Kharif-2014

> Basmati Acreage & Yield Estimation in Punjab, Haryana, Delhi, Uttarakhand, Himachal Pradesh, Western Uttar Pradesh and Parts of Jammu & Kashmir





Submitted to Basmati Export Development Foundation (APEDA), New Delhi **Report Volume - 5**

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EXECUTIVE SUMMARY

Scope of the Report

The present report being the fifth cycle of report for Kharif - 2014 covers the results of field survey based acreage and production estimates of Basmati varieties and other Nonnotified, Non-basmati long grain varieties in the different districts of Punjab, Haryana, Delhi, Uttar Pradesh, Uttarakhand, Himachal Pradesh and Jammu & Kashmir.

<u>Study districts</u>

The study area covers 81 districts, which includes 22 districts of Punjab, 21 districts of Haryana, one of Delhi, 30 districts of Uttar Pradesh, 4 districts of Uttarakhand, 1 district of Himachal Pradesh and 3 districts of Jammu & Kashmir.

<u>Rice Acreage</u>

Out of total **56,68,900** ha area transplanted in GI area under rice during this kharif, **21,34,540** (37.6%) ha has been under various Basmati varieties. Whereas during kharif-2013, the total area transplanted under rice was **57,90,500** ha, out of which the area under basmati varieties was **16,77,450** ha (28.97%). Thus, this year there is 27.25% increase in

Basmati area in comparison to last year (2013).

In **Punjab**, as we discussed in the last report volume, the production of Pusa -1121 has been 21,17,940 metric tons with an average productivity 3.90 metric tons/ha. CSR-30 & Basmati-386 covered only 15,100 ha area and the production is estimated 38,540 metric tons, while Punjab Basmati-3 has been grown in 28,410 ha area and the production is estimated to be 1,03,270 metric tons. PB-1 covered 24,620 ha and estimated production is 1,14,130 metric tons. Sharbati a Non-Basmati long grain variety has been transplanted in 38,370 ha and the estimated production is 1,60,640 metric tons.

In **Haryana**, The production of Pusa -1121 is 17,87,050 metric tons with an average productivity 4.28 metric tons/ha. PB-1 has been sown in 96,430 ha. with an estimated production 5,18,030 metric tons. Pusa -1401 has been sown in 27,090 ha area with a likely production 1,62,530 metric tons and CSR-30 covered 1,46,130 ha area with an estimated production 5,01,160 metric tons. Punjab Basmati-3 occupied 8,940 ha area with an estimated production 40,750 metric tons. HBC-19 was sown in 2,410 ha. and the production is estimated 6,630 metric tons. Non-basmati long Grain variety Sharbati is grown only in 5,790 ha. with a likely production 22,400 metric tons.

In Uttar Pradesh, the production of Pusa -1121 is 6,57,470 metric tons with an average productivity 3.50 metric tons/ha. PB-1 has been sown in 46,290 ha. with an estimated production 1,83,210 metric tons and productivity 3.96 tons/ha. Type-3 and Basmati-370 have been grown in 13,220 ha area and the estimated production is 38,470 metric tons. Non-basmati long Grain variety Sharbati is grown in 1,41,280 ha. with a likely production 5,27,250 metric tons and Sugandha has been sown in 1,52,400 ha. area with a likely production 5.93,910 tons.

In **Uttarakhand**, the production of Pusa -1121 is 16,240 metric tons with an average productivity 3.45 metric tons/ha. PB-1 has been sown in 1,700 ha. with an estimated production 6,540 metric tons. Type-3 and Basmati-370 have been grown in 6,570 ha area and the estimated production is 15,460 metric tons. Non-basmati long Grain variety Sharbati is grown in 11,720 ha. area with a likely production 44,950 metric tons and Sugandha has been sown in 330 ha. area with a likely production 1,410 tons.

In Jammu & Kashmir, the estimated production of Pusa -1121 is 22,330 metric tons with an average productivity 3.55 metric tons/ha. Basmati-370 have been grown in 59,970 ha area and the estimated production is 2,10,440 metric tons. Non-basmati long Grain variety Sharbati is grown in 10,990 ha. with a likely production 38,430 metric tons. Since the last three years efforts of trade and BEDF, the area under Pusa-1121 has increased In Himachal Pradesh, this year Pusa-1121 has been sown in 1,000 ha. area only with a likely production 3,400 metric tons and Sharbati in 22,240 ha. with an estimated production 77,840 metric tons.

In **Delhi** approximately 1000 ha area under rice has been transplanted, out of which almost 630 ha area is under Pusa-1121 and only 70 ha area is under Pusa Basmati-1509. State wise total rice, Basmati varieties area has been given in table below:



						Ĥ	able 1: State	-wise total	rice during K	Tharif 201	4						
															Area	'000 ha; Prod	action '000 tons
s,	State	Pusa	1121	PB	-1	Pusa	ı-1401	Punjab B	asmati-3	Š	uper	Pusa	-1509	CS	R-30	HBC-19 Basmati-	, Type-3, 370, 386
°,		Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
1	Haryana	413.39	1767.57	96.43	518.03	27.09	162.53	8.94	40.75	3.10	10.19	135.04	636.36	146.13	501.16	2.41	6.63
7	Punjab	542.43	2117.94	24.62	114.13			28.41	103.27			247.12	1125.00	15.10	38.54		
m	W. Uttar Pradesh	187.69	657.47	46.29	183.21							107.19	381.54			13.22	38.47
4	Uttarakhand	4.71	16.24	1.70	6.54							7.36	28.17			6.57	15.46
S	Himachal Pradesh	0.43	1.59														
9	Jammu & Kashmir	6.29	22.33									2.20	8.00			59.97	210.44
٢	Delhi	0.63	2.66									0.07	0.34				
	Total	1155.57	4585.80	169.04	821.91	27.09	162.53	37.35	144.02	3.10	10.19	498.98	2179.41	161.23	539.70	82.17	271.00
Τâ	thle 2: State-wise	Acreage	e & Product	ion Estim	lates for N	on-											
	Basmati lc	ong grain	Rice during	g Kharif 2	014												
			Ar	ea in '000 ha,	Production ('C	00 tons)											
s.	C to to		Sharbati		Sugandha												
°.	olate	Area	1 Producti	ion Are	sa Prod	uction											

Production

Area

Production

Area

5.79

Haryana Punjab

-N 593.91 1.41

152.40

527.25

141.28 11.72

Jttar Pradesh

ŝ

Uttarakhand

4 5 9

160.64 22.40

38.37

0.33

44.95 0.90 38.43 595.32

152.73

794.57

208.37

Total

0.22 10.99

Himachal Pradesh Jammu & Kashmir

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Tab	le-3 State-wise Area Kharif 2013 and	a and Pac Compari	ldy product son with Kl	ion of Ba harif 2014	smati in 4
			Area in	'000 ha; Pro	duction in '000 t
S1.	State	2	013	2	014
No.	State	Area	Production	Area	Production
1	Punjab	590.01	2292.75	857.68	3498.88
2	Haryana	711.11	2898.98	832.53	3643.23
2 Inalyana 711.11 2090.90 052.55 5045.25 3 Uttar Pradesh 318.75 1270.09 354.39 1260.69					
4	Uttarakhand	18.30	54.16	20.34	66.41
5	Jammu & Kashmir	37.28	92.66	68.45	240.77
6	Himachal Pradesh	1.00	3.40	0.45	2.15
7	Delhi	1.00	4.09	0.70	3.00
	Total	1677.45	6616.13	2134.54	8715.13

Table-4 State-wis	se Area a	and Paddy p	roduction	1 of Non not with Kharif	tified No 2014	n-Basmati ii	n Kharif :	2013 and
		Con	puiison		2014	Area in '00	0 ha; Produc	tion in '000 tons
		20	13			20	14	
State	Sh	arbati	Su	gandha	Sh	arbati	Sug	gandha
	Area	Production	Area	Production	Area	Production	Area	Production
Punjab	17.02	61.84	0.44	1.80	5.79	22.40		
Haryana	39.11	159.85			38.37	160.64		
Uttar Pradesh	132.40	487.03	133.30	631.97	141.28	527.25	152.40	593.91
Uttarakhand	33.00	129.20	3.00	12.50	11.72	44.95	0.33	1.41
Jammu & Kashmir	1.87	6.33			0.22	0.90		
Himachal Pradesh	22.24	77.84			10.99	38.43		
Total	245.64	922.09	136.74	646.27	208.37	794.57	152.73	595.32

Project Background

Basmati rice is an important export commodity among the food grains exported from India. During the past few years, the Basmati export has been growing steadily, from 7.71 lakh metric tons in 2003 to an estimated 35.0 lakh metric tons in 2013-14 on robust demand from the traditional markets in West Asia. Iran alone has been importing >40% of the total Basmati export from India. Now China has taken a decision to import Indian Basmati rice which is likely to further increase the Indian Basmati demand.

Timely information on the area and likely production of the crop before the harvest helps exporters and other decision makers involved in Basmati trade to take decisions about the quantum and time of export. The export of Basmati is on continuous rise year by year from India and has reached to >3.76 million by 2013-14. Realizing this potential, the Basmati Export Development Foundation (BEDF), New Delhi contracted M/s. Agri Net Solutions (A division of BPPL – a UPL Group Company) the work of field survey validation based acreage estimation for all rice, for Basmati crop for selected other non-notified varieties), crop health monitoring and yield

estimation and production for Basmati rice and non-notified varieties and guestionnaire based sample survey of farmers, for 75 selected districts of Punjab, Haryana, Uttar Pradesh, Uttarakhand, Himachal Pradesh and Jammu & Kashmir, apart from Delhi, during Kharif 2011. During the year 2013, the number of districts has been increased to 81 in the selected seven states i.e. Punjab, Haryana, Pradesh, Uttarakhand, Himachal Uttar Pradesh, and Jammu & Kashmir apart from Delhi. This year the field survey based approach is being applied to collect the information at block level to improve the accuracy further to a desired level.

The Basmati varieties for which information is required include Basmati-370, Basmati-386, Type-3 (Dehraduni), Taraori (HBC-19), Ranbir (Basmati – 370), Pusa-1509, Pusa Basmati-1, CSR – 30 and Pusa Basmati-1121 and nonnotified, non-Basmati (Sharbati and Sugandha -5).

Scope of the current report

The present report being the fifth cycle of report for Kharif-2014 covers the results of field survey based district wise corrected acreage and estimated production of all Basmati varieties in different states.

Study Area Details

The study is confined to 81 districts, which includes 22 districts of Punjab (Amritsar, Barnala, Bathinda, Faridkot, Fatehgarh Sahib, Firozpur, Fazilka, Gurdaspur, Pathankot, Hoshiarpur, Jalandhar, Kapurthala, Ludhiana, Mohali, Mansa, Moga, Muktsar, Nawanshahar, Patiala, Ropar, Sangrur and Tarantaran), 21 districts of Haryana (Ambala, Faridabad, Bhiwani, Fatehabad, Gurgoan, Hissar, Jhajjar, Jind, Kaithal, Karnal, Kurukshetra, Mahendragarh, Mewat, Palwal, Panchkula, Panipat, Rewari, Rohtak, Sirsa, Sonepat, Yamunanagar), 3 Districts of Jammu & Kashmir (Jammu, Samba and Kathua), 30 districts of Uttar Pradesh (Agra, Aligarh, Auraiya, Baghpat, Bareilly, Bijnore, Budaun, Bulandshahr, Etah, Etawah, Kasganj, Ferozabad, Gautam Buddha Nagar, Ghaziabad, Hapur, Hathras, J. P. Nagar, Mainpuri, Kannauj, Mathura, Meerut, Moradabad, Sambhal, Muzaffarnagar, Shamli, Pilibhit, Rampur, Saharanpur, Shahjehanpur), 4 districts of Uttarakhand, 1 district of Himachal Pradesh and one of Delhi. The map of the study districts is given as Fig. The study districts form a part of the Himalayas and the Indo-Gangetic Plains.









Ground Survey based Rice Acreage

<u>HARYANA</u>

In **Haryana**, the harvesting of Pusa Basmati-1509 & Pusa Basmati-1 isw almost finished and Pusa Basmati-1121 is at full swing. In general, the crop health is good and the weather conditions are favorable for good quality grain.

The district wise acreage & production estimates under Basmati varieties have been given in Table-5.

In comparison to 58% area of total rice acreage under Basmati in the year 2013, this year the area is estimated to increase up to 72%.

<u>PUNJAB</u>

The district-wise Basmati acreage and production estimates have been given in Table-6.

Pusa Basmati-1509 and Pusa Basmati-1 have been fully harvested and Pusa Basmati-1121 is almost harvested. Only 8-10% is remaining. The rates offered have been lower and the farmers have withheld the produce of Punjab Basmati-3 as the prices offered are Rs. 200-300 lesser than the price of Pusa Basmati-1121.

UTTAR PRADESH

Pusa Basmati-1509, Pusa Basmati-1 are almost harvested and Pusa Basmati-1121 is being harvested at full swing. The district wise acreage & production estimates under Basmati varieties have been given in Table-7.

UTTARAKHAND

The district wise area and Production under Basmati varieties is given in Table-8.

<u>JAMMU & KASHMIR</u>

The estimated variety wise Basmati acreage & Production estimates in the districts have been given in Table 9.

HIMACHAL PRADESH

The area and likely production of Pusa-1121 and Sharbati in Kangra during Kharif 2014 is given in Table-10.

			Table	5: Distric	t-wise Acrea	ige & Pro	duction Esti	mates of .	Basmati Var.	ieties Va.	rieties in Ha	ryana dur	ing Kharif 2	014			
															Area in '00	0 ha, Producti	on ('000 tons)
S. No.	District	Ħ	3C-19	Pusa Bas	mati-1121	Pusa	-1509	Pusa	- 1401	Punjab l	Basmati-3	Pusa Ba	samti - 1	Su	per	CSF	t-30
		Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
1	Ambala			11.18	44.98	8.47	39.61	0.03	0.19	0.04	0.16	0.21	0.98	1.18	4.17	16.78	51.37
6	Bhiwani			10.47	43.61	0.58	2.73					0.46	2.16				
e	Faridabad	0.20	0.55	6.04	24.54	0.15	0.64			_		1.01	5.20				
4	Gurgaon			2.50	12.25					_		0.50	2.25				
S	Fatehabad	0.27	0.74	21.37	103.67	9.40	44.45	2.06	14.10	0.82	3.62	19.01	111.75			1.07	3.66
7	Hisar			24.77	109.24	7.03	32.70	0.14	0.79	_		1.01	4.68	0.42	1.33	1.52	5.17
œ	Jajjhar			20.99	77.12			0.03	0.16	_						4.04	13.72
6	Jind	0.04	0.11	47.49	187.91	11.25	52.37	2.18	14.10	1.66	7.32	14.67	70.09	0.42	1.22	9.26	31.76
10	Kaithal	0.41	1.13	48.18	212.47	17.67	77.90	4.12	26.45	_		12.66	60.46			33.65	115.40
11	Karnal	1.14	3.14	52.37	233.52	27.22	130.69	0.51	2.75	2.36	10.99	1.89	9.03			43.68	154.09
12	Kurukshetra			18.81	83.85	18.74	95.41	0.48	2.59	1.29	6.00	0.70	3.43	0.50	1.59	20.82	73.08
13	Mewat			2.38	10.50	0.13	0.61										
14	Palwal	0.35	0.96	17.90	78.92	3.20	15.30			_		1.42	6.76				
15	Panipat			44.41	193.13	5.78	31.83			1.28	6.77	7.18	38.32			9.92	34.22
16	Rewari			1.16	4.92							0.14	0.67				
17	Rohtak			19.19	72.87	2.49	9.76			0.50	1.88	0.37	1.43			1.79	6.25
18	Sirsa			10.88	53.31	4.88	20.33	17.55	101.40	0.84	3.29	23.94	146.63				
19	Sonepat			50.86	210.21	11.78	51.95			0.15	0.72	1.75	8.15	0.59	1.88	3.47	11.88
20	Yamunanagar			2.45	10.56	6.30	30.10					9.54	46.04			0.17	0.56
	Total	2.41	6.63	413.39	1767.57	135.04	636.36	27.09	162.53	8.94	40.75	96.43	518.03	3.10	10.19	146.13	501.16





	Table 6:	District-wis	se Acreage &	c Productio	n Estimates u	inder Basn	nati Varieties	in Punjab	during Khari	f 2014	
									Area in '00	0 ha, Product	on ('000 tons)
	District	CSR-30/B	asmati-386	Pusa Bas	imati 1121	Pusa	-1509	Punjab B	asmati-3	Pusa Ba	smati -1
		Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
	Amritsar	1.01	1.98	76.90	284.85	43.15	193.85	9.33	33.61		
	Barnala			2.80	11.25	0.56	2.45			2.64	12.18
	Bhatinda			7.86	29.45	11.82	52.30			4.91	21.27
	Faridkot			20.90	83.60	1.10	5.35				
	Fatehgarh Sahib	0.28	0.82	8.91	35.24	9.13	44.70	0.68	2.63		
	Fazilka			50.40	211.78	21.60	104.00				
	Firozepur			26.01	100.45	10.22	48.10			5.77	28.26
	Gurdaspur	6.60	16.38	49.94	180.54	24.37	107.75	3.83	14.02		
	Pathankot			7.81	27.65	3.19	12.30				
	Hoshiarpur	1.10	2.75	6.95	26.98	5.34	24.00	1.61	5.37		
	Jalandhar			16.61	67.12	5.30	24.50	2.09	7.99		
	Kapurthala			15.08	61.66	5.47	24.80	1.38	5.32		
	Ludhiana			24.29	101.72	7.89	36.70	2.02	7.68		
	Mansa			7.69	29.63	5.90	26.65			1.41	6.73
	Moga			25.42	100.84	9.16	43.50	0.70	2.62	1.72	8.30
	Mohali			2.79	10.88	0.78	3.45	0.43	1.64		
	Muktsar			66.99	271.20	7.01	31.70				
	Nawanshahar			5.06	19.20	1.77	7.90	1.17	4.49		
	Patiala	2.10	5.86	16.83	69.97	13.06	59.50	0.76	2.38	4.94	21.71
	Roopnagar	0.31	0.78	4.05	15.34	2.10	9.50	0.54	1.51		
	Sangrur			21.25	89.66	17.66	81.20			3.23	15.68
	Tarantaran	3.70	9.97	77.89	288.93	40.54	180.80	3.87	14.01		
	Total	15.10	38.54	542.43	2117.94	247.12	1125.00	28.41	103.27	24.62	114.13
l											

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Table	> 7: District-wise Acre	age & Prod	luction Estir	nates unde	r Basmati V	arieties in I	Jttar Pradesl	h during Kl	narif 2014
							Area in '00	0 ha, Product	ion ('000 tons)
N N	District	Pusa Bası	nati-1121	Pusa Ba	asmati-1	Pusa-	1509	Type-3	& others
2		Area	Production	Area	Production	Area	Production	Area	Production
1	Agra	0.36	1.12	0.08	0.31	0.43	1.48		
7	Aligarh	18.35	65.23	4.47	16.55	6.99	26.35	0.03	0.89
ŝ	Auraiya	5.59	16.25	0.18	0.68	2.96	8.91	0.98	2.45
4	Baghpat	1.47	6.77	1.14	4.87	1.08	4.27	0.13	0.41
S	Bareilly	2.59	8.47	0.88	3.17	7.26	26.50	0.50	1.33
9	Bijnore	3.24	10.85	3.16	12.17	3.99	14.46	0.20	09.0
7	Budaun	3.09	9.12	1.30	4.21	5.96	18.30	8.89	26.23
×	Bulandshahr	21.07	82.59	6.15	25.50	6.35	24.13	0.05	0.15
6	Etah+Kasganj	5.46	17.43	0.57	2.05	4.75	14.96		
10	Farukhabad	0.37	1.12	0.04	0.12	0.95	3.03		
11	Firozabad	2.99	9.54	0.22	0.73	1.99	6.37		
12	Etawah	9.92	34.35	0.15	0.51	6.25	21.15		
13	Gautam Buddha Nagar	18.01	71.05	1.60	6.49	1.49	5.89	0.03	0.11
14	Ghaziabad+Hapur	5.69	22.57	1.10	4.73	3.45	13.80	0.03	0.10
15	Hathras	4.44	14.87	0.82	3.06	2.88	9.42		
16	Mathura	28.87	99.02	1.18	4.42	4.64	17.40		
17	Mainpuri	19.77	63.46	0.24	0.88	11.15	40.12		
18	Meerut	3.26	11.99	3.27	14.21	3.12	12.17	0.18	0.58
19	Moradabad	2.64	8.77	0.73	2.68	3.15	10.71	0.25	0.69
20	J. P. Nagar	1.72	5.35	1.35	4.99	2.55	8.54	0.03	0.09
21	Kannauj	1.40	4.54	0.11	0.38	1.30	4.03		
22	Muzaffarnagar+Shamli	4.69	17.21	5.10	21.13	2.88	10.89	0.20	0.61
23	Pilibhit	2.02	7.02	0.16	0.61	2.23	7.96	0.03	0.08
24	Rampur	1.20	4.04	0.29	1.08	4.91	19.15	0.13	0.41
25	Saharanpur	12.82	42.95	10.45	41.98	6.90	26.57	0.27	0.82
26	Shahjehanpur	3.18	10.13	0.76	2.72	4.13	13.94	1.14	2.57
27	Sambhal	3.48	11.66	0.79	2.98	3.45	11.04	0.15	0.35
	Total	187.69	657.47	46.29	183.21	107.19	381.54	13.22	38.47



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L	able 8: District	-wise Ac	reage & I	roduction	under Ba	smati Vari	eties in Ut	tarakhand du	Iring Kha	rif 2014
								Area in	1 '000 ha, Pro	duction '000 tons
S.	Diotaiot		Pusa Basm	ati- 1121	Pusa B	asmati-1	Pus	a-1509	Type-3	8 & others
No.	חזאווכו		Area	Production	Area	Production	Area	Production	Area	Production
1	Dehradun		0.3	1.0	0.0		0.1	0.37	2.3	4.83
7	Haridwar		2.1	7.3	1.3	5.1	0.8	2.70	2.8	7.56
ω	Nainital		0.2	0.6	0.07	0.28	0.4	1.60	1.06	2.07
4	Udham Singh Na _i	gar	2.2	7.4	0.29	1.12	6.1	23.50	0.4	1.00
	Total		4.71	16.24	1.70	6.54	7.36	28.17	6.57	15.46
Tab	ole 9: District-wis	e acreage	under Bas	imati rice ii	n Jammu &	Kashmir dı	iring Khari			
				2014						
						Area '000 ha, Pr	oduction ('000 t	(suo		
S. No.	District	Pus	a-1121	Pu	sa-1509	Ba	smati-370			
		Area	Productio	n Area	Productio	on Area	Producti	uo		
1	Jammu	1.58	5.37			50.13	120.31			
7	Kathua	4.55	16.38	1.80	6.60	7.03	18.28			
3	Samba	0.16	0.58	0.40	1.40	2.82	71.85			
	Total	6.29	22.33	2.20	8.00	59.97	210.44			
Table	3 10: District-wise	e acreage	& Product	ion Estimat	tes under P	usa-				
1121	and Non-Basmat	ti Sharbati	i in Himac	hal Pradesh	during Kh	arif				
			2014							
				Area '000 ha,	Production ('00	0 tons)				
SN S	District	Ρ	usa-1121		Basmati					
		Area	Produc	tion Are:	a Produc	tion				
1	Kangra	0.43	1.55	0.02	0.5	2				
	Total	0.43	1.55	0.02	0.5	2				

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