

## **Report of visit to Chhattisgarh state by Dr. M. Dutta, National Consultant (Oilseeds) from 29<sup>th</sup> November to 2<sup>nd</sup> December, 2016**

A visit was made to Chhattisgarh state w.e.f. 29<sup>th</sup> November to 2<sup>nd</sup> December, 2016 by Dr. M. Dutta, National Consultant (Oilseeds) to monitor the programme implementation of NMOOP, NFSM and BGREI schemes and to assess the status of fund utilization. Three districts namely Raipur, Balodabazar and Bemetara were visited and meetings held with senior officials of State Department of Agriculture, State Seed Corporation, SAU, KVK and farmers.

### **Meeting with SDA, SAU and SSC (29.11.2016)**

A brief meeting was held with senior officials of the State Department of Agriculture, State Agriculture University (IGKV) and State Seed Corporation on 29 November, 2019 at the Directorate of Agriculture, Raipur. The meeting was attended by Director, Agriculture, Chhattisgarh; Director, Research, IGKV; Director, Extension, IGKV; Addl. Director, Agriculture; Jt. Director, Agriculture; MD, State Seed Corporation; Mission Directors, NFSM, NMOOP and BGREI and other officials of Agriculture Department and IGKV. In the meeting following issues were raised:

- In case of DBT where the farmer's share is to be contributed first to avail DBT, it is difficult to convince the small and marginal farmers who have poor capacity to contribute his own share.
- It was requested that flexibility may be allowed to include more than 15 years old pulses and oilseeds varieties in the seed production and distribution programmes due to paucity of seeds of new varieties.
- It was by SSC that it faced the problem of very low (50%) germination with breeder seed of soybean variety provided by IGKV, Raipur.

### **Fund Utilization:**

The UCs along with progress reports in respect of NMOOP, NFSM and BGREI were collected. The physical and financial progress along-with provisional fund utilization certificate for the year 2016-17 under various schemes have been handed over to concerned divisions for processing as detailed below:

(Rs. in lakhs)

<b>Mission</b>	<b>Unspent balance 2015-16</b>	<b>GOI share</b>	<b>Fund utilization</b>	<b>Utilization percentage</b>
MM-I	21.777	168.100	189.777	75.54 (upto 29.11.2016)
MM-II (2015-16)	NA	232.00	54.165	14.01 (upto 18.11.2016)
NFSM- Rice	NA	2202.87	1811.70	82.24 (upto 15.11.2016)
NFSM-Pulses	NA	3022.55	1575.91	52.14 (upto 15.11.2016)
NFSM-Coarse cereal	NA	130.00	85.00	65.38(upto 15.11.2016)
BGREI	541.98	8275.00	5511.80	66.61(upto 25.10.2016)

With regard to fund utilization under Targeting Rice Fallow Areas (TRFA) in Eastern States, copies of the letters to Joint Secretary (RKVY) and Advisor (Trade), DAC&FW were collected informing that the SLSC meeting has been scheduled on 15<sup>th</sup> Dec., 2016 under the Chairmanship of Chief Secretary, Govt. of Chhattisgarh to accord approval on the AAP. The copies of the same were handed over to the respective Divisions. In addition, the following letters of approval were also collected and handed over to the concerned Divisions:

- i). **TRFA** - Annual Action Plan was collected and handed over to ADC (OS) for processing.
- ii). **Additional Area Coverage under NFSM-Pulses:** District-wise physical and financial targets for various pulses were collected and handed over to ADC (Crops).
- iii). **Reclamation of Problem Soils** – a sub scheme of RKVY
- iv). **Monitoring of Arsenic Build up in Soil**

#### Crop Coverage and Targets:

(A: 000 ha; P: 000 tonne; Y: kg/ha)

Sr. No.	Crops	Achievement during 2015-16			Target for 2016-17		
		A	P	Y	A	P	Y
1	Wheat	154.78	152.92	988	178.00	258.10	1450
2	Maize	74.08	125.72	1697	84.46	165.96	1965
3	Rice (Summer)	149.07	361.64	2426	135.19	528.59	3910
4	Coarse cereal	5.55	0.00	0	9.43	7.83	830
5	Gram	351.31	299.32	852	400.00	460.00	1150
6	Field pea	43.77	13.74	314	55.00	31.90	580
7	Lentil	24.48	6.22	254	30.00	14.70	490
8	Green gram	26.56	11.45	431	30.00	12.30	410
9	Black gram	11.18	3.23	289	15.00	5.85	390
10	Horse gram	24.54	8.12	331	30.00	13.50	450
11	Lathyrus	305.23	138.57	454	350.00	234.50	670
12	Mustard	113.10	48.63	430	164.55	99.55	605
13	Linseed	49.05	18.64	380	70.00	34.30	490
14	Safflower	4.76	1.11	233	8.30	2.53	305
15	Sunflower	7.39	3.33	450	10.21	6.69	655
16	Sesame	2.71	0.59	219	3.90	1.76	450
17	Groundnut	24.89	29.54	1187	30.00	46.80	1560
	<b>Total Rabi*</b>	<b>1557.99</b>	<b>1830.00</b>	<b>803</b>	<b>1251.29</b>	<b>2039.59</b>	<b>1115</b>

\*Does not include other pulses, other oilseeds, sugarcane etc.

The proposed APY targets for rabi 2016-17 although is significantly higher than those for rabi 2015-16. These are not much higher as compared to the APY achieved during 2014-15.

**Seed Situation during Rabi-2016-17:**

(in Qtl.)

Sr. No.	Crop	Supply during 2015-16	Demand	Availability	Storage	Distribution
1	Wheat	69883.00	62400.00	63521.30	40296.20	22673.80
2	Maize	5863.00	14580.00	4992.78	4992.78	4877.78
3	Rice (summer)	3884.00	9150.00	9150.00	0.00	0.00
4	Gram	49589.91	41490.00	45064.30	29744.31	21601.71
5.	Field pea	5280.95	2850.00	4349.00	2916.49	2828.49
6	Lentil	0.00	940.00	820.20	385.46	230.26
7	Green gram	356.16	805.00	805.00	256.30	246.30
8	Black gram	200.00	650.00	696.00	225.08	225.08
9	Lathyrus	364.00	1100.00	72.00	72.00	70.80
10	Red gram	3.00	20.00	20.00	0.00	0.00
11	Horse gram	0.00	50.00	50.00	0.00	0.00
12	Mustard	337.69	1515.00	2347.00	1133.26	1104.49
13	Rapeseed	341.78	375.00	323.00	335.39	332.39
14	Groundnut	526.00	1170.00	1239.90	886.90	886.90
15	Linseed	56.08	325.00	62.24	62.66	55.66
16	Safflower	179.00	500.00	30.50	41.04	30.04
17	Sunflower	12.00	50.00	50.00	0.00	0.00
18	Sesame	0.00	30.00	0.06	0.25	0.19
	<b>Total</b>	<b>136876.57</b>	<b>138000.00</b>	<b>133593.28</b>	<b>81348.12</b>	<b>55163.89</b>

**Agency-wise Availability of Seed during Rabi-2016-17:**

Crop	Require-ment	Available sources						Total	Remarks
		DOA	SSC	SAU	NSC	Others	Pvt.		
Summer rice	9150.0	0.0	10000.0	0.0	0.0	0.0	0.0	10000.0	+850
Wheat	64400.0	0.0	33731.0	1306.0	20730.0	5725.0	3215.0	64707.0	+307
Maize	14580.0	0.0	0.0	0.0	0.0	0.0	14630.0	14630.0	+50
Gram	41490.0	0.0	10755.0	342.0	22800.0	3050.0	4550.0	41497.0	+7
Lentil	940.0	0.0	370.0	0.0	575.0	0.0	0.0	945.0	+5
Field pea	2850.0	0.0	496.0	74.0	1380.0	253.0	650.0	2853.0	+3
Green gram	805.0	0.0	140.0	0.0	390.0	50.0	230.0	810.0	+5
Black gram	650.0	0.0	100.0	0.0	250.0	260.0	50.0	660.0	+10
Lathyrus	1100.0	0.0	72.0	10.0	550.0	268.0	200.0	1100.0	
Horse gram	50.0	0.0	0.0	0.0	0.0	40.0	10.0	50.0	
Red gram	20.0	0.0	30.0	0.0	0.0	0.0	0.0	30.0	+10
Mustard	1515.0	0.0	356.0	65.0	590.0	370.0	140.0	1521.0	+6
Rapeseed	375.0	0.0	0.0	0.0	280.0	0.0	100.0	380.0	+5
Groundnut	1170.0	0.0	200.0	0.0	800.0	175.0	0.0	1175.0	+5
Linseed	325.0	0.0	145.0	50.0	0.0	130.0	0.0	325.0	
Safflower	500.0	0.0	148.0	107.0	0.0	50.0	200.0	505.0	+5
Sunflower	50.0	0.0	0.0	0.0	0.0	0.0	55.0	55.0	+5
Sesame	30.0	0.0	35.0	0.0	0.0	0.0	0.0	35.0	+5
<b>Total</b>	<b>140000.0</b>	<b>0.0</b>	<b>56578.0</b>	<b>1954.0</b>	<b>48345.0</b>	<b>10371.0</b>	<b>24030.0</b>	<b>141278.0</b>	<b>+1278</b>

**Minikits Distribution (upto 30.9.2016):**

Sr. No.	Crop	Distribution
<b>NFSM</b>		
1	Gram	20000
2	Black gram	1000+6000
3	Green gram	1000
	<b>Total</b>	<b>21000</b>
<b>NMOOP</b>		
1	Mustard	41000
2	Safflower	500
3	Groundnut	2500
	<b>Total</b>	<b>44000</b>
<b>RKVY</b>		
1	Maize	88809
2	Red gram	39432
3	Black gram	15000
4	Green gram	8000
	<b>Total</b>	<b>151241</b>

**Additional Area Coverage Programme under NFSM-Pulses:**

The summary of additional area coverage programme under NFSM-pulses during Rabi-2016-17 for cluster demonstration of 100 ha each has been planned with financial allocation in 16 districts of the state as given below:

Phy= Number (100 ha each), Fin= Rs. in lakh

Crop	Targets			
	Cluster demonstration		Seed distribution	
	Physical	Financial	Physical	Financial
Gram	14200	1065.0	1850	46.25
Green gram	2200	165.0	275	6.785
Black gram	1900	142.5	370	9.25
Lathyrus	200	15.0	200	5.00
Lentil	300	22.5	105	2.625
Field pea	1200	90.0	1200	30.0
<b>Total</b>	<b>20000</b>	<b>1500.0</b>	<b>2000</b>	<b>100.0</b>

**District Raipur (29.11.2016)**

Field visit was organized to nearby farmers' fields in district Raipur in the afternoon of 29.11.2016. In village **Singerbhata** of block Abhanpur farmer Shri Harish Chandrakar has sown Asha variety of pigeon pea under NFSM during first week of June in 18.0 acre area with ridge-

furrow system. The crop was sown on both sides of the ridges, which were 1.5 to 2.0 ft wide. The crop growth was very good and about 20.0 to 22.0 qtl. per ha yield was expected.

In village **Dhusera** in the same block a meeting was organized with the farmers. It was informed by the farmer Shri Gajanan Bains that he has sown rice in 12 acres area and Shri Bisa Nirmalkar has grown rice in 8 acre area. The farmers expected 55 to 60 qtl. per ha yield and a profit of Rs. 10000 to 15000/ha. The farmers informed that the ruling market price of rice was about Rs. 300/- less per qtl. than the MSP (Rs. 1510 & 1470/ctl.). Another problem faced by the farmers was the procurement limit of 15 qtl. per ha by the State Cooperative leading to distress sale in the open market.

### **IGKV-KVK, Bhatapara, District Balodabazar (30.11.2016)**

The cluster demonstration on pigeon pea organized by the KVK, Bhatapara, IGKV conducted in 1.0 ha area by farmer Shri Parshuram in village **Marrakona**, block Shimga was visited. The crop was grown in the rabi season (DOS: 20.09.2016) with variety Laxmi under direct seeded condition due to high rainfall during September end. The variety was at flowering stage and may mature within 30 to 45 days with an estimated yield of 10.0 qtl/ha. The special feature of rabi pigeon pea was that the crop could be raised with significant reduction of maturity duration by about two months. As informed all the components including seed, DAP, rhizobium and bio-control agents were supplied by the KVK.

The cluster demonstration field of another farmer Shri Ganpat Nishad who has sown the pigeon pea Laxmi variety in 2.0 ha area on 25.09.2016 was visited next. The farmer has provided two irrigations to the crop as a result the expected yield was about 15 qtl./ha. The crops in both the farmers' fields were free of any disease.

### **Seed Hubs on Pulses:**

Next visit was made to the seed hubs created by IGKV at Dau Kalyan Singh College of Agriculture, Bhatapara. The College has undertaken seed production of pigeon pea in kharif season and gram and lentil in rabi 2016-17 in 4 different farms namely Bhatapara, Mudhipar, Borsi and Khapradihi, which were all visited. At Mudhipar farm Asha variety of pigeon pea was grown in about 7.0 ha area with an estimated yield of 20 qtl./ha. At Borsi farm, pigeon pea crop was taken in 8.0 ha area while at Khapradihi chick pea variety of JG-14 was taken in 8.0 ha area, pigeon pea varieties Asha in 6.0 ha area and Rajiv Lochan in 2.0 ha area, field pea in 4.0 ha area and lentil in 2.0 ha area. These crops were grown after the soybean variety JS 97-52. The details of seed hubs conducted by the university are given as under:

Seed hubs	Crop	Target (qtl.)	Area (ha)	Variety	No. of farmers	Remarks
Bhatapara	Pigeon pea	100	12 in rabi	Asha	5	
	Chick pea	200	25.0	JG-14	13	
	Field pea	100	15.0	Paras & Adarash	10	Sowing in progress.
	Lentil	100	-	-	-	Did not get seed.
Surguja	Field pea	250	40	Paras	100	Sowing in progress.
	Chick pea	150	40	JAKI 9218	100	
	Lentil	150	30	KLS 218 & PL 7	75	
Rajnandgaon	Field pea	250	10	Paras	9	Sowing in progress.
	Chick pea	150	70	JAKI 9218 & JG 63	73	
	Lentil	150	-	-	-	Did not get seed.
Kawardha	Chick pea	0	44	JAKI 9218	36	90% sowing is completed.
	Field pea	200	-	-	-	Did not get seed.
	Lentil	100				
	Moong	100				
	Lathyrus	150				
	Pigeon pea	50				
Delay in creation of seed hub. Would be taken up next year.						

Dr. R.B. Tiwari, Dean of the College and Dr. K.L. Nandeha, Prof. Agronomy, IGKV and scientists of KVK accompanied during the visit. One of the major concerns raised by the university was about the utilization of seed produced at farmers' fields under the revolving fund of seed hub as the same may face difficulties in registration as seed.

#### **District Bemetara (01.12.2016):**

A visit was made to village **Mudhipar Kela** in block Berla where a meeting was organized with the farmers. A cluster of 66 farmers were involved under BGREI to grow rice variety COH 3 whose performance was very good. Chick pea was the next crop (variety JAKI 9281) to be sown after rice, which was already harvested. However, the seed distribution of gram was not yet complete, thus delaying the sowing of the crop as the soil moisture was fast depleting. The farmers raised some issues regarding the slow procurement of rice by the Marketing Department.

Next visit was made to village **Hatpan** in the same block where the farmer Shri Ishwar Sahu has been provided with a Rotavator under NFSM at a total cost of Rs. 1.07 lakh of which Rs. 35,000/- was provided as subsidy. The demonstrated rice variety Rajeshwari was expected to yield about 52.0 qtl/ha and matured in 125 days. Rice will be followed by field pea variety Paras,

which has just been sown. The farmer was provided subsidy under NFSM to construct a Seed Godown (40x24 ft) @ total cost of Rs. 4.5 lakh of which Rs. 1.5 lakh was subsidized. The district had some areas under soybean (40,000 ha), most of which was intercropped with arhar giving a profit of Rs. 25,000/ha.

Next visit was made to village **Patharpunji** in the same block where a progressive farmer Shri Krishna Kumar Lather has taken up seed production of pigeon pea variety Rajiv Lochan. The crop was grown under wider spacing (5x2 or 3 ft) with very low seed rate of only 1.700 kg/ha. The crop was in excellent condition and was expected to yield about 25-30 qtl/ha. The pigeon pea field was flanked by cages of bee hives to facilitate pollination and also harvest honey from them. The farmer also grows vegetables with drip irrigation and poly mulch technology which is also profitable.

The next visit was made to village **Rampura** in block Saja where 79 farmers have grown pigeon pea variety Rajiv Lochan in about 100 ha area. Farmer Shri Parmanand Sahu has grown pigeon pea under ridge-furrow system with an expected yield of 15-20 qtl/ha. In some areas soybean variety JS 335 was also grown, which has already been harvested. However, JS 335 is a very old variety and needs to be replaced with new varieties.

A meeting was held at village **Bargara** in the same block where about 25 farmers were present. The farmers raised concern about the difficulty in getting the benefit under PMKBY due to delay in assessment and submission of monitoring report. Most of the farmers were satisfied with the support received from the State Department of Agriculture (SDA), however, they requested that more frequent visits may be made by the extension functionaries during cropping season. The visits were accompanied by Additional Director of Agriculture, Joint Director Agriculture, Managing Director, State Seed Corporation and respective District Agriculture Officials.

The following major suggestions/action points emerged during the visit:

- More proactive approach is needed for utilization of unspent balance for availing second installment funds under CSD.

**Action: SDA**

- Under the seed hub on pulses programme, seed of lentil and field pea varieties was not made available to the SAU/KVK, while seed hub at Kawardha could not be started yet. This may be taken up immediately together with adoption of recently released varieties of pulses and oilseeds.

**Action: IIPR/SAU/SSC**

- Rabi pigeon pea has good potential in the state as it takes very less time to mature, hence needs to be promoted on a large scale. Similarly, pigeon pea crop was grown

on field bunds successfully by the farmers which need to be promoted on a large scale to utilize fallow bunds.

**Action: SDA/SAU**

- Implementation of Targeting Rice Fallow Areas (TRFA) may be accelerated as soil moisture is fast depleting after harvesting of rice. Seed distribution of rabi crops may also be accelerated.

**Action: SDA**

- A more comprehensive approach may be adopted for timely procurement of produce at fixed MSP through better interaction with other sister departments.

**Action: SDA**

- More awareness generation among the farmers about the support available under Centrally Sponsored Schemes (CSS) through literature in local languages, public campaigns etc.

**Action: SDA/SAU**

- The state may expedite the implementation of Direct Benefit Transfer (DBT) to the beneficiaries for ensuring better transparency.

**Action: SDA**

\*\*\*\*\*





**Fig.1. Seed hub of pigeon pea at Mudhipar**



**Fig.2. Pigeon pea crop at podding**



**Fig.3. Seed hub of pigeon pea at Bhatapara**



**Fig. 4. Seed hub of pigeon pea at Borsi**



**Fig. 5. Seed hub of chick pea at Khapradihi**