

REPORT - 2

October 9th, 2017

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

Basmati Export Development Foundation
APEDA, New Delhi



Basmati Survey - Report-2 (Season 2017)

This is the 2nd report for Basmati crop across 7 states totalling 81 districts. Detailed microscopic level has been collected and compiled in this report. The report begins with an overview of the entire scenario of Basmati crop for the current season and then goes on to provide details of production state wise and then district wise.

Geotrans Technologies Pvt. Ltd.

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The scientific team of Geotrans is also thankful to the Hon'ble members and representatives of All India Rice Exporters' Association for giving their valuable suggestions from time to time.

TEAM GEOTRANS

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Executive Summary

Scope of the Report

The present report being the report for Kharif 2017 covers the results of field survey based acreage estimation & crop health reporting of rice area transplanted and Basmati varieties in the different districts of Punjab, Haryana, Delhi, Uttar Pradesh, Uttarakhand, Himachal Pradesh and Jammu & Kashmir. This time we have taken the help of satellite images to generate the second opinion on the crop acreage, its spread & crop health to substantiate with our field report findings. Basis the crop health we have derived to the yield levels which lead us to give the initial estimates of the basmati crop production across various districts in studied 7 states. As we move further in the harvest season we will give more insights on the realized yields and the clearer picture will immerse on the production of basmati crop. This report primarily covers the crop acreage to the level of block-wise / district wise & state wise along with preliminary estimates on basmati crop production.

Study districts

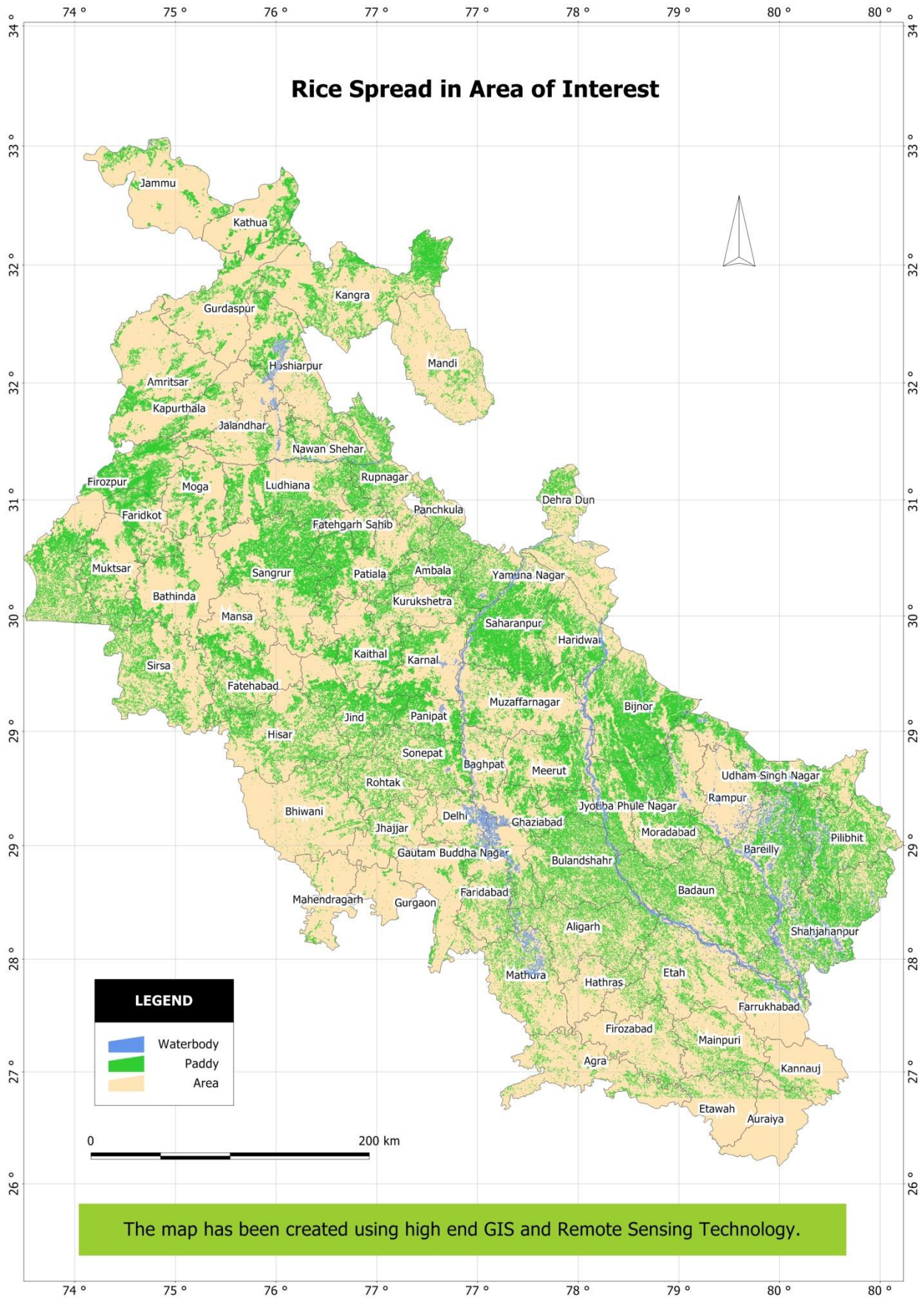
The study has been conducted in 81 districts, which includes 22 districts of Punjab, 21 districts of Haryana, 29 districts of Uttar Pradesh, 4 districts of Uttarakhand, 2 districts of Himachal Pradesh and 3 districts of Jammu & Kashmir and findings were elaborated in in form of tables / text and pics

Rice Acreage

Apart from survey techniques we have validated the data using high end satellite mapping technology. The spatial spread of the same is shown in the next page...

This year the total rice transplanted area in India has decreased by 1% i.e. from 38,238,000 ha to 3,710,000 ha in the kharif 2017-18 seasons. The total rice crop in the studied 7 states & 81 districts has been reduced to 2.28% in the kharif 2017-18 season. Although, the % area occupied by Basmati has reduced in major states of Haryana and Punjab by 9.4% and 8.8% respectively as observed during the first survey estimates, which is further substantiated in second report too from field visits & satellite images. While in U.P. the area under Basmati has increased 9,600 ha. Overall, the Basmati area has decreased by 7.9% in comparison to last year i. e 2016. Whereas, the area under other Long Grain Non-Basmati (Sharbati & Sugandha) rice has increased from 291,300 to 302,000 ha.

In Punjab, the rice transplanting has been 2,926,000 ha in 22 districts this year. Sangrur district has the largest area under rice (2,67,720 ha), followed by Ludhiana district (2,49,200 ha). The area under Basmati variety Pusa Basmati-1121 has reduced this year by 10.1% in comparison to last year. The area under Pusa Basmati-1509 has significantly increased from 35,200 ha. to 38,700 ha in comparison to last year as the farmers got shifted to PB 1509 from PB 1121. Farmers realized yields & higher return on PB 1509 along with shorter duration makes PB 1509 as preferred choice over PB 1121



In Haryana, the total rice acreage based on field survey has been estimated at 12,87,000 ha in 20 districts. Karnal district has the highest transplanted area under rice (1,59,700 ha), followed by Kaithal district (1,57,700ha). Overall Basmati area has reduced by 9.4% in comparison to last year.

In Uttar Pradesh, timely onset of monsoon, rice transplanting was started in time and continued in full sowing during July. A total of 13,42,000 ha. rice acreage based on field survey has been estimated as transplanted in the 27 districts of the state. Shahjahanpur district has the largest total rice area (1,97,051 ha), followed by Pilibhit (1,52,500 ha) and in districts like Muzaffarnagar, Bagpat, Meerut, many farmers have sown sugarcane replacing Basmati speculating higher sugarcane state advised prices from the state Govt and no sugarcane arrears from sugar mills.

In Uttarakhand, A total of 130,000 ha rice acreage has been estimated as transplanted in the 4 districts. Udham Singh Nagar district has the largest area under rice (100,300 ha). This year overall basmati crop has been reduced to 5% across state while in certain major districts basmati acreage has been reduced upto the level of 9%.

In Jammu & Kashmir, three districts have been taken up for the study. The total rice area is estimated to be 139,000 ha. in these districts. Jammu & Samba have an area of 97,000 ha. and Kathua only 42,000 ha. The state has received excess rainfall this year. Area under basmati & rice is almost intact as farmer have lesser choice and variety like Ranbir which pays well to farmers in recent past and has constant demand in market

In Himachal Pradesh, a total of 76,000 ha rice acreage based on field survey has been estimated as transplanted in 11 districts. Basmati is grown in Kangra and Mandi districts only. Kangra district has the highest area (60,000 ha). The farmers opted Permal varieties including PR-123 in the increased paddy area and the area under Pusa-Basmati 1509.

State Wise Transplanted Area Basmati & Non-Basmati Long Grain Rice Area during Kharif 2017

Total rice transplanting in the studied 7 states has been reduced by 2.28% from last year. Farmers shifted to crops like cotton & sugarcane in Harayana/ Punjab & Wester part of Uttar Pradesh. The total Basmati (notified varieties) area in these targeted 7 states& 81 districts has decreased by 7.88%. The notified Basmati varieties majorly comprises of Basmati-370, Basmati- 386, Type-3 (Dehraduni), Taraori, Ranbir, Pusa-1509, Pusa Basmati-1, CSR-30 and Pusa Basmati-1121

This year about 1,32,900 hac area under basmati has been shifted either to non-basmati long grain rice or shifted to other major competitive crops like sugarcane & cotton

State Wise Transplanted Area, Basmati & Non-Basmati long grain Rice Area during Kharif 2017 (Area in 000 ha.)

S. No	State	Total Basmati	Pusa-1121	PB-1	Pusa-1509	Pusa-1401	Basmati 370	CSR-30	Type-3 & Others	Non-Notified	
										Sharbati	Sugandha
1	Haryana	652.0	444.0	42.0	30.0	44.0		93.0		6.0	
2	Punjab	561.0	500.0	23.0	39.0					5.9	
3	Uttar Pradesh	257.0	145.0	43.0	56.0				13.0	173.6	91.7
4	Uttarakhand	15.0	4.0	2.0	3.0				6.0	15.0	0.5
5	Jammu & Kashmir	62.0	8.0				53.0			10.1	
6	Himachal Pradesh	7.0	2.0		5.0					0.0	
7	Delhi										
	Total	1553.0	1102.0	110.0	132.0	44.0	53.0	93.0	19.0	210.6	92.2

State Wise initial estimated production of Basmati & Non-Basmati long grain Rice during Kharif 2017

Field team has gathered the information on crop health in 7 studied areas and found that this year Haryana and Punjab basmati crop is almost in similar condition as that of last year while crop in Uttar Pradesh & UK got some losses due to heavy rainfall happened on 23-24th Sep, 2017, which flattened the crop and initial estimation shows some losses on basmati crop.

This year initial round of farmer interaction and various field visits suggests that this year about 56- 58 lakh tons of basmati production is expected against 61.53 lakh tons production on last year. The exact figures of basmati production can be assessed once harvesting and crop cutting experiments will be taken in further reports

State Wise Production of Basmati & Non-Basmati long grain Rice during Kharif 2017 (production in 000 ton)

S. No	State	Total Basmati	Pusa-1121	PB-1	Pusa-1509	Pusa-1401	Basmati 370	CSR-30	Type-3 & Others	Non-Notified	
										Sharbati	Sugandha
1	Haryana	2539.0	1615.0	223.0	148.0	273.0		279.0		21.2	
2	Punjab	2139.0	1840.0	110.0	189.0					22.2	
3	Uttar Pradesh	776.0	412.0	134.0	209.0				21.0	529.1	308.8
4	Uttarakhand	40.0	9.0	8.0	10.0				12.0	49.7	1.9
5	Jammu & Kashmir	132.0	25.0		1.0		106.0			35.9	
6	Himachal Pradesh	30.0	7.0		22.0					0.0	
Total		5656.0	3909.0	475.0	580.0	273.0	106.0	279.0	33.0	658.2	310.7

However, all the above figures are initial estimations and can be further vetted as and when we move near to harvesting season

This year initial reports shows that total basmati acreage has been reduced to 7.9% which can bring down the overall basmati production to the level which is about 8.1% down from last year

State wise Variety wise basmati Acreages (000 ha.) & Production (000 tons) of basmati rice basis initial estimations

S. No	State	Area (in 000 Ha.)			
		2016	2017	2016	2017*
		Basmati Area		Basmati Production	
1	Haryana	720.1	652.4	2796.6	2538.8
2	Punjab	615.3	561.2	2335.6	2139.3
3	Uttar Pradesh	266.2	256.5	816.5	776.5
4	Uttarakhand	15.6	14.8	41.8	39.5
5	Jammu & Kashmir	62.3	61.5	133.8	132.2
6	Himachal Pradesh	7.0	7.0	29.7	29.5
Total		1686.4	1553.5	6153.9	5655.8

PB 1121

In the current season PB 1121 acreage in the 7 states have been reduced by 10.5% over last year. Farmer preferred high yielding Pusa-1509 in place of low yielding PB-1121. Moreover PB 1509 also has shorter time period and early maturity trait if compared with PB 1121. Initial crop health report shows that PB 1121 is intact in Haryana and Punjab while some crop damage reported in UP / UK but over this year lesser crop infestation and timely application on remedial action by farmers on brown plant hopper & White bagged plant hopper reduces the crop losses. This year farmers are expected to harvest about 39-40 lakh tons of PB 1121 against the 43-44 lakh tons of harvest happened last year. However, final figures

might differ once actual arrival will start coming in the market. Overall harvesting activity already stated and gather pace in coming days

State wise Acreages (000 ha.) & Production (000 tons) of Pusa-basmati 1121

S. No	State	Area (in 000 Ha.)			
		2016	2017	2016	2017*
		Basmati Area		Basmati Production	
1	Haryana	504.9	443.5	1842.1	1615.5
2	Punjab	555.8	499.5	2047.6	1840.3
3	Uttar Pradesh	156.3	144.9	451.7	411.9
4	Uttarakhand	4.2	3.5	11.3	9.3
5	Jammu & Kashmir	8.4	8.2	25.7	25.1
6	Himachal Pradesh	2.0	1.9	7.6	7.2
	Total	1231.5	1101.6	4386.0	3909.3

Mandi Arrivals & Prices of PB 1121 (Haryana Mandi) from 01/09/2016-06/10/2017)

APMC	Commodity Arrivals(Quintal)	Price INR / Qtl
AMBALA	180	2461
BARWALA HISAR	65	0
DHAND	95	2461
FATEHABAD	100	1751
GANAUR	20	2901
GHARAUNDA	90	2451
GOHANA	495	2825
INDRI	25	1625
KALAYAT	80	2640
KARNAL	395	3325
LADWA	20	1625
PANIPAT	95	3050
PEHOWA	160	1510
PILLUKHERA	50	2800
RATIA	150	1625
REWARI	145	2711
SAFIDON	110	1625
SHAHBAD	10	2500
SIRSA	30	2700
TARAORI	270	2211
THANESAR	125	2325
TOHANA	55	2525

However the arrival of PB 1121 is yet to start so above rates might not be the true indicator of seasonal paddy opening rates for the season.

Pusa-1509

This year Pusa-1509 increased by 7.83%, clearly indicates that farmer replaced PB 1121 with Pusa -1509 due to lesser price differential between these two prominent varieties from last year. Farmer preferred high yielding Pusa-1509 in place of low yielding PB-1121 also on account of its shorter time period and early maturity trait. PB 1509 crop health is also intact and expected to give similar yields in Haryana & Punjab as that of last year while UP / UK might see some crop damage on account of 24th Sep rainfall which is 500% more than normal

rainfall in most of the districts . Overall PB 1509 yields will be little bit on positive side as compare to last year, basis the current crop conditions

This year farmers are expected to harvest around 5.8 lakh tons of PB 1509 which could be around 7.44% higher than last year. However, final figures might differ once actual arrival will start coming in the market. Overall harvesting activity already stated and gather pace in coming days

Mandi Arrivals & Prices of PB 1509 (Haryana Mandi) from 01/09/2016- 09/10/2017)

APMC	Arrivals from 01/09/2017 to 09/10/2017	Commodity Prices(INR/QtI)		
		09-10-17	07-10-17	06-10-17
AMBALA	2480.75	2703	2703	2703
ASANDH	20944	0	0	0
BARWALA HISAR	2059.13	0	0	0
CHEEKA	89621.13	2490	2950	2840
DHAND	16198	2291	2291	2291
ELLANABAD	4996	2486	2669	2889
FATEHABAD	25561	2571	2571	2844
GANAUR	75177.75	2641	2611	2901
GHARAUNDA	219746	2525	2481	1980
GOHANA	36682.15	2525	2905	2971
HANSI	8521	2671	2911	2821
HODAL	1762	0	0	0
INDRI	146432.5	2400	2251	2251
ISMAILABAD	16984.9	2665	2665	2665
JAKHAL	5220	2800	2800	2790
JIND	17694.9	2681	2873	2987
JULLANA	4302.5	2701	2821	2821
KAITHAL	32791.25	2311	2311	2311
KALAYAT	14506	2591	2882	2881
KARNAL	183350.5	2850	2850	2640
LADWA	64741	2475	2855	2400
MADLAUDA	29607.5	2651	2891	3169
NARNAUND	568	2900	2900	2671
NARWANA	8869.75	2951	2651	1590
NISSING	96077.9	2574	2574	2574
PALWAL	6360	0	0	0
PANIPAT	99894.1	2642	2900	2751
PEHOWA	25434	2265	2265	2265
PILLUKHERA	23173.75	2900	3021	2921
PUNDRI	61791.89	2561	2225	2181
RANIA	7675	2845	2865	2921
RATIA	6125	2860	2860	2700
ROHTAK	2280.5	2731	2731	0
SAFIDON	63217.62	2650	3166	2965
SAMALKHA	153686.63	2661	1590	1590
SHAHBAD	10804.5	0	1981	0
SIRSA	30970.5	2772	2772	2850
SONEPAT	32003.97	2845	2801	2721
TARAORI	139323	2551	2601	2321
THANESAR	57306.12	1550	1550	1550
TOHANA	132260.24	2761	2810	2850
UCHANA	5586.5	2201	2201	2201

State wise Acreages (000 ha.) & Production (000 tons) of Pusa-basmati 1509

		Area (in 000 Ha.)			
S. No	State	2016	2017	2016	2017
		Basmati Area		Basmati Production	
1	Haryana	26.2	29.9	130.1	147.9
2	Punjab	35.2	38.7	171.9	188.9
3	Uttar Pradesh	53.7	56.0	204.1	209.1
4	Uttarakhand	2.5	2.5	10.1	10.2
5	Jammu & Kashmir	0.3	0.3	1.1	1.1
6	Himachal Pradesh	5.0	5.1	22.1	22.3
	Total	122.8	132.4	539.4	579.5

Pusa basmati – 1

Pusa basmati - 1 is continuously reducing in acreage over years and now is only preferred by farmers who take it for their self-consumption, however PB -1 still has good market potential in Europe & Saudi Arabia, which is about 1.5-2 lacs ton each.

State wise Acreages (000 ha.) & Production (000 tons) of Pusa-basmati 1

		Area (in 000 Ha.)			
S. No	State	2016	2017	2016	2017
		Basmati Area		Basmati Production	
1	Haryana	44.3	41.5	239.6	223.0
2	Punjab	24.3	23.0	116.1	110.1
3	Uttar Pradesh	43.3	42.8	139.1	134.4
4	Uttarakhand	2.3	2.3	8.0	7.7
	Total	114.2	109.7	502.7	475.2

The acreage under long grain non-basmati varieties (Sharbati and Sugandha) in these targeted districts has increased by 3.96%.

This year Sharbati is the clear preference by the farmers not only over basmati but also over high yielding HYV varieties in Western & Central part of UP / Punjab & Haryana. Primarily this acreage shift towards Sharbati is not only due to lesser price differential between basmati & non-basmati varieties but also its high yields / lesser susceptibility towards diseases / high demand / lesser cost of cultivation etc

This year farmers are expected to harvest around 6.6 lakh tons of Sharbati which could be around 3-4% higher than last year. However, final figures might differ once actual arrival will start coming in the market. Overall harvesting activity already stated and gather pace in coming days

State wise Acreages (000 ha.) & Production (000 tons) of Long Grain Non-Basmati(Sharbati)

		Area (in 000 Ha.)			
S. No	State	2016	2017	2016	2017
		Basmati Area		Basmati Production	
1	Haryana	5.8	6.0	20.5	21.3
2	Punjab	5.8	5.9	21.8	22.2
3	Uttar Pradesh	163.9	173.6	509.8	529.1
4	Uttarakhand	14.6	15.0	49.2	49.7
5	Jammu & Kashmir	10.0	10.2	35.6	35.9
	Total	199.9	210.6	636.8	658.2

Sugandha, which is primarily complimenting PB-1121 has been not changed much. Usually Sugandha is not preferred by farmers as independent choice as long grain rice but grown for complimenting the PB 1121 variety

This year farmers are expected to harvest around 3.1 lakh tons of Sugandha which could be around similar levels of last year. However, final figures might differ once actual arrival will start coming in the market. Overall harvesting activity already stated and gather pace in coming days

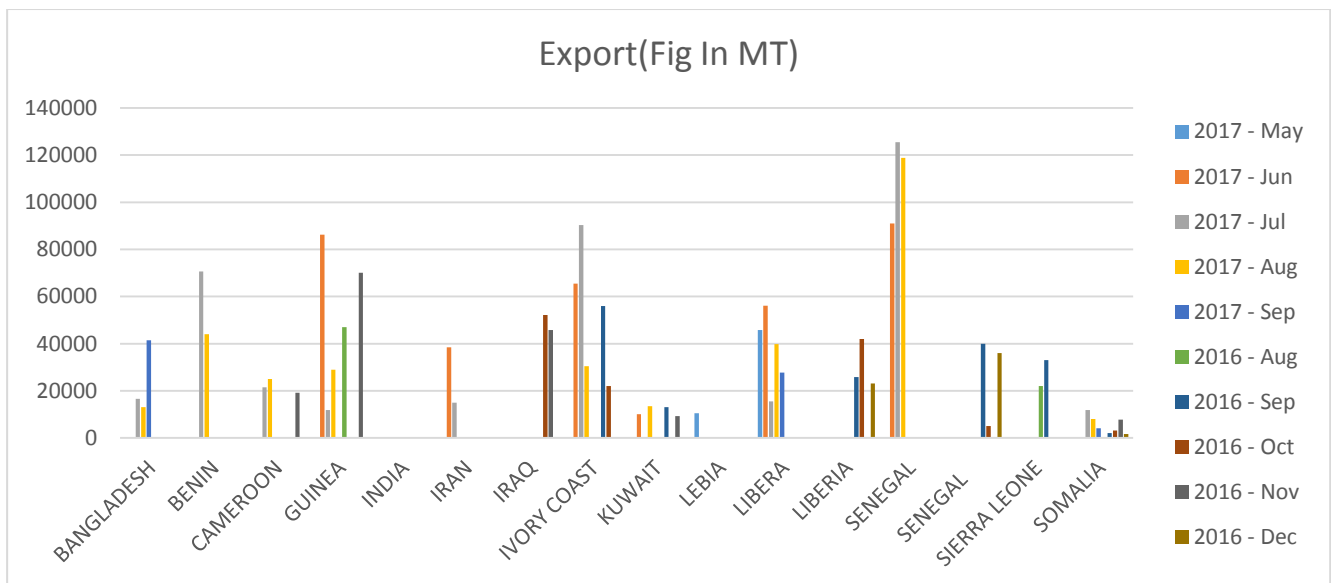
State wise Acreages (000 ha.) & Production (000 tons) of Long Grain Non-Basmati(Sugandha)

S. No	State	Area (in 000 Ha.)			
		2016	2017	2016	2017
		Basmati Area		Basmati Production	
1	Uttar Pradesh	90.9	91.7	310.4	308.8
2	Uttarakhand	0.5	0.5	2.0	1.9
Total		91.4	92.2	312.4	310.7

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 tonnes in 2003 to an estimated 4.05 million metric tonnes in 2015-16 on robust demand from the traditional markets in West Asia. Almost 132 countries have been importing Basmati from India every year. Out of which, Iran, Saudi Arabia, UAE and Iraq are the major importers. Apart from India second is Pakistan from where Basmati is exported to many countries. 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. Realizing this potential, the Basmati Export Development Foundation (BEDF), New Delhi contracted M/s Geotrans Technologies Pvt. Ltd 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 questionnaire based sample survey of farmers, for 88 districts in the selected seven states i.e. Punjab, Haryana, Uttar Pradesh, Uttarakhand, Himachal Pradesh, and Jammu & Kashmir apart from Delhi. The field survey based approach has been 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, Ranbir), Pusa-1509, Pusa Basmati-1, CSR-30 and Pusa Basmati-1121 and non-notified, non- Basmati (Sharbati, and Permal).

Exported Rice from India (Aug 2016-May 2017)



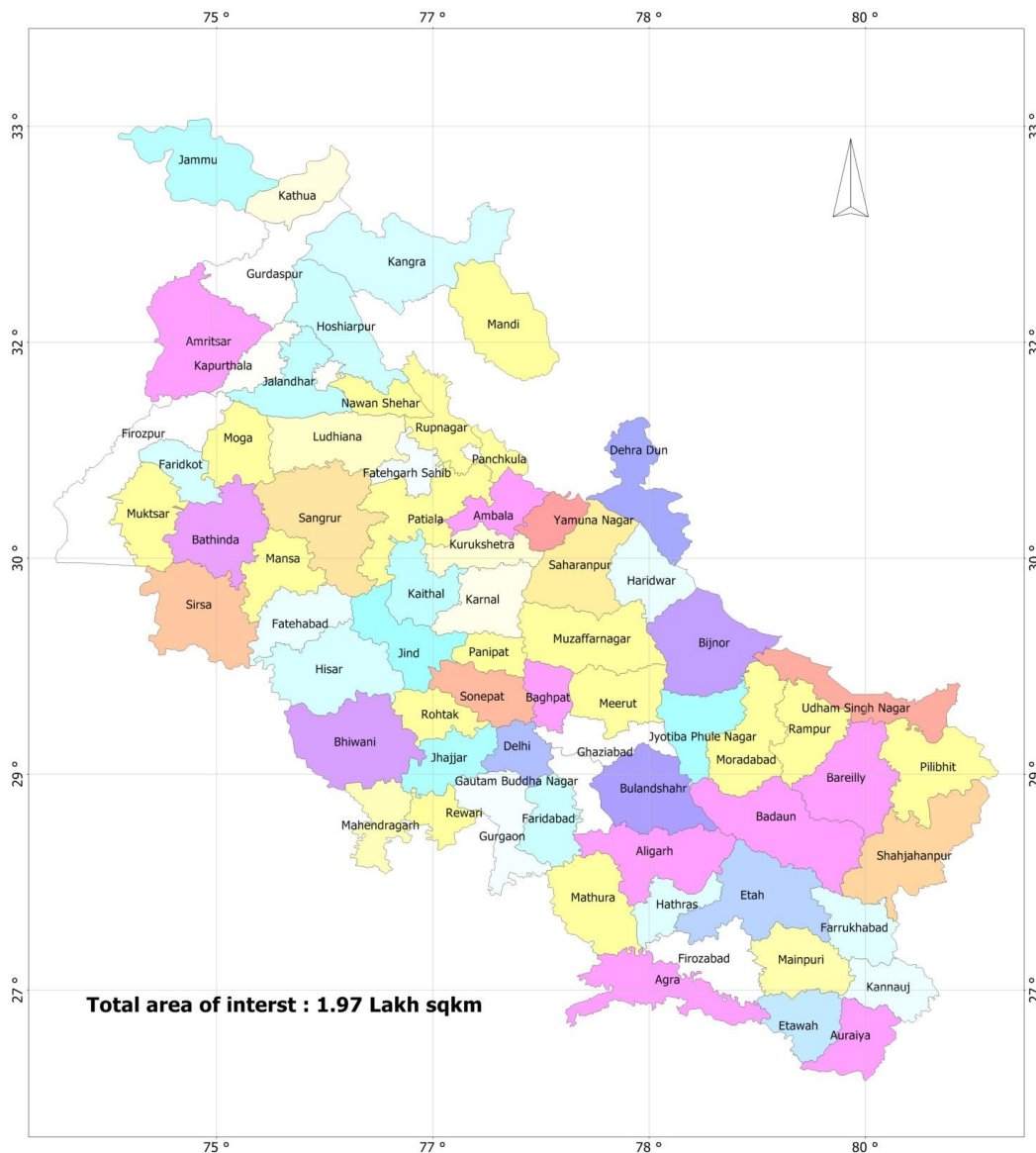
Scope of the current report

The present report being the report for Kharif-2017 covers the results of field survey based total rice and Basmati acreage / production under various varieties in different states.

Study Area Details

The study is confined to 79 districts, which includes 22 districts of Punjab (Amritsar, Barnala, Bathinda, Faridkot, Fatehgarh, Sahib, Firozpur, Fazilka, Gurdaspur, Pathankot, Hoshiarpur, Jalandhar, Kapurthala, Ludhiana, Mansa, Moga, Mohali, Muktsar, Nawanshahr, Patiala, Ropar, Sangrur and Tarantaran), 21 districts of Haryana (Ambala, Faridabad, Bhiwani, Fatehabad, Gurgaon, Hissar, Jhajjar, Jind, Kaithal, Karnal, Kurukshetra, MahendraGarh, Mewat, Palwal, Panchkula, Panipat, Rewari, Rohtak, Sirsa, Sonapat, Yamunanagar), 3 Districts of Jammu & Kashmir (Jammu, Samba and Kathua), 27 districts of Uttar Pradesh (Agra, Aligarh, Auraiya, Baghpat, Bareilly, Bijnore, Budaun, Bulandshahr, Etah, Kasganj, Etawah, Ferozabad, Gautam Buddha Nagar, Ghaziabad, Hapur, Hathras, J. P. Nagar, Kannauj, Mainpuri, Mathura, Meerut, Moradabad, Sambhal, Muzaffarnagar, Shamli, Pilibhit, Rampur, Saharanpur, Shahjahanpur), 4 districts of Uttarakhand, 2 district of Himachal Pradesh and one of Delhi.

Districts of Study Area



Sample size selection & methodology

Sample size of farmers interviews

S.No	State	Districts coverage	No. of blocks	No. of farmers targeted	Share of Basmati Acreage
1	Haryana	20	93	3906	42%
2	Punjab	22	143	2860	36%
3	Uttar Pradesh	27	255	2240	19%
4	Uttarakhand	4	27	675	1%
5	Jammu & Kashmir	3	13	60	2%
	Total	79	536	9866	100%

- Four different teams each with four experts have been deputed on field for collecting information from farmers
- Teams not only interviewed farmers but also clicked pictures of their fields along with same day newspaper
- Farmers pictures were along geo-tagged for reference purpose
- Tele-callers have been deputed to collect the mandi prices & arrival trend so that seasonal trend can be ascertained.
- Technical team is working on the Agri-dash-boards for quick understanding and analysis.
- The number of farmer interaction may vary from one state to another based on their availability and responses.

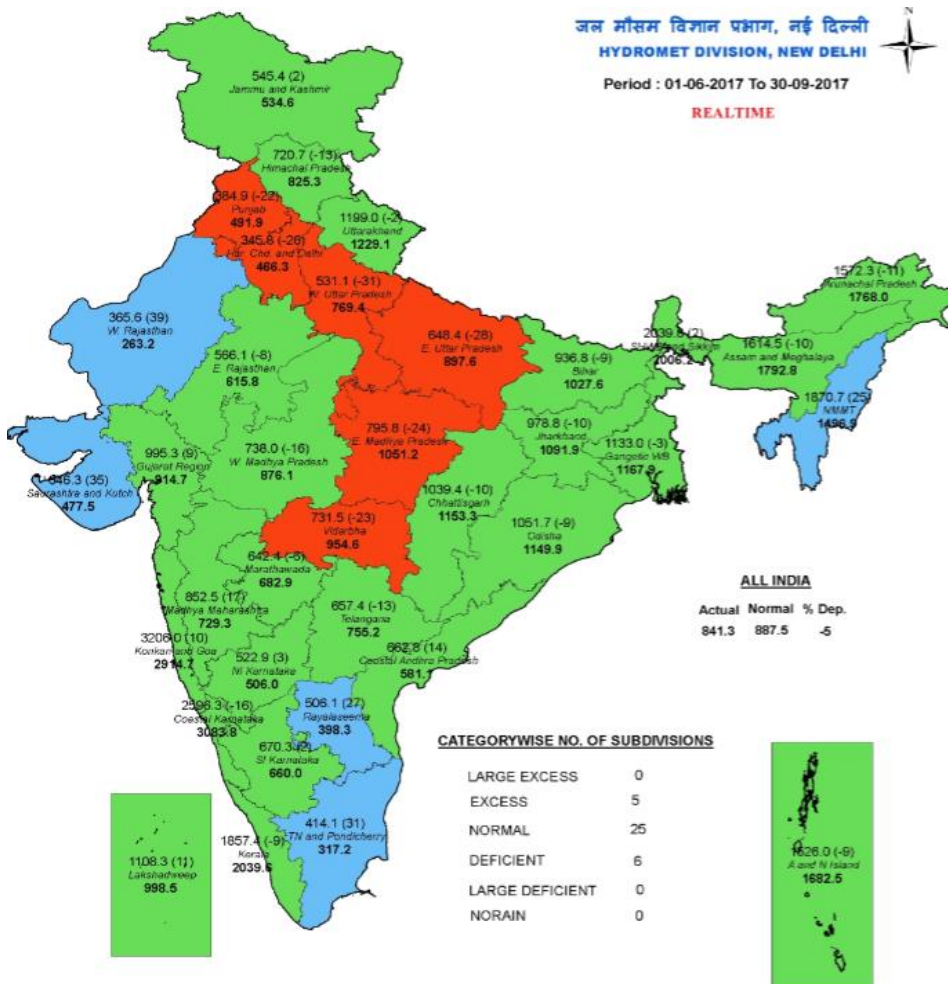
Chapter-3

Rainfall of the area, maps

Rainfall Stats in Major states (Haryana, Punjab, U.P, U.K, J & K, H.P, Delhi)

Period:01-06-2017 To 30-09-2017				
States	ACTUAL (mm)	NORMAL (mm)	% DEP.	Rainfall Status
HARYANA	341.9	459.8	-26%	Deficient
Punjab	384.9	491.9	-22%	Deficient
Uttar Pradesh	602.5	846.1	-29%	Deficient
Uttarakhand	1199	1229.1	-2%	Normal
J & K	545.4	534.6	2%	Normal
HP	720.7	825.3	-13%	Normal
Delhi	442.6	636.2	-30%	Deficient

Monsoon Map from 01-06-2016 to 30-09-2017



Ground Survey based Rice Acreage

HARYANA

In Haryana, the total rice acreage based on field survey has been estimated at 12,87,000 ha in 20 districts. The area under Basmati rice has reduced by 9.4%. Pusa Basmati- 1121 has decreased almost 12.2% over the last year. The area under CSR-30 has also reduced by almost 4,900 ha. Under Pusa Basmati- 1509, almost 3,700 ha area has increases as comparison to last year. The district wise area figures under Basmati varieties have been given in Chapter 6 Annexure tables.

PUNJAB

A total of 29.2 lakh ha. area has been transplanted in the state this year. Whereas last year 30.4 lakh ha. area was transplanted. Basmati has occupied 5.61 lakh ha. and the area under Basmati varieties has reduced by almost 8.8% in comparison to the last year. After Pusa Basmati-1121, the other variety transplanted in the major area state under Basmati is Pusa Basmati-1509 (38,700 ha.). Pusa Basmati-1121 has reduced to 499,500 ha. i.e. 10.1% in comparison to last year. Pusa Basmati-1 has decreased by 1,200 ha. Pusa Basmati-1509 has increased from 35,200 ha. in the year 2016 to 38,700 ha. this year. This varietal shift is due to price economy prevailed last year. The district-wise acreage under total rice and Basmati rice is given in the annexure in chapter 6

UTTAR PRADESH

In overall districts of Uttar Pradesh a total 59.7 lakh ha area could be transplanted this year which is almost similar to last year The area under Pusa Basmati- 1121 has been 1.44 lakh ha. (A reduction of 7.3%). and Pusa Basmati-1509 has increased to 55,950 ha. (4.29% increased). Long grain Non- Notified Non- Basmati variety Sugandha has increased by 0.95%. The crop health is good. District wise acreage under Basmati varieties and Long Grain Non-Basmati varieties is given in Table. The block wise area under Basmati varieties is given in annexure in chapter 6

UTTARAKHAND

The state has received a normal rainfall during the months of June, July & August. Nainital has received normal rainfall during the last three months. Pusa Basmati-1509 has increased to 2,530 ha. area in the state in comparison to 2,500 ha. last year. Overall Basmati area in Uk has been reduced by 5% . The district wise acreage under Basmati varieties in Table and Block wise acreage in annexure in chapter 6

JAMMU & KASHMIR

The rice transplanting in Jammu & Kashmir is estimated 1.16 lakh ha. in three study districts. The major area in Jammu is under Basmati 370/ Ranbir . In Kathua, Pusa Basmati-1121 has increased during the last 3 years. The farmers ruled out Pusa Basmati-1509 in both Jammu and Kathua districts. The estimated variety wise Basmati area in the districts is given annexure in chapter 6.

HIMACHAL PRADESH

76,000 ha. area has been transplanted in major Basmati growing district Kangra and Mandi in the state this year. Out of which, 7,000 ha. is estimated to be under Basmati varieties. The district-wise target for total rice in Kharif-2017 is given in annexure in chapter 6.

DELHI

Almost 1520 ha Basmati area has been transplanted in Delhi. The area -wise target for total rice in during Kharif-2017 is given in annexure in chapter 6.

Basmati crop diseases & commonly used pesticides/ chemicals in 7 studied area

S.No.	Crop Stages	Diseases & Pests	Pesticides
1	Milking stage	Brown plant Hopper	Buprofezin 25 % SC - 330 ml/Acre
2	Tillering to heading stage	Sheath blight	Hexaconazole 5 % SC or Vaalidamycin 3 % L-400 ml/ Acre
3	After flowering only	False smut	Propiconazole 1ml/litr water/acre
4	Late booting stage	Sheath Rot	Lamdacyclothrin 5 % - 250 ml/Acre
5	mid-tillering stage	Stem Rot	mancozeb or carbendazim @ 1.5–2.5g/litre
6	Observed 1-3 weeks after transplanting	Bacterial Leaf Blight	copper oxychloride 500 g + streptomycin 7.5 g in 500 litre/ha or Bectra - 20 gm
7	Seedling and adult stage	Blast	Tebuconazole - 200 ml /Acre
8	Appears in nursery & may also appear after 10–15 days of transplanting	Khaira	zinc sulphate (5 kg) and lime (2.5 kg) in 500 litres of waters after 10 days of sowing
9	15 - 25 Days after transplanting	Stem Borer, Leaf Folder	Cartap hydrochloride 4% Gr 7.5 to 10 Kg Per Acre

Note

- 1 This year no major occurrence of infestation happened in basmati growing areas
- 2 Current rainfall actually brings some chances of BPH but farmers applied Buprofezin for crop protection
- 3 This past two-three days rainfall was actually beneficial for the crop as it was anticipated by farmers at this basmati grain filling stage
- 4 No damage seen due to these shows as it was without any heavy winds

Our field team is on ground, monitoring the crop progress & its development. We will keep you posted on all the events which might impact the overall crop throughput



Different kinds of infestation on Basmati crop and pesticides used.

District wise Basmati details

Haryana

District-wise acreage (000ha.) under Basmati rice in Haryana during Kharif 2017

District	Pusa Basmati 1121	Pusa 1509	CSR-30	PB -1	PB 1401	Sharbati
Ambala	6.2	0.1	8.8	0.2		0.1
Bhiwani	18.7	0.0		0.0		0.3
Faridabad + Palwal	22.1	0.2		3.2		0.3
Fatehabad	2.0	0.0		0.2		0.3
Gurgaon	23.3	1.5	1.0	12.0	7.0	0.1
Hisar	36.0	0.5	1.0	0.8		0.3
Jajjhar	37.3	1.1	0.3	0.0		0.3
Jind	55.3	2.2	5.7	7.4		0.3
Kaithal	34.3	3.4	23.2	0.1		0.3
Karnal	36.5	9.9	28.3	0.2		0.1
Kurukshetra	9.9	3.0	13.8	2.3		0.3
Mewat	6.6	0.0		0.0		0.3
MahendraGarh		0.0		0.0		0.3
Panchkula		0.0		0.0		0.3
Panipat	51.5	2.5	7.5	2.0		0.3
Rewari	1.1	0.0		0.0		0.3
Rohtak	30.7	0.1	0.1	0.0		1.1
Sirsa	10.1	3.4	0.3	6.1	37.1	0.5
Sonepat	61.0	1.4	2.8	0.0		0.3
Yamunanagar	0.7	0.7	0.4	6.9		0.3
TOTAL HARYANA	443.5	29.9	93.1	41.5	44.1	6.0





% change in acreage (000ha.) of Basmati & Non-Basmati varieties of rice in 2017 over 2016 in Haryana

S.no	Variety	Acreage 2016	Acreage 2017	% Change
1	Basmati			
	Pusa Basmati-1121	504.88	443.5	-12.2%
	Pusa Basmati-1	44.3	41.5	-6%
	Pusa Basmati-1401	46.42	44.099	-5.0%
	Pusa Basmati-1509	26.18	29.8	15.0%
	CSR-30	97.95	93.05	-5.0%
2	Non-Basmati Long Grain			
	Sharbati	5.75	6.0301	4.9%

Punjab

District-wise acreage(000ha.) Under Basmati rice in Punjab during Kharif 2017

District	Pusa Basmati 1121	Pusa 1509	Bas-386	PB -1
Amritsar	72.6	30.9	0.4	0.0
Barnala	1.8	0.0		0.5
Bhatinda	9.6	0.0		0.0
Faridkot	20.5	0.0		0.0
Fatehgarh Sahib	7.6	0.0		1.9
Fazilka	66.8	0.0		0.0
Ferozepur	48.3	0.0		0.0
Gurdaspur	41.9	0.1		0.0
Pathankot	2.7	0.0		0.0
Hoshiarpur	6.6	0.0		0.0
Jalandhar	9.7	0.8		0.0
Kapurthala	7.7	0.0		0.0
Ludhiana	17.4	2.1		3.2
Mansa	0.9	0.0		0.0
Moga	17.9	0.0		0.1
Mohali	3.9	0.0		0.0
Muktsar	42.4	0.0		8.3
Nawanshahr	4.7	0.2		0.0
Patiala	16.1	1.1		2.6
Rupnagar	2.8	0.0		0.0
Sangrur	25.6	0.0		6.4
Tarantaran	72.2	3.4		0.0
Total	499.5	38.7	0.4	23.0





% change in acreage (000ha.) of Basmati & Non-Basmati varieties of rice in 2017 over 2016 in Punjab

S.no	Variety	Acreage 2016	Acreage 2017	% Change
1	Basmati			
	Pusa Basmati-1121	555.78	499.5148	-10.1%
	Pusa Basmati-1	24.28	23.03	-5.1%
	Pusa Basmati-1509	35.2	38.67	9.9%
	Bas-386	0.37	0.35	-5.0%
2	Non-Basmati Long Grain			
	Sharbati	5.75	5.89	2.6%

Uttar Pradesh

District-wise acreage (000ha.) under Basmati rice in U.P during Kharif 2017

District	Type-3 & Others	Pusa Basmati-1121	Pusa Basmati-1509	Pusa Basmati-1 & 6	Sharbati	Sugandha
Agra		0.3	0.5	0.1		2.2
Aligarh		16.9	4.3	4.8	2.5	9.1
Auraiya	0.7	1.0	0.2	0.0	1.8	0.2
Baghpat	0.0	1.9	0.5	1.2	0.2	0.9
Bareilly	0.7	1.2	0.7	0.5	46.4	0.5
Bijnore	0.0	1.5	2.3	3.1	18.1	1.3
Budaun	9.4	1.9	2.1	0.7	20.8	2.0
Bulandshahr	0.0	19.1	4.5	5.8	4.5	14.8
Etah + Kasganj	0.0	4.9	3.1	0.5	0.9	7.4
Farukhabad	0.0	1.7	0.9	0.1	0.1	2.4
Firozabad	0.0	2.3	1.3	0.2	0.1	5.3
Etawah	0.0	6.2	2.6	0.2	0.1	4.6
Gautam Buddha Nagar	0.0	17.7	0.8	1.8	1.4	0.9
Ghaziabad + Hapur	0.0	5.4	2.9	1.4	3.1	5.0
Hathras	0.0	3.9	2.4	0.8	0.7	5.9
Mathura	0.0	22.8	3.4	1.0	0.3	3.4
Mainpuri	0.0	15.5	2.5	0.2	0.2	6.0
Meerut	0.0	2.2	2.5	2.3	0.6	3.2
Moradabad	0.0	0.9	2.2	0.3	9.3	2.4
J. P. Nagar	0.0	1.2	2.0	1.0	7.2	2.8
Kannauj	0.0	0.6	1.4	0.2	0.1	1.4
Muzaffarnagar + Shamli	0.1	4.3	2.5	3.9	1.3	2.0
Pilibhit	0.0	0.8	3.4	0.2	5.4	0.4
Rampur	0.0	0.7	1.2	0.1	24.0	0.2
Saharanpur	0.2	6.9	3.3	11.9	7.5	2.9
Shahjehanpur	1.7	1.5	0.8	0.3	8.7	0.4
Sambhal	0.0	1.4	1.7	0.4	8.5	4.4
Total	12.8	144.9	56.0	42.8	173.6	91.7



% change in acreage (000ha.) of Basmati & Non-Basmati varieties of rice in 2017 over 2016 in U.P

S.no	Variety	Acreage 2016	Acreage 2017	% Change
1	Basmati			
	Pusa Basmati-1121	156.26	144.9083	-7.3%
	Pusa Basmati-1 & 6	43.29	42.8375	-1.0%
	Pusa Basmati-1509	53.65	55.9503	4.3%
	Type 3 & Others	12.97	12.8394	-1.0%
2	Non-Basmati Long Grain			
	Sharbati	163.92	173.5609	5.6%
	Sugandha	90.86	91.71955	0.9%

Uttarakhand

District-wise acreage (000ha.) under Basmati rice in U.K during Kharif 2017

District	Type-3 & Others	Pusa Basmati-1121	Pusa Basmati-1509	Pusa Basmati-1	Sharbati	Sugandha
Dehradun	2.5	0.3	0.2		2.475	0.06
Haridwar	2.4	1.4	0.5	2.156	3.590	0.26
Nainital	0.9	0.3	0.3		1.414	
U S Nagar	0.8	1.5	1.5	0.1176	7.487	0.17
Total	6.4	3.5	2.5	2.2736	14.965	0.49



% change in acreage (000ha.) of Basmati & Non-Basmati varieties of rice in 2017 over 2016 in U.K

S.no	Variety	Acreage 2016	Acreage 2017	% Change
1	Basmati			
	Pusa Basmati-1121	4.2	3.538	-15.8%
	Pusa Basmati-1	2.32	2.2736	-2.0%
	Pusa Basmati-1509	2.5	2.5325	1.3%
	Type 3 & Others	6.6	6.444	-2.4%
	Non-Basmati Long Grain			
2	Sharbati	14.57	14.965	2.7%
	Sugandha	0.49	0.4932	0.7%

Jammu & Kashmir

District-wise acreage (000ha.) under Basmati rice in J.K during Kharif 2017

District	Pusa Basmati- 1121	Pusa Basmati 1509	Basmati 370/ Ranbir	Sharbati
Jammu	1.4	0.0	47.2	9.1
Kathua	6.3	0.2	3.8	0.7
Samba	0.6	0.1	2.1	0.3
Total	8.2	0.3	53.1	10.1

% change in acreage (000ha.) of Basmati & Non-Basmati varieties of rice in 2017 over 2016 in J.K

S.no	Variety	Acreage 2016	Acreage 2017	% Change
1	Basmati			
	Pusa Basmati-1121	8.4	8.212	-2.2%
	Pusa Basmati 1509	0.25	0.255	2.0%
	Basmati 370/ Ranbir	53.6	53.064	-1.0%
2	Non-Basmati Long Grain			
	Sharbati	9.95	10.149	2.0%



Himachal Pradesh

District-wise acreage (000ha.) under Basmati rice in H.P during Kharif 2017

District	Pusa Basmati 1121	Pusa Basmati 1509
Kangra*	1.9	1.0
Mandi*		4.1
Total	1.9	5.1

% change in acreage (000ha.) of Basmati & Non-Basmati varieties of rice in 2017 over 2016 in H.P

S.no	Variety	Acreage 2016	Acreage 2017	% Change
1	Basmati			
	Pusa Basmati 1121	2	1.92	-4.0%
	Pusa Basmati 1509	5	5.1	2.0%

Chapter-5

District wise Production Details of Basmati & Long Grain Non-Notified Non-Basmati (Production in 000 tons)

All the below stated figures are based on the initial feedback received from farmers and crop health conditions. All the below figures are derived on the statistical model using sampling techniques. Such figures will quickly give an idea on the overall district level and block-level detailing on acreage & tentative production, which might differ from actual figures. As and when we progress in the season, we will do corrections if we observe something different from our currently reported figures.

Haryana (Production 000 tons)

District	Total Basmati	Pusa Basmati 1121	Pusa 1509	CSR-30	PB -1	PB 1401	Sharbati
Ambala	38.9	17.3	0.6	19.9	1.1		0.4
Bhiwani	59.7	59.7					0.9
Faridabad + Palwal	79.5	64.6	0.9		14.0		1.1
Fatehabad	6.7	6.0			0.7		0.9
Gurgaon	232.2	94.2	7.8	2.9	79.7	47.6	0.3
Hisar	151.1	141.3	2.9	2.8	4.1		0.9
Jajjhar	126.6	121.6	4.4	0.6			0.9
Jind	319.6	257.3	9.4	16.9	36.0		0.9
Kaithal	213.7	127.8	17.3	68.1	0.5		0.9
Karnal	285.1	150.4	48.8	84.9	1.1		0.4
Kurukshetra	108.6	39.0	14.8	42.8	12.1		1.0
Mewat	22.6	22.6					0.9
MahendraGarh	0.0						0.9
Panchkula	0.0						0.9
Panipat	206.4	157.8	12.0	28.9	7.7		1.3
Rewari	3.9	3.9					0.9
Rohtak	105.6	105.4		0.1			3.4
Sirsa	325.6	49.4	19.8	0.8	30.6	224.9	2.0
Sonepat	209.2	194.3	5.7	9.1			0.9
Yamunanagar	43.0	2.9	3.5	1.2	35.3		0.9
TOTAL HARYANA	2537.9	1615.5	147.9	279.0	223.0	272.5	21.2

Punjab (Production 000 tons)

District	Total Basmati	Pusa Basmati 1121	Pusa 1509	Bas-386	PB -1
Amritsar	420.1	266.8	152.5	0.9	0.0
Barnala	9.5	7.1	0.0		2.4
Bhatinda	32.2	32.2	0.0		0.0
Faridkot	83.6	83.6	0.0		0.0
Fatehgarh Sahib	39.3	30.1	0.0		9.2
Fazilka	273.2	273.2	0.0		0.0
Firozpur	173.6	173.6	0.0		0.0
Gurdaspur	152.5	152.1	0.4		0.0
Pathankot	7.6	7.6	0.0		0.0
Hoshiarpur	24.8	24.8	0.0		0.0
Jalandhar	36.7	36.3	0.4		0.0
Kapurthala	27.2	27.2	0.0		0.0
Ludhiana	89.8	64.4	11.1		14.3
Mansa	3.2	3.2	0.0		0.0

District	Total Basmati	Pusa Basmati 1121	Pusa 1509	Bas-386	PB -1
Moga	45.4	44.8	0.0		0.6
Mohali	11.9	11.9	0.0		0.0
Muktsar	190.2	150.4	0.0		39.9
Nawanshahar	17.5	16.5	1.1		0.0
Patiala	81.5	63.4	5.5		12.6
Rupnagar	9.6	9.6	0.0		0.0
Sangrur	127.9	96.8	0.0		31.1
Tarantaran	284.3	266.2	18.0		0.0
Total	2141.8	1840.3	188.9	0.9	110.1

Uttar Pradesh (Production 000 tons)

District	Total Basmati	Pusa Basmati-1121	Pusa Basmati-1509	Pusa Basmati-1 & 6	Type-3 & Others	Sharbati	Sugandha
Agra	2.9	0.8	1.8	0.2			6.4
Aligarh	78.0	46.3	18.3	13.4		8.5	28.0
Auraiya	4.4	2.6	0.5	0.2	1.2	5.0	0.6
Baghpat	11.1	5.5	2.1	3.5	0.0	0.8	2.3
Bareilly	8.2	3.2	2.3	1.3	1.4	134.5	1.6
Bijnore	20.5	3.5	7.9	9.1		56.3	4.8
Budaun	27.9	4.9	6.1	2.2	14.8	63.0	6.8
Bulandshahr	92.7	54.6	18.7	19.5		15.5	52.3
Etah+Kasganj	23.6	11.9	10.1	1.5		2.5	23.5
Farukhabad	7.3	4.6	2.5	0.2		0.4	6.9
Firozabad	11.6	6.0	4.9	0.7		0.3	17.2
Etawah	27.1	17.8	8.8	0.5		0.2	13.5
Gautam Buddha Nagar	62.2	52.9	3.3	6.0	0.0	4.8	2.9
Ghaziabad+Hapur	35.4	17.9	12.8	4.7		9.0	18.5
Hathras	21.9	11.3	8.1	2.6		2.1	19.3
Mathura	85.8	69.5	12.9	3.4		1.0	13.6
Mainpuri	50.2	41.7	7.8	0.7		0.5	19.8
Meerut	23.7	5.9	10.2	7.5	0.1	2.0	12.1
Moradabad	11.8	2.8	8.0	1.0		31.0	7.9
J. P. Nagar	13.0	3.0	7.1	2.9		23.4	8.9
Kannauj	6.3	1.6	4.3	0.4		0.4	4.3
Muzaffarnagar+Shamli	35.0	11.5	10.5	12.8	0.2	3.6	8.0
Pilibhit	16.2	2.5	13.2	0.5		16.6	1.4
Rampur	6.9	1.9	4.5	0.5		71.3	0.8
Saharanpur	69.7	19.5	12.6	37.1	0.5	22.2	10.5
Shahjehanpur	11.4	4.4	3.2	0.8	2.9	29.1	1.4
Sambhal	11.6	3.7	6.6	1.3	0.0	25.2	15.4
Total	776.5	411.9	209.1	134.4	21.1	529.1	308.8

Uttarakhand (Production 000 tons)

District	Total Basmati	Pusa Basmati-1121	Pusa Basmati-1509	Pusa Basmati-1	Type-3 & Others	Sharbati	Sugandha
Dehradun	6.2	0.8	0.7			4.7	0.24
Haridwar	18.1	4.0	2.3	7.33628		4.5	1.06
Nainital	3.4	0.7	0.9			1.7	4.676
U S Nagar	11.8	3.8	6.3	0.364952		1.4	0.63
Total	39.5	9.3	10.2	7.701232		12.3	1.93

Jammu & Kashmir (Production 000 tons)

District	Pusa Basmati- 1121	Pusa Basmati 1509	Basmati 370/ Ranbir	Sharbati
Jammu	4.4	0.0	94.5	32.3
Kathua	20.6	0.8	7.6	2.6
Samba	0.2	0.3	3.8	1.0
Total	25.1	1.1	105.9	35.9

Himachal Pradesh (Production 000 tons)

District	Pusa Basmati 1121	Pusa Basmati 1509
Kangra*	7.2	4.5
Mandi*		17.8
Total	7.2	22.3

Chapter- 6

Annexure (Area in ha.)

The blow figures are subject to change as we get more clarity from the field inputs moving forward.

Block wise and Variety wise acreage under total rice and Basmati + Scented varieties in Haryana (2017)

Sl. No.	District	Block	Total Paddy	Pusa Basmati-1121	CSR30	Pusa Basmati-1509	Pusa Basmati - 1	Punjab Basmati-3	Taraori (HBC-19)	Pusa 1401	Sharbat i
1	Kaithal		157708	34316	23161	3360	92				276
		Pundri	35353	3637	14291	792.6	21.7				0
		Seevan	10606	757	314	511.2	14.0				0
		Gulha	40950	5271	667	465.2	12.7				0
		Rajond	13454	5547	1019	781.1	21.4				0
		Kaithal	34076	8188	4764	396.3	10.9				0
		Kalayath	23269	10917	2106	413.5	11.3				0
2	Karnal		159698	36533	28282	9912	239				138
		Nissang	27374	7124	6586	1331.5	32.1				0
		Assandh	29230	10902	2301	813.7	19.6				0
		Nilokheri	26446	2200	12162	1745.7	42.1				0
		Gharunda	25611	4955	1160	3195.5	77.1				138
		Indri	23198	5223	3672	0.0	0.0				0
		Karnal	27838	6130	2400	2825.7	68.2				0
3	Kurukshetra		118200	9936	13756	3024	2346				302
		KRK	35322	5134	2777	1238	60				0
		Babain	8090	132	114	329	295				16
		Ladwa	10557	604	0	780	1816				0
		Pehowa	38084	2825	8516	677	0				286
		Sahabad	26146	1240	2348	0	175				0
4	Rohtak		42020	30736	57	55	0				1050
		Rohtak	14325	10199	0	0					0
		Lakhanmajra	4298	3285	24	55					0
		Sampla	4107	3654	0	0					0
		Meham	13561	9349	7	0					1050
		Kalanaur	5730	4249	27	0					0
5	Faridabad		9068	7128			276				276
		Faridabad	2242.5	1584							
		Ballabhgarh	6825	5544							
6	Palwal		23400	14951		224	2935				265
		Palwal	13162.5	8360		224	1288				0
		Hodal	2632.5	1584			165.6				0
		Hathin	3120	2252.8			377.2				159
		Hassanpur	4485	2754.4			1104				106
7	Fatehabad	Hassanpur	107915	23298.5	997.5	1495	11951			7001.5	72.1
		Tohana	22140	3953	43	606	874	0	0	195	72
		Fatehabad	27675	9352	147	23	4608	0	0	703	0
		Bhuna	8016	2419	162	231	694	0	0	504	0
		Ratia	36627	5390	613	104	5491	0	0	3862	0
		Jakhal	11738	1139	33	519	233	0	0	1259	0
		Bhattukalan	1718	1046	0	12	52	0	0	480	0
8	Sirsa		71052	10090	285	3415.5	6089.5			37097.5	504.7
		Ellanbad	14210	1921	0	1106	1312				9671
		Sirsa	23684	7293	0	1192	2591			10136.5	505
		Rania	17052	395	285	1071	1702			13775	0
		Baragua	4737	0	0	0	0			0	0
		Dabwali	3789	0	0	0	0			0	0
		Odhan	1895	0	0	0	0			0	0
		Natusari	5684	480	0	46	485			3515	0
9	Jhajjar		42510	37320.8	256.5	1058	0				275.625
		Jajhhar	10725	9090	145	598	0				0
		Beri	17550	15840	0	0	0				0
		Sahlwas	585	528	0	0	0				0
		Matnhill	5363	4840	0	0	0				0
		B/Garh	8288	7022	111	460	0				0
10	Bhiwani		20940.5	18742.5							275.62
		Bhiwani	5235.125	4685.625							
		Bhiwani Khera	5235.125	4685.625							
		Dadri	5235.125	4685.625							
		Dadri II	5235.125	4685.625							

Sl. No.	District	Block	Total Paddy	Pusa Basmati-1121	CSR30	Pusa Basmati-1509	Pusa Basmati - 1	Punjab Basmati-3	Taraori (HBC-19)	Pusa 1401	Sharbati
11	Yamunanagar		69855.5	708.4	389.5	678.5	6878				275.625
		Radore	12631	255	238	391	4791				0
		Mustfabad	13014	0	95	0	152				0
		Jagadhari	14545	0	57	0	1911				0
		Bilaspur	10718	56	0	0	0				0
		Chachhroli	10813	398	0	288	24				0
		Sadhora	8134	0	0	0	0				0
12	Panipat		70920	51529.2	7457.5	2472.5	1995				307.4
		Panipat	11820	7529	1597	622	0				0
		Israna	14775	11198	2069	296	0				193
		Matloda	18715	12177	2014	772	1995				115
		Samalkha	12805	9557	1296	782	0				0
		Bapoli	12805	11069	481	0	0				0
13	Jind		126750	55275.5	5738	2150.5	7434				275.625
		Narwana	34141	5950	856	334	3773				0
		Jind	19205	8500	803	317	378				0
		Julana	10136	7591	542	0	0				0
		safidon	22725	12750	0	461	788				0
		Pilukhera	16004	8500	1768	0	369				0
		Alewa	13870	7310	818	1038	2125				0
		Uchana	10669	4675	951	0	0				0
14	Ambala		79950	6192	8835	132	247				84
		Naraingarh	13803	0	0	0	143				53
		Ambala-I	29729	4730	8550	88	0				0
		Ambala-II	6583	602	95	0	0				0
		Baraar	20173	559	190	0	95				32
		Saha	8919	301	0	44	0				0
		Sahzadpur	743	0	0	0	10				0
15	Sonepat		88650	61010	2793	1391.5	0				275.625
		Gohana	13251	8077	443	125	0				0
		Mundana	14186	11083	87	0	0				0
		Kharkhoda	7067	4866	171	287	0				0
		Sonipat	21513	13852	1228	131	0				0
		Kathura	6028	4481	0	162	0				0
		GANOUR	19019	12918	864	686	0				0
		Rai	7587	5734	0	0	0				0
16	Hisar	Rai	61502	36040	1045	517.5	833				275.62
		Hisar 1	8786	1829	0	0	0				0
		Bas	8786	10519	950	345	196				0
		Hansi	8786	11891	0	0	0				0
		Narnaud	8786	9147	0	58	49				0
		Agroha	8786	91	0	0	0				0
		Uklana	8786	1646	95	115	392				0
		Barwala	8786	915	0	0	196				0
17	Mewat		7880	6600							276
		Nuh	2627	2200							
		Punana	2627	2200							
		Nagina	2627	2200							
18	Rewari		1737	1056	0	0	0				276
19	Gurgaon		4728.5	2040	0	0	190				276
20	Panchkula		9262.5	0	0	0	0				276
	Total		1273746	443503	93053	29886	41506	0	0	44099	6030

Block wise and Variety wise acreage under total rice and Basmati + Scented varieties in Punjab (2017)

Sl. No.	District	Block	Total Basmati	Pusa-1121	Pusa-1509	Basmati-386/ CSR 30	PB-1	Sharbati
1	AMRITSAR		103913.5	72641	30921	351.5		367.2
		Ajnala	24841	10595	1771			
		Chogawan	20695	8102	1716			
		Harsha Chhina	15564	14334	2970			
		Jandiala Guru	2383	3739	6754			
		Majitha	8426	14461	8657			
		Rayya	2870	3125	1804			
		Tarsikka	4839	994	1122			
		Verka	11953	11185	2992			
		Attari	12342	6106	3135			
2	BARNALA		2349	1809	0		540	
		Barnala	1051.79	439				
		Sehna	759.62	685				
		Mehal Kalan	537.58	685			540	
3	BATHINDA		9596.5	9596.5	0			
		Rampura Phul	2108	1611	0			
		Nathana	2448	3059	0			

Sl. No.	District	Block	Total Basmati	Pusa-1121	Pusa-1509	Basmati-386/ CSR 30	PB-1	Sharbati
		Bathinda	1632	1734	0			
		Maur	1131	1387	0			
		Sangat	893	581	0			
		Talwandi	510	459	0			
		Sabo	493	255	0			
		Bhagta Bhai Ka	383	510	0			
4	FARIDKOT		20520	20520				
		Faridkot	9540	9562				
		Kotkapura	10980	10958				
5	FATEHGARH SAHIB		9498	7560	0		1938	
		Khera	1809	1361				
		Bassi pathana	1052	1512				
		Khamano	1628	454				
		Sirhind	2329	2117			1938	
		Amlah / Gobindgarh	2680	2117				
6	FAZILKA		66813.5	66813.5	0			
		Fazilka	34647	28999				
		Abohar	5434	1392				
		Jalalabad	24092	35727				
		Khuyian Sarvar	2641	696				
7	FEROZEPUR		48326.5	48326.5	0			
		Ferozepur	6508	5948				
		Ghall Khurd	3705	7187				
		Guru Har Sahai	25441	19826				
		Makhu	3154	3717				
		Mamdot	6270	7931				
		Zira	3249	3717				
8	GURDASPUR		41955.1	41857	98.1			3594.7
		Gurdaspur	3476	5407	0			
		Dhariwal	4028	4360	0			
		Khanuwan	2809	4098	98			
		Kalanaur	4371	4186	0			
		Dinanagar	3657	3139	0			
		Batala	3314	3052	0			
		Sh Hargobindpur	3752	2965	0			
		Fatehgarh Churian	3276	3750	0			
		Quadian	4104	3052	0			
		Dera Baba Nanak	4885	3837	0			
		Dorangla	4285	4011	0			
9	HOSHIARPUR		6579	6579	0			
		Hoshiarpur-I	423	0	0			
		Hoshiarpur-II	297	0	0			
		Bhunga	414	0	0			
		Tanda	1548	1910	0			
		Dasuya	198	1698	0			
		Mukerian	1827	1910	0			
		Hajipur	180	849	0			
		Talwara	270	0	0			
		Mahilpur	531	0	0			
		Garhshankar	891	212	0			
10	JALANDHAR		10413	9657	756			
		Jalandhar East	854	1518	0			
		Jalandhar West	650	1242	0			
		Adampur	1271	828	0			
		Bhogpur	1252	966	216			
		Philour	1980	828	0			
		Rurka Kalan	505	759	0			
		Noor Mahal	747	1173	0			
		Nakodar	1126	1242	0			
		Shahkot	844	552	0			
		Lohian	1184	552	540			
11	KAPURTHALA		7686	7686	0			
		Kapurthala	981	1441	0			
		Sultanpur Lodhi	441	1633	0			
		Phagwara	1494	2114	0			
		Dhilwan	2250	1633	0			
		Nadala	2520	865	0			
12	LUDHIANA		22678.3	17370	2136.4		3171.9	
		Ludhiana-I	1586	1069	0			
		Ludhiana-II	1763	1069	0			
		Machiwara	1821	1069	578		164.9	
		Samrala	1669	534	1504		135.8	
		Khanna	1528	2672	0			
		Doraha	2174	802	0			
		Dehlon	3173	802	0			
		Pakhowal	1927	1336	0		1134.9	

Sl. No.	District	Block	Total Basmati	Pusa-1121	Pusa-1509	Basmati-386/ CSR 30	PB-1	Sharbati
		Sudhar	1610	1336	55		1134.9	
		Jagraon	2244	1336	0			
		Sidhwan Bet	1810	4008	0		601.4	
		Rai Kot	1375	1336	0			
13	MANSA		850	850	0			
		Mansa	179	163	0			
		Bhikhi	179	327	0			
		Bhudhalada	281	294	0			
		Jhunir	196	33	0			
		sardulgarh	17	33	0			
14	MOGA		18056.6	17937	0		119.6	
		Moga-I	2482	4729	0			
		Moga-II	988	1631	0			
		Bagha Purana	2283	6523	0			
		Nihal Singh wala	7792	2609	0			
		Kot Ise khan	4512	2446	0			
15	MOHALI		3870	3870	0			
		Kharar	1620	1097	0			
		Majri	1800	1290	0			
		Derabassi	450	1484	0			
16	MUKATSAR		50723.3	42406.5	0		8316.8	
		Muktsar	10289	13304	0			
		Malout	14315	10394	0			
		Giddarbaha	10604	10394	0		2336.8	
		Lambi	15515	8315	0		5980	
17	NAWANSHAHR		4909	4689	220			
		Nawanshahr	641	1172	110			
		Banga	1460	1172	110			
		Aur	2035	586	0			
		Balachaur	546	1172	0			
		Saroya	226	586	0			
18	PATHANKOT		2807.1	2709	98.1			1938
		Pathankot	961	713	0			
		N.J. Singh	839	1283	0			
		Bamial	373	356	0			
		Dhar	0	0	0			
		Kalan						
		Sujanpur	308	356	0			
19	PATIALA		19756.5	16092	1090		2574.5	
		Patiala	2199	2058	0			
		Nabha	3834	2620	0			
		Saman	1392	1310	0		1320.5	
		Patran	3028	1029	414		1254	
		Bhunerheri	122	3368	0			
		Sanour	3381	2620	240			
		Rajpura	3039	1310	436			
		Ghanour	2762	1778	0			
	RUPNAGAR		2835.8	2824.8	11			
		Rupnagar	468	1469	0			
		Chamkaur Sahib	1272	452	0			
		Nurpur Bedi	186	226	0			
		Morinda	751	565	11			
		Anandpur Sahib	159	113	0			
21	SANGRUR		31987	25568	0		6419	
		Sangrur	2382	3133	0			
		Bhawaniagarh	2339	2729	0			
		Ahmedgarh	1031	2729	0			
		Malerkotla	861	2526	0			
		Dhuri	1808	2021	0			
		Sherpur	1999	2729	0		411.6	
		Sunam	1850	3436	0			
		Lehragaga	9890	3032	0		4821.6	
		Andana	9826	3234	0		1185.8	
22	TARN TARAN		75596	72153	3443			
		TarnTaran	9731	9463	154			
		Chohla Sahib	3781	11828	0			
		Naushera Pannuan	13503	10882	1056			
		Gandiwind	8119	7688	1111			
		Khadaur Sahib	4479	5323	1122			
		Patti	12023	8871	0			
		Valtoha	11966	8871	0			
		Bhikhiwind	11994	9226	0			
	Total		561720	499515	38774	352	23080	5900

Block wise and Variety wise acreage under total rice and Basmati + Scented varieties in U.P (2017)

S. No.	District	Block	Total Rice	Pusa-1121	Pusa Basmati-1	Type-3	HB C-19	Basmati - 370	Pusa-1509	CSR-30	Sugandha 2,3&5	Sharbati	Sugandha
1	Aligarh		58300.0	16907.8	4806.8				4336.8			2475.2	9059.7
		Dhanipur	6200.4	3017.5	339.8				265.5			224.1	197.1
		Lodha	3744.8	1105.9	226.6				223.9			203.2	358.7
		Jawan	7551.0	2516.8	418.6				369.6			317.9	864.0
		Akrabad	6227.7	2617.0	305.4				338.4			218.9	217.3
		Atroli	4815.7	923.9	201.9				359.2			218.9	1389.5
		Bijoli	4208.6	896.6	128.1				468.6			119.9	1086.4
		Gangiri	4065.4	687.2	113.3				359.2			177.2	1056.0
		Khair	4836.2	1137.8	1516.9				218.7			135.5	318.3
		Chandous	3540.2	896.6	477.7				328.0			93.8	656.9
		Tappal	4577.0	1451.8	704.3				442.5			99.0	490.1
		Iglas	4283.7	723.6	93.6				536.2			411.7	1298.6
		Gonda	4249.5	933.0	280.7				426.9			255.3	1126.8
2	Hathras		13561.0	3873.2	792.0				2412.8			695.5	5898.4
		Hasain	3948.6	1054.7	237.6				562.8			204.9	1559.4
		Sikandraraoo	4505.0	1552.0	242.6				469.0			275.0	2004.9
		Sapau	2904.8	695.4	153.5				646.2			80.9	1265.8
		Mursan	548.7	198.0	59.4				151.1			43.1	146.8
		Hathras	648.5	152.0	44.6				198.0			21.6	420.2
		Sasani	663.9	170.4	39.6				182.4			32.3	389.9
		Sadabad	341.5	50.7	14.9				203.2			37.7	111.4
3	Etah +Kasganj		33150.0	4878.6	485.1				3135.1			882.0	7413.4
		Sheetalpur	3646.5	540.5	55.0				379.9			89.8	717.3
		Sakeet	6287.6	911.8	80.0				374.5			68.7	974.9
		Nindholikala	2554.2	427.7	35.0				155.2			42.3	207.1
		Marehara	1592.3	361.9	10.0				198.0			42.3	394.0
		Aliganj	554.3	65.8	20.0				128.4			21.1	106.1
		Jaithra	277.2	37.6	15.0				58.9			15.8	60.6
		Jalesar	2407.5	361.9	35.0				294.3			37.0	767.8
		Awagarh	2374.8	488.8	40.0				208.7			37.0	656.7
		Soron	1673.8	202.1	15.0				155.2			42.3	495.0
		Kasganj	1624.9	253.8	15.0				187.3			31.7	343.5
		Tilpura	2662.9	371.3	55.0				230.1			89.8	540.5
		Ganjdudwara	1831.4	103.4	20.0				208.7			68.7	500.1
		Patiyali	2548.7	427.7	60.0				224.7			163.7	666.8
		Amapur	1690.1	216.2	20.0				208.7			100.3	666.8
		Sawat	1423.8	108.1	10.0				123.1			31.7	316.2
4	G.B. Nagar		26829.0	17728.4	1762.2				782.8	8.8		1375.5	852.6
		Bisrakh	3550.6	2392.9	341.7				56.7			152.3	24.6
		Dadri	6330.2	3422.5	251.6				437.8	8.8		719.3	537.2
		Dankour	7298.1	5035.0	549.8				97.9			246.8	197.1
		Jebar	9650.1	6877.9	619.1				190.6			257.3	93.6
5	Baghpat		4921.5	1895.7	1178.1				535.5	21.9		235.4	850.0
		Chhaproli	702.4	263.2	134.2				68.3	21.9		23.3	155.0
		Barot	682.7	281.0	124.3				89.3			47.7	110.0
		Bagpat	859.5	352.4	183.9				84.0			37.1	165.0
		Kirana	967.6	307.8	298.3				110.3			42.4	185.0
		Khekhda	972.5	419.3	253.5				99.8			47.7	110.0
		Binoli	736.8	272.1	183.9				84.0			37.1	125.0
6	Bulandshahr		51975.0	19080.8	5760.0				4473.2	17.5		4483.8	14776.3
		Sikandrabad	5711.8	2976.2	867.8				291.8			249.4	793.1
		Gulavati	3191.4	1090.2	786.9				228.2			408.6	419.3
		Lakhawati	4564.3	2074.6	984.7				281.2	13.1		228.2	570.8
		Bulandshahar	3539.8	1817.0	283.3				222.9	4.4		260.0	671.9
		Shikarpur	3611.5	1320.2	188.9				217.6			222.9	1470.1
		B.B. Nagar	1388.3	220.8	76.4				206.9			37.1	793.1
		Sayana	1485.6	262.2	89.9				222.9			164.5	702.2
		Jahangirabad	2607.5	501.4	287.8				307.8			100.8	1298.3
		Khurja	4108.4	1812.4	548.6				313.1			334.3	823.4
		Arnia	3196.6	1205.2	238.3				286.5			652.7	646.6
		Pahasu	5245.7	1968.8	472.1				482.9			541.2	1470.1
		Unchagaon	1342.1	340.4	76.4				148.6			100.8	621.4
		Danpur	3596.1	1246.6	211.3				435.1			408.6	1050.8
		Dibai	3048.0	906.2	143.9				254.7			334.3	1227.6
		Anoopshahar	4041.8	943.0	278.8				429.8			334.3	1874.2
		Agota	1296.0	395.6	224.8				143.3			106.1	343.5
7	Gaziabad + Hapur		26966.0	5431.2	1400.0				2860.0			3092.3	4999.5
		Rajapura	3324.4	1391.5	205.0				46.9			315.7	197.0
		Loni	1291.2	451.4	90.0				67.7			80.3	146.5
		Muradnagar	2396.8	888.9	145.0				114.6			165.9	217.2
		Bhojpur	2092.6	316.5	70.0				151.1			155.2	702.0
		Hapur	5253.7	926.1	95.0				1172.1			48.2	1267.6

S. No.	District	Block	Total Rice	Pusa-1121	Pusa Basmati-1	Type-3	HB C-19	Basmati - 370	Pusa-1509	CSR-30	Sugandha 2,3&5	Sharbati	Sugandha
		Dholana	4830.7	861.0	215.0				234.4			1524.8	449.5
		Garh	4979.1	367.7	535.0				432.4			700.9	1136.3
		Simbhawali	2797.5	228.0	45.0				640.8			101.7	883.8
8	Meerut		16280.0	2244.0	2332.4				2522.8	17.5		625.4	3192.6
		Hastinapur	1937.2	66.1	497.8				90.1	4.4		270.3	46.0
		Jani	1084.1	246.9	191.1				153.7	0.0		10.6	214.5
		Mavana	1776.8	330.6	164.6				291.5			68.9	454.6
		Paricshitgarh	2161.7	127.9	299.9				259.7	13.1		121.9	628.3
		Meerut	724.8	154.3	76.4				100.7			10.6	168.6
		Kharkhonda	1257.2	158.7	44.1				392.2			26.5	352.5
		Machhara	1404.8	136.7	83.3				376.3			26.5	475.1
		Rohta	1007.1	189.6	191.1				206.7			37.1	137.9
		Sardana	1276.5	123.4	272.4				116.6			15.9	76.6
		Rajpura	1122.5	171.9	63.7				227.9			10.6	393.3
		Dorala	1225.2	260.1	240.1				132.5			10.6	97.1
		Saroorpur	1302.1	277.7	207.8				174.9			15.9	148.1
9	Muzzfarnagar + Shamili		29785.0	4250.4	3900.4				2541.0	56.9		1263.6	1989.7
		M. Nagar	2169.6	197.8	201.2				299.9			21.6	191.9
		Bagra	1705.3	179.4	260.0				184.1			70.2	146.5
		Sardhawan	2401.7	299.0	460.2				226.2	8.8		75.6	60.6
		Purkaji	3598.1	427.8	513.2				131.5	48.2		437.4	75.8
		Jansath	1803.5	197.8	363.1				178.9			75.6	166.7
		Khatoli	2544.6	299.0	289.5				205.2			48.6	217.2
		Borda	1526.7	225.4	122.7				131.5			48.6	96.0
		Shahpur	2008.9	391.0	202.1				115.7			37.8	156.6
		Udana	1776.7	262.2	217.8				152.6			21.6	126.3
		Kandla	1758.9	197.8	230.6				210.4			59.4	186.9
		Shamli	1982.1	418.6	279.7				184.1			43.2	96.0
		Udon	2044.6	418.6	230.6				121.0			64.8	176.8
		Kerana	1830.3	170.2	309.1				205.2			167.4	146.5
		Thanabhawan	2633.9	565.8	220.8				194.7			91.8	146.5
10	Saharanpur		50504.0	6942.0	11889.9	1692.9			3254.2	21.9		7455.0	2878.5
		Baliakheri	5283.8	692.4	1569.8	148.3			254.8	8.8		824.3	156.6
		Punwarka	5932.1	638.8	1495.5	123.6			223.0	13.1		834.8	3528.5
		Nakur	6016.4	853.2	1857.0	123.6			329.1			750.8	6211.5
		Sarsawan	5278.0	889.0	2084.8	0.0			254.8			887.3	2176.4
		Gangoh	5751.0	750.5	1931.3	185.4			127.4			540.8	1021.4
		Rampur Maniharan	5549.1	701.3	1005.3	370.7			329.1			1060.5	6672.9
		Nanota	6172.1	670.1	906.2	370.7			615.8			687.8	3217.1
		Devband	2272.7	402.0	168.4	0.0			366.3			57.8	4191.5
		Nagal	3455.2	625.4	564.5	247.1			366.3			624.8	2358.3
		Sadholikalan	2324.6	348.4	133.7	0.0			196.4			645.8	1650.9
		Muzzafarabad	2468.8	370.8	173.3	123.6			191.1			540.8	2730.9
11	Moradabad		66504.0	931.2	297.0				2204.8			9298.8	2375.1
		Billari	3436.6	158.7	63.9				468.0			1313.0	573.5
		Moradabad	4760.8	187.6	39.3				400.4			1340.0	390.8
		Chhajlet	3042.6	149.1	39.3				369.2			189.1	289.3
		Mudapanday	7923.8	62.5	31.5				145.6			1350.8	197.9
		Kundarki	8159.1	187.6	44.3				265.2			1566.9	664.8
		Thakurdwar	15300.4	94.3	44.3				223.6			1096.8	147.2
		Bhagatpur Tandan	12017.0	52.9	19.7				156.0			1096.8	45.7
		Dillari	11863.8	38.5	14.8				176.8			1345.4	66.0
12	Bijnore		43714.5	1474.2	3118.5				2268.0			18072.3	1340.0
		Mohamadpur	3001.0	68.5	207.8				215.3			1193.8	120.0
		Devmal Haldore	3208.2	100.4	242.5				110.3			1514.9	110.0
		Nurpur	3508.3	105.0	272.2				120.8			1729.1	110.0
		Jalilpur	4308.6	59.3	282.1				204.8			1771.9	125.0
		Dhampur	2679.5	100.4	183.1				147.0			1204.5	105.0
		Chuhara	2922.4	77.6	196.0				120.8			1557.8	75.0
		Mehtore	2829.5	82.2	193.0				110.3			1482.8	105.0
		Afjalgarh	4265.7	141.5	351.3				535.5			1761.2	85.0
		Kotwali	6830.8	260.2	572.0				357.0			1697.0	205.0
		Najibabad	7223.8	314.9	579.0				225.8			2719.4	105.0
		Keeratpur	2936.7	164.3	39.6				120.8			1440.0	195.0
13	Rampur		112404.0	652.8	138.6				1203.6			23971.5	191.9
		Subar	20199.2	91.9	34.7				158.1			4332.2	40.4
		Vilaspur	20098.7	140.2	39.6				219.3			3313.5	30.3
		Shayatnagar	17765.1	53.2	9.9				198.9			2326.3	25.3
		Chabraoa	16034.2	82.2	14.9				219.3			3628.5	40.4
		Shahabad	17312.9	149.9	14.9				188.7			4468.7	40.4
		Milakh	20993.8	135.4	24.8				219.3			5902.3	15.2

S. No.	District	Block	Total Rice	Pusa-1121	Pusa Basmati-1	Type-3	HB C-19	Basmati - 370	Pusa-1509	CSR-30	Sugandha 2,3&5	Sharbati	Sugandha
14	J.P. Nagar		15974.0	1152.0	960.3				1998.2			7233.2	2757.3
		Amroha	2728.4	183.2	108.9				365.7			626.0	439.4
		Joya	2518.9	159.1	64.4				561.4			1086.1	570.7
		Dhanora	2869.6	245.8	311.9				360.5			1203.8	459.6
		Gajrola	2924.2	269.9	138.6				273.0			1342.9	580.8
		Hasanpur	2313.9	106.0	183.2				221.5			1278.7	444.4
		Gangeshwani	2619.1	188.0	153.5				216.3			1696.0	262.6
15	Pilibhit		152500.0	827.2	158.4				3429.9			5406.0	377.4
		Nurori	15849.4	115.1	13.2				237.3			578.8	43.5
		Lalorikhera	8834.4	107.9	33.0				204.9			782.3	21.8
		Amaria	22348.8	115.1	13.2				399.1			305.3	58.1
		Badkhera	12205.6	79.1	39.6				420.6			540.6	58.1
		Beejalpur	13633.3	57.5	33.0				399.1			833.2	79.8
		Bilsanda	18298.4	129.5	13.2				593.2			941.3	58.1
		Puranpur	61330.2	223.0	13.2				1175.7			1424.6	58.1
16	Agra		3956.5	319.2	72.0				483.0			0.0	2181.6
		Achhnera	2314.8	123.4	31.5				228.2			0.0	1331.2
		Atmadpur	311.9	46.8	18.0				47.8			0.0	156.9
		Fatehpur Sikri	1329.8	149.0	22.5				207.0			0.0	693.5
17	Bareilly		150084.0	1244.5	465.3				665.6	595.7		46375.0	494.9
		Khyora	5186.4	85.8	29.6				10.4	8.8		1669.5	45.5
		Bitlichainpur	11742.3	57.2	29.6				57.4	21.9		2082.9	40.4
		Bhojpur	9082.4	42.9	9.9				46.9	35.0		2920.3	35.4
		Fatehganj	5913.2	23.8	14.8				88.7	48.2		768.5	25.3
		Meerganj	6501.5	81.1	14.8				46.9	8.8		2098.8	25.3
		Fareedpur	11327.0	57.2	54.2				67.8	21.9		2268.4	35.4
		Bhutha	12315.8	76.3	44.4				57.4	48.2		2453.9	40.4
		Nababganj	13799.1	71.5	34.5				62.6	74.5		4372.5	25.3
		Bhairpura	9675.7	166.9	34.5				57.4	35.0		4086.3	25.3
		Bahedi	13957.3	66.8	39.4				26.1	35.0		4218.8	30.3
		Damekhoda	10634.8	90.6	41.4				36.5	65.7		3662.3	45.5
		SeeshGarh	9438.3	109.7	54.2				26.1	48.2		4086.3	40.4
		Alampur	12711.4	147.8	24.6				20.9	74.5		4467.9	10.1
		Jafrabad	9141.7	104.9	14.8				57.4	39.4		4192.3	35.4
		Majhagwa	8657.2	62.0	24.6				3.1	30.7		3026.3	35.4
18	Badaun		47800.0	1919.0	742.5				2069.6	8301.9		20753.7	1969.5
		Badaun	2077.0	61.9	39.6				36.1	48.2		935.7	65.7
		Asabpur	1868.2	185.7	9.9				56.8	83.2		1040.3	111.1
		Islamnagar Bisoli	2139.1	61.9	39.6				191.0	131.4		1301.7	75.8
		Bajirganj	1721.5	52.4	24.8				113.5	188.3		893.9	55.6
		Dangawan	1602.9	47.6	24.8				87.7	162.1		1029.8	75.8
		Sahswan	3335.7	61.9	24.8				160.0	275.9		1615.3	156.6
		Auiyapur	2771.3	42.9	24.8				113.5	188.3		1552.6	65.7
		Salarpur	3623.5	147.6	29.7				263.2	834.0		1301.7	247.5
		Jagat	3211.5	90.5	34.7				160.0	337.3		1610.1	156.6
		Ujhiani	2872.9	176.2	54.5				180.6	275.9		1343.5	146.5
		Kodarchock	3109.9	176.2	44.6				144.5	661.4		1301.7	141.4
		Samred	5655.4	323.8	108.9				113.5	1940.3		1730.3	217.2
		Dataganj	5367.6	147.6	89.1				263.2	1738.9		1678.1	272.7
		Mayaoo	5107.9	176.2	54.5				87.7	862.9		2075.4	85.9
		Usava	3335.7	166.7	138.6				98.1	573.8		1343.5	96.0
19	Kannauj		12322.0	630.5	158.4				1407.6			136.5	1424.1
		Chhibramau	1933.6	53.4	12.7				87.0			10.5	116.6
		Talgram	1532.1	87.3	12.7				153.6			31.5	248.3
		Sorikh	2143.1	38.8	57.0				220.1			15.8	446.0
		Haseran	2256.6	189.2	19.0				363.4			10.5	288.9
		Jalalabad	336.1	72.8	6.3				56.3			15.8	40.5
		Kakor	1728.5	63.1	25.3				179.1			31.5	187.5
		Umartha	2029.7	82.5	12.7				250.8			10.5	55.7
		Jugrajpur	362.3	43.7	12.7				97.3			10.5	40.5
20	Firozabad		12524.0	2260.1	237.6				1305.6			124.2	5322.7
		Tundla	219.6	43.7	10.1				87.0			10.4	70.7
		Narkhi	358.3	43.7	10.1				66.6			10.4	141.4
		Shikohobad	2045.6	345.1	15.2				189.4			20.7	1065.6
		Madanpur	2045.6	306.2	15.2				112.6			25.9	1136.3
		Araon	1348.3	179.8	50.6				291.8			15.5	661.6
		Jasrana	4719.1	1093.6	70.8				363.5			25.9	1429.2
		Hathbant	150.2	19.4	5.1				46.1			15.5	45.5
		Eka	1637.3	228.4	60.7				148.5			0.0	772.7
21	Mathura		35717.0	22831.9	1049.4				3433.5			275.6	3423.9

S. No.	District	Block	Total Rice	Pusa-1121	Pusa Basmati-1	Type-3	HB C-19	Basmati - 370	Pusa-1509	CSR-30	Sugandha 2,3&5	Sharbati	Sugandha
		Mathura	3988.4	3044.6	39.6				330.8			42.9	156.8
		Govardhan	4471.9	3172.0	212.9				225.8			12.2	187.1
		Nand Gaon	4979.5	3172.0	94.1				472.5			24.5	101.1
		Chhata	7870.5	4742.0	306.9				787.5			12.2	242.8
		Chomuha	3824.1	2716.9	123.8				456.8			6.1	202.3
		Farah	1469.7	468.7	24.8				299.3			49.0	576.6
		Baldev	981.4	350.4	34.7				141.8			49.0	343.9
		Raya	1049.1	277.6	39.6				204.8			18.4	531.0
		Manth	3007.0	1597.4	84.2				367.5			12.2	763.7
		Navjihil	4075.5	3290.3	89.1				147.0			49.0	318.6
22	Mainpuri		48042.0	15475.2	202.0				2464.8			156.0	5970.0
		Kurawali	2372.9	686.4	5.1				203.2			5.2	415.3
		Ghiroor	6899.2	1872.0	15.2				364.8			20.8	985.8
		Sultanganj	3344.5	1396.8	40.4				401.2			31.2	640.5
		Bebbar	3036.2	763.2	20.2				255.3			36.4	525.4
		Kishani	8179.1	1454.4	40.4				469.0			20.8	955.8
		Mainpuri	11168.5	3988.8	60.6				359.6			10.4	1256.1
		Jageer	11350.7	4656.0	10.1				255.3			20.8	765.6
		Karahal Barnahal	1690.9	657.6	10.1				156.3			10.4	425.4
23	Etawah		40602.0	6203.4	158.4				2565.4			62.1	4585.4
		Saifai	7537.5	877.1	13.8				247.9			11.3	545.4
		Jaswantnagar	5025.0	553.7	41.3				592.0			22.6	681.8
		Badpura	1036.7	289.1	34.4				141.7			5.6	136.4
		Basrehar	6712.3	994.7	27.5				349.1			0.0	489.9
		Bhartana	9034.4	935.9	13.8				354.2			0.0	772.7
		Takha	6950.4	1519.0	13.8				546.5			11.3	1252.4
		Maheva	4189.3	1019.2	6.9				318.8			5.6	691.9
		Chakarnagar	116.4	14.7	6.9				15.2			5.6	15.2
24	Farrukhabad		11322.0	1748.0	59.4				854.9			136.5	2385.3
		Badpura	1269.9	14.3	0.0				36.4			15.8	177.6
		Rajepur	1328.8	38.1	10.8				57.3			36.8	314.7
		Kamalganj	1805.7	33.3	5.4				130.2			42.0	421.2
		Mohamdabad	1591.4	28.6	21.6				223.9			5.3	603.9
		Nababganj	1875.4	23.8	16.2				203.1			31.5	360.3
		Shamshabad	1655.7	14.3	0.0				192.6			0.0	319.7
		Kayamganj	1795.0	1595.6	5.4				11.5			5.3	187.8
25	Auriya		44945.0	1030.4	49.5				164.8	586.9		1754.4	190.0
		Auriya	6004.7	138.0	0.0				15.9	4.4		168.8	35.0
		Ajital	6103.0	78.2	11.0				21.3	13.1		393.8	40.0
		Bhagwant nagar	7665.7	165.6	22.0				53.2	258.4		526.8	35.0
		Bidhuna	7884.2	193.2	0.0				26.6	249.7		301.8	25.0
		Achalda	4868.2	78.2	5.5				42.5	26.3		102.3	0.0
		Sahar	5698.7	289.8	0.0				5.3	21.9		92.1	15.0
		Aerwakra	6720.4	87.4	11.0				0.0	13.1		168.8	40.0
26	Shahjahanpur		197051.0	1532.2	267.3				840.0	1493.6		8688.4	426.3
		Banda	20387.9	94.3	24.8				58.1	65.7		766.5	0.0
		Khutar	10909.6	89.6	0.0				52.8	26.3		664.6	0.0
		Puvahya	17150.9	174.4	24.8				42.3	83.2		873.7	20.2
		Sindholi	18465.9	94.3	39.6				37.0	83.2		873.7	55.6
		Khudaganj	14824.3	75.4	9.9				58.1	118.3		670.0	20.2
		Jaitipur	10646.6	80.1	0.0				42.3	118.3		852.2	10.1
		Tilhar	9898.1	33.0	9.9				37.0	48.2		305.5	30.3
		Nigohi	11496.3	141.4	9.9				37.0	74.5		380.6	20.2
		Kanth	11243.4	51.9	5.0				42.3	74.5		32.2	35.4
		Dadrol	11142.3	61.3	19.8				58.1	52.6		519.9	32.3
		Bhaavalkheda	10459.5	61.3	14.9				89.8	109.5		487.8	40.4
		Clan	13307.0	231.0	19.8				110.9	249.7		734.3	40.4
		Mirjapur	9898.1	132.0	29.7				47.5	184.0		455.6	50.5
		Jalalabad	11688.5	108.4	29.7				100.4	61.3		766.5	30.3
		Madanpur	15532.4	103.7	29.7				26.4	144.5		305.5	40.4
27	Sambhal		28458.0	1444.4	396.0				1736.8	17.5		8533.0	4393.5
		Junamai	2184.0	170.2	34.7				88.4			832.1	419.6
		Gunnour	1959.7	115.0	19.8				88.4			784.4	389.3
		Rajpura	1788.1	151.8	29.7				98.8			726.1	268.0
		Baniakhera	5212.6	170.2	64.4				244.4			1605.9	399.4
		Bahjoi	3107.7	142.6	39.6				327.6			620.1	328.6
		Sambhal	5615.1	262.2	79.2				327.6			1653.6	1264.0
		Pawansa	2316.0	105.8	29.7				192.4			768.5	359.0
		Asmoli	6274.9	326.6	99.0				369.2			1542.3	965.7
	Total		1336191.5	144908.3	42837.5	1692.9	0.0	0.0	55950.3	11140.1	0.0	173560.9	91719.6

Block wise and Variety wise acreage under total rice and Basmati + Scented varieties in U.K (2017)

Sl. No.	District	Block	Total Rice	Basmati varieties							Long Grain Non-Basmati
				Pusa Basmati-1121	Pusa Basmati-1	Type-3	HBC-19	CSR-30	Basmati-370	Pusa Basmati-1509	
1	Haridwar		14342	1408	2156.00	176	428	907	799	505	3731.476
		Bahadurabad	3650	416	456	53.9	259.7	249.9	225.4	101	906
		Narsan	1871	174	316	0	39.2	122.5	34.3	83	297
		Rurki	2490	255	286	24.5	31.36	151.9	63.7	64	609
		Lakshar	1768	264	356	58.8	34.3	39.2	63.7	64	432
		Khanpur	2284	107	356	9.8	39.2	308.7	377.3	101	422
		Bhagwanpur	2279	192	386	29.4	24.5	34.3	34.3	92	1067
2	Dehradun		7474	328	0	1725	0	519	402	202	2474.5
		Doibala	1796	127	0	387	0	83	0	84	731
		Raypur	519	0	0	132	0	183	0	51	66
		Sahjpur	1769	87	0	348	0	1818	0	34	721
		Vikash Nagar	1833	100	0	534	0	519	0	34	711
		Kalasi	831	13	0	162	0	470	0	0	156
		Chackrata	726	0	0	162	0	601	0	0	91
3	U S Nagar		100293	1520	117.6	62	353	152	146	1522.5	7486.5
		Khatima Sitar	15546	94	0	0	14	0	0	111	588
		Ganj	17366	59	0	10	10	0	0	121	467
		Bajpur	15006	195	0	0	0	0	24	329	1028
		Rudrapur	14378	400	26	11	11	109	13	253	1338
		Jaspur	12884	176	46	24	48	43	33	268	1521
		Kashipur	11321	269	0	10	33	0	76	313	1102
		Gadarpur	13792	328	46	8	238	0	0	127	1443
4	Nainital		8585	282	0.00	573	0	245	39	303	1414
		Betalghat	358	0	0	0	0	0	0	0	116
		Bhimtal	307	0	0	0	0	0	0	0	70
		Dhari	40	0	0	0	0	0	0	0	0
		Ramgarh	199	0	0	0	0	0	0	0	0
		Okhalgola	358	0	0	0	0	0	0	0	0
		Haldwani	2728	108	0	294	0	147	25	135	556
		Ram Nagar	2465	145	0	279	0	98	15	168	672
		Kotabag	2130	29	0	0	0	0	0	0	0
	Total		130694	3538	2274	2536	782	1823	1386	2533	15106

Block wise and Variety wise acreage under total rice and Basmati + Scented varieties in J.K (2017)

Sl. No.	District	Block	Total Rice	Pusa Basmati- 1121	Basmati- 370	Sharbati
1	Jammu		85000	1358	47203	9129
		Akhnoor	0	0	9257	3060
		Balwal	0	0	1114	153
		Bishnah	0	1314	2129	1938
		Marh	0	0	4208	255
		R.S. Pura	0	44	21782	2856
		Satwari	0	0	8713	867
2	Kathua		42000	6272	3762	744.6
		Kathua	0	2744	1485	230
		Hiranagar	0	2303	1634	357
		Barnoti	0	1225	644	158
3	Samba		12000	582	2099	275
		Samba & Rehian	0	340	495	68
		Vijaypur & Ramgarh	0	243	1139	104
		Purumandal & Yakh	0	0	119	0
		Gaghwal	0	0	347	104
	Total		139000	8212	53064	10149

Chapter-7

Rainfall

The Basmati growing belt has witnessed normal to deficient rainfall in the months of June and July this year in the states of Punjab, Haryana and Western U.P. But transplanting has been timely due to good distribution of rainfall in the districts. The new variety Pusa Basmati-1509 has reduced to very less area due to very low returns last year. The rainfall during 1-06-2017 to 30-09-2017 in meteorological divisions under study area is given in below table and the rainfall in prominent districts (Haryana, Punjab, U.P, U.K, J & K, H.P, Delhi)

Haryana/Districts	Period:01-06-2017 To 30-09-2017			
	ACTUAL (mm)	NORMAL (mm)	% DEP.	Rainfall Status
AMBALA	553.9	916.6	-40%	Deficient
BHIWANI	227.0	348.5	-35%	Deficient
FARIDABAD	577.8	600.2	-4%	Normal
FATEHABAD	137.8	283.0	-51%	Deficient
GURGAON	243.0	472.3	-49%	Deficient
HISAR	247.9	325.1	-24%	Deficient
JHAJJAR	385.7	417.3	-8%	Normal
JIND	327.9	415.6	-21%	Deficient
KAITHAL	375.5	384.0	-2%	Normal
KARNAL	557.3	577.0	-3%	Normal
KURUKSHETRA	410.7	563.0	-27%	Deficient
MAHENDRAGARH	310.3	395.4	-22%	Deficient
MEWAT	404.2	501.8	-19%	Normal
PALWAL	284.9	446.9	-36%	Deficient
PANCHKULA	405.3	950.4	-57%	Deficient
PANIPAT	311.7	521.7	-40%	Deficient
REWARI	364.5	435.8	-16%	Normal
ROHTAK	255.1	508.0	-50%	Deficient
SIRSA	152.9	242.1	-37%	Deficient
SONIPAT	380.2	534.3	-29%	Deficient
YAMUNANAGAR	813.8	892.1	-9%	Normal
TOTAL HARYANA	341.9	459.8	-26%	Deficient

Punjab/Districts	Period:01-06-2017 To 30-09-2017			
	ACTUAL (mm)	NORMAL (mm)	% DEP.	Rainfall Status
AMRITSAR	444.3	537.6	-17%	Normal
BARNALA	276.3	355.6	-22%	Deficient
BATHINDA	310.7	321.0	-3%	Normal
FARIDKOT	273.6	325.1	-16%	Normal
FATEHGARH SAHIB	379.9	547.1	-31%	Deficient
FIROZPUR	59.8	352.3	-83%	Large Deficient
GURDASPUR	1009.3	827.8	22%	Excess

Punjab/Districts		Period:01-06-2017 To 30-09-2017		
HOSHIARPUR	390.9	717.9	-46%	Deficient
JALANDHAR	337.8	551.5	-39%	Deficient
KAPURTHALA	600.5	422.6	42%	Excess
LUDHIANA	461.9	534.2	-14%	Normal
MANSA	220.7	334.8	-34%	Deficient
MOGA	476.6	354.0	35%	Excess
MUKTSAR	286.0	311.8	-8%	Normal
NAWASHAHR	793.8	788.6	1%	Normal
PATIALA	432.0	615.2	-30%	Deficient
RUPNAGAR	773.0	728.5	6%	Normal
SANGRUR	209.6	436.8	-52%	Deficient
SAS NAGAR	493.9	644.5	-23%	Deficient
TARN TARAN	167.0	336.8	-50%	Deficient
Punjab Total	384.9	491.9	-22%	Deficient

Uttar Pradesh/District		Period:01-06-2017 To 30-09-2017		
	ACTUAL (mm)	NORMAL (mm)	% DEP.	Rainfall Status
Agra	273.7	687.2	-60%	Large Deficient
Aligarh	558.3	655.7	-15%	Normal
Auraiya	309.5	700.0	-56%	Deficient
Baghpat	553.5	545.3	2%	Normal
Bareilly	895.8	853.8	5%	Normal
Bijnore	938.6	914.2	3%	Normal
Budaun	552.4	758.0	-27%	Deficient
Bulandshahr	503.6	670.7	-25%	Deficient
Etah	478.6	615.3	-22%	Deficient
Farukhabad	604.5	743.4	-19%	Normal
Firozabad	618.1	676.3	-9%	Normal
Etawah	377.7	728.0	-48%	Deficient
Gautam Buddha Nagar	618.1	676.3	-9%	Normal
Ghaziabad+Hapur	290.1	572.8	-49%	Deficient
Mathura	260.7	579.9	-55%	Deficient
Mainpuri	562.1	655.3	-14%	Normal
Meerut	507.7	778.5	-35%	Deficient
Moradabad	892.2	855.2	4%	Normal
J.P.Nagar	723.5	783.0	-8%	Normal
Kannauj	649.7	776.7	-16%	Normal
Muzaffarnagar+Shamli	477.3	736.8	-35%	Deficient
Pilibhit	446.7	988.6	-55%	Deficient
Rampur	484.9	915.5	-47%	Deficient
Saharanpur	690.4	804.6	-14%	Normal
Shahjehanpur	508.1	859.2	-41%	Deficient
UP Total	602.5	846.1	-29%	Deficient

Uttarakhand/District	Period:01-06-2017 To 30-09-2017			
	ACTUAL (mm)	NORMAL (mm)	% DEP.	Rainfall Status
ALMORA	997.5	858.4	16%	Normal
BAGESHWAR	1129.2	858.4	32%	Excess
CHAMOLI	1242.1	859.3	45%	Excess
CHAMPAWAT	1270.9	1319.7	-4%	Normal
DEHRADUN	1718.6	1802.1	-5%	Normal
HARIDWAR	927.1	961.9	-4%	Normal
NANITAL	1750.8	1439.1	22%	Excess
PAURI GARHWAL	898.3	1213.5	-26%	Deficient
PITHORAGARH	1488.3	1687.9	-12%	Normal
RUDRAPRAYAG	1492.0	1671.1	-11%	Normal
TEHRI GARWAL	787.9	1047.1	-25%	Deficient
UDHAM SINGH NAGAR	946.7	1119.9	-15%	Normal
UTTARKASHI	951.5	1148.6	-17%	Normal
Uttarakhand Total	1199.0	1229.1	-2%	Normal

J & K/District	Period:01-06-2017 To 30-09-2017			
	ACTUAL (mm)	NORMAL (mm)	% DEP.	Rainfall Status
Jammu	819.5	860.5	-5%	Normal
Kathua	1105.2	982.0	13%	Normal
Samba	581.8	860.5	-32%	Deficient
J & K Total	545.4	534.6	2%	Normal

HP/District	Period:01-06-2017 To 30-09-2017			
	ACTUAL (mm)	NORMAL (mm)	% DEP.	Rainfall Status
BILASPUR	953.9	877.0	9%	Normal
CHAMBA	708.0	1406.4	-50%	Deficient
HAMIRPUR	1077.8	1078.9	0%	Normal
KANGRA	1631.6	1582.1	3%	Normal
KINNAUR	180.1	264.2	-32%	Deficient
KULLU	593.1	519.7	14%	Normal
Mandi	1195.8	1093.4	9%	Normal
Simla	640.1	633.9	1%	Normal
Sirmaur	1213.1	1324.6	-8%	Normal
Solan	839.6	1000.1	-16%	Normal
Una	1019.2	862.7	18%	Normal
HP Total	720.7	825.3	-13%	Normal

Delhi/District	Period:01-06-2017 To 30-09-2017			
	ACTUAL (mm)	NORMAL (mm)	% DEP.	Rainfall Status
CENTRAL DELHI	584.8	636.2	-8%	Normal
NEW DELHI	700.5	636.2	10%	Normal
NORTH DELHI	519.5	636.2	-18%	Normal
NORTH EAST DELHI	259.5	636.2	-59%	Deficient
NORTH WEST DELHI	419.0	636.2	-34%	Deficient
SOUTH DELHI	460.1	636.2	-28%	Deficient
SOUTH WEST DELHI	424.4	636.2	-33%	Deficient
WEST DELHI	500.5	636.2	-21%	Deficient
Delhi Total	442.6	636.2	-30%	Deficient

Methodology

- We have done the complete study based on field based survey
- We have deputed the field teams in targeted 7 states which conducted the farmer interviews in around 78 districts of total 81 districts
- We have done questionnaires' based farmer survey and taken farmers pictures along with actual survey days newspapers. We geo-tagging farmers during the survey.
- To vet the complete study, we have also taken assistance from satellite images and tele-calling so that complete perspective can be taken into considerations while arriving the results of the study
- To further validate the results, we have also taken the last year's figures from the previous reports, so that survey results error has to be minimized and actual figures can be achieved in the study

Way Forward

- Survey teams will be continuously in the field throughout the survey and report on crop progress, so that subsequent reports will be presented in the more meaning & timely manner
- Next report will focus on Mandi arrival pace / crop production / crop cutting experiments / price trends / any infestation or losses if any
- Any changes as reported from the field on current thoughts
- Next report will be presented during November 2017,

Data Source

- All figures based on farmer interview and feedback for current year
- Last year dataset from previously submitted reports
- Paddy procurement prices taken from independent price pooling exercise from Sep 2017 onwards
- Monsoon data was collected from IMD & other meteorological departments
- Satellit imagery from NRSC