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Report for week beginning 23 Jun 2017

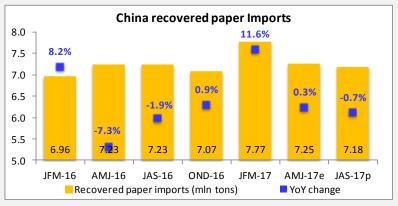
Indian Paper and Paperboards Price Outlook Summary						
22 Jun 2017	Kraft Paper Ruby Macons 22 BF 150 GSM INR per ton	Kraft Paper Aryan Paper mills 22 BF 150 GSM, INR per ton	Kraft Paper Devpriya paper products 22 BF 180 GSM, INR per ton	Kraft Paper Ruchira Papers 22 BF 150 GSM, INR per ton	Gayatri Shakti, Grey back Duplex board, 260 GSM, INR per ton	
Closing Prices	35,200	34,800	32,100	34,600	44,600	
Change since 09 Jun'17	0	0	0	0	0	
	Critical Price	drivers		Price Direction		
Fundamental	Stable Chinese	N	Mixed			
Summary	Strong deman	arter U	Upward			
	Complaint file	wners D	ownward			
	Decline in inp	ut costs for pape	r production afto	er GST D	ownward	
Price Outlook	Kraft paper W (Recycled pap		•	Kraft paper North India (Bagasse based)		
Summary	Prices are expected to witness weaken initially before moving higher in the next 2-3 months			before moving hi	o witness weaken g higher in the next	
	Jul'17	Aug-Sep '1	7 Jul'17	А	ug-Sep '17	
Direction	Downward	Upward	Downw	vard U	pward	
Price Revision +/-	-1000	+2500	-1000	+	2500	

Discoulari	Duplex Board We	st India	Duplex board North India		
Price Outlook Summary	weaken initially before moving		Prices are expected to witness weaken initially before moving higher in the next 2-3 months		
	Jul'17	Aug-Sep '17	Jul'17	Aug-Sep '17	
Direction	Downward	Upward	Downward	Upward	
Price Revision +/-	-1000	+2000	-1000	+2000	

Fundamental Analysis: Global

- ✓ International recovered paper prices were quoted in the range of USD 270 250 per ton for June, almost in the same range as in the previous month, amid steady buying from China.
- ✓ Meanwhile, pulp prices also remained steady for June after the consecutive rise in the past three months. Decline in supplies during spring season maintenance in May and June in US and EU had led to producers increasing in hardwood and softwood pulp prices in the previous months.
- ✓ China recovered paper imports in the during Jan May 2017 period are estimated to have

increased by 6% to 12.51 million tons compared to 11.80 million tons during the same period last year majorly due to the restocking activity during first quarter of 2017. Strong growth in Chinese imports led to OCC prices increasing sharply during the first three months of year. However, imports have come down in the past two months after



the restocking activity and decline in demand. During April recovered paper imports of China declined by 27% compared to March, resulting in prices correction.

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- ✓ Going ahead, total imports in the third quarter are expected to stand at 7.18 million tons, 1% lower than second quarter of 2017 and about 0.7% lower than 7.23 million tons imports during same quarter last year despite the seasonal higher period owing to higher stock levels.
- ✓ US recovered paper exports during the five months of 2017 have declined by 4.4% to 7.98 million tons compared to 8.35 million tons during same period last year due to lower availability in the market during winter season and China's crackdown on recycled imports starting from mid-February.
- ✓ Supply tightness in the market due to lower availability of the recycled paper also contributed to the sharp rise in prices. However, US recovered paper imports are seen increasing in May by 6.8% YoY to 1.83 million tons amid higher availability and increased orders from China.
- ✓ Going ahead, lower Chinese imports and higher availability of recovered paper from US and Europe due to higher recovery rates during the summer season is expected to keep prices on stable trend in the medium term.
- ✓ Global pulp deliveries in May'17 have increased by 7.5% to 4.11 million tons from 3.82 million tons during April, but remained marginally lower than 4.12 million tons during same month last year. Further, total stock levels of pulp deliveries have remained steady at 33 days of supply in May'17 amid higher demand from EU.
- ✓ Going ahead, seasonal higher demand season in EU region during second half of the month and steady demand expected from China is likely to keep pulp shipments higher in coming months.

Fundamental Analysis and Market Intelligence: India

✓ Paper and paperboard prices have remained unchanged during June both in Western and Northern region despite weak demand and buyers pressure to lower prices after steep hike in first four months of 2017, due to kraft and duplex mill owners lowering the production to keep supplies tight in the market. Earlier, kraft paper prices have been lowered by INR 1000 per ton in May due to weak demand in the market.

- ✓ Further, market sources have indicated that buying activity has been quite sluggish during June due to seasonal lower demand and uncertainty in the market ahead of GST implementation regarding the tax filing on remaining stocks.
- ✓ At the raw material front, domestic recovered paper prices remained flat at INR 14000 per ton in June tracking the mixed trend in international recovered paper prices.
- ✓ Also, sugar bagasse prices have also remained unchanged with one dry ton being quoted at INR 5600 amid lack of quality material availability in the market as the crushing season has come to end. Due to the most of procurement done during the first quarter demand for bagasse is also known to have declined in the market resulting in prices being adjusted lower.
- ✓ Corrugators association FCBM have filed a complaint against kraft paper mills in the Competition Commission of India for sharply increasing prices and cartelization to cut production in order to force the prices. Legal pressure on kraft paper mills may force the downside revisions in the coming month.
- ✓ In the current quarter, seasonally food and beverage sector production is expected to enter low production phase in coming months keeping the demand for the packaging materials limited.
- ✓ Moving forward, however, seasonal higher demand for packaging materials ahead of the festive season along with pent-up demand after the implementation of GST is expected to

consumption higher in the coming quarter.

✓ Overall, kraft paper consumption in JAS 2017 is expected to increase by 9.4% YoY to 1035 thousand

Indian Kraft Paper supply demand balance							
Attribute JAS-16 AMJ-17e JAS-17							
Production	904	943	977				
Imports	43.9	47	50				
Exports	4.90	5	5				
Consumption	946	936	1035				
supply-demand -3 50 -13							
All units are in thousand tons; Source:	TG estimat	es					

tons compared to 946 thousand tons during same period last year and about 10.5% higher from an estimated 936 thousand tons during AMJ 2017.

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Additionally, duplex board consumption is anticipated to increase by 8.9% YoY to 794 thousand tons compared to 729 thousand tons during JAS 2016, and about 11.9%

Indian Duplex Board supply demand balance							
Attribute	Attribute JAS-16 AMJ-17e JAS-17p						
Production	687	708	733				
Imports	39.95	46	48				
Exports	0	0	0				
Consumption	729	709	794				
supply-demand	-2	45	-12				
All units are in thousand tons; Source: TG estimates							

- compared to 709 thousand tons during the previous quarter. Higher consumption in the coming months is likely to remain supportive for prices in the medium term.
- ✓ India's recovered paper imports in May are estimated to have increased by 8.6% YoY to 0.23 million tons and about 23.3% MoM owing to restocking activity after depletion during first quarter in amid increase in prices and higher demand for waste paper.
- ✓ Further, kraft and duplex manufacturers preparing to store material for stronger demand period ahead of the festive season is also expected to result in increase of recovered paper material. However, due to the adverse impact of monsoon on recovered paper quality imports growth is expected to be limited until July.

Procurement Strategy: Kraft paper West India

Kraft paper West India (Recycled paper based) Procurement Strategy for spot month*					
	Pricing Wi	ndow		Already Priced	
Open Position 01	Start	End	Avg Till Date	Weighted Average Price	Quantity
					0%
		30 Jun 2017	35,200	Yet to be Priced (Remaining	quantity)
	-0-1	2017		Price at current levels	100%

Strategy Review	May'17 was covered at a	May'17 was covered at an average price of INR 30,700.			
Medium term strategy	Expected reduction in prices during Jun-Jul'17 should be utilized to lock-in medium term buying requirements up to Nov'17				
Closed Positions Audit	Market	Period	Procurement savings % (Bettering the market average)		
	Kraft paper West India	2003 to Till Date	1.03%		
	(Recycled paper based) INR/MT	May 2017	15.19%		

^{*} Please contact Engagement manager for forward / long term buying strategies

Procurement Strategy: Kraft paper North India

Kraft paper North India (Bagasse based) Procurement Strategy for spot month*						
	Pricing Window			Already Priced		
	Start	End	Avg Till Date	Weighted Average Price	Quantity	
Open Position					0%	
		30 Jun 2017	34,600	Yet to be Priced (Remaining qu	uantity)	
		2017		Price at current levels	100%	
Strategy Review	May'17 wa	s covered at	an average price	e of INR 29,600.		
Medium term Strategy	•		prices during equirements up t	Jun-Jul'17 should be utilized on Nov'17	to lock-in	
Closed Positions	Market Pe		Period	Procurement savir (Bettering the market	_	
Audit	Kraft paper	North	2003 to Till D	ate	1.05%	
	India (Bagasse based)		JFM 2017		15.24%	

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INR/MT

* Please contact Engagement manager for forward / long term buying strategies

Procurement Strategy Duplex Board North India

Duplex Board North India Procurement Strategy for spot month*					
	Pricing Wi	ndow		Already Priced	
	Start	End	Avg Till Date	Weighted Average Price Quantity	
Open Position				0%	
	01 Jun 2017	30 Jun 2017		Yet to be Priced (Remaining quantity)	
	201,			Price at current levels 100%	
Strategy Review	May'17 wa	s covered at	an average price	e of INR 39600	
Medium term Strategy	•		prices during equirements up t	Jun-Jul'17 should be utilized to lock-in to Nov'17	
Marke Closed Positions		Market P		Procurement savings % (Bettering the market average)	
Audit	Duplex Boa	ard West	2003 to Till D	rate NA	
	India INR/I	MT	JFM 2017	13.45%	
*0					

^{*} Please contact Engagement manager for forward / long term buying strategies

Procurement Strategy: Duplex board West India

ı	Duplex board West India Procurement Strategy for spot month*				
Open Position	pen Position Pricing Window Already Priced				

	Start	End	Avg Till Date	Weighted Average Price	Quantity
		24 St N.4		0%	
	01 May 2017	31 st May 2017	44600	Yet to be Priced (Remaining	quantity)
				Price at current levels	100%
Strategy Review	May'17 was covered at an average price of INR 39,600.				
Medium term strategy	•	Expected reduction in prices during Jun-Jul'17 should be utilized to lock-medium term buying requirements up to Nov'17			
Closed Positions			Period	Procurement sav (Bettering the marke	_
Audit	Duplex board North		2003 to Till D	ate	NA
	India INR/N	ИΤ	May 2017		13.95%

^{*} Please contact Engagement manager for forward / long term buying strategies

Indicative Cost Structure

150 GSM 22 BF Kraft paper (waste paper based)						
	Requirement per ton paper	Unit cost INR/MT	Total cost INR/MT	Change from previous month		
Raw material (Tons)	1.15	20896	24030	0		
Chemicals (tons)	0.092	25743	2368	0		
Power (KWH)	425	4.05	1721	0		
Steam (Tons)	3.25	351	1141	0		
Water (Cubic meters)	30	10.00	300	0		
Process loss @ 10%			2956	0		

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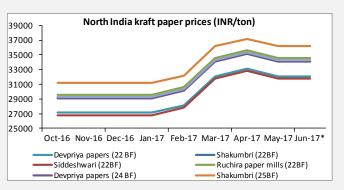


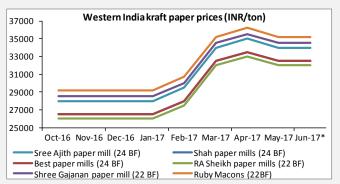
Total cost of production (INR/ton) 32517

140 GSM 25 BF Kraft paper (waste paper based)						
	Requirement per ton paper	Unit cost INR/MT	Total cost INR/MT	Change from previous month		
Raw material (Tons)	1.18	20896	24657	0		
Chemicals (tons)	0.0944	25743	2430	0		
Power (KWH)	425	4.05	1721	0		
Steam (Tons)	3.25	351	1141	0		
Water (Cubic meters)	30	10.00	300	0		
Process loss @ 10%			3025	0		
Total cost of production (INR/ton)			33274	0		

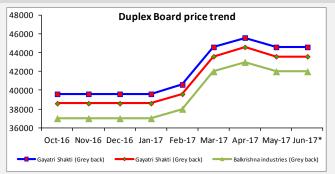
Mini Charts

North India Kraft Paper Price Trend INR/MT Western India Kraft Paper Price Trend INR/MT

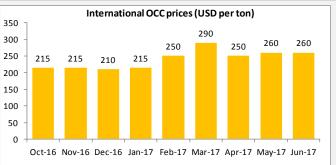




Duplex Board Price Trend INR/MT



International OCC Price Trend USD/MT



Market Prices

Market	Commodity	Jun 2017	May 2017	Change	Change %
Delhi Chemical market	Alum, INR per ton*	13000	13000	0	0.00%
Mumbai Chemical market	Rosin, INR per Kg*	102	102	0	0.00%
Mumbai Chemical market	Caustic Soda, INR per Kg*	49.20	44.25	4.95	11.2%
Delhi Chemical market	Caustic Soda, INR per Kg*	52	46.88	6.62	14.1%
Mumbai	Indian Waste paper, INR per ton	14000	14000	0	0.00%
Uttar Pradesh	Bagasse based pulp, INR per ton	5600	5600	0	0.00%
-	International OCC, USD per ton	260	260	0	0.00%
* indicates May 2017 prices					

Bi-Weekly Paper and Paperboards Market Intelligence Decision enabling cash market analysis & price outlook





Jun May Change Change Market Commodity 2017* 2017 Century pulp and Agro based Kraft paper GSM 140 NA NA paper mills BF 24 Devpriya Paper 34100 34100 0% 0 **Products** RCF Kraft paper GSM 220 BF 24 Devpriya Paper 32100 32100 0% 0 RCF Kraft paper GSM 180 BF 22 **Products** Devpriya Paper NA NA **Products** RCF Kraft paper GSM 140 BF 25 Mixed (RCF and Agro) Kraft NA NA paper GSM 150 BF 24 Genus paper products **Ruchira Papers** RCF Kraft paper GSM 150 BF 22 33600 33600 0 0% **Ruchira Papers** RCF Kraft paper GSM 150 BF 24 NA NA **Ruchira Papers** RCF Kraft paper GSM 140 BF 25 NA NA Shakumbri Paper Agro based Kraft paper GSM 150 34200 34200 0% 0 **Products** BF 22 Shakumbri Paper Agro based Kraft paper GSM 120 36200 36200 0 0% **Products** BF 25 Agro based Kraft paper GSM 150 31800 31800 0% 0 Siddeshwari industries BF 22 Agro based Kraft paper GSM 220 34300 34300 0 0% Siddeshwari industries BF 24 The south India paper NA NA mills RCF Kraft paper Mixed (RCF, Wood) Kraft paper NA NA The West coast paper

mills					
Aryan Paper Mills	RCF Kraft paper GSM 150 BF 22	34800	34800	0	0%
Astron paper and board mills	RCF Kraft paper GSM NA BF 28	NA	NA	NA	NA
Laxmi board and paper mills	RCF Kraft paper GSM 150 BF 24	NA	NA	NA	NA
Malu paper mills	RCF Kraft paper GSM 180 BF 22	32800	32800	0	0%
Malu paper mills	RCF Kraft paper GSM 180 BF 18	NA	NA	NA	NA
Ruby Macons	RCF Kraft paper GSM 150 BF 22	35200	35200	0	0%
Ruby Macons	RCF Kraft paper GSM 220 BF 24	37200	37200	0	0%
Shree Ajith Paper mills	RCF Kraft paper GSM 150 BF 24	34000	34000	0	0%
Shree Ajith Paper mills (High RCT)	RCF Kraft paper GSM 150 BF 24	37000	37000	0	0%
Shree Gajannan paper and boards	RCF Kraft paper GSM 150 BF 22	34500	34500	0	0%
Shree Gajannan paper and boards (High RCT)	RCF Kraft paper GSM 150 BF 22	36000	36000	0	0%
Shah paper mills	RCF Kraft paper GSM 150 BF 24	32500	32500	0	0%
Shah paper mills (High RCT)	RCF Kraft paper GSM 150 BF 24	34000	34000	0	0%
Best paper mills	RCF Kraft paper GSM 150 BF 24	32500	32500	0	0%
Best paper mills (High RCT)	RCF Kraft paper GSM 150 BF 24	34000	34000	0	0%
RA sheikh paper mills	RCF Kraft paper GSM 150 BF 22	32000	32000	0	0%
RA sheikh paper mills (High RCT)	RCF Kraft paper GSM 150 BF 22	34000	34000	0	0%

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Kwalita Danas willa	DCE K-eft CCM 120 DE 10	20500	20500	0	00/
Kwality Paper mills	RCF Kraft paper GSM 120 BF 18	29500	29500	0	0%
Market	Commodity	Jun 2017*	May 2017	Change	Change %
Gayatri Shakti	Grey back duplex board, 260 GSM	44600	44600	0	0%
Gayatri Shakti	Grey back duplex board, 300 GSM	43600	43600	0	0%
Gayatri Shakti	coated white back , 260 GSM	48000	48000	0	0%
Gayatri Shakti	coated white back , 300 GSM	45500	45500	0	0%
Deevya Shakti	HWC duplex board, 250 GSM	43050	43050	0	0%
Deevya Shakti	HWC duplex board, 320 GSM	40970	40970	0	0%
Three M papers	HWC white back, 250 GSM	45250	45250	0	0%
Three M papers	HWC white back, 300 GSM	42750	42750	0	0%
Balkrishna industries	Grey back DB 300 GSM	41500	41500	0	0%
Balkrishna industries	White back DB 285 GSM	44500	44500	0	0%
Khanna papers	deluxe duplex board (LWC) 300 GSM	NA	NA	NA	NA
* indicates current market prices					

Our Extensive coverage of Packaging Products				
Report	Coverage #	Price Outlook & Strategies		
Bi-Weekly Paper and Paperboards Market Intelligence	NU, FA, PO, PS, FF, MP, 1M, 2M	North India, West India		
Quarterly Paper and Paperboards special report	FA, BS, PO, FF, MP, 2M, 4M			
Bi-Weekly Indian Polymers price outlook and strategy	NU, FA, TA, PO, PS, FF, MP, 2W, 1M	HDPE, LDPE, LLDPE, PP, PET, India –RIL, Crude Oil, Naphtha, Ethylene, Propylene, PTA, MEG		

Bi-Weekly International Polymers price outlook and strategy	NU, FA, TA, PO, PS, FF, MP, 2W, 1M	Crude Oil, Naphtha, Ethylene, Propylene, PTA, MEG, ASIA (SOUTH KOREA): HDPE, LDPE, LLDPE, PP, PET; MIDDLE EAST (SAUDI ARABIA): HDPE, LDPE, LLDPE, PP; EUROPE (GERMANY): HDPE, LDPE, LLDPE, PP, PET
Quarterly Polymers special report	FA, BS, PO, FF, MP, 2M, 4M, 6M	
Quarterly Laminates special report	FA, BS, PO, FF, MP, 2M, 4M, 6M	

News Update NU, Fundamental Analysis FA, Balance Sheets BS, Weather Analysis WA, Policy Impact PI, Technical Analysis TA, Trading Strategies TS, Procurement Strategies PS, Price Outlook PO, Market Intelligence MI, Facts & Figures FF, Market Prices MP, Price Spreads PS, Forward Curves FC, Elliott Wave Analysis EWA, 5D, 2W, 6W, 2M, 4-6M

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