieties	Recommended Varieties (ICAR/SAUs)
19.	Balrampur	Pigeonpea	10.40	Asha, UPAS-120	Asha, UPAS-120
		Urdbean	7.41	TAU-1, Azad Urd-3	PU-30, PU-31, TAU-1
		Moongbean	0.26	Pusa Vishal, SML-668	HUM-12, Pusa Vishal
		Chickpea	5.24	JG-74, JG-14, Vaibhaw, Vishal	JG-74, JG-14, Vaibhaw, Digvijay
		Lentil	1.82	JL-1, JLS-3	Pant Lentil-7 & 8, JL-3
		Peas	2.74	IP-885, Arkel, Rachna	Rachna, Prakash, Arkel
		Lathyrus	0.15	-	-
		Other Pulses	2.84		
		Total Pulses	30.69		
20.	Koriya	Pigeonpea	12.51	Asha, Laxmi, UPAS-120	Asha, BSMR-736, UPAS-120
		Urdbean	9.25	T-9, TAU-94-2	PU-30, PU-31, TAU-94-2
		Moongbean	1.29	Pusa Vishal, HUM-1	HUM-12, Pusa Vishal, HUM-16
		Chickpea	4.42	JG-31, JG-4	JAKI-9218, JG-14, JG-74
		Lentil	2.11	K-75	Pant Lentil-7 & 8, JL-3
		Peas	3.73	Prakash, Arkel	Rachna, Parash, Arkel
		Lathyrus	2.55	Prateek, Ratan	Mahatiwara, Prateek
		Other Pulses	6.10		
		Total Pulses	41.96		
21.	Jagdalpur	Pigeonpea	1.90	Asha, Laxmi, UPAS-120	IRG-41, BSMR-863, BDN-708
		Urdbean	8.83	TAU-1, TAU-94-2	PU-30, PU-31, TAU-94-2, PU-40
		Moongbean	0.55	SML-668, HUM-16	HUM-12, SML-668, HUM-16
		Chickpea	1.67	JG-14, JG-74, JG-11	JAKI-9218, JG-6
		Lentil	0.11	-	-
		Peas	0.98	Aman, Prakash, Arkel	Prakash, Arkel
		Lathyrus	0.17	-	-
		Other Pulses	5.18		
		Total Pulses	19.39		

S. No.	Districts	Name of Pulse Crop	Area (In 000 ha)	Prevalent Varieties	Recommended Varieties (ICAR/SAUs)
22.	Kondagaon	Pigeonpea	0.86	Asha, Laxmi, LRG-41	Asha, Mal-13, PRAGATI
		Urdbean	12.10	T-9, TAU-94-2	Azad Urd-3 TAU-94-2
		Moongbean	0.55	HUM-1, K-851	HUM-1, K-851
		Chickpea	2.88	JAKI-9218, JG-14, JG-74, JG-11	JAKI-9218, JG-6, JG-14
		Lentil	0.17	-	-
		Peas	1.79	Arkel	Arkel, Ambika
		Lathyrus	1.47	-	-
		Other Pulses	3.58		
		Total Pulses	23.40		
23.	Naryanpur	Pigeonpea	1.10	Asha, Laxmi, UPAS-120	Asha, Laxmi, UPAS-120
		Urdbean	6.00	TAU-1, T-9, PU-30	T-9, PU-30, PU-31
		Moongbean	0.25	Pusa Vishal, K-851	HUM-12, K-851, HUM-16
		Chickpea	1.25	JAKI-9218, JG-14, JG-63	JAKI-9218, JG-315
		Lentil	0.02	JLS-3	JLS-3
		Peas	0.46	Vikash, Parash	Prakash, Arkel
		Lathyrus	0.12	Prateek, Ratan	Mahatiwara
		Other Pulses	3.70		
		Total Pulses	12.90		
24.	Dantewada	Pigeonpea	0.40	Asha, UPAS-120	Asha, UPAS-120
		Urdbean	0.71	T-9, TAU-94-2	Azad Urd-3, TAU-94-2
		Moongbean	0.43	HUM-1, K-851	HUM-1, K-851
		Chickpea	0.20	-	-
		Lentil	0.00	-	-
		Peas	0.06	-	-
		Lathyrus	0.00	-	-
		Other Pulses	1.75		
		Total Pulses	3.50		

S. No.	Districts	Name of Pulse Crop	Area (In 000 ha)	Prevalent Varieties	Recommended Varieties (ICAR/SAUs)
25.	Sukma	Pigeonpea	0.55	Asha, Laxmi	Asha, UPAS-120
		Urdbean	1.17	T-9, TAU-94-2	Azad Urd-3, TAU-94-2
		Moongbean	1.03	HUM-1, K-851	HUM-1, HUM-12, Pusa Vishal
		Chickpea	0.08	JG-11, JG-74	JG-315, JG-74
		Lentil	0.00	-	-
		Peas	0.00	-	-
		Lathyrus	0.00	-	-
		Other Pulses	1.61		
		Total Pulses	4.44		
26.	Bijapur	Pigeonpea	0.21	Asha, Laxmi	Asha, Laxmi
		Urdbean	0.98	T-9, TAU-94-2	Azad Urd-3, TAU-94-2
		Moongbean	1.03	HUM-1, Pusa Vishal	HUM-16, HUM-12, K-851
		Chickpea	0.16	JG-11, JG-4	JAKI-9218, JG-11, JG-4
		Lentil	0.00	-	-
		Peas	0.03	Arkel	Arkel, Ambika
		Lathyrus	0.00	-	-
		Other Pulses	0.92		
		Total Pulses	3.15		
27.	Kanker	Pigeonpea	2.13	Asha, Laxmi	Asha, LRG-41
		Urdbean	8.43	PU-31, TAU-1, TAU-2	TPU-4, PU-30, Azad Urd-3
		Moongbean	6.55	HUM-1, HUM-12, Paury Moong	HUM-1, HUM-12, K-851, HUM-16
		Chickpea	3.52	Vijay, JG-315, JG-4	Digvijay, Vaibhaw, JG-63, JG-74, JG-4
		Lentil	0.65	-	-
		Peas	6.34	IP-885, Rachna	Paras
		Lathyrus	8.71	-	-
		Other Pulses	8.73		
		Total Pulses	45.06		

Note:The above information as per received from concerned State Department of Agriculture

A. Physical & Financial Target to the Division/Districts under CSS-NFSM during 2016-17**I. NFSM-PULSES**

(Rs. in Lakh)

Division/ Districts	Demonstration on Imp. Techn.		Prod. &distri. of HYVs Seeds		Assist. of Seed Prod.		INM		IPM		Effici. Water Appl. Tools		Cropping sys. Based training		ME (PMT) at District		Grand Total
	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Fin.
Mungeli	2032	187.40	5100	127.50	2650	66.25	3900	20.50	3200	16.00	222	22.20	15	2.10	1	12.06	437.26
Jangir Champa	500	42.50	1100	27.50	500	12.50	4400	26.75	7000	35.00	75	7.5	30	4.20	1	12.06	201.11
Baloda Bazar	800	70	2870	71.75	1410	35.25	4809	26.05	3000	15.0	20100	18.00	20	2.80	0	0	237.00
Bilaspur	900	87.50	3350	83.75	1750	43.75	3100	16.25	1500	7.50	225	22.50	15	2.10	0	0	258.15
CG state	19632.00	1772.40	70896.00	1772.40	35448.00	886.20	110315.0	545.83	68080.00	340.40	215170.0	377.70	422.00	59.08	18.00	222.00	6130.00
II. NFSM-Paddy																	
Mungeli	2448	223.60	5500	55.00			7600	41.00	7500	37.50	30	3.00	12	1.68			420.03
Jangir Champa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Baloda Bazar	2750	243.75	7000	70.00	-	-	8850	48.50	13800	69.00	60	6.00	30	4.2	-	-	575.70
Bilaspur	1950	191.25	2000	20	-	-	2700	17.00	7700	38.5	45	4.5	40	5.6	-	-	418.84
CG State	20848	1863.6	80680	806.80	-	-	59770	328.85	74000	370	500	50.00	332	46.48	-	-	4659.00

II. NFSM-COARSE CEREALS-NA

(Rs. in Lakh)

Division/Districts	Demonstration of Improved Technology										Distribution of Certified Seed					
	Maize		Sorghum (Jowar)		Ragi		Any Other (Kodo)		Demo. on Intercropping		HYVs		Hybrid Seeds		Grand Total	
	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
Mungeli	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jangir Champa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Baloda Bazar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bilaspur	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CG state	2700	135	-	-	500	25.00	400	20.00	-	-	1000	15.00	1300	65.00	5900	260.00

B. NFSM- Release 1st installment of funds for NFSM-All Crops for the year 2016-17 (Central Share +State Share)

(Rs. in Lakh)

Component	Gen.	SC	ST	Total (CS+SS)
NFSM-Pulse	1710.76	961.17	350.62	3022.55
NFSM-Rice	1246.82	700.52	255.53	2202.87
NFSM-Coarse Cereals	73.58	41.33	15.08	130.00
NFSM Total CG state	3031.16	1703.02	621.23	5355.42

ANNEXURE-VII

SUBSIDY PATTERN UNDER NFSM IMPLEMENTS

(Rs. In lakhs)

S.No.	Name of Implement	NFSM (Max. Subsidy 50%)	SC/ST/small/marginal/women farmers (Max. subsidy 50%)	Other farmers (Max. subsidy 40 %)
1	Multi-crop Planter	0.15	0.63	0.50
2	Seed Drill	0.15	0.44	0.35
3	Power Weeder	0.15	0.19	0.15
4	Zero-till-Multi-crop Planter	0.15	0.44	
5	Rotavator	0.35	0.63	0.50
6	Laser land leveller	1.50	0.63	0.50
7	Paddy Thresher/Multi-crop Thresher	0.40	0.63	0.50
8	Paddy Transplanter	0.75	0.94 (4 row), 2.0 (above 4 row)	0.75 (4 row) 2.0 (above 4 row)

SCHEME-WISE AGRI. MACHINERY SUBSIDY PATTERN

(Amount in Rs.)

S. No.	Scheme	Component	Category of Farmers	Scheme proposed Subsidy	Top-Up Proposed	Total Subsidy
1	NFSM	Sprinkler	All Category Farmers	Rs.10000/-ha or 50% of cost whichever less	4500/-	14500/-
2	RKVY, NMOOP, NMSA	Sprinkler	Marginal & Small Farmer	Rs.9800/-ha or 50% of cost whichever less	4500/-	14300
			Large Farmer (2 ha. above lend)	Rs.9800/-ha or 35% of cost whichever less	4500/-	11360
3	NMOOP, SMAM	Thresher and Rotavator	20 -25 HP Small, Marginal, SC & ST	Rs.25000/-ha or 50% of cost whichever less	-	-
			20 -25 HP Other Farmer	Rs.2000/-ha or 40% of cost whichever less	-	-
			35HP Small, Marginal, SC & ST	Maximum 63000/-	-	-
			35 HP Other Farmer	Maximum 50000/-	-	-
4	NFSM	Rotavator	All Category Farmers	Rs.35000/-ha or 50%	-	-
		Thresher	All Category Farmers	Rs.40000/-ha or 50%	-	-

Note: Therefore, according to the above, variation in subsidy pattern in various scheme, field functionaries facing problem for satisfying farmers.

SCHEME-WISE SUBSIDY PATTERN: AGRICULTURAL MACHINERY

(Amount in Rs.)

S. No.	Name of Scheme	Component	Category of Farmers	Subsidy rate	Remarks
	RKVY, NMOOP, NMSA	Sprinkler Set	Marginal & Small Farmers	Rs.9800/- per ha or 50% of cost whichever less.	
			Others farmers	Rs.6860/- per ha or 35% of cost whichever less.	Farmers have more than 2 ha land, subsidy have been reduced from 50% to 35 % .This is discrepancy in the scheme of NMOOP, RKVY & NMSA. The pattern of subsidy should be equal to NFSM.
	NFSM	Sprinkler Set	All Category Farmers	Rs.10000/- per ha or 50% of cost whichever less.	
	NMOOP, SMAM	Thresher and Rotavator	20 -35 HP, Marginal, Small, SC & ST farmers	Rs.25000/- per Machine or 50% of cost whichever less.	The discrepancy have been found in the Scheme of SMAM & NMOOP in the subsidy pattern. The pattern of subsidy should be equal to NFSM.
			20 -35 HP, Other Farmers	Rs.20000/- per Machine or 40% of cost whichever less.	
			More than 35HP, Marginal, Small, SC & ST farmers	Rs.63000/- per Machine	
			More than 35 HP, Other Farmers	Rs.50000/- per Machine	
	NFSM	Rotavator	All Category Farmers	Rs.35000/-per Machine or 50% cost whichever less	
		Thresher	All Category Farmers	Rs.40000/-per Machine or 50% cost whichever less	

Note: Variation in subsidy pattern in various schemes i.e RKVY, NMSA, NMOOP, SMAM and NFSM. Field level functionaries are facing a lot of problem in this regard to satisfy the farmers.

Sub: Report on Progress of Implementation of Seed-hubs/ project on Pulses in Chhattisgarh, implemented by IGKV, Raipur

A meeting on review of seed hub of pulses at IGKV, Raipur was convened on 26.9.2016 at Directorate of Research Services, IGKV, Raipur. Director, DPD, Bhopal, Director Research Services, IGKV, Raipur, Director, SAMETI, Scientist of IGKV and officials of State Agriculture Department were present in the meeting.

1. Director Research Services presented the progress of NFSM- seed hub project with IGKV including the availability of seed with the National Seed Plan (NSP).
2. Seed production targets have been assigned to 05 centres/locations involving 04 KVKs and 01 AICRP centre at IGKV, Bhatapara.
3. The project has been given for 03 years viz. *Kharif* 2016-17 to *Rabi* 2018-19. A total of 12550 Qtls of seed has been targeted to be produced at the end of the project period. The details of centres, crops and year-wise production targets are given under **Table 1**.
4. During *Kharif* 2016, seed production has been organized for Tur cv. Asha and Rajeev lochan. The category of seed to be produced is certified seed (90 ha) and foundation seed (2 ha). Details are given under **Table-2**. Variety Asha is however, more than 10 years old.
5. Suitable crop varieties which could be considered for seed hub for state of CG are given under **Table-3**.

Table 1-Seed Production Target under Seed hub (q) 2016-17

No.	Station	Crops	2016-17	2017-18	2018-19	Total
1 1.	AICRP Pulses, IGKV, Raipur	Pigeonpea	150	150	150	2650
		Fieldpea	250	300	300	
		Chickpea	200	250	300	
		Lentil	150	200	250	
			750	900	1000	
2.	KVK Bhatapara	Pigeonpea	100	200	200	2250
		Fieldpea	100	150	200	
		Chickpea	200	200	300	
		Lentil	100	200	300	
			500	750	1000	
3.	KVK Ambikapur	Fieldpea	250	350	400	2500
		Chickpea	150	350	400	
		Lentil	150	250	200	
			550	950	1000	

34.	KVK Rajnadgaon	Fieldpea	250	350	400	2400
		Chickpea	150	300	400	
		Lentil	150	200	200	
			550	850	1000	
5.	KVK Kawardha	Crops	2016-17	2017-18	2018-19	2750
		Fieldpea	200	250	250	
		Lentil	100	150	200	
		Mungbean	100	200	250	
		Lathyrus	150	250	350	
		Pigeonpea	50	100	150	
			600	950	1200	
Grand total						12550

Table 2-Status of seed hubs in IGKV during 2016-17

Station	Crops	Area (ha.)	Target -(q)
D.K. Farm Bhatapara	Asha (CS)	28 ha.	150
	Rajiv Lochan (FS)	2 ha.	
	Fieldpea		250
	Chickpea		200
	Lentil		150
	Total		750
KVK Bhatapara	Pigeonpea (Asha)	12 ha.	100
	Fieldpea		100
	Chickpea		200
	Lentil		100
	Total		500
KVK Surguja	Rajiv Lochan (CS)	50 ha.	250
	Asha (CS)		
	Laxmi (CS)		
Rajnandgaon	Field pea		250
	Chickpea		150
	Lentil		150
	Total		550

Station	Crops	Area (ha.)	Target (q)
Kawardha	Field pea	-	200
	Pigeonpea		50
	Lentil		100
	Mungbean		100
	Lathyrus		150
	Total		600
Total		92 ha.	550

Table 3- Suitable crop varieties (within 10 years)

Chickpea	Indira Chana-1, JSC-55, JSC-56, JG-14, JGK-2 (Kabuli), BJD-128, IPCK 2002-29, IPCK 2004-29
Lentil	IPL-316, RBL-31
Lathyrus	Mahativdha, Pratik, Ratan
Fieldpea	Paras, KPMR 400, Vikash (IPFD-99-13), Prakash (IPFD-1-10), IPFD-10-12, Sapna (KPMR 144-1), Indira Matar-4
Mung	Parry Mung (TS 2002-2)

Cluster Front Line Demonstration of Pulses and Oilseeds conducted during Kharif 2016 by KVKs in Chhattisgarh State:

A. Blackgram

Cluster Demonstration of Black Gram –Variety Azad-3			
KVKs	Date of Sowing	Area(ha)	No. of Farmers
Kanker	14 July – 17July, 2016	20	52
Bastar	25 July - 2 Aug ,2016	30	52
Balrampur	11 July-17 July,20 16	20	50
Bilaspur	2 July ,2016	30	75
Korea	25 June-10 July, 2016	10	22
Janjgir-Champa	27July, 2016	10	50
Total		120	301

Cluster Demonstration of Black Gram –Variety PU-31			
KVKs	Date of Sowing	Area (ha)	No. of Farmers
Rajnandgaon	July end	40	100
Mahasamund	11 July -15 July, 2016	40	85
Bijapur	28July- 15 Aug, 2016	20	50
Janjgir-Champa	18 July, 2016	30	150
Total		130	385
Cluster Demonstration of Black Gram –Variety Indira Urd-1			
Kanker	14 July-18July, 2016	10	23
Total		130	385
Grand total		250	686

B. Green gram

Cluster Demonstration of Green Gram –Variety SML-668			
KVKs	Date of Sowing	Area (ha)	No. of Farmers
Rajnandgaon	2 July to 15 July 2016	28	71
Mahasamund	12-16 July 2016	40	78
Kawardha	11-13 July 2016	10	26
Dhamtari	12-15 July, 2016	20	129
Ambikapur	25 June-10 July, 2016	30	71
Total		128	375
Grand total		378	1061

Cluster Demonstration of Green Gram				
KVKs	Variety	Date of Sowing	Area(ha)	No. of Farmers
Kawardha	Hum-16	11-13 July 2016	10	24
Dhamtari	Hum-16	12-15 July, 2016	10	4
Bastar	Hum-16	21 July to 2 Aug , 2016	30	60
Total			50	88
Dhamtari	Hum-12	12-15 July, 2016	6	26
Rajnandgaon	Sweta	2 July to 15 July 2016	1	2
Rajnandgaon	Swati	2 July to 15 July 2016	1	2
Grand total			436	1189

C. Pigeonpea

Cluster Demonstration of Pigeon Pea- Rajeev Lochan			
KVK	Date of Sowing	Area(ha)	No. of Farmers
Rajnandgaon	5 July - 15 July 2016	30	75
Balrampur	5 July-15 July,20 16	30	76
Bilaspur	02 July,2016	80	205
Korea	1 July - 22 July 2016	40	80
Korba	7 July-20 July 2016	30	75
Total		210	511
Grand total		646	1700

Cluster Demonstration of Pigeon Pea				
KVK	Variety	Date of Sowing	Area (ha)	No. of Farmers
Ambikapur	Asha	Completed in July	30	76
Dantewada	Asha	25 June-25 July 2016	50	130
Total			80	206
Jashpur	Laxmi	01 to 15 July ,2016	40	100
Kawardha	LRG-41	11-13 July 2016	20	50
Rajnandgaon	UPAS-120	5 July to 15 July 2016	5	07
Rajnandgaon	BDN-7	5 July to 15 July 2016	5	18
Grand total			786	2081

D. Horsegram

Cluster Demonstration of Horse Gram Variety-Indira Kulthi-1			
KVK	Date of Sowing	Area(ha)	No. of Farmers
Jashpur	22.09.2016	40	100
Kanker	05-09-16 to 25-09-16	30	75
Bastar	15-09-16 to 27-09-16	10	25
Korea	01-09-16 to 10-09-16	20	50
Total		100	250
Cluster Demonstration of Horse Gram Variety-BK-1			
Bastar	20-09-16 to 28-09-16	10	25
Grand total		896	2356

E. Oilseeds

Cluster Demonstration of Oilseeds					
KVKs	Crop	Variety	Date of Sowing	Area (ha)	No. of Farmers
Ambikapur	Groundnut	K-6	Completed in July	30	97
Ambikapur	Sesamum	GT-2	Completed in July	30	63
Balrampur	Sesamum	GT-10	7 -15 July, 2016	30	75
Korea	Sesamum	TKG-22	23 June-15 July, 2016	20	25
Rajnandgaon	Soybean	JS-9752	15 – 25 July, 2016	30	60
Jashpur	Niger	Variety depends on seed availability	19-09-16 to 24-09-16	40	100
Korea	Niger	JLS-5	09-09-16 to 14-09-16	30	75
			Total	210	495
			Grand Total	1106	2851

**Progress report of Cluster FLD on Pulses and Oilseeds during 2015-16
conducted by KVKs in Chhattisgarh state**

A. Chickpea

S.N.	KVK	Number of Farmers	Area (ha)	Farmer's Yield (q/ha)	RP Yield (q/ha)	% Increase
1	Kanker	81	40	6.5	10.34	59.08
2	Korea	100	40	5.6	7.6	35.71
3	Mahasamund	65	40	10.9	13.1	20.18
4	Janjgir	28	25	8.5	12.5	47.06
5	Kawardha	100	40	10.2	11.45	12.25
6	Dhamtari	89	40	7.5	10.9	45.33
7	Bilaspur	84	40	5.8	10.1	74.14
8	Bhatapara	86	40	10.8	15.7	45.37
9	Narayanpur	100	40	7.5	11.25	50.00
10	Bastar	100	40	3	13.5	350.00
11	Dantewada	100	40	3.88	6.22	60.31
12	Rajnandgaon	100	40	3.5	5	42.86
		1033	465	6.97	10.63	70.19

B. Fieldpea

S.N.	KVK	Number of Farmers	Area ha	Farmer's Yield (q/ha)	RP Yield (q/ha)	% Increase
1	Korea	56	43	5.5	10	81.82
2	Balrampur	98	40	5.9	8.2	38.98
		154	83	5.7	9.1	60.40

C. Greengram

S.N.	KVK	Number of Farmers	Area in ha	Farmer's Yield (q/ha)	RP Yield (q/ha)	% Increase
1	Mahasamund	100	40	4.7	7.3	55.32
		100	40	4.7	7.3	55.31

D. Lentil

S.N.	KVK	Number of Farmers	Area in ha	Farmer's Yield (q/ha)	RP Yield (q/ha)	% Increase
1	Ambikapur	43	15	5.5	9	63.64
2	Kawardha	37	15	7.5	8.25	10.00
3	Gariyaband	19	15	5.5	7.1	29.09
4	Jashpur	18	10	5.5	9	63.64
5	Bhatapara	68	30	6.4	10.5	64.06
6	Narayanpur	37	15	7.5	10.5	40.00
7	Rajnandgaon	50	20	6.8	10.5	54.41
		272	120	6.38	9.26	46.40

E. Linseed

S.N.	KVKs	Number of Farmers	Area ha	Farmer's Yield (q/ha)	RP Yield (q/ha)	% Increase
1	Korea	39	33	3.35	5.4	61.19
2	Ambikapur	37	15	5.3	8	50.94
3	Mahasamund	21	10	4.5	6.5	44.44
4	Janjgir	10	4	4.55	6.83	50.11
5	Kawardha	25	10	10.3	12.02	16.70
6	Balrampur	45	14.8	2.9	5.3	82.76
7	Dhamtari	34	16	5.36	7.75	44.59
8	Bilaspur	50	30	4.5	8.4	86.67
9	Gariyaband	13	10	5.1	6.9	35.29
10	Jashpur	32	15	5.3	8	50.94
11	Korba	43	10	3.6	6.8	88.89
12	Beejapur	63	20	2	3.5	75.00
13	Bastar	20	10	3.6	6	66.67
		432	197.8	4.64	7.03	58.01

F. Mustard

S.N.	KVKs	Number of Farmers	Area (ha)	Farmer's Yield (q/ha)	RP Yield (q/ha)	% Increase
1	Kanker	30	12	5.85	6.98	19.32
2	Korea	43	32	4.7	5.5	17.02
3	Ambikapur	37	20	6	11	83.33
4	Mahasamund	14	10	5.7	8.1	42.11
5	Janjgir	50	20	6.8	10.5	54.41
6	Balrampur	50	20	7.3	10.9	49.32
7	Bilaspur	38	30	3.8	7	84.21
8	Jashpur	37	30	6	11	83.33
9	Korba	75	75	4.1	7.5	82.93
10	Bastar	75	30	4.4	6.25	42.05
11	Dantewada	50	20	4.12	6.26	51.94
12	Rajnandgaon	25	10	2.5	3.6	44.00
13	Raigarh	30	20	7.65	10.86	41.96
14	Kawardha	75	30	7.9	8.49	7.47
		629	359	5.49	8.14	50.24

G. Sesamum

S.N.	KVKs	Number of Farmers	Area (ha)	Farmer's Yield (q/ha)	RP Yield (q/ha)	% Increase
1	Gariyaband	25	20	3.12	4.53	45.19
2	Beejapur	60	20	1.5	2	33.33
		85	40	2.31	3.265	39.26282

H. Sunflower

S.N.	KVK	Number of Farmers	Area (ha)	Farmer's Yield (q/ha)	RP Yield (q/ha)	% Increase
1	Raigarh	25	10	7.65	14.44	88.76
		25	10	7.65	14.44	88.76

Observations and Suggestions on the basis of field visit/interactions with concerned officials and Issues Raised during Meeting:

Following observations and suggestions have been recorded for further necessary action/directives for better outcome of the project.

1. **Break-up of Budget-** Bulk amount of budget without break up of expenditure has been allotted. Item wise break up of budget should have been provided for clarity, especially separate allocation has been required for the monitoring, hiring of Vehicle & POL at coordinating unit.
2. **Mechanism for providing seed by ICAR-IIPR-** Mechanism is needed for providing higher grade seed (BS/FS) from National Seed Plan (NSP) unit for seed hub programme. NSP units also need to provide assurance for lifting of Breeder/foundation seed. This arrangement has not been made by modal agency. ICAR-IIPR the organizing centres have not been provided with the clear guidelines on the category of seeds to be produced by them.
3. **Arrangement for Nucleus seeds-** Nucleus seed in the target proportion has not been provided to many centres in IGKV or JNKVV Jabalpur, giving a setback to programme.
4. **Monitoring provision/ clarity on guidelines-** The seed production programme is carried out by KVKs at farmer's field and registered through certification agencies. The incentives for seed, inputs and field operations were provided to farmers. The seed will be sold by farmers to state seed agencies. Under such situation revolving fund operation is difficult. The clarity is also needed if seed production programme get failed due to natural reasons.
5. There should be tie up mechanism between State Govt., SAU and KVKs system under different sector for use of seeds under different programmes.
6. **Clarity on the Varieties to be considered-** The plan of selection of varieties for less than 10 years should be cleared.
7. **Enhancing Breeder Seed Production-** Source of the Nucleus Seed to be used for production of breeder seed may be conveyed to implementing centres location wise under **Enhanced project**. This should be specifically mentioned other than the ongoing existing Breeder Seed Production to quantify the outcome of this new project
8. **Creation of Seed Hub-** Under this project, the source of seed generation and class of Seed (Breeder, Foundation, Certified T.L., etc.) is indicated. Whether **Tag or Certificate** on the generation and class of Seed has been given to the organizing grower/farmers, is not clear or not followed.

It is concluded that detailed guideline need to be prepared by Nodal agencies ICAR-IIPR-Kanpur for further guidance to all KVKs/AICRPs involved in Seed-hub programme. There is need for baseline survey on the status of existing quantity of nucleus and breeder seed with the ICAR-IIPR on availability of nucleus seed, breeder seed, foundation seed, certified seed etc. The including crop-wise, variety-wise details are needed for 03 years (**detailed seed rolling plan**) for the aforesaid programme for further management of the accrued production of seed of different class/category under this project.

Meeting/visit photographs





Cluster Frontline Demonstration on Pulses 2016-17

State	Host Organization	Name of KVK	Crop	Area in ha.	No. of Demo
CG	IGKV, Raipur	Balrampur	Black gram	20	50
CG	IGKV, Raipur	Balrampur	Chickpea	30	75
CG	IGKV, Raipur	Balrampur	Field pea	30	75
CG	IGKV, Raipur	Balrampur	Green gram	20	50
CG	IGKV, Raipur	Balrampur	Pigeon pea	30	75
		Balrampur Total		130	325
CG	IGKV, Raipur	Bastar	Black gram	30	75
CG	IGKV, Raipur	Bastar	Chickpea	30	75
CG	IGKV, Raipur	Bastar	Field pea	30	75
CG	IGKV, Raipur	Bastar	Green gram	30	75
CG	IGKV, Raipur	Bastar	Green gram	30	75
CG	IGKV, Raipur	Bastar	Horse gram	20	50
CG	IGKV, Raipur	Bastar	Green gram	20	50
		Bastar Total		190	475
CG	IGKV, Raipur	Bhatapara	Chickpea	40	100
CG	IGKV, Raipur	Bhatapara	Lentil	50	125
		Bhatapara Total		90	225
CG	IGKV, Raipur	Bijapur	Blackgram	20	50
CG	IGKV, Raipur	Bijapur	Lytharus	40	100
		Bijapur Total		60	150
CG	IGKV, Raipur	Bilaspur	Black gram	20	50
CG	IGKV, Raipur	Bilaspur	Chickpea	50	125
CG	IGKV, Raipur	Bilaspur	Lytharus	30	75
CG	IGKV, Raipur	Bilaspur	Pigeon pea	80	200
		Bilaspur Total		180	450
CG	IGKV, Raipur	Dantewada	Chickpea	40	100
CG	IGKV, Raipur	Dantewada	Pigeon pea	50	125
		Dantewada Total		90	225
CG	IGKV, Raipur	Dhamtari	Chickpea	40	100
CG	IGKV, Raipur	Dhamtari	Green gram	40	100
CG	IGKV, Raipur	Dhamtari	Lytharus	40	100
		Dhamtari Total		120	300
CG	IGKV, Raipur	Durg	Chickpea	40	100
CG	IGKV, Raipur	Durg	Lentil	40	100
CG	IGKV, Raipur	Durg	Pigeon pea	40	100
		Durg Total		120	300
CG	IGKV, Raipur	Gariyaband	Lentil	40	100
		Gariyaband Total		40	100
CG	IGKV, Raipur	Janjgir-champa	Black gram	20	50
CG	IGKV, Raipur	Janjgir-champa	Chickpea	20	50
CG	IGKV, Raipur	Janjgir-champa	Black gram	20	50

State	Host Organization	Name of KVK	Crop	Area in ha.	No. of Demo
CG	IGKV, Raipur	Janjgir-champa	Lytharus	40	100
		Janjgir-champa Total		100	250
CG	IGKV, Raipur	Jashpur	Black gram	30	75
CG	IGKV, Raipur	Jashpur	Horse gram	40	100
CG	IGKV, Raipur	Jashpur	Lentil	20	50
CG	IGKV, Raipur	Jashpur	Pigeon pea	40	100
		Jashpur Total		130	325
CG	IGKV, Raipur	Kanker	Black gram	30	75
CG	IGKV, Raipur	Kanker	Chickpea	40	100
CG	IGKV, Raipur	Kanker	Horse gram	30	75
		Kanker Total		100	250
CG	IGKV, Raipur	Kawardha	Chickpea	40	100
CG	IGKV, Raipur	Kawardha	Green gram	20	50
CG	IGKV, Raipur	Kawardha	Lentil	20	50
CG	IGKV, Raipur	Kawardha	Pigeon pea	20	50
		Kawardha Total		100	250
CG	IGKV, Raipur	Korba	Chickpea	30	75
CG	IGKV, Raipur	Korba	Pigeon pea	30	75
		Korba Total		60	150
CG	IGKV, Raipur	Korea	Black gram	20	50
CG	IGKV, Raipur	Korea	Chickpea	40	100
CG	IGKV, Raipur	Korea	Field pea	40	100
CG	IGKV, Raipur	Korea	Green gram	20	50
CG	IGKV, Raipur	Korea	Horse gram	20	50
CG	IGKV, Raipur	Korea	Pigeon pea	40	100
		Korea Total		180	450
CG	IGKV, Raipur	Mahasamund	Black gram	40	100
CG	IGKV, Raipur	Mahasamund	Chickpea	40	100
CG	IGKV, Raipur	Mahasamund	Green gram	40	100
CG	IGKV, Raipur	Mahasamund	Green gram	40	100
		Mahasamund Total		160	400
CG	IGKV, Raipur	Narayanpur	Chickpea	40	100
CG	IGKV, Raipur	Narayanpur	Lentil	40	100
		Narayanpur Total		80	200
CG	IGKV, Raipur	Raigarh	Black gram	40	100
		Raigarh Total		40	100
CG	IGKV, Raipur	Rajnandgaon	Black gram	40	100
CG	IGKV, Raipur	Rajnandgaon	Chickpea	40	100
CG	IGKV, Raipur	Rajnandgaon	Green gram	30	75
CG	IGKV, Raipur	Rajnandgaon	Lentil	20	50
CG	IGKV, Raipur	Rajnandgaon	Lytharus	30	75
CG	IGKV, Raipur	Rajnandgaon	Pigeon pea	40	100
		Rajnandgaon Total		200	500
CG	IGKV, Raipur	Sarguga	Black gram	20	50
CG	IGKV, Raipur	Sarguga	Black gram	30	75
CG	IGKV, Raipur	Sarguga	Chickpea	30	75

State	Host Organization	Name of KVK	Crop	Area in ha.	No. of Demo
CG	IGKV, Raipur	Sarguga	Field pea	30	75
CG	IGKV, Raipur	Sarguga	Green gram	20	50
CG	IGKV, Raipur	Sarguga	Green gram	30	75
CG	IGKV, Raipur	Sarguga	Lentil	30	75
CG	IGKV, Raipur	Sarguga	Pigeon pea	30	75
		Sarguga Total		220	550

Cluster Frontline Demonstration on Oilseed 2016-17

State	Host Organization	Name of KVK	Crop	Area in ha.	No. of Demo
CG	IGKV, Raipur	Balrampur	Linseed	30	75
CG	IGKV, Raipur	Balrampur	Niger	30	75
CG	IGKV, Raipur	Balrampur	Rapseed & Mustard	30	75
CG	IGKV, Raipur	Balrampur	sesame	30	75
		Balrampur Total		120	300
CG	IGKV, Raipur	Bastar	Rapseed & Mustard	30	75
		Bastar Total		30	75
CG	IGKV, Raipur	Bilaspur	Linseed	30	75
CG	IGKV, Raipur	Bilaspur	Rapseed & Mustard	30	75
		Bilaspur Total		60	150
CG	IGKV, Raipur	Dantewada	Rapseed & Mustard	30	75
		Dantewada Total		30	75
CG	IGKV, Raipur	Dhamtari	Linseed	30	75
		Dhamtari Total		30	75
CG	IGKV, Raipur	Durg	Linseed	30	75
CG	IGKV, Raipur	Durg	Rapseed & Mustard	30	75
CG	IGKV, Raipur	Durg	Soybean	30	75
		Durg Total		90	225
CG	IGKV, Raipur	Janjgir Champa	Linseed	30	75
CG	IGKV, Raipur	Janjgir Champa	Rapseed & Mustard	30	75
		Janjgir Champa Total		60	150
CG	IGKV, Raipur	Jashpur	Linseed	30	75
CG	IGKV, Raipur	Jashpur	Niger	30	75
CG	IGKV, Raipur	Jashpur	Rapseed & Mustard	30	75
		Jashpur Total		90	225
CG	IGKV, Raipur	Kanker	Linseed	30	75
		Kanker Total		30	75
CG	IGKV, Raipur	Kawardha	Rapseed & Mustard	30	75
		Kawardha Total		30	75
CG	IGKV, Raipur	Korba	Linseed	30	75
CG	IGKV, Raipur	Korba	Rapseed & Mustard	30	75
		Korba Total		60	150
CG	IGKV, Raipur	Korea	Linseed	30	75

State	Host Organization	Name of KVK	Crop	Area in ha.	No. of Demo
CG	IGKV, Raipur	Korea	Niger	30	75
CG	IGKV, Raipur	Korea	Rapseed & Mustard	30	75
CG	IGKV, Raipur	Korea	Seasame	45	112.5
		Korea Total		135	337.5
CG	IGKV, Raipur	Mahasamund	Rapseed & Mustard	30	75
		Mahasamund Total		30	75
CG	IGKV, Raipur	Raigarh	Rapseed & Mustard	30	75
		Raigarh Total		30	75
CG	IGKV, Raipur	Raipur	Linseed	30	75
CG	IGKV, Raipur	Raipur	sesame	30	75
		Raipur Total		60	150
CG	IGKV, Raipur	Rajnandgaon	Rapseed & Mustard	30	75
CG	IGKV, Raipur	Rajnandgaon	Soybean	30	75
		Rajnandgaon Total		60	150
CG	IGKV, Raipur	Sarguja	Groundnut	30	75
CG	IGKV, Raipur	Sarguja	Groundnut	30	75
CG	IGKV, Raipur	Sarguja	Linseed	30	75
CG	IGKV, Raipur	Sarguja	Niger	30	75
CG	IGKV, Raipur	Sarguja	Rapseed & Mustard	30	75
CG	IGKV, Raipur	Sarguja	sesame	30	75
CG	IGKV, Raipur	Sarguja	sunflower	30	75
		Sarguja Total		210	525

Annexure-IX

A. STAFF POSITION: CG STATE

Project Management Team of National Food Security Mission (NFSM)

State/District	Designation	Proposed	Filled	Vacant
State Level	State Consultant	1	-	1
	Senior Technical Assistant	2	2	-
	Total PMT	3	2	1
District Level	District Consultant	13	1	12
	Technical Assistant	27	6	21
	Total PMT	40	7	33
TOTAL PMT		43	9	34

B. STAFF POSITION: VISITED DISTRICTS

District	Mungeli		Bilaspur		Baloda-Bazar		Janjgir-Champa	
Designation	Sanct.	Filled	Sanct.	Filled	Sanct.	Filled	Sanct.	Filled
District Consultant	-	-	-	-	-	-	1	-
Technical Assistant	-	-	-	-	-	-	2	-
Total PMT	-	-	-	-	-	-	3	-

