

# ICAR- Indian Institute of Soybean Research, Indore

# SOYBEAN MONITOR/ MARKET WATCH

April - September, 2019

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## **Monsoon Progress**

Source: IMD

- Onset of Southwest monsoon in Kerala was delayed by about a week and the progress was slow initially stalled by cyclone Vayu. Although, with the rains during end of third week of June month in parts of Madhya Pradesh sowing started, but a pause in rain activity delayed the sowing progress in major soybean growing area.
- Monsoon began with drought like conditions in June and ended with the wettest September in more than a century that has flooded fields. For the country as a whole, cumulative rainfall during southwest monsoon 2019 is 110% of LPA.

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Sub-divisions	Actual	Normal	% departure
West MP	1383	858	+61
East MP	1310	1048	+25
Madhya Maha	1167	751	+55
Marathwada	591	669	-12
Vidharbha	1055	943	+12
East Raj	919	609	+53
Chhatisgarh	1256	1142	+10
Telangana	805	760	+6



 Table 1. Rainfall (mm) distribution upto 30<sup>th</sup> Sept, 2019

- Most of the soybean growing districts of Madhya Pradesh received excess rainfall (40% to 130%) during the monsoon season and in the month of September. The rainfall was mostly evenly distributed during the months, the harvest period witnessed excess rainfall in majority of the districts.
- Rainfall received during monsoon season in districts of Madhya Maharashtra was 20 to 110% excess than the normal rainfall, while districts of Marathwada received less than normal rainfall (13-27%) during the monsoon season. In the districts of Vidharbha region of Maharashtra, monsoon rainfall was mostly normal except in Washim (-20%) and Yavatmal (-30%).

- Most of the soybean growing districts in Rajasthan received excess rainfall particularly in the month of September. Overall, during the monsoon season most of the soybean growing districts received more than 50% excess rainfall as compared to normal rainfall.
- Amount and spread of rainfall decides monsoon vield for kharif crops particularly for soybean which is mainly grown under conditions. rainfed The incessant rainfall in the month of September, particularly in Malwa region of Madhya Pradesh, likely to



affect the yield of short duration varieties.

### **Soybean: Sowing progress**

• With the delayed onset of monsoon, the sowing of soybean started late and delayed in most of the soybean growing areas. However, with the good monsoon progress, the sowing progressed well and the crop has been sown on 113.99 lakh ha area (Table 2) in the country as on 27.09.2019. The area under soybean has increased this year in Madhya Pradesh and Rajasthan, as the higher prevailing prices of soybean during lean season and good rainfall during sowing season, although delayed, encouraged farmers.

States	2019	Same period 2018	Same period 2017
Bihar	0.420	0.368	0.000
Chhattisgarh	0.742	1.290	1.320
Gujarat	1.003	1.365	1.290
Karnataka	3.302	3.394	2.710
Madhya Pradesh	55.160	53.180	50.100
Maharashtra	40.113	40.444	38.397
Rajasthan	10.608	10.461	9.690
Telangana	1.770	1.789	1.650
Uttar Pradesh	0.208	0.199	0.195
Uttarakhand	0.260	0.240	0.250
Others	0.402	0.367	0.319
Total	113.988	113.097	105.921

Table 2. Sowing position of soybean in India as on 27.09.2019 (Area in Lakh Ha)

Source: MOA&FW, GOI (http://agricoop.nic.in/sites/default/files/Cwwg-Data-as-on-27.09.2019.pdf).

### **Domestic scenario**

• Soybean production in India for the year 2019-20 is estimated at 135.05 lakh tonnes as per First advance estimates of MoA&FW, down marginally from 137.86 lakh tonnes for the year 2018-19 (Table 3) on account of higher rainfall in some districts particularly during harvest period. Due to continuous rains during September and first week of October, some of the farmers are unable to harvest the crop and therefore, there is possibility of downward revision in production estimates. The effect is mainly on the early varieties and in the low lying area

where there is water stagnation. The quality of harvest for early varieties is also expected to be affected.

Year	Area ('000 Ha)	Production ('000 Tons)	Yield (Kg/Ha)	Change in Area (%)	Change in Production (%)	Change in Yield (%)
2016-17	11183.4	13158.7	1177			
2017-18	10328.8	10933.0	1058	-7.6	-16.9	-10.1
2018-19*	10960.0	13786.0	1258	6.1	26.1	15.2
2019-20**	11399.0 <sup>a</sup>	13505.0	1185	4.0	-2.0	-2.8

Table 3. Estimates of area, production and yield of soybean in India.

\* Fourth advance estimates, \*\* First advance estimates, <sup>a</sup> All India weather summary and forecast bulletin 27.09.2019 (http://agricoop.nic.in/sites/default/files/Cwwg-Data-as-on-27.09.2019.pdf).

Source: Directorate of Economics and Statistics, MOA&FW, New Delhi.

### Soybean: International scenario (Source: AMIS, FAO)

- As per FAO Agricultural Market Information System, global soybean production forecast for 2019-20 slashed downward to 346.2 million tonnes from 364.1 m t estimated for 2018-19, on account of lower acreage and production expectations for USA and Argentina (Table 8). The crop is maturing late in the US leading to delayed harvest.
- Domestic soybean utilization in 2019-20 is estimated at 359.21 m t, up from 352.1 m t during 2018-19, reflecting higher utilisation in Argentina, Brazil and China.
- Global soybean trade estimates scaled up on higher import forecast for China and several other countries, which improved export prospects of major producers.
- Global carry forward stocks expected downwards on account of downward forecast for US and Brazil.

### Soybean price movement

- The minimum support price for soybean for *kharif* marketing year 2019-20 increased to Rs. 3710 per quintal as compared to Rs. 3399/qt for 2018-19.
- Soybean prices declined as the monsoon progressed in the major growing states on expectation of good harvest, as the sowing and growth of the crop was excellent. But with the continuous rains during the harvest period, prices of soybean started firming up amid crop and quality loss expectations.
- Soybean prices are expected to decline on the progress of crop harvest led increase in market arrivals and the quality and moisture content of the produce.

State	Market	Mar	ch	М	ay	Ju	ıly	September	
		2018	2019	2018	2019	2018	2019	2018	2019
MP	Dewas	3413	3465	3380	3596	3338	3495	3208	3715
	Dhar	3622	3346	3463	3571	3376	3422	3209	3646
	Indore	3592	3596	3557	3672	3353	3501	3183	3781
	Manasa	3414	3548	3385	3567	3039	3339	3057	3593
	Ratlam	3623	3625	3545	3649	3384	3481	3140	3731
	Ujjain	3668	3688	3630	3702	3429	3542	3225	3780
Mah	Akola	3462	3569	3420	3644	3349	3532	3128	3680
	Amrawati	3439	3386	3285	3437	3208	3485	3012	3736
	Latur	3691	3666	3619	3678	3538	3665	3400	3831
	Wasim	3608	3533	3547	3583	3492	3490	3230	3692
	Yeotmal	3439	3501	3307	3517	3289	3485	3096	3633
Raj	Baran	3494	3505	3449	3519	3285	3357	3197	3783

Table 4. Prices of soybean in major *mandies*. (Rs/qt)

Bhawani mandi	3548	3466	3484	3680	3374	3499	3155	3910
Kota	3534	3538	3554	3718	3372	3580	3259	3805
Ramganj mandi	3515	3583	3475	3694	3300	3541	3196	3851

Source: agmarknet.gov.in, NA=Not Available

- Wholesale price index of soybean (2011-12=100) continued steady with marginal fluctuations on the monsoon progress in the soybean growing regions. The WPI for soybean oil and soybean meal also was mostly flat (Fig. 1).
- Futures prices of soybean firmed up on last trading day of September, 2019 by 12.5 and 8.1 per cent as compared to last trading day of June, 2019, respectively for October, 2019 and November, 2019 contracts (Table 5). The incessant rainfall during the September month led to firm sentiments in the market. Soy oil futures prices also improved by 5-6 per cent.
- Futures contract return volatility was higher in nearby contract and in the case of soybean contracts as compared to soy oil contracts, and is declining gradually (Figure 2).



Fig. 1. Wholesale price index for soybean and products. (Data source: Office of Economic Advisor, Ministry of Commerce and Industry, GOI).

Contract	28.06.2019	31.07.2019	30.08.2019	30.09.2019	% Change*
Soybean (Rs/q)					
Oct 2019	3477	3528	3591	3912	12.51
Nov 2019	3477	3559	3528	3759	8.11
Soy oil (Rs/10 k	(g)				
Oct 2019	723.2	732.05	759.7	764.5	5.71
Nov 2019	723.2	732.05	760.95	758.8	4.92

#### Table 5. Futures contract close prices

\* Change in price on last day of Sept, 2019 over last day of June, 2018. Source: NCDEX website



C. Soy oil Oct, 2019 contract D. Soy oil Nov, 2019 contract Figure 2. Return volatility of soybean and soy oil futures contracts

## Movement of international prices

- Amid continued ebb and flow of China and US trade negotiations, mixed trend in soybean prices continued at major producing markets. Although, soybean prices improved marginally in all major exporting countries on lower expected production and demand support from China and other markets (Figure 3 and 4).
- The soybean meal prices in all major exporting countries continued downwards with marginal upturn in June month but the upturn was arrested and down trend continued afterwards mainly on the sluggish demand of meal from importing markets (Figures 3 and 5).
- Soy oil prices in major exporting markets continued to decline until June, but supported with the lower expected soybean production and with demand support soyoil prices trending up from July months (Figures 3 and 6).



Fig. 3. International price movement of soybean and products (Data source: World Bank Pink Sheet).



Fig. 4. Soybean price movement in major countries (Data source: USDA).



Fig. 5. Soybean Meal price movement in major countries (Data source: USDA).



Fig. 6. Soybean Oil price movement in major countries (Data source: USDA).

## Policy initiatives (Source: AMIS Market Monitor, FAO)

- On 20 May, the Ministry of Treasury in Argentina exempted imports of soybeans that are crushed for re-export in the form of meal/oil from a generic import tax, which was raised at the beginning of the month to address fiscal problems. The exemption was granted to support the local crushing industry and facilitate the country's exports of soy meal/oil.
- On 9 August, the US Department of Agriculture (USDA)approved a variety of drought and water-stress resistant soybean (HB4) developed by Verdeca, a joint venture between Arcadia Biosciences (US) and Bioceres (Argentina). This opens the way for the international commercialization of HB4soybean, subject to individual countries' import approvals.
- On 5 September, the General Administration of Customs of China allowed imports of soybean meal from the Russian Federation, including other commodities.
- On 11 September, under an agreement between the Ministry of Agriculture in Argentina and China, China allowed soymeal feed imports from 7 Argentine plants. The accord could result in shipment of up to 5 million tonnes of Argentine soymeal to China in 2020.
- On 13 September, the Ministry of Commerce of China exempted US soybean imports from the additional tariffs. China had started applying an additional tariff of 25 percent in June followed by an additional tariff of 5 percent in August 2019 on yellow soybeans.
- On 17 September, in its notification to the WTO, the EU established maximum residue limits for soybeans and cereals for Napropamide (0.02 mg per kg and 0.01 mg per kg, respectively), Myclobutanil (0.01 mg per kg), Sintofen (0.01 mg per kg), Chromafenozide (0.01 mg per kg), Flumenturon (0.01 mg per kg), Pencycuron (0.02 mg per kg), Sedaxane (0.01 mg per kg), Trazoxide (0.005 mg per kg) Fluvalinate (0.01 mg per kg for soybeans, rice and maize).
- On 11 September, the Ministry of Environment of Germany announced the ban of glyphosate from the end of 2023.

## Export of soybean products from India

- Export of soybean meals/ de-oiled cakes during the period April-August 2019-20 totalled at 3.9 lakh tonnes valued at Rs. 1434.03 crores, 40.4% less in terms of quantity and 35.8 % in terms of value of export as compared to the figures during corresponding period 2018-19 (Table 6 & 10). Lower demand from importing countries amid competitiveness led to lower export of soybean meal from the country.
- The major export destinations for soybean meal from India were USA (28.85%), Iran (27.78%), Nepal (9.97%), Korea RP (5.81%), Japan (5.45%) and Canada (4.44%).
- The country also exported 0.28 lakh tonnes of soybean (HS 120190) valued at Rs. 11327.4 lakhs during the period April-August this financial year and soybean of seed quality (HS 120110) at 4420 tonnes valued at Rs. 1800 lakhs. These products were mainly destined to USA, Canada, Belgium and France.
- The country also exported other soybean products such as soybean flour, soy oil, soy sauce and soy milk drinks (Table 10).

	Q	uantity (Tonne	s)	Value (Rs. Lacs)			
Months	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20	
April	202767.53	100351.37	52164.97	53457.30	32801.49	19279.55	
May	119355.83	111733.09	118875.98	33100.62	39315.87	42512.47	
June	100839.11	159147.60	69644.95	27654.02	54213.75	26388.98	
July	87877.38	141895.47	74487.31	25340.74	48702.32	27635.70	

Table 6. Month wise export of soybean meal (HS 230400) from India

August	209797.17	141465.24	74708.73	53948.29	48350.03	27586.84
September	72159.84	86728.51		22250.21	30919.37	
October	107791.59	130249.82		30508.13	41894.14	
November	303928.39	324509.97		78924.66	97017.62	
December	294389.00	398871.16		76827.48	117324.34	
January	182407.30	317450.45		48616.11	94026.85	
February	128510.96	200779.66		36022.92	64700.68	
March	84629.25	327748.57		26391.93	108118.92	
Total	1894453.34	2440930.91	389881.94	513042.41	777385.38	143403.54

Source: DGCI&S, Kolkata

#### Import of soybean oil and other soy products to India

- The country imported 14.25 lakh tonnes of soybean oil during the period April-August, 2019-20, about 6.9 per cent less from same period last year, valued at Rs. 6969.6 Crores. Nearly 72.3 per cent of soybean oil is sourced from Argentina, 12.7 per cent from Brazil and 9.7% from Switzerland and 2.8% from the Netherlands.
- The Import of other soybeans (HS 120190) has increased tremendously to 134729.8 tonnes during April-August 2019-20 valued at Rs. 462.9 Crores, mainly from Ethiopia (52.76%), Togo (12.47%), Mozambique (12.39%), Djbouti (4.74%) and Switzerland (2.52%).
- Import of isolated soya protein also surged recently (Table 9).

Table 7. Month wise imp	port of soybean oil w/n refined	d not chemically treated (HS 1507) in India

	Q	uantity (Tonne	s)	V	alue (Rs. Lacs	5)
Months	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
April 326582.88 235491		235491.89	217932.60	173575.76	125604.73	109343.88
May	364836.73	325481.53	277051.50	183282.27	176372.71	138968.52
June	284603.33	331957.32	172217.99	143482.31	179707.99	83136.99
July	393968.97	283753.41	332392.62	201953.63	149675.45	158989.00
August	338791.84	353306.10	425183.76	174367.37	179983.00	206520.89
September	346653.54	357077.97		181494.94	181343.79	
October	238890.75	225183.25		128465.67	117089.45	
November	231827.93	215071.92		126236.39	111748.30	
December	139491.08	157533.66		75981.01	79366.54	
January	227464.04	185100.32		121265.30	92373.77	
February	117943.76	234766.87		63177.34	116750.75	
March	141315.68	283828.46		76017.72	144426.50	
Total	3152370.50	3188552.7	1424778.47	1649299.71	1654442.98	696959.28

Source: DGCI&S, Kolkata

		Area	Production	Opening	Domestic	Imports	Total Supply	Dom. Utilization	Exports	Closing
Country	Year	(m ha)	(m t)	Stock (m t)	supply (m t)	(m t)	(m t)	(m t)	(m t)	stock (m t)
Argentina	2019/20	17.4	53.8	11.7	65.5	3.3	68.8	50.6	8.5	9.7
Argentina	2018/19	17.3	55.3	9.0	64.3	5.5	69.8	49.3	8.8	11.7
Argentina	2017/18	16.3	37.8	16.8	54.6	4.7	59.3	47.8	2.5	9.0
Argentina	2016/17	17.6	55.0	16.2	71.2	1.7	72.9	48.6	7.5	16.8
Brazil	2019/20	36.6	122.8	2.8	125.6	0.2	125.8	48.7	74.4	2.7
Brazil	2018/19	35.8	116.5	2.8	119.3	0.2	119.5	46.7	70.0	2.8
Brazil	2017/18	35.2	122.1	10.3	132.4	0.2	132.6	46.3	83.6	2.8
Brazil	2016/17	33.9	114.1	9.3	123.4	0.3	123.7	45.2	68.2	10.3
China	2019/20	8.9	17.0	12.0	29.0	85.1	114.1	102.0	0.1	12.0
China	2018/19	8.4	16.0	13.4	29.4	83.2	112.6	100.5	0.1	12.0
China	2017/18	8.2	15.3	14.7	30.0	94.1	124.1	110.5	0.1	13.4
China	2016/17	7.2	13.6	14.7	28.3	93.5	121.8	107.0	0.1	14.7
India	2019/20	11.1	13.0	0.4	13.4	0.1	13.5	13.1	0.1	0.3
India	2018/19	11.2	13.5	0.2	13.7	0.0	13.7	13.1	0.2	0.4
India	2017/18	10.4	10.9	0.9	11.9	0.1	12.0	11.5	0.3	0.2
India	2016/17	11.2	13.2	0.1	13.3	0.1	13.4	12.2	0.3	0.9
USA	2019/20	30.7	98.9	27.4	126.2	0.5	126.8	61.0	48.3	17.4
USA	2018/19	35.7	123.7	11.9	135.6	0.5	136.0	61.2	47.5	27.4
USA	2017/18	36.2	120.1	8.2	128.3	0.6	128.9	59.0	58.0	11.9
USA	2016/17	33.5	116.9	5.4	122.3	0.6	122.9	55.5	59.2	8.2
World	2019/20	123.5	346.2	61.8	408.0	149.7	557.7	359.2	150.3	48.2
World	2018/19	127.0	364.1	44.8	408.9	149.0	557.9	352.1	143.9	61.8
World	2017/18	125.3	344.6	57.1	401.6	152.5	554.1	348.2	161.1	44.8
World	2016/17	120.8	351.2	51.8	403.0	147.5	550.5	340.5	152.9	57.1

Table 8. Supply and distribution of soybean in major producing countries and the World.

Source: AMIS, FAO website.

HS Code	Crop commodity	2016-17		201	7-18	201	8-19	2019-20 (April- Aug(P))	
		Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
15071000	Soybean crude oil w/n degummed	3464460.5	1870341.10	3152168.50	1648879.32	3165906.41	1637264.82	1409527.81	684572.18
120190	Other soybeans w/n broken	79729.65	27894.74	81715.18	25024.61	156694.06	53489.42	134729.82	46298.60
35040091	Isolated soya protein	5585.00	12518.52	4472.65	9428.33	7188.40	18325.20	2446.47	5711.41
15079010	Soybean oil of edible grade	23.73	69.13	112.25	167.89	22467.43	16713.85	14879.14	11916.95
23040010	Oil-cake & oil-cake meal of soybean expeller variety	2109.63	886.02	4057.52	1485.00	42952.37	11243.27	90.07	71.43
21031000	Soy sauce	694.13	679.94	854.74	858.68	980.79	1244.10	422.08	575.55
22029910	Soy milk drinks w/n sweetened or flavored	235.03	244.58	124.97	71.39	762.63	603.73	206.21	97.87
15079090	Soybean oil other than edible grade	113.79	318.77	89.77	252.51	178.99	464.29	371.49	470.14
23040090	Oth. solid residues resulting from of extrn soybean oil	24687.61	7095.73	48.91	78.54	128.23	237.89	0.75	0.53
120110	Soybeans w/n broken of seed qlty	1645.44	452.59	7407.92	1924.69	355.0	137.38	3278.01	1135.66
23040030	Meal of soybean solvent extracted (defatted) variety	3049.15	940.40	500.00	194.95	3.00	16.07	69.91	27.38
12081000	Flours and meals of soybeans	35.39	30.71	0.91	0.65	0.00	0.07	2.04	2.02
23040020	Oil cake of soybean solvent extracted (defatted) variety	4628.00	1388.34	-	-	-	-	-	-

Table 9. Import of soybean and products in India (Quantity in tonnes and Value in Rs. Lakhs)

Source: DGCI&S, Kolkata

HS Code	Crop commodity	2016-17		2017-18		2018-19		2019-20 (Apr-Aug(P))	
		Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
23040030	Meal of soybean solvent extracted (defatted) variety	833058.4	232734.8	1218605.0	317615.46	1561163.00	464367.64	181068.23	60900.72
23040010	Oil-cake & oil-cake meal of soybean expeller variety	144011.08	54595.19	229882.19	78997.29	418293.28	164293.00	149250.62	61488.98
23040090	Other solid residues resulting from of extraction soybean oil	243799.8	69963.6	299011.48	77737.16	286632.93	93210.23	57352.70	20269.62
120190	Other soybeans w/n broken	180797.11	74821.58	270207.74	98517.46	184483.00	75581.34	27894.03	11327.38
23040020	Oil cake of soybean solvent extracted (defatted) variety	55308.29	15875.56	146954.53	38692.48	174841.68	55514.52	2210.40	744.22
12081000	Flours and meals of soybeans	91243.82	36917.28	44126.09	15388.99	20836.81	11390.65	8085.52	3946.52
120110	Soybeans w/n broken of seed qlty	2501.05	1064.12	5142.15	1,966.38	13326.81	5449.28	4420.29	1800.04
15079010	Soybean oil of edible grade	175.40	152.50	1154.08	916.60	4245.61	3820.26	2350.95	2243.24
15079090	Soybean oil other than edible grade	208.08	285.07	2566.60	2053.03	3293.4	2772.78	729.96	673.52
21031000	Soy sauce	977.10	583.31	907.66	564.90	947.05	563.83	488.79	321.39
35040091	Isolated soya protein	111.91	107.24	214.91	247.43	66.50	254.06	17.63	69.09
22029910	Soy milk drinks w/n sweetened or flavored	77.31	378.48	26.32	121.74	55.76	49.43	2.97	3.86
15071000	Soybean crude oil w/n degummed	36.46	22.25	64.43	49.28	-	-	-	-

Table 10. Export of soybean and products from India (Quantity in tonnes and Value in Rs. Lakhs)

Source: DGCI&S, Kolkata