

NATIONAL SEED PLAN

Indian Agriculture has made enormous progress in the last 50 years. Food grains production has risen from 50 million tons in 1947 to 212 million tons in 2003-04. The country has advanced from a situation of food scarcity and imports to that of food security and exportable surpluses. The **Green Revolution** of India has been universally acclaimed as a successful enterprise of the farmers, the Scientists and the Government. The land mark achievements in agriculture in the 60s and 70s were the result of a combination of inputs like introduction of high yielding varieties, increased fertilizer use, expansion of irrigation facilities, massive extension efforts, improved farm practices and, above all, ingenuity and industry of the Indian farmers. However, the growth of agriculture sector has not kept pace with the growth of the population and has stagnated. The unsatisfactory growth of agriculture, apart from serious implications for food security of the country, has been adversely impacting the growth rate of country's economy. The imperative of National food security, nutritional security and economic development demand a very focused and determined approach to raise productivity and production in agriculture. In view of the fact, that the area under cultivation is unlikely to increase significantly, **thrust will have to be on raising productivity per unit of cultivated land.**

Seed is the critical determinant of agricultural production on which depends the performance and efficacy of other inputs. **Quality seeds appropriate to different agro-climatic conditions and in sufficient quantity at affordable prices are required to raise productivity.** Availability and use of quality seeds is not a one time affair. Sustained increase in agriculture production and productivity necessarily requires

continuous development of new and improved varieties of crops and efficient system of production and supply of seeds to farmers.

The **National Seeds Policy 2002**, clearly emphasizes that “ *It has become evident that in order to achieve the food production targets of the future, a major effort will be required to enhance the seed replacement rates of various crops. This would require a major increase in the production of quality seeds.....*” According to the National seeds Policy 2002, the thrust areas have to be -

- i) Varietal Development.
- ii) Seed Production.
- iii) Seed Replacement Rate Enhancement.
- iv) Primary responsibility for production of breeder seed to be that of the ICAR/State Agriculture Universities.
- v) An effective seed production programme.
- vi) Popularisation of new varieties.
- vii) Availability of newly developed varieties to farmers with minimum time gap.
- viii) Provision of incentives to domestic seed industry to enable it to produce seeds of high yielding varieties and hybrid seeds at a faster pace to meet the challenges of domestic requirements.

The **Planning Commission in its Mid-Term Appraisal** of the 10th Five Year Plan (2002-07) has concluded as follows with regard to seeds:

“Despite a huge institutional framework for seed production both in the public and private sector, availability of good quality seeds continues to be a problem for the farmers. As a result, they prefer to rely on farm saved seeds; seed replacement rate continues to remain in the range of 2-10 per cent in certain states for certain crops, which is much below the desired level of 20 per cent for most crops., As is well known, seed replacement rate has a strong positive correlation with the productivity and production of crops. There is a need to rejuvenate the seeds sector through revamping the public sector seed companies, including the State Seed Corporations”.

As has been stated above, there is a **strong co-relationship between the quality of seed, the seed replacement rate and the yields.** The yields of major crops grown in the different states are given in **Statement 1.**

Statement 1
(Comparison of yields)

Crop	Major States	Highest yield in Indian State	Lowest yield in Indian State	Highest yield in the world
Rice	W.B.(89), U.P.(58.75), Orissa (45.01), Bihar (35.25), Chhattisgarh (34.62), Assam (25.9), A.P.(20.84) T.N. (17), M.P.(16.75), Maharashtra (15.2), Jharkhand (12.75), Karnataka (10.26), Gujarat (6.9) – in lakh hectares under coverage	3.750 Ton/ha Tamilnadu	0.702 Ton/ha Chhattisgarh	8-10 tons/ha in Nile Delta in Egypt, South Korea, Taiwan
Wheat	Punjab (33.5), Haryana (23), U.P (90.9), Bihar (20), Jharkhand (0.6), Rajasthan (18), Gujarat (7.9), M.P. (31), Chhattisgarh (1.47), W.B. (2.7), Maharashtra (7.6), Uttaranchal (4.1), H.P. (3.8), J&K (2.5), Karnataka (2.13), Assam (1), in lakh hectares under coverage.	4.2 Ton/ha Punjab	0.648 Ton/ha Karnataka	10 ton/ha Netherlands
Bajra	Rajasthan, Gujarat, Maharashtra, Haryana, U.P., M.P. Karnataka, A.P., T.N.	1.348 Ton/ha Tamilnadu	0.224 Ton./ha Rajasthan	3-4 tons/ha some farmers in T.N. and Gujarat.
Jowar	Maharashtra, Karnataka, M.P., A.P., Uttar Pradesh, Rajasthan, Gujarat, T.N.	0.962Ton/ha Tamilnadu	0.177 Ton/ha Rajasthan	3-4 tons/ha some farmers in Maharashtra & T.N.
Maize	M.P., Karnataka, A.P., Maharashtra, T.N., Gujarat, Rajasthan, U.P., Bihar, Jharkhand, Chhattisgarh, H.P., J&K, Uttaranchal, W.B. Punjab, Haryana.	2.825Ton./ha Andhra Pradesh	0.885 Ton/ha Rajasthan	10 ton/ha some farmers in A.P.
Ragi	Karnataka, T.N. Maharashtra, Bihar, Orissa, Gujarat, Chhattisgarh, Jharkhand, Uttaranchal, W.B.	2 Ton/ha Karnataka	0.634 Ton/ha Orissa	4 ton/ha some farmers in Karnataka

Crop	Major States	Highest yield in Indian State	Lowest yield in Indian State	Highest yield in the World
	Pulses			
Arhar	Andhra Pradesh, Assam, Bihar, Chhattishgarh, Gujarat, Haryana, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Orissa, U.P., Tamil Nadu, Rajasthan, Punjab, W. Bengal and Uttarakhand	1184 kg/ha Bihar	370 kg/ha Karnataka	2000 kg/ha Some farmers in Bihar
Urad (Kharif)	Andhra Pradesh, Bihar, Chhattishgarh, Gujarat, Haryana, Himachal Pradesh, J&K, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Tamil Nadu, U.P., W. Bengal and Kerala	818 kg/ha Kerala	167 kg/ha Haryana	2000 kg/ha Some farmer in Tamil Nadu
Moong (Rabi)	Andhra Pradesh, Bihar, Chhattishgarh, Gujarat, Haryana, J&K, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Tamil Nadu and Punjab	837 kg/ha Punjab	92 kg/ha Karnataka	2000 kg/ha Some farmers in Tamil Nadu
Urad (Rabi)	Andhra Pradesh, Assam, Chhattishgarh, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Sikkim, Tamil Nadu, and U.P.	737 kg/ha Sikkim	109 kg/ha Karnataka	2000 kg/ha Some farmers of Tamil Nadu
Moong (Rabi)	Andhra Pradesh, Assam, Bihar, Chhattishgarh, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Tamil Nadu, and U.P.	623 kg/ha Bihar	153 kg/ha Karnataka	2000 kg/ha Some farmers of Tamil Nadu
Gram	Andhra Pradesh, Assam, Bihar, Chhattishgarh, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, U.P., Orissa, W. Bengal, Tamil Nadu, Punjab and Himachal Pradesh	1083 kg/ha Andhra Pradesh	542 kg/ha Assam	2000 kg/ha Some farmers of Bihar

	Oilsseeds			
G. Nut (Kharif)	Andhra Pradesh, Chhattishgarh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Orisa, Rajasthan, Tamil Nadu, and U.P.	2267 kg/ha Gujarat	483 kg/ha Andhra Pradesh	3540 kg/ha USA
G. Nut (Rabi)	Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Orisa, Tamil Nadu, and W. Bengal	2147 kg/ha Tamil Nadu	1000 kg/ha Karnataka	3540 kg/ha USA
Til	Andhra Pradesh, Assam, Bihar, Chhattishgarh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Orisa, Punjab, Rajasthan, U.P., W. Bengal and Pondicherry.	1000 kg/ha Pondicherry	133 kg/ha U.P.	1127 kg/ha China
Rapeseed & Mustard	Arunachal Pradesh, Assam, Bihar, Chhattishgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Orisa, U.P., Uttaranchal, W. Bengal and Andhra Pradesh	1279 kg/ha Rajasthan	143 kg/ha Andhra Pradesh	3657 kg/ha Germany
Sunflower	Andhra Pradesh, Bihar, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Orisa, Punjab, Tamil Nadu, U.P and W. Bengal	1708 kg/ha UP	375 kg/ha Karnataka	2293 kg/ha France
Soybean	Andhra Pradesh, Chhattishgarh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, U.P. and Uttaranchal	1574 kg/ha Andhra Pradesh	532 kg/ha Karnataka	2803 kg/ha Argentina
Safflower	Andhra Pradesh, Karnataka, Maharashtra, Orisa and Chhattishgarh.	432 kg/ha Karnataka	250 kg/ha Chhattishgarh	1530 kg/ha USA
Linseed	Andhra Pradesh, Assam, Bihar, Chhattishgarh, Himachal Pradesh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Orisa, Rajasthan, U.P., and W. Bengal	1000 kg/ha Punjab	77 kg/ha Karnataka	1699 kg/ha Germany
Niger	Andhra Pradesh, Assam, Chhattishgarh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Orisa, W. Bengal and Dadar and Nagar Haveli	1000 kg/ha Dadar and Nagar Haveli	143 kg/ha Jharkhand	
Castor	Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Orisa, Rajasthan, Tamil Nadu, Bihar and Assam	1864 kg/ha Gujarat	192 kg/ha Maharashtra	Indian ranks first.

It will be seen from this statement that the **yields gaps between the states and between India and rest of the world are very large.**

One of the major reasons for low yields is disappointingly low rate of seed replacement. The seed replacement rates in respect of various crops in different states are given in **Statement 2**.

STATE-WISE REPLACEMENT RATE INCREASE OF IMPORTANT CROPS													FIGURES IN PERCENTAGE (%)				
As on 17.09.2007	STATE	YEAR	WHEAT	PADDY	MAIZE	JOWAR	BAJRA	GRAM	URD	MOONG	ARHAR	G.NUT	R/M	SOYA-	SUNFL	COTTON	JUTE
					V Hyd	V Hyd	V Hyd						BEAN	OWER	V Hyd		
													V Hyd				
A.PRADESH	2001	-	42.00	48 / 100	91 / 100	44.0 / 100	3.00	18.00	22.70	12.50	6.00	-	77.00	81.0/100	13.0/100	-	
	2002	-	62.00	62 / 100	53 / 100	87.0 / 100	6.00	51.00	13.00	14.00	13.00	-	76.00	97.0/100	18.0/100	-	
	2003	-	49.00	25 / 100	11 / 100	32.0 / 100	8.00	44.00	17.00	28.00	21.00	-	74.00	16.0/100	28.0/100	-	
	2004		52 / 94	11/100	14 / 100	44.0/100	15.00	43.00		19.00	21.00		59.00	67.0/100	46.0/100		
	2005	61.00	84 / 100	60 / 100	62/100	38.00	25.00	25.00	33.00	20.00	91.00	0 /100					
	2006	76.00	87/100	63/100	67/100	49.00	27.00	32.00	37.00	25.00		0/100					
KARNATAKA	2001	6	22.00	- / 100	13 / 100	26.0 / 100	5.00	7.00	7.00	8.00	2.50	-	16.00	18.0/100	6.0/100	-	
	2002	17	25.00	- / 100	17 / 100	21.0 / 100	6.00	7.00	6.00	8.00	4.00	-	13.00	14.0/100	10.0/100	-	
	2003	16	25.00	- / 100	20 / 100	22.0 / 100	12.00	18.00	6.00	8.00	5.00	-	25.00	15.0/100	9.0/100	-	
	2004	20	30.30	- / 100	21.5/100	23.0/100	14.30	11.00	12.00	20.00	5.80	-	35.00	20.0/100	13.5/100	-	
	2005	29	29.00	- / 100	21.5/100	27.0/100	15.00	23.00	12.00	14.00	7.00	-	26.50	23.0/100	14.5/100	-	
	2006	26	34.00	0/100	26./100	29/100	16.00	20.00	15.00	15.00	13.00	-	48.00	25/100	22/100		
TAMILNADU	2001	-	17.00	8.0/-	6.0/-	6.0/-	0.46	17.50	13.70	6.00	5.00	-	20.00	50.0/-	15.0/-	-	
	2002	-	15.00	8.0/-	4.0/-	6.0/-	12.50	12.50	12.50	12.50	5.00	-	20.00	50.0/-	15.0/-	-	
	2003	-	14.00	2.0/-	6.0/-	6.0/-	20.60	12.50	12.50	1.50	5.00	-	20.00	50.0/-	12.0/-	-	
	2004	-	12.00	1.0/-	1.0/-	26.0/100	3.50	18.50	14.10	3.70	2.36	-	-	12.51/-	10.85/-	-	
	2005	-	55.00	2.0/-	8.0/-	16/100	2.00	12.11	9.00	2.70	3.20	-	-	14.10/-	13.8/-	-	
	2006	56.00	2/-	6/-		5.50	11.90	8.40	5.00	3.18			8.25	15/-			
KERALA	2001	-	10.00	-	-	-				20.00	10.00	-	-	-	-	-	
	2002	-	20.00	-	-	-				20.00	10.00	-	-	-	-	-	
	2003	-	20.00	-	-	-				20.00	10.00	-	-	-	-	-	
	2004	-	19.49	-	-	-				20.00	10.00	-	-	-	-	-	
	2005	-	26.66	-	-	-			20.00	10.00	-	-	-	-	-	-	
	2006		31.24						20.00	10.00							
GUJARAT	2001	20	18.21	- / 100	33.0/-	- /100	3.42	14.4	22.2	10.45	1.16	71.44	-	-	31.0/100	-	
	2002	19.49	19.25	- / 100	- /100	- /100	4.05	16.8	25.6	10.13	1.78	68.82	-	-	21.0/100	-	
	2003	22.07	19.73	- / 100	- /100	- /100	2.01	17.4	23.8	10.41	1.25	94.04	-	-	20.0/100	-	
	2004	25.38	19.92	-/100	- /100	- /100	2.8	12.24	23.84	9.65	1.22	100			20.2/100		
	2005	27.42	21.31	-/100	- / 100	- /100	2.09	23.44	27.76	14.76	1.28	100			21.93/100		
	2006	24.84	21.59	-/100	- / 100	- /100	16.18	34.2	18.84	21.89	1.88	60.39			23.47/100		
MAHARASHTRA	2001	25.00	18.00	53.00/-	15.0/100	72.0/100	6.00	44.00	26.00	13.00	2.00	-	33.00	28.0/-	80.0/100	-	
	2002	29.00	24.00	59.00/-	14.0/100	74	6.00	45.00	22.00	13.00	2.00	-	42.00	30.0/-	85.0/100	-	
	2003	41.00	19.00	60.00/-	14.0/100	74.0/100	9.00	41.00	17.00	13.00	2.00	-	44.00	29.0/-	82.0/100	-	
	2004	41.00	20.00	61.00/-	14.0/100	75.0/100	10.00	41.00	16.00	14.00	2.00	-	44.00	29.0/-	83.0/100	-	
	2005	41.00	19.00	60.00/-	14.0/100	74.0/100	9.00	41.00	17.00	13.00	2.00	-	44.00	29.0/-	82.0/100		
	2006	41.00	24.00	75/100	10/100	75/100	9.00	45.00	3.00	15.00	3.00	-	45.00	30/-	85/100		

STATE	YEAR	WHEAT	PADDY	STATE-WISE REPLACEMENT RATE INCREASE OF IMPORTANT CROPS												FIGURES IN PERCENTAGE (%)			COT-TON	JUTE
				MAIZE		JOWAR	BAJRA	GRAM	URD	MOONG	AR-	G.NUT	R/M	SOYA-	SUNFL					
				V	Hy	V	V				HAR			BEAN	OWER					
														V	V					
RAJASTHAN	2001	11.16	4.41	1.70	/-	1.43/-	32.91/-	6.64	3.08	8.67	14.3	0.75	68.95	4.37	-	61.61/-				
	2002	21.84	6.77	12.54	/-	3.83/-	58.79/-	7.28	5.15	7.58	7.03	0.75	90.78	6.72	-	99.32/-				
	2003	14.5	3.03	12.49	/-	4.48/-	34.73/-	3.09	5.39	9.01	9.93	0.49	55.52	5.56	-	58.27/-				
	2004	15.86	2.63	10.46/-		2.79/-	31.10/-	3.13	4.33	5.06	14.18	0.61	44.56	6.61		37.64/-				
	2005	19.42	5.18	17.88/-		5.38/-	44.68/-	3.96	5.07	7.59	8.95	1.17	47.81	7.02		50.84/-				
	2006	19.12	9.61	19.86/-		7.50/-	46.22/-	3.91	5.16	9.12	8.8	2.15	60.01	10.99		49.16				
MADHYA PRA.	2001	5.64	3.3	8.05	/-	5.99/-	35.17/-	1.29	1.39	2.47	2.78	0.03	7.15	6.35	15.0/-	3.40/100				
	2002	6.51	3.91	7.06	/-	8.91/-	31.30/-	2.26	4.13	4.65	3.85	0.35	10.8	6.04	-	7.2/0/100				
	2003	6.28	3.9	8.95	/-	10.23/-	48.15/-	1.88	6.26	7.19	5.56	0.21	9.56	10.43	-	6.80/100				
	2004	8.77	3.39	13.77/-		10.63/-	55.05/-	2.33	3.11	7.54	2.79	0.03	14.56	12.48	-	0.31/100				
	2005	15.06	6.41	16.96/-		19.97/-	43.98/-	1.85	3.85	9.21	4.33	0.08	21.29	15.68	3.33/-	3.88/100				
	2006	13.09	3.96	12.94		14.28	55.37	2.15	1.17	7.58	6	0.33	21.49	15.84		0.35/100				
UTTAR PRADESH	2001	15.26	14.28	6.57	/-	5.35/-	13.85	4.13	7.24	13.89	12.05	1.04	26.83	7.11	36.05	1/-	70.80/-			
	2002	16.42	15.9	7.80	/-	4.90/-	17.7	8.16	8.8	16.2	13.2	1.5	38.18	13.1	100.0	1/-	73.80/-			
	2003	17	17.25	10.9	/ -	5.6 /-	35.9	9	10.9	15.3	13.5	2.6	38.25	23.9	72.60	1/-	60.60/-			
	2004	18.97	17.9	14.03/-		8.28/-	41.78	11.07	11.45	18.99	15.6	3.5	52.87	32.27	59.73/-	39.36/-				
	2005	21.4	20.29	12.28/-		10.57/-	50.54	11.5	11.2	23.06	18.23	3.96	52	31.68	14.13/-	64/100				
	2006	24.14					14.31						58.38							
HARYANA	2001	17.85	11.25	5.00	/ -	-	64.34	6.27	46.6	-	48.64	-	46.41		-					
	2002	18	14.12	4.12	/ -	-	36	11.56	40.51	-	50.3	-	49.89		-					
	2003	20.2	14.49	56.75	/ -	-	59.26	11.59	50.69	-	54.35	-	55.76		-	46.20/-				
	2004	21	14.05	-	-			7.09	52.00*				60			48.57				
	2005	21.78	17	-	-			10.27	56.29*				69.69			43				
	2006	23.25	17.5				57.51	10.5	69				72			42.24				
PUNJAB	2001	7	11	42.0	/ -	-	-	22	11	-	26	-	26	-	-	-				
	2002	7	17	44.0	/ -	-	-	22	12	-	21	-	21	-	-	-				
	2003	7	23	32.0	/ -	-	-	30	30	-	20	-	20	-	-	13/-				
	2004	10	15	57.0/-				74	15				37							
	2005	11	19	69.0/-				79	22				21			90				
	2006	13	21	95				56	38				58			95				
HIMACHAL PRA	2001	16.74	11.59	0.3/100		-	-	3.47	18.3	-	-	-	20	-	-	-				
	2002	17.9	12.2	0.26/100		-	-	3.82	20.67	-	-	-	26.67	-	-	-				
	2003	13.95	12.2	0.25/100		-	-	3.23	20	-	-	-	20	-	-	-				
	2004	13.95	12.8	0.20/100				3.23	20				20							
	2005	13.95	14.02	0.20/100				3.99	21.66				23							
	2006	13.68	14.33	0.07/100				3.47	16.66				25							

* Kharif Pulses

STATE-WISE REPLACEMENT RATE INCREASE OF IMPORTANT CROPS																	
STATE	YEAR	WHEAT	PADDY	MAIZE	JOWAR	BAJRA	GRAM	URD	MOONG	ARHAR	G.NUT	FIGURES IN PERCENTAGE (%)					JUTE
				V Hyd	V Hyd	V Hyd						BEAN	SOYA-	SUNFL	COTTON		
													OWER	V Hyd			
												V Hyd					
TRIPURA	2005	100	22.00									10					
	2006	100	35.00	40				39.00	30.00	29.00		96					
MANIPUR	2005						7.14					33.89					
	2006						35.71					64.84					
SIKKIM	2005	35.57	10.79	12.81				1.45				48.15	15.32				
	2006	39.68	11.93	15.45				9.58				63.13	16.3				
MIZORAM	2005		4.93	25.54								50.63	19.73				
	2006		10.87	76.56								85.76	42.64				
MEGHALAYA	2005	7.22	10.81	6.19								45.48	17.57	14.07		7.99	
	2006	4.26	11.36	6.12								63.33	18.04	28.47		18.99	
NAGALAND	2005	**															
	2006																
ARUNANCHAL PRADESH	2005	**															
	2006																
**No Report																	

It is evident that there is a direct proportionality between low yields and low seed replacement rates.

The desirable seed replacement rates, without which it is not possible to achieve higher productivity are 25% for self pollinated crops, 35% for cross pollinated crops and 100% for hybrids. The quantity of seeds required on the basis of seed replacement rates mentioned above and the area required state-wise for production of seeds is given in **Statement 3**

Statement 3

[Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively]

ANDHRA PRADESH

Crop	Season	Normal Area ('000' ha)	Seed Rate (Kg/he.)	Seed Req. ('000' Tons)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000' Tons)	
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Rice	Kharif	2499.4	40	99.976	75	33.325	8.331	11.664	24.994	34.9916
	Rabi	1076.4	40	43.056	75	14.352	3.588	5.023	10.764	15.0696
Wheat		12.9	100	1.29	20	0.645	0.161	0.226	0.3225	0.4515
Bajra	Kharif	115.3	4	0.461	200	0.577	0.144	0.202	0.11525	0.16135
Jowar	Kharif	299.9	12	3.599	100	2.999	0.75	1.05	0.89975	1.25965
Maize	Kharif	420.2	20	8.404	80	5.253	1.313	1.838	2.101	2.9414
S. Millets		57	7	0.399	80	0.713	0.178	0.249	0.09975	0.13965
Ragi		85.3	7	0.597	80	1.066	0.267	0.373	0.14925	0.20895
Gram		292.2	75	21.915	10	29.22	7.305	10.227	5.47875	7.67025
Arhar		463.6	20	9.272	100	4.636	1.159	1.623	2.318	3.2452
Urd	Kharif	98.2	20	1.964	40	2.455	0.614	0.859	0.491	0.6874
	Rabi	456.7	20	9.134	40	11.418	2.854	3.996	2.2835	3.1969
Moong	Kharif	377	20	7.54	40	9.425	2.356	3.299	1.885	2.639
	Rabi	144.9	20	2.898	40	3.623	0.906	1.268	0.7245	1.0143
Groundnut		1664.5	150	249.675	6	277.417	69.354	97.096	62.41875	87.38625
Soybean		31	65	2.015	15	2.067	0.517	0.723	0.50375	0.70525
Sunflower		329.8	10	3.298	10	32.98	8.245	11.543	0.8245	1.1543
Castor		293.8	12.5	3.673	60	4.897	1.224	1.714	0.91825	1.28555
Linseed		5.2	25	0.13	50	0.104	0.026	0.036	0.0325	0.0455
Safflower		17.9	12	0.215	60	0.298	0.075	0.104	0.05375	0.07525
Sesamum		152.4	5	0.762	250	0.61	0.152	0.213	0.1905	0.2667
Cotton		961.8	20	19.236	50	19.236	4.809	6.733	4.809	6.7326
Total		9855.4		489.509		457.316	114.328	160.059	122.3773	171.3282

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively)

ASSAM										
Crop	Season	Normal Area (000' ha)	Seed Rate	Seed Req. (000' Tons)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000' Tons)	
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Rice	Kharif	2260.7	40	90.428	75	30.143	7.536	10.55	22.607	31.6498
	Rabi	319.4	40	12.776	75	4.259	1.065	1.491	3.194	4.4716
Wheat		71.5	100	7.15	20	3.575	0.894	1.251	1.7875	2.5025
	Kharif	20	20	0.4	80	0.25	0.063	0.088	0.1	0.14
Small Millets		9.2	7	0.064	80	0.115	0.029	0.04	0.016	0.0224
		7.1	20	0.142	100	0.071	0.018	0.025	0.0355	0.0497
Urd	Rabi	39.5	20	0.79	40	0.988	0.247	0.346	0.1975	0.2765
	Rabi	7.6	20	0.152	40	0.19	0.048	0.067	0.038	0.0532
Moong		20.9	25	0.523	30	0.697	0.174	0.244	0.13075	0.18305
		21.4	5	0.107	100	0.214	0.054	0.075	0.02675	0.03745
Lentil		1.8	12.5	0.023	60	0.03	0.008	0.011	0.00575	0.00805
		10	25	0.25	50	0.2	0.05	0.07	0.0625	0.0875
Castor		14.7	5	0.074	250	0.059	0.015	0.021	0.0185	0.0259
		2803.8		112.879		40.791	10.201	14.279	28.21975	39.50765

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively)

BIHAR										
Crop	Season	Normal Area	Seed Rate	Seed Req.	SMR	Area Requirement			Seed Requirement	
		(000' ha)		(000' Tons)		100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Rice	Kharif	3460.8	40	138.432	75	46.144	11.536	16.15	34.608	48.4512
	Rabi	122.2	40	4.888	75	1.629	0.407	0.57	1.222	1.7108
Wheat		2104.3	100	210.43	20	105.215	26.304	36.825	52.6075	73.6505
	Bajra	1.6	4	0.006	200	0.008	0.002	0.003	0.0015	0.0021
Jowar	Kharif	2.9	12	0.035	100	0.029	0.007	0.01	0.00875	0.01225
	Maize	255.6	20	5.112	80	3.195	0.799	1.118	1.278	1.7892
Barley	Rabi	191	20	3.82	80	2.388	0.597	0.836	0.955	1.337
		22.1	100	2.21	15	1473.33	368.33	486.19	0.5525	0.7735
Small Millets		7.4	7	0.052	80	0.093	0.023	0.032	0.013	0.0182
	Ragi	23.4	7	0.164	80	0.293	0.073	0.102	0.041	0.0574
Gram		75.5	75	5.663	10	7.55	1.888	2.643	1.41575	1.98205
	Arhar	37.5	20	0.75	100	0.375	0.094	0.131	0.1875	0.2625
Urd	Kharif	28.3	20	0.566	40	0.708	0.177	0.248	0.1415	0.1981
	Moong	8.2	20	0.164	40	0.205	0.051	0.072	0.041	0.0574
Lentil		173.4	25	4.335	30	5.78	1.445	2.023	1.08375	1.51725
	Peas	23.8	100	2.38	10	2.38	0.595	0.833	0.595	0.833
R & M		271.5	5	1.358	100	2.715	0.679	0.95	0.3395	0.4753
	Groundnut	1.3	150	0.195	6	0.217	0.054	0.076	0.04875	0.06825
Sunflower		12.9	10	0.129	10	1.29	0.323	0.452	0.03225	0.04515
	Castor	1	12.5	0.013	60	0.017	0.004	0.006	0.00325	0.00455
Linseed		36.6	25	0.915	50	0.732	0.183	0.256	0.22875	0.32025
	Safflower	0.5	12	0.006	60	0.008	0.002	0.003	0.0015	0.0021
Sesamum		4.2	5	0.021	250	0.017	0.004	0.006	0.00525	0.00735
	Total	6866		381.644		1654.318	413.577	549.535	95.411	133.5754

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively)

CHATTISHGARH										
Crop	Season	Normal Area (000' ha)	Seed Rate	Seed Req. (000' Tons)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000' Tons)	
						100% SRR			25% SRR	35% SRR
						25% SRR	35% SRR	25% SRR	35% SRR	
Rice	Kharif	3769	40	150.76	75	50.253	12.563	17.589	37.69	52.766
Wheat		92.9	100	9.29	20	4.645	1.161	1.626	2.3225	3.2515
Bajra	Kharif	0.1	4	0	200	0.001	0	0	0	0
Jowar	Kharif	9.2	12	0.11	100	0.092	0.023	0.032	0.0275	0.0385
Maize	Kharif	96.5	20	1.93	80	1.206	0.302	0.422	0.4825	0.6755
Barley		4.2	100	0.42	15	0.28	0.07	0.098	0.105	0.147
Small Millets		266.9	7	1.868	80	3.336	0.834	1.168	0.467	0.6538
Ragi		10.9	7	0.076	80	0.136	0.034	0.048	0.019	0.0266
Gram		168.7	75	12.653	10	16.87	4.218	5.905	3.16325	4.42855
Arhar		54	20	1.08	100	0.54	0.135	0.189	0.27	0.378
Urd	Kharif	113.1	20	2.262	40	2.828	0.707	0.99	0.5655	0.7917
	Rabi	5.9	20	0.118	40	0.148	0.037	0.052	0.0295	0.0413
Moong	Kharif	10	20	0.2	40	0.25	0.063	0.088	0.05	0.07
	Rabi	6.1	20	0.122	40	0.153	0.038	0.053	0.0305	0.0427
Lentil		15.4	25	0.385	30	0.513	0.128	0.18	0.09625	0.13475
Peas		12.5	100	1.25	10	1.25	0.313	0.438	0.3125	0.4375
Rape & Mustard		50.6	5	0.253	100	0.506	0.127	0.177	0.06325	0.08855
Groundnut		33.2	150	4.98	6	5.533	1.383	1.937	1.245	1.743
Soybean		14.5	65	0.943	15	0.967	0.242	0.338	0.23575	0.33005
Castor		0.1	12.5	0.001	60	0.002	0	0.001	0.00025	0.00035
Linseed		77.5	25	1.938	50	1.55	0.388	0.543	0.4845	0.6783
Safflower		0.6	12	0.007	60	0.01	0.003	0.004	0.00175	0.00245
Sesamum		24.3	5	0.122	250	0.097	0.024	0.034	0.0305	0.0427
Total		4836.2		190.768		91.166	22.793	31.912	47.692	66.7688

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively)

GUJARAT										
Crop	Season	Normal Area (000' ha)	Seed Rate	Seed Req. (000' Tons)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000' Tons)	
						100% SRR		25% SRR	35% SRR	25% SRR
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Rice	Kharif	612	40	24.48	75	8.16	2.04	2.856	6.12	8.568
Wheat		486.7	100	48.67	20	24.335	6.084	8.517	12.1675	17.0345
Bajra	Kharif	818.2	4	3.273	200	4.091	1.023	1.432	0.81825	1.14555
	Summer	155.1	4	0.62	200	0.776	0.194	0.271	0.155	0.217
Jowar	Kharif	128.1	12	1.537	100	1.281	0.32	0.448	0.38425	0.53795
	Rabi	49.9	12	0.599	100	0.499	0.125	0.175	0.14975	0.20965
Maize	Kharif	433.3	20	8.666	80	5.416	1.354	1.896	2.1665	3.0331
Small Millets		14.4	7	0.101	80	0.18	0.045	0.063	0.02525	0.03535
Ragi		21.1	7	0.148	80	0.264	0.066	0.092	0.037	0.0518
Gram		71	75	5.325	10	7.1	1.775	2.485	1.33125	1.86375
Arhar		323.6	20	6.472	100	3.236	0.809	1.133	1.618	2.2652
Urd	Kharif	107.2	20	2.144	40	2.68	0.67	0.938	0.536	0.7504
Moong	Kharif	154.5	20	3.09	40	3.863	0.966	1.352	0.7725	1.0815
Rape & Mustard		236.8	5	1.184	100	2.368	0.592	0.829	0.296	0.4144
Groundnut		1898.4	150	284.76	6	316.4	79.1	110.74	71.19	99.666
Soybean		9.6	65	0.624	15	0.64	0.16	0.224	0.156	0.2184
Castor		328.5	12.5	4.106	60	5.475	1.369	1.916	1.0265	1.4371
Sesamum		356.7	5	1.784	250	1.427	0.357	0.499	0.446	0.6244
Cotton		1636.1	20	32.722	50	32.722	8.181	11.453	8.1805	11.4527
Total		7841.2		430.305		420.913	105.23	147.319	107.5763	150.6068

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively)

HARYANA										
Crop	Season	Normal Area (000' ha)	Seed Rate	Seed Req. (000' Tons)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000' Tons)	
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Rice	Kharif	1017.4	40	40.696	75	13.565	3.391	4.748	10.174	14.2436
Wheat		2308.4	100	230.84	20	115.42	28.855	40.397	57.71	80.794
Bajra	Kharif	583.8	4	2.335	200	2.919	0.73	1.022	0.58375	0.81725
Jowar	Kharif	107.8	12	1.294	100	1.078	0.27	0.377	0.3235	0.4529
Maize	Kharif	16.8	20	0.336	80	0.21	0.053	0.074	0.084	0.1176
Barley		33.8	100	3.38	15	2.253	0.563	0.789	0.845	1.183
Gram		109.2	75	8.19	10	10.92	2.73	3.822	2.0475	2.8665
Arhar		21.2	20	0.424	100	0.212	0.053	0.074	0.106	0.1484
Moong	Kharif	18.6	20	0.372	40	0.465	0.116	0.163	0.093	0.1302
Lentil		7.2	25	0.18	30	0.24	0.06	0.084	0.045	0.063
Peas		1.2	100	0.12	10	0.12	0.03	0.042	0.03	0.042
Rape & Mustard		522	5	2.61	100	5.22	1.305	1.827	0.6525	0.9135
Groundnut		1.2	150	0.18	6	0.2	0.05	0.07	0.045	0.063
Sunflower		9.8	10	0.098	10	0.98	0.245	0.343	0.0245	0.0343
Sesamum		5.5	5	0.028	250	0.022	0.006	0.008	0.007	0.0098
Cotton		554.6	20	11.092	50	11.092	2.773	3.882	2.773	3.8822
Total		5318.5		302.175		164.916	41.23	57.722	75.54375	105.7613

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively)

HIMACHAL PRADESH										
Crop	Season	Normal Area	Seed Rate	Seed Req.	SMR	Area Requirement			Seed Requirement	
		(000' ha)		(000' Tons)		('000' ha)			('000' Tons)	
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Rice	Kharif	81.4	40	3.256	75	1.085	0.271	0.38	0.814	1.1396
Wheat		364	100	36.4	20	18.2	4.55	6.37	9.1	12.74
Maize	Kharif	299.5	20	5.99	80	3.744	0.936	1.31	1.4975	2.0965
Barley		24.8	100	2.48	15	1.653	0.413	0.579	0.62	0.868
Small Millets		10.5	7	0.074	80	0.131	0.033	0.046	0.0185	0.0259
Ragi		3.7	7	0.026	80	0.046	0.012	0.016	0.0065	0.0091
Urd	Kharif	10.7	20	0.214	40	0.268	0.067	0.094	0.0535	0.0749
R&M		9.9	5	0.05	100	0.099	0.025	0.035	0.0125	0.0175
Linseed		2.3	25	0.058	50	0.046	0.012	0.016	0.0145	0.0203
Sesamum		4.5	5	0.023	250	0.018	0.005	0.006	0.00575	0.00805
Total		811.3		48.571	790	25.29	6.324	8.852	12.14275	16.99985

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively)

JAMMU & KASHMIR													
Crop	Season	Normal Area (000' ha)	Seed Rate	Seed Req. (000' Tons)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000' Tons)				
									100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR			
Rice	Kharif	248.1	40	9.924	75	3.308	0.827	1.158	2.481	3.4734			
Wheat		258.4	100	25.84	20	12.92	3.23	4.522	6.46	9.044			
Bajra	Kharif	14.1	4	0.056	200	0.071	0.018	0.025	0.014	0.0196			
Maize	Kharif	324.9	20	6.498	80	4.061	1.015	1.421	1.6245	2.2743			
Barley		8.1	100	0.81	15	0.54	0.135	0.189	0.2025	0.2835			
Small Millets		8.8	7	0.062	80	0.11	0.028	0.039	0.0155	0.0217			
Urd	Kharif	13.8	20	0.276	40	0.345	0.086	0.121	0.069	0.0966			
Peas		1.6	100	0.16	10	0.16	0.04	0.056	0.04	0.056			
Rape & Mustard		66.9	5	0.335	100	0.669	0.167	0.234	0.08375	0.11725			
Linseed		0.6	25	0.015	50	0.012	0.003	0.004	0.00375	0.00525			
Sesamum		6.4	5	0.032	250	0.026	0.006	0.009	0.008	0.0112			
Total		951.7		44.008		22.222	5.555	7.778	11.002	15.4028			

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively)

PUNJAB										
Crop	Season	Normal Area	Seed Rate	Seed Req.	SMR	Area Requirement			Seed Requirement	
		(000' ha)		(000' Tons)		('000' ha)		('000' Tons)		
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Rice	Kharif	2569.2	40	102.768	75	34.256	8.564	11.99	25.692	35.9688
Wheat		3407	100	340.7	20	170.35	42.588	59.623	85.175	119.245
Bajra	Kharif	6.4	4	0.026	200	0.032	0.008	0.011	0.0065	0.0091
Maize	Kharif	159.8	20	3.196	80	1.998	0.499	0.699	0.799	1.1186
Barley		26.8	100	2.68	15	1.787	0.447	0.625	0.67	0.938
Gram		6.8	75	0.51	10	0.68	0.17	0.238	0.1275	0.1785
Arhar		8.9	20	0.178	100	0.089	0.022	0.031	0.0445	0.0623
Moong	Kharif	25.2	20	0.504	40	0.63	0.158	0.221	0.126	0.1764
Lentil		4.1	25	0.103	30	0.137	0.034	0.048	0.02575	0.03605
Peas		4.7	100	0.47	10	0.47	0.118	0.165	0.1175	0.1645
Rape & Mustard		55.4	5	0.277	100	0.554	0.139	0.194	0.06925	0.09695
Groundnut		4.5	150	0.675	6	0.75	0.188	0.263	0.16875	0.23625
Sunflower		15.8	10	0.158	10	1.58	0.395	0.553	0.0395	0.0553
Linseed		0.4	25	0.01	50	0.008	0.002	0.003	0.0025	0.0035
Sesamum		16.6	5	0.083	250	0.066	0.017	0.023	0.02075	0.02905
Cotton		491.6	20	9.832	50	9.832	2.458	3.441	2.458	3.4412
Total		6803.2		462.17		223.219	55.807	78.128	115.5425	161.7595

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively)

MEGHALAYA										
Crop	Season	Normal Area	Seed Rate	Seed Req.	SMR	Area Requirement			Seed Requirement	
		(000' ha)		(000' Tons)		('000' ha)			('000' Tons)	
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Maize	Kharif	16.8	20	0.336	80	0.21	0.053	0.074	0.084	0.1176
S. Millets		2.8	7	0.02	80	0.035	0.009	0.012	0.005	0.007
		19.6	27	0.356	160	0.245	0.062	0.086	0.089	0.1246

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively)

KARNATAKA											
Crop	Season	Normal Area (000' ha)	Seed Rate	Seed Req. (000' Tons)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000' tons)		
									100% SRR	25% SRR	35% SRR
						Kgs./Ha				25% SRR	35% SRR
Rice	Kharif	1055.8	40	42.232	75	14.077	3.519	4.927	10.558	14.7812	
	Rabi	275.1		11.004		3.668	0.917	1.284	2.751	3.8514	
Wheat		253.1	100	25.31	20	12.655	3.164	4.429	6.3275	8.8585	
Bajra	Kharif	338.4	4	1.354	200	1.692	0.423	0.592	0.3385	0.4739	
	Rabi	0.9		0.004		0.005	0.001	0.002	0.001	0.0014	
Jowar	Kharif	336.5	12	4.038	100	3.365	0.841	1.178	1.0095	1.4133	
	Rabi	1474.4		17.693		14.744	3.686	5.16	4.42325	6.19255	
Maize	Kharif	550.9	20	11.018	80	6.886	1.722	2.41	2.7545	3.8563	
	Rabi	73.6		1.472		0.92	0.23	0.322	0.368	0.5152	
Small Millets		66	7	0.462	80	0.825	0.206	0.289	0.1155	0.1617	
Ragi	Kharif	858.8	7	6.012	80	10.735	2.684	3.757	1.503	2.1042	
	Rabi	60.1		0.421		0.751	0.188	0.263	0.10525	0.14735	
	Summer	10.4		0.073		0.13	0.033	0.046	0.01825	0.02555	
Gram		427.7	75	32.078	10	42.77	10.693	14.97	8.0195	11.2273	
Arhar		523.7	20	10.474	100	5.237	1.309	1.833	2.6185	3.6659	
Urd	Kharif	133.8	20	2.676	40	3.345	0.836	1.171	0.669	0.9366	
	Rabi	12.9		0.258		0.323	0.081	0.113	0.0645	0.0903	
Moong	Kharif	356.1	20	7.122	40	8.903	2.226	3.116	1.7805	2.4927	
	Rabi	11.7		0.234		0.293	0.073	0.102	0.0585	0.0819	
Groundnut		940.9	150	141.135	6	156.817	39.204	54.886	35.28375	49.39725	
Soybean		66.1	65	4.297	15	4.407	1.102	1.542	1.07425	1.50395	
Sunflower		711.6	10	7.116	10	71.16	17.79	24.906	1.779	2.4906	
Castor		22.3	12.5	0.279	60	0.372	0.093	0.13	0.06975	0.09765	
Linseed		17.6	25	0.44	50	0.352	0.088	0.123	0.11	0.154	
Safflower		96.4	12	1.157	60	1.607	0.402	0.562	0.28925	0.40495	
Sesamum		81.8	5	0.409	250	0.327	0.082	0.115	0.10225	0.14315	
Cotton		482.3	20	9.646	50	9.646	2.412	3.376	2.4115	3.3761	
Total		9238.9		338.414		376.012	94.005	131.604	84.6035	118.4449	

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively)

KERALA										
Crop	Season	Normal Area (000' ha)	Seed Rate	Seed Req. (000' Tons)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000' Tons)	
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
			Kgs./Ha							
Rice	Kharif	277.2	40	11.088	75	3.696	0.924	1.294	2.772	3.8808
	Rabi	47.1	40	1.884	75	0.628	0.157	0.22	0.471	0.6594
Til		1.4	5	0.007	250	0.006	0.001	0.002	0.00175	0.00245
Total		325.7		12.979		4.33	1.082	1.516	3.24475	4.54265

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively

MADHYA PRADESH											
Crop	Season	Normal Area ('000' ha)	Seed Rate	Seed Req. ('000' Tons)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000' Tons)		
									100% SRR	25% SRR	35% SRR
						25% SRR	35% SRR	25% SRR	35% SRR		
Rice	Kharif	1685	40	67.4	75	22.467	5.617	7.863	16.85	23.59	
Wheat		3802.2	100	380.22	20	190.11	47.528	66.539	95.055	133.077	
Bajra	Kharif	164.3	4	0.657	200	0.822	0.205	0.288	0.16425	0.22995	
Jowar	Kharif	667.4	12	8.009	100	6.674	1.669	2.336	2.00225	2.80315	
	Rabi	4.3	12	0.052	100	0.043	0.011	0.015	0.013	0.0182	
Maize	Kharif	852.8	20	17.056	80	10.66	2.665	3.731	4.264	5.9696	
Small Millets		466.7	7	3.267	80	5.834	1.458	2.042	0.81675	1.14345	
Ragi	Kharif	0.9	7	0.006	80	0.011	0.003	0.004	0.0015	0.0021	
Gram		2453.7	75	184.028	10	245.37	61.343	85.88	46.007	64.4098	
Arhar		302	20	6.04	100	3.02	0.755	1.057	1.51	2.114	
Urd	Kharif	475.6	20	9.512	40	11.89	2.973	4.162	2.378	3.3292	
	Rabi	7.2	20	0.144	40	0.18	0.045	0.063	0.036	0.0504	
Moong	Kharif	88.1	20	1.762	40	2.203	0.551	0.771	0.4405	0.6167	
	Rabi	2.8	20	0.056	40	0.07	0.018	0.025	0.014	0.0196	
Lentil		489.5	25	12.238	30	16.317	4.079	5.711	3.0595	4.2833	
Peas		188	100	18.8	10	18.8	4.7	6.58	4.7	6.58	
Groundnut		188	100	18.8	10	18.8	4.7	6.58	4.7	6.58	
Soybean		4341.3	65	282.185	15	289.42	72.355	101.297	70.54625	98.76475	
R/M		479.7	5	2.399	100	4.797	1.199	1.679	0.59975	0.83965	
Castor		2.2	12.5	0.028	60	0.037	0.009	0.013	0.007	0.0098	
Linseed		155.8	25	3.895	50	3.116	0.779	1.091	0.97375	1.36325	
Safflower		0.3	12	0.004	60	0.005	0.001	0.002	0.001	0.0014	
Sesamum		155.8	25	3.895	50	3.116	0.779	1.091	0.97375	1.36325	
Cotton		535.3	20	10.706	50	10.706	2.677	3.747	2.6765	3.7471	
Total		17508.9		1031.159		864.468	216.119	302.567	257.7898	360.9057	

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively

MAHARASHTRA											
Crop	Season	Normal Area (000' ha)	Seed Rate	Seed Req. (000' Tons)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000' Tons)		
									100% SRR	25% SRR	
						Kga./Ha				35% SRR	
Rice	Kharif	1489.9	40	59.596	75		19.865	4.966	6.953	14.899	20.8586
Wheat		801.4	100	80.14	20		40.07	10.018	14.025	20.035	28.049
Bajra	Kharif	1561.5	4	6.246	200		7.808	1.952	2.733	1.5615	2.1861
Jowar	Kharif	1782.5	12	21.39	100		17.825	4.456	6.239	5.3475	7.4865
	Rabi	3171.1	12	38.053	100		31.711	7.928	11.099	9.51325	13.31855
Maize	Kharif	267.4	20	5.348	80		3.343	0.836	1.17	1.337	1.8718
	Rabi	71	20	1.42	80		0.888	0.222	0.311	0.355	0.497
Small Millets		109.9	7	0.769	80		1.374	0.343	0.481	0.19225	0.26915
Ragi	Kharif	151	7	1.057	80		1.888	0.472	0.661	0.26425	0.36995
Gram		801.8	75	60.135	10		80.18	20.045	28.063	15.03375	21.04725
Arhar		1053.2	20	21.064	100		10.532	2.633	3.686	5.266	7.3724
Urd	Kharif	589.1	20	11.782	40		14.728	3.682	5.155	2.9455	4.1237
	Rabi	13.6	20	0.272	40		0.34	0.085	0.119	0.068	0.0952
Moong	Kharif	709	20	14.18	40		17.725	4.431	6.204	3.545	4.963
	Rabi	13.7	20	0.274	40		0.343	0.086	0.12	0.0685	0.0959
Lentil		7.1	25	0.178	30		0.237	0.059	0.083	0.0445	0.0623
Peas		15.9	100	1.59	10		1.59	0.398	0.557	0.3975	0.5565
Groundnut		453.7	150	68.055	6		75.617	18.904	26.466	17.01375	23.81925
Soybean		1251	65	81.315	15		83.4	20.85	29.19	20.32875	28.46025
Sunflower		318.6	10	3.186	10		31.86	7.965	11.151	0.7965	1.1151
Castor		19.4	12.5	0.243	60		0.323	0.081	0.113	0.06075	0.08505
Linseed		75.5	25	1.888	50		1.51	0.378	0.529	0.472	0.6608
Safflower		279.4	12	3.353	60		4.657	1.164	1.63	0.83825	1.17355
Sesamum		124.6	5	0.623	250		0.498	0.125	0.174	0.15575	0.21805
Cotton		3000.3	20	60.006	50		60.006	15.002	21.002	15.0015	21.0021
Total		18131.6		542.163			508.318	127.081	177.914	135.5408	189.7571

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively

MANIPUR										
Crop	Season	Normal Area	Seed Rate	Seed Req.	SMR	Area Requirement			Seed Requirement	
		(000' ha)		(000' Tons)		('000' ha)			('000' Tons)	
				Kgs./Ha		100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Rice	Kharif	155.8	40	6.232	75	2.077	0.519	0.727	1.558	2.1812

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively

MIZORAM										
Crop	Season	Normal Area	Seed Rate	Seed Req.	SMR	Area Requirement			Seed Requirement	
		(000' ha)		(000' Tons)		('000' ha)			('000' Tons)	
				Kgs./Ha		100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Rice	Kharif	54.3	40	2.172	75	0.724	0.181	0.253	0.543	0.7602

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively

NAGALAND										
Crop	Season	Normal Area	Seed Rate	Seed Req.	SMR	Area Requirement			Seed Requirement	
		(000' ha)		(000' Tons)		('000' ha)			('000' Tons)	
				Kgs/Ha		100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Bajra	Kharif	1.7	4	0.007	200	0.009	0.002	0.003	0.00175	0.00245
Maize	Kharif	36.6	20	0.732	80	0.458	0.114	0.16	0.183	0.2562
Linseed		7	25	0.175	50	0.14	0.035	0.049	0.04375	0.06125
Total		45.3	49	0.914	330	0.607	0.151	0.212	0.2285	0.3199

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively

ORISSA										
Crop	Season	Normal Area (000' ha)	Seed Rate	Seed Req. (000' Tons)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000' Tons)	
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
			Kgs/Ha							
Rice	Kharif	4203.4	40	168.136	75	56.045	14.011	19.616	42.034	58.8476
	Rabi	258.6	40	10.344	75	3.448	0.862	1.207	2.586	3.6204
Wheat		6.3	100	0.63	20	0.315	0.079	0.11	0.1575	0.2205
Bajra	Kharif	4	4	0.016	200	0.02	0.005	0.007	0.004	0.0056
Jowar	Kharif	12.3	12	0.148	100	0.123	0.031	0.043	0.037	0.0518
Maize	Kharif	50.5	20	1.01	80	0.631	0.158	0.221	0.2525	0.3535
Small Millets		36.7	7	0.257	80	0.459	0.115	0.161	0.06425	0.08995
Ragi	Kharif	77.7	7	0.544	80	0.971	0.243	0.34	0.136	0.1904
Gram		26.8	75	2.01	10	2.68	0.67	0.938	0.5025	0.7035
Arhar		132.5	20	2.65	100	1.325	0.331	0.464	0.6625	0.9275
Urd	Kharif	122.5	20	2.45	40	3.063	0.766	1.072	0.6125	0.8575
	Rabi	2.1	20	0.042	40	0.053	0.013	0.018	0.0105	0.0147
Moong	Kharif	116.2	20	2.324	40	2.905	0.726	1.017	0.581	0.8134
	Rabi	79.1	20	1.582	40	1.978	0.494	0.692	0.3955	0.5537
Peas		41.8	100	4.18	10	4.18	1.045	1.463	1.045	1.463
Groundnut		69.4	150	10.41	6	11.567	2.892	4.048	2.6025	3.6435
Sunflower		6.8	10	0.068	10	0.68	0.17	0.238	0.017	0.0238
Castor		18	12.5	0.225	60	0.3	0.075	0.105	0.05625	0.07875
Linseed		21.3	25	0.533	50	0.426	0.107	0.149	0.13325	0.18655
Safflower		2.3	12	0.028	60	0.038	0.01	0.013	0.007	0.0098
Sesamum		46.2	5	0.231	250	0.185	0.046	0.065	0.05775	0.08085
Cotton		41.6	20	0.832	50	0.832	0.208	0.291	0.208	0.2912
Total		5376.1		208.65		92.224	23.057	32.278	52.1625	73.0275

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively

TRIPURA										
Crop	Season	Normal Area# (000' ha)	Seed Rate	Seed Requirement (000' Tonnes)	SMR	Area Requirement			Seed Requirement (000'Tons)	
						('000' ha)				
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Rice	Kharif	185.3	40	7.412	75	2.471	0.618	0.865	1.853	2.5942
	Rabi	57.3	40	2.292	75	0.764	0.191	0.267	0.573	0.8022
Maize	Kharif	1.8	20	0.036	80	0.023	0.006	0.008	0.009	0.0126
Total		244.4		9.74		3.258	0.815	1.14	2.435	3.409

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively

TAMILNADU										
Crop	Season	Normal Area# (000' ha)	Seed Rate	Seed Requirement (000' Tonnes)	SMR	Area Requirement			Seed Requirement (000'Tons)	
						('000' ha)				
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Rice	Kharif	1656.1	40	66.244	75	22.081	5.52	7.728	16.561	23.1854
	Rabi	187.2	40	7.488	75	2.496	0.624	0.874	1.872	2.6208
Bajra	Kharif	134.3	4	0.537	200	0.672	0.168	0.235	0.13425	0.18795
Jowar	Kharif	260.9	12	3.131	100	2.609	0.652	0.913	0.78275	1.09585
Maize	Kharif	48.1	20	0.962	80	0.601	0.15	0.21	0.2405	0.3367
Small Millets		66.6	7	0.466	80	0.833	0.208	0.291	0.1165	0.1631
Ragi		124.9	7	0.874	80	1.561	0.39	0.546	0.2185	0.3059
Arhar		60.8	20	1.216	100	0.608	0.152	0.213	0.304	0.4256
Urd	Kharif	65.3	20	1.306	40	1.633	0.408	0.571	0.3265	0.4571
	Rabi	187.4	20	3.748	40	4.685	1.171	1.64	0.937	1.3118
Moong	Kharif	44.8	20	0.896	40	1.12	0.28	0.392	0.224	0.3136
	Rabi	88.6	20	1.772	40	2.215	0.554	0.775	0.443	0.6202
Castor		24.2	12.5	0.303	60	0.403	0.101	0.141	0.07575	0.10605
Sesamum		96.5	5	0.483	250	0.386	0.097	0.135	0.12075	0.16905
Cotton		143.2	20	2.864	50	2.864	0.716	1.002	0.716	1.0024

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively

UTTAR PRADESH										
Crop	Season	Normal Area# (000' ha)	Seed Rate	Seed Requirement (000' Tonnes)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000'Tons)	
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Rice	Total	5785.3	40	231.412	75	77.137	19.284	26.998	57.853	80.9942
Wheat	Kharif	9149.5	100	914.95	20	457.475	114.369	160.116	228.7375	320.2325
Bajra	Kharif	855.2	4	3.421	200	4.276	1.069	1.497	0.85525	1.19735
Jowar	Kharif	322	12	3.864	100	3.22	0.805	1.127	0.966	1.3524
Maize	Kharif	891.9	20	17.838	80	11.149	2.787	3.902	4.4595	6.2433
Barley		258.9	100	25.89	15	17.26	4.315	6.041	6.4725	9.0615
Small Millets		27.6	7	0.193	80	0.345	0.086	0.121	0.04825	0.06755
Ragi		0.7	7	0.005	80	0.009	0.002	0.003	0.00125	0.00175
Gram		825.7	75	61.928	10	82.57	20.643	28.9	15.482	21.6748
Arhar		388.3	20	7.766	100	3.883	0.971	1.359	1.9415	2.7181
Urd	Kharif	371.4	20	7.428	40	9.285	2.321	3.25	1.857	2.5998
	Summer	58.6	20	1.172	40	1.465	0.366	0.513	0.293	0.4102
Moong	Kharif	28.3	20	0.566	40	0.708	0.177	0.248	0.1415	0.1981
	Rabi	53.9	20	1.078	40	1.348	0.337	0.472	0.2695	0.3773
Lentil		597.6	25	14.94	30	19.92	4.98	6.972	3.735	5.229
Peas		361.2	100	36.12	10	36.12	9.03	12.642	9.03	12.642
Groundnut		102.1	150	15.315	6	17.017	4.254	5.956	3.82875	5.36025
Mustard		892	5	4.46	100	8.92	2.23	3.122	1.115	1.561
Soybean		8.6	65	0.559	15	0.573	0.143	0.201	0.13975	0.19565
Sunflower		8.8	10	0.088	10	0.88	0.22	0.308	0.022	0.0308
Linseed		102.7	25	2.568	50	2.054	0.514	0.719	0.642	0.8988
Sesamum		170.4	5	0.852	250	0.682	0.17	0.239	0.213	0.2982
Total		21260.7		1352.413		756.296	189.073	264.706	338.1033	473.3446

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively

UTTARANCHAL										
Crop	Season	Normal Area# (000' ha)	Seed Rate	Seed Requirement (000' Tonnes)	SMR	Area Requirement (000' ha)			Seed Requirement ('000'Tons)	
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Rice	Kharif	296.9	40	11.876	75	3.959	0.99	1.386	2.969	4.1566
Peas		3.7	100	0.37	10	0.37	0.093	0.13	0.0925	0.1295
Wheat	Kharif	391.8	100	39.18	20	19.59	4.898	6.857	9.795	13.713
Barley	Kharif	27.6	100	2.76	15	1.84	0.46	0.644	0.69	0.966
Lentil	Kharif	14.9	25	0.373	30	0.497	0.124	0.174	0.09325	0.13055
Maize	Kharif	38	20	0.76	80	0.475	0.119	0.166	0.19	0.266
Small Millets		76.1	7	0.533	80	0.951	0.238	0.333	0.13325	0.18655
Mustard		12.9	5	0.065	100	0.129	0.032	0.045	0.01625	0.02275
Urd	Kharif	16.9	20	0.338	40	0.423	0.106	0.148	0.0845	0.1183
	Rabi	16	20	0.32	40	0.4	0.1	0.14	0.08	0.112
Soybean		12.1	65	0.787	15	0.807	0.202	0.282	0.19675	0.27545
Sesamum		2.4	5	0.012	250	0.01	0.002	0.003	0.003	0.0042
Total		909.3		57.374		29.451	7.364	10.308	14.3435	20.0809

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively

WEST BENGAL										
Crop	Season	Normal Area# (000' ha)	Seed Rate	Seed Requirement (000' Tonnes)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000'Tons)	
						100% SRR	25% SRR	35% SRR		
Rice	Kharif	4445.2	40	177.808	75	59.269	14.817	20.744	44.452	62.2328
	Rabi	1425.4	40	57.016	75	19.005	4.751	6.652	14.254	19.9556
Wheat	Kharif	411.1	100	41.11	20	20.555	5.139	7.194	10.2775	14.3885
Bajra	Kharif	0.3	4	0.001	200	0.002	0	0.001	0.00025	0.00035
Jowar	Kharif	1.3	12	0.016	100	0.013	0.003	0.005	0.004	0.0056
Maize	Kharif	34.5	20	0.69	80	0.431	0.108	0.151	0.1725	0.2415
Small Millets		4.4	7	0.031	80	0.055	0.014	0.019	0.00775	0.01085
Barley		3.4	100	0.34	15	0.227	0.057	0.079	0.085	0.119
Ragi		13	7	0.091	80	0.163	0.041	0.057	0.02275	0.03185
Gram		45.2	75	3.39	10	4.52	1.13	1.582	0.8475	1.1865
Arhar		4.5	20	0.09	100	0.045	0.011	0.016	0.0225	0.0315
Urd	Kharif	53.1	20	1.062	40	1.328	0.332	0.465	0.2655	0.3717
Lentil		73.5	25	1.838	30	2.45	0.613	0.858	0.4595	0.6433
Moong	Kharif	0.6	20	0.012	40	0.015	0.004	0.005	0.003	0.0042
	Rabi	11.9	20	0.238	40	0.298	0.074	0.104	0.0595	0.0833
Peas		11.2	100	1.12	10	1.12	0.28	0.392	0.28	0.392
Groundnut		36.8	150	5.52	6	6.133	1.533	2.147	1.38	1.932
Mustard		416.4	5	2.082	100	4.164	1.041	1.457	0.5205	0.7287
Linseed		9.6	25	0.24	50	0.192	0.048	0.067	0.06	0.084
Sesamum		118.8	5	0.594	250	0.475	0.119	0.166	0.1485	0.2079
Total		7120.2		293.289		120.46	30.115	42.161	73.32225	102.6512

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively

RAJASTHAN										
Crop	Season	Normal Area# (000' ha)	Seed Rate	Seed Requirement (000' Tonnes)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000'Tons)	
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Wheat	Kharif	2230.2	100	223.02	20	111.51	27.878	39.029	55.755	78.057
Bajra	Kharif	4555.5	4	18.222	200	22.778	5.694	7.972	4.5555	6.3777
Jowar	Kharif	623.2	12	7.478	100	6.232	1.558	2.181	1.8695	2.6173
Maize	Kharif	1002.9	20	20.058	80	12.536	3.134	4.388	5.0145	7.0203
Barley		88	100	8.8	15	5.867	1.467	2.053	2.2	3.08
Small Millets		16.7	7	0.117	80	0.209	0.052	0.073	0.02925	0.04095
Gram		836.9	75	62.768	10	83.69	20.923	29.292	15.692	21.9688
Arhar		22.2	20	0.444	100	0.222	0.056	0.078	0.111	0.1554
Urd	Kharif	182.5	20	3.65	40	4.563	1.141	1.597	0.9125	1.2775
Lentil		22.4	25	0.56	30	0.747	0.187	0.261	0.14	0.196
Moong	Kharif	583.6	20	11.672	40	14.59	3.648	5.107	2.918	4.0852
Peas		11.9	100	1.19	10	1.19	0.298	0.417	0.2975	0.4165
Groundnut		233.2	150	34.98	6	38.867	9.717	13.603	8.745	12.243
Soybean		554.6	65	36.049	15	36.973	9.243	12.941	9.01225	12.61715
Mustard		1899.9	5	9.5	100	18.999	4.75	6.65	2.375	3.325
Castor		67.2	12.5	0.84	60	1.12	0.28	0.392	0.21	0.294
Linseed		4.8	25	0.12	50	0.096	0.024	0.034	0.03	0.042
Sesamum		252.5	5	1.263	250	1.01	0.253	0.354	0.31575	0.44205
Cotton		466.5	20	9.33	50	9.33	2.333	3.266	2.3325	3.2655
Total		13654.7		450.061		370.529	92.636	129.688	112.5153	157.5214

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively

JHARKHAND										
Crop	Season	Normal Area# (000' ha)	Seed Rate	Seed Requirement (000' Tonnes)	SMR	Area Requirement ('000' ha)			Seed Requirement ('000'Tons)	
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Rice	Kharif	1437	40	57.48	75	19.16	4.79	6.706	14.37	20.118
Wheat	Kharif	67	100	6.7	20	3.35	0.838	1.173	1.675	2.345
Bajra	Kharif	2.4	4	0.01	200	0.012	0.003	0.004	0.0025	0.0035
Jowar	Kharif	2.2	12	0.026	100	0.022	0.006	0.008	0.0065	0.0091
Maize	Kharif	134.3	20	2.686	80	1.679	0.42	0.588	0.6715	0.9401
Barley		12.9	100	1.29	15	0.86	0.215	0.301	0.3225	0.4515
Small Millets		24.6	7	0.172	80	0.308	0.077	0.108	0.043	0.0602
Ragi		28	7	0.196	80	0.35	0.088	0.123	0.049	0.0686
Arhar		39.7	20	0.794	100	0.397	0.099	0.139	0.1985	0.2779
Urd	Kharif	43.7	20	0.874	40	1.093	0.273	0.382	0.2185	0.3059
Moong	Kharif	5.9	20	0.118	40	0.148	0.037	0.052	0.0295	0.0413
Lentil		11.5	25	0.288	30	0.383	0.096	0.134	0.072	0.1008
Peas		5.3	100	0.53	10	0.53	0.133	0.186	0.1325	0.1855
Linseed		10.1	25	0.253	50	0.202	0.051	0.071	0.06325	0.08855
Sesamum		11.4	5	0.057	250	0.046	0.011	0.016	0.01425	0.01995
Total		1836		71.474		28.54	7.137	9.991	17.8685	25.0159

Statement 3 Contd...

Seed Requirement/area requirement (25%, 35% & 100% for self pollinated, cross pollinated and hybrids respectively

SIKKIM										
Crop	Season	Normal Area# (000' ha)	Seed Rate	Seed Requirement (000' Tonnes)	SMR	Area Requirement			Seed Requirement	
						('000' ha)			('000'Tons)	
						100% SRR	25% SRR	35% SRR	25% SRR	35% SRR
Maize	Kharif	38.5	20	0.77	80	0.481	0.12	0.168	0.1925	0.2695
Small Millets		1.9	7	0.013	80	0.024	0.006	0.008	0.00325	0.00455
Ragi		4.5	7	0.032	80	0.056	0.014	0.02	0.008	0.0112
Total		44.9		0.815		0.561	0.14	0.196	0.20375	0.28525

Almost all the States in the country have Agricultural Universities, State Farms and other assets, which need to be utilized for production of quality seeds (foundation and certified seeds).

The responsibility for the production of breeder seed in the country is that of the ICAR/SAUs system. The list of Agriculture Universities is given in **Statement 4.**

Statement 4

(List of Agriculture Universities)

S.No	Name and Email Address	Address	Fax No.
1	Acharya N G Ranga Agricultural University (APAU) Email: root@apau.ap.nic.in	Rajendranagar Hyderabad Andhra Pradesh PIN 500030	040- 4015031
2	Agricultural University Udaipur (AUU) Email:	University Campus Udaipur Rajasthan PIN 313001	0294- 411682
3	Assam Agriculture University (AAU) Email: vc@aau.ren.nic.in Web Site: www.aau.ac.in	Jorhat Assam PIN 785013	0376- 340001
4	Bidhan Chandra Krishi Vishva Vidyalaya (BCKVV) Email: root@bckv.wb.nic.in	Haringhatta PO Mohanpur Nadia West Bengal PIN 741246	03473- 33275
5	Birsa Agricultural University (BAU) Email: root@bau.bih.nic.in Web Site: www.icar.org.in/birsa/BAU.htm	Kanke Ranchi JHARKHAND PIN 834006	0651- 455073, 455850
6	CCS Haryana Agricultural University (HAU) Email: root@hau.pnp.nic.in Web Site: hau.nic.in	Hisar Haryana PIN 125004	01662- 34952
7	Central Agricultural University (CAU) Email:	JROISEMBA Imphal Manipur PIN 795001	0385- 310636
8	Chandra Shekhar Azad University of Agriculture & Technology (CSAUT) Email: csaukn@hotmail.com Web Site: www.csauk.org	Kanpur Uttar Pradesh PIN 208002	0512- 210408
9	Dr. Panjabrao Deshmukh Krishi Vishwa Vidyalaya (PKV) Email: vc@pdkv.mah.nic.in Web Site: pdkv.mah.nic.in	Krish Nagar Akola Maharashtra PIN 444104	0724- 58218, 58219

10	Govind Ballabh Pant University of Agriculture and Technology (GBPAU&T) Email: root@gbpauat.ernet.in Web Site: www.gbpauat.ac.in	Pantnagar Uttaranchal PIN 263145	05944-33473, 33608
11	Gujarat Agricultural University (GAU) Email: gau@gau.guj.nic.in Web Site: gau.guj.nic.in	Dantiwada Sardar Krishi Nagar Gujarat PIN 385506	02748-78261
12	Himachal Pradesh Krishi Vishwa Vidyalaya (HPKVV) Email: root@hpkv.hp.nic.in Web Site: hpkv.hp.nic.in	Palampur Himachal Pradesh PIN 176062	01894-30511
13	Indira Gandhi Krishi Vishwa Vidyalaya (IGKVV) Email: adr@zrcmp01.mp.nic.in	Krishak Nagar Raipur Chattisgarh PIN 492012	0771-424532
14	Jawaharlal Nehru Krishi Vishwa Vidyalaya (JNKVV) Email: root@jnau.mp.nic.in	Jabalpur Madhya Pradesh PIN 482004	0761-343382, 342719
15	Kerala Agricultural University (KAU) Email: kauhqr@hub.nic.in Web Site: www.kau.edu	Vellanikkara Trichur Kerala PIN 680654	0487-370019
16	Konkan Krishi Vidyapeeth (KKV) Email: root@kkv.ren.nic.in	Dopali Maharashtra PIN 415712	02358-82074
17	Mahatama Phule Krishi Vidyapeeth (MPKV) Email: kvmp@ren.nic.in Web Site: mpkv.mah.nic.in	Rahuri Maharashtra	0246-43302
18	Marathwada Agricultural University (MAU) Email: mau@ren.nic.in	Parbhani Maharashtra PIN 431402	02452-235812
19	Narendra Dev University of Agriculture and Technology (NDUAT) Email: nduat@up.nic.in	Faizabad Uttar Pradesh PIN 224229	5270-62118, 62023
20	Orissa University Of Agriculture & Technology (OUAT) Email: root@uat.ori.nic.in Web Site: bhub.ori.nic.in/ouat	Bhubaneswar Orissa PIN 751001	0674-407780
21	Punjab Agricultural University (PAU) Email: root@pau.chd.nic.in	Ludhiana Punjab PIN 141004	0161-400945
22	Rajasthan Agricultural University (RAU) Email: root@raub.raj.nic.in	Bikaner Rajasthan PIN 334002	0151-250336, 250576, 250562
23	Rajendra Agricultural University (RAU) Email: rau@bih.nic.in	Pusa Samastipur Bihar PIN 848125	06274-74255, 74266

24	Sher-e-Kashmir University of Agricultural Sciences & Technology (SKUAS&T, Jammu) Email:	Camp Office, Railway Road Jammu Jammu & Kashmir PIN 180004	0191-434883
25	Sher-e-Kashmir University of Agricultural Sciences & Technology (SKUAS&T, Kashmir) Email: anwar_alam@jk.nic.in Web Site: www.icar.org.in/sherk/welcome.htm	Post Box 262, GPO Srinagar Shalimar Campus, Srinagar Kashmir PIN 191121	0194-2462160
26	Tamil Nadu Agricultural University (TNAU) Email: root@tnau.tn.nic.in	Coimbatore Tamil Nadu PIN 641003	0422-431672, 454186
27	Tamil Nadu Veterinary & Animal Sciences University (TNU&ASU) Email: root@tnvasu.tn.nic.in	Chennai Tamil Nadu PIN 600007	044-5371576
28	University of Agricultural Sciences (UAS) Email: Web Site: uasbng.kar.nic.in	Bangalore Karnataka PIN 560065	080-3330277
29	University of Agricultural Sciences (UAS) Email: root@uasd.kar.nic.in aris@uasd.net Web Site: www.uasd.net	Krishi Nagar Dharwad Karnataka PIN 580005	0836-348349, 748377
30	West Bengal University of Animal & Fishery Sciences (WBUA&FS) Email:	68, Khudi Ram Bose Sarani, Belgachia Kolkata West Bengal PIN 700037	033-5500456, 5571986
31	Yashwant Singh Parmar University of Horticulture & Forestry (YSPUH&F) Email: vc@yspuhf.ren.nic.in Web Site: www.ysparmaruniversity.org	Solan Himachal Pradesh PIN 173230	01792-52242, 52279
32	Director, NHRDF P.O. Box 61, Kanda Batata Bhawan, 2954-E, New Mumbai Agra Road, NASIK, Maharashtra – 422 011.		

The State Governments need to work in **close collaboration with the Agriculture Universities** for development of agro-climatic zone specific varieties/hybrids.

The major responsibility for the production and distribution of foundation seed and certified seed has to be assumed by the State Seeds Corporations to the extent of 40% of the

requirement. The SFCI/NSC will be responsible for the 40% requirement. Private sector will be persuaded/encouraged to undertake production of remaining 20% of seeds required. The States which have their Seeds Corporation are listed in **Statement 5**

Statement 5

(List Of State Seeds Corporation)

1.	Andhra Pradesh State Seeds Development Corporation Ltd. 5-10-193,HACA Bhawan, 2 nd floor, HYDERABAD-4 Andhra Pradesh	9	Rajasthan State Seeds Corporation Ltd., Pant Krishi Bhawan, Bhagwan Dass Road, JAIPUR Rajasthan
2	Assam State Seeds Corporation Ltd., Madhura Nagar,Dispur GUWAHATI Assam	10	West Bengal State Seeds Corporation Ltd., 4, Gangadhar Babu Lane 5th floor, KOLKATA West Bengal
3	Gujarat State Seeds Corporation Ltd., Beej Bhawan, Sector-10/a, GANDHINAGAR-382010 Gujarat	11	Haryana Seeds Development Corporation Ltd. Bay No.308, Sector-2 PANCHKULA, Haryana
4	Karnataka State Seeds Corporation Ltd., Bellary Road, Hebbal, BANGALORE Karnataka	12	Bihar Rajya Beej Nigam Ltd., Indira Bhawan, 2 nd floor, Ram Charitra Singh Singh path PATNA Bihar
5	Maharashtra State Seeds Corporation Ltd., Plot no.8, Shastri Nagar, Post Box No.119, AKOLA-444 001 Maharashtra	13	Madhya Pradesh Rajya Beej Evem Farm Vikas Nigam, e-1/1/88-a Arera Colony, BHOPAL MADHYA PRADESH
6	Orissa State Seeds Corporation Ltd., Asha Nivas, Lewis Road, BHUBANESWAR Orissa	14	U.P. Seeds & Tarai Development Corporation Ltd., Pant Nagar, P.O. HALDI – 263146 Distt. Udhamsingh Nagar UTTRANCHAL
7	Punjab State Seeds Corporation Ltd., SCO 835-836, Sector-22/A, CHANDIGARH, Punjab	15	UP Beej Vikas Nigam C-973-74 B Faizabad Road , Mahanagar, LUCKNOW-226006 Uttar Pradesh
8	National Seeds Corporation, Beej Bhavan, C.T.O.Complex, IARI, Pusa New Delhi	16	State Farms Corporation of India 14-15, Farm Bhavan, Nehru Place, NEW DELHI

The States which do not have Seeds Corporations will have to undertake production and distribution of foundation and certified seeds through their Departments or Agencies which they consider appropriate.

It is also the responsibility of the State Governments to popularize and introduce varieties developed by ICAR/SAUs system. The list of varieties of various crops developed in last three years by the ICAR/SAUs system is given in **Statement 6**

Statement 6

(Particulars of varieties Released/Notified for the last 3 years alongwith average yield)

Sl. No.	Kind	Variety	Average yield
1.	Paddy	Dhanrasi (IET – 15358)	5-6.5 MT/ha
2.	Paddy	RH 204 (EXPH-204)	7.5 to 8 MT/ha
3.	Paddy	CSRC (S) 2-14 (IET-13428)	3-4 MT/ha
4.	Paddy	CSR-23 (CSR-891 R-5) (IET-13769)	6.5 to 7.0 MT/ha
5.	Paddy	HPR-1156 (IET-16007)	2.85 MT/ha
6.	Paddy	JR-503 (Richa) (IET-16783)	4.0 MT/ha

Statement 6 contd....

7.	Paddy	Pusa Sugandh-5 (IET-17021)	4.8 MT/ha.
8.	Paddy (hybrid)	Suruchi 5401	7-8 MT/ha
9.	Paddy	Sugandhamadhi	4.3 MT/ha
10.	Paddy	CSR-36 (Naina) (IET-17340)	3.91 MT/ha
11.	Paddy	Narendra-8002 (IET-15848)	5.5 MT/ha.
12.	Paddy	Warangal Samba (WGL-14)	5.5 to 6.5 MT/ha
13.	Paddy (hybrid)	DRRH-2 (IET-18076) (DRRH-20)	5.4 MT/ha
14.	Paddy	Jarava (IET-15420)	3.3 to 4.5 MT/ha
15.	Wheat	Shivalik (HS-420)	26.7 qtl./ha
16.	Wheat	Himgiri (HS-375)	26.6 qtl./ha.
17.	Wheat	Amrita (HI-1500)	16.0 qtl./ha.
18.	Wheat	DBW-14	43.0 qtl./ha
19.	Wheat	Narendra Wheat-2036	5.0 qtl./ha
20.	Wheat	MP- 4010	40.10 qtl./ha
21.	Wheat	VL Gehun-829	29.0 qtl./ha
22.	Wheat	PBW-502	48.0 qtl./ha
23.	Wheat	Poorva (HB-2824)	45.0 qtl./ha
24.	Wheat	Raj - 4037	40.0 qtl./ha
25.	Wheat	VL Gehun 832	24.0 qtl./ha
26.	Wheat	MACS 6145	48.50 qtl./ha
27.	Wheat	PDW-291	48.5 qtl./ha
27.A	Wheat	Urja (HD-2864)	20-25 qtl./ha
28.	Wheat	Shalimar Wheat-1	22.9 qtl./ha
29.	Barley	Himadri (BHS-352)	21.9 qtl./ha
30.	Barley	RD - 2624	28.0 qtl./ha
31.	Bajra	GHB-558 (MH-946)	2825 – 3201 kg/ha
32.	Bajra	MP – 406 (CZP –9802)	1000 – 1300 kg/ha

Statement 6 contd....

33.	Bajra	GHB-526 (MSH-105)	4002 kg/ha
34.	Bajra	HHB-146 (MSH-960)	2887 kg/ha
35.	Bajra	GHB-527	3000 kg/ha
36.	Bajra	GHB-538	2450 kg/ha
37.	Bajra	Pro Agro-9444	4007 kg/ha
38.	Sorghum	CSH-21	4.1 to 4.5 MT/ha
39.	Sorghum	RSSV-9	0.8 to 1.0 MT/hec.
40.	Sorghum	CSH-22SS (NSSH-104)	1.7 MT/hec.
41.	Sorghum	CSH-23 (SPH-1290)	4.1 MT/ha
42.	Maize	BK-701 (F-7001)	5000 – 6000 kg/ha
43.	Maize	Pusa Extra Early Hybrid Makka-5 (AH-421)	4900 – 5200 kg/ha
44.	Maize	Pratap Makka-3 (EC-3108)	4040 kg/ha
45.	Maize	Bisco – 2418 (Super Kohinoor)	6500 – 7000 kg/ha
46.	Maize	Win Orange Sweet Corn	6500 – 7000 kg/ha
47.	Maize	BIO 9636	5100 – 6800 kg/ha
48.	Maize	VL Baby Corn-1 (VL-78)	1200 – 1300 kg/ha
49.	Maize	DK-984 (2784)	6000 – 7000 kg/ha
50.	Maize	IC-8209 (72A)	6000 – 7000 kg/ha
51.	Maize	Vivek Maize Hybrid-15	4500 – 5000 kg/ha
52.	Maize	Vivek Maize Hybrid-17	4500 – 5000 kg/ha
53.	Maize	Azad Kamal	4200 – 4700 kg/ha
54.	Maize	Buland	7500 kg/ha
55.	Bengal gram	Vihar Phule (G-95311)	18.11 qtl./ha
56.	Bengal gram	Jawahar gram Kabuli-1 (JKG-2337)	20 – 25 qtls./ha
57.	Bengal gram	Haryana Kabuli Chana-1 (HK-94-134)	13.97 qtl./ha
58.	Bengal gram	Aadhar (RSG-963)	16-17 qtl./ha
59.	Red gram	Malviya Vikash (MA-6)	23 – 28 qtl./ha

Statement 6 contd....

60.	Red gram	Malviya Chamatkar (MAL-13)	27 – 29 qtl./ha
61.	Red gram	Pusa-992	24.4 qtl./ha
62.	Green gram	Malviya Janchetna (HUM-12)	11 - 12 qtl./ha
63.	Green gram	COGG - 912	8.0 qtl./ha
64.	Green gram	TMB-37	11.0 qtl./ha
65.	Green gram	Kamadev (OUM – 11-5)	5.5 – 11.7 qtl./ha
66.	Field pea	Adarsh (IPF-99-25)	23.0 qtl./ha
67.	Field pea	Vikas (IPFP-99-33)	20.70 qtl./ha
68.	Groundnut	GG-14 (JSP-28)	2159 kg/ha
69.	Groundnut	TG-37-A	1900 kg/ha
70.	Groundnut	Prutha (Dh-86)	2000 kg/ha
71.	Linseed	JLS-27 Suyog (SLS-27)	1500 kg/ha
72.	Linseed	Baner (Kl-224)	422 kg/ha
73.	Linseed	Indira Alsi-321 (RLC-81)	735 kg/ha
74.	Linseed	Binwa (KL-210)	1142 kg/ha
75.	Mustard	Agrani (SEJ-2)	1221 kg/ha
76.	Mustard	Maya (RK-9902)	2106 kg/ha
77.	Mustard	Geeta (RB-9901)	1773 kg/ha
78.	Mustard	Pusa Swarnim (IGC-01)	1429 kg/ha
79.	Mustard	Swarn Jyoti (RH-9801)	1377 kg/ha
80.	Mustard	Vasundhara (RH-9304)	2109 kg/ha
81.	Mustard	CS-54 (CS-614-4-24)	2400 kg/ha
82.	Mustard	Pusa Mahak (JD-6)	1600-1700 kg/ha
83.	Mustard	Ashirwad (RK-01-03)	1534 kg/ha
84.	Safflower	Phule Kusuma (JLSF-414)	1200 – 1500 kg/ha
85.	Sesame	Nirmala (OS- Sel –164)	800 – 1100 kg/ha
86.	Sesame	Pragati (MT-75)	578 kg./ha
87.	Soybean	MAUS-81	2000 – 3000 kg/ha

Statement 6 contd....

88.	Sunflower	SH-416	6000 – 7000 kg/ha
89.	Sunflower	Prosun-09 (PRO-009)	1890 kg/ha
90.	Sunflower	DRSF-108	1290 kg/ha
91.	Cotton	Swadeshi-1	1426 kg/ha
92.	Cotton	NCS-207 Mallika (NCHH-207)	3000 –3500 kg/ha
93.	Cotton	CICR-2	3213 kg/ha
94.	Cotton	Shrestha (CSHH-198)	3000 kg/ha
95.	Jute	Subala (S-19)	36.0 qtl./ha
96.	Jute	JRC.80 (Mitali White)	35.0 qtl./ha
97.	Sugarcane	Shyama (Co-94008)	120 MT/ha
98.	Sugarcane	Sweta (Cos-94270)	81.0 MT/ha

Particulars of varieties Released/Notified for the last 3 years along with average yield
(State Release)

S.No.	Kind	Variety	Average yield
1.	Paddy	Shah Sarang-1	4-4.2 t/ha
2.	Paddy	Lam Phah-1	4-4.2 t/ha
3.	Paddy	Bha Lum-1	3.5-3.8 t/ha
4.	Paddy	Bha Lum-2	3-3.5 t/ha
5.	Paddy	GR-8	1-1.5 t/ha
6.	Paddy	Dand (IET-14906)	4.5-5 t/ha
7.	Paddy	PNR-546	3.8-4.3 t/ha
8.	Paddy	Kali Khosa	3 t/ha
9.	Paddy	Swati (IET-12888)	7.1 t/ha
10.	Paddy	GR-104	4-5 t/ha
11.	Paddy	MTU-1031	6 MT/ha
12.	Paddy	MTU-1032	6 t/ha
13.	Paddy	Shanthi	5 t/ha
14.	Paddy	JGL-1798	5.2 t/ha
15.	Paddy	JGL-384	5.4-6.3 t/ha
16.	Paddy	GR-9	2.3 – 2.5 t/ha
17.	Paddy	PKV Makarand	3.5 – 4 t/ha
18.	Paddy	PKV-SKL-3-11-25-30-36	4.5 – 5 t/ha
19.	Paddy	Indira Dhan-1	3.6 t/ha
20.	Paddy	HKR-126	2.9 t/ha
21.	Paddy	SYE-2001	4.5 – 5t/ha
22.	Paddy	Palam Dhan-957	3.5 – 4 t/ha
23.	Paddy	Sharavathi	5-5.5 t/ha
24.	Paddy	Shalimar Rice-1	6.5 – 7 t/ha

25.	Paddy	Kohsaan	4-4.5 t/ha
26.	Paddy	Phandaghat-1	4.5 – 5t/ha
27.	Paddy	Haryalidan	3.5 – 4 t/ha
28.	Paddy	Sadabahar	3 – 3.5 t/ha
29.	Paddy	Barsamati	4 – 4.5 t/ha
30.	Paddy	Birsa Vikas Dhan –110	3 –3.5 t/ha
31.	Paddy	Birsa Vikas Dhan-109	3 – 4.5 t/ha
32.	Paddy	ADT (E) –46	6.2 t/ha
33.	Paddy	TKM(E) –12	3.0 t/ha
34.	Paddy	PMK (R) –3	2.5 – 4 t/ha
35.	Paddy	Malviya Dhan(HUBR-2-1)	4.5 t/ha
36.	Paddy	Malviya Dhan-2 (HUR – 3022)	5-5.5 t/ha
37.	Paddy	S.K.L.8	4.5 t/ha
38.	Paddy	Pusa –1121 (Pusa Sugandh-4)	4.2 t/ha
39.	Paddy	HKR-47	8 t/ha
40.	Paddy	GR –201 (Rashmi)	3 t/ha
41.	Paddy	VTL-6	4.5 t/ha
42.	Paddy	PBNR-93-1 (Parbhani Avishkar)	
43.	Bajra	Parbhani Sampada (PPC-6)	35 –38 qtl/ha
44.	Bajra	Cocu-9	28.5 qtl./ha
45.	Bajra	HHB-67 Improved	25.5 qtl/ha
46.	Wheat	PDW-274	52.2 qtl/ha
47.	Wheat	MACS-3125	45-50 qtl/ha
48.	Wheat	Sudha (MP)-1106)	45.50 qtl/ha
49.	Wheat	Raj-3777	59.44 qtl/ha
50.	Wheat	Swarna (HI-1479)	45-50 qtl/ha
51.	Wheat	Palam	25 qtl/ha
52.	Wheat	Chandrika	40.5 qtl/ha
53.	Wheat	VL-Gehun-802	48.5 qtl/ha
54.	Wheat	Kailash	35 qtl/ha

55.	Wheat	Mansarovar	35 qtl/ha
56.	Wheat	Singchen (SWL-8)	38 qtl/ha
57.	Wheat	Narendra Wheat-1064	35 qtl/ha
58.	Wheat	NIDW-15	13.5 qtl/ha
59.	Wheat	K-9423(Unnat Halna)	30-40 qtl/ha
60.	Wheat	HD-2851 (Pusa Vishesh)	56.5 t/ha
61.	Wheat	WR-544(Pusa Bold)	37.5 q/ha
62.	Wheat	JW-3020	32-35 qtl/ha
63.	Wheat	PBW-509	45.5 qtl/ha
64.	Wheat	Raj-6560	46.3 qtl/ha
65.	Maize	Gujarat Makai-6	2443 kg/ha
66.	Maize	Pratap Hybrid Maize-1	3800-6300 kg/ha
67.	Maize	Shakthiman-2	6208 kg/ha
68./	Maize	Sheetal	7250 kg/ha
69.	Maize	Jawahar Makka-216	5500-6300 kg/ha
70.	Maize	CPH(H) -4	5694 kg/ha
71.	Maize	Birsa Vikas Makka-22	4500-5000 kg/ha
72.	Maize	Shalimar KG Maize-1	4500-5500 kg/ha
73.	Maize	Shalimar KG Maize-2	3500-4000 kg/ha
74.	Maize	HM-4	8384 kg/ha
75.	Maize	HM-5	7995 kg/ha
76.	Maize	HQPM-1	7523 kg/ha
77.	Maize	Pusa Composite-3	7388 kg/ha
78.	Maize	Pusa Composite-4	4495 kg/ha
79.	Sorghum	Pratap Jawar-1430-	35-40 qtl/ha
80.	Sorghum	K-11	15.6 qtl/ha
81.	Sorghum	Parbhani moti	35-40 qtl/ha
82.	Sorghum	Bundela	32 qtl/ha
83.	Bengal gram	PDG-4	1965 kg/ha
84.	Bengal gram	Gujarat Gram-2	1807 –2000 kg/ha

85.	Bengal gram	GNG-1292	2400-2500 kg/ha
86.	Bengal gram	CSJD –884 (Akash)	1508 kg/ha
87.	Bengal gram	Anuradha	2200 – 2500 kg/ha.
88.	Bengal gram	Asha (RSG-945)	1744 kg/ha.
89.	Bengal gram	PGC-1 (Pratap Channa-1)	1200 – 1400 kg/ha.
90.	Bengal gram	Arpita (PSG-895)	1457 kg/ha.
91.	Bengal gram	Pusa-1103	1900 – 2300 kg/ha.
92.	Bengal gram	Pusa-1105	2500 – 3000 kg/ha.
93.	Bengal gram	Pusa-1088	2500 – 3000 kg/ha.
94.	Bengal gram	Haryana Channa-5	1973 kg/ha.
95.	Green gram	SML-668	1133 kg/ha.
96.	Green gram	RMG-492	750 – 925 kg/ha.
97.	Green gram	GM-4	859 kg/ha
98.	Green gram	Muskan (MH-967)	1450 kg/ha.
99.	Green gram	OBGG-52	1300 kg/ha.
100.	Green gram	Shalimar Moong-1	888 kg/ha.
101.	Green gram	Pusa-9972 (Pusa Ratna)	1200 – 1400 kg/ha.
102.	Black gram	Goutam (WBO-105)	1300 – 1500 kg/ha.
103.	Black gram	Shekhar-3	1000 kg/ha.
104.	Black gram	VBN (Bg) - 4	800 – 1050 kg/ha.
105.	Red gram	GT-101	1317 kg/ha.
106.	Red gram	CO (RG) –7 (CORG-9701)	1180 kg/ha.
107.	Red gram	Pusa-991	1600 – 2000 kg/ha.
108.	Cowpea	Co (CP) – 7	900 kg/ha.
109.	Cowpea	Shalimar Cowpea-1	833 kg/ha.
110.	Cowpea	V-578 (Pusa-578)	1213 kg/ha.
111.	Groundnut	GG-6	2782 kg/ha.
112.	Groundnut	RG-382	2203 kg/ha
113.	Groundnut	Kadiri-5	1967-3419 kg/ha.
114.	Groundnut	Kadiri-6	2062-3770 kg/ha

115.	Groundnut	CO (GN)-5	1585 kg/ha.
116.	Groundnut	ICUG-92195	1800 – 2800 kg/ha
117.	Groundnut	ICUG-92035	2500 – 3000 kg/ha.
118.	Mustard	Kranti (RK-9807)	1990 – 2245 kg/ha.
119.	Mustard	RGN-13	2000 – 2200 kg/ha.
120.	Mustard	Narendra Swarnarai - 08	2050 kg/ha.
121.	Mustard	Shivani	1200 – 1500 kg/ha.
122.	Mustard	Pusa Karishma	2000 – 2200 kg/ha
123.	Mustard	Jawahar Mustard-2	1500 – 2500 kg/ha.
124.	Mustard	Jawahar Mustard-3	1500 – 2500 kg/ha.
125.	Sunflower	PSFH-118	625 kg/ha.
126.	Sunflower	HSFH-848	2171 kg/ha.
127.	Safflower	Jawahar Safflower-97	1500 – 1600 kg/ha.
128.	Sesame	Chandana	812 kg/ha.
129.	Sesame	Prachi	1100 – 1700 kg/ha.
130.	Sesame	Gujarat Til-10	807 kg/ha.
131.	Castor	Kiran	1.2 – 1.5 qtl./ha.
132.	Castor	Haritha	1.4 – 1.6 qtl./ha.
133.	Soybean	TAMS-38	2165 kg/ha
134.	Soybean	Palam Soya	2050 kg/ha
135.	Soybean	Pusa-9712	2250 kg/ha.
136.	Cotton	F-1861	2127 kg/ha.
137.	Cotton	G.Cot 19	1082 kg/ha
138.	Cotton	G.Cot MOH-11	1366 kg/ha
139.	Cotton	Gujarat Cotton-23	1303 kg/ha.
140.	Cotton	PKV DH-1	1200 – 1500 kg/ha.
141.	Cotton	PKV Hybrid - 5	2500 – 3000 kg/ha
142.	Cotton	PA-225	1500 – 1600 kg/ha.
143.	Cotton	NH-545	1200 – 1500 kg/ha.
144.	Cotton	Veena	1000 – 1200 kg/ha.

145.	Cotton	Yamuna (PH-348)	1400 – 1500 kg/ha.
146.	Cotton	PA-402	1600 – 1800 kg/ha.
147.	Cotton	Phule LJA-794	850 – 950 kg/ha.
148.	Cotton	Mahabeej - 106	1217 kg/ha.
149.	Cotton	Mahabeej DH-986	1489 kg/ha.
150.	Cotton	MCU-13	1700 kg/ha.
151.	Cotton	HHH-287	2045 kg/ha
152.	Cotton	HD-324	1866 kg/ha.
153.	Sugarcane	Madhuri (Co.394164)	98.5 t/ha.
154.	Sugarcane	CoC (Sc) - 22	136 t/ha.
155.	Sugarcane	CoH-119	85 t/ha.
156.	Sugarcane	CoH-110	85 t/ha.

Alongwith production and distribution of quality seeds, concerted action is required to address **Region Specific Constraints** in agricultural production. The Region Specific Constraints are in **Statement 7.**

Statement 7

(Region Specific Constraints)

Agro-Climatic Region	States/Parts of States	Region Specific Constraints
Western Himalayan Region	J&K, H.P., Uttranchal	Severe soil erosion, degradation due to heavy rainfall/floods and deforestation
Eastern Himalayan Region	Assam, N.E. States, Sikkim	Alu, toxicity and soil acidity, soil erosion and floods, shifting cultivation
Lower and Mild Gangetic Plains	West Bengal, Bihar, Eastern U.P.	Flood/water lodging, poor drainage, salinity/alkalinity, Arsenic contamination
Upper and Trans Gangetic Plains	Western U.P., Punjab, Haryana	Ground water, depletion, decreasing soil, carbon content, micronutrient deficiency
Eastern Plateau & Hills	Orissa, Jharkhand, Chattisgarh	Moisture stress, drought and soil acidity, iron toxicity
Central, Western and Southern Plateau and Hills	Bundelkhand (in U.P. & M.P.), parts of Rajasthan, Maharashtra, A.P. Karnataka & Tamil Nadu	Drought, moisture stress, Soil crusting & cracking, soil salinity/alkanity
East & West Coast Plains & Ghats	Pondicherry, Coastal Area of Orissa, A.P. Tamil Nadu & Kerala, Goa, Parts of Karnataka & Maharashtra	Salinity, Water management, Poor nutritional status of soil, saline lands
Western Dry Region and Gujarat Plains & Hill Regions	Gujarat, D&N Haveli, Daman & Diu, North Western Rajasthan	Frequent drought moisture stress and high evaporation, poor soil
Island Region	A&N, Lakshdweep	Soild salinity & acidity, frequent cyclones.

The State Governments need to make efforts to address Region Specific Constraints and bring about convergence between their schemes and those of the Government of India for this purpose. Improvement of Seed Replacement Rate, production and distribution of quality seeds appropriate to agro-climatic zone at affordable prices along with a determined effort to address general and region specific constraints will make a significant difference to our agricultural production as is shown in **Statements 8, 9 & 10.**

Statement No.8

(Using Short-Term Strategy to enhance production of Wheat in Potential Region)

Potential Region	Mid & Upper Ganges, Central Plateau & Hills		Rest of Area		All India	
Year	2003-04	2007-08	2003-04	2007-08	2003-04	2007-08
Area(M ha)	13.70		12.88		26.58	
Yield (tons/ha)	2.40	2.81	3.05	3.30	2.71	3.05
Production(m tons)	32.82	38.50	39.29	42.50	72.11	81.00
Growth(%)	4.07		1.98		2.95	
Value (Rs.Crores) (Constant Price-1993-94)	12,363	14,502	14,801	16,011	27,164	30,513
Region Specific Inputs/Interventions Required	Water management, high-yielding varieties, Balanced Fertilizer, Micronutrients use , resource conserving technologies					

Statement No.9

(Using Short-Term Strategy to enhance production of Rice in Potential Regions)

Potential Region	Lower,Middle & Upper Gangetic Plains, Eastern Plateau & Eastern Coast Plains & Hills		Rest of Area		All India	
Year	2003-04	2007-08	2003-04	2007-08	2003-04	2007-08
Area (m ha)	19.4		23.1		42.5	
Yield (tons/ha)	2.04	2.30	2.10	2.29	2.03	2.30
Production(m tons)	39.58	44.55	48.70	52.90	88.28	97.45
Growth(%)	3.0		2.09		2.50	
Value (Rs.Crores) (Constant Price - 1993-94)	20,851	23,469	25,655	27,868	46,506	51,337
Region Specific Inputs/Interventions Required	Water management, Hybrids and high-yielding varieties, Fertilizer Management, Micronutrients, SRI, Drum Seeder, IPM					

Statement No.10

(Projected Output of Foodgrains & Oilseeds in Potential Regions)

Production (m tons)

Value (Rs. Crores at base year 1993-94)

Crop Production	Base Year – 2003-04		2006-07		2007-08	
	P.Reg.	All India	P.Reg	All India	P.Reg.	All India
Wheat	32.82	72.11	37.00	78.50	38.50	81.00
Rice	39.58	88.28	43.25	95.07	44.55	97.45
Maize	8.84	14.93	10.23	17.03	10.74	17.80
Total Cereals		198.52		212.57		219.05
Cereals Value		84964		91904		94582
Gram	4.40	5.79	5.24	6.70	5.55	7.04
Total Pulses (m tons)		14.94		15.85		16.84
Total Pulses(Rs. Cr.)		12636		14697		15592
Foodgrains(m tons)		213.45		226.12		232.98
Foodgrains(Rs. Cr.)		97600		106601		110174
Groundnut	6.70	8.18	7.55	9.15	7.84	9.50
Soybean	6.98	7.86	8.79	9.90	9.49	10.69
Total Oilseeds(m tons)		25.29		29.49		30.65
Total Oilseeds(Rs. Cr)		24113		27358		28.438
All Food Crops *		238.75		255.61		263.63
Value		121713		133959		138612

The private seed industry has an important role to play in the production and supply of quality seeds. This is clearly and emphatically envisaged in the National Seeds Policy 2002. Although public sector seed development, production and distribution system is dominant in high volume and low value crops, the private sector is playing a leading role in high value and low volume crops like vegetables, flowers, horticultural crops, hybrids of some cereals and cash crops and genetically modified crops. The seed industry is developing quite rapidly and its presence is expanding. There is, therefore, **need for synergy between and the public and the private**

sectors. The private is required to be involved in the overall national objective of providing quality seeds including those of high volume low value crops to the farmers at affordable prices.

The involvement of the private sector can be facilitated in the following manner:

- i) Arrangements between Seeds Corporations and Seed Industry for the benefit of the farmers. Modalities and exact nature of cooperation will have to be worked out by the Seeds Corporations with the support of the State Governments.
- ii) Trilateral Agreements between Seed Industry, State Agriculture Universities and States Seeds Corporations for development, production and distribution of seeds of new varieties.
- iii) Incentives to private sectors for production of low value high volume seeds including provision of incentives for bankable schemes.

According to the Seed Plan ---- quintals of quality seeds will have to be produced and made available to the farmers from the next kharif season by the Government/public sectors/private sectors.

The State-wise/agency-wise targets and time-frame for seed production and supply are given at statement 11.

Statement 11

ANDHRA PRADESH							
Crop	Season	Seed Requirement ('000' Tons)			To be produced by ('000' Tons)		
		100% SRR	25% SRR	35% SRR	NSC/SFCI	SSC/SDA	Private Industry
					40%	40%	20%
Rice	Kharif	99.976	24.994	34.9916	9.9976*	9.9976*	4.9988*
	Rabi	43.056	10.764	15.0696	4.3056*	4.3056*	2.1528*
Wheat		1.29	0.3225	0.4515	0.129*	0.129*	0.0645*
Bajra	Kharif	0.461	0.11525	0.16135	0.06454**	0.06454**	0.03227**
Jowar	Kharif	3.599	0.89975	1.25965	0.50386**	0.50386**	0.25193**
Maize	Kharif	8.404	2.101	2.9414	1.17656**	1.17656**	0.58828**
S. Millets		0.399	0.09975	0.13965	0.0399*	0.0399*	0.01995*
Ragi		0.597	0.14925	0.20895	0.0597*	0.0597*	0.02985*
Gram		21.915	5.47875	7.67025	2.1915*	2.1915*	1.09575*
Arhar		9.272	2.318	3.2452	1.29808**	1.29808**	0.64904**
Urd	Kharif	1.964	0.491	0.6874	0.1964*	0.1964*	0.0982*
	Rabi	9.134	2.2835	3.1969	0.9134*	0.9134*	0.4567*
Moong	Kharif	7.54	1.885	2.639	0.754*	0.754*	0.377*
	Rabi	2.898	0.7245	1.0143	0.2898*	0.2898*	0.1449*
Groundnut		249.675	62.41875	87.38625	24.9675*	24.9675*	12.48375*
Soybean		2.015	0.50375	0.70525	0.2015*	0.2015*	0.10075*
Sunflower		3.298	0.8245	1.1543	0.46172**	0.46172**	0.23086**
Castor		3.673	0.91825	1.28555	0.51422**	0.51422**	0.25711**
Linseed		0.13	0.0325	0.0455	0.013*	0.013*	0.0065*
Safflower		0.215	0.05375	0.07525	0.0215*	0.0215*	0.01075*
Sesamum		0.762	0.1905	0.2667	0.0762*	0.0762*	0.0381*
Cotton		19.236	4.809	6.7326	2.69304**	2.69304**	1.34652**
Total		489.509	122.3773	171.3282	50.86862	50.86862	25.43431

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

ASSAM								
Crop	Season	Seed Requirement ('000' Tons)			To be produced by ('000' Tons)			20%
		100% SRR	25% SRR	35% SRR	NSC/SFCI	SSC /SDA	Private Industry	
Rice	Kharif	90.428	22.607	31.6498	9.0428*	9.0428*		4.5214*
	Rabi	12.776	3.194	4.4716	1.2776*	1.2776*		0.6388*
Wheat		7.15	1.7875	2.5025	0.715*	0.715*		0.3575*
Maize	Kharif	0.4	0.1	0.14	0.056**	0.056**		0.02**
S. Millets		0.064	0.016	0.0224	0.0064*	0.0064*		0.00448*
Arhar		0.142	0.0355	0.0497	0.01988**	0.01988**		0.00994**
Urd	Rabi	0.79	0.1975	0.2765	0.079*	0.079*		0.0395*
Moong	Rabi	0.152	0.038	0.0532	0.0152*	0.0152*		0.0076*
Lentil		0.523	0.13075	0.18305	0.0523*	0.0523*		0.02615*
R & M		0.107	0.02675	0.03745	0.0107**	0.0107**		0.00535**
Castor		0.023	0.00575	0.00805	0.00322**	0.00322**		0.00161**
Linseed		0.25	0.0625	0.0875	0.025*	0.025*		0.0125*
Sesamum		0.074	0.0185	0.0259	0.0074*	0.0074*		0.0037*
Total		112.879	28.2198	39.50765	11.3105	11.3105		5.64853

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

Crop	Season	Seed Requirement ('000' Tons)			To be produced by ('000' Tons)		
		100% SRR	25% SRR	35% SRR	NSC/SFCI	SSC /SDA	Private Industry
Rice	Kharif	138.432	34.608	48.4512	13.8432*	13.8432*	20%
	Rabi	4.888	1.222	1.7108	0.4888*	0.4888*	6.9216*
Wheat		210.43	52.6075	73.6505	21.043*	21.043*	0.2444*
							10.5215*
Bajra	Kharif	0.006	0.0015	0.0021	0.00084**	0.00084**	0.00042**
Jowar	Kharif	0.035	0.00875	0.01225	0.0049**	0.0049**	0.00245**
Maize	Kharif	5.112	1.278	1.7892	0.71568**	0.71568**	0.35784**
	Rabi	3.82	0.955	1.337	0.5348**	0.5348**	0.2674**
Barley		2.21	0.5525	0.7735	0.221*	0.221*	0.1105*
Small Millets		0.052	0.013	0.0182	0.0052*	0.0052*	0.0026*
Ragi		0.164	0.041	0.0574	0.0164*	0.0164*	0.0082*
Gram		5.663	1.41575	1.98205	0.5663*	0.5663*	0.28315*
Arhar		0.75	0.1875	0.2625	0.075**	0.075**	0.0525**
Urd	Kharif	0.566	0.1415	0.1981	0.0566*	0.0566*	0.0283*
Moong	Kharif	0.164	0.041	0.0574	0.0164*	0.0164*	0.0082*
Lentil		4.335	1.08375	1.51725	0.4335*	0.4335*	0.21675*
Peas		2.38	0.595	0.833	0.238*	0.238*	0.119*
R & M		1.358	0.3395	0.4753	0.1358**	0.1358**	0.0679**
Groundnut		0.195	0.04875	0.06825	0.0195*	0.0195*	0.00975*
Sunflower		0.129	0.03225	0.04515	0.01806**	0.01806**	0.00645**
Castor		0.013	0.00325	0.00455	0.00182**	0.00182**	0.00091**
Linseed		0.915	0.22875	0.32025	0.0915*	0.0915*	0.04575*
Safflower		0.006	0.0015	0.0021	0.0006*	0.0006*	0.0003*
Sesamum		0.021	0.00525	0.00735	0.0021*	0.0021*	0.00105*
Total		381.644	95.411	133.5754	38.529	38.529	19.27692

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

Crop	Season	Seed Requirement ('000' Tons)			To be produced by ('000' Tons)		
		100%SRR	25% SRR	35% SRR	NSC/SFCI	SSC /SDA	Private Industry
					40%	40%	20%
Rice	Kharif	150.76	37.69	52.766	15.076*	15.076*	7.538*
Wheat		9.29	2.3225	3.2515	0.929*	0.929*	0.4645*
Jowar	Kharif	0.11	0.0275	0.0385	0.013475**	0.013475**	0.0077**
Maize	Kharif	1.93	0.4825	0.6755	0.236425**	0.236425**	0.1351**
Barley		0.42	0.105	0.147	0.042*	0.042*	0.021*
S Millets		1.868	0.467	0.6538	0.1868*	0.1868*	0.0934*
Ragi		0.076	0.019	0.0266	0.0076*	0.0076*	0.0038*
Gram		12.653	3.16325	4.42855	1.2653*	1.2653*	0.63265*
Arhar		1.08	0.27	0.378	0.1323**	0.1323**	0.0756**
Urd	Kharif	2.262	0.5655	0.7917	0.2262*	0.2262*	0.1131*
	Rabi	0.118	0.0295	0.0413	0.0118*	0.0118*	0.0059*
Moong	Kharif	0.2	0.05	0.07	0.02 *	0.02*	0.01*
	Rabi	0.122	0.0305	0.0427	0.0122 *	0.0122*	0.0061*
Lentil		0.385	0.09625	0.13475	0.0385*	0.0385*	0.01925*
Peas		1.25	0.3125	0.4375	0.125*	0.125*	0.0625*
R & M		0.253	0.06325	0.08855	0.0253**	0.0253**	0.01265**
Groundnut		4.98	1.245	1.743	0.498*	0.498*	0.249*
Soybean		0.943	0.23575	0.33005	0.0943*	0.0943*	0.04715*
Castor		0.001	0.00025	0.00035	0.000123**	0.000123**	0.00007**
Linseed		1.938	0.4845	0.6783	0.1938*	0.1938*	0.0969*
Safflower		0.007	0.00175	0.00245	0.0007*	0.0007*	0.00035*
Sesamum		0.122	0.0305	0.0427	0.0122*	0.0122*	0.0061*
Total		190.768	47.692	66.7688	19.14702	19.14702	9.60082

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...**GUJARAT**

Crop	Season	Seed Requirement			To be produced by ('000' Tons)		
		('000' Tons)			NSC/SFCI	SSC /SDA	Private Industry
		100% SRR	25% SRR	35% SRR			
Rice	Kharif	24.48	6.12	8.568	2.448*	2.448*	1.224*
Wheat		48.67	12.1675	17.0345	4.867*	4.867*	2.4335*
Bajra	Kharif	3.273	0.81825	1.14555	0.45822**	0.45822**	0.22911**
	Summer	0.62	0.155	0.217	0.0868**	0.0868**	0.0434**
Jowar	Kharif	1.537	0.38425	0.53795	0.21518**	0.21518**	0.10759**
	Rabi	0.599	0.14975	0.20965	0.08386**	0.08386**	0.04193**
Maize	Kharif	8.666	2.1665	3.0331	1.21324**	1.21324**	0.60662**
S.Millets		0.101	0.02525	0.03535	0.0101*	0.0101*	0.00505
Ragi		0.148	0.037	0.0518	0.0148*	0.0148*	0.0074**
Gram		5.325	1.33125	1.86375	0.5325*	0.5325*	0.26625*
Arhar		6.472	1.618	2.2652	0.90608**	0.90608**	0.45304**
Urd	Kharif	2.144	0.536	0.7504	0.2144*	0.2144*	0.1072*
Moong	Kharif	3.09	0.7725	1.0815	0.309*	0.309*	0.1545*
R & M		1.184	0.296	0.4144	0.16576**	0.16576**	0.08288**
Groundnut		284.76	71.19	99.666	28.476*	28.476*	14.238*
Soybean		0.624	0.156	0.2184	0.0624*	0.0624*	0.0312*
Castor		4.106	1.0265	1.4371	0.57484**	0.57484**	0.28742**
Sesamum		1.784	0.446	0.6244	0.1784*	0.1784*	0.0892*
Cotton		32.722	8.1805	11.4527	4.58108**	4.58108**	2.29054**
Total		430.305	107.5763	150.6068	45.39766	45.39766	22.69883

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

HARYANA

Crop	Season	Seed Requirement			To be produced by ('000' Tons)		
		100% SRR ('000' Tons)	25% SRR ('000' Tons)	35% SRR ('000' Tons)	NSC/SFCI	SSC /SDA	Private Industry
Rice	Kharif	40.696	10.174	14.2436	40%	40%	20%
Wheat		230.84	57.71	80.794	23.084*	23.084*	2.0348*
Bajra	Kharif	2.335	0.58375	0.81725	0.3269**	0.3269**	11.542*
Jowar	Kharif	1.294	0.3235	0.4529	0.18116**	0.18116**	0.16345**
Maize	Kharif	0.336	0.084	0.1176	0.04704**	0.04704**	0.09058**
Barley		3.38	0.845	1.183	0.338*	0.338*	0.02352**
Gram		8.19	2.0475	2.8665	0.819*	0.819*	0.169*
Arhar		0.424	0.106	0.1484	0.05936**	0.05936**	0.4095*
Moong	Kharif	0.372	0.093	0.1302	0.0372*	0.0372*	0.02968**
Lentil		0.18	0.045	0.063	0.018*	0.018*	0.0186*
Peas		0.12	0.03	0.042	0.012*	0.012*	0.009*
R & M		2.61	0.6525	0.9135	0.3654**	0.3654**	0.006*
Groundnut		0.18	0.045	0.063	0.018*	0.018*	0.1827**
Sunflower		0.098	0.0245	0.0343	0.01372**	0.01372**	0.009*
Sesamum		0.028	0.007	0.0098	0.0028*	0.0028*	0.00686**
Cotton		11.092	2.773	3.8822	1.55288**	1.55288**	0.0014*
Total		302.175	75.54375	105.7613	30.94506	30.94506	0.77644**
							15.47253

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

Crop	Season	Seed Requirement ('000' Tons)			To be produced by ('000' Tons)		
					NSC/SFCI	SSC /SDA	Private Industry
		100% SRR	25% SRR	35% SRR	40%	40%	20%
Rice	Kharif	3.256	0.814	1.1396	0.3256*	0.3256*	0.1628*
Wheat		36.4	9.1	12.74	3.64*	3.64*	1.82*
Maize	Kharif	5.99	1.4975	2.0965	0.8386**	0.8386**	0.4193**
Barley		2.48	0.62	0.868	0.248*	0.248*	0.124*
Small Millets		0.074	0.0185	0.0259	0.0074*	0.0074*	0.0037*
Ragi		0.026	0.0065	0.0091	0.0026*	0.0026*	0.0013*
Urd	Kharif	0.214	0.0535	0.0749	0.0214*	0.0214*	0.0107*
R&M		0.05	0.0125	0.0175	0.007**	0.007**	0.0035**
Linseed		0.058	0.0145	0.0203	0.0058*	0.0058*	0.0029*
Sesamum		0.023	0.00575	0.00805	0.0023*	0.0023*	0.00115*
Total		48.571	12.14275	16.99985	5.0987	5.0987	2.54935

* Based on 25% SRR ** Based on 35% SRR

Crop	Season	Seed Requirement ('000' Tons)			To be produced by (in 000 tons)		
					NSC/SFCI	SSC's/SDA	Private Industry
		25% SRR	35% SRR	100%SRR	40%	40%	20%
Rice	Kharif	2.481	3.4734	9.924	0.9924*	0.9924*	0.4962*
Wheat		6.46	9.044	25.84	2.584*	2.584*	1.292*
Bajra	Kharif	0.014	0.0196	0.056	0.00784**	0.00784**	0.00392**
Maize	Kharif	1.6245	2.2743	6.498	0.90972**	0.90972**	0.45486**
Barley		0.2025	0.2835	0.81	0.081*	0.081*	0.0405*
Small Millets		0.0155	0.0217	0.062	0.0062*	0.0062*	0.0031*
Urd	Kharif	0.069	0.0966	0.276	0.0276*	0.0276*	0.0138*
Peas		0.04	0.056	0.16	0.016*	0.016*	0.008*
Rape & Mustard		0.08375	0.11725	0.335	0.0335**	0.0335**	0.01675**
Linseed		0.00375	0.00525	0.015	0.0015*	0.0015*	0.00075*
Sesamum		0.008	0.0112	0.032	0.0032*	0.0032*	0.0016*
Total		11.002	15.4028	44.008	4.66296	4.66296	2.33148

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

JHARKHAND

Crop	Season	Seed Requirement ('000'Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100%SRR	NSC/SFCI	SSC/SDA	PVT.
Rice	Kharif	14.37	20.118	57.48	5.748*	5.748*	2.874*
Wheat	Kharif	1.675	2.345	6.7	0.67*	0.67*	0.335*
Bajra	Kharif	0.0025	0.0035	0.01	0.0014**	0.0014**	0.0007**
Jowar	Kharif	0.0065	0.0091	0.026	0.00364**	0.00364**	0.00182**
Maize	Kharif	0.6715	0.9401	2.686	0.37604**	0.37604**	0.18802**
Barley		0.3225	0.4515	1.29	0.129*	0.129*	0.0645*
Small Millets		0.043	0.0602	0.172	0.0172*	0.0172*	0.0086*
Ragi		0.049	0.0686	0.196	0.0196*	0.0196*	0.0098*
Arhar		0.1985	0.2779	0.794	0.0794**	0.0794**	0.0397**
Urd	Kharif	0.2185	0.3059	0.874	0.0874*	0.0874*	0.0437*
Moong	Kharif	0.0295	0.0413	0.118	0.0118*	0.0118*	0.0059*
Lentil		0.072	0.1008	0.288	0.0288*	0.0288*	0.0144*
Peas		0.1325	0.1855	0.53	0.053*	0.053*	0.0265*
Linseed		0.0633	0.08855	0.253	0.0253*	0.0253*	0.01265*
Sesamum		0.0143	0.01995	0.057	0.0057*	0.0057*	0.00285*
Total		17.869	25.0159	71.474	7.25628	7.25628	3.62814

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

KARNATAKA

Crop	Season	Seed Requirement ('000' tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100% SRR	40%	40%	20%
Rice	Kharif	10.558	14.7812	42.232	4.2232*	4.2232*	2.1116*
	Rabi	2.751	3.8514	11.004	1.1004*	1.1004*	0.5502*
Wheat		6.3275	8.8585	25.31	2.531*	2.531*	1.2655*
Bajra	Kharif	0.3385	0.4739	1.354	0.18956**	0.18956**	0.09478**
	Rabi	0.001	0.0014	0.004	0.00056**	0.00056**	0.00028**
Jowar	Kharif	1.0095	1.4133	4.038	0.56532**	0.56532**	0.28266**
	Rabi	4.42325	6.19255	17.693	2.47702**	2.47702**	1.23851**
Maize	Kharif	2.7545	3.8563	11.018	1.54252**	1.54252**	0.77126**
	Rabi	0.368	0.5152	1.472	0.20608**	0.20608**	0.10304**
Small Millets		0.1155	0.1617	0.462	0.0462*	0.0462*	0.0231*
Ragi	Kharif	1.503	2.1042	6.012	0.6012*	0.6012*	0.3006*
	Rabi	0.10525	0.14735	0.421	0.0421*	0.0421*	0.02105*
	Summer	0.01825	0.02555	0.073	0.0073*	0.0073*	0.00365*
Gram		8.0195	11.2273	32.078	3.2078*	3.2078*	1.6039*
Arhar		2.6185	3.6659	10.474	1.46636**	1.46636**	0.73318**
Urd	Kharif	0.669	0.9366	2.676	0.2676*	0.2676*	0.1338*
	Rabi	0.0645	0.0903	0.258	0.0258*	0.0258*	0.0129*
Moong	Kharif	1.7805	2.4927	7.122	0.7122*	0.7122*	0.3561*
	Rabi	0.0585	0.0819	0.234	0.0234*	0.0234*	0.0117*
Groundnut		35.28375	49.39725	141.135	14.1135*	14.1135*	7.05675*
Soybean		1.07425	1.50395	4.297	0.4297*	0.4297*	0.21485*
Sunflower		1.779	2.4906	7.116	0.99624**	0.99624**	0.49812**
Castor		0.06975	0.09765	0.279	0.03906**	0.03906**	0.01953**
Linseed		0.11	0.154	0.44	0.044*	0.044*	0.022*
Safflower		0.28925	0.40495	1.157	0.1157*	0.1157*	0.05785*
Sesamum		0.10225	0.14315	0.409	0.0409*	0.0409*	0.02045*
Cotton		2.4115	3.3761	9.646	1.35044**	1.35044**	0.67522**
Total		84.6035	118.4449	338.414	36.36516	36.36516	18.18258

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

KERALA							
Crop	Season	Seed Requirement ('000' Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100% SRR	NSC/SFCI	SSC's/SDA	Private Industry
Rice	Kharif	2.772	3.8808	11.088	1.1088*	1.1088*	0.5544*
	Rabi	0.471	0.6594	1.884	0.1884*	0.1884*	0.0942*
Til		0.00175	0.00245	0.007	0.0007*	0.0007*	0.00035*
Total		3.24475	4.54265	12.979	1.2979	1.2979	0.64895

MADHYA PRADESH							
Crop	Season	Seed Requirement ('000' Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100% SRR	NSC/SFCI	SSC's/SDA	Private Industry
Rice	Kharif	16.85	23.59	67.4	6.74*	6.74*	3.37*
Wheat		95.055	133.077	380.22	38.022*	38.022*	19.011*
Bajra	Kharif	0.16425	0.22995	0.657	0.09198**	0.09198**	0.04599**
Jowar	Kharif	2.00225	2.80315	8.009	1.12126**	1.12126**	0.56063**
	Rabi	0.013	0.0182	0.052	0.00728**	0.00728**	0.00364**
Maize	Kharif	4.264	5.9696	17.056	2.38784**	2.38784**	1.19392**
Small Millets		0.81675	1.14345	3.267	0.3267*	0.3267*	0.16335*
Ragi	Kharif	0.0015	0.0021	0.006	0.0006*	0.0006*	0.0003*
Gram		46.007	64.4098	184.028	18.4028*	18.4028*	9.2014*
Arhar		1.51	2.114	6.04	0.8456**	0.8456**	0.4228**
Urd	Kharif	2.378	3.3292	9.512	0.9512*	0.9512*	0.4756*
	Rabi	0.036	0.0504	0.144	0.0144*	0.0144*	0.0072*
Moong	Kharif	0.4405	0.6167	1.762	0.1762*	0.1762*	0.0881*
	Rabi	0.014	0.0196	0.056	0.0056*	0.0056*	0.0028*
Lentil		3.0595	4.2833	12.238	1.2238*	1.2238*	0.6119*
Peas		4.7	6.58	18.8	1.88*	1.88*	0.94*
Groundnut		4.7	6.58	18.8	1.88*	1.88*	0.94*
Soybean		70.54625	98.76475	282.185	28.2185*	28.2185*	14.10925*
R/M		0.59975	0.83965	2.399	0.2399**	0.2399**	0.11995**
Castor		0.007	0.0098	0.028	0.00392**	0.00392**	0.00196**
Linseed		0.97375	1.36325	3.895	0.3895*	0.3895*	0.19475*
Safflower		0.001	0.0014	0.004	0.0004*	0.0004*	0.0002*
Sesamum		0.97375	1.36325	3.895	0.3895*	0.3895*	0.19475*
Cotton		2.6765	3.7471	10.706	1.49884**	1.49884**	0.74942**
Total		257.7898	360.9057	1031.159	104.81782	104.81782	52.40891

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

Crop	Season	Seed Requirement ('000' Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100% SRR	NSC/SFCI	SSC's/SDA	Private Industry
		40%	40%	20%			
Rice	Kharif	14.899	20.8586	59.596	5.9596*	5.9596*	2.9798*
Wheat		20.035	28.049	80.14	8.014*	8.014*	4.007*
Bajra	Kharif	1.5615	2.1861	6.246	0.87444**	0.87444**	0.43722**
Jowar	Kharif	5.3475	7.4865	21.39	2.9946**	2.9946**	1.4973**
	Rabi	9.51325	13.31855	38.053	5.32742**	5.32742**	2.66371**
Maize	Kharif	1.337	1.8718	5.348	0.74872**	0.74872**	0.131026**
	Rabi	0.355	0.497	1.42	0.1988**	0.1988**	0.0994**
Small Millets		0.19225	0.26915	0.769	0.0769*	0.0769*	0.03845*
Ragi	Kharif	0.26425	0.36995	1.057	0.1057*	0.1057*	0.05285*
Gram		15.03375	21.04725	60.135	6.0135*	6.0135*	3.00675*
Arhar		5.266	7.3724	21.064	2.94896**	2.94896**	1.47448**
Urd	Kharif	2.9455	4.1237	11.782	1.1782*	1.1782*	0.5891*
	Rabi	0.068	0.0952	0.272	0.0272*	0.0272*	0.0136*
Moong	Kharif	3.545	4.963	14.18	1.418*	1.418*	0.709*
	Rabi	0.0685	0.0959	0.274	0.0274*	0.0274*	0.0137*
Lentil		0.0445	0.0623	0.178	0.0178*	0.0178*	0.0089*
Peas		0.3975	0.5565	1.59	0.159*	0.159*	0.0795*
Groundnut		17.01375	23.81925	68.055	6.8055*	6.8055*	3.40275*
Soybean		20.32875	28.46025	81.315	8.1315*	8.1315*	4.06575*
Sunflower		0.7965	1.1151	3.186	0.44604**	0.44604**	0.22302**
Castor		0.06075	0.08505	0.243	0.03402**	0.03402**	0.01701**
Linseed		0.472	0.6608	1.888	0.1888*	0.1888*	0.0944*
Safflower		0.83825	1.17355	3.353	0.3353*	0.3353*	0.16765*
Sesamum		0.15575	0.21805	0.623	0.0623*	0.0623*	0.03115*
Cotton		15.0015	21.0021	60.006	8.40084**	8.40084**	4.20042**
Total		135.5408	189.7571	542.163	60.49454	60.49454	30.00394

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

MANIPUR							
Crop	Season	Seed Requirement ('000' Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100% SRR	NSC/SFCI	SSC's/SDA	Private Industry
Rice	Kharif	1.558	2.1812	6.232	0.6232*	0.6232*	0.3116*

MEGHALAYA							
Crop	Season	Seed Requirement ('000' Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100%SRR	NSC/SFCI	SSC's/SDA	Private Industry
Maize	Kharif	0.084	0.1176	0.336	0.04704**	0.04704**	0.02352**
S. Millets		0.005	0.007	0.02	0.002*	0.002*	0.001*
TOTAL		0.089	0.1246	0.356	0.04904	0.04904	0.02452

MIZORAM							
Crop	Season	Seed Requirement ('000' Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100% SRR	NSC/SFCI	SSC's/SDA	Private Industry
Rice	Kharif	0.543	0.7602	2.172	0.2172*	0.2172*	0.1086*

NAGALAND							
Crop	Season	Seed Requirement ('000' Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100% SRR	NSC/SFCI	SSC's/SDA	Private Industry
Bajra	Kharif	0.00175	0.00245	0.007	0.00098**	0.00098**	0.00049**
Maize	Kharif	0.183	0.2562	0.732	0.10248**	0.10248**	0.05124**
Linseed		0.04375	0.06125	0.175	0.0175*	0.0175*	0.00875*
Total		0.2285	0.3199	0.914	0.12096	0.12096	0.06048

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

ORISSA

Crop	Season	Seed Requirement ('000' Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100% SRR	NSC/SFCI	SSC's/SDA	Private Industry
Rice	Kharif	42.034	58.8476	168.136	16.8136*	16.8136*	8.4068*
		2.586	3.6204	10.344	1.0344*	1.0344*	0.5172*
Wheat		0.1575	0.2205	0.63	0.063*	0.063*	0.0315*
Bajra	Kharif	0.004	0.0056	0.016	0.00224**	0.00224**	0.00112**
Jowar	Kharif	0.037	0.0518	0.148	0.02072**	0.02072**	0.01036**
Maize	Kharif	0.2525	0.3535	1.01	0.1414**	0.1414**	0.0707**
Small Millets		0.06425	0.08995	0.257	0.0257*	0.0257*	0.01285*
Ragi	Kharif	0.136	0.1904	0.544	0.0544*	0.0544*	0.0272*
Gram		0.5025	0.7035	2.01	0.201*	0.201*	0.1005*
Arhar		0.6625	0.9275	2.65	0.371**	0.371**	0.1855**
Urd	Kharif	0.6125	0.8575	2.45	0.245*	0.245*	0.1225*
		0.0105	0.0147	0.042	0.0042*	0.0042*	0.0021*
Moong	Kharif	0.581	0.8134	2.324	0.2324*	0.2324*	0.1162*
		0.3955	0.5537	1.582	0.1582*	0.1582*	0.0791*
Peas		1.045	1.463	4.18	0.418*	0.418*	0.209*
Groundnut		2.6025	3.6435	10.41	1.041*	1.041*	0.5205*
Sunflower		0.017	0.0238	0.068	0.00952**	0.00952**	0.00476**
Castor		0.05625	0.07875	0.225	0.0315**	0.0315**	0.01575**
Linseed		0.13325	0.18655	0.533	0.0533*	0.0533*	0.02665*
Safflower		0.007	0.0098	0.028	0.0028*	0.0028*	0.0014*
Sesamum		0.05775	0.08085	0.231	0.0231*	0.0231*	0.01155*
Cotton		0.208	0.2912	0.832	0.11648**	0.11648**	0.05824**
Total		52.1625	73.0275	208.65	21.06296	21.06296	10.53148

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

PUNJAB

Crop	Season	Seed Requirement ('000' Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100%SRR	NSC/SFCI	SSC's/SDA	Private Industry
Rice	Kharif	25.692	35.9688	102.768	10.2768*	10.2768*	5.1384*
Wheat		85.175	119.245	340.7	34.07*	34.07*	17.035*
Bajra	Kharif	0.0065	0.0091	0.026	0.00364**	0.00364**	0.00182**
Maize	Kharif	0.799	1.1186	3.196	0.44744**	0.44744**	0.22372**
Barley		0.67	0.938	2.68	0.268*	0.268*	0.134*
Gram		0.1275	0.1785	0.51	0.051*	0.051*	0.0255*
Arhar		0.0445	0.0623	0.178	0.02492**	0.02492**	0.01246**
Moong	Kharif	0.126	0.1764	0.504	0.0504*	0.0504*	0.0252*
Lentil		0.02575	0.03605	0.103	0.0103*	0.0103*	0.00515*
Peas		0.1175	0.1645	0.47	0.047*	0.047*	0.0235*
Rape & Mustard		0.06925	0.09695	0.277	0.0277**	0.0277**	0.01385**
Groundnut		0.16875	0.23625	0.675	0.0675*	0.0675*	0.03375*
Sunflower		0.0395	0.0553	0.158	0.02212**	0.02212**	0.01106**
Linseed		0.0025	0.0035	0.01	0.001*	0.001*	0.0005*
Sesamum		0.02075	0.02905	0.083	0.0083*	0.0083*	0.00415*
Cotton		2.458	3.4412	9.832	1.37648**	1.37648**	0.68824**
Total		115.5425	161.7595	462.17	46.7526	46.7526	23.3763

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

SIKKIM

Crop	Season	Seed Requirement ('000'Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100%SRR	NSC/SFCI	SSC/SDA	PVT.
Maize	Kharif	0.1925	0.2695	0.77	0.1078**	0.1078**	0.0539**
Small Millets		0.00325	0.00455	0.013	0.0013*	0.0013*	0.00065*
Ragi		0.008	0.0112	0.032	0.0032*	0.0032*	0.0016*
Total		0.20375	0.28525	0.815	0.1123	0.1123	0.05615

TAMILNADU

Crop	Season	Seed Requirement ('000'Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100%SRR	NSC/SFCI	SSC's/SDA	Private Industry
Rice	Kharif	16.561	23.185	66.244	6.6244*	6.6244*	3.3122*
	Rabi	1.872	2.6208	7.488	0.7488*	0.7488*	0.3744*
Bajra	Kharif	0.1343	0.188	0.537	0.07518**	0.07518**	0.03759**
Jowar	Kharif	0.7828	1.0959	3.131	0.43834**	0.43834**	0.21917**
Maize	Kharif	0.2405	0.3367	0.962	0.13468**	0.13468**	0.06734**
Small Millets		0.1165	0.1631	0.466	0.0466*	0.0466*	0.0233*
Ragi		0.2185	0.3059	0.874	0.0874*	0.0874*	0.0437*
Arhar		0.304	0.4256	1.216	0.17024**	0.17024**	0.08512**
Urd	Kharif	0.3265	0.4571	1.306	0.1306*	0.1306*	0.0653*
	Rabi	0.937	1.3118	3.748	0.3748*	0.3748*	0.1874*
Moong	Kharif	0.224	0.3136	0.896	0.0896*	0.0896*	0.0448*
	Rabi	0.443	0.6202	1.772	0.1772*	0.1772*	0.0886*
Castor		0.0758	0.1061	0.303	0.04242**	0.04242**	0.02121**
Sesamum		0.1208	0.1691	0.483	0.0483*	0.0483*	0.02415*
Cotton		0.716	1.0024	2.864	0.40096**	0.40096**	0.20048**
Total		23.073	32.302	92.29	9.58952	9.58952	4.79476

TRIPURA

Crop	Season	Seed Requirement ('000'Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100%SRR	NSC/SFCI	SSC's/SDA	Private Industry
Rice	Kharif	1.853	2.5942	7.412	0.7412*	0.7412*	0.3706*
	Rabi	0.573	0.8022	2.292	0.2292*	0.2292*	0.1146*
Maize	Kharif	0.009	0.0126	0.036	0.00504**	0.00504**	0.00252**
Total		2.435	3.409	9.74	0.97544	0.97544	0.48772

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

Crop	Season	Seed Requirement ('000'Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100%SRR	NSC/SFCI	SSC's/SDA	Private Industry
					40%	40%	20%
Rice	Total	57.853	80.9942	231.412	23.1412*	23.1412*	11.5706*
Wheat	Kharif	228.738	320.2325	914.95	91.495*	91.495*	45.7475*
Bajra	Kharif	0.85525	1.19735	3.421	0.47894**	0.47894**	0.23947**
Jowar	Kharif	0.966	1.3524	3.864	0.54096**	0.54096**	0.27048**
Maize	Kharif	4.4595	6.2433	17.838	2.49732**	2.49732**	1.24866**
Barley		6.4725	9.0615	25.89	2.589*	2.589*	1.2945*
Small Millets		0.04825	0.06755	0.193	0.0193*	0.0193*	0.00965*
Ragi		0.00125	0.00175	0.005	0.0005*	0.0005*	0.00025*
Gram		15.482	21.6748	61.928	6.1928**	6.1928**	3.0964**
Arhar		1.9415	2.7181	7.766	1.08724*	1.08724*	0.54362*
Urd	Kharif	1.857	2.5998	7.428	0.7428*	0.7428*	0.3714*
	Summer	0.293	0.4102	1.172	0.1172*	0.1172*	0.0586*
Moong	Kharif	0.1415	0.1981	0.566	0.0566*	0.0566*	0.0283*
	Rabi	0.2695	0.3773	1.078	0.1078*	0.1078*	0.0539*
Lentil		3.735	5.229	14.94	1.494*	1.494*	0.747*
Peas		9.03	12.642	36.12	3.612*	3.612*	1.806*
Groundnut		3.82875	5.36025	15.315	1.5315*	1.5315*	0.76575*
Mustard		1.115	1.561	4.46	0.446**	0.446**	0.223**
Soybean		0.13975	0.19565	0.559	0.0559*	0.0559*	0.02795*
Sunflower		0.022	0.0308	0.088	0.01232**	0.01232**	0.00616**
Linseed		0.642	0.8988	2.568	0.2568*	0.2568*	0.1284*
Sesamum		0.213	0.2982	0.852	0.0852*	0.0852*	0.0426*
Total		338.103	473.3446	1352.41	136.56	136.56038	68.28019

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...**UTTARANCHAL**

Crop	Season	Seed Requirement ('000'Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100%SRR	40%	40%	Private Industry
Rice	Kharif	2.969	4.1566	11.876	1.1876*	1.1876*	0.5938*
Peas		0.0925	0.1295	0.37	0.037*	0.037*	0.0185*
Wheat	Kharif	9.795	13.713	39.18	3.918*	3.918*	1.959*
Barley	Kharif	0.69	0.966	2.76	0.276*	0.276*	0.138*
Lentil	Kharif	0.09325	0.13055	0.373	0.0373*	0.0373*	0.01865*
Maize	Kharif	0.19	0.266	0.76	0.1064**	0.1064**	0.0532**
Small Millets		0.13325	0.18655	0.533	0.0533*	0.0533*	0.02665*
Mustard		0.01625	0.02275	0.065	0.0065**	0.0065**	0.00325**
Urd	Kharif	0.0845	0.1183	0.338	0.0338*	0.0338*	0.0169*
	Rabi	0.08	0.112	0.32	0.032*	0.032*	0.016*
Soybean		0.19675	0.27545	0.787	0.0787*	0.0787*	0.03935*
Sesamum		0.003	0.0042	0.012	0.0012*	0.0012*	0.0006*
Total		14.3435	20.0809	57.374	5.7678	5.7678	2.8839

* Based on 25% SRR ** Based on 35% SRR

Statement 11 Contd...

WEST BENGAL

Crop	Season	Seed Requirement ('000'Tons)			To be produced by (in 000 tons)		
		25% SRR	35% SRR	100% SRR	NSC/SFCI	SSC/SDA	PVT.
Rice	Kharif	44.452	62.2328	177.808	17.7808*	17.7808*	8.8904*
	Rabi	14.254	19.9556	57.016	5.7016*	5.7016*	2.8508*
Wheat	Kharif	10.2775	14.3885	41.11	4.111*	4.111*	2.0555*
Bajra	Kharif	0.00025	0.00035	0.001	0.00014**	0.00014**	0.00007**
Jowar	Kharif	0.004	0.0056	0.016	0.00224**	0.00224**	0.00112**
Maize	Kharif	0.1725	0.2415	0.69	0.0966**	0.0966**	0.0483**
Small Millets		0.00775	0.01085	0.031	0.0031*	0.0031*	0.00155*
Barley		0.085	0.119	0.34	0.034*	0.034*	0.017*
Ragi		0.02275	0.03185	0.091	0.0091*	0.0091*	0.00455*
Gram		0.8475	1.1865	3.39	0.339*	0.339*	0.1695*
Arhar		0.0225	0.0315	0.09	0.0126**	0.0126**	0.0063**
Urd	Kharif	0.2655	0.3717	1.062	0.1062*	0.1062*	0.0531*
Lentil		0.4595	0.6433	1.838	0.1838*	0.1838*	0.0919*
Moong	Kharif	0.003	0.0042	0.012	0.0012*	0.0012*	0.0006*
	Rabi	0.0595	0.0833	0.238	0.0238*	0.0238*	0.0119*
Peas		0.28	0.392	1.12	0.112*	0.112*	0.056*
Groundnut		1.38	1.932	5.52	0.552*	0.552*	0.276*
Mustard		0.5205	0.7287	2.082	0.2082**	0.2082**	0.1041**
Linseed		0.06	0.084	0.24	0.024*	0.024*	0.012*
Sesamum		0.1485	0.2079	0.594	0.0594*	0.0594*	0.0297*
Total		73.3223	102.651	293.289	29.36078	29.36078	14.68039

* Based on 25% SRR ** Based on 35% SRR

The seed development, production and supply chain shall be as indicated below:

Breeder Seed Development/production by ICAR/SAUs.

Foundation and certified seed production by States Seeds Corporations, NSC, SFCI, State Department of Agriculture and private sectors.

Extension/demonstration by State Department of Agriculture/SAU's.

Supply/distribution of certified seeds by State Seeds Corporation, NSC, SFCI, State Department of Agriculture and private Seed sector.

Monitoring by the State Task Force.

Quarterly progress reports to be submitted to Seeds Division, Department of Agriculture & Cooperation, Government of India for monitoring.

Central Government funding will be performance-friendly. Better performing States will be supported.

The implementation of National Seed Plan involving Department of Agriculture, Ministry of Agriculture, Government of India, State Governments, ICAR/SAUs system, Seeds Corporations and seed industry is envisaged to raise the seed replacement rates and enhance food production in the country.