DOMESTIC AND WORLD COTTON REVIEW

DOMESTIC COTTON CROP SCENARIO

T.L. 1

Pakistan Central Cotton Committee imparted comprehensive training on "Off Season Management Strategies for Mealy Bug and Pink Boll Worm" to the agriculture extension technicians of 11 districts in Punjab. During a session 526 master trainers have been trained. Simultaneously scientists of Central Cotton Research Institute – Sakrand are in fields arranging various seminars and corner meetings with the cotton growers and farmers regarding advisory on cost efficient production practices and pest management especially pink boll worm for the forth coming cotton crop season. Growers are being advised to bring more area under cotton cultivation during next season. Various information dissemination methods like seminars, corner meetings, brochures, leaflets, SMS service and TV programs are being utilized.

Table-1: TARGETS FOR AREA AND PRODUCTION OF COTTON CROP 2016-17									
S. No	Dravince	Area	Production						
5. NO	Province								

S. No	Province	Area (Million Hectares)	Production (Million Bales)		
1.	Punjab	2.310	9.500		
2.	Sindh	0.660	4.500		
3.	Khyber Pakhtunkhwa	0.001	0.003		
4.	Baluchistan	0.038	0.098		
	Total of Pakistan	3.009	14.101		

Source: Federal Committee on Cotton (FCC) meeting held on 23.2.2016.

Table-2: SOWIN	(Million Hectares)					
Province	Target	Area	Sown	% Change Over		
Frovince	2016-17	2016-17	2015-16	Target	Last Year	
Punjab	2.310	1.776	2.243	76.88	-20.82	
Sindh	0.660	0.636	0.621	96.36	+2.41	
Pakistan	2.97	2.412	2.864	81.21	-15.78	

Source: Provincial Crop Reporting Departments.

 Table – 3: ASSESSMENT OF COTTON CROP 2016-17

(Bales = 170 Kg)

	Expected Production (Million Bales)								
Province	First Cotton Crop Assessment (06-9-2016)	Second Cotton Crop Assessment (06-10-2016)	Third Cotton Crop Assessment (05-12-2016)						
Punjab	7.500	7.300	6.903						
Sindh	3.733	3.700	3.600						
КРК	0.001	0.001	0.001						
Balochistan	0.038	0.038	0.038						
Pakistan	11.272	11.039	10.542						

Source: Cotton Crop Assessment Committee Meeting (held on 06-9-2016, 06-10-2016 & 05-12-2016.

Table-4: SEED COTTON ARRIVALS 2016-17 AND 2015-16 AS ON: 1ST FEBRUARY, 2017

Heads	2016-17			2015-16			
	Punjab	Sindh	Total	Punjab	Sindh	Total	
Arrivals	6,849,887	3,784,740	10,634,627	5,857,696	3,755,015	9,612,711	
Sales to Exporters	56,100	146,256	202,356	7,152	351,266	358,418	
Sales to Textile Mills	6,073,721	3,441,757	9,515,478	4,967,905	3,064,505	8,032,410	
Sales to T.C.P	-	-	-	-	-	-	
Unsold Stock	688,997	191,837	880,834	828,904	312,828	1,141,732	
Un-ginned Stock	31,069	4,890	35,959	53,735	26,416	80,151	

Source: Pakistan Cotton Ginners Association.

Table-5: SEED COTTON PRICES (Monthly Averages) 2015-16 & 2016-17(Rs. per 40 Kg)

Months	Hyd	M.P.	Khair	Sukr	R.Y.	Bahawal	Khane	Mian	Sahiwal	Multan	Burew
		Khas	Pur		Khan	Pur	wal	Channu			ala
July	3154	-	-	-	3358	-	-	-	-	-	-
2016											
August	3364	3333			3361			3262	3270		3270
2016											
September	2985	2984	-	-	3049	-	-	2902	2961	-	2960
2016											
October	2954	2901	3075	3116	3176	3093	-	3054	3069	3090	3135
2016											
November	2400	2300	3060	3110	3230	3200	-	3125	3105	3100	3240
2016											
December	-	-	3049	3209	3413	3372	-	3313	-	3296	3331
2016											
January	-	-	-	-	3526	3476	-	3194	-	3231	3470
2017											
Average	2971	2880	3061	3145	3302	3285	-	3142	3100	3179	3234
2016-17											
Average	2392	2387	2794	2867	3178	2771	2334	2729	2416	2648	2707
2015-16											

Source: Market Report.

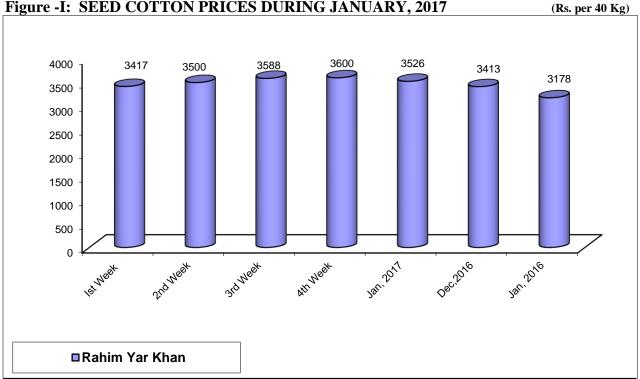


Figure -I: SEED COTTON PRICES DURING JANUARY, 2017

Source: Market Report.

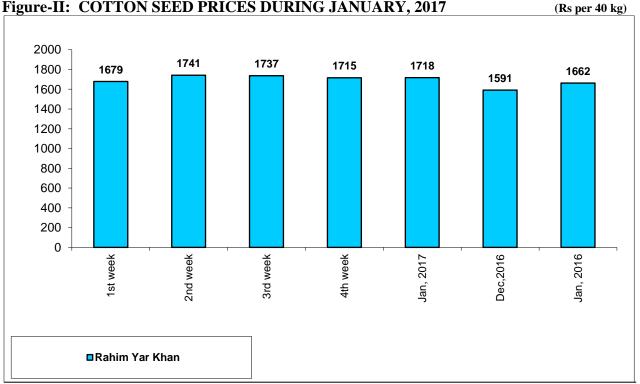


Figure-II: COTTON SEED PRICES DURING JANUARY, 2017

Source: Market Report.

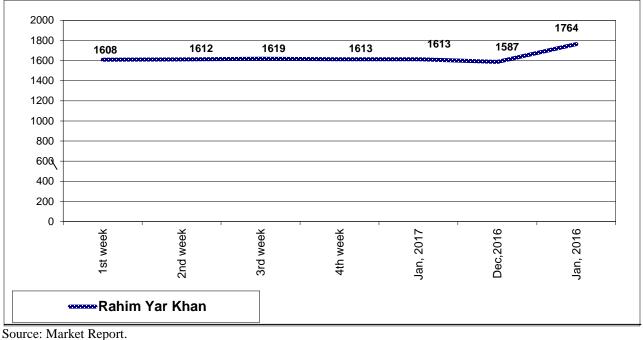


Figure-III: COTTON SEED CAKE PRICES DURING JANUARY, 2017 (Rs per 40 kg)

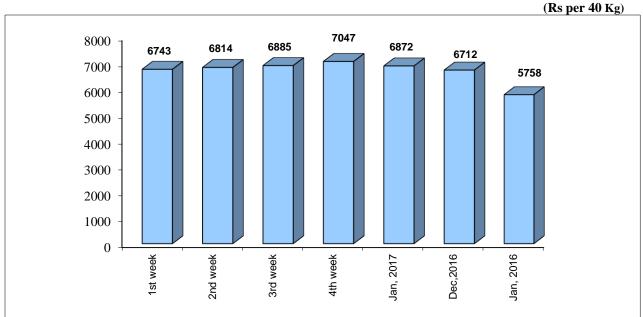


Figure-IV: KCA SPOT RATE (EX-GIN) AT KARACHI DURING JANUARY, 2017

Source: The Karachi Cotton Association

The graph above indicates that the prices of raw cotton witnessed growing tendency during the month of December, 2016. The prices were averaged at Rs. 6,872 per 40 kg as compared to Rs. 6,712 in December, 2016. However, the prices in January, 2016 were recorded much lower at Rs. 5,758 per 40 kg. Month-wise details are given in table below:

		(Rs. per 40 kg)
Month	2016-17	2015-16
WOITUI	Ex-Gin Rate	Ex-Gin Rate
August	7082	4880
September	6450	4991
October	6410	5582
November	6469	5698
December	6712	5607
January	6872	5758
February	-	5726
March	-	5616
April	-	5785
May	-	5986
June	-	5993
July	-	6558
Average	6666	5682

Table-6: MONTHLY AVERAGE PRICES OF RAW COTTON DURING 2016-17 & 2015-16 (Be non 40 kg)

Source: Karachi Cotton Association.

Sr. No.	Position	201	4-15	201	5-16*	
		'000' Bales	'000' M/Tons	'000' Bales	'000' M/Tons	
1.	Carryover	701	118	398	66	
2.	Production	13,996	2,379	9917	1686	
3.	Imports	987	168	2453	417	
	Total	15,684	2665	12768	2169	
4.	Mill Consumption	14727	2504	11533**	1961**	
5.	Exports	559	95	287	49	
6.	End Season Stocks	398	66	948	159	
	Total	15,684	2665	12768	2169	

Source: i) Textile Commissioners Organization

ii) Pakistan Bureau of Statistics.

iii) Pakistan Cotton Ginner's Association. (PCGA figure is converted in to 170 kg)

*Provisional **Mill Consumption Aug, 2015-March, 2016.

Note: Exports and Imports July-June, 2016 (2015-16 Crop)

COTTON YARN PRICES

The Cotton Yarn prices of 21's and 30's counts in January, 2017 slightly increased from previous month and averaged at Rs. 1218 and Rs. 1384 per bundle of 4.54 kg. However, the same counts in the corresponding month of the last year were recorded at Rs. 1057 and Rs. 1256 per bundle respectively. Details are given as below:

Table-8: DOMESTIC COTTON YARN PRICES DURING JANUARY, 2017

(Rs. per bundle of 4.54 kg)

		W E	E I	K			
Count/ Week	1	11	III	1V	January 2017	December 2016	January 2016
10/1	883	907	907	907	901	833	823
16/1	1142	1160	1161	1163	1157	1143	969
21/1	1200	1223	1223	1224	1218	1200	1057
22/1	1195	1235	1235	1235	1225	1196	1065
26/1	1308	1329	1329	1329	1324	1309	1151
28/1	1350	1350	1350	1350	1350	1350	1200
30/1	1381	1383	1383	1390	1384	1381	1256
32/1	1380	1380	1380	1380	1380	1380	1260
40/1	1650	1650	1650	1650	1650	1650	1520
52/1	1700	1700	1700	1700	1700	1700	1560
60/1	1750	1750	1750	1750	1750	1750	1700
70/1	1850	1850	1850	1850	1850	1850	1800
20/2	1282	1304	1304	1304	1290	1282	1158

Source: Pakistan Yarn Merchants Association, Karachi.

Table-9: EXPORTS OF TEXTILE GROUP COMMODITIES DURING DECEMBER, 2016

												(Value	= Rs. In	Millio	ns)
Commodities	Unit		mber)16		mber)16		mber 15	Over	nange : Nov 16	July-De 20		July-De 20		% C	hange
		Qty	Val	Qty	Val	Qty	Val	Qty	Val	Qty	Val	Qty	Val	Qty	Val
Raw Cotton	M.T	1544	248	2849	471	1671	266	-45.8	-47.3	21626	3754	45959	7419	-53.0	-49.4
Cotton Yarn	M.T	41565	10952	49784	13128	35987	11328	-16.5	-16.6	243357	68106	230454	72693	5.7	-6.3
Bed Wear	M.T	27453	17610	27544	17569	25987	16107	-0.3	-0.2	172988	109193	159075	103475	8.8	5.5
Towels	M.T	13254	6513	14095	6836	13914	6796	-6.0	-4.7	84196	39082	90170	42032	-6.6	-7.0
Cotton Cloth	Th.SQ	121457	15930	127658	17238	198955	19540	-4.9	-7.6	930271	109719	1098591	115252	-15.3	-4.8
Synthetic Fiber	Th.SQ	8244	2141	7944	2002	19139	2561	3.8	6.9	53941	10722	150708	15359	-64.2	-30.2
Knitwear	Th.Do	12557	21339	12805	20989	8206	20463	-1.9	1.7	62926	124885	53879	123572	16.8	1.1
Readymade Garments	Th.Do	2897	22111	2597	19740	2775	20230	11.5	12.0	15615	115219	15373	107945	1.6	6.7

Source: Pakistan Bureau of Statistics, Karachi.

The table above indicates that the exports of raw cotton and its related produce witnessed sluggish trend in December, 2016. The raw cotton exports decreased to 1544 metric tons valuing Rs. 248 million in December, 2016 as compared to 2849 metric tons amounting Rs. 471 million in November, 2016. However, the exports in the corresponding month last year recorded at 1671 metric tons valuing Rs. 266 million. It shows decrease of 45.8 % in quantity and 47.3% in value over November, 2016.

(Value = Rs. In Millions) % change December November December July-December July-December over Nov % Change 2016 Commodities Unit 2016 2015 2016 2016 2015 Qty Val Raw Cotton M.T 13914 2400 10369 1835 80646 15227 34.2 30.8 86058 14814 168904 32464 -49.1 -54.4 Synthetic мт 18861 3105 16366 2894 16484 3803 15.2 116573 22256 128976 27108 -9.6 -179 73 Fiber Synthetic & Artificial M.T 34277 6369 33315 6137 22325 5461 29 163857 32901 140134 32493 169 1.3 38

1626

10357

-12.9

-5.4

9.3

Table-10: IMPORTS OF TEXTILE GROUP COMMODITIES DURING DECEMBER, 2016

Source: Pakistan Bureau of Statistics, Karachi.

32629

M.T

Silk Yarn Worn

Clothing Other Textile

Items

The table above shows that the imports of raw cotton during December, 2016 witnessed rising trend and recorded at 13914 metric tons amounting to Rs. 2400 million as compared to 10369 metric tons valuing Rs. 1835 million in November, 2016. Whereas, the imports in December, 2015 recorded at 80646 metric tons amounting to Rs. 15227 million. It shows an increase of 34.2 % in quantity and 30.8 % in value, over November, 2016.

204427

241677

7940

64836

8107

61862

-15.4

-2.1

4.8

ECONOMICS OF COTTON AND COMPETING CROPS

37488

1262

12425

1334

11363

42702

Cotton a kharif crop, competes with rice, sugarcane and other crops for land, water and other farm resources in the area where the cultivation of all other crops is technically feasible. Mainly cotton faces indirect competition from sugarcane, the annual crop which keeps the land throughout the year. The farmer gives priorities and takes decision on the economics of cotton and competing crops on the basis of inputs-outputs prices paid and received. The estimation of the indicators, like gross cost, gross income, gross margin, net income, input-output ratio, etc may provide the useful sights to the growers at farm level. Details are presented in following table.

		Oreferent Immert		Gross Revenue Pe	r
S.	Previous/ Crops/ Crop Combination	Output Input ratio	Rupee of Purchased inputs cost	Day of Crop Duration	Acre inch of irrigation water used
No.	_	Ratio		Rupees	
	1	2	3	4	5
			PUNJAB		
1.	Seed Cotton	1.03	3.06	239	2602
2.	Basmati Paddy	0.87	1.95	227	704
3.	IRRI Paddy	0.80	1.84	184	533
4.	Cotton + Wheat	1.04	2.98	235	2904
5.	Cotton + Sunflower	1.01	2.75	232	2219
6.	Sugarcane	1.25	3.96	237	1943
			SINDH		
1.	Seed Cotton	1.16	3.71	250	3332
2.	IRRI Paddy	1.18	3.29	249	800
3.	Cotton + Wheat	1.12	3.41	238	3338
4.	Cotton + Sunflower	1.08	3.41	239	2509
5.	Sugarcane	1.28	3.89	232	1597

Table-11: ECONOMICS OF SEED COTTON AND COMPETING CROPS AT PRICES **REALIZED BY THE GROWERS 2015-16 CROP**

Source: API's Cotton Policy Analysis for 2015-16 Crop.

Table-12:EXPORT PARITY PRICE OF SEED COTTON ON THE BASIS OF ACTUAL
AVERAGE EXPORT PRICE OF PAKISTANI COTTON

S. No.	Item	December 2016
01.	Actual average export price per 40 Kgs	6425 (Rupees) or 69.65 (US Cents per Lb)
02.	Marketing expenses (export & purchase incidentals, insurance & financial expenses) per 40 kgs	425
03.	Ex-gin price of lint per 40 kgs (item 1-item 2)	6000
04.	Value of 80 Kgs of cotton seed (b)	3182
05.	Ginning charges for 120 Kgs of seed cotton	600
06.	Value of 120 Kgs of seed cotton (c) (item 3+4-item 5)	8582
07.	Seed cotton price per 40 Kgs (item 6/3)	2861

Notes:

- a) One US = 104.61 Pak rupees.
- b) Average price of cotton seed for December, 2016 in Rahim yar khan market was Rs. 1591 per 40 Kg.
- c) 120 Kg of seed cotton = 80 kg of cotton seed + 40 Kg of lint.

Sources:

- 1. PBS for export prices.
- 2. KCA, Karachi for marketing expenses.
- 3. Pakistan Cotton Ginners Association, Karachi for ginning charges.
- 4. Directorate of Agriculture (E&M), Punjab, Lahore.
- 5. API's Cotton Policy Analysis for 2015-16 Crop.

Table-13: IMPORT PARITY PRICE OF SEED COTTON ON THE BASIS OF ACTUAL AVERAGE CIF (KARCHI) PRICE OF IMPORTED COTTON

Sr. No.	Item	December 2016
01.	Actual average cif (Karachi) Price, per 40 kgs	Rs.6900 (Rupees) or 74.80 (US Cent per Lb)
02.	Handling charges at port and transport cost from port to textile mill at Karachi @ 5% of cif price	425
03.	Ex-gin price of cotton lint (item 1+ item 2)	7325
04.	Value of 80 Kgs of cotton seed (a)	3182
05.	Ginning charges for 120 Kgs of seed cotton including ginning losses	600
06.	Value of 120 Kgs of seed cotton (item 3 + item 4 – item 5)	9907
07.	Seed cotton price (item 6/3)	3302

Note:

- a) Average price of cotton seed for December, 2016 in Rahim Yar Khan market was Rs. 1591 per 40 Kg.
- b) 120 kg of seed cotton = 80 kg of cotton seed + 40 kg of lint.

Sources:

- 1. PBS, for cif (Karachi price).
- 2. KCA, for incidental charges.
- 3. Pakistan Cotton Ginners Association, Karachi for ginning charges.
- 4. Directorate of Agriculture (E&M), Punjab, Lahore.
- 5. API's Cotton Policy Analysis for 2015-16 Crop.

REGIONAL COTTON SITUATION

1. <u>CHINA</u>

The cotton area in China declined for fifth consecutive season, reaching 2.8 million hectares in 2016-17, due to high production cost and better return from competing crops. Similarly, cotton production also decreased by 0.2 percent to 4.74 million tons in 2016-17, as compared to 4.75 million tons in 2015-16, despite the 7.2 percent gain in average yield at 1665 kg/hectare in 2016-17 as against 1553 kg/hectare recorded in 2015-16.

Although China consumption is forecast to remain stable at 7.59 million tons in 2016-17, as against 4.75 million tons in 2015-16 showing an increase of 2 percent. China will continue to be the world's largest consumer of cotton. Total imports in China during 2016-17 projected at 0.98 million tons as against 0.96 million tons recorded in 2015-16 showing an increase of 2 percent.

Table-14:	CHINA S	UPPLY AND	DEMAND P	OSITION	(M	lillion Metric Tons)
Heads	2011-12	2012-13 Est.	2013-14 Est.	2014-15 Proj.	2015-16 Proj.	2016-17 Proj.
Beginning Stock	2.09	6.18	9.61	12.11	12.92	11.16
Production	7.40	7.30	6.95	6.50	4.75	4.74
Consumption	8.63	8.29	7.52	7.48	7.44	7.59
Import	5.34	4.43	3.07	1.80	0.96	0.98
Ending Stock	6.18	9.61	12.11	12.92	11.16	9.27

Source: Cotton this Month 1st February, 2017.

2. <u>INDIA</u>

In 2016-17 cotton area in India, the largest cotton producing country, fell by 12 percent to 10.5 million hectare in 2016-17 as compared to 11.9 million hectares in 2015-16, due to competition from food crops. However, the average yield recovered by 16 percent to 560 kg/ha due to favorable monsoon conditions then the two previous seasons. As a result production in 2016-17 is estimated to rise by 2 percent to 6 million tons, as compared to 5.7 million tons during last season. Whereas, mil use in India is projected to decline by 01 percent to 5.1 million tons due to firm domestic cotton prices making cotton less attractive to spinners.

3. INTERNATIONAL COTTON SITUATION 2016-17

The world cotton area in 2016-17 declined by 3.6 percent to 29.2 million hectare, as compared to 30.3 million hectare in 2015-16, which is the lowest area under cotton since 2009-10. While average yield is projected to decline by 12 percent to 764 Kg/ha as compared to 781 kg/ha recorded in 2015-16. As a result, world cotton production is predicted to increase by 8.0 percent to 22.8 million tons in 2016-17 as compared to 21 million recorded in 2015-16. India is still the world's largest cotton producing country, followed by China, U.S.A and Pakistan.

World cotton consumption is expected to remain stable at 24.1 million tons in 2016-17 as high price discouraged growth in demand. The world imports in 2016-17 are projected to increase by 1.01 percent at 7.76 million tons as against 7.5 million tons in 2015-16. Similarly, world cotton export showed a slight increase of 2.6 percent at 7.7 million metric tons as compared to 7.5 million tons recorded in 2015-16. The world cotton ending stocks are projected to decline by 6.4 percent to 18.02 million tons in 2016-17 as compared to 19.2 million tons registered in 2015-16.

Cotton Review (Vol. 49 No. 04) Directorate of Marketing & Economic Research, Multan.

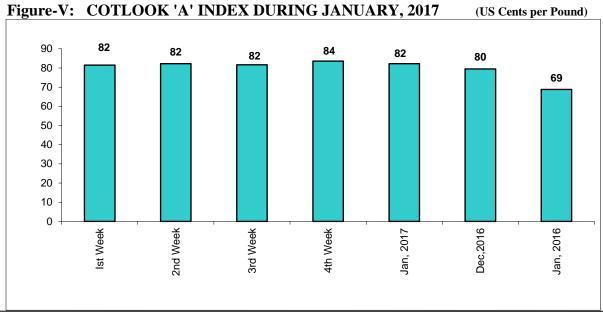
Table-15:	WORLD	COTTON BA	LANCE SHI	EET	(Mill	ion Metric Tons)
Heads	2012-13 Estimated	2013-14 Estimated	2014-15 Projected	2015-16 Projected	2016-17 Projected	% Change in 2016-17 over 2015-16
Beginning stock	15.36	18.51	20.60	22.32	19.25	-13.75
Production	26.78	26.17	26.20	21.07	22.85	8.45
Consumption	23.78	24.00	24.44	24.13	24.08	-0.02
Exports	10.06	9.00	7.80	7.55	7.76	2.78
Imports	10.20	8.93	7.78	7.54	7.76	2.92
Ending Stock	18.50	20.60	22.32	19.25	18.02	-6.39

Source: Cotton this Month 1st February, 2017.

Table -16: COTTON PRODUCTION AND CONSUMPTION IN MAJOR COTTON GROWING COUNTRIES DURING LAST 5 YEARS (Million Tons)

GROWIN	IG COUNTRIES	DUKING LA	IST STEAK	•	(Million Tons)
Countries	2012-13	2013-14	2014-15	2015-16	2016-17
	Estimated	Estimated	Estimated	Projected	Projected
		PRODUCTION	N		
India	6.29	6.76	6.56	5.75	5.88
China	7.30	6.95	6.50	4.75	4.74
USA	3.77	2.81	3.55	2.81	3.69
Pakistan	2.00	2.07	2.30	1.51	1.77
Brazil	1.31	1.73	1.56	1.29	1.42
Uzbekistan	1.00	0.91	0.88	0.83	0.77
Others	5.11	4.92	4.83	4.13	4.58
World Total	26.78	26.17	26.20	21.07	22.85
		CONSUMPTIO	N	11	
China	8.29	7.52	7.48	7.44	7.59
India	4.73	5.06	5.26	5.24	5.09
Pakistan	2.22	2.47	2.49	2.26	2.27
Europe & Turkey	1.56	1.61	1.69	1.69	1.63
Vietnam	0.49	0.67	0.87	1.01	1.14
Bangladesh	1.02	1.15	1.20	1.32	1.40
USA	0.76	0.77	0.78	0.75	0.72
Brazil	0.91	0.86	0.80	0.73	0.70
Others	3.79	3.89	3.87	3.69	3.55
World Total	23.78	24.00	24.44	24.13	24.08

Source: Cotton this Month, 1st Febuary, 2017.



Source: Cotton Outlook.

The graph above shows that 'A' index prices during January 2017, enhanced to 82 cents per pound as compared to 80 cents per pound recorded in December, 2016. However, the prices in January, 2016 were recorded lower at 69 cents per pound. The available Cotlook 'A' index in 2016-17 as compared to 2015-16 are given in the table below:-

Table-17: MONTHLY AVERAGE PRICES OF "A" INDEX DURING 2016-17 & 2015-16

		(US Cents Per Pound)
Month/Season	2016-2017	2015-2016
August	80.39	71.79
September	77.80	68.95
October	78.46	68.93
November	78.71	69.21
December	79.51	70.52
January	82.2	68.81
February	-	66.55
March	-	65.38
April	-	69.17
May	-	70.27
June	-	74.01
July	-	80.72
Average	79.51	70.36

Source: Cotton Outlook.

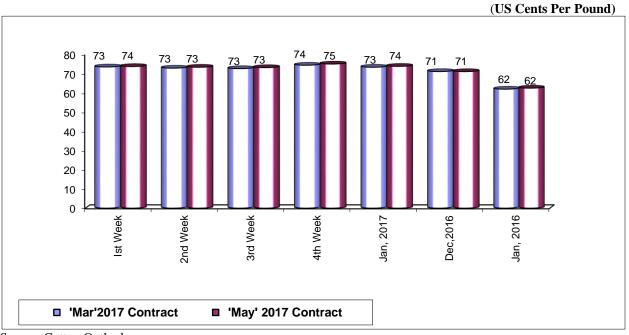


Figure-VI: NEW YORK COTTON FUTURES VALUES DURING JANUARY, 2017

Source: Cotton Outlook

The graph above indicates that the nearby March and May, 2017 contract during January, 2017 remained slightly increased at 73 cents per pound as compared to 71 cents in previous month. However, the price of same contract in the corresponding month of last year recorded lower at 61.89 cents per pound.

DESCRIPTION OF RATING OF DIFFERENT FIBER CHARACTERISTICS

i) Fiber Length

Description	Rating			
Short Staple	20.32	0.80"	-0.99"	25.15
Medium Staple	25.40	1.00"	-1.10"	27.94
Long Staple	28.19	1.11"	-1.26"	32.00
Extra Long	Above 1.27"		32.26	

II) Uniformity Ratio/Uniformity Index.

Desc	ription	Rating
Uniformity Ratio	Uniformity Ratio	
42.0% or Below	77 or below	Very Low
42.0 - 43.0	78-79	Low
44.0 - 45.0	80-82	Average
46.0 -47.0	83—85	High
Above 47.0	Above 85	Very high

iii) Micronaire Value

Description	Rating
Below 3.0	very fine
3.0 - 3.9	Fine
4.0 - 4.9	Average
5.0 - 5.9	Coarse
Above 6.0	Very coarse

iv) Maturity Ratio

Description	Rating
1.0 and above	Very mature
1.0 -0.95	Above average
0.94 - 0.85	Mature
0.84 - 0.80	Below average
0.79 - 0.70	Immature

v) Flat Bundle Strength 000 Ibs PSI

Description	Rating
Less than 76	Very Low
77 - 83	Low
84 - 90	Average
91 - 97	High
Above 97	Very High

vi) Fiber Strength (G/Tex)

	Description	Doting
ICC mode	HVI mode	Rating
Less than 16	Less than 21	Low
17 -19	22 - 24	Low

20 - 22	25 - 27	Average
23 - 25	28 - 30	High
Above 25	Above 30	High

vii) Short Fiber Content

Description	Rating
Below 6	Very Low
6 - 9	Very Low
10 - 13	Low
14 - 17	High
Above 17	Very High

viii) Rd%

Description	Rating	
80 and above	Very High	
75 - 79	High	
70 - 74	Average	
64 -96	Low	
Below 63	Very Low	

ix) +**B**

Description	Rating	
	Very Low	
6 and below		
	Low	
6 - 8		
	Average	
8 - 10		
	High	
10 - 12		
	Very high	
Above 13		

x) Moisture

Description	Rating		
below 4.5	very low		
4.5 to 6.5	low		
6.5 -8.0	Medium		
8.0 - 10.0	High		
10.0 and Higher	Very high		

WEIGHTS AND MEASURES

Kilogram	=	2.2046 Pounds = 1.0717 Seers
Pounds	=	453.5924 Grams = 0.4536 Kilogram
Maund	=	82.2858 Pounds = 37.3242 Kilograms = 0.0373 Metric Ton
Metric Ton	=	2204.6229 Pounds= 26.7923 Maunds = 1000 Kilograms
Kantar	=	50 Kilograms = 110.2334 Pounds = 1.3396 Maunds
Quintal	=	1.9684 Cwt. = 2.6792 Maunds = 100 Kilograms
Hundred weight (CWT)	=	112 Pounds = 50.8029 Kilograms
Yard	=	0.9144 Meter
Square Yard	=	0.8361 Square Meter
Meter	=	3.2808 Feet = 1.0936 Yards
Square Meter	=	1.19603 Square Yards
Acre	Ш	4840 Square Yards = 0.4047 Hec. = 4046.7240 Sq. Meter
Hectare	=	2.4710 Acre = 11959.6400 Sq. Yards = 999.4550 Sq. Meter
Bale of Raw Cotton	=	375 Pounds = 170 Kilograms = 0.170 Metric Ton
Bale of Cotton Yarn	II	400 Pounds=181.4388 Kilograms=0.1814388 Metric Ton
Bale of Cotton Cloth	=	1500 Sq. Yards = 1254.1500 Sq. Meter
Lbs/Acre.	=	0.8922 X (Kgs. /Hectare)
Kgs/Hectare	=	1.1208 X (Lbs/Acre) = 92.2281 X (Mds. /acre)

Cotton Review (Vol. 49 No. 04) Directorate of Marketing & Economic Research, Multan.

Maund/Acre	=	0.01084268 X (Kgs. /Hectare)
------------	---	------------------------------