

# JK Paper

Leader in a turnaround sector

## Sources used:

Sunidhi Research report “Paper sector; coming out of woods” dated 11<sup>th</sup> December 2017

JK Paper IC dated 20<sup>th</sup> December, 2017 by Dalmia Securities

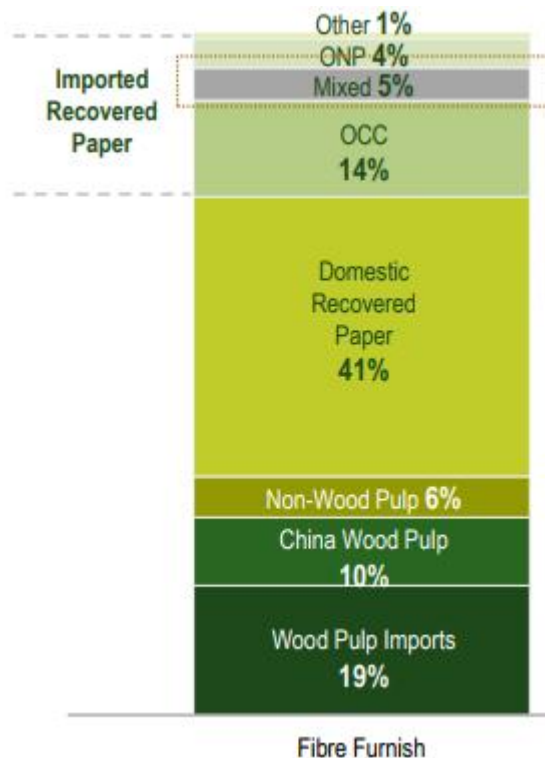
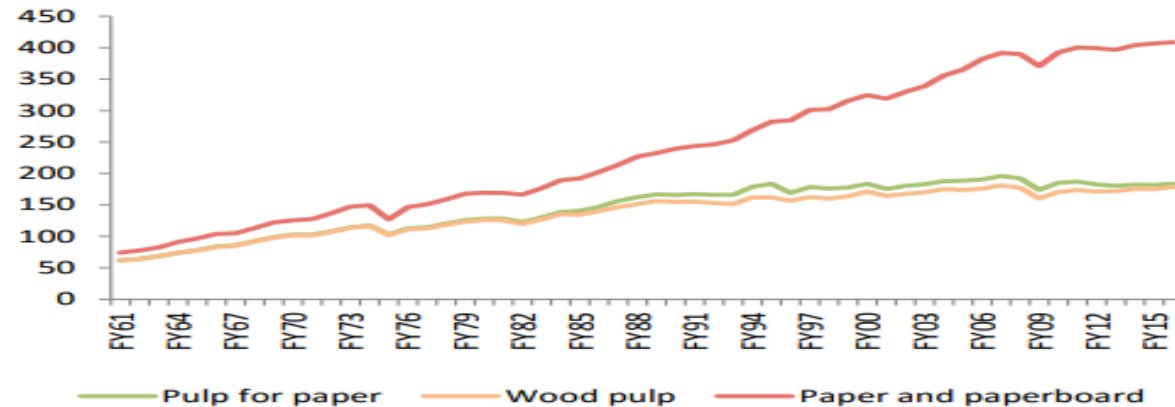
Latest Investor presentation from Ence (Spain), global leading supplier of wood pulp

# Industry overview – Global

*With increased demand and reduced supply wood pulp to remain at higher levels*

# China (largest importer of waste paper) to ban imports of recovered paper will support pulp prices

- Two major raw materials for making paper
  - Wood pulp
  - Recovered paper
- Historically majority of paper production has come from recovered paper as production of wood pulp remained stagnant



Virgin pulp demand growth in China underpinned by increasing environmental standards:

- Ban of mixed recovered paper (MRP) imports in China from 2018
- Ongoing substitution of old paper mills based on recovered paper to virgin pulp

Absence of large capacity additions indicates high pulp prices for coming years

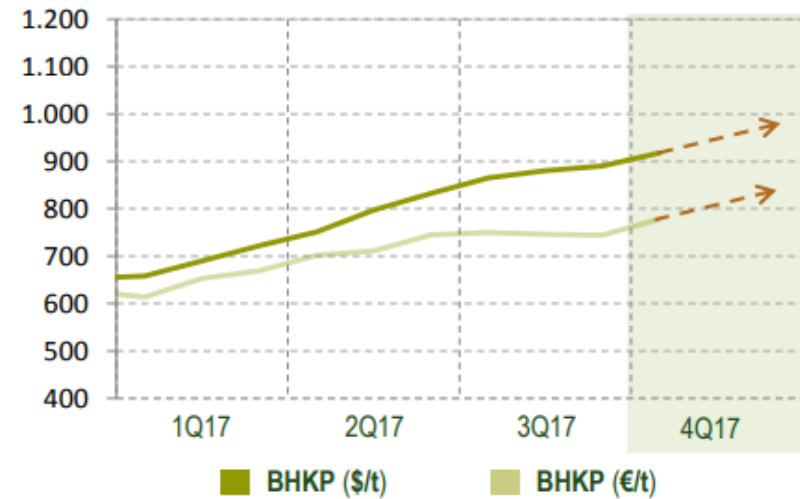
- APRIL halts operations at Kerinci mill having capacity of 2.8 million tonnes/yr
  - Gov. of Indonesia cancels it's plantation concessions
- Chile: 70,000 hectares of forest planation affected by fires
- Chile meets 10% of Chinese wood pulp demand

# Hardwood pulp prices to jump as market will be in deficit in coming years

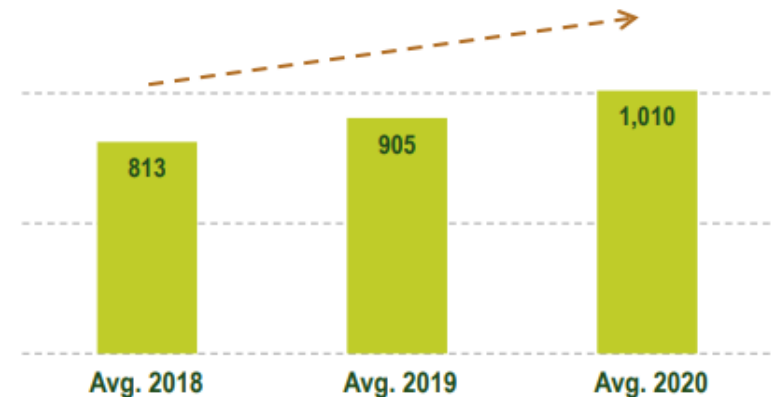
## Hardwood supply/demand balance

Mn t	2017	2018	2019	2020	2017 - 2020
<b>ESTIMATED BHKP DEMAND INCREASE</b>	<b>1,4</b>	<b>1,6</b>	<b>1,4</b>	<b>1,4</b>	<b>5,8</b>
China	1,0	1,1	1,0	1,0	4,1
Other Asia / Africa / Oceania / Middle East	0,2	0,2	0,2	0,2	0,8
Europe	0,0	0,1	0,1	0,1	0,3
North America	0,0	0,1	0,0	0,0	0,1
Latin America	0,1	0,1	0,1	0,1	0,4
<b>ESTIMATED BHKP SUPPLY INCREASE</b>	<b>0,3</b>	<b>1,0</b>	<b>-0,3</b>	<b>-0,5</b>	<b>0,5</b>
APP (OKI)	1,2	0,6	0,2	0,2	2,2
FIBRIA (TRES LAGOAS)	0,5	1,4			1,9
FIBRIA (ARACRUZ)	-0,1	-0,2			-0,3
KLABIN (PUMA)	0,5				0,5
SUZANO (IMPERATRIZ, MUCURI & MARANHAO)	-0,1		0,3		0,2
ENCE (NAVIA & PONTEVEDRA)			0,1	0,1	0,2
METSA (AANEKOSKI)	0,1				0,1
UPM (KYMI)	0,1				0,1
CMPC (GUAIBA)	-0,6	0,6			0
TAIWAN P&P and RFP (Calhoun)	-0,1				-0,1
ARAUCO (VALDIVIA)			-0,1		-0,1
APRIL (RIZHAO)	-1,0	-1,2	-0,6	-0,6	-3,4
APRIL (KERINCI)					
OTHER UNEXPECTED CLOSURES / CONVERSIONS	-0,2	-0,2	-0,2	-0,2	-0,8
<b>SURPLUS / (DEFICIT)</b>	<b>(1,1)</b>	<b>(0,6)</b>	<b>(1,7)</b>	<b>(1,9)</b>	<b>(5,3)</b>

## European hardwood pulp prices



## Hardwood pulp price estimates



Source: RISI estimates (September 2017)

# Industry overview – Indian

*With shortage of wood pulp, prices of P&W paper to increase*

~30% India's wood pulp requirement is met through imports  
and wood pulp is used to make high quality, high end products

Raw material	Wood pulp	Agri waste	Waste paper
Players	<ul style="list-style-type: none"><li>➤ Global companies like Fibria, Ence, APP, April etc.</li></ul>	<ul style="list-style-type: none"><li>➤ Unorganized, mostly from farms near paper mills</li></ul>	<ul style="list-style-type: none"><li>➤ Waste paper traders</li></ul>
Source	<ul style="list-style-type: none"><li>➤ Plantations</li></ul>	<ul style="list-style-type: none"><li>➤ Farms waste</li></ul>	<ul style="list-style-type: none"><li>➤ Rag picking and sorting &amp; grading</li></ul>
Indian scenario	<ul style="list-style-type: none"><li>➤ India is wood pulp deficit country</li><li>➤ <b>~30% of demand met through imports</b></li></ul>	<ul style="list-style-type: none"><li>➤ Locally sourced</li></ul>	<ul style="list-style-type: none"><li>➤ <b>~50% of demand met through imports</b></li></ul>
Availability	<ul style="list-style-type: none"><li>➤ Limited (takes 2 -3 years to set up)</li></ul>	<ul style="list-style-type: none"><li>➤ N/A</li></ul>	<ul style="list-style-type: none"><li>➤ Abundant but polluting</li></ul>
Usage	<ul style="list-style-type: none"><li>➤ Mixed in various proportion</li><li>➤ Finished production quality depends upon the mix proportions</li></ul>		
Quality of finished product	<ul style="list-style-type: none"><li>➤ <b>High quality</b></li><li>➤ <b>High brightness and strength</b></li></ul>		<ul style="list-style-type: none"><li>➤ <b>Low quality</b></li><li>➤ <b>Low brightness and strength</b></li></ul>

# Majority of raw material requirement for P&W segment is met through wood pulp fiber

End products categories	<b>Packaging &amp; paperboard</b> <i>(~47% of domestic industry)</i>	<b>Printing &amp; writing</b> <i>(~31% of domestic industry)</i>
Products	➤ Kraft paper and packaging boards etc.	➤ Un-coated: Copier, mapolith etc. ➤ Coated: Shade cards, wedding cards
Usage	➤ Packaging in food, pharma etc	➤ Office stationary, text-books, A4 sheets
Growth drivers in India	➤ E-commerce, packaged foods ➤ High growth expected	➤ Rising education level ➤ Next 5 year CAGR: 5%
RM source	➤ Waste paper	➤ Mostly wood pulp
RM cost % to sales	➤ 60%	➤ 35%
% of RM imports	➤ 45%	➤ 22%
Capital intensity	➤ Low ➤ ~INR 0.25/ton (1/5 <sup>th</sup> of int. facility )	➤ High ➤ ~INR1.2 lacs/tonne
Competitive intensity	➤ High	➤ Moderate (mostly from imports) ➤ 50% of coated is imported
Benefits due to China ban	➤ <b>Direct due to fall in RM cost</b> ➤ <b>Short-term due to underutilized capacities</b>	➤ <b>Integrated players like JK Paper will benefit due to rise in input costs</b> ➤ <b>Long-term</b>

# Comparison of major players in Indian paper industry

*P&W paper players are best suited to take advantage of present industry scenario*



# Comparison of major W&P players

Company	CMP	Mcap (Cr.)	Net debt (Cr.)	EV (Cr.)	Net debt / Equity	Capacity (t)	FY 17 Sales (t)	% utilization	Realization (Rs/kg)
JK Paper	163	2,853	1,305	4,158	88%	455,000	482,000	106%	62
International paper APPM	347	1,378	142	1,520	29%	241,000	220,900	92%	58
West Coast Paper	316	2,084	332	2,416	46%	320,000	317,951	99%	56

Company	Sales (FY17)	EBITDA (%)	NI (%)	Export revenue	% wood imports	EV/ EBITDA	PE (LTM)	EV/ton (actual)	EV/ton (assessed)	Premium/ (Discount)
JK Paper	2,989	18%	5%	7%	N/A	7.7x	12.5x	91,395	120,000	(24%)
International paper APPM	1,273	13%	2%	16%	0	8.9x	20.4x	63,069	96,667	(35%)
West Coast Paper	1,879	15%	7%	1%	49%	8.4x	11.0x	75,486	120,000	(37%)

Market data as of 6<sup>th</sup> January, 2017

# Comparison of major waste paper converters

Company	CMP (Rs)	Market cap (Cr.)	Net Debt (Cr.)	EV (Cr.)	Capacity (t)	Production (t)
NR Agarwal	474	807	254	1061	306,000	283,483
Ruchira	202	454	53	507	130,000	116,776

Company	Sales	EBITDA margin	NI Margin	EV/ EBITDA	PE (LTM)	EV/tonne (actual)	EV/tonne (assessed)	Prem. /(Discount)
NR Agarwal	1,050	14%	7%	7.4x	9.6x	34,663	25,000	39%
Ruchira	427	13%	8%	9.0x	12.1x	39,005	25,000	56%

Market data as of 6<sup>th</sup> January, 2017

# JK Paper – Most preferred bet

*Leading brand in P&W segment with 24% market share  
Integrated operations keeps raw material costs under control*

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# Leading player in printing & writing (P&W) with strong brand name

## Leading player in printing & writing (P&W) with strong brand name

- JK paper is the market leader in branded copier paper segment and among the top two players in Coated Paper and high-end Packaging Boards
- According to Crisil, demand for P&W is projected to grow at around 4-5% CAGR in the next five years
- Consumption of P&W paper is closely linked to population growth, literacy levels, increase in office printing and private and public spending on education

Copier Paper (Market Leader –Current Mkt. Share is 24% \*)



Packaging Board (Amongst top Two  
Current Mkt. Share is 14% \*)



Coated Paper ( Amongst top Two –  
Current Mkt. Share is 12% \*)

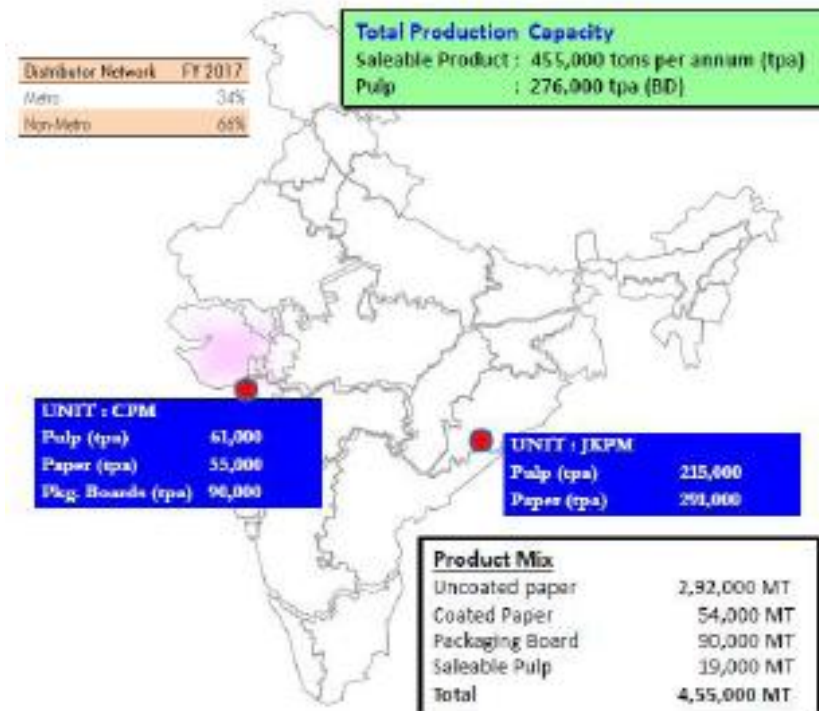


# Integrated production facilities with captive raw material and power sourcing

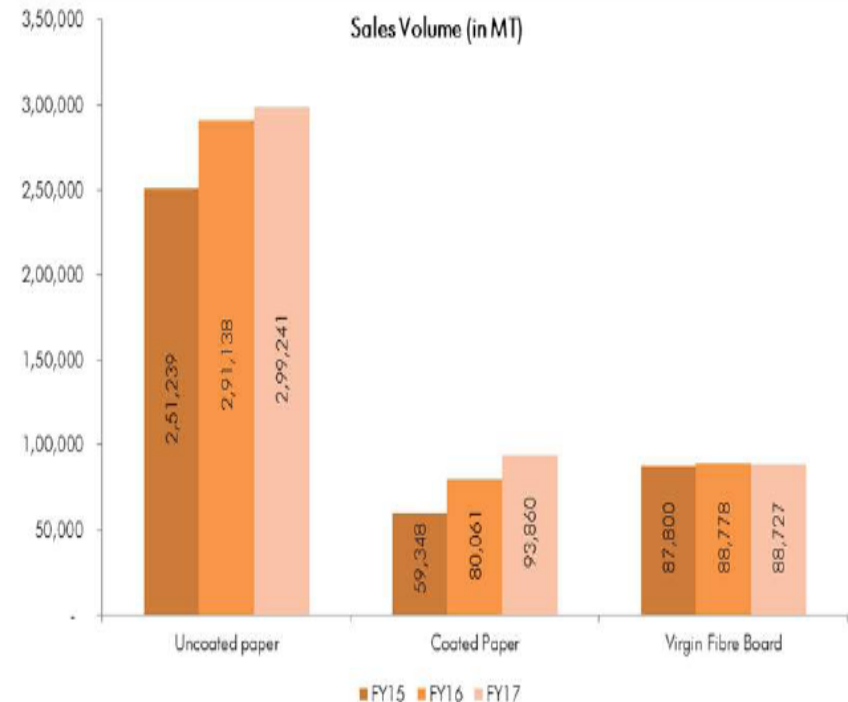
## Integrated production facilities with captive raw material and power sourcing

- JK Paper enjoys operating efficiencies because of its integrated production capacities
  - Significant portion of woodpulp (pulp capacity of 276,000 TPA) and power requirements (major cost components) are met through captive production
- For long term continuous source of raw material (~52% of total raw material consumption) the company is running social forestry

### Plant Location



### Sales Volume (in MT)

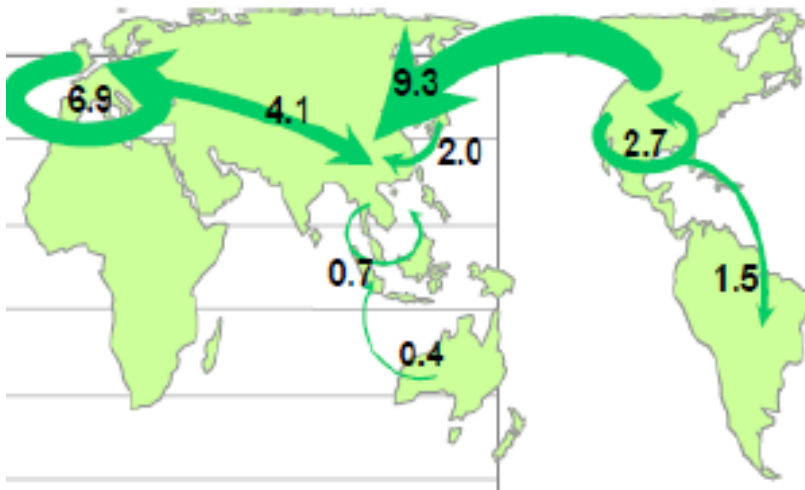


# Ban of mixed waste paper in China is structural and will lead to rise in paper prices

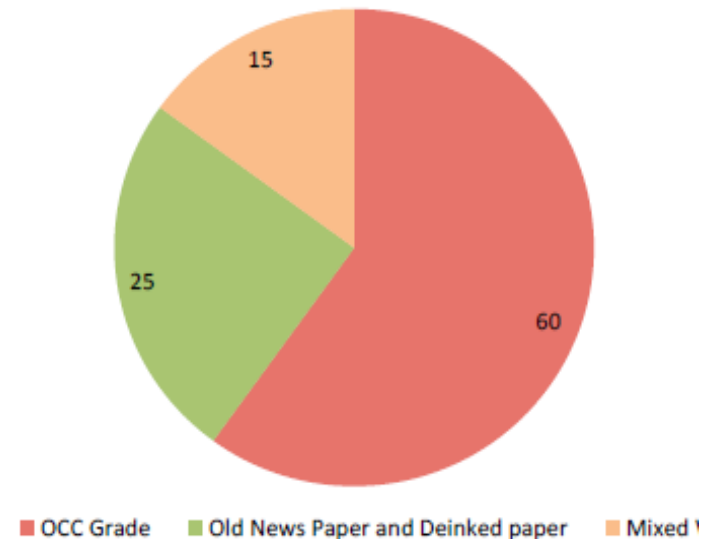
Integrated production facilities with captive raw material and power sourcing

- China is the largest importer of waste paper and pulp in the world
- Ongoing substitution of old paper mills based on non wood pulp and recovered paper

China is major consumer of waste paper and developed world is exporter



Mixed waste constitute 15% of the total waste paper import of China



# Valuation and target

*At 15x PE (FY20), JK Paper can achieve price of 255 Rs. and offers return upside of 56%*

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## Outlook and valuation

- The Company is currently trading at a PE of 9.6x FY20E and EV/EBITDA of 6.7x FY20E
- With improved financial performance and industry tailwinds, assign a target PE multiple of 15.0x on FY20
- Target price: 255
- Return potential: 56%

	FY2017	FY2018 (E)	FY2019 (E)	FY2020 (E)
Total Revenue (Cr.)	2,629	2,747	2,844	2,930
% growth		5%	4%	3%
EBDITA (Cr.)	552	572	606	625
% margin	21%	21%	21%	21%
PAT (Cr.)	172	211	255	294
% margin	7%	8%	9%	10%
EPS (INR)	11.4	13.5	14.8	17.0
PE	14.3x	12.1x	11.0x	9.6x
EV/EBITDA	7.5x	7.3x	6.9x	6.7x



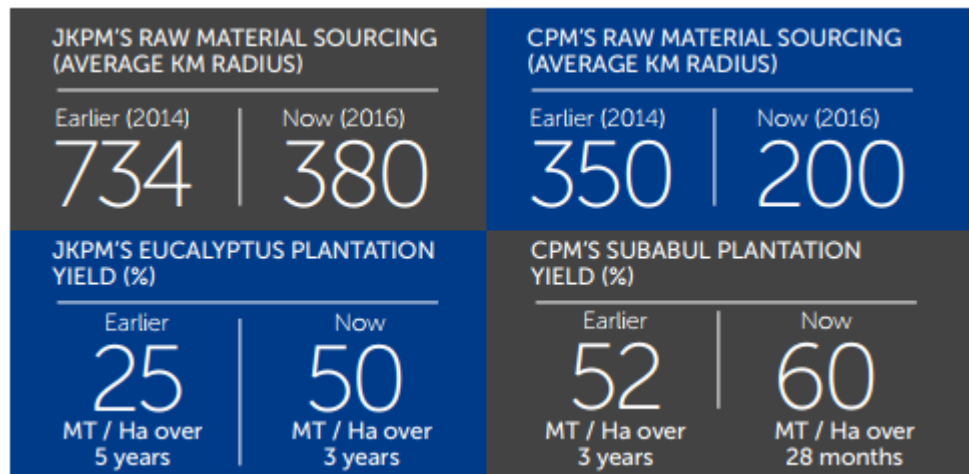
# Key risks

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## Key risks

- Fluctuation in Raw Material Prices
- Limited Pricing Flexibility
- Currency Fluctuation
- Increasing competition from import
- Increased digitalization

# Excerpts from JK Paper 2017AR



## OUTLOOK

The per capita paper consumption in India is only 11.5 kilograms as opposed to a global average of 58 kilograms, highlighting ample room for growth. Moreover, with India reinforcing its status as one of the fastest-growing major economies as well as the fastest-growing paper market (~6% per annum), it is expected that paper consumption could grow over 50% to ~20 million tonnes by 2020 and to ~23.5 million tonnes by 2024-25.

## CHALLENGES

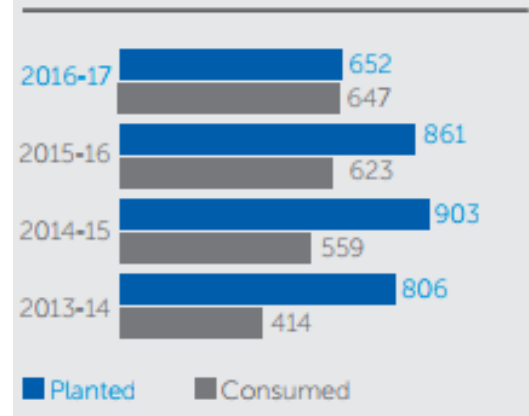


At JK Paper, we encountered a number of sectoral challenges across the last few years.

Companies like ours with large investments could never be completely secure about where they would be able to procure raw material and at what price. Indian paper manufacturers needed to compete with international paper manufacturers who were integrated backwards into captive plantations, an advantage that Indian paper companies never enjoyed due to government restrictions. Most Indian paper manufacturers sourced their entire raw material produce from a radius of around 600 kms compared to

competitive global manufacturers accessing most of their raw material requirements from within 100 kms. The weak national road infrastructure and a corresponding high transportation cost made it more expensive to transport paper within the country over imports. The government periodically revised the minimum support price of various cash crops, which inevitably created a cost-pull impact on wood prices as well. The Indian paper industry was required to compete with more competitive ASEAN paper manufacturers with no duty protection. The industry was largely manufacturing-driven with large gaps in customer understanding and corresponding productisation.

Trees planted vs consumed (Lakh)



# Excerpts from JK Paper 2017AR (cont'd)

India's unique position as a growing economy, in an otherwise convoluted global economy, is both a matter of pride and challenge.

The challenge is to sustain the growth by defying the odds, whether it is the new economic order of growing protectionism (USA and Britain's exit from EU) or the heightened global security risks, and juxtaposed with the not-so-encouraging scenario in the other emerging markets. This is particularly so in developing Asia, where growth slumped to around 6% from over 11% in the last decade, most notably in China and ASEAN, which makes India a prime destination to absorb the surplus from the 'slowing markets'.

This is quite apparent in the paper industry as well as other manufacturing industries in India. While Indian paper has been growing at about 6-7%, there has been a sharp escalation in imports, accounting for 15-20% of the market with a bigger share of the coated paper and newsprint varieties.

This was exacerbated by the sudden strengthening of the Rupee at the turn of the year, appreciating by about 6% vis-à-vis about 4% depreciation during the previous 9 months (Apr-Dec), thereby giving a further fillip to imports. The fact that JK Paper was still able to consolidate its gains by reaching its highest ever turnover and a net profit of Rs 162.83 crore for the year, is a reflection of the sustained improvement in performance across the board.

## INDIAN PAPER INDUSTRY OVERVIEW

Despite having a capacity to produce ~13 million tonnes per annum and a turnover of ~Rs. 50,000 crore, the Indian paper industry accounts for a mere 3% of the global aggregate. This sector provides direct unemployment to more than 5 lac people, and indirectly to 15 lac people. The Indian paper industry is highly fragmented with over 750 paper mills. However, only 50 of these mills have a capacity of 50,000 metric tonnes per annum or more. ~70% of the total installed capacity is spread across the states of Gujarat, West Bengal, Odisha, Andhra Pradesh, Karnataka and Maharashtra. The organised sector had an installed capacity of 4.1 million tonnes per annum in FY2015-16 and was running at capacity utilisation of 90%. An increase in consumption by just 1 kilogram per capita could lead to an increase in demand by 1.25 million tonnes per annum.

### THE IMPORT THREAT

Higher cost of raw material, fuel, logistics and capital increased India's dependence on imports, causing existing capacities to remain under-utilised. During the past five years, imports rose at a CAGR of 11.4% in value terms (from Rs. 7,152 crore in 2010-11 to Rs. 12,284 crore in 2015-16), and 7.9% in volume terms (from 1.8 million tonnes to 2.6 million tonnes over the same period). Import duties on paper and paperboard from ASEAN reduced from a base rate of 10% to nil (with effect from 1st January, 2014), resulting in import growth of about 40% per annum. The combination of these factors could threaten local viability.

### BUDGETARY SUPPORT

The governmental outlay towards education increased by 9.9% to Rs. 79,685.95 crore. Of this, Rs. 46,356.25 crore was mandated to be spent towards primary education. Sarva Shiksha Abhiyan, the flagship central scheme for universalisation of school education, was allocated Rs. 23,500 crore for the year, up from Rs. 22,500 crore

## GLOBAL PAPER INDUSTRY OVERVIEW

Global paper consumption stood at ~407.5 million tonnes, roughly equal to the amount of paper produced. China remained the largest paper and paperboard consumer in the world (>100 million metric tonnes) followed by the United States (>71 million tonnes). Global demand for paper and paperboard is forecast to grow to 482 million tonnes by 2030. Although the demand for newsprint has been shrinking, tissue paper, containerboards and carton boards continue to see a surge in demand. Dwindling demand in markets such as Japan, North America and Western Europe is expected to be offset by buoyant demand in emerging markets such as India and China.

# Excerpts from JK Paper 2017AR (cont'd)

## GROWTH DRIVERS

**Economic development:** The Indian economy is expected to grow at a rate of >7% over the next few years. This growth in GDP will also result in a growth in the key manufacturing sectors, creating a larger demand for paper.

**Increasing literacy:** The union government continued its resolve to improve literacy in India through its various initiatives such as Sarva Shiksha Abhiyan, such initiatives are not only going to improve the enrolment numbers but also improve paper consumption in a big way.

**Growing consumerism:** With India forecast to become the fifth-largest consumer market by 2025 on the back of increasing disposable incomes and changing lifestyles, paper consumption is expected to strengthen.

**Booming e-commerce:** India's e-commerce market is growing at a rate of 51% and is expected to jump to \$120 billion in 2020. Consequently, demand for packaging such as cartons, corrugated boxes, labels, invoices and envelopes will increase and give a further impetus to the paper industry.

## MARKET PRESENCE

The Company worked to continuously exceed customer expectations in terms of product quality and client servicing. It not only strengthened foothold in existing segments but also launched new products to address emerging needs. The company with a strengthened distribution network of 191 wholesalers, having a proportion of non metro to metro wholesales of 66% to 34%, helped in reaching out to new markets and customers directly and faster.

**Packaging boards:** Growth in India's retail, consumer and e-commerce segments catalysed the demand for packaging boards. The result was that the nation's high-end packaging segment reported growth of 13.7% per annum in 2016-17. The country encountered a substantial increase in boards capacity by more than 50 percent in the short space of 18 months. For the year, JK's packaging brands 'JK Ultima' and 'JK TuffCote' retained market shares

**Copier and office papers :** JK Copier continues to be India's largest-selling premium paper brand. JK Paper's leadership in the category has been indicated by the fact that the additional volume resulting from capacity expansion has been readily absorbed in the marketplace, increasing its market share to 24%. The Company has also aggressively forayed into the lower tiers of the copier market through its brand 'JK Max' which has gained immense popularity among jobbers. The quality of the Company's branded copier paper manufactured at the Unit JKPM is respected not only in India but also in Middle East, Sri Lanka, and other countries including USA. The Company achieved exports of 3500 tonnes per month during the year. Irrespective of import threats and other challenges, all copier brands of the Company (JK Copier, JK Easy Copier, JK Cedar, JK CMax, JK Sparkle and JK Max) performed extremely well in their respective market and price segments. This was possible due to efficient planning, channel expansion, relationship management and strategic positioning of the copier range. ,



# Excerpts from West Coast Paper 2017AR

Major Paper producing countries of Latin America, Europe and Asia, including China, Indonesia, Malaysia, etc., have adopted a policy of granting forest concessions to large Paper Mills to plant, protect and harvest Pulpwood in a cost effective manner. In absence of similar enabling policies, Paper Mills in India have to necessarily depend upon small and scattered plantations developed through Industry's social forestry initiative or Government controlled forests. In the process, the cost of collection and transportation works out to be greater than cost of the pulpwood itself. As a result, cost of raw-materials in India has been continuously going up and has become most uncompetitive in comparison to the major paper producing countries in the world.

Given the above status of availability, the Industry is facing severe shortage of wood apart from continuously increasing cost of procurement particularly in the context of unplanned expansion by the Industry without raw-material back-up and focusing only on Andhra Pradesh for sourcing the requirement.

In order to meet shortfall in locally wood availability, the Company decided to import wood chips from 2013 with first shipment arrived at Goa Port in June, 2013. The Company imported 5.75 lakh GMT in 2015-16 and 4.12 lakh GMT in 2016-17 and has an edge over other mills due to proximity to the port.

The Central Government in its Union Budget 2016 has made NIL custom duty on import of wood chips bringing some relief to wood based Paper Industry.