

**Seed Action Plan  
for  
Achieving  
Desirable SRR (%)  
in  
Rajasthan**

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# Seed Action Plan for Achieving Desirable SRR (%) in Rajasthan

**1.Subijam Sukshetra Jayate, Sampadayte"** is an ancient saying which sums up the importance of quality seeds. It means that a good quality seed sown in a good field gives optimum crop yield. Thus, seed is a critical & vital input essential for enhancing productivity. In order to ensure higher availability of quality seeds to our farmers across the state, Department is coordinating all seed development activities through every stakeholders.

Towards an intellect and income orientation to farming, a "**Task Force**" was set up under the chairmanship of Prof. M. S. Swaminathan for preparing an action plan for the development of Agriculture & Animal Husbandry in Rajasthan. This Task Force divided its work in to six major themes and the Thematic Group on "**Technology & Input Management**" was assigned responsibility of making specific recommendations in respect of each of the major issues flagged by them. On the issue of "**Quality Seed Development**" the Thematic Group observed that the seed replacement rate (SRR%) in the state is particularly very low. This low SRR is one of the factors limiting production. Therefore, on an emergency basis efforts need to be made in making available the quality seed in time to the farming community. For this purpose SAUs need to be made responsible for ensuring breeder seed requirement. The state is bestowed with ideal climatic conditions, which are conducive for production of high quality seeds of almost all important field and vegetable crops. Relatively dry weather at flowering to maturity in the state stand in favour of high yield of healthy and vigorous seeds. Yet no major seed producing companies have operation in the state. Therefore, state need to initiate dialogue with seed producing companies. The production & supply of seeds of pulses, soybean, castor, sesame, groundnut, vegetables, spices and flowers is far from satisfactory. The Thematic Group has suggested action programme to improve the seed production in the state covering various aspects such as monitoring of breeder seed, seed production of pulses, hybrid seed production, research & education in seed science & technology, on farm seed production, disease free planting material of fruit trees, linkage with ICAR institution, seed policy of the state and quality seed management. In order to achieve a sustained growth of seed production of pulses, a target of 25 percent Seed Replacement Rate (SRR) may be fixed for Moong, Gram and

Guar. The target may be achieved by 2008-09. For the crops like Soybean, Guar, Groundnut, Maize, Castor, Wheat & Barley, ideal SRR of 50% and for Bajra 100% SRR have been emphasized.

Similarly, realizing the paramount importance of seed, the National Development Council (NDC), in its 53rd meeting held on 29th May 2007 resolved that State Governments would "accord the highest priority to seed production so that adequate supply of quality seeds, of relevant major crops & fodder is available at reasonable price and at the right time. This is necessary to improve seed replacement rates, which will help reduce yield gaps. There should be close liaison between State Governments & SAUs, or ICAR institutions for ensuring production of seeds of varieties suitable for each agro-climatic region. Public Private Partnership between SAUs, State Department concerned and Public Sector for varietal development can be considered." Further, the Hon'ble Prime Minister urged State Governments "to set-up a high level committee that can address the operational issues involved in bringing about the necessary partnership between the SAUs, State Farms, ICAR and relevant Private Sector players to ensure that seed supply which exist are made available to farmers in time and production plans are implemented to ensure adequate supplies of seeds for future". In pursuance of this, State Government constituted a High Level Committee vide Order No.F6 (46) AR/Gr-3/2007 dated 24.9.07, who's ToRs are as follows:

- To review the requirement of seeds of improved varieties and their availability.
- To review the performance of seed minikit distribution.
- To review the availability of breeder seed and the production of foundation & certified seeds.
- To identify and support agencies, cooperatives and public having necessary technological & infrastructure base to widen the seed production programme.
- To approve projects for improving seed availability.

The first meeting of this High Level Committee on Seed was held under the chairmanship of Additional Chief Secretary (Dev.), Government of Rajasthan on 23.10.07 at 3.00PM in the Committee Room of Secretariat, Jaipur and minutes of this meeting was issued vide No.7604-7629 dated 27.10.07.

In a follow-up action on the decisions taken in the meeting of High Level Committee on Seed held on 23.10.2007, a draft action plan for achieving desirable SRR (%) in Rajasthan is given below:

## **2.VISION:**

***To make available certified / quality seeds of every crop to every farmer in every crop season.***

## **3. Mission:**

***To carry out crop wise and area wise analysis of existing SRR, seed production & distribution, seed processing & storage infrastructure in the state, find out deficiencies in each activity and evolve suitable mechanisms to bridge the identified gaps.***

## **4.GOAL:**

***To double SRR (%) from its existing level of approximately 20 % in 2007-08 to 40 % by the end of 11th plan period (2011-12) by distributing approximately 27 lakh qtls of certified / quality seeds in the state.***

## **5. Strategy:**

- i) To incentivize public & private sector to develop appropriate varieties for each agro-climatic zone with focus on suitable varieties for dry land farming.***
- ii) To calculate crop wise / variety wise requirement of breeder seeds to ensure seed availability so as to achieve the goal.***
- iii) To ensure multiplication of breeder seed in to foundation seed and foundation seed in to certified seed through public & private sector seed agencies.***
- iv) To ensure actual physical distribution of seeds at affordable price.***
- v) To evolve suitable mechanism for timely certification, quality control parameters and penal action against defaulters seed dealers.***

## 6. Current Status & Proposed Plan of Seed Replacement Rate (%)

### (i) Current Status: (SRR%)

Year	Kharif	Rabi	Average
• 2002-03	10.05	14.17	12.56
• 2003-04	7.84	10.76	9.59
• 2004-05	7.39	13.65	11.01
• 2005-06	9.16	16.43	13.35
• 2006-07	10.43	17.12	14.53
• 2007-08	13.63	23.11	19.30

### (ii) Proposed Plan

• 2008-09	20.00	29.00	26.00
• 2009-10	26.00	34.00	31.00
• 2010-11	30.00	39.00	35.00
• 2011-12	34.00	44.00	40.00
• <b>Desirable SRR (%)</b>	<b>51.00</b>	<b>45.00</b>	<b>47.00</b>

Crop wise / year wise status & plan is at annex- 1

## 7. Current Status & Proposed Plan of Seed Distribution:

### (i) Current Status: (Seed in lakh qtls)

Year	Kharif	Rabi	Total
• 2002-03	1.54	3.37	4.91
• 2003-04	1.68	3.45	5.13
• 2004-05	1.67	4.22	5.89
• 2005-06	2.22	5.39	7.61
• 2006-07	2.42	6.30	8.72
• 2007-08	3.25	8.21	11.46

### (ii) Proposed Plan

• 2008-09	5.28	11.93	17.21
• 2009-10	6.90	13.82	20.72
• 2010-11	8.10	15.69	23.79
• <b>2011-12</b>	<b>9.38</b>	<b>17.68</b>	<b>27.06</b>
• <b>Requirement For desirable SRR</b>	<b>13.71</b>	<b>18.51</b>	<b>32.22</b>

Crop wise / year wise status & plan is at annex- 2

## 8. Breeder Seed Utilization & Indent:

### (i) Current Status (RSSC+Tilam Sangh) & Requirement.

Year	Kharif	(Seed in qtls.)	
		Rabi	Total
• 2002-03	342.10	795.20	1137.30
• 2003-04	400.32	777.28	1177.60
• 2004-05	400.32	601.05	1038.35
• 2005-06	476.63	1416.15	1892.78
• 2006-07	1400.17	3195.02	4595.19
• 2007-08*	3229.00	5307.70	8536.70
• 2008-09	3780.00	6439.00	10219.00
• 2009-10	4163.27	7082.86	11246.13
• <b>Requirement For desirable FS.</b>	<b>6008.00</b>	<b>7301.00</b>	<b>13309.00</b>

Crop wise details is at Annex- 3A & 3 B.

\* Year 2007-08, 2008-09 & 09-10 indicate indented quantity of B/S of agricultural crops. Vegetables & seed spices indents are separate.

## 9. Production of Foundation Seed:

### (i) Current Status (all agencies) & Requirement.

Year	Kharif	(Seed in qtls.)	
		Rabi	Total
• 2002-03	5403	40324	45727
• 2003-04	10894	51478	62372
• 2004-05	7966	42743	50709
• 2005-06	7506	60684	68190
• 2006-07	12966	114203	127169
• 2007-08	46931		
• <b>Requirement For desirable CS</b>	<b>70974</b>	<b>107367</b>	<b>178341</b>

Agency wise details at Annexure-4 and plan for FS production at Annex-5,

## 10. Production of Certified Seed:

### (i) Current Status (all agencies) & Required.

Year	Kharif	(Seed in lakh qtls.)	
		Rabi	Total
• 2002-03	0.72	4.25	4.97
• 2003-04	1.52	6.33	7.85
• 2004-05	1.07	5.95	7.02
• 2005-06	1.31	7.26	8.57
• 2006-07	1.29	9.72	11.01
• 2007-08	3.55		
• <b>Requirement For desirable SRR</b>	<b>13.71</b>	<b>18.51</b>	<b>32.22</b>

Crop wise / agency wise details at Annexure-4A

### 11. Seed Producing Agencies (Public Sector)

- Rajasthan state Seed Corporation (RSSC)
- Tilam Sangh
- National Seed Corporation (NSC)
- State Farm corporation of India (SFCl)
- Krishak Bhartiya Cooperative Ltd.(KRIBHCO)

### 12. Seed Producing Agencies (Private Sector)

- Rajasthan State Certified seed Producers Association, Sriganganagar, through its members.
- Seed Association of India, through its members.
- Others private seed companies.

In all, there are about 149 seed producers who are, at present, registered with RSSCA.

### 13. Strategy for Enhancing SRR (%)

As emphasized in the report of the **Task Force** constituted for development of agriculture in Rajasthan, the seed replacement rate (SRR%) in crops like Soybean, Guar, Groundnut, Maize, Castor, Wheat & Barley should be 50% and for Bajra it should be 100%. It means, the SRR in self-pollinated & cross-pollinated crops, in general, and in hybrid crops (varieties) in particular, should be 50% and 100% respectively. That is, in



order to obtain optimal yields, the seeds of self-pollinated & cross-pollinated crops must be replaced every 2 years and every year in case of hybrid varieties.

Seed replacement / use of improved seed by farmers is governed by many factors such as rain fall situation / availability of water, per unit return from the crop, availability of quality seed, awareness about the benefit of seed replacement and above all, the economic status of farmers. The following strategies are required to be strengthened for enhancing existing level of SRR.

- Development of suitable seeds for each crop and for each agro-ecological situation.
- Adequate availability of breeder seeds of desired varieties through SAUs & other ICAR institutions.
- Efficient multiplication of breeder seeds to foundation & certified seeds.
- Public - private participation in seed production programme.
- Adequate and timely availability of certified / quality seeds in remote areas.
- Promoting concept of seed village in rural areas to improve quality of farm-saved seeds.
- Technological back up to farmers.

### **13.1 Development of suitable seeds for each crop and for each agro-ecological situation.**

- A large number of varieties have been developed by SAUs for the state. Some other varieties developed under the aegis of ICAR are also recommended for the state. Accordingly, these state's as well as national varieties are in cultivation in the state. Since, research is a continuous process and innovations on the front of varietal as well as technological development take place time to time, therefore, what needs to be done is a through screening of existing as well as newly developed varieties / technology and their addition in the package of practices for each agro ecological situation. And accordingly, our research programme is required to be re-oriented towards bridging the existing gap.
- Some problems with regard to the purity of certain varieties of Cotton & Bajra are being also reported. This aspect is also required to be taken by SAUs on priority basis.

- Bt. cotton hybrids are gaining popularity in the state as about 40000 ha area under Bt. cotton is expected during Kharif-2007. If this Bt. technology is transferred in our own hybrids / popular varieties, this would be more beneficial for our farmers.

### **13.2 Adequate availability of breeder seeds and their efficient multiplication in to foundation & certified seeds.**

Breeder seeds of different crops viz Oilseeds, Pulses, Cereals and Cotton are procured through ICAR Institutions and State Agriculture Universities etc. Breeder seeds indents (crop/variety wise) are submitted in advance to Govt. of India for organizing production programme through ICAR Institutions, SAUs, etc. The allotted quantity of breeder seed is lifted by various agencies including RSSC, Tilam Sangh etc.

The details given at point no. 2 show that there has been substantial increase in breeder seed consumption & indent. Breeder seed indent for the year 2008-09 has already been finalized in the meetings held at GOI level during March & June 2007 and our indents for state agencies (RSSC & Tilam Sangh) have been accepted and SAUs and other ICAR institutions are organizing production programme, accordingly. Breeder seed indent for 2009-10 is in process.

Following issues are required to be addressed.

- Full conversion of breeder seed (lifted) in to foundation seed during same year by RSSC.
- Full utilization of foundation seed for production of certified seed by RSSC.
- At present, RSSC is not fully utilizing foundation seed for production of certified seed due to inadequate infrastructure facilities available with them. Therefore, additional infrastructure facilities are required to be developed.
- There is need to devise a mechanism to utilize excess foundation seed produced by RSSC. This could be done by providing FS to other seed producing agencies including private sector and organizing certified seed production programme on PPP / MoU basis under supervision of RSSCA. Seed thus produced, may be shared between the RSSC & participating agency.

- As suggested by RAU, potential of IGNU area is required to be taped and fully utilized for seed production programme under technical guidance of RAU.

#### 14-Conversion of available B/S in to F/S by RSSC during 07- 08.

Crop wise summary of seed production program of RSSC is given below.

##### (i)Kharif-2007.

(Seed in qtls)

Crop	Ideal SMR	Actual BS lifting during Kh-07	F/S Prod. as per ideal SMR	FS being produced by RSSC
Bajra	200	9.10	1820	80
Jowar	100	1.88	188	80
Maize	100	8.20	820	300
Paddy	80	0.76	60.8	40
Soybean	16	1147.30	18357	1100
Groundnut	8	211.19	1690	800
Til	250	2.65	662	100
Castor	60	0.24	14	4.0
Moth	40	83.05	3322	500
Moong	40	244.50	9780	1200
Urd	40	2.60	104	30
Arhar	100	1.35	135	10
Cowpea	40	38.80	1552	300
Guar	20	392.68	7853	4000
Cotton	50	17.17	858	793
<b>Total</b>		<b>2160</b>	<b>47215.80</b>	<b>9337</b>

##### (ii) Rabi-2007-08

(Seed in qtls)

Crop	Ideal SMR	Actual B/S lifting for Rabi-07-08	F/S Prod. as per ideal SMR	FS being produced by RSSC
Wheat	20	2144.50	42890	36000
Barley	15	1375.60	20634	14000
Gram	10	834.30	8343	7000
Mustard	100	7.47	747	1800
Others		275.69		770
<b>Total</b>		<b>4637.56</b>	<b>72614</b>	<b>59570</b>

**15. Target for Conversion of B/S in to F/S by RSSC during 08- 09 & 09-10.**

(Seed in qtls)

<b>CROP Kharif</b>	<b>Ideal SMR</b>	<b>B.S. Indent for 08-09</b>	<b>B.S. Indent for 09-10</b>	<b>FS Production in 08- 09</b>	<b>FS production in 09-10</b>
Bajra	200	8	8.82	1600	1764
Jowar	100	4	4.42	400	442
Maize	100	50	51.72	5000	5172
Paddy	80	1	1.11	80	89
Soybean	16	2165	2390	34640	38240
G.Nut	8	800	880	6400	7040
Castor	250	6	6.6	1500	1650
Til	60	3	3.3	180	198
Moth	40	125	137.5	5000	5500
Moong	40	250	275	10000	11000
Urd	40	10	11	400	440
Arhar	100	2	2.2	200	220
Cowpea	40	22	24.2	880	968
Guar	20	300	330	6000	6600
Cotton	50	34	37.4	1700	1870
<b>Total</b>		<b>3780</b>	<b>4163</b>	<b>73980</b>	<b>81193</b>
<b>RABI</b>					
<b>Wheat</b>	20	3000	3300	60000	66000
<b>Barley</b>	15	1300	1430	19500	21450
<b>Gram</b>	10	2000	2200	20000	22000
<b>Mustard</b>	100	14	15	1400	1500
<b>Rabi Maize</b>	100	24	26	2400	2600
<b>Others</b>		161	178		
<b>Total</b>		<b>6499</b>	<b>7149</b>	<b>103300</b>	<b>113550</b>
<b>GT (Kh+Rabi )</b>		<b>10279</b>	<b>11312</b>	<b>177280</b>	<b>194743</b>

**Note:** Under Soybean & Mustard crops indent of Tilam sangh is also included.

Therefore, Tilam Sangh has to take FS production programme accordingly.

**16-Conversion of available F/S in to C/S by RSSC during 07- 08 & Target for C/S production during 08- 09.**

Crop wise summary of seed production program of RSSC is given below.

**(i)Kharif-2007 & 2008.**

**(Seed in qtls)**

<b>Crop</b>	<b>Ideal SMR</b>	<b>Actual available F/S for Kh-07</b>	<b>C/S Prod. as per ideal SMR</b>	<b>CS being produced by RSSC</b>	<b>Target for CS production during Kh-08</b>
Bajra	200	169.52	29360	3000	<b>5000</b>
Maize	100	82.5	8250	2500	<b>20000</b>
Jowar	100	49.28	7700	300	<b>5000</b>
Paddy	80	-	-	-	<b>1000</b>
Soybean	16	4202	76282	80000	<b>225000</b>
G.nut	8	67	544	4000	<b>25000</b>
Til	250	20.47	4455	500	<b>2000</b>
Castor	60	0	0	100	<b>500</b>
Moth	40	204.03	5091	2000	<b>16000</b>
Moong	40	469.65	8129	16000	<b>35000</b>
Urd	40	45.94	1622	500	<b>6500</b>
Arhar	100	13.65	1075	20	<b>500</b>
Cowpea	40	96.28	1945	300	<b>3500</b>
Guar	20	2630.12	49490	7000	<b>25000</b>
Cotton	50	856	48045	12000	<b>15000</b>
<b>Total</b>		<b>8906.44</b>	<b>241988</b>	<b>128220</b>	<b>385000</b>

**(ii) Rabi-2007-08 & 2008-09**

**(Seed in qtls)**

<b>Crop</b>	<b>Ideal SMR</b>	<b>Actual available F/S for Rabi-07-08</b>	<b>C/S Prod. as per ideal SMR</b>	<b>Agreed Quantity of Seed prod. After meeting</b>	<b>CS being produced by RSSC</b>	<b>Target for CS production during Rabi-08-09</b>
Wheat	20	52689.2	1053784	400000	217000	500000
Barley	15	6852.90	102794	22000	11000	50000
Gram	10	3754.48	37545	34000	18000	50000
Mustard	100	1681.51	168151	40000	45000	55000
Others		-		10000	10370	
<b>Total</b>		<b>64978.09</b>	<b>1362274</b>	<b>506000</b>	<b>301270</b>	<b>655000</b>

## **17. Strategy to be adopted by RSSC for enhancing seed production**

With the intervention of the Department, there has been substantial increase in B/S availability and as a result, F/S availability has also been augmented. Now, RSSC has to play a greater role at this stage and incessant efforts are required to be made to convert F/S in to C/S to the maximum extent possible, with desired SMR. Simultaneously, quality aspect of seed also needs special attention by providing technological back-up to the seed producing farmers and stage-wise monitoring of seed production programs i.e. from its sowing to packing.

- Identification of villages (crop wise) as per seed village scheme approach.
- Identification of potential seed producers – crop wise.
- Expanding seed production programme in IGNP area under technical guidance of RAU.
- Plan for capacity building of seed producers. (Training - orientation towards seed production, technical literature etc)
- Plan for field inspection & seed certification.
- Strengthening of seed processing / storage infrastructure facilities & marketing network.
- Tie-up arrangement with other seed producing agencies including private sector and organizing certified seed production programme on PPP / MoU basis under supervision of RSSCA.
- As suggested by RAU, potential of IGNP area is required to be taped and fully utilized for seed production programme under technical guidance of RAU.

## **18. Seed Certification & Quality Control**

At present, responsibility of seed certification work has been assigned to Rajasthan State Seed & Organic Production Certification Agency (RSSOPCA). Besides providing financial support for strengthening of infrastructure facility in RSSOPCA, 93 officers of the department have been also authorized to carryout field inspection work for seed certification. There are 6 Seed Testing Laboratories established in Jaipur, Sriganganagar, Chittorgarh, Kota, Jodhpur and Alwar districts

of the state for analysis of seed samples. Seed Testing Laboratory at Durgapura, Jaipur is notified as State Seed Testing Laboratory. Seed samples taken by Seed inspectors (425) under Seed Act & Seed Control Order other service samples are analyzed in these labs.

. Based on the seed quality performance / number of samples taken during last 5 years, existing seed dealers / see companies have categorized in to A, B, C & D categories and much emphasis is being given on seed sampling poor performing dealers / companies.

In view of quantum jump in breeder seed availability and proportionate enhancement in seed production, there is need to strengthen / create additional infrastructure facilities in the state. In order to have an effective check on various crop varieties being sold by different seed producing companies / agencies, registration of these seed producing agencies is required at Directorate level.

**19. Registered Seed processing Plants, Producing Agencies & Seed Growers:**

Rajasthan State Seed Corporation (RSSC), Tilam Sangh, National Seed Corporation (NSC), State Farm Corporation of India (SFCI), and Krishak Bhartiya Cooperative Ltd. (KRIBHCO) are the main public / cooperative sector seed producing agencies in the state. In private sector, Rajasthan State Certified seed Producers Association, Sriganganagar, and Seed Association of India are engaged in seed business through their members. Some others private seed companies are also operating in the state. These seed producing agencies are having their own infrastructure facilities / seed growers in different districts and taking seed production programme accordingly. District wise summary is given below:

**19.1 Summary of Registered Seed processing Plants, Producing Agencies & Seed Growers:**

<b>S.No.</b>	<b>Districts</b>	<b>Seed Processing Plants</b>	<b>Seed Producing agencies</b>	<b>Seed Growers</b>
1	Sriganganagar	46	56	3031
2	Hanumangarh	13	16	1558
3	Bikaner	2	2	31
4	Ajmer	2	2	115
5	Bhilwara	1	2	122
6	Kota	9	15	1255
7	Bundi	1	2	132
8	Baran	1	1	233
9	Jhalawar	1	1	109
10	Banswara	3	4	4704
11	Rajsamand		2	
12	Chittorgarh	2	2	459
13	Udaipur	2	1	91
14	Jaipur	5	9	902
15	Sikar	1	1	137
16	Jhunjhunu		2	
17	Tonk	1		0
18	S.Madhopur	1	1	33
19	Karoli	1	1	89
20	Bharatpur	6	9	747
21	Alwar	9	10	1243
22	Jodhpur	3	8	259
23	Sirohi		2	
24	Pali	1		134
25	Dausa	-	-	-
26	Dholpur	-	-	-
27	Barmer	-	-	-
28	Nagaur	-	-	-
29	Jalore	-	-	-



30	Jaisalmer	-	-	-
31	Churu	-	-	-
32	Dungarpur	-	-	-
	<b>Total</b>	<b>111</b>	<b>149</b>	<b>15384</b>

- Sriganganagar & Hanumangarh districts are having highest number of registered seed processing plants, seed producing agencies and seed growers.
- Rajsamand, Jhunjhunu & Sirohi are lacking in seed processing plant and seed growers.
- Tonk is having one seed processing plant (recently established by RSSC) but lacking in seed growers.
- Pali is lacking in seed growers.
- Districts like Dausa, Dholpur, Barmer, Nagaur, Jalore, Jaisalmer, Churu and Dungarpur are not having any seed processing plant, seed producing agencies and seed growers.

#### 19.2 Proposed action to be taken:

<b>Proposed action</b>	<b>Districts</b>	<b>Agencies</b>	<b>Remarks</b>
1-Estt of seed processing plants.	Dausa, Dholpur, Barmer, Nagaur, Jalore, Jaisalmer, Churu, ,Dungarpur, Rajsamand, Jhunjhunu & Sirohi	RSSC (6) Tilam Sangh & Kribhco (2) & Private (3)	Details of proposals to be submitted by concerned agencies.
2-Seed growers.	All above districts and Tonk, Pali, Bikaner & Swaimadhopur	RSSC & all other agencies	As above.

District wise / agency wise details of registered seed processing plants, seed producers and seed growers are given at Annex- 6,7 &8.

**District wise registered seed producers:**

**Annex-**

S. N.	District	No. of Regd. Seed Producers	Agencies							
			RSSC	T. Sangh	NSC	SFCI	Kribhco	SAU	Other	Private
1	S.ganganagar	56	2	-	1	3	1	-	1(RSFPD)	48
2	H.garh	16	1	-	-	-	-	-	-	15
3	Bikaner	2	-	-	-	-	-	-	1 (RCDF)	1
4	Ajmer	2	1	-	1	-	-	-	-	-
5	Bhilwara	2	1	-	-	-	-	-	-	1
6	Kota	15	1	1	1	-	1	-	-	11
7	Bundi	2	-	-	-	-	-	-	-	2
8	Baran	1	1	-	-	-	-	-	-	-
9	Jhalawar	1	1	-	-	-	-	-	-	-
10	Banswara	4	1	-	-	-	-	1	1 (DyDAg)	1
11	R.samand	2	-	-	-	-	-	-	-	2
12	Chittor	2	1	-	1	-	-	-	-	-
13	Udaipur	1	1	-	-	-	-	-	-	-
14	Jaipur	9	2	-	-	-	-	-	-	7
15	Sikar	1	-	-	-	-	-	-	-	1
16	Jhunjhunu	2	-	-	-	-	-	-	-	2
17	S.Madhapur	1	-	-	-	-	-	-	-	1
18	Karoli	1	-	-	-	-	-	-	-	1
19	Bharatpur	9	1	1	-	-	-	-	-	7
20	Alwar	10	1	-	-	-	-	-	-	9
21	Jodhpur	8	-	-	1	-	-	-	-	7
22	Sirohi	2	1	-	-	-	-	-	-	1
23	Dausa									
24	Dholpur									
25	Tonk									
26	Pali									
27	Churu									
28	Barmer									
29	Jaisalmer									
30	Nagaur									
31	Jalore									
32	Dungarpur									
<b>Total</b>		<b>149</b>	<b>16</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>117</b>

- Sriganganagar & Hanumangarh districts are having highest number of seed producing agencies.

- 10 districts namely Dausa, Dholpur, Tonk, Pali, Churu, Barmer, Jaisalmer, Nagaur, Jalore & Dungarpur are not having any seed producing agency.

**District wise Seed Processing Plants: Annex-**

S. N.	District	No. of Regd. Processing Plants	Agencies							
			RSSC	T. Sangh	NSC	SFCI	Kri bhco	SAU	Other	Private
1	S.ganganagar	46	2		1	5			1(RSF PD)	37
2	H.garh	13	1							12
3	Bikaner	2							1(RCDF)	1
4	Ajmer	2	1		1					
5	Bhilwara	1	1							
6	Kota	9	1	1	1		1	1		4
7	Bundi	1								1
8	Baran	1	1							
9	Jhalawar	1	1							
10	Banswara	3	1							2
11	Chittor	2	1		1					
12	Udaipur	2	1					1		
13	Jaipur	5	1							4
14	Sikar	1								1
15	Tonk	1	1							
16	S,Madhopur	1								1
17	Karoli	1								1
18	Bharatpur	6	1		1					4
19	Alwar	9	1							8
20	Jodhpur	3	1							2
21	Pali	1	1							
22	Dholpur									
23	Dausa									
24	Jhunjhunu									
25	Jalore									
26	Sirohi									
27	Nagaur									
28	Churu									
29	Jaiselmer									
30	Barmer									
31	Rajsamand									
32	Dungarpur									
	<b>Total</b>	<b>111</b>	<b>17</b>	<b>1</b>	<b>5</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>78</b>

- Among 21 districts having seed processing plants,RSSC presence is lacking in Bikaner, Bundi, Sikar, S.Madhopur & Karauli districts. 11 districts (S.No-22 to 32) are not having any seed processing plants, either in public or private sector.

**Details of Registered Seed Growers: Annex-**

S.N.	District	No. of Regd. Seed growers	Agency wise Number of Seed Growers							
			RSSC	T. Sangh	NSC	SFC I	Kribh co	SA U	Other	Private
1	S.ganganagar	3031	655		79	8			10	2279
2	Hanumangarh	1558	270							1288
3	Bikaner	31								31
4	Ajmer	115	70		45					
5	Bhilwara	122	122							0
6	Kota	1255	443	207	115		46	1		443
7	Bundi	132								132
8	Baran	233	233							
9	Jhalawar	109	109							
10	Banswara	4704	4628							76
11	Chittor	459	280		179					
12	Udaipur	91	91							
13	Jaipur	902	397							505
14	Sikar	137								137
15	S.Madhopur	33								33
16	Karoli	89								89
17	Bharatpur	747	182		89					476
18	Alwar	1243	245							998
19	Jodhpur	259	224							35
20	Pali	134	134							
21	Tonk	-	-	-	-	-	-	-	-	-
22	Dholpur	-	-	-	-	-	-	-	-	-
23	Dausa	-	-	-	-	-	-	-	-	-
24	Jhunjhunu	-	-	-	-	-	-	-	-	-
25	Jalore	-	-	-	-	-	-	-	-	-
26	Sirohi	-	-	-	-	-	-	-	-	-
27	Nagaur	-	-	-	-	-	-	-	-	-
28	Churu	-	-	-	-	-	-	-	-	-
29	Jaisalmer	-	-	-	-	-	-	-	-	-
30	Barmer	-	-	-	-	-	-	-	-	-
31	Rajsamand	-	-	-	-	-	-	-	-	-
32	Dungarpur	-	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>15384</b>	<b>8083</b>	<b>207</b>	<b>507</b>	<b>8</b>	<b>46</b>	<b>1</b>	<b>10</b>	<b>6522</b>

- Sriganaganagar & Hanumangarh districts are having highest number of registered seed growers.
- Tonk, Dholpur, Dausa, Jhunjhnu, Jalore, Sirohi, Nagaur, Churu, Jaisalmer, Barmer, Rajasamand and Dungarpur districts are not having any seed growers.
- Seed growers number is also very less in Bikaner & Swaimadhapur districts.

### Seed Replacement Rate (SRR%): Existing, Desirable & Plan up to 11-12.

Annex-

S.No	Crop	SRR% 02-03	SRR% 03-04	SRR% 04-05	SRR% 05-06	SRR% 06-07	SRR% 07-08	Desira ble SRR (%).	Plan 08-09	Plan 09-10	Plan 10-11	Plan 11-12
1	Bajra	39.99	26.69	31.10	33.89	34.80	42.09	100	56	60	70	80
2	Jowar	2.67	4.13	2.79	5.12	6.27	8.22	50	15	20	25	30
3	Maize	9.22	10.40	10.46	17.43	19.02	25.20	50	29	35	43	50
4	Paddy	6.65	3.33	2.63	4.84	7.61	6.23	25	20	25	28	30
5	Soybean	5.02	5.22	6.61	6.61	10.82	12.18	50	20	25	28	30
6	Groundnut	0.66	0.85	0.61	1.17	2.12	2.41	50	4	11	15	20
7	Castor	58.05	10.82	18.29	31.81	23.09	27.81	50	37	45	55	60
8	Til	20.96	11.37	13.88	18.06	23.10	24.41	75	33	45	55	60
9	Moth	6.43	1.74	1.50	1.50	1.19	3.36	25	8	15	20	25
10	Moong	9.58	6.27	5.06	8.11	9.44	14.94	50	28	30	35	40
11	Urd	6.78	6.60	4.33	5.87	6.85	11.21	25	20	25	30	35
12	Arhar	6.38	11.20	14.18	8.50	11.53	13.30	25	20	25	30	35
13	Cowpea	1.95	2.22	2.17	6.81	9.75	9.88	25	19	25	30	35
14	Guar	5.59	2.29	2.27	2.49	3.75	7.38	50	11	18	20	25
15	Cotton	59.34	52.48	54.77	49.01	49.14	66.79	75	70	78	80	85
	Kharif Av.SRR%	10.05	7.84	7.39	9.16	10.43	13.63	51	20	26	30	35
1	Wheat	14.46	12.26	15.86	19.42	19.12	29.47	50	35	40	45	50
2	Barley	10.81	9.40	11.69	12.42	15.13	16.77	50	25	28	30	35
3	Gram	7.71	3.53	3.13	3.96	3.91	4.54	25	10	15	20	25
4	Mustard	61.89	48.54	44.55	47.81	60.1	85.66	80	90	92	95	98
	Av.SRR%	14.17	10.76	13.65	16.43	17.12	23.11	45	29	34	39	44

<b>State Av.SRR%</b>	<b>12.56</b>	<b>9.59</b>	<b>11.01</b>	<b>13.35</b>	<b>14.53</b>	<b>19.30</b>	<b>47</b>	<b>26</b>	<b>31</b>	<b>35</b>	<b>40</b>
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- At present, SRR (%) of Mustard crop is already more than desirable level.
- By the end of 11th plan (11-12), this list would be comprised of 11 crops.
- For remaining 8 crops viz- Bajra, Jowar, Soybean, Groundnut, Til, Moong, Guar, Barley and Gram, some more time (2-3 years) would be required.

### Seed Distribution Plan to Achieve Desirable SRR (%)

### Annex- (Seed in qtls)

<b>CROP Kharif</b>	<b>02-03</b>	<b>03-04</b>	<b>04-05</b>	<b>05-06</b>	<b>06-07</b>	<b>07-08</b>	<b>Seed Req. for Desira ble SRR%</b>	<b>08-09 (Plan)</b>	<b>09-10</b>	<b>10-11</b>	<b>11-12</b>
<b>Bajra</b>	51436	62529	56781	67264	67916	70245	180000	100000	108000	126000	144000
<b>Jowar</b>	1421	3052	1601	3008	4154	4536	3000	9000	12000	15000	18000
<b>Maize</b>	18141	23110	21800	34971	39097	50604	125000	72500	87000	108000	125000
<b>Paddy</b>	1389	829	664	1294	2056	1697	6250	5000	6000	7000	7500
<b>Soybean</b>	18953	20639	32892	39362	55567	74472	320000	125000	160000	180000	192000
<b>G.Nut</b>	2402	2702	2632	5573	9645	11748	262500	20000	58000	78000	105000
<b>Castor</b>	2274	1033	2524	5057	2736	5340	15000	11000	13500	16500	18000

<b>Til</b>	1198	1064	1861	2287	1892	2482	9000	4000	5000	6500	7500
<b>Moth</b>	4155	3884	3241	2764	2059	5207	49688	15000	30000	40000	50000
<b>Moong</b>	9857	10387	7648	12979	14298	30709	90700	50000	55000	63000	72500
<b>Urd</b>	3507	3164	1264	1631	1479	3744	10000	8000	10000	12000	14000
<b>Arhar</b>	211	437	482	340	438	718	1250	1000	1300	1500	1800
<b>Cowpea</b>	432	504	551	1716	2146	3242	13000	10000	13000	15500	18000
<b>Guar</b>	4666	7830	8034	9142	15787	23690	202500	45000	73000	81000	101000
<b>Cotton</b>	34327	27040	24730	34629	22704	36867	56250	52500	58500	60000	64000
<b>Total</b>	<b>154369</b>	<b>168204</b>	<b>166705</b>	<b>222017</b>	<b>241974</b>	<b>325301</b>	<b>1371138</b>	<b>528000</b>	<b>690300</b>	<b>810000</b>	<b>938300</b>
<b>RABI</b>						<b>Prov.</b>					
<b>Wheat</b>	260405	257793	318785	412415	490543	646891	1250000	875000	1000000	1125000	1250000
<b>Barley</b>	20750	17086	20457	25080	35098	50641	225000	112500	126000	135000	157500
<b>Gram</b>	26006	29580	24265	32139	29627	43782	243750	97500	146000	195000	243000
<b>Mustard</b>	29496	40048	58577	68057	74500	80113	96000	108000	110400	114000	117600
<b>Others</b>	337	403	208	1350	787		36792				
<b>Total</b>	<b>336994</b>	<b>344910</b>	<b>422292</b>	<b>539041</b>	<b>630555</b>	<b>821427</b>	<b>1851542</b>	<b>1193000</b>	<b>1382400</b>	<b>1569000</b>	<b>1768100</b>
<b>GT (Kh+Rabi)</b>	<b>491363</b>	<b>513114</b>	<b>588997</b>	<b>761058</b>	<b>872469</b>	<b>1146728</b>	<b>3222680</b>	<b>1721000</b>	<b>2072700</b>	<b>2379000</b>	<b>2706400</b>

**Annex-**

**Requirement of Foundation Seed to Achieve Desirable & Planned SRR (%)  
(Seed in qtls)**

<b>CROP Kharif</b>	<b>F.S. required for prod. of CS for desirable SRR%</b>	<b>F.S. req. in 07- 08 for prod. of CS for planned SRR of 08-09</b>	<b>F.S. req. in 08-09for prod. of CS for planned SRR of 09-10</b>	<b>F.S. req. in 09-10 for prod. of CS for planned SRR of 10-11</b>	<b>F.S. req. in 10-11 for prod. of CS for planned SRR of 11-12</b>
<b>Bajra</b>	900	495	540	630	720
<b>Jowar</b>	300	90	120	150	180
<b>Maize</b>	1250	750	875	1075	1250
<b>Paddy</b>	78	63	78	88	94
<b>Soybean</b>	20000	8000	10000	11200	12000
<b>G.Nut</b>	32813	3938	7219	9844	13125
<b>Castor</b>	250	175	225	275	300
<b>Til</b>	36	17	22	26	29
<b>Moth</b>	1242	497	745	994	1242
<b>Moong</b>	2268	1270	1361	1587	1814
<b>Urd</b>	250	200	250	300	350
<b>Arhar</b>	13	10	13	15	18
<b>Cowpea</b>	325	260	325	390	455
<b>Guar</b>	10125	2430	3645	4050	5063
<b>Cotton</b>	1125	1125	1170	1200	1275
<b>Total</b>	<b>70974</b>	<b>19318</b>	<b>26687</b>	<b>31824</b>	<b>37914</b>
<b>RABI</b>					
<b>Wheat</b>	62500	43750	50000	56250	62500
<b>Barley</b>	15000	7500	8400	9000	10500
<b>Gram</b>	24375	9750	14625	19500	24375
<b>Mustard</b>	960	1080	1104	1140	1176



Others	4532				
<b>Total</b>	<b>107367</b>	<b>62080</b>	<b>74129</b>	<b>85890</b>	<b>98551</b>
<b>GT (Kh+Rabi)</b>	<b>178341</b>	<b>81398</b>	<b>100716</b>	<b>117714</b>	<b>136465</b>

**Annex-**

**Requirement of Breeder Seed to Achieve Desirable & Planned SRR (%)**  
(Seed in qtls)

<b>CROP Kharif</b>	<b>B.S. required for prod. of FS for desirable SRR%</b>	<b>B.S. req. in 06-07 for prod. of FS for 07-08 plan</b>	<b>B.S. req. in 07-08 for prod. of FS for 08-09 plan</b>	<b>B.S. req. in 08-09 for prod. of FS for 09-10 plan</b>	<b>B.S. req. in 09-10 for prod. of FS for 10-11 plan</b>
<b>Bajra</b>	5	2	3	3.15	4
<b>Jowar</b>	3	1	1	1.5	2
<b>Maize</b>	13	8	9	10.75	13
<b>Paddy</b>	1	1	1	1.10	1.20
<b>Soybean</b>	1250	500	625	700	750
<b>G.Nut</b>	4102	492	902	1231	1641
<b>Castor</b>	4	3	4	5	5
<b>Til</b>	0.1	0.1	0.1	0.11	0.12
<b>Moth</b>	31	12	19	25	31
<b>Moong</b>	57	32	34	40	45.40
<b>Urd</b>	6	5	6	8	9
<b>Arhar</b>	0.1	0.1	0.13	0.15	0.18
<b>Cowpea</b>	8	7	8	10	11.40
<b>Guar</b>	506	122	182	203	253
<b>Cotton</b>	23	23	23	24	26
<b>Total</b>	<b>6008</b>	<b>1207</b>	<b>1818</b>	<b>2260</b>	<b>2790</b>
<b>RABI</b>					
<b>Wheat</b>	3125	2188	2500	2813	3125
<b>Barley</b>	1000	500	560	600	700
<b>Gram</b>	2438	975	1463	1950	2437
<b>Mustard</b>	10	11	11	12	12

Others	729				
<b>Total</b>	<b>7301</b>	<b>43673</b>	<b>4534</b>	<b>5374</b>	<b>6274</b>
<b>GT (Kh+Rabi)</b>	<b>13309</b>	<b>4880</b>	<b>6351</b>	<b>7634</b>	<b>9064</b>

Annex-

**Breeder Seed Lifting During 06-07& 07-08 and Indent for 08-09 & 9-10**  
(Seed in qtls)

CROP Kharif	B.S. required for prod. of FS for desirable SRR%	B.S. Lifting in 06-07 (State agencies) RSSC+T.Sangh	B.S. Lifting in 07-08 by state agencies	B.S. Indent for 08-09 for state agencies	B.S. Indent for 09-10 for state agencies
Bajra	5	5.39	9.10	8	8.82
Jowar	3	6.32	1.88	4	4.42
Maize	13	11.21	8.20	50	51.72
Paddy	1	0.85	0.76	1	1.11
Soybean	1250	933.70	1398	2165	2390
G.Nut	4102	96.75	211.19	800	880
Castor	4	0.20	0.24	6	6.6
Til	0.1	1.20	2.65	3	3.3
Moth	31	33.30	83.05	125	137.5
Moong	57	20.48	244.50	250	275
Urd	6	3.20	2.60	10	11
Arhar	0.1	0.61	1.35	2	2.2
Cowpea	8	10.70	36.80	22	24.2
Guar	506	211.80	392.68	300	330
Cotton	23	65.89	17.17	34	37.4
<b>Total</b>	<b>6008</b>	<b>1406.60</b>	<b>2410.70</b>	<b>3780</b>	<b>4163</b>
<b>RABI</b>					
Wheat	3125	2260.50	2144.50	3000	3300
Barley	1000	514.80	1375.60	1300	1430
Gram	2438	319.70	834.30	2000	2200
Mustard	10	8.81	8.47	14	15
Rabi Maize		18.92	-	24	26

<b>Others</b>	729	72.90	275.69	161	178
<b>Total</b>	<b>7301</b>	<b>3195.63</b>	<b>4638.56</b>	<b>6499</b>	<b>7149</b>
<b>GT (Kh+Rabi)</b>	<b>13309</b>	<b>4602.23</b>	<b>7049.26</b>	<b>10279</b>	<b>11312</b>

- For the 2008-09 & 2009-10 separate indent for vegetables (301 & 331qtls) and seed spices (57 & 67qtls) has also been submitted to GOI.