

Agri Conference

Key takeaways

INDIA | SECTOR UPDATE

16 January 2017

We organised an **'Agri Conference** on 12th January 2017 in Mumbai. In this day-long event, we hosted the following luminaries for panel discussion and board room meetings.

Vikram Suryavanshi

(+ 9122 6667 9951)

vsuryavanshi@phillipcapital.in

Boardroom meeting participants

- ✓ Agri Business and Commodity Market Specialist
- ✓ NEML (National Electronic Markets Ltd.)
- ✓ Insecticides India
- ✓ ED&F Man India (Sugar Expert)
- ✓ Savannah Seeds (Rice)
- ✓ Maia Commodity Management Pvt Ltd
- ✓ KRBL
- ✓ Agriculture Policy Expert
- ✓ White Organic Agro



Panel Discussion Key Takeaways

- India is third largest agri producer after China and USA with ~15% GDP contribution. India has ~16% of world population supported by less than 3% of land resources and 4% water resources. Limited resource in land and water with growing demand present opportunities in agri value chain.
- India has sustainable drivers for growth over next 20 to 25 years with growing demand, rising income and current very low consumption level. The government is focusing on agriculture for job led growth as 50% of population depends on it.
- Total land cultivation is ~140mn Hectare (Ha) with two cropping in a year. The crop intensity in India is significantly lower at 1.3x compared to ideal intensity estimated at 1.8x. The potential increase in land intensity will substantially increase demand for fertilizer and agri inputs.
- Need to increase land usage with investment in irrigation to expand acreage. Around 3mn ha land is expected to bring under irrigation over next two years. Total 100 projects are under implementation to bring 7.6mn Ha land under irrigation with investment of ~RS 8.5tn.
- Tropical climate in India need more heat and climate changes resistant crop varieties. Wheat and Maize has reached to heat tolerant level and India needs to develop new varieties for yield improvement.
- Incentives are required for PPP in agriculture to double farmer income, encourage high value crop and integration of supply chain from off-takers to farmers. Value creation opportunities for private players are in pesticide and seed in upstream side and consumer facing distribution through brand creation on downstream side.
- Significant shortage in agri warehousing capacity in India. Currently ~1300 warehouses are registered with total storage capacity of 6mn tonnes and ~439 are used by commodity exchange for storage. Food Corporation of India (FCI) has ~35.8mn tonnes own storage and 46.7mn tonnes hired storage capacity. More investment from private players is expected with investment opportunity of USD 5bn.
- Electronic platform for mandis shifted manual transactions and auctions form to electronic mode and has improved transparency. However their success is limited due to non availability of integrated service providers for grading of products, transportation and credit availability
- Fertilizer subsidy is expected to remain at same level with elections coming in many states. The government is working on reducing cost of manufacturing in Urea by setting up plant close to raw material availability and reducing the slippage of subsidies. The direct benefit transfer (DBT) to farmers will require micro planning and will require long time to do it. The fertilizer subsidies will continue to be given to fertilizer companies instead of farmers based on sales receipt. Currently urea prices are subsidies by ~70% and farmers will find difficulty to pay full money upfront in case of DBT with lack of credit. Another issue with DBT is 30-40% hidden tenancy on agricultural land and need land reforms to make it successful.



- Industry also facing shortage of cold chain network and provide investment opportunity of ~5-6bn in reefer logistics and transport.
- De-monetization impact was much higher on perishable side and expect commodity price to remain soft with higher output this year.
- Crop insurance policy is good and ~40-50% farmer are benefiting from it. However current insurance premium of ~18% are not sustainable (subsidized rate for farmer is 2% on kharib and 1.5% Rabi).
- IT revolution has bypassed agriculture in past ten years and now it can be implemented aggressively in agri sector with web based solution to connect farmers with off takers.
- Inconsistent policies in sugar has impacted growth in Sugar sector over past years and expect lower production of ~21mn in current sugar season. Industry is expected to import 1-2mn tonnes sugar to meet the shortage and demand supply mismatch is expected to keep sugar prices up.

KRBL

- The company is largest producer and exporter of branded basmati rice. It holds ~25% market share in branded Basmati exports from India. It is market leader in domestic branded market with ~35% market share followed by Dawat ~15% and Kohinoor ~10%. In rice segment branded players control ~40% market while unbranded market is 60%.
- Basmati Rice is just 2% of total Rice Production in the World and it is grown only in India (70%) and Pakistan (30%). "India Gate", the flagship brand of Company, is the topmost selling rice in the Branded Rice segment, both in India and Overseas market.
- Rice manufacturing capacities of 195 MT per hour. Export price per MT commands a premium of more than 30% over the Industry average.
- Wide marketing network with presence at 6,72,000 retail outlets spread over all towns and cities of the Country. Being an integrated player, the Company generates value-added by-products like brain oil, de-oiled cakes and uses rice husks for captive power plant.
- Benefit from huge storage system and do a 3-step check on the paddy seeds when they are with the buyers, again at Mandi and later at the Godowns. Keep stock of 2-3yrs old basmati rice in their inventory which are ready for sale.
- The payment is done to the farmers within 7days, and the firm avails 2% discount at the cost for the same. The payments are done by cheques (100%), hence no adverse impact from demonetization. They try to retain their farmer's base of paddy, by doing some CSR activities. The CSR activities includes, try to educate farmers about the new techniques in farming, seminars on the good crop and seeds verification, etc.
- The company has 500 dealer base, that covers around 5 lakh retail shops. The price of paddy has come down to Rs 17-18, from Rs 23 in 2016, the company is planning to keep the prices stable at Rs 70/kg, because of lowering cost of inputs. In their exports, 70% of their revenue comes from the middle east countries. In the domestic markets, south India accounts the highest revenue of 30-35%, followed by north India (20-25%) and west (20-23%) and the rest is north east states.
- The payment is done to farmers within 7 days and gets 2% discount for it. The payment is 100% by cheque, hence no adverse impact of de-monetization. Developed strong relationship with farmers (also supported by CSR) and educate farmers about new techniques in farming, arrange seminars etc.
- Company is planning to extend its operations into the rice-bran oil sector (currently they are selling it to Saffola as raw material) and already have started operations in the brown rice segment (targeting the health conscious population).

MAIIA Commodity

- Founded by de Souza family in 2010, MAIIA has now grown into one of the most efficient Collateral Management services company in the country covering 11 states of North, West & South India, and continues to expand rapidly into more & more territories.
- Its services range also includes Stock Monitoring Assignments, Inspection & Testing Services, Certification & Verification Services, and other customized service needs for Indian & International Banks, Financial institutions as well as Corporates dealing in agricultural commodities
- The company started their business, by charging Rs.5-7/sq feet in their warehouses, which gradually increased to Rs.30/sq feet. The key commodities that they store are grains, pulses, oilseeds, complex spices, cotton, sugar, jiggery and non-ferrous metals as well. The capacity utilization of the warehouse space is 70%.
- It also provides cold storage and liquid storage as per the needs of the clients. They also charge for warehousing fees, collateral fees, loading and unloading fees. Liability for the business comes into picture only when the goods of the customers are damaged, for that they keep it insured beforehand.
- Volatility in commodity prices affects positively to the business because clients will go long and store their products for a longer period of time. There is no major default risk (as they follow the advance rent policy) in this business, the environment got critical due to demonetization, but no major setbacks. There can be around 1% risk of default, but they are already insured for the same.

White Organics (earlier White Diamond Industries)

- The company is first listed entity catering to entire organic product range. It has 160 Premium Organic products in 12 major categories and 17 sub categories.
- The company has strong presence of own farmer base of ~108 acre through lease model mainly in Gujarat. It is targeting to increase organic farm acreage to 1200 over next 12-18 month with focus on quality assurance at every step of processes.
- It is also developing retail business through owned, franchise, e-com and exports. It has opened one retail outlet in Central Mumbai and Targeting 15 stores in next 3 years along with additional 30 retail outlets through franchise model.
- The company is targeting huge demand for healthy and nutritious food product amongst health conscious people. Indian organic food market is expected to report CAGR of 25-30%.

NEML (National Electronic Markets Ltd.)

- NeML is a wholly owned subsidiary of NCDEX, India's largest Agricultural commodity exchange with more than 90% market share. It works with domain experts and offers trading platforms for trading in a host of commodities, both agricultural and non-agricultural to various market participants, primary producers including farmers, traders, processors etc. These trading platforms combine technological efficiency and market friendly trading features in a transparent atmosphere to make trading a rich and rewarding experience.
- In 2014, Karnataka took the mandi (farmers' market) system to the virtual world with setting up Rashtriya e Market Services Private Limited (ReMS) as a joint venture between the state government and NeML. As of March 2016, ReMS had integrated online 105 of the 155 APMCs across 27 of the 30 districts in Karnataka through a single licensing system. This has created what the state calls a unified market platform (UMP).
- Management sees a shift from cash to cashless transaction at the Mandi level and which will help in transparency at Mandi transactions. However, there are

few challenges like (1) strong resistance from trader side (the mandies are dominated by the traders) and (2) Transaction process from Mandi is to directly deposits amount in farmer's account but the farmers are more depend on cash transactions for farming related buying, logistics and others costs.

- Crop loans will help farmers in big way by providing financial support in farming as well as it also gives insurance to farming related risks. Crop loans are generally disbursed by the banks through the mode of Kisan Credit Card (KCC). All farmers including small farmers, marginal farmers, share croppers, oral lessees and tenant farmers are eligible for issuance of KCC. KCC holders are also covered under Personal Accident Insurance Scheme (PAIS) against accidental death/permanent disability.
- The electronic National Agriculture Market (e-NAM) has covered over 250 markets. However, most of them are at a nascent stage and grappling with operational issues. e-NAM operations includes (1) Quality testing centre at the mandies, (2) Automation of auction process to bring transparency and ease of doing business for farmers, (3) provides funding requirements, (4) Information technology support at the Mandi etc.
- Company believes in remote buying in India as it will help in reducing logistic costs, goods wastage, physical handing by farmers etc. However, he feels India is much behind in implement remote buying.
- Government operates through its MSP centers and it opens window for 10-15 days at selective centers only. However, through these MSP centers government generally incurred loss as buying is always at higher price and selling at lower price due to demand driven pricing. He highlighted two major challenges at MSP centers (1) Multiple round of buying and (2) Substandard quality. However, management feels MSP is only a physiological support to the farmer.
- Central government does not participate in contract farming as it is done at state level only. The three elements in it are (1) Sponsor, (2) Producer (farmer) and (3) agreement.

Insecticides (India) Limited (IIL)

- Insecticides (India) Limited (IIL) is amongst the top 10 Indian agrochemical companies having approx. 7% market share of the Indian domestic agrochemical market.
- The company has a fully integrated business model right from manufacturing of technical and branded formulations to sale of generic and in-licensed agrochemical products. IIL has a pan India presence with network of 5000 plus distributors and 29 depots and branches. It has 5 Formulations & 2 Technical facilities at Chopanki (Rajasthan), Samba (J&K), Udhampur (J&K) and Dahej (Gujarat). IIL indicates to have average utilization level of 60% across all plants.
- The company has a portfolio of strong & successful brands which includes 9 brands under Navratna category (inlicensed, leased or own brand) and 11 brands under super 11 category (mostly reverse engineering) contributing 52% and 13% of its total branded formulations sales in FY15 respectively. It has International tie-ups with AMVAC and Nissan Chemicals (through Nagarjuna Agrichem Ltd.), for brand licensing and marketing rights.
- The company intends to further move up in the value chain by developing new molecules and has set up an R&D centre through a JV with OAT Agrio, Japan. The company indicates for have more number of such tie-ups going forward.
- IIL is focusing more on its R&D activities and has identified 20-22 products and as part of its short term growth strategy, it intend to add one product every year through reverse engineering of off patented molecule (life of the product is approx. 2-3 years) as well as one co-licensing product.
- IIL has strong brands present across all types of pesticides. Insecticides contribute 60% of the sales followed by Herbicides 23% and Fungicides 11%. The

branded business contributes ~77% of its sales and the balance is institutional sales.

- IIL recently launched a new post-emergence herbicide Green Label, manufactured in India for the first time using advanced technology. Green Label contains active ingredient bispyribac sodium 10% SC, which is a broad spectrum systemic herbicide. It indicates to have 15% market share in the product so far. Other companies like PI Industries and Garda chemicals are the key competitor for this product.
- IIL indicates to focus more on international business with geographical expansion. It guides Rs 1bn export sales in near future from current level of Rs 230mn.
- It indicates to face difficulties in registration of products in international market due to continuously strengthening of norms from global regulatory bodies.
- IIL expects its top 20 products will contribute ~75% of sales in near future which will drive the value growth for the company.
- China agrochemical companies facing plant shutdown or plant relocation issues to match up the environmental norms of China. IIL sees incremental opportunity from these China slowdown.
- The company's revenue, EBITDA and PAT has grown at a CAGR of 17%, 16% and 4% respectively in FY11-16. It guides for sustainable sales growth with EBITDA margins expansion to 14-14.5% in FY18 from current level of 10.5%.

Savannah Seeds

- Savannah Seeds is the subsidiary of large European Conglomerate and is expert in rice and largest rice seeds companies in the world. It is present in 13 states and further expanding its presence in Vietnam in next 2-3 months.
- Perishable crops were impacted more compared to other crops due to demonetization, however winter sowing was surprisingly good.
- 90% use labor for transplanting and surprisingly total cost for transplanting is \$4bn.
- 98% of rice is used as a food crop and rest is used in alcohol and various other industries.
- Concerns like milling process, taste, long rice has discouraged the customers and millers in using hybrid rice. However, newer hybrid rice version has shown some interest to customers. Newer hybrid rice takes 5-6 years for development.
- Farmers are ok of using generic agro chemicals; however when it comes to seeds, they strongly prefer branded seeds only.
- MNC controls 60% of the total seeds market, led by Monsanto and Bayers
- As per Indian food regulations farmers cannot use BT-GMO seeds in food seeds except cotton.
- Corn is the fastest growing hybrid crop which now accounts for 80-90% of total corn crop.

Rating Methodology

We rate stock on absolute return basis. Our target price for the stocks has an investment horizon of one year.

Rating	Criteria	Definition
BUY	>= +15%	Target price is equal to or more than 15% of current market price
NEUTRAL	-15% > to < +15%	Target price is less than +15% but more than -15%
SELL	<= -15%	Target price is less than or equal to -15%.

Management

Vineet Bhatnagar (Managing Director)	(91 22) 2483 1919
Kinshuk Bharti Tiwari (Head – Institutional Equity)	(91 22) 6667 9946
Jignesh Shah (Head – Equity Derivatives)	(91 22) 6667 9735

Research

Automobiles	IT Services	Pharma & Speciality Chem
Dhawal Doshi (9122) 6667 9769	Vibhor Singhal (9122) 6667 9949	Surya Patra (9122) 6667 9768
Nitesh Sharma, CFA (9122) 6667 9965	Shyamal Dhruve (9122) 6667 9992	Mehul Sheth (9122) 6667 9996
Banking, NBFCs	Infrastructure	Strategy
Manish Agarwalla (9122) 6667 9962	Vibhor Singhal (9122) 6667 9949	Naveen Kulkarni, CFA, FRM (9122) 6667 9947
Pradeep Agrawal (9122) 6667 9953	Deepak Agarwal (9122) 6667 9944	Aashima Mutneja (9122) 6667 9764
Pareesh Jain (9122) 6667 9948	Logistics, Transportation & Midcap	Telecom
Consumer & Retail	Vikram Suryavanshi (9122) 6667 9951	Naveen Kulkarni, CFA, FRM (9122) 6667 9947
Naveen Kulkarni, CFA, FRM (9122) 6667 9947	Media	Manoj Behera (9122) 6667 9973
Jubil Jain (9122) 6667 9766	Manoj Behera (9122) 6667 9973	Technicals
Preeyam Tolia (9122) 6667 9950	Metals	Subodh Gupta, CMT (9122) 6667 9762
Cement	Dhawal Doshi (9122) 6667 9769	Production Manager
Vaibhav Agarwal (9122) 6667 9967	Yash Doshi (9122) 6667 9987	Ganesh Deorukhkar (9122) 6667 9966
Economics	Mid-Caps & Database Manager	Editor
Anjali Verma (9122) 6667 9969	Deepak Agarwal (9122) 6667 9944	Roshan Sony 98199 72726
Engineering, Capital Goods	Oil & Gas	Sr. Manager – Equities Support
Jonas Bhutta (9122) 6667 9759	Sabri Hazarika (9122) 6667 9756	Rosie Ferns (9122) 6667 9971
Vikram Rawat (9122) 6667 9986		
Sales & Distribution	Sales Trader	Corporate Communications
Ashvin Patil (9122) 6667 9991	Dilesh Doshi (9122) 6667 9747	Zarine Damania (9122) 6667 9976
Shubhangi Agrawal (9122) 6667 9964	Suniil Pandit (9122) 6667 9745	Bharati Ponda (9122) 6667 9943
Kishor Binwal (9122) 6667 9989		
Bhavin Shah (9122) 6667 9974	Execution	
Ashka Mehta Gulati (9122) 6667 9934	Mayur Shah (9122) 6667 9945	
Archan Vyas (9122) 6667 9785		

Contact Information (Regional Member Companies)

SINGAPORE: Phillip Securities Pte Ltd 250 North Bridge Road, #06-00 RafflesCityTower, Singapore 179101 Tel : (65) 6533 6001 Fax: (65) 6535 3834 www.phillip.com.sg	MALAYSIA: Phillip Capital Management Sdn Bhd B-3-6 Block B Level 3, Megan Avenue II, No. 12, Jalan Yap Kwan Seng, 50450 Kuala Lumpur Tel (60) 3 2162 8841 Fax (60) 3 2166 5099 www.poems.com.my	HONG KONG: Phillip Securities (HK) Ltd 11/F United Centre 95 Queensway Hong Kong Tel (852) 2277 6600 Fax: (852) 2868 5307 www.phillip.com.hk
JAPAN: Phillip Securities Japan, Ltd 4-2 Nihonbashi Kabutocho, Chuo-ku Tokyo 103-0026 Tel: (81) 3 3666 2101 Fax: (81) 3 3664 0141 www.phillip.co.jp	INDONESIA: PT Phillip Securities Indonesia ANZTower Level 23B, Jl Jend Sudirman Kav 33A, Jakarta 10220, Indonesia Tel (62) 21 5790 0800 Fax: (62) 21 5790 0809 www.phillip.co.id	CHINA: Phillip Financial Advisory (Shanghai) Co. Ltd. No 550 Yan An East Road, OceanTower Unit 2318 Shanghai 200 001 Tel (86) 21 5169 9200 Fax: (86) 21 6351 2940 www.phillip.com.cn
THAILAND: Phillip Securities (Thailand) Public Co. Ltd. 15th Floor, VorawatBuilding, 849 Silom Road, Silom, Bangrak, Bangkok 10500 Thailand Tel (66) 2 2268 0999 Fax: (66) 2 2268 0921 www.phillip.co.th	FRANCE: King & Shaxson Capital Ltd. 3rd Floor, 35 Rue de la Bienfaisance 75008 Paris France Tel (33) 1 4563 3100 Fax : (33) 1 4563 6017 www.kingandshaxson.com	UNITED KINGDOM: King & Shaxson Ltd. 6th Floor, Candlewick House, 120 Cannon Street London, EC4N 6AS Tel (44) 20 7929 5300 Fax: (44) 20 7283 6835 www.kingandshaxson.com
UNITED STATES: Phillip Futures Inc. 141 W Jackson Blvd Ste 3050 The Chicago Board of TradeBuilding Chicago, IL 60604 USA Tel (1) 312 356 9000 Fax: (1) 312 356 9005	AUSTRALIA: PhillipCapital Australia Level 10, 330 Collins Street Melbourne, VIC 3000, Australia Tel: (61) 3 8633 9800 Fax: (61) 3 8633 9899 www.phillipcapital.com.au	SRI LANKA: Asha Phillip Securities Limited Level 4, Millennium House, 46/58 Navam Mawatha, Colombo 2, Sri Lanka Tel: (94) 11 2429 100 Fax: (94) 11 2429 199 www.ashaphillip.net/home.htm

INDIA

PhillipCapital (India) Private Limited

No. 1, 18th Floor, Urmi Estate, 95 Ganpatrao Kadam Marg, Lower Parel West, Mumbai 400013
 Tel: (9122) 2300 2999 Fax: (9122) 6667 9955 www.phillipcapital.in

Disclosures and Disclaimers

PhillipCapital (India) Pvt. Ltd. has three independent equity research groups: Institutional Equities, Institutional Equity Derivatives, and Private Client Group. This report has been prepared by Institutional Equities Group. The views and opinions expressed in this document may, may not match, or may be contrary at times with the views, estimates, rating, and target price of the other equity research groups of PhillipCapital (India) Pvt. Ltd.

This report is issued by PhillipCapital (India) Pvt. Ltd., which is regulated by the SEBI. PhillipCapital (India) Pvt. Ltd. is a subsidiary of Phillip (Mauritius) Pvt. Ltd. References to "PC IPL" in this report shall mean PhillipCapital (India) Pvt. Ltd. unless otherwise stated. This report is prepared and distributed by PC IPL for information purposes only, and neither the information contained herein, nor any opinion expressed should be construed or deemed to be construed as solicitation or as offering advice for the purposes of the purchase or sale of any security, investment, or derivatives. The information and opinions contained in the report were considered by PC IPL to be valid when published. The report also contains information provided to PC IPL by third parties. The source of such information will usually be disclosed in the report. Whilst PC IPL has taken all reasonable steps to ensure that this information is correct, PC IPL does not offer any warranty as to the accuracy or completeness of such information. Any person placing reliance on the report to undertake trading does so entirely at his or her own risk and PC IPL does not accept any liability as a result. Securities and Derivatives markets may be subject to rapid and unexpected price movements and past performance is not necessarily an indication of future performance.

This report does not regard the specific investment objectives, financial situation, and the particular needs of any specific person who may receive this report. Investors must undertake independent analysis with their own legal, tax, and financial advisors and reach their own conclusions regarding the appropriateness of investing in any securities or investment strategies discussed or recommended in this report and should understand that statements regarding future prospects may not be realised. Under no circumstances can it be used or considered as an offer to sell or as a solicitation of any offer to buy or sell the securities mentioned within it. The information contained in the research reports may have been taken from trade and statistical services and other sources, which PCIL believe is reliable. PhillipCapital (India) Pvt. Ltd. or any of its group/associate/affiliate companies do not guarantee that such information is accurate or complete and it should not be relied upon as such. Any opinions expressed reflect judgments at this date and are subject to change without notice.

Important: These disclosures and disclaimers must be read in conjunction with the research report of which it forms part. Receipt and use of the research report is subject to all aspects of these disclosures and disclaimers. Additional information about the issuers and securities discussed in this research report is available on request.

Certifications: The research analyst(s) who prepared this research report hereby certifies that the views expressed in this research report accurately reflect the research analyst's personal views about all of the subject issuers and/or securities, that the analyst(s) have no known conflict of interest and no part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific views or recommendations contained in this research report.

Additional Disclosures of Interest:

Unless specifically mentioned in Point No. 9 below:

1. The Research Analyst(s), PCIL, or its associates or relatives of the Research Analyst does not have any financial interest in the company(ies) covered in this report.
2. The Research Analyst, PCIL or its associates or relatives of the Research Analyst affiliates collectively do not hold more than 1% of the securities of the company (ies) covered in this report as of the end of the month immediately preceding the distribution of the research report.
3. The Research Analyst, his/her associate, his/her relative, and PCIL, do not have any other material conflict of interest at the time of publication of this research report.
4. The Research Analyst, PCIL, and its associates have not received compensation for investment banking or merchant banking or brokerage services or for any other products or services from the company(ies) covered in this report, in the past twelve months.
5. The Research Analyst, PCIL or its associates have not managed or co-managed in the previous twelve months, a private or public offering of securities for the company (ies) covered in this report.
6. PCIL or its associates have not received compensation or other benefits from the company(ies) covered in this report or from any third party, in connection with the research report.
7. The Research Analyst has not served as an Officer, Director, or employee of the company (ies) covered in the Research report.
8. The Research Analyst and PCIL has not been engaged in market making activity for the company(ies) covered in the Research report.
9. Details of PCIL, Research Analyst and its associates pertaining to the companies covered in the Research report:

Sr. no.	Particulars	Yes/No
1	Whether compensation has been received from the company(ies) covered in the Research report in the past 12 months for investment banking transaction by PCIL	No
2	Whether Research Analyst, PCIL or its associates or relatives of the Research Analyst affiliates collectively hold more than 1% of the company(ies) covered in the Research report	No
3	Whether compensation has been received by PCIL or its associates from the company(ies) covered in the Research report	No
4	PCIL or its affiliates have managed or co-managed in the previous twelve months a private or public offering of securities for the company(ies) covered in the Research report	No
5	Research Analyst, his associate, PCIL or its associates have received compensation for investment banking or merchant banking or brokerage services or for any other products or services from the company(ies) covered in the Research report, in the last twelve months	No

Independence: PhillipCapital (India) Pvt. Ltd. has not had an investment banking relationship with, and has not received any compensation for investment banking services from, the subject issuers in the past twelve (12) months, and PhillipCapital (India) Pvt. Ltd. does not anticipate receiving or intend to seek compensation for investment banking services from the subject issuers in the next three (3) months. PhillipCapital (India) Pvt. Ltd. is not a market maker in the securities mentioned in this research report, although it, or its affiliates/employees, may have positions in, purchase or sell, or be materially interested in any of the securities covered in the report.

Suitability and Risks: This research report is for informational purposes only and is not tailored to the specific investment objectives, financial situation or particular requirements of any individual recipient hereof. Certain securities may give rise to substantial risks and may not be suitable for certain investors. Each investor must make its own determination as to the appropriateness of any securities referred to in this research report based upon the legal, tax and accounting considerations applicable to such investor and its own investment objectives or strategy, its financial situation and its investing experience. The value of any security may be positively or adversely affected by changes in foreign exchange or interest rates, as well as by other financial, economic, or political factors. Past performance is not necessarily indicative of future performance or results.

Sources, Completeness and Accuracy: The material herein is based upon information obtained from sources that PCIPL and the research analyst believe to be reliable, but neither PCIPL nor the research analyst represents or guarantees that the information contained herein is accurate or complete and it should not be relied upon as such. Opinions expressed herein are current opinions as of the date appearing on this material, and are subject to change without notice. Furthermore, PCIPL is under no obligation to update or keep the information current. Without limiting any of the foregoing, in no event shall PCIPL, any of its affiliates/employees or any third party involved in, or related to computing or compiling the information have any liability for any damages of any kind including but not limited to any direct or consequential loss or damage, however arising, from the use of this document.

Copyright: The copyright in this research report belongs exclusively to PCIPL. All rights are reserved. Any unauthorised use or disclosure is prohibited. No reprinting or reproduction, in whole or in part, is permitted without the PCIPL's prior consent, except that a recipient may reprint it for internal circulation only and only if it is reprinted in its entirety.

Caution: Risk of loss in trading/investment can be substantial and even more than the amount / margin given by you. The recipient should carefully consider whether trading/investment is appropriate for the recipient in light of the recipient's experience, objectives, financial resources and other relevant circumstances. PCIPL and any of its employees, directors, associates, group entities, or affiliates shall not be liable for losses, if any, incurred by the recipient. The recipient is further cautioned that trading/investments in financial markets are subject to market risks and are advised to seek independent third party trading/investment advice outside PhillipCapital/group/associates/affiliates/directors/employees before and during your trading/investment. There is no guarantee/assurance as to returns or profits or capital protection or appreciation. PCIPL and any of its employees, directors, associates, group entities, affiliates are not inducing the recipient for trading/investing in the financial market(s). Trading/Investment decision is the sole responsibility of the recipient. For Detailed Disclaimer: Please visit our website www.phillipcapital.in

For U.S. persons only: This research report is a product of PhillipCapital (India) Pvt Ltd., which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S.-regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances, and trading securities held by a research analyst account.

This report is intended for distribution by PhillipCapital (India) Pvt Ltd. only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by the U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a-6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated, and/or transmitted onward to any U.S. person, which is not a Major Institutional Investor.

In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, PhillipCapital (India) Pvt Ltd. has entered into an agreement with a U.S. registered broker-dealer, Decker & Co, LLC. Transactions in securities discussed in this research report should be effected through Decker & Co, LLC or another U.S. registered broker dealer.

If Distribution is to Australian Investors

This report is produced by PhillipCapital (India) Pvt Ltd and is being distributed in Australia by Phillip Capital Limited (Australian Financial Services Licence No. 246827).

This report contains general securities advice and does not take into account your personal objectives, situation and needs. Please read the Disclosures and Disclaimers set out above. By receiving or reading this report, you agree to be bound by the terms and limitations set out above. Any failure to comply with these terms and limitations may constitute a violation of law. This report has been provided to you for personal use only and shall not be reproduced, distributed or published by you in whole or in part, for any purpose. If you have received this report by mistake, please delete or destroy it, and notify the sender immediately.

PhillipCapital (India) Pvt. Ltd.

Registered office: No. 1, 18th Floor, Urmi Estate, 95 Ganpatrao Kadam Marg, Lower Parel West, Mumbai 400013