

NATIONAL FOOD SECURITY MISSION

RABI-2019-20 (Madhya Pradesh)



सत्यमेव जयते

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE & FARMERS WELFARE
(DEPARTMENT OF AGRICULTURE, COOPERATION & FARMERS WELFARE)
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Preface

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, BGREI, NMSA, RKVY, PKVY, PMKSY, NMAET (SMAM, SMSP & Extension Reforms/ATMA), MIDH, PMFBY, SHC, e-NAM etc. To effectively monitor the implementation of the CS/CSS, the department has constituted a National Monitoring Team (NLMT) under the National Food Security Mission (*NFSM-Rice, Wheat, Pulses, Coarse Cereals, Nutri-cereals, Commercial Crops viz, Sugarcane, Cotton, Jute and Oilseeds*). The Team comprises of the Director, Crops Development Directorates of DAC&FW (Directorate of Pulses Development) as Convener/Team Leader, 02 Principal /Sr. Scientists/ SMSs/experts in the field of agriculture and State Mission Director, NFSM as Nodal Officer.

The Terms of Reference (ToR) of the National team suggests mandatory monitoring once in each crop season to conduct in-depth inspection of the executed activities in consonance to Mission's mandate and approved action plan; Local Initiatives; quantitative and qualitative achievements and impact of the Transfer of Technology (ToT) delivery mechanism in totality taking all CSS/CS/State plan schemes in a district into consideration and providing observations and recommendations for further necessary corrections (ATR) at the level of State Govt./ stake-holders for better implementation and desired mandated outcome.

This season, the Team visited the state between February 15th-20th, 2020 in 06 districts of 03 sample divisions and interacted with number of stake-holders, people's representatives, progressive farmers, KVKs, FPOs etc. The Team interacted with the farmers individually in the field and also by organizing/participating *Kisan Gosthies*.

Due to delays in finalization of report, also owing to COVID-19 lock down etc, final assessment of whole financial year 2019-20 along with the impact of NFSM on crops performance etc, beyond five year plan periods, is also given to make the report more informative and useful.

I am thankful to the Principal Secretary (Agriculture) and Director (Agriculture), Govt. of Madhya Pradesh for facilitating the monitoring/visit. I acknowledge the sincere efforts of Dr. A. K. Shivhare, Assistant Director, Mrs. Shweta Kumari, STA and Dr. Ashwini Tikle, TA/NFSM PMT in bringing out the report publication.

Bhopal (M.P.)
June, 2020

(A.K.Tiwari)
Director

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ABBREVIATIONS

1. AICRP-All India Coordinated Research Project
2. APEDA-Agricultural and Processed food products Export Development Authority
3. APMC-Agriculture Produce Market Committee
4. CDDs- Crop Development Directorates
5. CSBD-Cropping System Based Demonstrations
6. CSBT-Cropping System Based Training
7. CSS- Central Sponsored Schemes
8. DES- Directorate of Economics and Statistics
9. DSR- Direct Seeded Rice
10. DFSMEC-District Food Security Mission Executive Committee
11. FLD-Front Line Demonstration
12. FIRB- Furrow Irrigated Raised Bed
13. FPOs-Farmer Producer Organizations
14. GPS-Global Positioning System
15. HYV-High Yielding Varieties
16. ICAR-Indian Council of Agricultural Research
17. IPM-Integrated Pest Management
18. KRIBHCO-Krishak Bharti Cooperative Limited
19. KVK- Krishi Vigyan Kendra
20. LRP- Lead Resource Person
21. MAPWA- Madhya Pradesh women in Agriculture
22. MIDH-Mission for Integrated Development of Horticulture
23. MIS- Micro Irrigation System
24. MSP- Minimum Support Price
25. NAFED-National Agricultural Cooperative Marketing Federation of India Ltd.
26. NCIP-National Crop Insurance Programme
27. NDC-National Development Council
28. NGO- Non Governmental Organization
29. NFSM-National Food Security Mission
30. NFSMEC-National Food Security Mission Executive Committee
31. NLMT-National Level Monitoring Team
32. NMAET - National Mission on Agricultural Extension & Technology
33. NMSA- National Mission for Sustainable Agriculture
34. NRM- Natural Resource Management
35. PKVY- Paramparagat Krishi Vikash Yojana
36. PMKSY-Pradhan Mantri Krishi Sinchai Yojna
37. PMT-Project Management Team
38. PROM-Phosphate Rich Organic Manure
39. RAD- Rainfed Area Development
40. RCT-Resource Conservation Technology
41. SAUs-State Agriculture University
42. SDA- State Department of Agriculture
43. SFSMEC-State Food Security Mission Executive Committee
44. SMAE- Sub- Mission on Agriculture Extension
45. SMAM- Sub- Mission on Agricultural Mechanization
46. SMSP- Sub-Mission for Seed and Planting Material

Agro-Climatic Zones of Madhya Pradesh/ Sample Districts Visited by Monitoring Team



- I** Chhattisgarh Plains (1) ó Balaghat
- II** Northern Hills of Chhattisgarh (05) ó Mandla, Dindori, Shahdol, Umaria, Anuppur
- III** Kymore Plateau & Satpura Hills (08) ó Jabalpur, Seoni, Katni, Panna, Satna, Rewa, Sidhi, Singrauli
- IV** Vindhyan Plateau (06) ó Bhopal, Sehore, Raisen, Sagar, Damoh, Vidisha
- V** Central Narmada Valley (03) ó Narsinghpur, Hoshangabad, Harda
- VI** Grid Zone (07) ó Gwalior, Guna, Ashoknagar, Shivpuri, Sheopur, Morena, Bhind
- VII** Bundelkhand Zone (04) ó Datia, Niwari, Tikamgarh, Chhatarpur
- VIII** Satpura Plateau (02) ó Chhindwara, Betul
- IX** Malwa Plateau (10) ó Indore, Ujjain, Dhar, Dewas, Shajapur, Agar-Malwa, Neemuch, Mandsaur, Ratlam, Rajgarh,
- X** Nimar Valley (04) ó Khandwa, Kargone, Barwani, Burhanpur
- XI** Jhabua Hills (02) ó Jhabua, Alirajpur

(Sample Districts of NLMT Monitoring- Sehore, Ujjain, Dhar, Dewas, Shajapur, Agar-Malwa)

STATE PROFILE: MADHYA PRADESH

Particulars		Status		
Population	(Crore)	7.27 (Male- 3.77, Female-3.51)		
Population Growth	(%)	20.35 6 2011		
Revenue Districts /Tehsil	(Nos.)	51/364		
Block/Janpad Panchayat	(Nos.)	313 (89 Tribal Blocks)		
Village Panchayat/Tot. Village	(Nos.)	23006/54903		
Krishi Upaj Mandi	(Nos.)	520		
Average Annual Rainfall	(mm)	1200		
Land Use Pattern (Area : lakh ha)		Agricultural land use (Area : lakh ha)		
Geographical Area	307.56	Net sown area	154.55	
Cultivable area	158.72 (52%)	Double Cropped Area	83.62	
Forest area	85.88 (28%)	Gross cropped area	238.17	
Land under non-agricultural use	19.92 (6%)	Kharif Area	152.52	
Permanent pastures	13.48 (4%)	Rabi Area	85.65	
Cultivable wasteland	8.67 (3%)	Cropping Intensity	156%	
Barren and uncultivable land	14.06 (5%)			
Current fallows	7.69 (3%)			
Particulars		Status		
Operational Land Holding (Area : Lakh ha, Number-Lakh)				
Average Size of Social Groups		Average Size (ha)	Numbers (%)	Area (%)
Marginal	(< 1 ha)	0.49	38.91 (44%)	19.15 (12%)
Small	(1 to 02 ha)	1.42	24.49 (28%)	34.66 (22%)
Semi Medium	(02 to 04 ha)	2.73	16.55 (19%)	45.10 (28%)
Medium	(04 to 10 ha)	5.76	7.89 (9%)	45.45 (29%)
Large	(10 ha & Above)	15.73	0.89 (1%)	14.00 (9%)
Total		1.78	88.73	158.36
Irrigation (lakh ha)			Sources of Irrigation (Area : lakh ha)	
Net irrigated area		85.50 (64%)	Canals	10.91 (16%)
Gross irrigated area		89.65	Tanks	1.49 (2%)
Rainfed area		60%	Open wells	24.03 (35%)
			Bore wells/Tube Wells	17.93 (26%)
			Other Sources	14.25 (21%)
			Total Irrigated Area	68.61
Major Soils (Area - lakh ha)				
1. Alluvial Soil		33.5 (11%)	2. Deep Medium black soils	162.1 (53%)
3. Shallow & Medium Black Soil		30.6 (10%)	4. Mixed Red & Black Soil	81.1 (26%)
Major Crops (% Share: 2013-14 to 2017-18)				
% Share to TKA*	Soybean (42%), Paddy (16%), Urd (9%), Maize (9%), Tur (6%),			
% Share to TRA*	Wheat (55%), Gram (28%), Mustard (7%), Lentil (5%), Pea (2%), Linseed (1%).			
Ranking & % Share to TPI*	1 st - Pulses (27%), Oilseeds (27%), Soybean (50%), Gram (39%), Niger (35%) 2 nd - Lentil (33%), Pea (27%), Mustard (11%); 3 rd - Arhar (17%), Wheat (18%)			
Development Programme under implementation				
NFSM	NFSM-Paddy (8) ; Wheat (16) ; Pulses (52); Coarse Cereals (22); Nutri- cereals (24); Cotton (10); Sugarcane (13);PMT District-52 Mini Mission I- (Oilseeds)			

Source- ENVIS, Centre of M.P. State. TKA-Total Kharif Area; TRA - Total Rabi Area; TPI*- Total Production in India

AGRICULTURE PROFILE : SAMPLE DISTRICTS

Particulars	Sehore	Shajapur & Agar-Malwa	Ujjain	Dhar	Dewas
Population (Lakh)	13.11	15.13	19.87	21.86	15.64
Annual Rainfall (mm)	1261	927	890	833	1065
Land Use Pattern (000 ha)					
Geographical Area	656.40	618.00	690.87	819	702.00
Cultivable area	385.20	419.00	489.03	504.50	624.50
Current fallows	0.40	-	0.80	2.00	0.80
Agricultural land use (000 ha)					
Net sown area	385.20	419.00	489.10	504.50	388.40
Double Cropped Area	222.10	302.00	289.10	239.40	236.60
Gross cropped area	607.30	455.00	778.20	743.90	624.60
Cropping Intensity (%)	158	172	163	147	161
Major Soil (000 ha)					
Deep soil	406.40	442.20	539.60	352.20	363.60
Medium deep soil	32.80	30.80	11.40	173.60	125.60
Shallow soil	217.00	145.40	57.20	287.80	212.00
Irrigation (000 ha)					
Net irrigated area	229.70	281.00	199.80	281.90	193.64
Gross irrigated area	229.70	282.00	199.80	281.90	193.64
Rainfed area	155.50	-	289.30	222.60	430.90
Sources of Irrigation Area (000 ha)					
Canals	41.20	10.40	3.57	13.30	6.76
Tanks	6.30	7.30	0.92	12.00	4.76
Open wells	83.40	145.00	44.26	82.10	65.90
Bore wells	53.90	86.80	131.27	122.70	93.10
Others	44.90	31.50	19.77	51.80	23.12
Total Irrigated Area	229.70	281.00	199.80	281.90	193.64
Major crops *					
Kharif	Soybean, Rice, Maize, Arhar, Mung	Soybean, Maize, Urd, Arhar, Mung, Sesame, Groundnut, Jowar,	Soybean, Maize, Urd, Mung, Arhar, Groundnut, Sesame	Soybean, Cotton, Maize, Arhar, Jowar, Urd, Mung, Groundnut	Soybean, Maize, Arhar, Cotton, Jowar, Urd, Mung
Rabi	Wheat, Gram, Lentil, Pea	Wheat, gram, Rapeseed & Mustard, Lentil, Pea	Wheat, gram, Rapeseed & Mustard, Lentil, Pea	Wheat, gram, Pea, Sugarcane Rapeseed & Mustard, Lentil	Wheat, gram, Pea, Rapeseed & Mustard, Lentil, Linseed

Source: <http://ugricoop.nic.in> *- As per District Crop scenario (2019-20) reported by respective districts

EXECUTIVE SUMMARY

- 1.0 As an institutional mechanism for monitoring of various central sector and centrally sponsored agriculture/crops development programmes, in addition to concurrent field visits, there exist the provision of in-depth apex level monitoring of implementation of programmatic interventions, modus operandi of release of subsidized benefits etc, through a National Monitoring Team within the guidelines of National Food Security Mission, issued by the DAC&FW, Ministry of Agriculture & FW, Govt. of India, New Delhi.

The NLMT for MP was comprises of Dr. A. K. Tiwari, Director, Govt. of India, DAC&FW, DPD, Bhopal, Convener/Team Leader; Shri Sanjeev Singh (IAS), State Mission Director/Director Agriculture, Directorate of Agriculture, Dept. of Farmer Welfare & Agri. Development, Govt. of M.P; Dr. S. V. Sai Prasad, PS/Head, ICAR-IARI, Regional Wheat Research Station, Indore, M.P; Dr. R. K. Singh, Sr. Scientist (Plant Pathology), ICAR-AICRP on Chickpea/CoA, Indore as Members. *The report captures the final figures of performance, both physical and financial, owing to its finalization by June, 4th 2020 due to Covid-19/lockdown.*

- 1.1 The Team visited in the 03 divisions/06 sample districts namely, Sehore (04 villages/02 blocks), Shajapur (05 villages/02 blocks), Agar-malwa (05 villages /02 blocks), Ujjain (04 villages /02 blocks), Dhar (02 villages /01 block) and Dewas (04 villages /02 blocks) of Madhya Pradesh between Feb. 15th -20th, 2020.
- 1.2 The field visit was followed by a power point presentation by the Deputy Director Agriculture on the status of all farmersøcentric development programmes (both CSS/State-run) involving all the stakeholder organizations/representatives (*PD ATMA/Agriculture Engineering/Animal Husbandry/ Veterinary/Horticulture/DMO/Agro./SSC/Seed Certification/PMFBY agency/ FPO/NGO etc.*).
- 1.3 The team interacted with a good number of beneficiaries, social groups, FPOs and also had a wrap-up meeting with the Director Agriculture/Mission Director, Govt. of M.P on Feb., 25th 2020. The members also gave their feedback on the likely remedial measures at the level of DFSMEC/ NFSM-SFSMEC for desired mandated outcome of the crop development schemes both the centrally sponsored as well as the state-run programmes.
- 1.4 The National Food Security Mission (NFSM) is operational under State Plan Scheme-Krishonnati Yojna in 29 states. In Madhya Pradesh, NFSM- Rice, NFSM-Wheat and NFSM-Pulses are being implemented since 2007-08. From 2014-15, NFSM- Coarse Cereals and Commercial Crops (Cotton & Sugarcane) also became the part of NFSM. Further enhancing the canvas of NFSM, from 2018-19, Nutri-Cereals and Oilseeds development also came in the purview of NFSM. Thus, under Green Revolution-Krishonnati Yojna Scheme of DAC&FW, NFSM is a major crops development programme of the state.
- 1.5 NFSM-Paddy crop improvement programme/developmental interventions covers 8 districts, NFSM-Wheat in 16 districts, NFSM- Pulses in 52 districts, NFSM-Coarse Cereals in 22 districts , NFSM-Nutri-Cereals in 24 districts, Sugarcane in 13 districts, Cotton in 10 districts and oilseeds in all 52 districts of Madhya Pradesh.

- 1.6 For effective programme implementation, documentation, skill development and technology transfer etc., 50/52 districts (except Agar-Malwa & Burhanpur) have also been provided the *Project Management Team* (PMT) in addition to one setup at state HQ level (District- 01 DC + 02 TA; HQ- 01 State Consultant + 02 TA) under NFSM- Pulses.
- 1.7 During 2019-20, Central allocation towards all NFSM components/crops *i.e. rice, pulses, wheat, coarse cereals, nutri-cereals, commercial crops (sugarcane & cotton), intercropping of pulses with sugarcane and oilseeds* was Rs. 630.05 Cr. against which the total release was Rs. 332.43 Cr. (GoI- Rs. 143.47 Cr. + State-Rs. 188.96 Cr.) including the unspent balance of Rs. 139.98 Cr. , the state had a total available funds to the tune of Rs. 472.41 Cr. which includes 40% share of the State Govt., as well.
- 1.8 The overall expenditure on all these crops development interventions has been Rs 232.74 Cr. which is 37 per cent of total allocation and 49 per cent of total available funds. Component/Crop wise percent utilization against available fund has also been very poor except coarse cereals/pulses & oilseeds. (Pulses-51%; Rice-31%; Wheat-40%; Coarse Cereals-82%; Nutri-Cereals-22%; Sugarcane-27%; Intercropping of Pulses with Sugarcane -23% and Oilseeds-51%).
- It is realized that, there is need to streamline the scheme implementation modalities with decentralized decision policy at district level to enhance the fund utilization. Continuous poor utilization ultimately results into decreased central allocation in the successive years.
- 1.9 Further, *interventions-wise performance for all NFSM crops* have been partly satisfactory under CSBT (85%) owing to poor documentation of trainings/skill development activities while disappointing under other interventions, especially *seed distribution (07%), plant and soil protection management i.e. INM and IPM (04%)*, hence strongly recommended to be improved. (Interventions-wise details are at *table -1*).Chronologically, the poor expenditure under these interventions for the last few years recommends to reduce the allocation by >75% in INM/IPM and seed distribution component. Percent existing norms against total allocation, for seed distribution are 15%-Pulses/Nutri-cereals; 20% -Rice/Wheat and 30% -Coarse Cereals and for INM/IPM 15% it is for all crops.

Table 1: Intervention-wise Programme Performance (2019-20): Rice/Wheat/Pulses/Coarse Cereals & Nutri- Cereals
(Financial – Rs. in Lakhs)

S. No.	Interventions	Unit	Crops	Target		Achievement		% Uti.	
				Phy.	Fin.	Phy.	Fin.	Phy.	Fin
1	Demo. on improved technologies								
(a)	Cluster Demonstrations (100 ha each)	ha	Pulses+Rice+ Wheat+Coarse Cereals	116700	10131.00	109690	6104.22	94	60
(b)	Cluster Front Line Demo.		Nutri.-Cereals	11900	714.00	11702	216.80	98	30
(c)	Demo. on intercropping		Pulses + Coarse cereals	24200	2172.00	20134	935.49	83	43
(d)	CSBD		Pulses+Rice+ Wheat	33395	5009.25	30745	1893.57	92	38
(e)	Cluster Demo(Hybrid seed)		Rice	800	72.00	790	21.37	99	30

S. No.	Interventions	Unit	Crops	Target		Achievement		% Uti.	
				Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
(f)	Demo.(Stress tolerant var.)(100 ha each)		Rice	2740	246.60	2730	74.59	100	30
Total Demonstration				189735	18344.85	175791	9246.04	93	50
2	Assistance on Distribution of seeds								
(a)	HYVs Seeds (<10 Yrs.)	qtls	Rice+ Wheat + Pulses + Coarse cereal +Nutri-Cereals	148597	6209.53	30470	382.86	21	6
(b)	HYVs Seeds (> 10 Yrs.)			78139	1650.04	6770	66.73	9	4
(c)	Hybrid seed		Rice + Coarse cereals + Nutri-Cereals	7482	748.20	1682	131.29	22	18
Total Seed Distribution				234218	8607.77	38922	580.88	17	7
3	Prod. of HYVs Seeds (< 10 Yrs.)	qtls	Pulses + Nutri-Cereals	159700	7751.00	218397	4999.37	137	64
4	Plant & soil protection management								
(a)	INM	ha	Rice+ Wheat +Pulses +Nutri-Cereals	808831	4126.36	15422	11.13	2	0
(b)	IPM			855045	4275.23	157267	292.79	18	7
	Total INM & IPM			1663876	8401.59	172688	303.92	10	4
5	Flexi Components								
a	Farm implements & equipments	Nos.	Rice+Wheat+ Pulses + Nutri-Cereals	90841	4926.40	41772	2282.98	46	46
b	Efficient Water Application Tools		Rice + Wheat + Pulses	4538988	8540.91	31854	3190.33	1	37
c	CSBT		Rice + Wheat + Pulses +Nutri-Cereals	2676	374.64	2148	316.77	80	85
d	Miscellaneous Expenses		Pulses	53	781.00	11	341.22	21	44
e	Local Initiatives		Rice+Pulses	0	0.00	0	0.00		
f	Other Initiatives		+Nutri-Cereals	0	0.00	0	0.00		
	Total Flexi Funds			4632558	14622.95	75785	6131.30	2	42
	Grand Total			6880087	57728.15	681583	21261.51	10	37

S.No.	Financial analysis (NFSM 2019-20)	(Rs. in Lakhs)		
		Amount	GOI	State
1	Approved Allocation	57728.15	34636.89	23091.26
2	Fund Released (GoI+State)	30422.27	13103.84	17318.43
3	Unspent Balance of 2018-19 (As on 01 st April, 2019)	12873.82	12873.82	0.00
4	Total Available Fund (TAF) 2019-20	43296.09	25977.66	17318.43
5	Amount Utilized till March, 2020	21261.51	12756.90	8504.60
6	% Fund Utilized against TAF	49	29	20
7	Unspent Balance on 1st April, 2020	22034.58	13220.76	8813.83

Note: NFSM-Commercial crop (Sugarcane) and NFSM- Oilseed, physical and financial progress is at chapter-4.

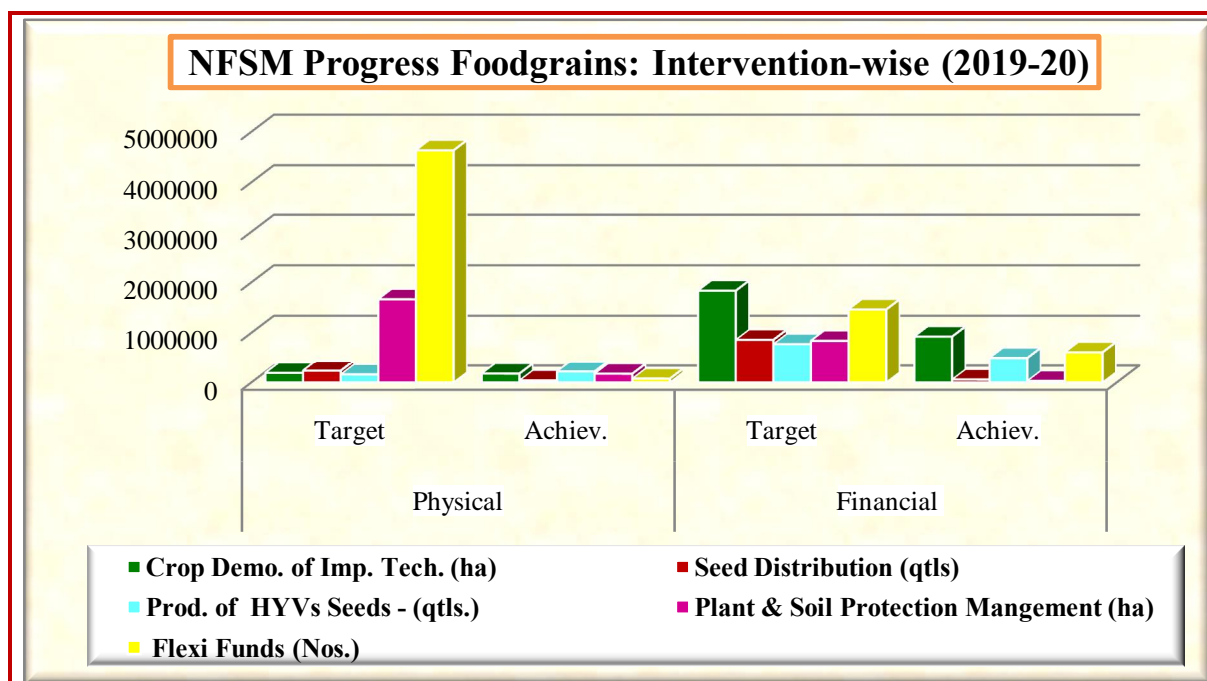


Fig.-1: Intervention-wise Progress (NFSM-Rice/Wheat/Pulses/Coarse & Nutri-Cereals)

- 1.10 Physical achievement in *demonstrations on improved technology* is 93 per cent while financial achievement is reported only 50 per cent, this shows that the spirit of full package demonstration has not been followed. Only with single component supply of seed is being reflected as cluster demonstration.
- 1.11 It is perceived that demonstrations on implemented technologies being organized need focussed and scientific approach where the state has to make an institutional arrangement to provide *full input cafeteria package* to farmers and its application, mandatory inclusion of 4-5 var., 2 -3 *thematic areas in a cluster*, method of planting/irrigation/INM/IPM/seed treatment/intercropping, AES, stress tolerant var. also need to be ensured.
- 1.12 Similarly, refresher training courses are strongly advised more seriously for extension staff/ATM/BTMs etc on latest varietal /technological innovations in crop cultivation, agriculture and allied sectors.
- 1.13 Generally, farmers are benefited by cluster demonstrations on improved package of practices, demonstrations on cropping system (provided full package is not demonstrated), seed production & seed/minikits distribution, plant protection measures, nutrient management/soil ameliorants, Flexi Components {Farm Machineries (SMAM), Water saving devices (PMKSY norms), CHCs, Capacity Building/Training/Local Initiatives}. In M.P, however, the soil ameliorants have not been made available in the districts by the input dealers, INM component has not been implemented and cluster demonstrations were organized, generally by supply of seeds.
- 1.14 The crops development programmes are implemented by the Deputy Director Agriculture (DDA) and its paraphernalia at the grassroots level. All the agriculture related schemes (central/state) in a district are complimentary and supplementary to each other and are expected to deliver its impact in

terms of the objective outcome i.e. the overall productivity enhancement with economic cost of cultivation, employment generation in an eco-friendly manner. Therefore, the team monitored the status of all developmental programme in a district.

- 1.15 The All India production of cereals, pulses, oilseeds, cotton and sugarcane during 2019-20, as compared to last year has been higher by 2%, 4%, 8%, 24% except sugarcane with (-) 13%. However, there has been a setback during kharif 2019 owing to incessant rains/floods during reproductive to maturity stage of crops especially pulses (urd/tur) and sesamum etc. In M.P production of cereals, sugarcane, oilseeds during 2019-20, as compared to last year has been higher by 5%, 9%, 10% except cotton with (-) 17% and pulses with (-) 9%.

1.16 Summary observations on the status of implementation of various schemes/interventions, for further follow up/corrective measures to be taken by the stake holders etc, are as under :

I. Scheme-Wise Observations/Suggestions/Recommendations

S.No.	Activity/ Interventions	Observations/ Suggestions
1	Crop Scenario (Rabi-2019-20)	<ul style="list-style-type: none"> • Overall crop scenario was excellent. No major biotic & abiotic stresses observed. • Crop Coverage (Rabi): 125.80 Lha which is 113% & 106% of state's Normal and targeted area (Wheat- 79.68 Lha, Total cereals- 80.98 Lha, Gram-27.38 Lha, Lentil-4.82 Lha , Total Pulses- 35.25 Lha Mustard- 7.04 Lha, Total Oilseeds- 8.50Lha). • Crop diversion: 07 Lha gram area diverted to wheat owing to excellent SW rainfall and sufficient availability of water in all the reservoirs. • Spring/Summer coverage has been at 5.12 Lha (mung- 4.52 Lha+urd-0.33 Lha).
2	Seed Components (Purchase of breeder (oilseed)/Production of foundation/certified seed /distribution of certified seeds) under NFSM, RKVY, Suraj Dhara, Annapurna Scheme.	<ul style="list-style-type: none"> • Centralised policy (since 2008-09) in decision of crops/varieties identification in the implementation of <i>Seed related components</i>, is the root cause for non-availability of quality seeds of latest varieties of pulses, oilseeds, paddy, coarse cereals and Nutri-cereals etc. • District/DDAs role is generally limited to simply reimburse the cost or extend the subsidy to SSC/seed growing Society i.e. Seed growers/Federation towards breeder seed/production of F/C Seed and distribution of seed varieties, with little or NIL exercise on District Seed Planning. • This component need to be decentralized and should be made mandatorily as per <i>district action plan/seed rolling plan</i>. • <i>05 years impact assessment</i> on the varieties distributed/ demonstrated under Minikits, cluster/ CSBD demos, CFLDs by KVK, Beej Gram Yojna, Annapurna/Suraj dhara and <i>seed rolling plan</i> so prepared, is envisaged to help in the improvement of

S.No.	Activity/ Interventions	Observations/ Suggestions
		<p>SRR/VRR.</p> <ul style="list-style-type: none"> • <u>Include NFSM-Seed HUB, if exists in district, as beneficiary.</u>
4	Plant & Soil Protection Management (INM/IPM)	<ul style="list-style-type: none"> • INM (Micro/ Secondary nutrients) inclusion should be <i>strictly as per SHC recommendations</i>, may vary as per AES from one block to other. • INM component is not being implemented in M.P. • IPM (chemical pesticides/molecules) inclusion must be based on past impact analysis (ATMA/KVK/PMT), economic viability/environ--friendly properties, efficacy, as per Pesticides Regulations conferred by Central Insecticides Board &Registration Committee (CIBRC) and the FSSAI etc. It should be implemented as a technology demonstration rather than mere distribution. • Availability of Gypsum is a major constraint. It was appraised that, the PACs root was suited for supply of such inputs in terms of quality and reach to the farmers.
5	Conducting Cropping System Based Training	<ul style="list-style-type: none"> • Need strategic planning /commensurate to the crop stage. • Mandatory tour and training. • Staff Training: Specific trainings in expert institutions (ICAR-IARI Wheat Research Station Indore, IISR-Indore; IIWR-Jabalpur, IIPR-RS, Phanda, NCIPHM, IISS-Nabibagh.
6	Seed Minikit Demonstrations (Oilseeds/Pulses/ Others)	<ul style="list-style-type: none"> • Impact study of varietal performance involving KVK scientists + SDAs is yet to be ensured. Seed minikits demonstrations are aimed at identification of sustainability of a variety in a district in terms of its potential, biotic and abiotic stress tolerance and also to pave way for new cropping system to enhance cropping intensity. • Performance evaluation/Documentation (crop-wise/variety-wise) of minimum 20 per cent of seed minikits, which is mandatory, be ensured block-wise/district-wise to be submitted to DPD, Bhopal. This is benchmark for allocation of varieties in the next season and extending subsidies towards purchase of Breeder seed, production/distribution of certified seeds in a block / district/ state. • The district ATMA ATM/BTM/PD ATMA should be included in conduct of seed Minikit demonstration, cluster demonstration etc.
7	Seed Village Programme implementation	<ul style="list-style-type: none"> • This scheme is limited to <i>seed distribution only</i>. Components of training, safe storage metal bins to farmers <i>etc.</i> activities are yet to get attention of the state. Further, lack of meticulous planning about the crops/varieties to be considered etc. As per the objectives of this very ambitious scheme, more serious and sincere efforts are needed to implement the Beej Gram Yojana • Impact evaluation of 03 years (2017-18 to 2019-20) programme implementation on crops/ varieties taken, seed quantity produced, per cent distribution / utilization by nearby farmers and overall

S.No.	Activity/ Interventions	Observations/ Suggestions
		impact on VRR, is strongly suggested.
8	Flexi-components a) Farm implements and equipments b) Sprinkler set/Rain guns/Pipeline	<ul style="list-style-type: none"> • The District Agriculture Office is the nodal agency for all centrally sponsored agricultural development programmes with its paraphernalia up to village level. • Impact of penetration of mechanisation, required farm implements and feedback about their operational issues etc is received by the DDA. • Poor monitoring/ no- monitoring is a major issue. Beneficiaries wise/item wise detailed quantitative data management between the stake holders agencies (Directorate of Engineering & District DDA), should be prepared. • Block level poor SES beneficiaries are devoid of benefits. • To ensure equitable benefits, the target distribution under RCT/machineries should be block-wise instead of district wise. • It is recommended to constitute “user groups” of 10 farmers in a Group with the main beneficiary as Head Resource availing a subsidy benefit of > Rs. 10,000/- in a farm machinery/ tools. This will expand the beneficiaries numbers. • An impact evaluation of such farm machineries, distributed during NFSM period, is also suggested to document cost - cutting, employment generation, increase in mechanization/farm power, increase in Cropping Intensity etc. • The trainings on Repair/maintenance of farm implements/ equipments may be planned under local initiatives/state plan. • An evaluation study on potential increase under mechanization and irrigation efficiency involving scientist of KVKs & SDAs.
9	PMKSY	<ul style="list-style-type: none"> • To harness the benefits, strong convergence of schemes of Agriculture and Horticulture (MIDH) is recommended. Intercropping of oilseeds, pulses etc. with orchard should be highlighted.
	PKVY/PMFBY	<ul style="list-style-type: none"> • In PKVY-PGS-Lead Resource Personnel trainings are not being conducted. • In visited districts, the Loanee farmers are about 99% of total beneficiary farmers under PMFBY. • For wider publicity and information of PMFBY, detailed flexi-boards at Panchyat level (agents, premium rates, crops etc.) may be erected.
10	DBT/Geo tagging	<ul style="list-style-type: none"> • More attention needed on Aadhar seeded beneficiary's postings on NFSM national portal. • Geo- tagging of executed activities at beneficiary location may be started.
11	State NFSM Consultant/PMT/	<ul style="list-style-type: none"> • 50/52 districts are strengthened with PMT and also PMT at state HQ. However, their involvement towards technological

S.No.	Activity/ Interventions	Observations/ Suggestions
	District PMT	<p>demonstrations, weekly crop scenario, technical feedback, ATR follow up on the field recommendation etc need to be reviewed for better objective outcome of PMT at state HQ.</p> <ul style="list-style-type: none"> • Previous NLMTs-ATRs are awaited. • Poor documentation/ record management about impact of various interventions of NFSM. • Need exposure training as well as rotational transfer policy for skill improvement/knowledge up gradation of district PMT and strengthening of STATE PMT Cell. • Ensure field visit at least twice in a month.
12	New Initiatives taken -visited districts	<ul style="list-style-type: none"> • Progressive Increase in Summer Mung area, increase in new wheat variety area like HI 8663 area in Sehore may be attributed to NFSM. • Increase aquaculture activities in Balram Talab with the help of ATMA in district Sehore. • Seed graders, power seed treatment drum & power spray pump distribution in district Shajapur. • Low lift pump, tractor mounted spray solar pump ,solar spray, hand rotary duster distribution in district Agar-Malwa • Raised Bed Sowing in gram and wheat in district Dewas.
13	Others	<ul style="list-style-type: none"> • The new proposed initiatives of GoI on One district-One product/crop (ODOP) are highly recommended for durum wheat and Sarbati (bread wheat). These districts may be delineated. • Durum wheat increasing area is important to prevent build up and spread of Rust in Central India and thus in whole country, and also to save irrigation water and improve water use efficiency. In addition to harness its nutritional potential. • Durum is a natural source of high Protein (1.0 % to 1.5 % higher in Central India as compared to North India), -Carotene (Precursor of Vitamin A), and very low in saturated fat, cholesterol and sodium; it is good source of B vitamins and other minerals like Iron, Copper and Zinc, high Hectoliter weight -> 80 kg/ hectoliter, higher semolina recovery (65 %), least moisture content in grain (< 10.5 %), absence of starchy grain (higher recovery) and is free from seed borne diseases and has no pesticide residue. • Longer grain filling period and less vegetative period is required for better grain development. • Increasing global demand, value addition potential, resistance to diseases, better market price are some of the key factors which make Indian durum wheat suitable for export commodity. • Best quality Durum wheat is grown in central parts of India, particularly in the Malwa region of Madhya Pradesh viz., Indore, Sanver, Gautampura, Dewas, Ujjain and Dhar. Its area is increasing

S.No.	Activity/ Interventions	Observations/ Suggestions
		<p>in Bhopal and Sagar division also.</p> <ul style="list-style-type: none"> • Approximately, ~14% of the wheat area in Madhya Pradesh is occupied by durum wheat varieties. (Pusa Tejas, Poshan, Pusa Anmol, Pusa Mangal etc.). These are resistant to <i>Karnal Bunt</i> and are being grown in a larger area. • Marketing strategy for durum wheat for better remunerative price is must and need a policy for separate procurement platforms for durum wheat in the grain mandis. • Grading based on grain appearance and quality to facilitate exports. • Identifying suitable geographical areas for contract farming to intensify durum wheat production and procurement. (one district ó one product) • Separate MSP for durum wheat may be announced similar to breeder seed price (Durum wheat @ Rs. 7295/- per qtl; bread wheat @ Rs. 6520/- per qtl) including bonus for durum wheat farmers in Madhya Pradesh for producing high quality and pure durum wheat. • Root aphid in wheat has been an emerging issue for the last 4-5 years in Sarbati varieties. Early sown wheat (Oct., 10th -15th) was mainly affected. • State department should assign assessment/impact for various interventions and involving in studies to the district, KVKs. • Immediate need: as the area and production of durum wheat in Madhya Pradesh is increasing over years <p>“ A meeting between Government of MP, Traders, Exporters, DAC & FW/ DPD, Bhopal and APEDA may be convened to take corrective steps to procure and export durum wheat at national and international level</p> <p>“ Steps may be initiated to procure maximum durum wheat by Government at optimum prices and promote value addition centers at village level to improve the quality.</p> <p>“ Make availability provision for warehouse facility to durum wheat farmers on subsidy may be made available so that they can sell slowly based on demand.</p> <p>“ Initiate use of durum wheat in Mid-day meal programme and anganwadis as a health food in the form of pasta products and homemade foods</p> <ul style="list-style-type: none"> • Awareness and training programmes to farmers by Government of Madhya Pradesh for cultivating durum wheat and address their fears about the market issues.

राष्ट्रीय खाद्य सुरक्षा मिशन के अन्तर्गत नेशनल मॉनेटरिंग टीम (NLMT) द्वारा मध्यप्रदेश राज्य में रबी-2020 की अवधि में कृषि/फसल विकास कार्यक्रम क्रियान्वयन की समीक्षा हेतु सम्पन्न भ्रमण प्रतिवेदन के महत्वपूर्ण बिन्दु एवं सुझाव।

रा.खा.सु.मि., जोकि फसल विकास कार्यक्रमों की महत्वपूर्ण राष्ट्रीय योजना है, के अनुश्रवण हेतु राज्य मिशन संचालक के अतिरिक्त राज्य सलाहकार व जिला स्तर पर प्रोजेक्ट मैनेजमेंट टीम (जिला सलाहकार-01, तकनीकी सहायक-02) का प्रावधान है। राष्ट्रीय स्तर पर केन्द्रीय कृषि मंत्रालय के फसल विकास निदेशालय, राज्यों के समन्वय से योजना में सन्निहित महत्वपूर्ण घटकों (उन्नत तकनीक आधारित फुल पैकेज फसल प्रदर्शन कार्यक्रम, प्रमाणित व नवीन प्रजातियों के बीजों का वितरण, उन्नत/नवीन प्रजातियों के बीजोत्पादन पर अनुदान, पौध एवं मृदा संरक्षण प्रबंधन/ INM एवं IPM तथा Flexi Components जैसे कृषि यंत्रों/मशीनरी, सिंचाई संयंत्र-मोटर, पाइप, स्प्रिंकलर सेट, रेनगन; फसल आधारित प्रशिक्षण, स्थानीय नवाचार कार्यक्रम इत्यादि) की नियमित समीक्षा का प्रतिवेदन केन्द्र व राज्य सरकार को देते हैं।

2. रा.खा.सु.मि.-दलहन के भोपाल स्थित राष्ट्रीय मुख्यालय के रूप में दलहन विकास निदेशालय, मध्यप्रदेश व छत्तीसगढ़ राज्य के सभी केन्द्र समर्थित/ केन्द्र पोषित कृषि विकास कार्यक्रमों के केन्द्रीय नोडल कार्यालय की भूमिका का उत्तरदायित्व भी देखता है। इसी क्रम में क्षेत्रीय स्तर पर समवर्ती अनुश्रवण (Concurrent Monitoring) के अतिरिक्त NLMT अनुश्रवण, खरीफ व रबी के दोनों सीजन पर भ्रमण करते हुए अपना प्रतिवेदन देता है।
3. रा.खा.सु.मि. 2007-08 में दलहन, धान व गेहूँ के लिए वर्ष 2014-15 तक शत-प्रतिशत केन्द्रीय अनुदान के साथ प्रारम्भ हुआ। वर्ष 2014-15 से मोटे अनाज (Coarse Cereals – मक्का, बाजरा) व नकदी फसलें (Commercial Crops – कपास, गन्ना) भी इसमें सम्मिलित हुई। 14वें वित्त आयोग की अनुशंसा के परिप्रेक्ष्य में राज्यों को अधिक राजस्व भागीदारी के परिणामस्वरूप वर्ष 2015-16 से रा.खा.सु.मि. योजना में केन्द्र व राज्य की वित्तीय भागीदारी 60:40 के आधार पर है।
भारत सरकार के ग्रीन रिवोल्यूशन-कृषोन्नति योजना के अन्तर्गत रा.खा.सु.मि. एक वृहद् कार्यक्रम है। वर्ष 2018-19 से मध्यप्रदेश में भी इसके अन्तर्गत दलहन, गेहूँ, धान, कोर्स सीरियल, न्यूट्री सीरियल (ज्वार, बाजरा (पर्ल मिलेट), रागी/मडुआ (फिंगर मिलेट), कुटकी (लिटिल मिलेट), कोदों (कोदों मिलेट), सावां/झंगोरा {बार्नयार्ड मिलेट), कंगनी/काकून (फॉक्सटेल मिलेट), चीना (प्रोसो मिलेट)} के कार्यक्रम संचालित हैं।
4. वर्ष 2018-19 में रा.खा.सु.मि. योजनाओं में मध्यप्रदेश का कुल वित्तीय आवंटन रु. 566 करोड़ के सापेक्ष व्यय हेतु उपलब्ध धनराशि रु. 524 करोड़ था। जबकि कुल वित्तीय व्यय रु. 290 करोड़ रहा, जोकि मात्र 55 प्रतिशत रहा। वर्ष 2019-20 में कुल वित्तीय आवंटन रु. 630 करोड़ था। रिवेलिडेशन व रिलीज के साथ कुल उपलब्ध राशि रु. 472.41 करोड़ थी। जबकि कुल वित्तीय व्यय रु. 232.74 करोड़ अर्थात् 49% ही रहा।

नेशनल मॉनेटरिंग टीम द्वारा योजनाओं के घटक-वार क्रियान्वयन की समीक्षा व तत्संबंधी अपेक्षित कार्यवाही हेतु सुझाव, जोकि राज्य/सहभागी संस्थाओं द्वारा कार्यक्रम के वांछित परिणाम हेतु लिये जा सकते हैं, निम्नवत हैं:

योजना/घटक	अवलोकन/टिप्पणी	मुख्यालय/जिला स्तर पर अपेक्षित कार्यवाही
बीज घटक रा.खा.सु.मि., राष्ट्रीय कृषि विकास योजना, सूरजधारा, अन्नपूर्णा योजनाओं के अन्तर्गत प्रजनक/आधार बीज/प्रमाणित बीजों के उत्पादन एवं प्रमाणित बीजों के वितरण पर अनुदान	<ul style="list-style-type: none"> ● फसल प्रजातियों के चयन का निर्णय राज्य मुख्यालय स्तर पर लेने के कारण, दलहन, तिलहन, धान, मोटे अनाज और न्यूट्री सीरियल्स की नवीनतम किस्मों व गुणवत्तायुक्त बीजों की कमी/अनुपलब्धता, मूल कारण है। ● उपसंचालक कृषि की भूमिका मुख्यतः प्रजनक बीज की कीमत की प्रतिपूर्ति, आधार व प्रमाणित बीजोत्पादन तथा बीज वितरण के अनुदान देने तक सीमित है। ● राज्य बीज निगम/बीज उत्पादक समीतियां/म.प्र. सहकारी बीज महासंघ आदि इस अनुदान का लाभ वर्ष 2008 से प्राप्त कर रहे हैं। 	<ul style="list-style-type: none"> ● जिला कार्य योजना/जिला सीड रोलिंग प्लान के अनुसार फसल की किस्मों को ही अनुदान योजना में सम्मिलित किए जाने की आवश्यकता है। निर्णय विकेन्द्रीकृत रूप में जिलों द्वारा लिया जाना चाहिए। ● सीड रोलिंग प्लान/आकस्मिक योजना तैयार करने के लिए जिलेवार, उपयुक्त और सर्वश्रेष्ठ प्रदर्शन करने वाली पुरानी किस्मों (गैर-विवरणी) को भी, जोकि योजना में 20 प्रतिशत तक ली जा सकती है, मूल्यांकन के आधार पर समाहित किया जाना आवश्यक है। ● जिले के लिए अनुशंसित/उपयुक्त किस्मों का चयन, मिनिक्टिस, क्लस्टर प्रदर्शन/फसल पद्धति आधारित प्रदर्शन, केवीके द्वारा आयोजित क्लस्टर अग्रिम पंक्ति प्रदर्शन, बीज ग्राम योजना, अन्नपूर्णा/सूरजधारा आदि योजना के अन्तर्गत प्रदर्शित की गई किस्मों के विगत 05 वर्ष के परिणाम/मूल्यांकन के आकलन के आधार पर किया जाना चाहिए। बीज प्रतिस्थापन दर (SRR) / प्रजाति प्रतिस्थापन दर (VRR) के सुधार हेतु जिले-वार आंकलन अनिवार्य है। ● रा.खा.सु.मि. के अन्तर्गत दलहन/तिलहन एवं मोटे अनाज से सम्बंधित जिले में स्थापित सीड हब, अनुदान लाभार्थी के रूप में शामिल करते हुए उनके द्वारा उत्पादित गुणवत्ता युक्त बीज/किस्मों को प्राथमिकता के आधार पर उपयोग किये जाने की आवश्यकता है।
उन्नत तकनीक आधारित फुल पैकेज फसल प्रदर्शन (क्लस्टर प्रदर्शन) सम्पूर्ण प्रदर्शन -70% फसल पद्धति आधारित प्रदर्शन (CSBD) -30%	<ul style="list-style-type: none"> ● प्रदर्शनों में सामान्यतः केवल बीज उपलब्ध कराया जा रहा है। जिसके आधार पर कुल भौतिक लक्ष्यों की पूर्ति दर्शायी जा रही है। तकनीकी रूप से इसे "उन्नत तकनीक आधारित फुल पैकेज फसल प्रदर्शन" की श्रेणी में मान्यता हेतु अनुशंसित आदान (इनपुट कैफेटेरिया) जैसे बीजोपचार, सूक्ष्म पोषक तत्व, खरपतवारनाशी, कीटनाशी आदि आदान क्लस्टर में प्रदर्शित नहीं किए जा रहे हैं। 2017-18 से प्रत्यक्ष लाभ हस्तांतरण (डीबीटी) लागू होने के कारण, किसान आम तौर पर स्वयं खरीद कर इनका उपयोग नहीं कर रहे हैं। 	<ul style="list-style-type: none"> ● प्रदेश में उन्नत तकनीक आधारित फुल पैकेज फसल प्रदर्शनों को सुनिश्चित करने के लिए प्रति हे. निर्धारित/अनुशंसित आदानों (इनपुट कैफेटेरिया) की बुवाई के समय ही आपूर्ति किया जाना अनिवार्य है। राज्य द्वारा इसके लिए एक संस्थागत व्यवस्था करने की आवश्यकता है। ● उन्नत प्रदर्शन आदान किट (इनपुट कैफेटेरिया) का निर्धारण विकेंद्रीकृत प्रक्रिया के आधार पर जिला स्तर पर, केवीके/कृषि विश्वविद्यालय के द्वारा तय किया जाना चाहिए। ● रा.खा.सु.मि. के अन्तर्गत केवीके/कृषि विश्वविद्यालय में बनाये गये

योजना / घटक	अवलोकन / टिप्पणी	मुख्यालय / जिला स्तर पर अपेक्षित कार्यवाही
	<ul style="list-style-type: none"> इनपुट कैफेटेरिया में आईएनएम (सूक्ष्म पोषक तत्व) का समावेश मृदा स्वास्थ्य कार्ड की सिफारिश के आधार पर करने की जरूरत है। साथ ही कृषि पारिस्थितिकी (AES) के अनुसार इनपुट कैफेटेरिया की अनुशंसा एक विकासखण्ड से दूसरे में भिन्न हो सकती है। आईपीएम (रासायनिक कीटनाशक) का समावेश भी गत वर्ष के प्रदर्शन परिणाम, पर्यावरण अनुकूलता, कीमत आदि के गुणों के आधार पर जिले द्वारा निर्धारित होना चाहिए। प्रदर्शनो का 30% CSBD के अन्तर्गत किया जाना आवश्यक है, जिसका कुछ जिलों में अभाव है। साथ ही बीज उपचार, एक क्लस्टर में विभिन्न प्रजातियों का समावेश न करना एवं SHC सिफारिशों को न अपनाना। जियो-टैगिंग अनिवार्य है परन्तु नहीं की जा रही है। डिस्प्ले बोर्ड का अभाव। पिछले 05 वर्षों के प्रदर्शनों का प्रभाव, खेती की लागत : लाभ अनुपात का मूल्यांकन, फसल सघनता पर प्रभाव, पर्यावरण अनुकूलता व मशीनीकरण आदि का दस्तावेजीकरण आवश्यक है। जिस पर फसल चक्र, विपणन आदि की रणनीति आधारित है। 	<p>दलहन, तिलहन/मिलेट्स सीड हब से गुणवत्ता युक्त बीज लिये जाने को प्राथमिकता देनी चाहिए।</p> <ul style="list-style-type: none"> गुणवत्ता हेतु जैव कीटनाशक (bio-pesticide)/जैव-उर्वरक (bio-fertilizer) आदि कृषि विश्वविद्यालय/इफको/कृषको उत्पादों को कैफेटेरिया में शामिल किये जाने को प्राथमिकता देनी चाहिए। एक क्लस्टर में न्यूनतम 4-5 किस्मों का अनिवार्य समावेश, प्रदर्शन हेतु सुनिश्चित किया जाना आवश्यक है। विभिन्न कृषि पारिस्थितिकी में कृषि मॉडल के लिए एक क्लस्टर में 2-3 विषयगत क्षेत्रों को शामिल करना (बुआई/रोपण की विधि, सिंचाई, आईएनएम/आईपीएम, बीज उपचार, अंतर्वर्ती फसलों को लेना), SHC सिफारिशों को अपनाना आदि लागत प्रभावी, बेहतर कृषि प्रदर्शन घटक की सिफारिश की जाती है। प्रदर्शन के अन्तर्गत उन्नत तकनीक के प्रचार-प्रसार के लिए डिस्प्ले बोर्ड लगाना आवश्यक है। विगत 12-13 वर्षों से संचालित फसल पद्धति आधारित प्रदर्शनों के परिणामों के आधार पर जिले-वार अनुशंसित/परिवर्तित नवीन फसल पद्धति/क्रॉपिंग पैटर्न का डाक्यूमेंटेशन अनिवार्य रूप से करने की आवश्यकता है ताकि फसल विविधीकरण, विपणन-रणनीति निर्धारण, एक जिला-एक उत्पाद (ODOP) जैसे विषयों पर कार्ययोजना बनायी जा सके। केवीके एवं जिला/राज्य कृषि अधिकारी द्वारा संयुक्त रूप से ऐसा प्रतिवेदन प्रस्तुत किये जाने का दायित्व दिया जा सकता है।
फसल पद्धति आधारित प्रशिक्षण (CSBT) आयोजन	<ul style="list-style-type: none"> आमतौर पर फसल के दौरान प्रशिक्षण कार्यक्रम या तो आयोजित नहीं किए जा रहे हैं अथवा जिला/विकासखण्ड स्तर पर संबंधित दस्तावेजों के संग्रहण का अभाव। 	<ul style="list-style-type: none"> चरणबद्ध तरीके से रणनीतिक योजना के अनुसार परिणामात्मक प्रशिक्षण की आवश्यकता है। यह कार्य विभाग के अतिरिक्त स्वयंसेवी संस्थाओं के माध्यम से भी समन्वय के साथ सम्पन्न कराया जा सकता है।
सीड मिनीकिट प्रदर्शन आवंटन खरीफ 2020 (दलहन उर्द -12000 नं. पी.यू.-1 तिलहन सोयबीन-129250 नं.	<ul style="list-style-type: none"> दलहन बीज मिनीकिट प्रदर्शन कार्यक्रम 2016-17 में पुनः प्रारम्भ किया गया। इसका उद्देश्य नवीन प्रजातियों की उत्पादन क्षमता/रोग प्रतिरोधकता तथा स्थापित/नवीन फसल प्रणाली जोकि फसल विविधीकरण अथवा फसल सघनता के लिए अनिवार्य है, आदि के आधार पर मूल्यांकन करना है। ताकि जिला योजना में किस्मों/बीज की उपलब्धता आदि की रूपरेखा निर्धारित हो सके। 	<ul style="list-style-type: none"> बीज मिनीकिट्स के प्रदर्शनों का फसल-वार/विविधतापूर्ण दस्तावेजीकरण किया जाना चाहिए, ताकि इसे बीज उत्पादन/वितरण कार्यक्रमों (बीडर/फाउन्डेशन/प्रमाणित) की सब्सिडी के साथ लिंकअप किया जा सके। बीज मिनीकिट के प्रदर्शन का दस्तावेजीकरण ब्लॉक-वार/जिले-वार सुनिश्चित किया जाना चाहिए। समयबद्ध मिनीकिट वितरण सुनिश्चित करने की आवश्यकता है।

योजना / घटक	अवलोकन / टिप्पणी	मुख्यालय / जिला स्तर पर अपेक्षित कार्यवाही
जे.एस. 20-29, जे.एस. 20-34, जे.एस. 20-69 एवं आर.वी.एस. 2001-4)	<ul style="list-style-type: none"> ● केवीके वैज्ञानिकों व जिला कृषि अधिकारियों द्वारा प्रजाति प्रदर्शनों के प्रभाव का अध्ययन एवं तत्सम्बंधी कार्ययोजना, अभी तक सुनिश्चित नहीं किया गया है। ● न्यूनतम 20 प्रतिशत बीज मिनीकिट के प्रदर्शन का दस्तावेजीकरण (फसल-वार/विविधता-वार), जोकि अनिवार्य है, का अभाव है। ● सामान्यतः यह कार्यक्रम वितरण के रूप में लिया जा रहा है जबकि इसे तकनीकी प्रदर्शन (बीज किस्म) के रूप में लेना चाहिए। 	<ul style="list-style-type: none"> ● मिनीकिट प्रदर्शन/परिणामों के आधार पर किस्मों के आवंटन और प्रजनक बीज की खरीद, ब्लॉक/जिले/राज्य में आधार/प्रमाणित बीजों के उत्पादन/ बीज वितरण में अनुदान की पात्रता हेतु यह अनुशंसा, बेंचमार्क के रूप में उपयोग किये जाने की आवश्यकता है।
बीज ग्राम योजना	<ul style="list-style-type: none"> ● यह योजना सब-मिशन ऑन सीड एण्ड प्लांटिंग के अन्तर्गत वर्ष 2015-16 से क्रियान्वित है। 50 कृषकों (प्रति एकड़ 01 कृषक) को बीज हेतु दलहन/तिलहन में 60% अनुदान व खाद्यान्नों में 50% अनुदान की पात्रता है। बीजोत्पादन प्रशिक्षण व बीज भण्डारण हेतु छोटे मेटलबिन, योजना का भाग है। ● योजना केवल बीज वितरण तक सीमित है। इसके अन्य घटक - प्रशिक्षण, किसानों को सुरक्षित भंडारण हेतु धातु की टंकियां (मेटलबिन) आदि का क्रियान्वयन नहीं किया जा रहा है। 	<ul style="list-style-type: none"> ● इस अति महत्वाकांक्षी योजना के उद्देश्यों के अनुसार, गुणवत्ता युक्त बीजों की उपलब्धता सुनिश्चित करने के लिए फसलों/किस्मों व लाभार्थियों के चयन, प्रशिक्षण व भण्डारण के क्रियान्वयन हेतु अधिक गंभीर और ईमानदार प्रयासों की आवश्यकता है। ● विगत 05 वर्ष (2015-16 से 2019-20) के प्रभाव का जिले-वार मूल्यांकन (उत्पादित किस्में, उत्पादित बीज की मात्रा, बीज की श्रेणी, लाभार्थी द्वारा कुल उत्पादित बीज का प्रतिशत वितरण/विक्रय, किस्म का क्षेत्र में प्रतिस्थापन/उपयोग /वी.आर. आर.), पर समग्र प्रभाव का आकलन किया जाना आवश्यक है।
मशीनीकरण / संसाधन संरक्षण तकनीक घटक	<ul style="list-style-type: none"> ● जिला कृषि कार्यालय, ग्राम स्तर तक के सभी केंद्र प्रायोजित कृषि विकास कार्यक्रमों के लिए नोडल एजेंसी है। मशीनीकरण, कृषि उपकरणों की किस्मों का चयन, वितरण उपरान्त उनके परिचालन मुद्दों के बारे में प्रतिक्रिया/फीड-बैक आदि की जानकारी उपसंचालक कृषि तक पहुंचती है। अतः दोनों विभागों में समन्वय आवश्यक है। ● फार्म मशीनीकरण की मात्रात्मक जानकारी का कृषि अभियांत्रिकी एवं उपसंचालक कृषि के मध्य आदान प्रदान का अभाव है। 	<ul style="list-style-type: none"> ● लाभार्थी-वार/मद-वार विस्तृत मात्रात्मक डेटा प्रबंधन तैयार किया जाना चाहिए जिसका हितधारक एजेंसियां (कृषि अभियांत्रिकी और जिला कृषि विभाग) जिला कार्ययोजना/ फसल विविधीकरण जैसी योजना में उपयोग कर सके। ● वृहद् स्तर पर प्रत्येक सामाजिक व आर्थिक वर्ग-समूह के लाभार्थियों को योजना के समान लाभ सुनिश्चित करने हेतु, संसाधन संरक्षण तकनीक (RCT)/यंत्रों के लक्ष्य तहत लक्ष्य वितरण को जिले स्तर के बजाय ब्लॉक स्तर पर किया जाना चाहिए। ● रु. 10,000/- से अधिक का अनुदान लाभ प्राप्त करने वाले मुख्य लाभार्थी के साथ समूह में 10 किसानों को शामिल करते हुए "उपयोगकर्ता समूहों" का गठन करने की आवश्यकता है ताकि मशीन की क्षमता का पूर्ण रूप से उपयोग किया जा सके। ● स्थानीय स्तर पर उपकरणों के रखरखाव/मरम्मत के प्रशिक्षण योजना, राज्य योजना के तहत बनाई जा सकती है।

योजना / घटक	अवलोकन / टिप्पणी	मुख्यालय / जिला स्तर पर अपेक्षित कार्यवाही
		<ul style="list-style-type: none"> ● एनएफएसएम अवधि के दौरान वितरित की गई ऐसी कृषि मशीनरी का प्रभाव—मूल्यांकन से संबंधित दस्तावेज जैसे लागत, रोजगार सृजन, मशीनीकरण और कृषि शक्ति में वृद्धि, फसल सघनता में वृद्धि, जोखिम प्रबंधन, नयी विकसित फसल प्रणाली आदि, आवश्यक है। जिसका अभाव है। ● संयुक्त रूप से केवीके और कृषि विभाग द्वारा, समावेशित मशीनीकरण और सिंचाई दक्षता में वृद्धि एवं संभावित वृद्धि के मूल्यांकन की आवश्यकता है।
प्रधानमंत्री कृषि सिंचाई योजना (PMKSY)	<ul style="list-style-type: none"> ● सिंचाई क्षमता के सम्पूर्ण दोहन हेतु व लाभ प्राप्त करने के लिए, कृषि और बागवानी (MIDH) की योजनाओं के क्रियान्वयन में जिले स्तर पर समन्वय का अभाव है। 	<ul style="list-style-type: none"> ● प्रधानमंत्री कृषि सिंचाई योजना के क्रियान्वयन में उपसंचालक कृषि/भूमि संरक्षण अधिकारियों को नोडल संस्था के रूप में दायित्व दिये जाने की आवश्यकता है। ● जिले स्तर पर इस कार्यक्रम के प्रतिवेदन/विस्तृत विवरण उपलब्ध नहीं हो सके। ● बागवानी के साथ तिलहन, दलहन आदि के अंतर्वर्ती कार्यक्रम को बढ़ावा देते हुए जिले की कार्ययोजना में इसे सम्मिलित व व्यापक प्रचार—प्रसार की आवश्यकता है।
परम्परागत कृषि विकास योजना (PKVY)/ प्रधानमंत्री फसल बीमा योजना (PMFBY)	<ul style="list-style-type: none"> ● PKVY/-PGS-Lead संसाधन कार्मिक प्रशिक्षण (LRP प्रशिक्षण) आयोजित नहीं किये जा रहे हैं। 	<ul style="list-style-type: none"> ● प्रशिक्षण व क्रियान्वयन जैसी गतिविधियां केवल लक्ष्य प्राप्ति तक ही सीमित न होकर, नई व प्रभावी रणनीति सुनिश्चित किया जाना आवश्यक है। ● पीएमएफबीवाई की जानकारी और व्यापक प्रचार के लिए, पंचायत स्तर (एजेंटों, प्रीमियम दरों, फसलों आदि) पर विस्तृत फ्लेक्सी-बोर्ड लगाए जाना आवश्यक है। बैंको के अतिरिक्त किसान मित्रों को भी प्रशिक्षण देते हुए उनका उपयोग किया जा सकता है।
DBT/GI tagging	<ul style="list-style-type: none"> ● NFSM राष्ट्रीय पोर्टल पर आधार लिंकड लाभार्थियों की जानकारी देने का अभाव है। ● लाभार्थी के लिए किये गये निष्पादित गतिविधियों की जी.आई.—टैगिंग किया जाना आवश्यक है। 	<ul style="list-style-type: none"> ● NFSM राष्ट्रीय पोर्टल और जियो—टैगिंग पर आधार के साथ लाभार्थियों की जानकारी देना सुनिश्चित करने की आवश्यकता है।
अन्य	<ul style="list-style-type: none"> ● राज्य का खरीफ क्षेत्र लगभग 126 लाख हे. है जिसके विरुद्ध वर्तमान खरीफ 2020 लक्ष्य लगभग 138 लाख हे. रखा गया है। ● खरीफ की मुख्य फसलें सोयबीन—56 लाख हे., धान—25 लाख हे., मक्का—16 लाख हे., उर्द—16.50 लाख हे., 	<ul style="list-style-type: none"> ● लक्षित फसल—वार क्षेत्र के अनुसार समय पर गुणवत्ता युक्त आदानों की उपलब्धता सुनिश्चित करने की आवश्यकता है। ● अनुशंसित बीज दर को सुनिश्चित करना। ● फसल की खेती में कीटनाशकों के अत्यधिक इस्तेमाल से बचने के लिए, किसानों के बीच जैव—आधारित पैकेज की शुरुआत की

योजना / घटक	अवलोकन / टिप्पणी	मुख्यालय / जिला स्तर पर अपेक्षित कार्यवाही
	<p>कपास—6.09 लाख हे. एवं अरहर—5.26 लाख हे. लक्षित है।</p> <ul style="list-style-type: none"> ● राज्य में जिलों को फसल—वार 4 श्रेणियों में विभाजित कर (अधिक क्षेत्र—कम उत्पादकता, कम क्षेत्र—अधिक उत्पादकता, अधिक क्षेत्रफल— अधिक उत्पादकता, कम क्षेत्र— कम उत्पादकता) कार्ययोजना तैयार कर उत्पादन एवं उत्पादकता में वृद्धि की जा सकती है। ● एक जिला—एक उत्पाद / फसल पर भारत सरकार की नई प्रस्तावित पहल की अत्यधिक अनुशंसा। ● आमतौर पर उच्च बीज दर एवं असंतुलित उर्वरक / पोषक तत्वों एवं कीटनाशकों का उपयोग। ● समुचित बीज उपचार, फंगिसाइड्स / जैव कीटनाशकों आदि की अनुशंसित मात्रा के साथ नहीं किया जाना। ● जिप्सम की समुचित उपलब्धता अभाव। 	<p>जानी चाहिए।</p> <ul style="list-style-type: none"> ● एक जिला—एक उत्पाद / फसल पर भारत सरकार की नई प्रस्तावित पहल फसलों के विशिष्ट वर्चस्व वाले क्षेत्रों का चयन कर क्रियान्वयन करने की आवश्यकता है। ● बीज प्रतिस्थापन दर में वृद्धि करने के लिए, किसानों को मंडी में बीज की सीधी बिक्री की अपेक्षा बीज को बीज प्रतिस्थापन मोड के आधार पर ग्रामीणों के बीच वितरित करने की आवश्यकता है। ● जिप्सम जैसे आदान की आपूर्ति के लिए प्राथमिक कृषि सहकारी समिति के माध्यम से गुणवत्ता युक्त आपूर्ति सुनिश्चित करने की आवश्यकता है।

Chapter – 1

Background

1.1 Overview

- The National Food Security Mission, a Centrally Sponsored Scheme (CSS) on Crops /commodity development programmes for Rice, Wheat and Pulses was launched during the **11th five year plan (2007-08 to 2011-12)** consequent upon the recommendations of 53rd Meeting of National Development Council dated May 29th, 2007. Initially the Mission envisaged to achieve additional food-grains production of 20 million tonnes by the end of Eleventh plan ,over the base year (2006-07), consisting of Rice, Wheat & Pulses by 10, 8 and 2 million tonnes respectively.
- During 2011-12, the National food grains production was achieved at 259.29 million tonnes, a hike of 42 MT over the NFSM launching base year 2006-07 recording an additional increase of 11, 19 and 2.89 million tonnes under rice, wheat and pulses respectively. Per hectare yield increase in pulses, wheat and paddy was 87 kg (612 kg to 699 kg/ha), 469 kg (3177 kg/ha) and 272 kg/ha (2393 kg) respectively.
- **During 12th Plan (2012-13 to 2016-17)**, NFSM has been 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). The new targets were gaining additional production of food grains by 25 million tons (*i.e.* 10 Mt- rice, 8 Mt- wheat, 4 Mt- pulses, 3 Mt- coarse cereals) by the end of 12th Five Year Plan over the base year 2011-12.
- During 12th Plan (terminal year 2016-17), the all India food grains production was 275.11 million tonnes. An Additional increase of approx. 16 Mt (*i.e.* 4.39 Mt-rice; 3.63 Mt-wheat; 6.04 Mt-pulses; 1.76 Mt-Coarse Cereals) was recorded over the 11th plan (base year 2011-12). The achievement has been 9 mt less than the target (25 Mt). However, pulses achieved an additional production of 2 mt more than the target.

1.2 Implementation of Krishonnati Yojna

- With the end of five year plan period era '*The Green Revolution-Krishonnati Yojna*' was approved which is co-terminus with the period of 14th Finance Commission, from 2017-18 to 2019-20. This umbrella scheme has twelve schemes/missions including the National Food Security Mission.
- Vide EFC recommendations dated Nov. 29th, 2017, the NMOOP and Seed Village Programmes also came into the ambit of NFSM and accordingly it is now under implementation with eight components viz. (i) NFSM- Rice (ii) NFSM-Wheat (iii) NFSM-Pulses (iv) NFSM-Coarse Cereals (Maize, Barley) (v) NFSM-Sub Mission on Nutri Cereals (vi) NFSM-Commercial Crops; (vii) NFSM Oilseeds and Oilpalm and (viii) NFSM-Seed Village Programme.
- Based on past performance of 12th Plan, the NFSM, beyond 12th plan period (2017-18 to 2019-20) has an additional production target of 13 Mt. of food grains (5 Mt-rice, 3 Mt-wheat, 3 Mt-pulses and 2 Mt-nutri-cum coarse cereals) over the base year 2016-17.

- The total food grains production achieved during 2017-18 is 285.01 Mt which is 3.6% increase over the last year. The production of rice, wheat, pulses and nutri/coarse cereals have been recorded at 112.76 Mt (+3 Mt over 2016-17), 99.87 Mt (+1 Mt), 25.42 Mt (+2 Mt) and 46.97 Mt. (+3 Mt.) respectively.
- During 2018-19 the total food grains production has been 285.21 Mt. The production of rice, wheat, pulses and nutri/coarse cereals have been at the level of 116.45 Mt-rice (+4 Mt), 103.60 Mt-wheat (+4 mt), 22.08 Mt-pulses (-3 Mt) and 43.06 Mt ó nutri./coarse Cereals (-3 Mt) respectively.
- As per 3rd Advance estimates, the total food grain production during 2019-20 is 296 Mt. The production of rice, wheat, pulses and nutri/coarse cereals have been at the level of 118 Mt-rice (1.55 Mt higher over 2018-19), 107 Mt-wheat (+2.61 Mt), 23 Mt-pulses (+1 Mt) and 47 Mt ó nutri./coarse Cereals (+4 Mt) respectively.

1.3 Funding Pattern

- The pattern of Central funding assistance has been at 100 per cent till 2014-15 only. From 2015-16, in view of increased devolution to the States on account of implementation of recommendations of 14th Finance Commission, NFSM has been implemented on sharing basis between Government of India and States on 60:40 basis for general category states & 90:10 basis for North East & hilly states. However, the Central Agencies are funded 100% by GOI. The same pattern of sharing of expenditure has been continued during the period from 2017-18 to 2019-20.

It is seen that the state of MP has a major funding share of about 20% of total all India NFSM allocation for all crops and about 28 per cent under NFSM Pulses. (Table 1).

Table 1: NFSM Allocation: 2019-20

(Fin.-Rs. in Cr.)

S. No.	NFSM	Inception Yr	All India (CS+SS)			Madhya Pradesh		
			Total	CS	SS	Total	CS	SS
1	Pulses	XI th Plan (2007-12)	1743	1081	662	485.17	291.10	194.07
2	Rice		413	284	129	20.40	12.24	8.16
3	Wheat		211	132	79	40.08	24.05	16.03
4	Coarse Cereals	XII th Plan (2012-16)	120	82	38	10.78	6.47	4.31
5	Comm. Crops		34	22	13	0.59	0.36	0.24
6	Nutri-Cereals	2018-19	252	156	96	20.86	12.51	8.34
7	Oilseeds		344	211	133	52.08	31.25	20.83
	Oilpalm		102	62	40	Not covered		
	TBOs		6	4	2			
	Grand Total		3225	2034	1192	629.96	377.98	251.98

- The basic strategy of the NFSM 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; 30% of total demonstrations would be Cropping System Based Demonstrations (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 etc under flexi component to improve productivity.

- The programme also emphasis on 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 Centres (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.
- The NFSM has provided funding support to both the SAUs (JNKVV, Jabalpur and RVSKVV, Gwalior) for strengthening of Breeder Seed production infrastructure; created 24 seed hubs (Pulses-16, Oilseed-6, millet-2) @ Rs. 1.5 Cr. each at KVK/SAUs.
- New initiatives have been taken for increasing production and productivity of Nutri-Cereals from 2018-19 onwards ie. Breeder seed production of nutri-cereals, creation of seed hubs, certified seed production, seed minikits allocation and strengthening/creation of Center of Excellence.

1.4 Area of Operation : NFSM Crop Development States

S.No.	Commodities	All India		Madhya Pradesh Districts (No.)
		States (No.)	Districts (No.)	
i.	NFSM-Wheat	11	126	16
ii.	NFSM-Pulse	29	638	52
iii.	NFSM-Rice	25	194	8
iv.	NFSM- Coarse cereals	27	269	22
	Maize	27	237	15
	Barley	4	39	8
v	NFSM-Nutri-cereal	14	202	24
	Jowar	10	88	9
	Bajra	9	88	4
	Ragi	8	44	-
	Other millets	7	43	15
vi.	NFSM-Commercial Crops			
	i) Cotton,	15		10
	ii) Sugarcane	13		13
	iii) Jute	09		-
vii	NFSM-Oilseeds			
	i) Oilseeds,	25		52
	ii) Oil palm	10		-
	iii) TBOs	08		-

1.4.1 NFSM Crop Development Districts in M.P

S.No.	Commodities	Madhya Pradesh Districts (Nos.)
i.	NFSM-Wheat (16)	Ashok nagar, Chhatarpur, Guna, Katni, Khandwa, Panna, Raisen, Rajgarh, Rewa, Sagar, Satna, Seoni, Shivpuri, Sidhi, Tikamgarh, Vidisha
ii.	NFSM-Pulse (52)	All the districts
iii.	NFSM-Rice (8)	Anupur, Damoh, Dindori, Katni, Mandla, Panna, Rewa, Sidhi
iv.	NFSM- Coarse cereals (22)	
	Maize (15)	Chhindwara, Jhabau, Dhar, Betul, Rajgarh, Khargone, Ratlam, Alirajpur, Seoni, Mandsaur, Burhanpur, Neemuch, Barwani, Singrauli, Dindori
	Barley (8)	Singrauli, Chhatarpur, Tikamgarh, Satna, Rewa, Bhind, Siddhi, Panna
v	NFSM-Nutri-cereal (24)	
	Jowar (9)	Alirajpur, Barwani, Betul, Burhanpur, Chhindwara, Dhar, Khargone, Rewa, Sidhi
	Bajra (4)	Bhind, Morena, Sheopurkalan, Shivpuri
	Other millets (15)	Anuppur, Balaghat, Betul, Chhindwara, Damoh, Dindori, Jabalpur, Katni, Mandla, Rewa, Shadol, Seoni, Sidhi, Singrauli, Umaria
vi.	NFSM-Commercial Crops	
	Cotton (10)	Chhindwara, Dhar, Jabaua, alirajpur, Khargone, Barwani, Khandwa, Burhanpur, Ratlam, Dewas
	Sugarcane (13)	Chhindwara, Mandla, narshinghpur, Dhar, Barwani, Burhanpur, Gwalior, Shivpuri, Datia, Hosangabad, Betul, Jabalpur, Guna
vii	NFSM-Oilseeds (52)	All the districts

1.5 Monitoring Mechanism/Mission Structure

Monitoring	Body	Composition	Review Meeting/ Visit
National Level	i) General Council(GC)	<p>” Minister of Agri. & Farmers Welfare - Chairman</p> <p>” <u>Secretary</u> AC & FW/DARE)& DG (ICAR)/ Deptt. of Expenditure, MoF/ Deptt. of Food & Public Distribution/ MoPR / MoTA/Deptt. of Social Justice & Empowerment/ MoW&CD - Member</p> <p>” Addl. Secretary & Financial Advisor (DAC&FW) - Member</p> <p>” Agri.Commissioner (DAC&FW)</p>	Twice a year

Monitoring	Body	Composition	Review Meeting/ Visit
		<p>- Member</p> <p>" Advisor (Agri.), NITI AYO - Member</p> <p>" Joint Secretary, MoEF - Member</p> <p>" Mission Director (NFSM) - Member Secretary</p>	
	ii) NFSM- Executive Committee (NFSMEC)	<p>" Secretary (AC&FW) - Chairman</p> <p>" Secretary DARE & DG (ICAR)/ MoWR/ Deptt. of Fertilizer/ Deptt. of Food & Public Distribution / MoPR / MoTA/ Deptt. of Social Justice & Empowerment/ MoW&CD</p> <p>- Member</p> <p>" Addl. Secretary & Financial Advisor (DAC&FW) - Member</p> <p>" ADG (Oilseeds, ICAR) - Member</p> <p>" Agri. Commissioner - Member</p> <p>" Advisor (Agri.), NITI AYO - Member</p> <p>" Five Experts on crop matter- Member</p> <p>" Joint Secretary (Crops) & National Mission Director (NFSM) - Member Secretary</p>	Quarterly
	iii) National Level Monitoring Team (NLMT)	<p>" Director CDDs- Co-ordinator</p> <p>" Scientist SAUs/JDA 6Member</p>	Twice a year (Kha + Rabi)
State Level	State Food Security Mission Executive Committee (SFSMEC) Monitoring Committee	<p>" Chief Secretary - Chairman</p> <p>" Agri. Prod. Commissioner - Member</p> <p>" Secretary Agri./ Irrigation/ Power/ Panchayati Raj/ Tribal Affairs/ Social Welfare Deptt./ Food & Public Distribution - Member</p> <p>" VCs of SAU - Member</p> <p>" Director (Agriculture) - Member</p> <p>" Director/PD (ICAR) - Member</p> <p>" Director, DPD/CDDs , GoI - Member</p> <p>" SSC - Member</p> <p>" Representative of Lead Bank & NABARD - Member</p> <p>" IIS/CIAE/NISR/DWR - Member</p> <p>" State Mission Director - Member Secretary</p>	Twice a year (Kha + Rabi)
District Level	District Food Security Mission Executive Committee (DFSMEC)	<p>" District Collector/CEO - Chairman</p> <p>" Representative Line depart. /SHGs/ NGOs/ KVK/ ICAR/SAUs/ Lead Bank/NABARD - Member</p> <p>" Progressive Farmer - Member</p> <p>" PD ATMA - Member</p> <p>" DDA/DAO/DHO - Member Secretary</p>	Quarterly

1.6 Composition of Monitoring Team

S. No.	Organization	Names and Designation
i.	Government of India, Department of Agriculture, Cooperation & Farmers Welfare, (Ministry of Agri. & FW) Directorate of Pulses Development Vindhyachal Bhavan, Bhopal (M.P.)	Dr. A.K. Tiwari, Director <u>Email- dpd.mp@nic.in</u> Mobile 6 9425010489 -Convenor and Team leader
ii.	Directorate of Agriculture, Deptt. of Agri. Development & FW, Govt. of Madhya Pradesh Vindhyachal Bhawan, Bhopal-462004 (MP)	Shri Sanjeev Singh, IAS Director (Agri.)/Mission Director (NFSM) <u>Email-diragri@mp.gov.in</u> Mobile-8085477177 -Member
iii.	ICAR-IARI, Regional Wheat Research Station, Indore (MP)	Dr. Sai Prasad Principal Scientist & Head <u>Email-head indore@iari.res.in</u> <u>sprasad78@yahoo.com</u> Mobile-9425957920 - Member
iv.	College of Agriculture, Indore Deptt. of Plant Pathology	Dr. R. K. Singh Senior Scientist <u>Email-rakesh0429@gmail.com</u> Mobile- 9407119090 - Member
v.	Deptt. of Agriculture Development and Farmers Welfare Divisional Coordinators: Shri N P Suman- Bhopal Shri Dharendra K. Pandey - Ujjain Shri R.S. Sisodia- Indore	Joint Director (Agri) Govt. of MP Email- <u>Bhopal-zmagribho@mp.gov.in</u> <u>Ujjain-zmagriujj@mp.gov.in</u> <u>Indore-zmagriind@mp.gov.in</u> Bhopal-0755-2540890/M.No.-94253-68204 Ujjain-0734-2513781/M.No.-94251-65585 Indore-0731-2366967/M.No.-94253-69155

Chapter – 2

Crop/Intervention-wise Cost Norms (2019-20 Vs 2020-21) and Input Cafeteria (2019-20)

2.1 NFSM Foodgrains : Rice, Wheat, Pulses, Coarse & Nutri-Cereals

S. No	Particular/ Interventions	Norms	
		2019-20	Additional/Revised : 2020-21
1.	Funding Pattern (GoI:State)	General States: 60:40 (Central: State) Hilly & NE States: 90:10 (Central: State)	<u>100% - Newly created UTs (J&K, Ladakh)</u>
2.	Demonstration	Rice & Wheat-40% Pulses & Nutri-cereals -30% Coarse- cereals-70%	Rice & Wheat-40% Pulses & Nutri-cereals -30% Coarse- cereals-50%
3.	Seed distribution	Rice & Wheat-20% Pulses & Nutri-cereals -15% Coarse- cereals-30% • Phy. & Fin. targets for varieties > 10 Yrs. of age with special characteristics- Not > 20%.	Rice & Wheat-20% Pulses & Nutri-cereals -15% Coarse- cereals-30% TL seeds allowed for NE States, Hilly States (HP & UK) and UTs of J&K and Ladakh for all crops under NFSM.
4.	Seed Production of quality seed	<u>Pulses & Nutri-cereals -15%</u> • In order to promote quality seeds of newer var. not older than 10 Yrs. of age, states may take up prod. of certified seeds through SSC and State farms. • Separate targets for may be given for demonstration, seed distribution and production. • More focus towards potential districts for increasing pulses & nutri-cereals production.	• No change
5.	INM & IPM	<u>Rice, Wheat, Pulses, Coarse-cereals & Nutri- cereals- 15% each</u> <u>INM</u> Wheat: Micro-nutrient & Gypsum Rice: Micro-nutrient; Liming in Acidic Soils <u>IPM</u> Wheat & Rice: PP Chemicals, Bio-agents, Weedicides	<u>Wheat & Rice:</u> • Inclusion of Bio-fertilizers under INM • Inclusion of Bio-pesticides under IPM
6.	Flexi-Components	<u>Rice, Wheat, Pulses& Nutri- cereals- 25% each</u> <u>Coarse-cereals-05%</u> • Farm Machineries (SMAM norms) • Water saving devices (PMKSY norms) • CHCs, Demonstration by NGOs, Capacity Building/training Local Initiatives etc.	• Demonstrations by NGOs excluded • Inclusion of PHM implements/ equipments/tools (SMAM norms) • Small seed storage bins /structures (SVP under NFSM)
	Local Initiatives	• Those activities which can help in boosting the production and productivity	<u>Excluding from Local Initiative</u> • Development of godowns for safe

S. No	Particular/ Interventions	Norms	
		2019-20	Additional/Revised : 2020-21
		of NFSM-Rice, Wheat, Pulses and Nutri-Cereals e.g. augmentation of water resources, convergence of Pulses & Nutri-Cereals production within areas brought under irrigation through PMKSY.	storage of critical inputs, machines for post harvest processing like grader, dehussing machines, mini dal mills, etc.
7.	Crop-Wise		
a	Rice & Wheat*	<i>(In order to utilize Rice Bunds - State may include planting of Arhar in demonstration plot of Rice.)</i>	
		30% Allocation for Stress tolerant varieties	30% Allocation for Stress tolerant/ Bio-fortified / HYVs <i>The sowing of rice crop should be avoided in the 'Dark-Zone' areas of the State.</i>

Note- SMAM- Sub-mission on Agricultural Mechanization; SVP- Seed Village Programme

2.2 NFSM-Oilseed, Oilpalm & TBOs

S.No	Particular/ Interventions	Norms	
		2019-20	Additional/Revised : 2020-21
I	Funding Pattern (GoI:State)	General States: 60:40 (Central: State) Hilly & NE States: 90:10 (Central: State)	<i>100% - Newly created UTs (Pondicherry, Ladakh +J&K)</i>
II	States	i) Oilseed ó 25 ii) Oilpalm ó 11 iii) TBOs ó 10	i) Oilseed * ó 28 ii) Oilpalm ó 11 iii) TBOs # ó 08 *Addl. Oilseed States (+3) = <i>Ladakh, Pondichery, Punjab</i> #Excluded States in TBOs (-02) = <i>Meghalaya & WB</i>
III	NFSM- Oilseeds		
1.1	Seed Component under Oilseeds		
a)	Prod. of Foundation & Certified Seed-	- Rs.2500/qtls-< 10 yrs.var. - Addl-100/qtls within 5 yrs. <i>(75% subsidy- farmers & 25%- Seed Prod. Agencies)</i>	No change
b)	Seed Distribution of quality seed	•Phy.& Fin. targets for the varieties > 10 Yrs. of age with special characteristics- Not be > 20% .	•TL seeds allowed for NE, Hilly States and UTs for all crops under NFSM (OS & OP).
1.2	Demonstration & Training	<i>Same as per Revamped NFSM guideline</i>	-
1.3	Distribution of input incl.Farm Machinery/irrigation tools etc.	•Farm Implements & equipments/tools (SMAM norms) •Water saving devices (PMKSY norms)	• PHM implements/equipments/tools (SMAM) • Small seed storage bin /structure(SVP)
1.4	Flexi components	•The activities for which no assistance has been indicated under normal	-

S.No	Particular/ Interventions	Norms	
		2019-20	Additional/Revised : 2020-21
		interventions but can help in boosting the production and productivity of oilseeds and area expansion of Oilpalm & TBOs, may be included.	
IV	NFSM- Oilpalm (MP State not included)		
1.1	Supply of planting material, maintenance/cultivation cost and inter-cropping during gestation period		
a)	Supply of planting material	• Subsidy @ 85% of cost of planting for farmers (Limited @ Rs. 12000/ha for entire land holding/planting area of farmer)	
b)	Maintenance cost	• 50% of the cost during gestation period of 4 yrs. with a ceiling of Rs. 20,000/ha (@Rs. 5000/yrs./ha)	
c)	Input for inter-cropping	• Same as Maintenance cost norms	
d)	Other components	(Same as revamped NFSM-guideline) • Such as supply of water saving devices, establishment of seed garden, vermin-compost units at oilpalm field, machinery etc.	
V	NFSM – Tree Born Oilseeds (TBOs) MP State not included – Potential districts: Jabalpur, Khargaoan, Mandla, Dindori and Jabua		
1.1	Area Expansion input	• Integrated development of Nurseries & plantation on the new wasteland as well as existing wasteland/ degraded forest land. • Maintenance of TBO Plantation	
1.2	Production Input	• Incentives for undertaking intercropping with TBOs with oilseeds, pulses and other crops (@ Rs. 1000/ha)	
1.3	ToT	• Farmers (30 Nos.)-2 days (@24000/training) • Extension Officers/workers (20 Nos.) 6 (@Rs.36000/training)	
1.4	R&D	• 100 % Assistance for need based R&D projects to institute like, ICAR, ICFRE, CSIR & IIT.	
1.5	Flexi Components	(Same as revamped NFSM-guideline) • Such as exposure visit (inter & Intra state), distribution of oil extraction units, organizing seminar/workshop etc., by an independent agency.	

2.2.1 Allocation of funds (%) for different interventions for AAP (2020-21)

S.No.	NFSM- Oilseeds		NFSM-Oilpalm		NFSM-TBOs	
	Intervention	%Fund	Intervention	%Fund	Intervention	%Fund
1	Seed Component	30	Supply of planting material, maintenance /cultivation cost and inter-cropping during gestation period	50-70	Area Expansion Input	87
2	Demonstration & Training	27	Other Component	20-30	Production Input	
3	Distribution of inputs incl. farm machinery and irrigation system/tools	30			Transfer of Technology	
4	Flexi funds	10	Flexi funds	0-10	Flexi funds	10
5	PMT	3	PMT	0-3	PMT	3
	Total	100		100		100

2.3 NFSM-Commercial Crops (Sugarcane/Cotton/Jute & Mesta)

S.No.	Interventions	NFSM- Cotton	NFSM- Jute & Mesta	NFSM- Sugarcane
		15 States MP (10 districts)	09 States MP not included	13 States MP (13 districts)
1	Demonstration Trial	High Density Planting system@ Rs. 10,000/ha	-	• Inter-cropping & Single bud chip tech.- @ Rs. 9000/ha
2	FLDs	<ul style="list-style-type: none"> • Integrated Crop Management/Inter-cropping/Natural Colour Cotton - @ Rs. 8000/ha each • Desi & ELS /ELS Seed Prod.-@ Rs.9000/ha 	<ul style="list-style-type: none"> • Alternate retting technology- @Rs. 20,000/FLD • Prod. Tech./Inter-cropping- @ Rs. 9000/ha 	•
3	Production of Seed B/Foundation/Certified	-	<ul style="list-style-type: none"> • Rs. 12000 for Found. • Rs. 5500 for Certified 	• Rs. 40,000/ha for Breeder Seed production
4	Production & Supply of tissue culture plantlets /seedling	-	-	• Rs. 3.5/seedling
5	Distribution i) Certified seeds ii) Nail weeder iii) Microbial consortium (CRIJAF Sona)	-	Rate of Assistance i) Rs.100/kg ii) Rs.1000/machine iii) Rs.25/kg or 50% of cost for each	-
6	Distribution of PP chemicals and Bio-agents	• @Rs.500/ha or 50% of cost whichever is less	-	• @Rs.500/ha or 50% of cost whichever is less
	Trainings i) National Level ii) State Level	i) Rs. 80,000/Training (25 nos X 3 days) ii) Rs. 40,000/Training (20 nos.X 2 days)	Same as NFSM-Cotton	i) Rs.50,000/ Training (25 nos X 2 days) ii) Rs.40,000 /Training (20 nos.X 2 days)
7	Local Initiatives	As per the State Specific need limited to 25% of total allocation	Same as NFSM-Cotton	

2.4 National Food Security Mission: Assistance Norms (2019-20)

i) NFSM – Pulses (District Covered – 51)

S. No.	Intervention	Approved rates /Unit
1	*Demonstrations on Improved Technologies	
(a)	Cluster Demonstrations (of 100 ha each)	Rs.9000/-ha
(b)	Intercropping Demonstration	Rs.9000/-ha
(c)	Cropping System based Demonstration (30% of total Demonstration)	Rs.15000/-ha
2	Distribution of Certified Seeds	
(a)	HYVs seeds- less than 10 year	Rs.5000/-Qtls or 50 % cost
(b)	HYVs seeds - more than 10 year (Limited to 20 % of total seed distribution)	Rs.2500/-Qtls or 50 % cost
(c)	Production of Seeds: (less than 10 year)	Rs.5000/-Qtls or 50 % cost
3	Integrated Nutrient Management (INM)	
(a)	Micro-nutrients	Rs.500/-ha
(b)	Gypsum/80% WG Sulphur	Rs.750/-ha
(c)	Lime	Rs. 1000 /- ha
(d)	Bio-fertilizers	Rs.300/-ha
4	Integrated Pest Management (IPM)	
(a)	Distribution of PP Chemicals	Rs.500/-ha
(b)	Weedicides	Rs.500/-ha
5	Farm Implements & Equipments (As per SMAM Norms)	
	RCT	Farmers Category
(a)	Manual Sprayer	SC/ST/SMF/Women Other Farmers
		Rs. 750/- or 50% Rs. 600/- or 40%
(b)	Seed drill (Tractor Drawn -35 BHP- 9 tines and above)	SC/ST/SMF/Women Other Farmers
		Rs.20,000 or 50% Rs. 16,000 or 40%
(c)	Zero till seed cum fertilizer drill (11 tines)	SC/ST/SMF/Women Other Farmers
		Rs. 24,100 or 50% Rs. 19,300 or 40%
(d)	Rotavator (6 Feet)	SC/ST/SMF/Women Other Farmers
		Rs. 44,800 or 50% Rs. 35,800 or 40%
(e)	Multi-Crop Thresher (above 35 BHP) upto 4 tonnes per hr capacity	SC/ST/SMF/Women Other Farmers
		Rs. 1.00 Lakh or 50% Rs. 80,000 or 40%
6	Efficient Water Application Tools (As per PMKSY norms)	
(a)	Sprinkler Sets (Depending upon diameter of pipe used)	Rs. 19,542 to Rs 21901 per ha
(b)	Pump Sets	Rs.10000/Unit or 50%
(c)	Pipe for carrying water from source to the field-HDPE (Cost limited to Rs.50/-per meter)	Rs. 15000/ farmer/beneficiary or 50%
(d)	Mobile Rain gun (Depending upon diameter of pipe used)	Rs. 28681/- to Rs 34513/- or 55%
7	Cropping System based trainings	
	Four Sessions (One before Kharif and rabi seasons and one each during Kharif and Rabi Crops)	Rs.14000/ Training (@ Rs. 3500/- per Session)

ii) NFSM – Wheat (District Covered – 16)

S. No.	Intervention	Approved rates /Unit
1	Demonstrations on Improved Technologies	
(a)	Cluster Demonstrations (of 100 ha each)	Rs.9000/-ha
(b)	Cropping System based Demonstration <i>(30% of total Demonstration)</i>	Rs.15000/-ha
i)	Wheat-Moong (Summer)	
ii)	Wheat- Urad (Summer)	
2	Distribution of High Yielding Varieties Seeds (HYVs)	
(a)	HYVs seeds- less than 10 year	Rs.2000/-Qtls or 50 % cost
(b)	HYVs seeds - more than 10 years <i>(Limited to 20 % of total seed distri.)</i>	Rs.1000/-Qtls or 50 % cost
3	Integrated Nutrient Management (INM)	
(a)	Micro-nutrients	Rs.500/-ha
(b)	Gypsum/80% WG Sulphur	Rs.750/-ha
4	Integrated Pest Management (IPM)	
(a)	Distribution of PP Chemicals	Rs.500/-ha
(b)	Weedicides	Rs.500/-ha
5	Farm Implements & Equipments	Farmers Category
(a)	Seed drill <i>(As per SMAM Norms)</i> <i>(Tractor Drawn -35 BHP- 9 tines and above)</i>	SC/ST/SMF/Women
		Other Farmers
		Rs. 20,000 or 50%
		Rs. 16,000 or 40%
6	Efficient Water Application Tools (As per PMKSY norms)	
(a)	Sprinkler Sets	Rs.10000/Unit or 50%
(b)	Pump Sets	Rs.10000/Unit or 50%
(c)	Pipe for carrying water from source to the field-HDPE <i>(Cost limited to Rs.50/-per meter for HDPE & Rs. 35 for PVC pipes)</i>	Rs.15000/ farmerbeneficiary or 50%
(d)	Mobile Rain gun	Rs. 15,000 or 50%
7	Cropping System based trainings	
	Four Sessions (One before Kharif and rabi seasons and one each during Kharif and Rabi Crops)	Rs.14000/ Training (@ Rs. 3500/- per Session)

iii) NFSM – Coarse Cereals (District Covered – 15)

S. No.	Intervention	Approved rates /Unit
1 (a)	Demonstrations on Improved Package	
i	Maize	Rs.6000/-ha
ii	Barley (for covered State)	Rs.6000/-ha
1 (b)	Demonstration on Inter-cropping (specify the intercrop)	
i	Maize- Mung	Rs.6000/-ha
ii	Maize- Urd	Rs.6000/-ha
2	Distribution of Certified Seeds of Maize & Barley -for covered State	
(a)	HYVs seeds- less than 10 year	Rs.3000/-Qtls or 50 % cost
(b)	HYVs seeds - more than 10 year <i>(Limited to 20 % of total seed distribution)</i>	Rs.1500/-Qtls or 50 % cost
(c)	Hybrid seeds of Maize	Rs.10,000/-Qtls or 50 % cost

iv) NFSM –Nutri-Cereals (District Covered – 24)

S. No.	Intervention	Approved rates /Unit
1	Cluster Front line Demonstration	
(a)	Jowar , Bajra, kodo Millet, Little Millet <i>(Assistance rate for each crop)</i>	Rs.6000/-ha for each crop
2	Distribution of Seed	
(a)	Hybrid seed of nutritive variety (25% of total seed allocation) <i>(Assistance rate for each crop)</i>	
i	Jowar & Bajra	Rs.10,000/ha or 50%
(b)	High Yielding Varieties Seeds (HYVs) <i>(Assistance rate for each crop)</i>	
i	Jowar & Bajra (Less than 10 Yrs. var.)	Rs. 3000/ha or 50%
ii	Jowar & Bajra (More than 10 Yrs. var.)	Rs. 1500/ha or 50%
(c)	Small Millets <i>(Assistance rate for each crop)</i>	
i	Kodo Millets & Little Millets (Less than 10 Yrs. var.)	Rs. 3000/ha or 50%
ii	Kodo Millets & Little Millets (More than 10 Yrs. var.)	Rs. 1500/ha or 50%
3	Certified seed production <i>(Assistance rate for each crop)</i>	
i	Jowar & Bajra (Less than 10 Yrs. var.)	Rs. 3000/ha or 50%
ii	Kodo Millets & Little Millets (Less than 10 Yrs. var.)	Rs. 3000/ha or 50%
4	Integrated Nutrient Management (INM)	
i	Micro-Nutrient	Rs. 500/ha or 50%
ii	Bio-Fertilizer	Rs. 300/ha or 50%
5	Integrated Pest Management (IPM)	
i	Weedicides	Rs. 500/ha or 50%
ii	Plant Protection & Bio-agent	Rs. 500/ha or 50%
6	Farm Implements & Equipment	
i	Manual Sprayer (SC/ST/SMF/Women Farmers)	Rs. 750/ha or 50%
ii	Manual Sprayer (Other Farmers)	Rs. 600/ha or 50%
7	Cropping System based trainings	
i	Four Sessions (One before Kharif and rabi seasons and one each during Kharif and Rabi Crops)	Rs.14000/ Training (@ Rs. 3500/- per Session)

v) NFSM – Sugarcane (District Covered – 13)

S. No.	Intervention	Approved rates /Unit
i	Demonstration on Intercropping and single bud chip technology with sugarcane	Rs. 9000 per ha.(Rs.8000 for inputs & Rs. 1000 for contingency)
ii	Distribution of plant protection chemicals and Bioagents	Rs.500/-ha or 50%
iii	State Level Training (20 Participant*2 day) for 2 Trainings	Rs. 40,000/Training

2.5 CSS & SS Schemes Financial Assistance for Irrigation Implements

S. No.	Schemes	Components	Categories of farmers	Subsidy amount	Top up Subsidy	Total Amount (Rs.)		
1	NFSM	Pump set	All categories	Max. Rs. 10000 or 50 % of total cost	Nil	10000		
		Pipeline set		Max. Rs. 15000 or 50% of total cost		15000		
		Sprinkler set		Max. Rs. 10000 or 50 % of total cost		10000		
		Mobile Rain gun		Max. Rs. 15000 or 50% of total cost		15000		
2.	PMKSY Per Drop More Crop (Micro-irrigation)	Sprinkler set	Small & Marginal farmers of all categories	55 % of total cost	Nil	55 % of total cost		
			Other farmers of all categories	45 % of total cost		45 % of total cost		
		Drip Irrigation	Small & Marginal farmers of all categories	55 % of total cost		55 % of total cost		
			Other farmers of all categories	45 % of total cost		45 % of total cost		
		Mobile Rain gun	Small & Marginal farmers of all categories	55 % of total cost		55 % of total cost		
			Other farmers of all categories	45 % of total cost		45 % of total cost		
		3.	PMKSY Per Drop More Crop (Other Intervention)	Diesel/Electric Pump			Max. Rs. 10000 or 50 % of total cost	10000
4.	State Micro-Irrigation Scheme	Sprinkler set	All categories small, marginal and other farmer	Max. Rs. 12000 or 80 % of total cost	Nil	12000		
		Drip Irrigation		Max. Rs. 40000 or 80 % of total cost		40000		
		Mobile Rain gun		Max. Rs. 15000 or 50 % of total cost		15000		

2.6 Approved Cost Norms & Input Cafeteria

2.6.1 Cluster Demonstration: Sole Crops

i) Pulses

(Amount in Rs.)

S. No.	Interventions/Input		Recommendation	Total Cost /ha
1	Popularization of improved varieties			
1.1	Urd Moong and Pigeon pea		20 kg/ha	3000/-
1.2	Chick Pea/field pea		75 kg/ha	
1.3	Lentil/Horse gram		40 kg/ha	
2	Seed treatment fungicides/Molybdenum		100 gm/ha	100/-
3	Promotion of use of Micro Nutrients and bio-fertilizers			
3.1	Zinc sulphate (Based on soil testing value) Zinc Sulphate 21%		25 kg/ha	800/-
3.2	Sulphur	Sulphur 80% WG	20 kg/ha	
		Gypsum	250 kg/ha	
3.3		Rhizobium (liquid culture)	2l ts/ha	500/-
		PSB (liquid culture)	2l ts/ha	
		Trichoderma viride	2 kg/ha	
4	Plant Protection	For Diseases	2lts/ha	1000/-
		For insect and pesticide		1000/-
		Weedicide		1000/-
5	IPM	Neem oil (3000 ppm)	2lts/ha	800/-
		NPV virus	250 Li	
6	Publicity material /Visit of Scientists/Field Day		-	800/-
	Total			9000/-

ii) Coarse Cereals: (Maize)

(Amount in Rs.)

S. No.	Interventions/Input		Recommendation	Total Cost /ha
1.	Hybrid Maize Seed		20 kg/ha	3000/-
2.	Seed treatment Trichoderma/Carbendazim		100gm	100/-
3.	Zinc sulphate (Based on soil testing value)		25 kg/ha	500/-
4.	Weedicides		500gm	300/-
5.	Bio-fertilizers (Azotobacter and PSB liquid)		1lt each/ha	300/-
6	IPM	Trichoderma	1kg/ha	1000/-
		Neem oil	1lt/ha	
7.	Publicity material /Visit of Scientists/Field Day		-	800/-
	Total			6000/-

iii) Nutri- Cereals (Jowar)

(Amount in Rs.)

S. No.	Interventions/Input	Recommendation	Total Cost /ha
1.	Hybrid Jowar Seed	10 kg/ha	2000/-
2.	Seed treatment Trichoderma/Carbendazim	100gm	100/-
3.	Zinc sulphate (Based on soil testing value) + Borax	25 kg/ha + 10 kg/ha	700/-
4.	Weedicides	500gm	1000/-
5.	Bio-fertilizers (Azotobacter and PSB liquid)	1 lit each/ha	400/-
6.	Plant protection		1000/-
7.	Publicity material /Visit of Scientists/Field Day	-	800/-
	Total		6000/-

2.6.2 Intercropping Demonstration

i) Moong + Maize and Urd+Maize

(Amount in Rs.)

S. No.	Interventions/Input	Recommendation	Total Cost /ha
1	Soybean (Main Crop)+ Maize/Jowar/Bajra/ Kodokutki		2500/-
2	Seed treatment fungicides		200/-
3.	Zinc Sulphate	25 kg/ha	500/-
4.	Weedicides		900/-
5	Azotobacter, PSB and PMB	5 g each ino./kg seed	100/-
6.	Publicitymaterial/Visit of Scientists/Field Day		800. /-
	Total		5000/-

ii) Urd+Bajra

(Amount in Rs.)

S. No.	Interventions/Input	Recommendation	Total Cost /ha
1	Soybean (Main Crop)+ Maize/Jowar/Bajra/ Kodo-kutki		2500/-
2	Seed treatment fungicides		200/-
3.	Zinc Sulphate	25 kg/ha	500/-
4.	Weedicides		900/-
5	Azotobacter, PSB and PMB	5 g each ino /kg seed	100/-
6.	Publicitymaterial/Visit of Scientists/Field Day		800/-
	Total		5000/-

iii) Cereals/Oilseeds with Pulses

(Amount in Rs.)

S. No.	Interventions/Input	Recommendation	Total Cost /ha
1	Wheat. Jowar, Soybean, Mustard (Main Crop) +Urd/ Mung/Moth/Cowpea/Tur/ Gram/ Pea/Lentil/Gram (Intercrop)		3400/-
2.	Seed treatment fungicides		300/-
3.	Promotion of use of micro-nutrient and bio-fertilizer		
3.1	Zinc/Boron/Molybdenum	25 kg/ha	300/-
3.2	Rhizobium & PSB		200/-
4.	Plant Protection		2000/-
5	Weed management		2000/-
6.	Publicity material /Visit of Scientists/Field Day		800/-
	Total		9000/-

iv) Cereals/Pulses with Sugarcane (Commercial Crops)

(Amount in Rs.)

S. No.	Interventions/Input	Recommendation	Total Cost /ha
1	Seed	Wheat- 40 kg/ha & Gram-35 kg/ha	3600/-
2.	Seed treatment fungicides		200/-
3.	Promotion of use of micro-nutrient and bio-fertilizer		
3.1	Zinc/Boron/Molybdenum	25 kg/ha	300/-
3.2	Rhizobium and PSB		100/-
4.	Plant Protection		2000/-
5	Weed management		2000/-
6.	Publicity material /Visit of Scientists/Field Day		800/-
	Total		9000/-

2.6.3 Cropping System Based Demonstration (CSBD)

i) PULSE-WHEAT

A. CSBD: PULSE

(Amount in Rs.)

S. No.	Interventions/Input	Recommendation	Total Cost /ha
1.	Urd, Moong and Pigeon pea (less than 10 years)	20 kg/ha	3500/-
2.	Soil treatment (<i>Trichoderma viride</i>)	5 kg/ha	500/-
3.	Zinc Sulphate	25 kg/ha	1000/-
3.	Seed treatment fungicides	250 gm	100/-
4.	Liquid bio-fertilizer (Rhizobium, PSB and other cultures etc.)	2 lts	500/-
5.	Vermi-compost	300 kg/ha	1600/-
6.	Biopesticide (Mycorrhiza, Azadirachtin 3000ppm, IPM etc.)	2 lt/ha	1000/-
7.	Publicity material /Visit of Scientists/Field Day		800/-
	Total		9000/-

B. CSBD: WHEAT

(Amount in Rs.)

S. No.	Interventions/Input	Recommendation	Total Cost /ha
1.	Wheat seed (less than 10 years)	60 kg/ha	2500/-
2.	Soil treatment (<i>Trichoderma viride</i>)	5 kg/ha	200/-
3.	Zinc Sulphate	25 kg/ha	900/-
3.	Seed treatment fungicides	250 gm	100/-
4.	Liquid biofertilizer (Rhizobium, PSB and other cultures etc.)	2 lts	300/-
5.	Vermicompost	300 kg/ha	600/-
6.	Biopesticide (Mycorrhiza, Azadirachtin 3000ppm, IPM etc.)	2 lt/ha	600/-
7.	Publicity material /Visit of Scientists/Field Day		800/-
	Total		6000/-

ii) RICE-WHEAT

A. CSBD: RICE

(Amount in Rs.)

S. No.	Interventions/Input	Recommendation	Total Cost /ha
1.	Rice seed (less than 10 years variety)	60 kg/ha	2900/-
2.	Soil treatment (<i>Trichoderma viride</i>)	5 kg/ha	500/-
3.	Zinc Sulphate	25 kg/ha	1100/-
3.	Seed treatment fungicides (Carbendazim+ Mancozeb)	1.5g +2.5g/kg	100/-
4.	Biofertilizer (BGA, Vermicompost and PROM etc.)	5kg BGA+ 300 kg/ha	1600/-
6.	Biopesticide (Mycorrhiza, Azadirachtin 3000ppm, IPM etc.)	2 lt/ha	1800/-
7.	Publicity material /Visit of Scientists/Field Day		800/-
	Total		9000/-

B. CSBD: WHEAT

(Amount in Rs.)

S. No.	Interventions/Input	Recommendation	Total Cost /ha
1.	Wheat seed (less than 10 years)	60 kg/ha	2800/-
2.	Soil treatment (<i>Trichoderma viride</i>)	5 kg/ha	300/-
3.	Zinc Sulphate	25 kg/ha	1100/-
4.	Seed treatment fungicides	1.5g/kg seed	200/-
5.	Use of Biofertilizer (Vermicompost, PROM etc.)	5kg+300kg/ha	800/-
6.	Publicity material /Visit of Scientists/Field Day		800/-
	Total		6000/-

iii) RICE-PULSES

A. CSBD: RICE

(Amount in Rs.)

S. No.	Interventions/Input	Recommendation	Total Cost /ha
1.	Rice seed (less than 10 years variety)	60 kg/ha	2900/-
2.	Soil treatment (<i>Trichoderma viride</i>)	5 kg/ha	500/-
3.	Zinc Sulphate	25 kg/ha	1100/-
4.	Seed treatment fungicides (Carbendazim+ Mancozeb)	1.5g+2.5g/kg	100/-
5.	Biofertilizer (BGA, Vermicompost and PROM etc.)	5kg BGA+300kg/ha	1600/-
6.	Biopesticide (Mycorrhiza, Azadirachtin 3000ppm, IPM etc)	2 lt/ha	1800/-
7.	Publicity material /Visit of Scientists/Field Day		800/-
	Total		9000/-

B. CSBD: PULSES

(Amount in Rs.)

S. No.	Interventions/Input	Recommendation	Total Cost /ha
1.	Chickpea/Lentil (less than 10 years)	60 kg/ha/40kg/ha	2800/-
2.	Soil treatment (<i>Trichoderma viride</i> and PSB)	5 kg/ha	200/-
3.	Zinc Sulphate	25 kg/ha	1000/-
3.	Seed treatment fungicides (Bavistin+Thirum)	1g+2g/kg seed	100/-
4.	Use of Biofertilizer (Vermicompost, PROM etc.)	5kg+300kg/ha	600/-
6.	Biopesticide (Mycorrhiza, Azadirachtin 3000ppm, IPM etc.)	2 lt/ha	500/-
7.	Publicity material /Visit of Scientists/Field Day		800/-
	Total		6000/-

Chapter – 3

State's Crop Production Scenario

3.1 Kharif : 2019

(Area-Lakh ha; Production- Lakh tonnes; Yield- kg/ha)

Crop	Kharif -2019				% production achiev against target	Kharif-2018			% change over 2018-19		
	Production Target	Achievement				Achievement			A	P	Y
		A	P	Y		A	P	Y			
Paddy	43.00	19.82	48.06	2425	112	23.91	44.95	1880	-17	7	29
Jowar	5.00	0.75	1.64	2189	33	0.75	1.64	2189			
Bajra	4.50	2.99	5.74	1921	128	3.27	6.28	1921	-9	-9	
Maize	35.20	12.56	40.90	3256	116	12.56	40.90	3256			
Other Cereal	1.55	0.89	0.59	663	38	0.89	0.59	663			
Total Cereal	89.25	37.01	96.93	2619	109	41.38	94.36	2280	-11	3	15
Tur	9.27	2.52	3.10	1230	33	2.13	1.80	846	18	72	45
Urd	13.00	17.52	8.85	505	68	24.37	11.33	465	-28	-22	9
Mung	1.50	0.90	0.43	476	28	0.95	0.38	402	-6	12	18
Total Pulses	23.78	21.14	12.49	591	53	27.47	13.53	492	-23	-8	20
Total foodgrain	113.03	58.15	109.42	1882	97	68.67	107.43	1564	-15	2	20
Groundnut	4.00	2.18	2.63	1205	66	2.23	4.12	1848	-2	-36	-35
Soybean	73.00	61.94	62.56	1010	86	54.19	66.71	1231	14	-6	-18
Sesamum	2.48	3.14	1.50	478	61	2.48	1.39	559	27	8	-14
Total Oilseed	80.56	68.23	67.03	982	83	59.02	72.15	1222	16	-7	-20
Jute & Mesta*	0.11	0.01									
Cotton**	20.50	6.10	19.30	538	94	6.14	23.29	645	-1	-17	-17
Total Kharif	214.20	132.49	195.75	1477	91	133.83	202.87	1516	-1	-4	-3

Source: DES, Govt. of India, 3rd Advance estimate, 2019-20 * 000 'Bales of 180 kgs each. ** 000 ' bales of 170 kgs each.

3.2 Rabi : 2019-20

(Area-Lakh ha; Production- Lakh tonnes; Yield- kg/ha)

Crop	Rabi: 2019-20				% production achiev. against target	Rabi : 2018-19			% change over 2018-19		
	Production Target	Achievement				Achievement					
		A	P	Y		A	P	Y	A	P	Y
Wheat	160.00	60.28	185.83	3083	116	55.20	165.21	2993	9	12	3
Barley	3.00	0.30	0.52	1735	17	0.83	1.64	1981	-64	-68	-12
Maize	2.00	0.11	0.42	3809	21	0.11	0.42	3809			
Total cereal	165.00	60.69	186.77	3077	113	56.14	167.28	2980	8	12	3
Gram	47.00	19.27	26.06	1352	55	31.03	39.97	1288	-38	-35	5
Urd	0.38					0.43	0.57	1336			
Mung	0.85	1.81	1.01	560	119	1.96	2.42	1235	-8	-58	-55
Total Pulses	56.63	26.65	33.19	1246	59	38.53	46.93	1218	-31	-29	2
Total foodgrain	221.63	87.34	219.96	2519	99	94.85	214.65	2263	-8	2	11
R & M	9.42	6.70	7.42	1108	79	7.07	10.40	1471	-5	-29	-25
Total Oilseed	10.25	7.22	7.72	1069	75	7.52	10.80	1436	-4	-29	-26
Sugarcane	48.00	1.25	31.66	25330	66	1.08	52.82	48905	16	-40	-48
Total Rabi	279.88	95.81	259.34	2707	93	103.27	277.82	2690	-7	-7	1

Source: DES, Govt. of India, 3rd Advance estimate, 2019-20; Note: Paddy and groundnut include total paddy and groundnut area, production, yield respectively, Total Oilseed includes other oilseeds; Total foodgrains is sum of total cereal and pulses.

3.3 Impact of NFSM in Crop Sector in MP

MP is one of the major top ranking states in agriculture in India. It contributes to about 10% of total area and production in Cereals, 23%-A, 27% in total pulses; 27%-A, 26%-P in total oilseed; 5% -A, 8%-P in Cotton and 2%-A, 1%-P in sugarcane. *The sustained increasing trend in area, production and yield of cereal and pulses has been recorded over the period between the base year 2006-07 to 2018-19 as depicted under Table-3.4.*

3.4 NFSM Impact : Cereals and Pulses (Pre NFSM to 2018-19)

(Area in Lakh ha; Production in Lakh tonnes; Yield in kg/ha)

S. No.	Crops	States	2006-07 (Pre-NFSM/Base year)			2018-19			% Share in 2018-19			% change over to pre-NFSM		
			A	P	Y	A	P	Y	A	P	Y	A	P	Y
A	Cereal													
1	Paddy	MP	16.61	13.68	824	23.91	44.95	1880	5	4	71	44	229	128
		All India	438.14	933.45	2131	441.56	1164.78	2638				1	25	24
2	Wheat	MP	39.93	73.26	1835	55.20	165.21	2993	19	16	85	38	126	63
		All India	279.95	758.07	2708	293.19	1035.96	3533				5	37	30
B	Pulses													
1	Arhar	MP	3.23	2.20	683	2.13	1.80	846	5	5	116	-34	-18	24
		All India	35.62	23.14	650	45.50	33.15	729				28	43	12
2	Urd	MP	4.42	1.54	347	24.80	11.91	480	44	39	88	461	673	38
		All India	30.67	14.43	470	56.02	30.60	546				83	112	16
3	Mung	MP	0.80	0.26	328	2.91	2.80	963	6	11	187	264	978	194
		All India	31.94	11.15	349	47.55	24.55	516				49	120	48
4	Gram	MP	24.63	24.13	980	31.03	39.97	1288	33	40	124	26	66	31
		All India	74.94	63.34	845	95.47	99.38	1041				27	57	23
5	Lentil	MP	5.22	2.59	497	4.21	3.30	783	31	27	87	-19	27	58
		All India	14.70	9.13	621	13.63	12.28	901				-7	34	45
6	Other pulses	MP	2.79	1.31	469	0.92	0.68	739	3	3	119	-67	-48	58
		All India	43.84	20.53	468	33.39	20.79	623				-24	1	33
Total Pulses		MP	41.08	32.03	780	66.00	60.45	916	23	27	121	61	89	17
		All India	231.70	141.72	612	291.56	220.76	757				26	56	24

Source: DES, GoI, N.Delhi; Note- NFSM Inception year 2007-08

Area of total pulses increased by 61 percent with highest area coverage in Urd (461%) followed by mung (264%) and gram (26%). Similar phenomenal increase in the area of paddy and wheat at 44% and 38% during 2018-19 over to NFSM base year 2006-07, has been a major achievement of NFSM.

Major increment in production was recorded in cereals like paddy (229%), wheat (126%), total pulses (89%) including Mung (978%) followed by urd (673%), gram (66%) and lentil (27%) and total coarse cereal (102%).

As regards the individual crop yield performance during 2018-19, all crops covered under NFSM development interventions have the highest yield increments have been recorded in mung (194 %) followed by paddy (128%), wheat (63%), lentil (58%), urd (38%), gram (31%) and tur (24%), over the base year (2006-07) in MP.

- During 2006-07, the crop coverage of paddy was in about >16 Lha with production >13 Lt. at productivity of 824 kg/ha which significantly increased to approx. 24 Lha (44%), 45 Lt. (229%) at yield level of 1880 kg/ha (128%).

- In wheat, the area, production and yield of wheat was 40 Lha, >73 Lt. and 1835 kg/ha which increased to >55 Lha (38%), >165 Lt. (126%) and 2993 kg/ha (63%) during 2018-19.
- During 2006-07 the total pulses >41 Lha with production of >32 Lt. at productivity of 780 kg/ha which significantly increased to 66 Lha (61%), >60 Lt. (89%) at 916 kg/ha (17%) in area, production and productivity respectively during 2018-19. This shows that the increasing production by 89% from the base year is contributory of the increase in area by 61% as well as in productivity by 17%. The increasing trends shown almost in major pulses like Mung, Urd, Gram & Lentil.

3.5 NFSM Impact: Coarse Cereals/Nutri Cereals and Commercial crops (Pre -NFSM to 2018-19)

(Area in Lakh ha; Production in Lakh tonnes; Yield in kg/ha)

S. No.	Crops	States	2013-14 (Pre- NFSM)			2018-19			% Share in 2018-19			% change		
			A	P	Y	A	P	Y	A	P	Y	A	P	Y
A	Coarse Cereal													
1.	Barley	MP	0.87	1.50	1730	0.83	1.64	1981	14	10	70	-5	10	15
		All India	6.74	18.31	2718	5.76	16.33	2837				-15	-11	4
2.	Jowar (Kha. +R)	MP	2.55	3.73	1466	0.75	1.64	2189	2	5	258	-71	-56	49
		All India	57.93	55.42	957	40.93	34.75	849				-29	-37	-11
3.	Bajra	MP	1.90	3.80	2003	3.27	6.28	1921	5	7	158	72	65	-4
		All India	78.11	92.50	1184	71.05	86.64	1219				-9	-6	3
4	Maize	MP	8.68	15.34	1767	12.67	41.31	3261	14	15	106	46	169	85
		All India	90.66	242.60	2676	90.27	277.15	3070					14	15
5.	Ragi	MP	0.001	0.001	500									
		All India	11.94	19.83	1661	8.91	12.39	1390				-25	-38	-16
6.	Small Millet	MP	2.28	1.15	503	0.89	0.59	663	20	18	90	-61	-49	32
		All India	6.82	4.30	630	4.54	3.33	734				-33	-23	16
Total Coarse Cereals		MP	16.27	25.52	1568	18.41	51.47	2796	8	12	144	13	102	78
		All India	252.20	432.95	1717	221.46	430.59	1944				-12	-1	13
B	Commercial Crops													
1	Cotton#	MP	5.14	17.30	572	6.14	23.29	645	5	8	171	19	35	13
		All India	119.60	359.02	510	126.14	280.42	378				5	-22	-26
2	Sugarcane	MP	0.73	31.74	43415	1.08	52.82	48905	2	1	61	48	66	13
		All India	49.93	3521.42	70522	50.61	4054.16	80105				1	15	14

Source: DES, GOI, # thousand bales of 170 kg each.

- Coarse cereals became part of NFSM during XIIth plan (2012-13 to 2016-17) and it is implemented from 2014-15. Area, production and yield of coarse cereal during 2013-14 was >16 Lha, >25 Lt., 1568 kg/ha which increased to >18 Lha (13%), >51 Lt. (102%), 2796 kg/ha (78%) during 2018-19.
- The area, production and yield under cotton increased during the period from >5 Lha, >17 Lt and 572 kg/ha to >6 Lha (19%), >23 Lt (35%) and 645 kg/ha (13%) over the period.
- There is an increasing trend in the sugarcane area, production and yield over the period (2013-14 to 2018-19). The area, production and yield increased from 0.73 Lha, >31.74 Lt., 43415 kg/ha during 2013-14 to >1 Lha (48%), 52.82 Lt. (66%), 48905 kg/ha (13%) during 2018-19.

3.6 Impact Analysis : Oilseeds (2014-15* to 2018-19)

(Area in Lakh ha; Production in Lakh tonnes; Yield in kg/ha)

S. No	Crops	States	2014-15			2018-19			% Share in 2018-19			% change		
			A	P	Y	A	P	Y	A	P	Y	A	P	Y
1	Soybean	MP	55.78	63.53	1139	54.19	66.71	1231	49	50	103	-3	5	8
		All India	109.11	103.74	951	111.31	132.68	1192				2	28	25
2	R & M	MP	7.13	7.17	1006	7.07	10.40	1471	12	11	97	-1	45	46
		All India	57.99	62.82	1083	61.24	92.56	1511				6	47	40
3	Groundnut	MP	2.31	3.70	1602	2.23	4.12	1848	5	6	130	-3	11	15
		All India	47.69	74.02	1552	47.31	67.27	1422				-1	-9	-8
4	Sesamum	MP	3.59	1.86	518	2.48	1.39	559	17	20	115	-31	-25	8
		All India	17.46	8.28	474	14.20	6.89	485				-19	-17	2
5	Linseed	MP	1.11	0.60	541	0.38	0.27	712	22	27	124	-66	-55	32
		All India	2.85	1.55	541	1.73	0.99	574				-40	-36	6
6	Other Oilseeds	MP	0.74	0.38	513	0.01	0.00	373	0.1	.03	27	-99	-99	-27
		All India	20.86	24.70	1184	10.59	14.38	1357				-49	-42	15
Total Oilseeds		MP	70.66	77.24	1093	66.54	82.94	1247	27	26	98	-6	7	14
		All India	255.96	275.11	1075	247.94	315.22	1271				-3	15	18

Source: DES, GOI ; * Inception year of NMOOP 2014-15 & from 2018-19 NMOOP is became a part of NFSM.

- The state oilseed contributed to 27 % and 26% of total area and production in country during 2018-19. Major contribution is from soybean (49%-A, 50%-P) followed by Linseed (22%- A, 27%-P), Sesame (17%-A, 20%-P) and Rapeseed & Mustard (12%-A, 11%-P).
- There is an increment of 7% production from base year contributory of increased productivity by 14%, however, area under total oilseed decrease by 6% from base year 2014-15. The highest increment in production and productivity shown in Rapeseed & Mustard 45% and 46% followed by groundnut 11% and 15 % and soybean 5% and 8% respectively.

3.7 Change Over in APY : MP Vs All India (2018-19 to 2019-20)

(Area in Lakh ha; Production in Lakh tonnes; Yield in kg/ha)

S. No.	Crops	States	2018-19			2019-20*			% change over to 2018-19		
			A	P	Y	A	P	Y	A	P	Y
A.	Cereal										
1	Paddy	MP	23.91	44.95	1880	19.82	48.06	2425	-17	7	29
		All India	441.80	1165.23	2637	436.21	1179.87	2705	-1	1	3
2	Wheat	MP	55.20	165.21	2993	60.28	185.83	3083	9	12	3
		All India	293.74	1037.61	3532	306.14	1073.65	3507	4	3	-1
B.	Pulses										
1	Arhar	MP	2.13	1.80	846	2.52	3.10	1230	18	72	45
		All India	45.52	33.17	729	42.31	37.57	888	-7	13	22
2	Urd	MP	24.80	11.91	480	17.52	8.85	505	-29	-26	5
		All India	56.27	30.72	546	44.61	23.41	525	-21	-24	-4
3	Mung	MP	2.91	2.80	963	2.91	1.44	494		-49	-49
		All India	47.58	24.58	517	43.44	23.45	540	-9	-5	4
4	Gram	MP	31.03	39.97	1288	19.27	26.06	1352	-38	-35	5
		All India	95.78	99.78	1042	96.96	109.31	1127	1	10	8
5	Lentil	MP	4.21	3.30	783	4.82	5.52	1145	14	67	46
		All India	13.67	12.31	901	14.36	14.50	1010	5	18	12

S. No.	Crops	States	2018-19			2019-20*			% change over to 2018-19		
			A	P	Y	A	P	Y	A	P	Y
6	Other pulses	MP	0.92	0.68	739	0.75	0.71	951	-18	5	29
		All India	33.40	20.80	623	33.18	22.34	673	-1	7	8
Total Pulses		MP	66.00	60.45	916	47.79	45.68	956	-28	-24	4
		All India	292.22	221.36	758	274.86	230.58	839	-6	4	11
C.	Coarse Cereals										
1.	Barley	MP	0.83	1.64	1981	0.30	0.52	1735	-64	-68	-12
		All India	5.76	16.35	2836	6.19	15.91	2572	7	-3	-9
2.	Jowar (K+R)	MP	0.75	1.64	2189	0.75	1.64	2189			
		All India	40.94	34.77	849	46.56	46.35	995	14	33	17
3.	Bajra	MP	3.27	6.28	1921	2.99	5.74	1921	-9	-9	
		All India	71.08	86.70	1220	74.17	103.17	1391	4	19	14
4	Maize	MP	12.67	41.31	3261	12.67	41.31	3261			
		All India	90.40	277.56	3070	92.84	290.20	3126	3	5	2
5.	Small Millet	MP	0.89	0.59	663	0.89	0.59	663			
		All India	4.55	3.34	734	4.65	3.43	737	2	3	0.4
Total Coarse cereals		MP	18.41	51.47	2796	17.60	49.81	2830	-4	-3	1
		All India	221.64	431.11	1945	234.23	475.94	2032	6	10	4
Total cereal		MP	97.52	261.63	2683	97.70	283.70	2904	0.2	8	8
		All India	957.18	2633.95	2752	976.59	2729.46	2795	2	4	2
D.	Commercial Crops										
1	Cotton#	MP	6.14	23.29	645	6.10	19.30	538	-1	-17	-17
		All India	126.20	280.65	378	133.38	360.67	460	6	29	22
2	Sugarcane	MP	1.08	52.82	48905	1.25	31.66	25330	16	-40	-48
		All India	50.62	4054.69	80098	45.44	3581.70	78829	-10	-12	-2
E.	Oilseeds										
1.	Soybean	MP	54.19	66.71	1231	61.94	62.56	1010	14	-6	-18
		All India	111.85	133.34	1192	121.37	123.04	1014	9	-8	-15
2.	R & M	MP	7.07	10.40	1471	6.70	7.42	1108	-5	-29	-25
		All India	61.31	92.66	1511	61.49	87.10	1417	0.3	-6	-6
3.	Groundnut	MP	2.23	4.12	1848	2.18	2.63	1205	-2	-36	-35
		All India	47.33	67.31	1422	47.98	93.50	1949	1	39	37
4	Sesamum	MP	2.48	1.39	559	3.14	1.50	478	27	8	-14
		All India	14.22	6.91	486	15.67	7.47	477	10	8	-2
5.	Linseed	MP	0.38	0.27	712	0.52	0.29	563	37	8	-21
		All India	1.73	0.99	574	1.85	1.03	556	7	3	-3
6.	Other Oilseeds	MP	0.19	0.06	304	0.96	0.34	352	408	489	16
		All India	12.16	14.83	1220	15.52	23.62	1522	28	59	25
Total Oilseeds		MP	66.54	82.94	1247	75.45	74.74	991	13	-10	-21
		All India	248.61	316.05	1271	263.88	335.76	1272	6	6	0.1

Source: DES, GOI; *- As per 3rd Adv. Estimate -2019-20 ; # A bale equal to 170 kg of cotton.

- During 2019-20, the all India production of cereals, pulses, oilseeds and cotton has been increased by 4%, 4%, 6%, 29% respectively, whereas production of sugarcane decreases by (-) 12% as compared to last year (2018-19). There has been a setback during kharif 2019 owing to incessant rains/floods during reproductive to maturity stage especially pulses (Urd/Tur).
- In Madhya Pradesh, During 2019-20, the production of Cereal has been increased by 8%, whereas production has been decreased by (-10%), (-24%), (-40%) and (-17%) in Oilseeds, Pulses, Sugarcane, and Cotton respectively as compared to last year (2018-19).

Chapter – 4

Budgetary Allocation & Expenditure : 2019-20

4.1 NFSM - Financial Progress: 2018-19

Upto- 31st March, 2019

(Rs. in Lakhs)

S. No	Crops	Allocation	Revalid.	Release		Total available fund	Expend.	% Uti.	Unspent Balance	
				GoI	State				Total	CS
1	Pulses	27862.34	16717.40	-	11144.93	27862.33	15328.38	55	12533.95	7520.37
2	Additional Pulses	16500.00	-	9900.00	6600.00	16500.00	9225.95	56	7274.05	4364.43
3	Paddy	1520.06	541.27	-	360.85	902.12	504.42	56	397.70	238.62
4	Wheat	3282.93	1385.41	-	923.61	2309.02	1593.68	69	715.34	429.20
5	Coarse Cereals	1019.16	381.51	-	254.34	635.85	542.42	85	93.43	56.06
6	Nutri-Cereals	1125.30	-	506.38	337.59	843.97	425.02	50	418.95	251.37
7	Sugarcane	51.25	1.04	19.59	13.75	34.38	19.74	57	14.64	8.78
8	Cotton	122.50	73.50	0.00	49.00	122.50	0.55		121.95	73.17
9	Intercropping of Pulses with Sugarcane	22.95	-	13.77	-	13.77	-		13.77	13.77
10	Oilseeds	5083.35	1426.54	500.00	1284.36	3210.90	1337.67	42	1873.23	1123.93
	NFSM Total	56589.84	20526.67	10939.74	20968.43	52434.84	28977.83	55	23457.01	14074.21

4.2 NFSM- Financial Progress: 2019-20

Upto –31st March, 2020

(Rs. in Lakhs)

S. No	Crops	Allocation	Revalid.	Release		Total available fund	Expend.	% Uti.	Unspent Balance	
				GoI	State				Total	CS
1	Pulses	48516.58	11898.57	9933.89	14554.97	36387.43	18594.91	51	17792.52	10675.51
2	Rice	2039.74	238.62	679.26	611.92	1529.80	472.43	31	1057.37	634.42
3	Wheat	4007.98	429.20	1374.39	1202.39	3005.98	1190.00	40	1815.98	1089.59
4	Coarse Cereals	1078.25	56.06	429.15	323.47	808.68	665.83	82	142.85	85.71
5	Nutri-Cereals	2085.60	251.37	687.15	625.68	1564.20	338.34	22	1225.86	735.52
6	Sugarcane	59.44	-	17.96	11.97	29.93	8.01	27	21.92	13.15
7	Intercropping of Pulses with Sugarcane	8.78	-	5.26	3.51	8.77	2.03	23	6.74	4.05
8	Oilseeds	5208.33	1123.93	1219.83	1562.51	3906.27	2002.64	51	1903.63	1142.18
	NFSM Total	63004.7	13997.75	14346.89	18896.42	47241.06	23274.19	49	23966.87	14380.13

Pulses*- Unspent Balance of Total Pulses – Rs. 4364.43 lakhs (Addl. Pulses) + Rs. 13.77 lakhs (Intercropping of Pulses with sugarcane) + Rs. 7520.37 lakhs (Pulses itself) is adjusted/revalidated under NFSM-Pulses for the year 2019-20.

4.3 Flagship Programmes: 2018-19

Upto –31st March, 2019

(Rs. in Lakhs)

Schemes	Allocation			Available Fund (CS+SS)			Expenditure *			% Util.	Unspent Balance
	Central	State	Total	Revali.	Release	Total	Central	State	Total		
RKVY	17089.00	11392.67	28481.67	8256.70	18783.56	27040.26	12762.11	8508.08	21270.19	79	5770.07
PKVY	6334.39	4222.93	10557.32	3023.23	4119.95	7143.18	1835.78	1223.86	3059.64	43	4083.54
NMSA-SMAF	0.00	0.00		700.00		700.00	38.52	25.68	64.20	9	635.80
NMAET-SMSP	2733.72	1822.48	4556.20	2056.40	8259.80	10316.20	1900.62	1267.08	3167.70	31	7148.50
NMSA-RAD	0.00	0.00		235.72		235.72	74.41	49.60	124.01	53	111.71
SMFWM	6875.00	4583.33	11458.33	4808.07	3791.67	8599.74	1550.90	1033.94	2584.84	30	6014.90
SHM	1368.20	912.13	2280.33	6031.67	112.15	6143.82	840.55	560.37	1400.92	23	4742.90
SHC	2310.71	1540.47	3851.18	934.07	3495.93	4430.00	1856.92	1237.94	3094.86	70	1335.14
SMAE-ATMA	3969.86	2646.57	6616.43		4924.89	4924.89	2660.38	2050.02	4710.40	96	214.49
PMKSY	2500.00	1666.67	4166.67	2186.43	1500.00	3686.43	230.21	153.48	383.69	10	3302.74
SASA 100% of GoI(Agriculture & Irrigation)				554.57	225.00	779.57	232.54	0.00	232.54	30	547.03
Total CS/CSS	43180.88	28787.25	71968.13	28786.86	45212.95	73999.81	23982.95	16110.04	40092.99	54	33906.82

4.4 Flagship Programmes: 2019-20

Upto –31st March, 2020

(Rs. in Lakhs)

Schemes	Allocation			Available Fund (CS+SS)			Expenditure *			% Util.	Unspent Balance
	Central	State	Total	Revali.	Release	Total	Central	State	Total		
RKVY	17870.00	11913.33	29783.33	5770.07	14309.25	20079.32	6065.08	4043.38	10108.46	50	9970.86
PKVY	6091.28	4060.85	10152.13	4083.53	4302.80	8386.33	2088.94	1392.62	3481.56	42	4904.77
NMSA-SMAF	0.00	0.00		635.80		635.80	0.00	0.00		0	635.80
NMAET-SMSP	1713.58	1142.39	2855.97	7148.50	2606.67	9755.17	1345.79	897.19	2242.98	23	7512.19
NMSA-RAD	450.00	300.00	750.00	111.70	450.00	561.70	33.27	22.18	55.45	10	506.25
SMFWM	4249.80	2833.20	7083.00	3791.67	3400.00	7191.67	1861.09	1240.72	3101.81	43	4089.86
SHM	0.00	0.00		4742.90		4742.90	420.88	280.59	701.47	15	4041.43
SHC	1312.73	875.16	2187.89	1335.13	835.80	2170.93	748.66	499.11	1247.77	57	923.16
SMAE-ATMA	3332.10	2470.75	5802.85	214.47	6340.50	6554.97	3531.15	2597.61	6128.76	93	426.21
PMKSY	4249.80	2833.20	7083.00		850.00	850.00	0.00	0.00		0	850.00
SASA 100% of GoI(Agriculture & Irrigation)	837.78	0.00	837.78	50.94	145.00	195.94	227.22	0.00	227.22	116	-31.28
Total CS/CSS	40107.07	26428.88	66535.95	27884.71	33240.02	61124.73	16322.07	10973.41	27295.48	45	33829.25

RKVY- Rashtriya Krishi Vikas Yojna; **PKVY**-Paramparagat Krishi Vikas Yojna; **NMSA**-Sub-mission on Agro-Forestry; **SMSP**-Sub-mission of Seed and Planting Material, **NMSA-RAD** (Rainfed Area Develop.); **SMFWM** - Sub-mission on Farm Water Management; **SHM**-Soil Health Manag.; **SHC**-Soil Health Card; **SMAE-ATMA**-Sub-mission of Agriculture Extension, **PMKSY**-Pradhan Mantri Krishi Sinchai Yojna; **SASA** – State Agricultural Statistical Authority.

4.5 Intervention-wise progress report : Madhya Pradesh (2019-20)

i) NFSM- Pulse

(Financial - Rs. in Lakhs)

S.No	Interventions	Units	Madhya Pradesh					
			Target		Achievement		% Utilization	
			Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Demo. on improved technologies							
(a)	Cluster Demo. (100 ha each)	ha	88600	7974.00	81900	4814.58	92	60
(b)	Demonstration on intercropping	ha	24000	2160.00	19934	928.09	83	43
(c)	Cropping System Based Demo.	ha	28500	4275.00	26670	1683.70	94	39
	Total Demonstration		141100	14409.00	128504	7426.37	91	52
2	Assistance of Distribution and Production of Seeds							
(a)	Distri. of HYVs Seeds (<10 Yrs.)	Qtls	106100	5305.00	15864	344.44	15	6
(b)	Distri. of HYVs Seeds (> 10 Yrs.)	Qtls	57000	1425.00	3626	62.33	6	4
	Total Seed Distribution		163100	6730.00	19490	406.77	12	6
3	Prod. of HYVs Seeds (< 10 Yrs.)	Qtls	148000	7400.00	218397	4999.37	148	68
4	Plant & soil protection managment							
(a)	INM	ha	660000	3382.50	14972	11.13	2	0
(b)	IPM	ha	756760	3783.80	152392	287.26	20	8
	Total INM & IPM		1416760	7166.30	167363	298.39	12	4
5	Flexi Components (25% of the outlay)							
a	Farm implements & equipments	Nos.	46557	3951.20	24836	1913.08	53	48
b	Efficient Water Application Tools	Nos.	4534020	7799.08	29717	2963.49	1	38
c	Cropping System based trainings	Nos.	2000	280.00	1609	246.22	80	88
d	Miscellaneous Expenses		53	781.00	11	341.22	21	44
e	Local Initiatives							
f	Other Initiatives							
	Total Flexi Funds		4582630	12811.28	56173	5464.01	1	43
	Grand Total		6451590	48516.58	589927	18594.91	9	38

	Financial analysis (Rs. In Lakh)	Total	GOI	State
1	Approved Budget (2019-20)	48516.58	29109.95	19406.63
2	Fund Released (GoI+State)	24488.86	9933.89	14554.97
3	Unspent Balance as on 01 April, 2019	11898.57	11898.57	0.00
4	Total available fund for utilization	36387.43	21832.46	14554.97
5	Amount Utilized till March, 2020	18594.91	11156.95	7437.96
6	% Fund Utilized against Tot. Avail. Fund	51	31	20
7	Balance on 1st April, 2020	17792.52	10675.51	7117.01

ii) NFSM- Rice

(Financial - Rs. in Lakhs)

S.No	Interventions	Units	Madhya Pradesh					
			Target		Achievement		% Utilization	
			Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Demonstration on improved technologies							
(a)	Cluster Demo. (100 ha each)	ha	2900	261.00	2692	83.14	93	32
(b)	Cluster Demo. on Hybrid Rice	ha	800	72.00	790	21.37	99	30
(c)	Demo.on stress tolerance var. (100 ha each)	ha	2740	246.60	2730	74.59	100	30
(d)	Cropping System Based Demo.		1640	246.00	1430	85.46	87	35
	Total Demonstration		8080	825.60	7642	264.56	95	32
2	Assistance of Distribution and Production of Seeds							
(a)	Hybrid Rice seed	Qtls	2812	281.20	0	0.00	0	0
(b)	Distri. of HYVs Seeds (> 10 Yrs.)	Qtls	2500	25.00	356	2.75	14	11
(c)	Distri. of HYVs Seeds (<10 Yrs.)	Qtls	5037	100.73	352	3.32	7	3
	Total Seed Distribution		10349	406.93	708	6.07	7	1
3	Plant & soil protection management							
(a)	INM	ha	31191	161.91	0	0.00	0	0
(b)	IPM	ha	28600	143.00	4500	5.44	16	4
	Total INM & IPM		59791	304.91	4500	5.44	8	2
4	Flexi Components (25% of the outlay)							
a	Farm implements & equipments	Nos.	334	315.20	155	136.20	46	43
b	Efficient Water Application Tools	Nos.	1375	167.50	337	43.36	25	26
c	Cropping System based trainings	Nos.	140	19.60	120	16.80	86	86
e	Local Initiatives	Nos.						
d	Other Initiatives	Nos.						
	Total Flexi Funds		1849	502.30	612	196.36	33	39
	Grand Total		80069	2039.74	13462	472.43	17	23

	Financial analysis (Rs. In Lakh)	Total	GOI	State
1	Approved Budget (2019-20)	2039.74	1223.84	815.90
2	Fund Released (GoI+State)	1291.18	679.26	611.92
3	Unspent Balance as on 01 April, 2019	238.62	238.62	0.00
4	Total available fund for utilization	1529.80	917.88	611.92
5	Amount Utilized till March, 2020	472.43	283.46	188.97
6	% Fund Utilized against Tot. Avail. Fund	31	19	12
7	Balance on 1st April, 2020	1057.37	634.42	422.95

iii) NFSM-Wheat

(Financial - Rs. in Lakhs)

S. No	Interventions	Units	Madhya Pradesh					
			Target		Achievement		% Utilization	
			Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Demonstration on improved technologies							
(a)	Cluster Demo. (100 ha each)	ha	12800	1152.00	12779	679.53	100	59
(b)	Cropping System Based Demo.	ha	3255	488.25	2645	124.41	81	25
	Total Demonstration		16055	1640.25	15424	803.94	96	49
2	Assistance of Distribution and Production of Seeds							
(a)	Distri. of HYVs Seeds (> 10 Yrs.)	Qtls	15909	159.09	2768	1.65	17	1
(b)	Distri. of HYVs Seeds (<10 Yrs.)	Qtls	32000	640.00	14186	34.83	44	5
	Total Seed Distribution		47909	799.09	16954	36.48	35	5
3	Plant & soil protection management							
(a)	INM	ha	73500	401.25	0	0.00	0	0
(b)	IPM	ha	37490	187.45	42	0.09	0.1	0.05
	Total INM & IPM		110990	588.70	42	0.09	0.0	0.02
4	Flexi Components (25% of the outlay)							
a	Farm implements & equipments	Nos.	1950	366.00	794	134.80	41	37
b	Efficient Water Application Tools	Nos.	3593	574.32	1800	183.48	50	32
c	Cropping System based trainings	Nos.	283	39.62	248	31.21	88	79
	Total Flexi Funds	Nos.	5826	979.94	2842	349.49	49	36
	Grand Total		180780	4007.98	35262	1190.00	20	30

	Financial analysis (Rs. In Lakh)	Total	GOI	State
1	Approved Budget (2019-20)	4007.98	2404.79	1603.19
2	Fund Released (GoI+State)	2576.78	1374.39	1202.39
3	Unspent Balance as on 01 April, 2019	429.20	429.20	0.00
4	Total available fund for utilization	3005.98	1803.59	1202.39
5	Amount Utilized till March, 2020	1190.00	714.00	476.00
6	% Fund Utilized against Tot. Avail. Fund	40	24	16
7	Balance on 1st April, 2020	1815.98	1089.59	726.39

iv) NFSM-Coarse Cereals

(Financial - Rs. in Lakhs)

S.No	Interventions	Units	Madhya Pradesh					
			Target		Achievement		% Utilization	
			Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Demo. on improved technologies							
(a)	Cluster Demonstrations (100 ha each)	ha	12400	744.00	12319	526.97	99	71
(b)	Demonstration on intercropping	ha	200	12.00	200	7.40	100	62
	Total Demonstration		12600	756.00	12519	534.37	99	71
2	Assistance of Distribution and Production of Seeds							
(a)	Distri. of HYVs Seeds (<10 Yrs.)	Qtls	940	28.20	63	0.17	7	1
(b)	Distri. of HYVs Seeds (> 10 Yrs.)	Qtls	470	7.05	20	0.00	4	0
(c)	Hybrid Seeds (Maize)	Qtls	2870	287.00	1682	131.29	59	46
	Total Seed Distribution		4280	322.25	1765	131.46	41	41
	Grand Total		16880	1078.25	14284	665.83	85	62

Financial analysis (Rs. In Lakh)		Total	GOI	State
1	Approved Budget (2019-20)	1078.25	646.95	431.30
2	Fund Released (GoI+State)	752.62	429.15	323.47
3	Unspent Balance as on 01 April, 2019	56.06	56.06	0.00
4	Total available fund for utilization	808.68	485.21	323.47
5	Amount Utilized till March, 2020	665.83	399.50	266.33
6	% Fund Utilized against Tot. Avail. Fund	82	49	33
7	Balance on 1st April, 2020	142.85	85.71	57.14

v) **NFSM-Nutri-Cereals**

(Financial - Rs. in Lakhs)

S. No.	Interventions	Units	Madhya Pradesh					
			Target		Achievement		% Utilization	
			Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Cluster Front line Demo.	ha	11900	714.00	11702	216.80	98	30
2	Seed Distribution							
(a)	Hybrid seed of nutritive variety	Qtls	1800	180.00				
(b)	HYVs seeds (< 10 Yrs.)	Qtls	4520	135.60	5	0.10		
(c)	HYVs seeds (> 10 Yrs.)	Qtls	2260	33.90				
	Total Seed Distribution		8580	349.50	5	0.10		
3	Seed production HVYs seeds	Qtls	11700	351.00				
4	Plant & soil protection management							
(a)	INM	ha	44140	180.70	450		1	
(b)	IPM	ha	32195	160.98	333		1	
	Total INM & IPM		76335	341.68	783		1	
5	Flexi Components							
a	Farm implements & equipments	Nos.	42000	294.00	15987	98.90	38	34
b	Efficient Water Application Tools	Nos.						
c	Cropping System based trainings	Nos.	253	35.42	171	22.54	68	64
d	Local Initiatives	Nos.						
e	Establishment of processing unit (Ragi biscuit manufacturing unit)	Nos.						
f	Event/Workshop	Nos.						
	Total Flexi Funds		42253	329.42	16158	121.44	38	37
	Grand Total		150768	2085.60	28648	338.34	19	16

Financial analysis (Rs. In Lakh)		Total	GOI	State
1	Approved Budget (2019-20)	2085.60	1251.36	834.24
2	Fund Released (GoI+State)	1312.83	687.15	625.68
3	Unspent Balance as on 01 April, 2019	251.37	251.37	0.00
4	Total available fund for utilization	1564.20	938.52	625.68
5	Amount Utilized till March, 2020	338.34	203.00	135.33
6	% Fund Utilized against Tot. Avail. Fund	22	13	9
7	Balance on 1st April, 2020	1225.86	735.52	490.35

vi) NFSM-Commercial Crops (Sugarcane)
(Financial - Rs. in Lakhs)

S.No	Interventions	Apporved Rate of Assistance	Unit	Target		Achievement		% Utilization	
				Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Demonstration on Intercropping and single bud chip technology with sugarcane	Rs. 9000 per ha.(Rs.8000 for inputs & Rs. 1000 for contingency)	Ha.	600	54.00	600	8.01	100	15
2	Distribution of PP Chemical/bio-agent	Rs.500/ha or 50% of the cost,	Ha.	928	4.64	120	0.00	13	0
3	State Level Training(20 Participant*2 day)	40000/ Training	Nos.	2	0.80	1	0.00	50	0
Total					59.44	721.00	8.01		13

	Financial analysis (Rs. In Lakh)	Total	GOI	State
1	Approved Budget (2019-20)	59.44	35.66	23.78
2	Fund Released (GoI+State)	29.93	17.96	11.97
3	Unspent Balance as on 01 April, 2019	0	0	0
4	Total available fund for utilization	29.93	17.96	11.97
5	Amount Utilized till March, 2020	8.01	4.81	3.20
6	% Fund Utilized against Tot. Avail. Fund	27	16	11
7	Balance on 1st April, 2020	21.92	13.15	8.77

vii) NFSM- Intercropping of Pulses with Sugarcane
(Financial - Rs. in Lakhs)

S.No.	Intervention	Approved rate of assistance	Unit	Target		Achievement	
				Phy.	Fin.	Phy.	Fin.
1	Demo. on Intercropping of Pulses with Sugarcane	Rs. 9000/ha	Ha.				1.628
2	Distri. of certified seed of pulse to sugarcane growers	Rs.5000/qtl	Qtl.	114	5.70		
3	Distribution of PP Chemical/bio-agent	Rs.500/ha	Ha.	85	0.43		
4	Distribution of Bio Fertilizer	Rs.300/ha	Ha.	85	0.26		
5	State level Training (20 participants *2 day)	Rs.40000/Training	No.	6	2.40	1	0.4
Total					8.78	1	2.03

	Financial analysis (Rs. In Lakh)	Total	GOI	State
1	Approved Budget (2019-20)	8.78	5.27	3.51
2	Fund Released (GoI+State)	8.77	5.26	3.51
3	Unspent Balance as on 01 April, 2019	0	0	0
4	Total available fund for utilization	8.77	5.26	3.51
5	Amount Utilized till March, 2020	2.03	1.22	0.81
6	% Fund Utilized against Tot. Avail. Fund	23	14	9
7	Balance on 1st April, 2020	6.74	4.04	2.70

viii) NFSM- TRFA (Pulses)

(Financial - Rs. in Lakhs)

S.No	Interventions	Units	Madhya Pradesh					
			Target		Achievement		% Utilization	
			Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Demonstration on improved technologies							
(a)	Chickpea	ha	40000	3600.00	38087	312.29	95	9
(b)	Lentil	ha	15000	1350.00	8349	89.82	56	7
	Total Demonstration		55000	4950	46436	402.11	84	8
2	Assistance of Distribution of Certified Seeds							
(a)	Chickpea	Qtls	4000	200.00	600	2.10	15	1
(b)	Lentil	Qtls	1000	50.00	50	0.40	5	1
	Total Seed Distribution		5000	250.00	650	2.50	13	1
3	Plant & soil protection management							
(a)	INM	ha	320000	1475	7032	3.51	2	0.24
(b)	IPM	ha	300000	1500.00	30566	5.33	10	0.36
	Total INM & IPM		620000	2975.00	37598	8.84	6	0.30
4	Flexi Components							
a	Farm implements & equipments	Nos.	4000	27.00	681	4.82	9	18
b	Efficient Water Application Tools	Nos.	7283	1250.00	1460	12.96	20	1
	Total Flexi Funds		11283	1277	2141	17.78	19	1
	Grand Total			9452.00		431.23		5

	Financial analysis (Rs. In Lakh)	Total	GOI	State
1	Approved Budget (2019-20)	9452.00	5671.20	3780.80
2	Fund Released (GoI+State)	9452.00	5671.20	3780.80
3	Unspent Balance as on 01 st April, 2019	-	-	-
4	Total available fund for utilization	9452.00	5671.20	3780.80
5	Amount Utilized till March, 2020	431.23	258.74	172.49
6	Fund Utilized against Total Avail. Fund (%)	5	3	2
7	Balance on 1st April, 2020	9020.77	5412.46	3608.31

Note: In Madhya Pradesh, NFSM & TRFA programme has been initiated from 2019-20 in 16 districts.
(**TRFA District-** Katni, Balaghat, Chhindwara, Seoni, Damoh, Dindori, Mandla, Narsinghpur, Rewa, Sidhi, Singouli, Satna, Umariya, Anuppur, Raisen, Betul).

ix) NFSM-Oilseeds
(Financial - Rs. in Lakhs)

S.No	Interventions	Units	Madhya Pradesh					
			Target		Achievement		% Utilization	
			Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Seed Component (30%)							
(a)	Purchase of Breeder seed	Qtl	1500	150	472	55.02	31	37
(b)	Production of FS & CS	Qtl	23600	590	21218	310.82	90	53
(c)	Distribution of CS	Qtl	20438	822.5	27356	521.38	134	63
	Total Seed component			1562.5		887.22		57
2	TOT							
(a)	Block dem. (Soybean, Groundnut, Sesame, Niger and R & M with Beekeeping)	ha	24160	1348	16651	402.88	69	30
(b)	IPM Demonstration FFS	ha	104	27.76	36	9.04	35	33
(c)	Farmers Training	Nos.	52	12.48	49	11.76	94	94
(d)	Extension Officer training	Nos.	52	18.72	49	17.64	94	94
	Total TOT			1406.96		441.32		31
3	Production Inputs							
(a)	INM	ha	31400	123	2172	12.31	7	10
(b)	IPM	ha	94500	472.5	32154	137.14	34	29
(c)	Farm implements & PP equipments	Nos.	12163	776.97	2888	179.21	24	23
(d)	Water carrying pipe	Mtrs.	1052800	526.4	554400	277.2	53	53
	Total Production Input			1898.87		605.86		32
4	Flexi Components							
(a)	Small Oil extraction Unit	Nos.	-	-	-	-	-	-
(b)	Diesel or electric Pump set	Nos.	2200	220	473	43.06	22	20
	Total Flexi Funds		2200	220	473	43.06	22	20
5.	Project Management expenses			120		25.18		21
	Grand Total			5208.33		2002.64		38

	Financial analysis (Rs. In Lakh)	Total	GOI	State
1	Approved Budget (2019-20)	5208.33	3125.00	2083.33
2	Fund Released (GoI+State)	2782.34	1219.83	1562.51
3	Unspent Balance as on 01 April, 2019	1123.93	1123.93	-
4	Total available fund for utilization	3906.27	2343.76	1562.51
5	Amount Utilized till March, 2020	2002.64	1201.58	801.06
6	% Fund Utilized against Tot. Avail. Fund	51	31	20
7	Balance on 1st April, 2020	1903.63	1142.18	761.45

Chapter – 5

Brief of Visit/Field Observations

5.1 Field Observations

District/Block/ Villages	Activity/Events	Brief Report
District- Sehore (15.02.2020)		
Vill- Lasudiaparihar	NFSM- Cluster Demo. (Wheat)	<ul style="list-style-type: none"> Visited field of cluster demo. Wheat (var.-Tejas). Demonstration plot is properly laid out. Crop condition is excellent. Expected yield > 65 qtls./ha.
Vill.-Takipur	NFSM- Cluster Demo. (Pulses)	<ul style="list-style-type: none"> Beneficiary Shri Bhagwan Singh Parmar; Gram- var. RVG 202. 75 kg seed @ Rs. 6000/qlts (subsidy Rs. 4500). <u>Only seed input is provided in kind, other inputs under DBT mode through input dealer camps organization to facilitate purchase of input by the farmer.</u> <u>Geo-tagging not yet started.</u> SHC recommendations yet to be considered as a part of input cafeteria.
Vill.-Takipur	CSBD	<ul style="list-style-type: none"> Team advised to document the impact of last years demonstration, cost of cultivation and C:B ratio, both under sole and CSBD demonstration. Also advised to document details of training/visit by Sr. Officers and field days along with no. of molecules demonstrated to contain <i>H. armigera</i> and to recommend the most suited, safest, cost effective pesticide in the block/region.
Vill.-Thuna- Panchama	Diversified Farm Activity	<ul style="list-style-type: none"> Sh Neeraj Vashisht (9425093142), self motivated farmer cultivating strawberry, floriculture, vegetables and ponds with KCC support. Strawberry being sold in local market.
District- Sehore	Schemes Review at DDA Office	<ul style="list-style-type: none"> <i>Cropping Intensity (CI) – 204%; expected summer mung area: 38-40 thousand ha.</i> <i>Khairf - 2019 soybean yield 7.5 qtls/ha.</i> <i>PMFBY agency is IFFCO-Tokio General Insurance, claims settled only up till 2017.</i> <i>2019-20 allocation under NFSM is Rs. 1452.06 lakhs (release Rs. 852.64 lakhs : Pulses- Rs. 741 + Oilseeds Rs. 111.6); Other CSS total allocation of Rs. 613.739 Lakhs {viz., - PKVY, PMKSY, RKVY, SHC, SHM, NMSA-RAD, NMAET-ATMA, SMSP -Beej Gram Yojna }. Total CSS- 2065.58 lakhs.</i> <i>2019-20 State Schemes Allocation is Rs. 243.25 Lakhs (Nalkoop Khanan + Surajdhara + Annapurna + MAPWA + National Bio-gas + SMIS + CM Khet Tirth). Rs. 259.814 lakhs also allocated under Bhavantar Flat Rate scheme.</i> <i>Thus, total District Development Programmes are having a budgeting support of Rs. 2568.644 lakhs. The share of CSS</i>

District/Block/ Villages	Activity/Events	Brief Report
		<p>is 80% and the state schemes are only 20%.</p> <ul style="list-style-type: none"> To technically demonstrate/implement crop development programme, each district incl. sehare is also provided project manning support (PMT) with one District Consultant & 2 TAs.
District-Sehare	Schemes Review at DDA Office	<ul style="list-style-type: none"> PM-Kisan Samman Nidhi already distributed to 1.36 lakh farmers. 100% ridge-furrow sowing in soybean is under adoption. DDA has been advised to conduct block-wise survey on the impact of PM Kisan Samman Nidhi on the beneficiaries, through ATMA. Duram varieties (Ujjala, Tejas, Poshan, Pusa Mangal etc.) which are resistant to Karnal Bunt is being grown in a larger area, but the marketing is the major issue. South India is the biggest consumer of durum wheat using for Pasta making, vermicelli, Suji, Rawa, Dalia etc. and procure the product through middle man thereby, poor realization of remunerative prices to the durum growers. Sarbati is grown in an area of about 25,000 hectares with major varieties C 306, HI 1531, HI 1520. The expected per/ha wheat yield levels are about 45 qtls/ha due to excellent crop stand this year. Root aphid in wheat has been an emerging issue for the last 4-5 years in Sarbati varieties. Early sown wheat (Oct., 10th - 15th) was mainly affected and was effectively controlled by Emidachlopride. Soybean-Wheat-Chickpea cropping system diverting to Maize-Wheat-Chickpea owing to better production and marketing. It has been appraised that seed distribution component in wheat beyond 10 yrs. and within 10 yrs varieties may be stopped owing to availability of sufficient of seed quantity of seeds and varieties in the state. Upto 3 top dressing of urea in wheat has been practiced this year. Team advised to adopt SHC based recommendations for micro-nutrients, the availability of Gypsum is a major constraints. It was appraised that, the society root was suited for supply of such inputs in terms of quality and reach to the farmers. The PDM 139 mungbean variety is still found as one of the best and is only comparable with the Shikha (IPM 410-3) variety.
	PKVY	<ul style="list-style-type: none"> Despite PGS registration of the clusters, the designated PKVY agency (NGO) to impart LRP training, exposure visit etc., has not done any activity during the year.
	Seed Component (Breeder/Prod. and	<ul style="list-style-type: none"> Expenditure on this component should be in accordance to District Action Plan (DAP/DDA), so that the crop/variety

District/Block/ Villages	Activity/Events	Brief Report
District-Sehore	Distribution of Certified seeds) under NFSM, RKVY, Suraj Dhara, Annapurna Scheme.	<i>assessed under the CSS interventions viz., Seed Minikit Demo., Beej Gram Yojna (SMSP), Certified Seed Production, Cluster Demo., NFSM CFLDs (KVK/ATARI/ICAR) is picked up and the given incentive fulfils the criteria of varietal replacement (to increase VRR).</i>
	Seed Production subsidy norms	<ul style="list-style-type: none"> The existing NFSM certified seed production subsidy norms @ Rs. 5000/qtls (< 10 Yrs.) and @ 2500/qtls (> 10 Yrs.) need to be followed by the state of Madhya Pradesh (presently giving @ Rs. 1300/qtls and Rs. 500 qtls) particularly for Tur and Urd to attract the seed producers and thus helping in improvement of VRR of these important pulses of the state.
District- Shajapur (16.02.2020)		
Vill.- Jamner Block-Shujalpur	Cluster Demo. (Gram & Lentil)	<ul style="list-style-type: none"> Gram var.-RVG 201 & Lentil RVL 31. Crop condition was good. Team has advised adoption of SHC recommendations in finalization of input cafeteria and also monitoring of different physiological stages of the crop and organization of the trainings. It was felt that concept of cluster demo. should be properly understood by the field level functionary.
Vill.-Chakrod, Block-Kalapipal	MIS : Sprinkler Set	<ul style="list-style-type: none"> The beneficiary Sh Rasheed Khan has taken the set through online registration system. 30 pipes @ 20 ft. each + 5 Nozzles (Khaitan Company). Farmer share was Rs. 13800/- (total cost Rs. 25920/-) which was paid to dealer directly. Only one irrigation was provided after 20 DOS in crop. The Team suggest that the dealer should be responsible for delivery of the sprinkler set, assemble and demonstrate it and finally to undertake one year AMC as per the GGRC Ltd. pattern in Gujarat.
Vill.-Rampura, Block-Kalapipal	Cluster Demo. (Gram)	<ul style="list-style-type: none"> Gram var.-RVG 201, beneficiary Sh Narendra S/o Keshar Singh.
Vill.-Nandni, Block-Kalapipal	RKVY	<ul style="list-style-type: none"> Mahindra 575 DI Tractor (RKVY) beneficiary Sh Surendra Singh Mewada (Mob-8120782335). Onion storage structure of 50 metric tones capacity built, beneficiary Sh Ramgopal. 19 Onion storage structures at a total cost of Rs. 3.5 Lakh each (Subsidy Rs. 1.75 Lakh) have been created in this village.
Block Kalapipal KGK (Krishi Gyan Kendra)	RKVY NMAET (SMSP)	<ul style="list-style-type: none"> The KGK created under RKVY (2018-19) in block Kalapipal hosted the review meeting. Local MLA Sh Choudhary also interacted with the Team. The Team advised to document the details on no. of varieties/quantities taken through BGY, whether the seed distributed from farmers to farmers are not. Also directed to display the details of the BGY (Crops/varieties /villages/ quantities) in the gram panchayat bhavan / SADO Office for wider publicity.

District/Block/ Villages	Activity/Events	Brief Report
		<ul style="list-style-type: none"> Cluster Demo. of mungbean variety Shikha (IPM 410-3) was appreciated by district with 66% yield increase over control plot. District has been advised to conduct an impact study on the new varieties demonstrated under CFLD along with technology are being adopted during last year.
Block6Kalapipal		<ul style="list-style-type: none"> DBT is implemented in the district however, Geo-tagging is yet to be initiated.
District- Agar- Malwa (17.02.2020)		
Village- Semali Block- Agar	Electric pump distribution	<ul style="list-style-type: none"> Met with farmer Shri Heeralal who is a beneficiary of electric pump under NFSM costing Rs. 18000 (Subsidy- Rs. 10000). The online operation for the distribution takes 10 days.
Vill.- Suigaon, Block- Nalkheda	Wheat seed production under Beej gram Yojana	<ul style="list-style-type: none"> Met with beneficiary farmer Shri Prabhuji, grown wheat var.- Pusa Ujala. Under the scheme 50% subsidy is provided in 50 kg seed/acre to 50 farmers for 50 acre area.
Vill.-Gudrawan Block- Nalkheda	Sprinkler set distribution under NFSM	<ul style="list-style-type: none"> Met with farmer shri Girraj who is a beneficiary of sprinkler set and pipe and sold the set and pipe of Kisan Co. The farmer is satisfied with the quality of the sprinkler set and pipes.
Vill.- Binyaga Badod, Block- Badod	Organic farming	<ul style="list-style-type: none"> Here, farmer Shri Radhey shyama (8989074051) and Shri Sanjay (9691348731) has done organic farming and also making own compost.
Vill.- Sudwas, Block- Badod	Demonstartion of Gram	<ul style="list-style-type: none"> Gram var.- RVG-202 is sown on 25.12.2019 by farmer Shri Baji Singh. The crop was at pod to grain filling stage.
District-Agar- Malwa	Schemes Review at DDA Office	<ul style="list-style-type: none"> The DDA informed that this year the area of wheat in the district increases to 80-85, 000 ha High Seed rate is used in wheat @ 200kg/ha instead of 100kg/ha by the farmers Farmer grown wheat in raised bed for increasing yield. In kharif Soybean is grown with seed rate @ 35kg/ha Oilseed demonstration was not conducted due to non-availability of seed. A farmer producer Co. i.e. Samarth Kishan Producer Co. is active here with 6552 member farmers. The Producer Co. is established in the district in 2006. Now the Co. has a turnover of Rs. 5.54 cr. annually. The Company directors are Shri Shiv singh gujar (Mob.-9977299695) and Shri Ram Singh (Mob.-9752282748). The company other staffs are Shri Bhagwan Singh Sisodia, VRP (Mob.-9424026844), Shri B.S. Karada (Mob.-9755131043), Shri Rajesh Gavali, A.O. (Mob.-8878970162) and Shri R. S. Thakur, C.E.O. (Mob.-9826372427). PKVY-PGS registration is held up as new district Agar Malwa

District/Block/Villages	Activity/Events	Brief Report
		<p><i>is not reflected on website.</i></p> <ul style="list-style-type: none"> • <i>PMKSY- Sprinkler intervention is covered.</i> • <i>DDA informed that they faced problem in implementation of programme due to targets were circulated a bit late and requested to fix target early so the farmers get benefited on time.</i> • <i>RKVY- Breeder seed reimbursement and distribution subsidy is provided under the scheme.</i>
District-Agar-Malwa	Schemes Review at DDA Office	<ul style="list-style-type: none"> • <i>DDA also requested for including Hand holding duster in implement for dusting PP chemicals.</i> • <i>DDA informed that the online system for machineries has some constraint of dropping of the name, 3 times. This need to be rectified as farmer has to pay Rs. 100 each time.</i>
District- Ujjain (18.02.2020)		
Vill.- Chintaman Jawasiya, Block-Ujjain	Cluster demonstration of wheat	<ul style="list-style-type: none"> • Here, Cluster demonstration of wheat var.- Tejas (Durum) wheat is done with the breeder seed. The overall crop condition was excellent and the farmer has expected a yield of 90 qtl/ha as on seed gives maximum 73 tillers. • A farmer also grown Yasasthi (HD-2632) recently released variety of bread wheat with 01 kg of seed. Here Sharbati wheat variety was also grown and organic farming of wheat was done. • Potato cultivation is also done here.
Vill.- Chintaman Jawasiya, Block-Ujjain	Seed grader beneficiary	<ul style="list-style-type: none"> • Met with beneficiary farmer of seed grader. The farmer briefed about the grading and satisfied with the quality of grader.
	Kishak Gosthi	<ul style="list-style-type: none"> • A Kishan gosthi was organized in the village on the eve of Soil Health Card day by the district official. • In this gosthi, the farmers get the information about the Soil Health Card, its use and its benefit. • The farmers also promoted for use of fertilizer as per the recommendation of SHC. • The farmers are also encouraged to test their soil regularly.
Vill.- Jalodiya Block- Badnagar	Cluster demonstration of chickpea	<ul style="list-style-type: none"> • Cluster demonstration gram var.- RVG-201 was done. • The overall crop condition was good .The crop was at flowering stage.
District-Ujjain	Schemes Review at DDA Office	<ul style="list-style-type: none"> • A review meeting was organized at DDA office where, the official has presented a brief PPT on crop scenario of the district and the implementation of all the CSS and State schemes in the district. The detail of the schemes in district is annexed. • The official also informed about the problems faced during the implementation of scheme on ground.
District- Dhar (19.02.2020)		
KVK- Dhar	Visit to KVK-	<ul style="list-style-type: none"> • Here, protected cultivation of tomato is done.

District/Block/ Villages	Activity/Events	Brief Report
	Dhar	<ul style="list-style-type: none"> • The KVK also involved in the horticulture and agriculture allied sector. • Nursery for Khirini plant is established in the KVK for preparation of plantlets. • There is a training programme for skill development in small scale poultry farming is ongoing in KVK under skill development programme. • The KVK has also developed a small model of hatchery and poultry for development of chicks.
Vill.-Talwada, Block- Dhar	Farm Machineries beneficiaries	<ul style="list-style-type: none"> • Met with farmer Shri Kanhiya lal who is a beneficiary of Seed-cum-ferti drill Rs. 54000 cost (Rs. 28000 subsidy under NFSM 2019-20 and he is also a beneficiary of multi crop planter earlier.
District-Dhar	Schemes Review at DDA Office	<ul style="list-style-type: none"> • A review meeting was organized in district office. In the meeting the district officials are presented and presented the PPt about the new initiatives done in the district for development in agriculture. • DDA informed that the 70% of the wheat area is durum wheat. approx. 3000 ha in Nisharpur block • Cotton + Maize + Gram based cropping system is done in the district with drip irrigation. • Raised Bed system is used for cultivation of wheat. This year all NFSM demonstrations are done on raised bed system. • Pusa Tejas wheat variety performs well in the district with yield of 75-80 qtl/ha. • RVG-202 variety of gram performed well in the district. • Kabuli Chickpea is also grown in the district. • Production subsidy is requested @ Rs. 5000/qtl instead of Rs. 1300 by state for 10yrs.and Rs. 500/qtl for >15yrs var. • DBT status is being appreciated. • DDA also informed that the Kharif Soybean target of 800 ha could not be conducted due to delayed in the allocation of targets on July 05th by Headquarter. Now the funds have been requested to be diverted /accepted under pipeline/sprinkler/diesel pumps. • There is a diversion of wheat in Rabi season due to availability of soil moisture and irrigation water. • There is total 55000 farmers registered under Kisan Man dhan Yojana and farmers are also benefited under Kisan Samman Nidhi Yojana. • The status of horticulture is poor and need new set up/new policy. Only 5-10% of potential has been harnessed as of now. There is potential of custard apple in the district.
District- Dewas (20.02.2020)		
Vill.- Bhagsara , Block- Sonkatch	<ul style="list-style-type: none"> • Cluster demo. of gram 	<ul style="list-style-type: none"> • Here cluster demonstration of the gram var.- RVG-202 is sown on Oct. 06th , 2019.

District/Block/ Villages	Activity/Events	Brief Report
		<ul style="list-style-type: none"> Overall crop was at pod filling stage.
Vill.- Bawadiya , Block- Sonkatch	<ul style="list-style-type: none"> FIRB Cultivation of wheat 	<ul style="list-style-type: none"> Furrow Irrigated Raised Bed system technology is demonstrated in the village. Cultivation of wheat var.- Tejas and Poshan was done in the village sown on 27.11.2019. The crop was at milking to maturity stage.
Vill.- Odani, Block- Sonkatch	Tractor beneficiary under NFSM- 2019-20	<ul style="list-style-type: none"> Met with Mrs. Kanta Bai, who is a beneficiary of tractor (subsidy of Rs. 2.50 lakh) under NFSM- 2019-20. The subsidy is provided with DBT on 21st Jan, 2020.
KVK- Dewas	Visit to KVK	<ul style="list-style-type: none"> Visited to the KVK- Dewas. The KVK has presented a biogas plant working model for fuel production and compost making. 7 PKVY cluster is also created with 64 farmers for promotion of organic farming. Raised bed cultivation of gram is also done by the KVK. Met with the farmer Shri Ajay Soni who is a beneficiary of Poly house of 4000sq m under MIDH 2016-17.
District- Dewas	Schemes Review at DDA Office	<ul style="list-style-type: none"> A review meeting was organized at DDA. The meeting was attended all the official and staff working under NFSM programme. DDA has informed that the district has a net 4.05 Lha area under cultivation (Kharif- 3.84 Lha, Rabi -2.93 Lha & Summer- Approx. 5000 ha) and cropping intensity of 167%. 75% farmers are SMF. SC-19% & ST-17.40% farmers are included in the programme as compared to 16.6% and 8.6% mandatory allocation of budget to SCP for SC and TSP respectively. During 2018-19, total allocation was 17.01 cr. (NFSM- Rs. 9.78 cr. + Flagship- Rs. 7.23 cr.). However, during current year allocation (2019-20) is Rs 10.105 cr. (NFSM- Rs.6.81 cr. + Flagship-Rs. 3.40 cr.). During 2018-19, total 4900 ha demos organised with single var. of gram JG-14 (against 3500 ha). In kharif, Tur var.-TJT-501 is used in the district. > 60% durum wheat var.- Pusa Mangal, Poshan, Tejas and Pusa Anmol is grown in the district. Aestivum wheat var.- Purna and Ujjala is also grown in the district however, the yield of the Aestivum is low as compared to the durum. Problem of Karnal bunt is also prevalent in the district. The spread of the bunt in the district is 300% per year The DDA informed that there is a need of godown for the storage of grains.

5.2 Summary Observation/Suggestions/Recommendations

- Overall rabi crop scenario is excellent. No major biotic & abiotic stress observed.
- Rabi coverage-2019-20: 125.80 Lha i.e. 113% of normal area & 106% of targeted area of 119.18 Lha. Crop wise coverage- Wheat- 79.68 Lha, Total cereals- 80.98 Lha, Gram-27.38 Lha, Lentil- 4.82 Lha, Total Pulses- 35.25 Lha and Mustard- 7.04 Lha and Total Oilseeds- 8.50Lha
- There is crop diversion from gram to wheat owing to excellent rainfall and sufficient availability of water in all the reservoirs of the state. Summer Mung area prospects are much better and likely to cover > 4 Lha.
- Purchase of breeder seed/production of F/C Seed distribution should be as per district action plan/seed rolling plan. Since 2008-09 onward DDAs, has no involvement in the decision of identification of varieties or crops for this component i.e. purchase of breeder seed/production of foundation and certified seeds. They simply reimburse the cost or extend the subsidy.
- Seed production/distribution subsidy should be distributed as per seed rolling plan of district and varieties demonstrated earlier. This will help the improvement in SRR/VRR. Expenditure on this component should be in accordance to District Action Plan (DAP/DDA), so that the crop/variety assessed under the CSS interventions viz., Seed Minikit Demo., Beej Gram Yojna (SMSP), Certified Seed Production, Cluster Demo., NFSM CFLDs (KVK/ATARI/ICAR) is picked up and the given incentive fulfils the objective criteria of varietal replacement (to increase VRR).
- Input Cafeteria for cluster demonstration should be decided as de-centralized/district level.
- Inclusion of within 10 yrs old and recommended varieties, if possible seed should be taken from NFSM-Seed hub.
- It was generally observed during visit most of the farmers using high seed rate in chickpea and wheat cultivation, to avoid high seed rate farmers should advised for seed treatment with recommended dosage of fungicides/ bio-pesticides by which more plant population may maintained by providing recommended seed rate.
- To avoid indiscriminate use of pesticides in crop cultivation, bio-based package of practice must be introduced among the farmers. For chickpea cultivation pheromone trap and T shape stick must be laid down in farmers' field to avoid least application of pesticides for management of insect pest. Most of the farmers generally following mono-cropping pattern, as a result soil become sick for soil borne pathogen which may cause breakdown of resistance in commercially available variety. Recommendation of fertilizer for cultivation of crops must ensure on the basis of soil health card report.
- To make the agriculture sustainable and long-lasting farmers should adopt the green manuring and amendment with organic fertilizers. INM (Micro & Secondary nutrients) should be included strictly as per SHC recommendations and this may vary from one block to other.
- Inclusion of 2-3 chemical pesticides/molecules, on the basis of past impact analysis (ATMA/KVK/PMT) on its economic viability/eco-friendly, efficacy etc. should be demonstrated.
- Quality bio-pesticide / bio-fertilizer, preferably through MoU with SAUs /IFFCO /KRIBHCO /KVKs products should be included.
- Inclusion of at least 4-5 varieties to be demonstrated in a cluster is yet to be ensured. For e.g. during 2018-19 in Dewas district, 3500 ha gram demonstration were conducted with single variety JG-14.
- Inclusion of 2 -3 thematic areas in a cluster (Method of planting, Irrigation, INM/IPM, Seed Treatment/FIR, Intercropping etc) also need to be ensure.

- Transfer of Technology-Non-adoption of 30% CSBD, missing thematic area, single variety, no seed treatment, and non-adoption of SHC recommendations etc. have been the other issues, needing attention of the department.
- Institutional arrangement for timely supply of inputs, to ensure full package demonstration, as envisaged, is necessity. Presently only seed is provided while other inputs are not purchased /demonstrated in cluster as farmer usually not purchase.
- Mandatory Geo-tagging of CSBD/Sole Demo is to be done.
- Documentation on Impact of last year demonstrations, cost of cultivation and C: B ratio, details of training/monitoring visit/ field days and recording of physiological stage/crop scenario incl. IPM molecules demonstrated and their impact in terms of efficacy, cost effectiveness, eco-friendly etc., is highly recommended. CSBD conducted in the past need documentation. The changing cropping pattern needs linkage with marketing strategy. For e.g. cropping system diversion from soybean-wheat/gram to maize/paddy-wheat/gram in Sehore district, impress upon the development of strategy for marketing of maize.
- Complete/informative display board installation, field days is mandatory to be ensured.
- Staff Training/Specific trainings in expert institutions (ICAR-IARI Wheat Research Station Indore, IISR-Indore; IWR-Jabalpur; IPR-RS, Phanda, NCIPHM, IISS-Nabibagh can be done.
- CSBT need strategic planning /commensurate to the crop stage. The mandatory tour and training should be done regularly.
- Impact assessment/survey involving KVK+SDA officials should be done in cluster demonstrations and others.
- Impact study of varietal performance in seed minikits involving KVK scientist + SDAs is yet to be ensured. Seed minikits demonstration keeps in identification of sustainability of a variety in a district in terms of its potential and also to pave way for new cropping system to enhance cropping intensity.
- Documentation of crop-wise/variety-wise performance of seed minikits should be ensured, so that it can be linkup with subsidy of seed production/distribution programmes (B/F/C).
- The Seed village Scheme is limited to seed distribution only. Component of training and distribution of safe storage bins activities have been held up. *More serious efforts are needed to implement the Beej Gram Yojana as per the objectives of the scheme.*
- 3 year district-wise impact on variety taken seed quantity produced and impact on VRR should be done.
- Quantitative data management of Farm Mechanization/ RCT component between DEG & DDA is a missing links, poor monitoring/ no monitoring is one of the problem in implementation.
- Block level beneficiaries devoid of benefits. Equitable benefits, the target distribution under RCT/machineries should be block-wise instead of district wise and should have user group for more than Rs. 10,000/- subsidy tools and also impact evaluation after 4-5 years on cost cutting, employment generation, and increase in mechanization increase in CI etc. should be done.
- Repair/maintenance/training under local initiatives /state plan should be done and Implements report should be available to DDA by Agril. Engg. Deptt.
- Need evaluation of potential increase under mechanization and irrigation efficiency involving scientist of KVKs & SDAs.

- Intercropping with orchard should be highlighted by DDA to converge the other programme with MIDH.
- PKVY-PGS-LRP training not conducted properly.
- PMFBY-Flexi-boards should be provided in Panchayat level (Rates, crops etc.) for farmers' information and extending non-loanee cover is needed.
- 50/52 districts are strengthened with PMT and also PMT at state HQ. However, their involvement towards technological demonstration, weekly crop scenario, technical feedback, ATR follow up on the field recommendation etc need to be reviewed for better objective outcome of PMT at state HQ. Need exposure training as well as rotational transfer policy for skill improvement/knowledge up gradation of PMT and strengthening of PMT Cell.
- Ensure field visit at least twice in a month by district official.
- The new proposed initiatives of GoI on "One district-One product/crop" are highly recommended for durum wheat and Sarbati (Bread wheat).
- Approximately, ~14% of the wheat area in Madhya Pradesh is occupied by durum wheat varieties. Pusa Tejas, Poshan, Pusa Anmol, Pusa Mangal etc.) Which are resistant to Karnal Bunt are being grown in a larger area. Marketing strategy for durum wheat for better remunerative price is must. Separate procurement platforms for durum wheat in the grain *mandis* *should be ensured*. Grading based on grain appearance and quality to facilitate exports.
- Identifying suitable geographical areas for contract farming to intensify durum wheat production and procurement, (one district & one product) and separate MSP for durum wheat may be announced similar to breeder seed price (Durum wheat: Rs. 7295/- per quintal and bread wheat Rs. 6520/- per quintal) and bonus for durum wheat farmers in Madhya Pradesh for producing high quality and pure durum wheat.
- Root aphid in wheat has been an emerging issue for the last 4-5 years in Sarbati varieties. Early sown wheat (Oct., 10th -15th) was mainly affected.
- Availability of Gypsum is a major constraint. It was appraised that, the PACS was suited for supply of such inputs in terms of quality and reach to the farmers so this can be used for its supply.
- To widen the circulation system and increase the seed replacement rate, farmers should instruct to distribute the seeds among the villagers on the basis of seed to seed replacement mode to avoid direct selling of the seeds in the mandi.

Immediate need: As the area and production of durum wheat in M.P is increasing over years

- " A meeting between Government of MP, Traders, Exporters, DAC & FW/ DPD, Bhopal and APEDA to take corrective steps to procure and export durum wheat at national and international level.
- " Steps to be initiated to procure maximum durum wheat by Government at optimum prices and promote value addition centers at village level to improve the quality of durum wheat.
- " Make availability of warehouse facility to durum wheat farmers by subsidy, so that they can sell slowly based on demand.
- " Initiate use of durum wheat in Mid-day meal programme and anganwadis as a health food in the form of pasta products and homemade foods.
- " Awareness and training programmes to farmers by Government of Madhya Pradesh for cultivating durum wheat and address their fears about the market issues.

FIELD PHOTOGRAPHS

District-Sehore



Orange cultivation at Sehore



Strawberry cultivation at Vill.-Thuna-Panchama



Visit to Cluster demo. of gram at district-Sehore



Newspaper publication about visit

District- Sehore



Review Meeting with DDA and other district official about the ongoing CSS/SS scheme implementation in district at DDA office, Sehore

District-Shajapur



Tractor Mahindra 575 DI beneficiary Shri Surrendra singh Mewada under RKVY at vill.- Nandini, Shajapur



Onion storage structure constructed under RKVY at vill.- Nandini, Shajapur

District- Shajapur



Cluster demonstration of gram var.- RVG-201 at district- Shajapur



Interaction with the farmers on issues related to schemes at district- Shajapur



Water carrying pipe beneficiary at district- Shajapur



Meeting with stakeholders at district- Shajapur

District-Agar Malwa



Cluster demonstration of gram at District-Agar- Malwa



Interaction with the farmer to get issues regarding the implantation of programme on field at district-Agar- Malwa



Meeting with the district official or other stakeholder at district- Agar- Malwa

District-Ujjain



Seed grader beneficiary at district- Ujjain



Potato cultivation at district- Ujjain



Inspection of wheat plant condition on field at district- Ujjain



Organic farming of gram and durum wheat at district- Ujjain

District-Ujjain



Visit to Wheat (Sharbati) field at district-Ujjain



Kishn gosthi organized on the event of Soil Health card day celebration at district- Ujjain



Visit to Cluster demonstration on gram at district-Ujjain



T- Bird perch in the field of district- Ujjain



Stakeholders meeting at KVK-Ujjain

District-Dhar



Interaction with the scientist and official of KVK-
Dhar



Protected cultivation of tomatoes at district- Dhar



Visit to poultry model at KVK- Dhar for providing
training



Training programme on skill development in small
scale poultry farming to enhance the income

District-Dhar



Cultivation of gram in raised bed system with drip irrigation at district- Dhar



Seed cum ferti drill beneficiary at district- Dhar

District-Dewas



Tractor beneficiary under NFSM- 2019-20 at district- Dewas

Annexure

NFSM FINANCIAL PROGRESS (2018-19 to 2019-20): VISITED DISTRICTS

(Rs. in Lakh)

Schemes	Allocation	Release	Expenditure	Utilization against release (%)
District- Sehore				
NFSM- Pulses				
2018-19	493.87	483.88	327.79	68
2019-20	1309.06	741.04	593.96	80
NFSM- Additional Pulses				
2018-19	250	202.50	195.70	97
2019-20	0	0	6.35	0
NFSM- Oilseeds				
2018-19	137.27	49.79	40.27	81
2019-20	143	111.60	76.87	69
District- Sahajapur				
NFSM- Pulses				
2018-19	216.07	216.07	134.17	62
2019-20	77.91	77.91	67.19	86
NFSM- Additional Pulses				
2018-19	58.41	58.41	58.41	100
NFSM-Oilseeds				
2018-19	135.04	135.04	22.07	16
2019-20	130.11	130.11	86.99	66
District- Agar -Malwa				
NFSM- Pulses				
2018-19	482.83	172.74	162.73	94
2019-20	229.98	158.49	139.20	86
NFSM- Oilseeds				
2018-19	104.73	47.95	47.94	100
2019-20	107.76	93.60	81.37	87
District- Ujjain				
NFSM- Pulses				
2018-19	859.22	599.28	531.59	89
2019-20	857.36	457.50	264.89	58
NFSM- Oilseeds				
2018-19	47.95	47.95	47.95	100
2019-20	183.46	121.60	56.65	47

NFSM FINANCIAL PROGRESS (2018-19 to 2019-20): VISITED DISTRICTS
(Rs. in Lakh)

Schemes	Allocation	Release	Expenditure	Utilization against release (%)
District- Dhar				
NFSM-Pulses				
2018-19	390.23	362.87	203.66	56
2019-20	650.50	174.32	165.38	95
NFSM-Coarse-cereals				
2018-19	72.65	24.07	23.62	98
2019-20	50.80	38.10	24.30	64
NFSM-Nutri- cereals				
2018-19	15.80	7.29	0.362	0.04
2019-20	49.20	04.60	03.41	74
NFSM-Cotton				
2018-19	18.00	18.00	0.00	0
NFSM-Sugarcane				
2018-19	0.90	0.59	0.00	0
2019-20	2.10	1.06	0.00	
NFSM-Oilseeds				
2018-19	107.40	107.40	29.94	27
2019-20	149.88	104.10	45.20	43
District- Dewas				
NFSM-Pulses				
2018-19	435.27	494.32	283.87	57
2019-20	681.05	259.74	130.66	50
NFSM-Additional Pulses				
2018-19	540.00	437.50	407.08	93
NFSM-Cotton				
2018-19	3.20	3.20	0.00	0

Financial Progress of CSS & State Schemes: 2019-20

(Rs. in lakh)

Schemes	Sehore				Shajapur			
	Alloc.	Avail. fund (Rel.+ Reval.)	Exp.	Uti. (%)	Alloc.	Avail. fund (Rel.+ Reval.)	Exp.	Uti.(%)
PKVY	168.30	0	0	-	-	-	-	-
PMKSY	69.25	69.250	45.68	66	-	-	-	-
RKVY	133.63	56.43	55.40	98	-	-	-	-
SHC	19.61	19.61	19.22	98	7.44	7.44	3.94	53
SHM	3.75	3.75	3.75	100	-	-	-	-
NMSA-SMAF	0	0	0	-	-	-	-	-
NMSA-RAD	0.69	0.69	0	-	-	-	-	-
NMAET- SMAE (ATMA)	136.18	145.97	64.51	44	108.10	104.20	52.07	50
NMAET-SMSP	82.33	65.85	60.15	91	54.08	54.06	41.06	76
NeGP	0	0	0	-	-	-	-	-
SMFWM	0	0	0	-	45.97	45.97	4.36	9
Total CSS	613.74	361.55	248.71	69	215.59	211.67	111.43	48
Krishak Samridhi Yojna	0	0	0	-	-	-	-	-
Nalkup Khanan	19.96	19.96	11.55	58	-	-	-	-
Surajdhara Yojna	100.42	75.10	74.98	100	67.59	67.59	66.42	98
Annapurna Yojna	75.53	75.53	69.03	91	71.33	71.33	65.05	91
CM Fasal Rin Mafi Yojna	0	0	0	-	-	-	-	-
Bhavantar Flat Rate Schemes	259.81	259.81	259.48	100	-	-	-	-
Balram Talab Yojna	0	0	0	-	-	-	-	-
MAPWA	8.08	8.08	8.08	100	4.28	4.28	4.28	100
Indra Krishi Jyoti Yojna	0	0	0	-	-	-	-	-
Top-up subsidy on Irrigation Implements	0	0	0	-	-	-	-	-
National Biogas Yojna	4.50	4.50	2.53	56	1.55	1.55	0.45	29
State Micro-Irrigation Scheme	7.80	7.80	0.96	12	-	-	-	-
Training for Krishak Mitra	0	0	0	-	-	-	-	-
CM Khet Tirth Yojna	26.97	26.97	26.97	100	21.57	21.57	21.57	100
Total State Schemes	503.07	477.75	453.58	95	166.32	166.32	157.77	95

PKVY – Pramparagat Krishi Vikas Yojna, **PMKSY**- Pradhan Mantri Krishi Sinchai Yojna, **RKVY**-Rashtriya Krishi Vikas Yojna, **SHC**- Soil Health Card, **SHM**-Soil Health Management, **SMAF**-Sub mission on Agroforestry, **RAD**- Rainfed Agriculture Development, **SAME**-Sub-mission of Agriculture Extension (ATMA), **SMSP**-Sub-mission of Seed and Planting Material, **NeGP**- National E-Governance Plan, **SMFWM**-Sub-mission on Farm Water Management

Financial Progress of CSS & State Schemes: 2019-20

(Rs. in lakh)

Schemes	Agar Malwa				Ujjain			
	Alloc.	Avail. fund (Rel.+ Reval.)	Exp.	Uti. (%)	Alloc.	Avail. fund (Rel.+ Reval.)	Exp.	Uti. (%)
PKVY	165	100	99.72	100	165	100	99.72	100
PMKSY	22.25	13.25	7.3	55	13.25	13.25	7.3	55
RKVY	41.38	25.04	24.12	96	25.04	25.04	23.63	94
SHC	0	0	0	-	0	0	0	-
SHM	0.77	0.77	0.69	90	0.77	0.77	0.69	90
NMSA-SMAF	0	0	0	-	0	0	0	-
NMSA-RAD	0	0	0	-	0	0	0	-
NMAET- SMAE (ATMA)	82.66	91.05	59.01	65	82.66	91.05	59.01	65
NMAET-SMSP	28.33	25.5	24.89	98	25.5	25.5	24.89	98
NeGP	0	0	0	-	0	0	0	-
SMFWM	0	0	0	-	0	0	0	-
Total CSS	340.39	255.61	215.73	84	312.22	255.61	215.24	84
Krishak Samridhi Yojna	0	0	0	-	0	0	0	-
Nalkup Khanan	0	0	0	-	0	0	0	-
Surajdhara Yojna	115.09	115.09	114.91	100	115.09	115.09	114.91	100
Annapurna Yojna	78.26	78.26	74.99	96	78.26	78.26	74.99	96
CM Fasal Rin Mafi Yojna	797.89	797.89	790.57	99	797.89	797.89	790.57	99
Bhavantar Flat Rate Schemes	59.45	59.45	59.45	100	59.45	59.45	59.45	100
Balram Talab Yojna	0	0	0	-	0	0	0	-
MAPWA	6.8	6.8	6.8	100	6.8	6.8	6.8	100
Indra Krishi Jyoti Yojna	0	0	0	-	0	0	0	-
Top-up subsidy on Irrigation Implements	0	0	0	-	0	0	0	-
National Biogas Yojna	3.05	2.85	0.72	25	30.5	3.05	0.72	24
State Micro-Irrigation Scheme	0	0	0	-	0	0	0	-
Training for Krishak Mitra	0	0	0	-	0	0	0	-
CM Khet Tirth Yojna	21.57	21.57	21.57	100	21.57	21.57	21.57	100
Total State Schemes	1082.11	1081.91	1069.01	99	1109.56	1082.11	1069.01	99

Financial Progress of CSS & State Schemes: 2019-20

(Rs. in lakh)

Schemes	Dhar				Dewas			
	Alloc.	Avail. fund (Rel.+ Reval.)	Exp.	Uti. (%)	Alloc.	Avail. fund (Rel.+ Reval.)	Exp.	Uti. (%)
PKVY	330	224.33	222.31	99	270	270	264.09	98
PMKSY	96.04	96.04	80.22	84	145.32	145.32	72.97	50
RKVY	212.4	58.79	38.58	66	56.34	56.34	32.69	58
SHC	23.52	23.52	20.46	87	50.3	50.3	44.59	89
SHM	2.82	2.82	0	0	0	0	0	-
NMSA-SMAF	-	-	-	-	0	0	0	-
NMSA-RAD	0	3.94	3.94	100	0	0	0	-
NMAET- SMAE (ATMA)	197.92	154.69	154.07	100	128	128	83.44	65
NMAET-SMSP	116.48	100.48	96.7	96	87.62	87.62	51.95	59
NeGP	0	0	0	-	0	0	0	-
SMFWM	0	0	0	-	0	0	0	-
Total CSS	979.18	664.61	616.28	93	737.58	737.58	549.73	75
Krishak Samridhi Yojna	46.64	46.64	46.54	100	0	0	0	-
Nalkup Khanan	12	12	9.84	82	10	10	0	0
Surajdhara Yojna	211.23	186.62	186.62	100	142.78	142.78	142.73	100
Annapurna Yojna	155.2	30.54	30.54	100	72.74	72.74	65.35	90
CM Fasal Rin Mafi Yojna	365.48	364.48	69.75	19	481	481	480.57	100
Bhavantar Flat Rate Schemes	93.81	93.81	93.81	100	405.91	405.91	404.94	100
Balram Talab Yojna	0	0	0	-	0	0	0	-
MAPWA	13.21	13.21	13.21	100	9.28	9.28	9.28	100
Indra Krishi Jyoti Yojna	0	0	0	-	0	0	0	-
Top-up subsidy on Irrigation Implements	0	0	0	-	0	0	0	-
National Biogas Yojna	8.3	8.3	5.82	70	6.75	6.75	0.23	3
State Micro-Irrigation Scheme	48.5	48.5	18.96	39	32.92	32.92	14.24	43
Training for Krishak Mitra	0	0	0	-	0	0	0	-
CM Khet Tirth Yojna	69.77	69.77	69.4	99	32.36	32.36	29.14	90
Total State Schemes	1024.14	873.87	544.49	62	1193.74	1193.74	1146.48	96

NFSM- Cluster Demonstrations: Yield Impact in Visited Districts (2018-19)

Season	Crop	Area (ha)		Yield (q/ha)		Yield gap		Varieties undertaken
		Allotted	Conducted	Demo.	Local	Actual	%	
District- Sehore								
NFSM- Pulses								
Kharif	Arhar	200	200	15	12	3	25	TJT-501
Rabi	Gram	2000	2000	19.50	12	7.50	63	RVG-202, 201
	Lentil	100	100	12	10	2	20	RVL-31
Summer	Urd	500	500	10	8	2	25	PU-31
NFSM- Oilseeds								
Kharif	Soybean	6200	200	17.50	12.25	5.25	43	JS-9560, RVS-2001-4
District- Shajapur								
NFSM-Pulses								
Rabi	Gram	600	600	25	15	10	66	JAKI-9218
	Lentil	600	600	12	08	02	25	RVL-31
District- Agar Malwa								
NFSM- Pulses								
Kharif	Mung	200	200	8.82	7.50	1.32	17.60	IPM02-03
Rabi	Gram	500	500	13.64	12.25	1.39	11.35	JG-14
NFSM- Oilseeds								
Kharif	Soybean	150	150	12.54	11.75	0.79	6.72	JS-9560
Rabi	Mustard	5	0	0	0	0	0	
District- Ujjain								
NFSM- Pulses								
Kharif	Urd	200	200	7.51	6.30	1.21	19.21	UH-01
	Mung	200	200	7.50	6.35	1.15	18.11	MH-421
	Arhar	400	400	8.35	7.20	1.15	15.97	TJT-501
Rabi	Gram	3000	3000	16.00	12.00	4.00	33.33	JG-14, RVG-202
NFSM-Oilseeds								
Kharif	Soybean	200	200	16.00	14.00	2.0	14.29	JS-9560
District- Dhar								
NFSM- Pulses								
Kharif	Arhar	15	14	14.95	13.15	1.80	13.68	TJT-501
Rabi	Gram	1000	950	12.75	11.95	0.80	6.6	JAKI-9218
NFSM-Oilseeds								
Kharif	Soybean	100	100	17.30	14.20	3.10	21	JS-9560
NFSM- Coarse Cereal								
Kharif	Maize	650	650	38.50	32.60	5.90	18.09	ADV-756
NFSM- Nutri- cereal								
Kharif	Jowar	100	30	12.50	10.20	2.30	22.54	CSV-23
District- Dewas								
NFSM- Pulses								
Kharif	Urd	600	600	8.20	7.40	0.80	10.18	UH-1, Azad, PU-31
	Arhar	100	100	10.40	8.20	2.20	26.82	TJT 501
Rabi	Gram	3500	3900	13.00	11.60	1.40	12.06	JG-14
Summer	Mung	500	500	9.60	7.20	2.40	33.33	IPM-02-03
NFSM- Oilseeds								
Kharif	Soybean	280	280	15.00	12.50	2.50	20	RVS 2001-4

NFSM- Cluster Demo.- Target & Achievements: 2019-20

Season	Crops	Area (ha)		Financial (Lakh)		Yield (q/ha)		Yield gap		Varieties Demonstrated
		Target	Ach.	Target	Fund Rel.	Demo	Local	Actual	%	
District- Sehore										
NFSM- Pulses										
Kharif	Arhar	200	200	18	27.85	15	12	3	25	TJT-501
	Urd	100	100	9.00		10	08	02	25	PU-31, IPU-2-43
	Mung	200	200	18		10	08	02	25	Shikha, Virat
Rabi	Gram	1400	1400	126	103.56	18.50	12	6.50	54	JG-14, RVG-201 & 202
Summer	Mung	500	500	45	42.19					Sikha, Virat, MH-421
NFSM- Oilseeds										
Kharif	Soybean	600	96	36	3.55	7.50	4.20	1.30	31	JS-9560
Intercropping										
Rabi	Wheat + Gram	100	100	9.00	8.21	45	32	13	40	HI-8713+RVG-202
District- Shajapur										
NFSM- Pulses										
Kharif	Mung	100	68	72	72	4.5	1.5	3	66	IPM-410-3(Shikha)
Rabi	Gram	700	700	63	63	-	-	-	-	RVG-201 & 202
	Lentil	800	800	72	72	-	-	-	-	RVL-31
NFSM- Oilseeds										
Kharif	Soybean	550	0	33	33	-	-	-	-	-
Rabi	R & M	50	50	2.50	2.50	-	-	-	-	NRCHB-101
District- Agar Malwa										
NFSM- Pulses										
Kharif	Urd	100	100	9.00	NR	2.26	2.00	0.26	13	Pratap Urad-1
	Mung	200	200	18.00		2.21	1.95	0.26	13	IPM-02-03
Rabi	Gram	500	500	45.00		-	-	-	-	RVG 202
NFSM- Oilseeds										
Kharif	Soybean	450	450	27.00	27.00	807	680	127	19	JS -2034
Rabi	R & M	75	0	0						
District- Ujjain										
NFSM- Pulses										
Kharif	Urd	100	100	9.00	NR	1.30	1.00	0.30	30	Pratap Urad-1, Mas ó 479
	Arhar	200	200	18.00		2.00	1.50	0.50	33	TJT-501
Rabi	Gram	900	900	81.00		-	-	-	-	RVG -202, 201 JG-14
NFSM- Oilseeds										
Kharif	Soybean	750	0	45.0	NR					
District-Dhar										
NFSM- Pulses										
Kharif	Mung	100	100	09	3.165	9.90	8.20	1.70	21	Shikha-410-3
	Arhar	100	45	09		15.00	13.70	1.30	10	PKV-Tara
Rabi	Gram	1000	1000	90	45.50	12.75	11.55	1.20	10	RVG -202
NFSM- Oilseeds										
Kharif	Soybean	800		48	Late target received					

NFSM- Cluster Demo.- Target & Achievements: 2019-20

Season	Crops	Area (ha)		Financial (Lakh)		Yield (q/ha)		Yield gap		Varieties Demonstrated
		Target	Ach.	Target	Fund Rel.	Demo	Local	Actual	%	
District- Dewas										
NFSM-Pulses										
Kharif	Urd	200	200	18.00	17	9.60	8.20	1.40	17	PU-1
	Arhar	100	100	9.00		12.80	9.60	3.20	33	Rajiv lochan
Rabi	Gram	900	900	81.00	63	14.00	12.00	2.00	14	RVG-202, RVG-201
Summer	Mung	500	500	45	30					IPM-02-03
Intercropping										
Kharif	Moong+ Maize	10	0	0.90	Surrender					
	Urd+ Bajra	20	0	1.80						
	Urd+ Maize	20	0	1.80						
Rabi	Gram+ Wheat	500	0	45.00						
Cropping system based	Moong +Wheat	100	0	15.00	7.50					
	Urd+ Wheat	50	50	7.50		8.20 40.00	7.40 35.00	0.80 5.00	10 14	PratapUrd-1 and HI8737
NFSM- Oilseeds										
Kharif	Soybean	700	700	42.00	36	7.80	6.50	1.30	20	RVS2001-4, JS-2029

Seed Minikit Status: Visited Districts 2018-19

Season	Crops	Varieties	Suppl y	Agency	Yield (q/ha)		Yield gap		Quality of Minikit
					Avg.	Local Check	Actual	%	
District- Sehore									
Pulses									
Kharif	Arhar	TJT-501	250	NSC	15	12	3	25	Good
Rabi	Gram	JG-14	600	NSC	17	14	3	21	Good
	Lentil	IPL-316	200	HIL	13	10	3	30	Good
Oilseeds									
Kharif	Soybean	JS-9560	6700	NSC	14.06	12.92	1.14	9	Good
		RVS-2001-4		NAFED & HIL		13.98	0.76	5	Good
Rabi	Mustard	RH-749	300	NSC	11.53	9.06	2.47	27	Good
	Linseed	JLS-67	150	NSC	10.73	9.30	1.43	15	Good
District- Shajapur									
Pulses									
Rabi	Gram	RVG-201	100	KRIBHCO	11.00	6.20	4.80	77	Good
Oilseeds									
Kharif	Soybean	RVS-2001-04, JS- 9560	5100	NAFED	10.00	9.00	1.00	11	Good
Rabi	Mustard	RCHB-101	3000	KRIBHCO	11.00	8.00	3.00	38	Good
District-Agar Malwa									
Pulses									
Kharif	Arhar	TJT-501	300	NAFED, NSC	10.50	10.10	0.40	4	Good
Rabi	Gram	JG-14	500	NAFED	14.25	13.50	0.75	6	Good
Oilseeds									
Kharif	Soybean	RVS 2001-04,JS- 9560	3445	NAFED	12.90	11.50	1.40	12	Good
Rabi	Mustard	NRCHB-101	3000	KRIBHCO	10.50	9.20	1.30	14	Good
District- Ujjain									
Pulses									
Kharif	Urd	Urd Pratap-1	200	NSC	13.00	10.50	2.50	24	Good
Rabi	Gram	RVG ó 201	100	KRIBHCO	16.10	12.25	3.85	31	Good
		JG- 14	1900	NAFED	16.15	12.35	3.80	31	Good
Oilseeds									
Kharif	Soybean	JS- 9560	4100	HIL, NSC	12.50	11.00	1.50	14	Good
		RVS-2001-04	3000	NAFED	12.90	11.50	1.40	12	Good
Rabi	Mustard	NRCHB-101	2500	KRIBHCO	12.00	10.00	2.00	20	Good
	Linseed	JL-41	400	NAFED	12.10	9.50	2.60	27	Good

Seed Minikit Status: Visited Districts 2018-19

Season	Crops	Varieties	Supply	Agency	Yield (q/ha)		Yield gap		Quality of Minikit
					Avg.	Local Check	Actual	%	
District- Dhar									
Pulses									
Kharif	Arhar	TJT-501	200	NSC/NAFED	16.10	14.95	1.15	8	Good
Rabi	Gram	JG-6	400	NSC	14.20	13.50	0.7	5	Good
		JG-14	1500	NAFED	13.90	13.10	0.8	6	Good
	Lentil	IPL-316	100	NSC	9.80	9.20	0.6	7	Good
Oilseeds									
Kharif	Soybean	RVS 2001-04	2500	NAFED	20.50	19.20	1.30	6	Best
		JS-9560	1372	NSC	18.50	17.40	1.10	6	Good
		JS-9560	2500	HIL	17.80	16.25	1.55	10	Good
Rabi	Linseed	JLS97	200	NSC	7.50	5.80	1.70	29	Good
District- Dewas									
Pulses									
Rabi	Gram	JG 14	1600	NAFED	13.10	11.95	1.15	9	Good
		RVG 201	100	KRIBHCO	13.20	11.95	1.25	10	Good
	Lentil	IPL 316	100	NAFED	12.22	11.15	1.07	9	Good
Oilseeds									
Kharif	Soybean	RVS2001-4	2100	NAFED	15.25	12.50	2.75	22	Good
		JS 9560	1500	HIL	15.00	12.50	1.50	12	Good
		JS 9560	3300	NSC	15.00	12.50	1.50	12	Good
Rabi	Mustard	NRCHB101	2500	KRIBHCO	12.62	9.50	3.12	33	Good
	Linseed	JL-4	400	NAFED	6.85	5.65	1.20	21	Good

Seed Minikit Status: Visited Districts 2019-20

Season	Crops	Varieties	Allocation	Supply	Agency
District- Sehore					
Pulses					
Kharif	Urd	PU-31	300	300	NSC
Summer	Mung	IPM-205-07	400	400	NSC
Oilseeds					
Kharif	Soybean	JS-2034	800	800	IFFDC
District- Sahajapur					
Pulses					
Kharif	Urd	Pratap Urd-1	100	100	NSC
Oilseeds					
Kharif	Soybean	RVS-2001-04	5500	5500	NAFED
Rabi	Mustard	RH0749	1000	1000	NSC
District-Agar Malwa					
Pulses					
Kharif	Urd	Pratap Urd-1	300	300	NSC
Oilseeds					
Kharif	Soybean	RVS-2001-04	5000	5000	NAFED
Rabi	Mustard	RH0749	2200	2200	NSC
District-Ujjain					
Pulses					
Kharif	Urd	Pratap Urd-1	200	200	NSC
Oilseeds					
Kharif	Soybean	RVS-2001-04	4500	4500	NAFED
		JS-2029	200	200	NAFED
Rabi	Mustard	RH-0749	600	600	NSC
District- Dhar					
Pulses					
Kharif	Urd	Pratap Urd-1	200	200	NSC
Summer	Mung	Virat	200	200	NSC
Oilseeds					
Kharif	Soybean	RVS-2001-4	2955	2955	NAFED
		JS-2029	935	935	NAFED
District- Dewas					
Pulses					
Kharif	Urd	Pratap Urd-1	300	300	NSC
Summer	Mung	IPM-205-7	300	300	NSC
Oilseeds					
Kharif	Soybean	RVS 2001-4	4000	4000	NAFED
		JS-2029	2000	2000	NAFED
Rabi	Mustard	RH-0749	300	300	NSC

Scheme-Wise Status of DBT in Visited Districts

Schemes	Sehore	Shajapur	Aagar-Malwa	Ujjain	Dhar	Dewas
Sub Mission on Agriculture Extension (ATMA)	DBT in cash and in Kind	-	-	-	DBT	DBT Cash and Kind
NFSM	DBT in cash and in Kind	DBT in machineries	DBT in machineries	DBT in machineries	DBT	DBT Cash and Kind
PMKSY	DBT in Cash through account	-	DBT	DBT	DBT	-
SMSP	DBT in Kind	-	-	DBT in Kind	DBT	DBT Cash and Kind
SM-RAD	-	-	-	DBT	-	DBT in Kind
RKVY	DBT in cash and in Kind	-	-	DBT	-	NA
PKVY	DBT in cash and in Kind	-	-	DBT in Kind	DBT	DBT Cash and Kind
SHC	DBT	-	-	DBT	-	DBT

Status of PMFBY in Visited Districts: 2018-19 & 2019-20

Farmer Insured	Sehore				Shajapur			
	2018-19		2019-20		2018-19		2019-20	
	Kharif	Rabi	Kharif	Rabi	Kharif	Rabi	Kharif	Rabi
Loanee	134296	208963	149972	-	101228	169067	113425	185614
Non-loanee	557	504	143	-	121	563	132	562
Total Farmers Insured	134853	209467	150115	-	101349	169630	113557	186176
Area Insured (Lakh ha)	3.26	3.83	3.04	-	2.45	2.16	2.19	-
Sum Insured (cr.)	1245.70	1478.74	869.04	-	-	-	-	-
Farmers Premium	24.91	22.18	17.38	-	-	-	-	-
State	113.58	633.99	65.51	-	-	-	-	-
GOI	113.58	633.99	65.51	-	-	-	-	-
Total Premium	252.07	148.98	148.41	-	-	-	-	-
Claim Paid	-	-	-	-	-	-	-	-
Farmers Benefitted (Lakh Nos.)	-	-	-	-	-	-	-	-
Agency(s) involved	Agriculture Insurance Co., Bhopal		IFFCO Tokio General Insurance Co., Bhopal	-	ICICI Lombard Company	-	Bajaj Allianz GIC Ltd.	
Crop covered	Soybean	Wheat and gram	Soybean	-	-	-	Soybean, Urd	Wheat gram, Lentil

Status of PMFBY in Visited Districts: 2018-19 & 2019-20

Farmer Insured	Agar Malwa				Ujjain			
	2018-19		2019-20		2018-19		2019-20	
	Kharif	Rabi	Kharif	Rabi	Kharif	Rabi	Kharif	Rabi
Loanee	53054	67206	60712	44293	53054	67206	60712	44293
Non-loanee	122	1782	14	102	122	1782	14	102
Total Farmers Insured	53176	68988	60726	44395	53176	68988	60726	44395
Area Insured (Lakh ha)	1.35	0.97	1.30	1.09	1.35	0.97	1.30	1.09
Sum Insured (cr.)	645.85	419.89	466.2	377	645.85	419.89	466.2	377
Farmers Premium	12.92	6.30	9.3	506.6	12.92	6.30	9.3	506.6
State	58.12	33.05	23.3	17.56	58.12	33.05	23.3	17.56
GOI	58.12	33.05	23.3	17.56	58.12	33.05	23.3	17.56
Total Premium	129.17	72.40	55.9	40.77	129.17	72.40	55.9	40.77
Claim Paid	Under Process Subsidy not yet received		Under process	-	Under Process Subsidy not yet received		-	-
Farmers Benefitted (Lakh Nos.)	-	-	-	-	-	-	-	-
Agency(s) involved	ICICI Lombard Insurance Pvt.		Reliance General Insurance Company Ltd.		ICICI Lombard Insurance Pvt.		Reliance General Insurance Company Ltd.	
Crop covered	Soybean	Gram ,Wheat	Soybean	Wheat, Gram	Soybean Urd	Gram, Wheat-IR	Soybean	Wheat, Gram
Insurance Cut Date			31 Jul-19	31Dec-19	-	-	31 Jul-19	31Dec-19

Status of PMFBY in Visited Districts: 2018-19 & 2019-20

Farmer Insured	Dhar				Dewas			
	2018-19		2019-20		2018-19		2019-20	
	Kharif	Rabi	Kharif	Rabi	Kharif	Rabi	Kharif	Rabi
Loanee	150018	136175	127387	115653	178593	238767	195224	270216
Non-loanee	1785	7478	497	98	5880	22888	499	800
Total Farmers Insured	151803	143653	127884	115751	184473	261655	195725	271016
Area Insured (Lakh ha)	2.66	2.42	2.03	1.73	4.19	3.50	3.71	3.60
Sum Insured (cr.)	876.11	793.91	491.84	47930.55	1370.07	1053.52	887.58	843.39
Farmers Premium	18.51	11.90	1231.13	718.95	27.43	19.80	17.77	12.65
State	35.24	45.86	1640.41	1598.00	136.37	59.91	75.18	41.83
GOI	35.24	45.86	1640.41	1598.00	136.37	59.91	75.18	41.83
Total Premium	53.75	123.59	2871.54	2316.96	272.74	119.81	168.13	96.31
Claim Paid	0	0	0	0	Under process	Under process	Under process	Under process
Farmers Benefitted (Lakh Nos.)	0	0	0	0	-	-	-	-
Agency (s) involved	Agriculture insurance company		IFFCO Tokio General Insurance Company Ltd.		ICICI Lombard		Bajja allianz GIC Ltd.	
Crop covered	Black Gram,cotton, Green Gram, Sorghum, Soybean	Gram, Wheat	Black Gram,cotton, Green Gram, Sorghum, Soybean	Gram, Wheat	Soybean, Maize	Wheat, gram	Soybean and Maize	Wheat and Gram
Insurance Cut date	1 April to 31July	1 October to 31 December	1 April to 31July	1 October to 31 December	31 st July 2018	31 st Dec., 2018	31 st July 2019	31 st Dec., 2019

NEW INITIATIVES TAKEN BY THE DISTRICTS (2019-20)

Schemes	New Initiatives Taken
District- Sehore	
NFSM	Summer Mung crop area increased last five years regularly due to NFSM- additional pulses programme
SMSP	Wheat crop new varieties like HI 8663 area increase in year 2019-20 because last year under SMSP seed distribution in seed village programme as farmer produce seed and extension is also done to other village farmers.
ATMA	Production of fish farming in balram talab with the help of fisheries and ATMA.
District- Sahajapur	
NFSM Pulse	Seed grading, Power seed treatment drum & power spray pump distribution
District- Agar Malwa	
NFSM Pulse & Oilseeds	Low lift pump, tractor mounted spray solar pump ,solar spray, hand rotary duster distributed
District- Ujjain	
NFSM Pulse & Oilseeds	Seed treating drum, low lift pump, tractor mounted spray solar pump ,solar spray distribution
District- Dewas	
NFSM	Raised Bed Sowing in Gram
NAMET	Raised Bed Sowing in Wheat

MADHYA PRADESH: FINANCIAL ASSISTANCE PROVIDED FOR AGRICULTURE MACHINERIES

S.N o	Name of Schemes	Name of farm/Irrigation implements & equipments	Categories of farmers based on area	Categories of Farmers		Subsidy Amount (Rs.)	Top up Subsidy (Rs.)	Total Amount (Rs.)
				General	SC,ST & women			
1	SMAM	Multicrop Thresher	Small (1-2 ha)	General	SC,ST & women	40000	-	40000
			Marginal (< 1ha)				-	
			Other (>2 ha)	General		30000	-	30000
2		Raised bed Planter/ Ridge furrow planter	Small (1-2 ha)	General	SC,ST & women	40000	10000	50000
			Marginal (< 1ha)					
			Other (>2 ha)	General		32000		32000
3		Laser Land Leveller	Small (1-2 ha)	General	SC,ST & women	200000	-	200000
			Marginal (< 1ha)					
			Other (>2 ha)	General		160000	-	160000
4		Tractor (08-20 PTO HP , 2WD)	Small (1-2 ha)	General	SC,ST & women	200000	-	200000
			Marginal (< 1ha)					
			Other (>2 ha)	General		160000		160000
5		Tractor (08-20 PTO HP , 4WD)	Small (1-2 ha)	General	SC,ST & women	225000	-	225000
			Marginal (< 1ha)					
			Other (>2 ha)	General		180000	-	180000
6		Tractor (20-40 PTO HP , 2WD)	Small (1-2 ha)	General	SC,ST & women	250000	-	250000
			Marginal (< 1ha)					
			Other (>2 ha)	General		200000	-	200000
7		Seed drill (9 tines and above)	Small (1-2 ha)	General	SC,ST & women	20000	-	20000
			Marginal (< 1ha)					
			Other (>2 ha)	General		16000	-	16000
8		Seed cum fertilizer drill (11 tines)	Small (1-2 ha)	General	SC,ST & women	24100	-	24100
			Marginal (< 1ha)					
			Other (>2 ha)	General		19300	-	19300
9		Combined Harvester (Self propelled upto 14ft cutterbar)	Small (1-2 ha)	General	SC,ST & women	856000	-	856000
			Marginal (< 1ha)					
			Other (>2 ha)	General		685000	-	685000
10		Combined Harvester (Track, 6-8ft cutterbar)	Small (1-2 ha)	General	SC,ST & women	1100000	-	1100000
			Marginal (< 1ha)					
			Other (>2 ha)	General		880000	-	880000
11		Hydraulic Reversible Plough (2 bottom)	Small (1-2 ha)	General	SC,ST & women	70000	-	70000
			Marginal (< 1ha)					
			Other (>2 ha)	General		56000	-	56000
12		Hydraulic Reversible Plough (3 bottom)	Small (1-2 ha)	General	SC,ST & women	89500	-	89500
			Marginal (< 1ha)					
			Other (>2 ha)	General		71600	-	71600

Source: Dte. of Agril. Engg., Govt. of MP, Bhopal

MADHYA PRADESH: FINANCIAL ASSISTANCE PROVIDED FOR AGRICULTURE MACHINERIES

S.No	Name of Schemes	Name of farm/Irrigation implements & equipments	Categories of farmers based on area	Categories of Farmers		Subsidy Amount (Rs.)	Top up Subsidy (Rs.)	Total Amount (Rs.)
				General	SC,ST & women			
13	SMAM	Mulcher (6 ft)	Small (1-2 ha)	General	SC,ST & women	72800	-	72800
			Marginal (< 1ha)					
			Other (>2 ha)	General		58200	-	58200
14		Raised bed planter with inclined plate planter and shaper (5-7 tines)	Small (1-2 ha)	General	SC,ST & women	90000	20000	110000
			Marginal (< 1ha)					
			Other (>2 ha)	General		70000		70000
15		Reaper cum binder(Self propelled, 3 wheel)	Small (1-2 ha)	General	SC,ST & women	175000	-	175000
			Marginal (< 1ha)					
			Other (>2 ha)	General		140000		-
16		Reaper cum binder(Self propelled, 4 wheel)	Small (1-2 ha)	General	SC,ST & women	250000	-	250000
			Marginal (< 1ha)					
			Other (>2 ha)	General		200000		-
17		Tractor operated Reaper cum binder	Small (1-2 ha)	General	SC,ST & women	150000	-	150000
			Marginal (< 1ha)					
			Other (>2 ha)	General		120000		-
18		Straw Reaper (more than 35 bhp)	Small (1-2 ha)	General	SC,ST & women	130000	-	130000
			Marginal (< 1ha)					
			Other (>2 ha)	General		104000		-
19		Power tiller (more than 8 bhp)	Small (1-2 ha)	General	SC,ST & women	85000	30000	115000
			Marginal (< 1ha)					
			Other (>2 ha)	General		70000		-
20		Self propelled crop reaper	Small (1-2 ha)	General	SC,ST & women	75000	-	75000
			Marginal (< 1ha)					
			Other (>2 ha)	General		60000		-
21		Winnowing Fan (Tractor Operated)	Small (1-2 ha)	General	SC,ST & women	30000	-	30000
			Marginal (< 1ha)					
			Other (>2 ha)	General		25000		-
22		Power harrow	Small (1-2 ha)	General	SC,ST & women	100000	-	100000
			Marginal (< 1ha)					
			Other (>2 ha)	General		80000		-

Source: Dte. of Agril. Engg., Govt. of MP, Bhopal

MP: Pulses -Prevalent Varieties/ Recommended Varieties (ICAR/SAUS)

Crops	Prevalent Varieties	Recommended Varieties
Pigeonpea	Asha, JA-4, UPAS-120, TJT-501, ICPL 88039, ICPL 87119, ICPL 85063, ICPL 87, JKM 7, ICPH 2671, Laxmi, ICPL 151, Pragati, Jagriti, Pusa 33, Prabhat	TJT-501Asha, No-148, JKM-7, JA- 4, ICPL-85063 (Laxmi), JKM 189 JKM 7, Laxmi, Pragati, Jagriti, ICPL 87119, ICPL 88039, No.-148, UPAS 120, ICPL 151, BSMR 175, BSMR 736, CORG-7, LRG-41, RVICPH 2671, RVA 28, Pusa -991
Urdbean	T-9, Uttra, IPU-94-1, T-44, PDU-4, JU-2, LBG 20, PDU 1, PU 35, Desi urd, Pant U-35, Shekhar 2, Pant U-35, PDM-139, JU 3, Uttra	KU-96-3 PU 30, 35 & 19, MASH 338, LBG 684, LBG 623, JU-3, LAM 623, LBG 685, TPU 4, KU-91-2 (Azad Urd 1), TPU 2, PDU-1, JU-3, JU-86, LBG 23, RBU-38, TJM-3 PDM-139, JU 3, Uttra, JU-2, JU-88, VB 3, MASH 338,
Moongbean	HUM 1,2, TJM-7, PDM 139, Pusa Vishal, K-851, TMB-37, SML-668, K-58, PU 35, PDU 1, Samrat, HUM-16, HUM 1, HUM-12, TARM 1, TJM-3, Pusa Vaisakhi, HUM 16, JM 721, PDM-11,	HUM 1PDM 54, PDM-139, Pusa Vishal, JM 721, HUM 6, LGG 460, JKM-6, Pusa 9531BM 4, TARM 1, HUM 6, K-851, JKM-189, HU- 1, Meha, Pusa-9531, Samrat, JU1, JU-2, Pant U-31, TJM 3, Pusa 105, Pant Mung-3, TM-99, TMB 37, JM-1, J-45
Chickpea	JG-16, JAKI-9218, Vishal, JG 11, JG 130, JG 16, JG 315, JG 63, Dollar chana, JG 322, JG 218, JG 74, ICCV-37, JG 14, JG 226, KAK 2, JGK 3, Ujjain-21, JG-135	JAKI-9218 JGK-3, JGK-2 JG-322 Vishal JG 16, JG 130, JG 14, 322JG 12, JG 11, JG-63, JG-14 RVG 202, RVG 203, JG-74, ICCV 2, KAK-2 , JGK 1, JG-6, Vijay JG-11,
Lentil	JL-1, L 4046,JL 3, Malika, Shekhar M 3, , JL 2, L 4076, Kala Masara, JLS-1,2, K-75, Desi variety, L-4076, IPL 81, PL 8, DPL 62,	IPL 81, JL 3RVL 31, L 4076, JL 1, JL-3JL -1, PL -8, JLS 1, Lens 4076, L-4076, HUL 57,PL-4, K-75, DPL-62, DPL-15, RVL-31, PL-639, JM-15, IPL 406, ML-337, J-45, JMS-1, Pusa-5, IVL-31,JLS-3,
Peas	Arkel, JM-3, Azad 1,2 & 3, Batri, Local Batri, Rachna, JM-1, Vikas, KPMR-400, Ambika, Hema, Malviya Matar- 15, Desi Batri, Adarsh, , Prakash, Adarsh,Pea-1, JM-6,	KPMR 400, Prakash Arkel, JP 885, M-1, JM-2, VL Matar-42, Rachna, Azad-1, JM-3, Azad Pea 1 & 2, Ambika (IM 9102), Vikas (IPFD 99-13), Matar-42, Adarsh (IPFD 25), KPMR 522, Pea-1, Jawahar Matar 1, Indra (KPMR-400)

MP: WHEAT (BREAD & DURUM)- RECOMMENDED VARIETIES

Cultivation condition	Bread Wheat varieties	Durum Wheat varieties
Rainfed/Restricted Irrigation (20 th October -5 November)	RI 617 (Sujata) (1982), HW 2004 (1997), HI 1500 (Amrita) (2003), JW 3020 (2005), HI 1531 (Harshita) (2006), MP 3211 (2010), MP 3288 (2011), HD 2987 (Pusa Bahar) (2011), DBW 110 (2015), HI 1605 (Pusa Ujala) (2017)	HD 4672 (Malav Ratna) (2000), HI 8627 (Malav Kirti) (2007), HI 8777 (2018)
Timely Sown Irrigated (10 November -25 November)	Sonora 64 (1967), Lerma Rojo (1969), WH 147 (1978), GW 273 (1998), GW 322 (2002), MP 1142 (2007), GW 366 (2007), HI 1544 (Purna) (2008), JW 1201 (2011), JW 3382 (2016)	HI 8381 ((Malavshri) (1995), HI 8663 (Poshan) (2008), MPO 1215 (2010), HI 8713 (Pusa Mangal) (2013), HD 4728 (2015), HI 8737 (Pusa Anmol) (2015), (HI 8759 (Pusa Tejas) (2017)
Late Sown, Irrigated (December-January)	GW 173 (1994), DL 788-2 (Vidisha) (1997), MP 4010 (2003), HD 2864 (2005), HD 2932 (Pusa 111) (2008), JW 1203 (2009), JW 1202 (2010), MP 3336 (2013), RAJ 4238 (2016)	-

COMPARISON OF BREAD AND DURUM WHEAT VARIETIES IN QUALITY

Variety	Protein (%)	Yellow pigment (Luteins)	Zn content (%)	Fe content (%)
Bread wheat (Aestivum)				
Lok 1	10.6	2.3	27.2	35.5
HI 1544 (Purna)	11.5	2.7	30.2	29.9
Durum wheat				
HI 8627 (Malav Kirti)	11.0	5.7	42.1	49.6
HI 8498 (Malav Shakti)	12.5	5.0	40.0	40.0
HI 8663 (Poshan)	11.7	6.5	36.8	47.0
HI 8713 (Pusa Mangal)	11.7	7.2	33.6	35.5
HI 8737 (Pusa Anmol)	12.5	5.38	40.0	38.5
HI 8759 (Pusa Tejas)	11.9	5.70	42.8	42.1

Recommended / Prevalent varieties of Madhya Pradesh

Crop	Prevalent varieties	Recommended varieties
Rice	>10 years old: Mahamaya, Karnti, Pusa Basmati, PS-3, IR-64, Poornima,	Within 10 years: Dhanteshwari, JR-201, JR -503, MTU-1010, WGL 32100, PS-5, PS-4,
Coarse Cereals		
Kodo	JK-21, JK-48, JK-155, K-106 & JK-76	JK-13, JK-48, JK-65, JK-106 and JK-439 , JK-137, DPS-91, JK-98
Kutki	JK-8, JK-36, CO.2, PRC-3.	Kolab, Sabara and Jawahar Kutki-36.
Maize	Hybrid- Vivek 4 & 17, PEHM 2, Parkash, Pro 368, X 3342, HM 10, NK 21, Trishulata Pro 311, Bio 9681, Seed Tech 2324, Composite- Jawahar Makka 8, Jawahar composite 12, Amar, Azad Kamal, Pant Sankul Makk 3, Chandramani, Pratap Makka 3, Pratap Makka 5	
	>10 years old: Pusa Comp-1, Pusa Comp-2, Chandan-2, Chandan-3, Amar HM-4, HM-10, Decon 101, Decon 105, DHM-107, DHM-109, Decon-103, VL-42, VL 78, Vivek Hy. -4, HIM 129, PEHM-2, JM-8, JM-12, Azad kamal, Pratap makka -5, Pant -3, Chanramani -5	Within 10 years: HQPM-1, HQPM-5, JM-216, PMH-5
Sorghum	Hybrids: CSH-5, CSH-16, CSH-9 & CSH-14. Varieties: JK-22, JK-741, JK-938, JK-1041, SPV-15, CSV-15 & SPV-1022.	Hybrids: CSH-13, CSH-16, ICI-501, CSH-17, CSH-18, CSH-21, CSH-22 SS, CSH-23. Varieties: CSV-15, Jawahar Jowar-938, Jawahar Jowar-1041, CSV-17 & CSV-20
Pearlmillet	JBV-3 & JBV-4.	Hybrids: RHB-58, Pusa-444, MLHB-285, JKBH-26, GBH-316, 7886, Pusa-605, Nandi- 8, Nandi-32, Pusa-415, 7688, Proagro-9443, RHB-121, Proagro-9445, GHB-558, HHB-146, GHB-557, Nandi-62, HHB-197, GHB-732, Nandi-52, GHB-744, PHB-2168 & RHB-173.
Oilseeds		
Soybean	>10 years old: JS 93-05, NRC-37, Ahiliya -1, 2, & 3, JS 90-41, JS 335, JS 80-21, JS 97-52,	Within 10 years: JS 97-52, JS 20-29, JS20-34, RVS 2001-4, JS-95-60, JS 20-69,
Sesame	TKG-306, JT 11 (PKDS-11), JT 12 (PKDS-12), JT 14 (PKDS-8), TKG-308	TKG-306, JT 11 (PKDS-11), JT 12 (PKDS-12), JT 14 (PKDS-8), TKG-308
Niger	JNC-6, JNC-9, JNC-1, JNS -28, JNS-30	JNC-6, JNC-9, JNC-1, JNS -28, JNS-30
Groundnut	JGN -3,Jawahar Groundnut 23 (JGN 23), JL 501, TJ 37-A, GG 20	JGN -3,Jawahar Groundnut 23 (JGN 23), JL 501, TJ 37-A, GG 20
Linseed	JLS-67, JLS-73 JLS-41 , PKDL 41, JL-66,	

Mustard	Pusa Bold, Terri Uttam, Pusa Jaikisan, Pusa Manik, Pusa Tarak, Pusa Agrani JM-2, JM-3, JM 4, JMM 99, NRC HB 101, NRCHB506 (Hybrid), Pusa Mustard 27 (EJ 17), LET-43 (PM30), RVM 1	
Safflower	JSF-97, JSF-99,	RVS 113
Commercial Crops		
Cotton	JKHy-3, JK-5(23), JK-35	Raj Vijay Kapas 67 (RVK 67), RVK 11, Suchitra (Central Cotton CCH 12-2), Phule Suman, Gujarat Junagarh Cotton-102, G.Cot.34, Gujarat Cotton-38 (G.Cot-38) (GJHV-497),
Sugarcane	COC-671, CO-6507, CO-7318, CO-6304, CoJN 86-141, CO-86032, CoJ 64, CoJ 527 Co 0238, Co 96032, Co VSI 3102, Co VSI 10005, Co VSI 8005, Co VSI 10001, Co M 0265, Co 86032, Co 9805, Co 94072, CoJ 85, Co 7318, Co 62175, Co 419	
