

Success Story based on "Distribution of Good Quality Seeds" under RKVY

Madhya Pradesh

1. **Title:-** Quality Seed - A prerequisites to Farmer's Prosperity.

2. **Category:-** Agriculture

3. **Challenges:-** Madhya Pradesh has been formed on 1st of November, 1956, till then the attempts have been made to increase the productivity and total production. During the year 1960 the Green Revolution takes place, in which concentrated efforts have been made to fulfill the requirement of food grain in the country. Agriculture Research has been given a way forward to develop new varieties of various crops grown in Madhya Pradesh. After the Chhattisgarh State carved out from Madhya Pradesh, the state has still have 11 agro climatic zones. Approximately 65% of the net



cultivated area in the state is rain-fed and heavily depending on monsoon rains. During the winter the temperature ranges from 10 degree to 27 degree C, during summer it goes to even 48 degree C. The average rainfall of the state is 937.10mm. The major soils of the state are mixed red and black soil, deep black soil, Alluvial soil, shallow black soil and light soil. All these characteristics of the state make it complicated not only for extension delivery but also for increasing productivity and production of various crops. Agriculture scientists have a big challenge to produce varieties of seeds suited to all such conditions. Dwarf, high yielding, temperature resistance, drought resistance and short duration varieties are required to cope up with the requirement. It has also been observed that about 50% farmers are using their own farm produce seed as they are not capable of investing huge amount on the purchase of seed in every season. This problem becomes more aggravated when the strength of Small and Marginal farmers is increasing year to year. Presently there are about 67% farming population comes under the category of small and marginal.

During the year 200-01 when Chhattisgarh state has been carved out from Madhya Pradesh, the remaining MP has a sudden shortage of paddy area in the state. Therefore every attempt has been concentrated to increase the area and production of Paddy in the state. The responsibility of producing seed in the state has been entrusted to 48 Departmental seed producing Farms, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, RVSKVV, Gwalior, State Seed Corporation and Beej Mahasangh. The responsibility of certification of seed has been entrusted to M.P. state Seed Certification Agency.

4. **Initiative:-** Though raising indent to government of India for the supply of breeder seed is a usual process and it has contributed a lot to seed rolling plan, but as soon as RKVY and NFSM have been started in the state in the year 2007-08, the quantity of breeder seed and certified seed distribution has a boon. State has a high level committee under the chairmanship of Agriculture Production Commissioner for reviewing the



periodical seed availability for various crops. APC has made another arrangement that the seed distribution will be made from RKVY other than NFSM districts. The major initiatives taken under RKVY are as follows:

1. Intake of breeder seed from government of India has been increased and given to all agencies responsible for seed production.
2. Foundation seed procured by these agencies are well distributed to all those agencies that are entrusted the job of preparing the certified seed.
3. State Seed Certification Agency certify the seed as per the prescribed process and certified seed has been notified to the committee for distribution to the farmers.
4. As RKVY was started in the year 2007-08, therefore the year 2006-07 has been taken as base year. The quantity of breeder seed, foundation seed and distribution of certified seed various from year to year as per the availability of funds under NFSM, because there was a condition that firstly seed from NFSM will be distributed than RKVY funds will be used. The projects from the year 2008-09 to date are being sanction for strengthen seed sector, which is clearly visible from the table -1 given below :-

Table-1

Rs in Lakhs

SNo	Date of SLSC	Sanctioned cost of the project	Expenditure	Output
1	18.07.2008	2154.49	2152.96	1.77 lakh Quintal seed has been distributed.
2	09.07.2009	5312.60	4475.70	Seed Produced - 492861 quintal Seed Distributed - 142142 quintal
3	12.05.2010	6900.00	4775.61	Seed Produced - 145060 quintal Seed Distributed - 91710 quintal Breeder Seed - 725 quintal
4	30.04.2011	1200.00	259.42	Seed Distributed - 39986 quintal
5	09.06.2012	7585.00	7585.00	Seed Distributed -11 lakh quintal
6	14.06.2013	6250.00	2573.30	Seed Distributed - 5.49 Lakh quintal
7	25.06.2014	4674.12	3331.50	Seed Distributed -2.16 lakh quintal
8	18.05.2015	6813.00	2509.97	Seed Distributed - 1.09 Lakh quintal
9	23.02.2016	7854.25	3359.23	Seed Distributed - 1.94 Lakh quintal

5. Other than this the seed storage godowns have also been constructed at Government Agriculture Farms, Beej Nigam Farms and Beej Sangh Farms along with creation of new seed testing labs for department and state seed certification Agency. Processing centers have also been constructed at departmental farms and farms of Beej Nigam. Seed production and distribution program has been proved to the major cause of getting " Krishi Karman Awards" since last five years.



- 5. Key Result/ Insight /Interesting Facts:-** Because of the above initiatives taken by the department , the availability of certified seed from 2006-07 to 2015-16 has been increased by 33.33% as envisaged from the table-2 given below-

Table-2

Unit- lakh Quintal

SNo	Season	Year wise Seed Certification						
		2006-07	2007-08	2008-09	2012-13	2013-14	2014-15	2015-16
1	Kharif	13.10	16.30	24.17	25.83	13.81	14.69	11.22
2	Rabi	9.49	11.14	11.41	18.10	15.68	15.74	18.90
	Total	22.59	27.44	35.58	43.93	29.49	30.43	30.12

Source- Road map for doubling the farmers Income(18.02.2016)

Similarly the total area under crop have also been increased tremendously as shown in the table -3 given below :-

Table-3

Unit - Lakh Ha

SNo	Particulars	2011-12	2015-16	2016-17
1	Single cropped area	42.90	36.00	28.17
2	Double cropped area	89.00	96.59	106.00
3	Triple cropped area	1.05	2.50	3.00

Though this cannot be said that this development is just because of RKVY intervention only, but it is Apparent that the investment shown in table-1 is more than 60% of total investment from all sources. Therefore it can be said that RKVY is a major player in developing the scenario as shown above.



- 6. Impact:-** The basic aim of this project was to increase the Seed Replacement Ratio (SRR), productivity and total production of various major crops of the state. The cropped area and quantum of certified seed made available by seed certification agency shows that there is a remarkable achievement in the total food grain production in the state as shown in the table-4 below :-

Table-4

Unit - '000' Metric Ton

Crops	Total Food Grain Production					
	2013-14	2014-15	2015-16	2016-17	2017-18 Tentative	% Increase/ Decrease
Paddy	3328.58	5438.00	5320.00	8070.00	7305.00	51.69
Maize	1493.93	2531.00	3140.00	4301.00	4680.00	36.97
Wheat	15730.10	18480.00	18410.00	21918.00	18999.00	19.05
Total including others	24853.60	32048.00	33951.00	44470.00	42136.00	30.98

The impact of distributing certified seed to the farmers have reflected in to total pulse production in the state. There is 45% increase found in total pulse production as shown in Table-5 below:-

Table-5

(Unit - '000' Metric Ton)

Crops	Total Food Grain Production					
	2013-14	2014-15	2015-16	2016-17	2017-18 Tentative	% Increase/ Decrease
Arhar	288.87	511.00	640.00	873.00	839.00	36.40
Gram	2105.55	2964.00	3364.00	4546.00	5385.00	35.13
Total	3225.55	4647.00	5654.00	8201.00	9169.00	45.04

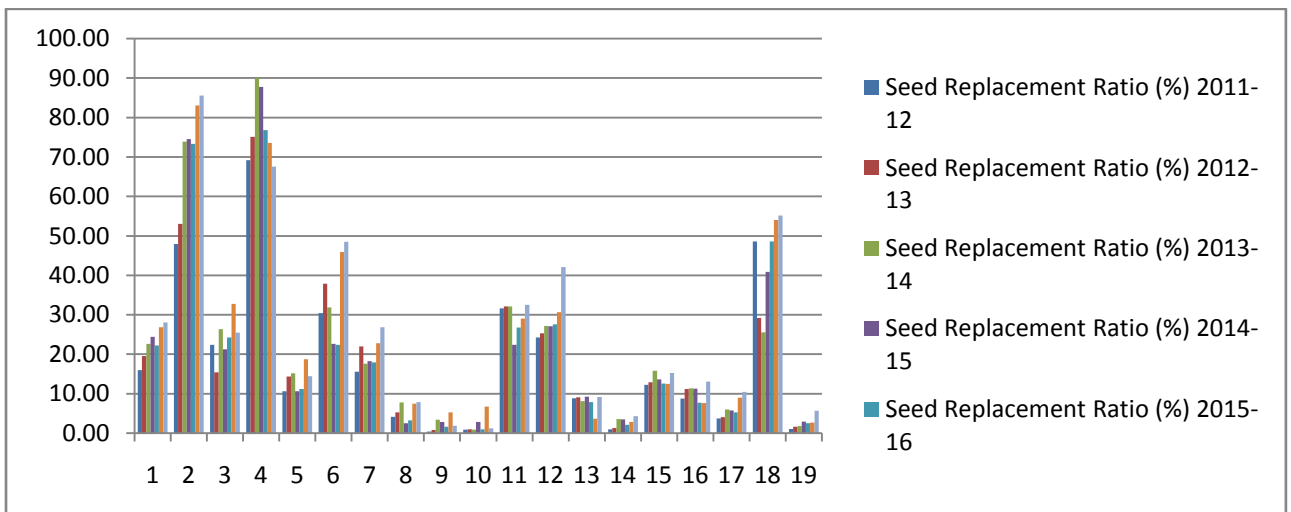
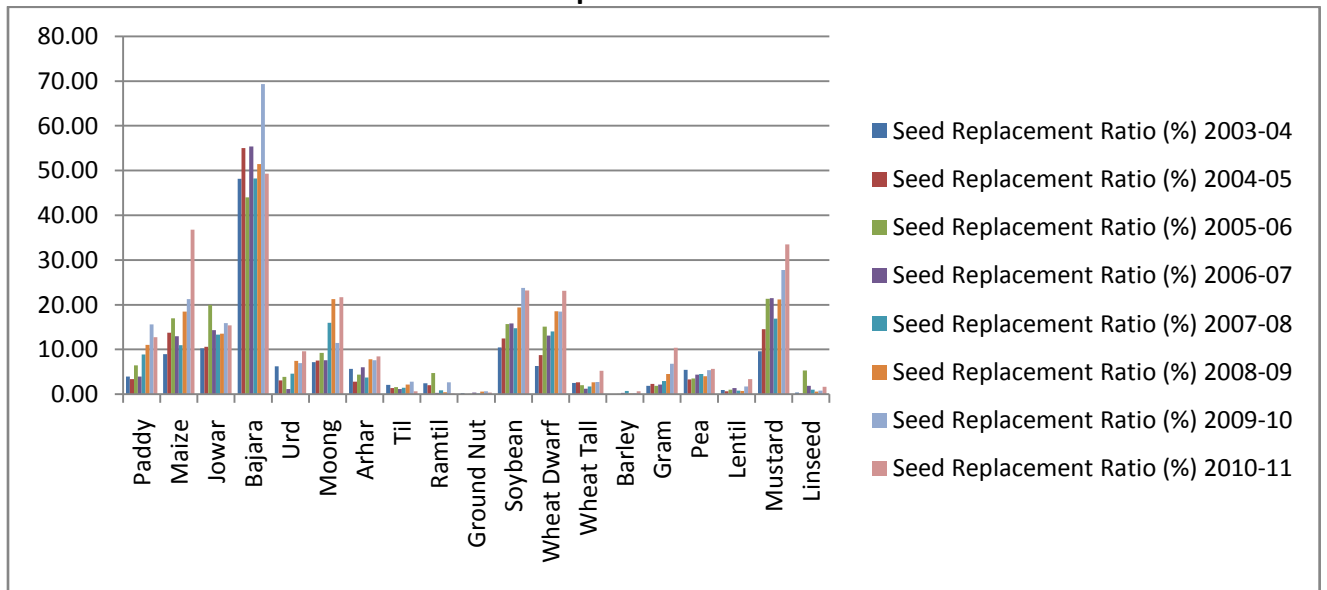
The seed replacement ratio which was aimed to be increased due to implementation of this project, has actually been increased tremendously in the state for various important crops. The data has been shown in the table below :-

Seed Replacement Ratio (%)								
Crops	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Paddy	3.90	3.39	6.41	3.96	8.85	11.05	15.60	12.75
Maize	8.95	13.77	16.96	12.94	10.94	18.43	21.23	36.81
Jowar	10.23	10.63	19.97	14.28	13.28	13.52	15.85	15.37
Bajara	48.15	55.05	43.98	55.37	48.22	51.43	69.35	49.31
Urd	6.26	3.11	3.85	1.17	4.56	7.42	6.92	9.59
Moong	7.19	7.54	9.21	7.58	15.98	21.27	11.44	21.69
Arhar	5.66	2.79	4.33	6.00	3.72	7.83	7.58	8.42
Til	2.11	1.39	1.55	1.15	1.44	2.15	2.82	0.66
Ramtil	2.43	2.00	4.74	0.32	0.83	0.45	2.65	0.15
Ground Nut	0.21	0.03	0.08	0.33	0.16	0.57	0.66	0.38
Soybean	10.43	12.48	15.68	15.84	14.77	19.37	23.78	23.18
Wheat Dwarf	6.28	8.77	15.06	13.09	14.03	18.54	18.47	23.12
Wheat Tall	2.51	2.65	2.02	1.23	1.73	2.64	2.70	5.19
Barley	0.00	0.00	0.06	0.32	0.70	0.13	0.23	0.63
Gram	1.88	2.33	1.85	2.15	2.90	4.51	6.83	10.39
Pea	5.41	3.30	3.48	4.34	4.50	4.01	5.38	5.63
Lentil	0.91	0.65	0.99	1.34	0.77	0.73	1.70	3.35
Mustard	9.56	14.56	21.29	21.49	16.88	21.19	27.78	33.47
Linseed	0.34	0.17	5.32	1.86	0.97	0.55	0.79	1.65

Crops	Seed Replacement Ratio (%)						
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Paddy							
Maize	15.94	19.56	22.61	24.39	22.22	26.85	28.09
Jowar	47.95	53.08	73.91	74.51	73.34	83.07	85.55
Bajara	22.37	15.39	26.37	21.22	24.27	32.77	25.46
Urd	69.22	75.07	90.01	87.78	76.79	73.58	67.58
Moong	10.61	14.35	15.14	10.62	11.18	18.74	14.46

Arhar	30.44	37.89	31.87	22.61	22.40	45.91	48.46
Til	15.54	21.98	17.62	18.23	17.94	22.80	26.87
Ramtil	4.12	5.25	7.82	2.49	3.21	7.49	7.89
Ground Nut	0.38	0.78	3.37	2.81	1.65	5.30	1.9
Soybean	0.93	0.94	0.89	2.81	0.94	6.77	1.21
Wheat Dwarf	31.60	32.15	32.15	22.37	26.78	29.03	32.54
Wheat Tall	24.22	25.30	27.20	27.12	27.59	30.62	42.11
Barley	8.80	9.05	8.07	9.28	7.85	3.61	9.17
Gram	0.99	1.27	3.58	3.50	2.07	2.82	4.27
Pea	12.22	12.86	15.78	13.59	12.58	12.53	15.23
Lentil	8.77	11.22	11.32	11.28	7.68	7.66	13.06
Mustard	3.77	4.05	5.98	5.72	5.27	9.02	10.46
Linseed	48.61	29.18	25.51	40.90	48.59	53.99	55.16
	1.04	1.65	1.82	2.89	2.50	2.70	5.7

Seed Replacement Ratio in %



7. Lesson Learnt:- In the beginning years the project was implemented in such a way that Dy. Director of the district every year collects the demand of farmers and accordingly arrangement of certified seed of demanded varieties were made. The demand was generated by Dy. Director to all seed supplying agencies. The block wise required quantity of seed was stored at the SADO office from where farmers use to lift the seed by paying their share of cost. The subsidy was adjusted against the bill of seed supplying agency. In this process farmers have to pay only beneficiary share, but now a day when "Direct Benefit Transfer" (DBT) has been imposed, the farmers have to pay 100% cost of the seed to purchase the seed and then apply for the release of subsidy. Dy. Director releases the subsidy part in to the bank account of each farmers.

Though this pattern of disbursing subsidy is more reliable and transparent, but equally cumbersome for the farmers. Many farmers even don't apply for the subsidy because of huge paper formalities. Secondly the Seed has been produced as per the recommended varieties, where as farmers demand for their traditional varieties which usually they don't get. This is perhaps the reason why the SRR of certain crops is not increasing as per the desired rate.

8. Supporting Quotes and Images:-



9. Additional Information:- The contact address of the person concerned is as given below:-

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