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HORIZON RESEARCH

Indian Basmati Rice Industry

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In this report, we examine India's Basmati[1] rice industry. We outline the industry's attributes in a global context and highlight the key variables for investment consideration in the sector. Basmati is the champagne of rice. And like champagne, it has a legally enforced regional denomination. Basmati can only be produced in India and a small part of Pakistan. As a grain staple, it has a unique combination of characteristics that has positioned the grain to achieve higher pricing in the marketplace. Basmati rice has distinctive and pleasant aromas, long slender grains, and on cooking sees both extreme grain elongation and dry fluffy texture.

BACKGROUND

The size of the global rice industry is approximately 459 million metric tonnes (mn MT), or USD 275 billion of which Basmati industry accounts for 6.7 mn MT or USD 5.8 billion (2.1%). India accounts for ~72% of Basmati produced or 4.8 mn MT (USD 4.4 billion) and Pakistan 28% or 1.9 mn MT (USD 1.4 billion). Although Basmati represents a small part of India's USD 221 billion agriculture industry, it offers India, its leading producer, high product visibility in the world market.

We believe that there will be a sustained growth in supply in coming years due to the development of PUSA 1121 Basmati (an evolved[2] Basmati variety) which has improved farmers' margins (Table 5) and increased yields (Table 4). We estimate that Basmati rice demand has grown at a CAGR of 10.5% during 2001-12 (as compared to 1.2% for rice as a whole), led by strong demand from both domestic and international markets.

Basmati is unique to the region. It can be grown where precise climatic conditions, soil quality and temperature exist and this only occurs in the Indo-Gangetic area of the Himalayas. It is also legally protected as a trade name. "Basmati" is protected under "The Geographical Indications of Goods (Registration & Protection) Act, 1999" of India, which prevents any rice grown outside of the Indo-Gangetic area from being called Basmati.

In pricing, Basmati has achieved a relatively higher international price when compared to other aromatic, non-sticky, long grained rice varieties such as Thai fragrant rice. The average selling price of Basmati rice is USD 1,000/MT against the average price for other rice varieties of around USD 600/MT. We review this pricing differential in greater detail in Table 3.

Major listed rice processors of India	M Cap	EV	Rice Capacity	Net Revenue	EBITDA Margin	EPS	EV/EBITDA	P/E	EV/Revenue	Debt/EBITDA	Interest coverage	Debt/ M Cap	Working capital/sales
Unit	INR Mn	INR Mn	MT/hour	INR Mn	%	Per share	x	x	x	x	x	x	x
REI Agro	10,423	55,479	118	42,255	20.0	2.0	6.6	5.4	1.3	5.6	1.6	4.5	1.3
KRBL	5,307	13,890	127	16,314	14.0	2.9	6.1	7.4	0.9	3.8	2.6	1.6	0.7
LT Foods	1,220	11,341	50	14,355	12.4	(0.4)	6.4	(113.9)	0.8	5.9	1.8	7.5	0.8
Kohinoor Foods	885	10,359	60	9,613	2.1	(43.0)	50.3	(0.7)	1.1	47.0	1.8	6.6	0.9
Lakshmi Overseas	1,185	10,681	99	11,334	9.7	(3.2)	9.7	(5.8)	0.9	8.8	2.5	8.1	1.3

Source: Horizon Research, Company documents using latest reported data

The table above outlines the universe of publicly traded Basmati rice processors in India. These five companies represent the major Basmati rice brands and approximately 45% of Basmati rice produced (by value) and 16% of Basmati rice exported (by value) from India. Importantly, no one of these Basmati rice processors possesses any particular competitive advantage. All rice processors have similar characteristics of:

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[1]Basmati', when literally translated from Hindi, means 'queen of aroma'.
[2]Evolved is a term used in the rice industry and refers to 'hybrid rice'.

- High working capital requirements
- High debt leverage due to capital requirements for the necessity to 'age' Basmati,
- A production recovery rate[3] of ~65%
- Limited brand differentiation and visibility with scale
- Low pricing power
- Negative free cash flow
- Limited product differentiation with most farmers preferring to grow the common rice grain known as PUSA 1121,
- Significant over capacity in paddy milling,
- Historically have grown through exports,
- Risk of decline in margins over the next 18 months. In 2008 the Government of India imposed a Minimum Export Price (MEP) on Basmati to prevent export of lower quality rice. There are indications that the MEP will be removed in the near future and this could lower average realizations.

RICE BASICS (TOTAL PRODUCTION – 464 MN MT RICE)

After wheat and maize, rice is the world's third principal staple food (Table 1) and is cultivated in more than 113 countries.

Table 1 Demand and consumption patterns of three major staples (in mn MT)

Particulars	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	*CAGR*
Wheat														
Production	587	583	584	570	555	627	619	596	612	683	686	651	694	*1.4%*
Consumption	586	585	587	605	590	607	622	616	618	643	650	655	687	*1.3%*
Corn														
Production	608	591	601	603	628	716	700	714	795	799	819	829	865	*3.0%*
Consumption	605	610	625	628	649	689	707	729	773	783	823	848	867	*3.0%*
Rice														
Production	409	399	400	378	393	401	418	421	434	450	443	450	464	*1.1%*
Consumption	400	396	414	408	414	409	416	422	430	438	440	446	459	*1.2%*

Source: Horizon Research and USDA

- There are two varieties of rice: Indica and Japonica. Over 40,000 sub-varieties have been derived from these two varieties. Basmati is an Indica variety.
- Indica rice is long-grain rice and is usually grown in hot climates. This rice is fluffy and doesn't stick together on cooking. Japonica is a short-grain variety of rice (fat and round grain) which is mainly characterized by its unique stickiness and remains moist, which helps it to be eaten with chopsticks.
- Rice can be consumed in three forms i.e. white rice, brown rice and parboiled rice. White rice is the polished rice because both the outer layers i.e. husk and bran is removed. In brown rice only the husk is removed while the bran layer remains. Brown rice is more nutritive than white rice and has a higher fiber and vitamin B content. Parboiled rice undergoes an additional process of boiling and steaming to capture the nutritive value of bran in the rice. Parboiled rice has good demand in Middle East.
- Asia produces close to 90% and consumes more than 80% of the total worldwide rice production. As per USDA, worldwide rice production stood at 464 mn MT against demand of 459mn MT in 2012.
- China, India and Indonesia are the three largest rice producers in the world. Together these three countries produce and consume more than 60% of total worldwide rice.

[3]Recovery rate is the amount of rice that can be milled from a given quantity of paddy. Husk and bran are by-products in the milling process

- In 2012 the top 3 rice exporting countries were India, Thailand and Vietnam (~60% of the total export).

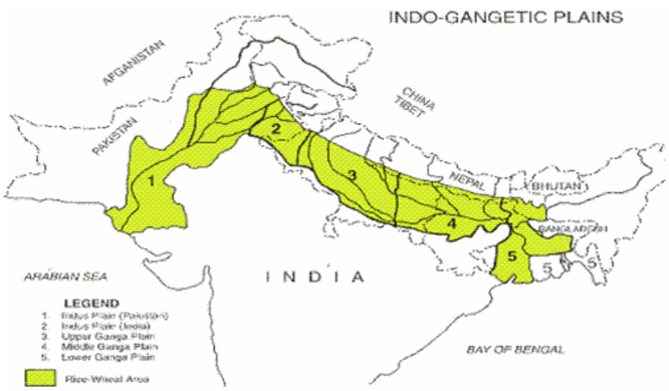
BASMATI BASICS (INDIA'S PRODUCTION – 4.1 MN MT IN FY11, 4.7 MN MT IN FY12)

India and Pakistan are the sole Basmati producers

In India, Basmati rice is grown in the states of Haryana, Punjab, Uttar Pradesh, Uttaranchal and J&K (Table 2).In Pakistan, Basmati rice is grown in Punjab (Exhibit 2). Basmati crop is generally a Kharif (May to November) crop with sowing season starting from May-June and harvesting season ending in October-November. With the inclusion of PUSA 1121 as Basmati, area under Basmati cultivation in both Punjab and Haryana increased by ~10%.

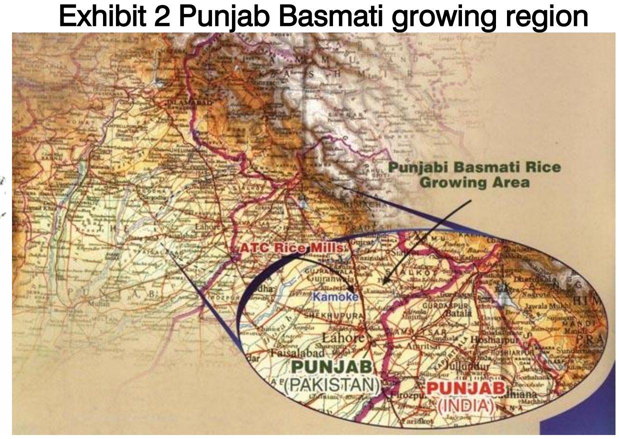
In 1997 RiceTec Inc. obtained a US patent for the right to call their variety of aromatic rice as 'Basmati'. This was strongly contested by the Government of India and the patent was later withdrawn. Since then Basmati has been protected under "The Geographical Indications of Goods (Registration & Protection) Act, 1999"[4] of India which prevents any rice grown outside of the Indo-Gangetic area from being called Basmati.

Exhibit 1 Indo Gangetic region



Source: Google Images

Exhibit 2 Punjab Basmati growing region



Source: ATC Rice Mills

Table 2 Region wise break-up of Basmati production in 2011

States	Area for Basmati of total rice	Basmati Area	Production	Yield	% of total Basmati rice	% of total India's Basmati rice
	%	Lakhs Hectare	Mn MT	MT/hectare		
India						
Haryana	60.0	7.5	1.9	2.5	29.4	46.0
Punjab	22.0	6.0	1.2	2.0	18.6	29.0
Uttar Pradesh	8.0	4.0	0.8	2.0	12.4	20.0
Uttaranchal & J&K	-	0.1	0.2	2.5	3.1	5.0
Total India		**17.6**	**4.1**	**2.3**	**63.5**	
Pakistan						
Punjab Area		1.3	2.4	1.9	36.5	

Source: Horizon Research, Directorate of Rice Development, REAP and Company

[4]Recognized under the WTO mechanism

Basmati price premium

As shown in Table 3 (red highlighted box), India and Pakistan Basmati rice variety fetches higher export realization per ton compared to any other rice variety (except to an extent Thailand Fragrant variety, which has been priced almost at par with Basmati rice).

Out of the total exports of 10.6 mn MT of rice from Thailand, 2.36 mn MT is Thai Fragrant rice. Thai Fragrant rice is similar to Basmati rice, but Fragrant rice becomes more starchy on cooking (i.e., it's sticky) compared to Basmati. Major importers for Thai Fragrant rice are US (with 15%), Cote d Ivoire (with 14%), Senegal (with 9%), Hong Kong (with 7%) and China (with 6%).

Table 3 **Rice export price**

US$/MT, FOB	Thai white 100% Second grade	Thail Parboiled 100%	US Long grain 2, 4%	Argentina max 10%	US California Medium Grain	Pak Basmati Ordinary	India 1121 Basmati	Thai Fragrant 100%
2007	335	332	436	338	557	677	-	550
2008	695	722	782	584	913	1,077	-	914
2009	587	619	545	459	1,019	937	-	954
2010	518	532	510	499	764	881	-	1,045
2011	565	563	577	475	855	1,008	-	1,054
2011								
May	500	508	518	496	871	1,025	1,310	993
June	518	521	529	450	871	938	1,290	1,007
July	548	548	549	450	871	910	1,290	1,062
August	582	588	605	450	866	875	1,210	1,096
September	618	625	650	450	860	950	1,210	1,110
October	620	610	639	450	860	962	1,120	1,140
November	649	624	597	450	816	950	905	1,141
December	620	598	569	468	764	890	930	1,125
2012								
January	548	531	546	475	816	950	955	1,087
February	563	570	535	475	816	950	1,040	1,110
March	567	614	524	472	788	950	1,040	1,120
April	569	608	514	470	772	825	1,350	1,091
May	613	622	544	470	780	881	1,185	1,078
June	619	615	565	470	783	931	1,280	1,062

India's rice figures are calculated and taken from livericeindex
Source: Horizon Research, FAO, Jackson& Co. (London) Ltd and livericeindex

BASMATI GRAIN DYNAMICS

PUSA 1121 - The future of Basmati

There have been various varieties of Basmati notified under the Seed Act, 1966. PUSA 1121, which was developed in FY04, was recently in FY11 notified by the Government of India as a Basmati variety. PUSA 1121 has significantly altered the supply dynamics of the industry. PUSA 1121's share in total Basmati paddy cultivation is now more than 70%[5] and has cannibalized other Basmati varieties and expanded the segment. There will be a further impetus to grow PUSA 1121 due to the likelihood of a deficient monsoon in 2012. PUSA 1121 has significant advantages over traditional varieties of Basmati (Table 4).

[5] Figure estimated based on interviews conducted with various rice processors

Table 4 Comparison between traditional and PUSA 1121 variety of Basmati rice

Description	Traditional	PUSA 1121
Length – before cooking	7.25 mm	8 mm
Length – after cooking	15 mm	17-18 mm
Aroma	Aroma is an important element	Doesn't have aroma
Period for maturing	Requires 130-135 days	Requires 105-110 days
Water and fertilizer requirement	More water and fertilizer required	Needs lesser water and fertilizer
Yield (Qtls/acres)	10	18
Demand	Good demand in the Middle East	Successfully replacing the traditional variety in the Middle East region.
Paddy Price (INR/Qtls) 05/12	2,200	2,700

Source: Horizon Research

- **Farmers are benefiting from PUSA 1121, leading to higher Basmati cultivation**
  Earlier farmer's preferred to grow non-Basmati paddy over the traditional variety of Basmati paddy mainly due to a Minimum Support Price[6] (MSP) offered for non-Basmati paddy and the comparatively higher yield of non-Basmati paddy. The introduction of PUSA 1121 Basmati variety, which gives a farmer ~80% higher yield and requires comparatively lesser water than traditional Basmati paddy, has changed the above mentioned trend. Higher farmer income has encouraged the farmer to cultivate more PUSA 1121 Basmati paddy and this will improve availability/supply in coming years (Table 5).

Table 5 FY12 Cost and profit analysis – Farmers in Punjab (India)

Description	Unit	Non-Basmati	Basmati	
			Traditional	PUSA 1121
Total Cost	INR/ Hectare	62,164	58,785	58,785
Yield	Qtls/Hectare	74	25	44
Yield	Qtls/Acres	30	10	18
Human Labour	INR/Qtls	162	162	162
Bullock Labour	INR/Qtls	3	3	3
Machine	INR/Qtls	88	88	88
Other operational cost	INR/Qtls	154	192	192
Operational Cost	INR/Qtls	407	445	445
Fixed Cost	INR/Qtls	432	432	432
Total Cost	INR/Qtls	839	877	877
Paddy Prices (Rs/Qtls)	INR/Qtls	1,200	2,200	2,500
Total Cost	INR/Acres	25,168	23,800	23,800
Total Income	INR/Acres	36,000	22,000	45,000
Net Income	INR/Acres	10,832	-1,800	21,200
Return	%	43.0	-7.6	89.1

Other operational cost includes Seed, fertilizer &manure, Insecticides, Irrigation charges. Fixed cost includes % Rental value of owned land, interest on fixed capital and others.
Source: Horizon Research, Department of Agricultural (India)

- **PUSA 1121 leading to the creation of perfect substitutes**
  Whatever limited product differentiation existed are slowly being eroded due to increasing homogeneity of Basmati. Earlier certain rice processors were known for their ability to select finer quality paddy out of the traditional Basmati varieties, but that advantage is no longer relevant as most Basmati being grown is PUSA 1121.

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[6]MSP is a Government mandated 'minimum' price that the farmer will get irrespective of the market price and enables the farmers to mitigate risks and avoid losses which could occur if the traditional Basmati paddy prices declined

Working capital needs due to ageing process

Ageing is necessary to (a) ensure a higher recovery of head rice and reduce the proportion of broken rice while processing, (b) remove moisture and (c) increase the aroma. Both paddy and rice are aged though there is a limit to the effectiveness of ageing paddy beyond six months. Rice can be aged for longer periods and rice aged beyond a year has a price premium but remains a niche product.

Ageing results in high working capital requirements. Indian banks have generally been liberal in financing these working capital requirements. Since FY09 financing standards have been very low and credit has been easily available. The result has been that most processors have purchased more paddy than was necessary which in turn has resulted in higher inventory holding periods (Table 6).

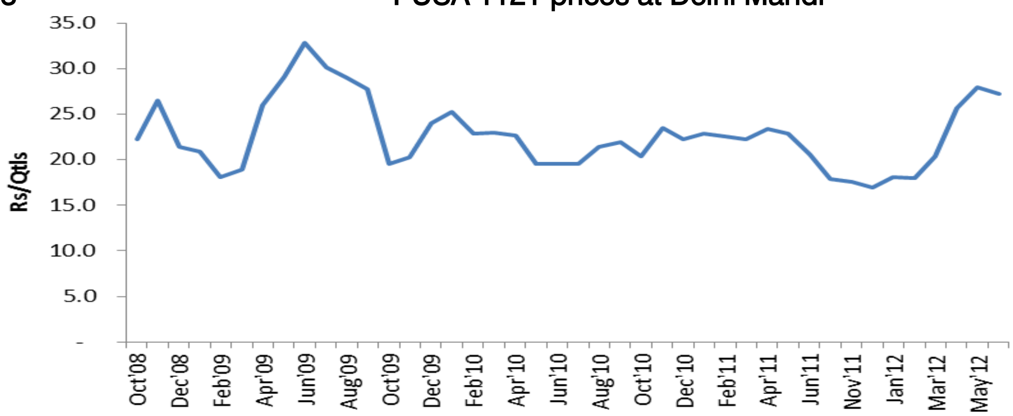
Table 6 **Overall Inventory days**

Companies	FY07	FY08	FY09	FY10	FY11
REI Agro(BSE: 532106)	414	466	470	402	461
KRBL(BSE: 530813)	291	397	293	220	364
Kohinoor Foods (BSE: 512559)	255	281	303	305	316
LT Foods(BSE: 532783)	231	279	320	314	303

Source: Horizon Research

Another problem with excess credit is that it has created an inflationary pressure on paddy prices (Exhibit 3).

Exhibit 3 **PUSA 1121 prices at Delhi Mandi**



Source: Horizon Research, National spot exchange and Agmarkweb

There is minimal benefit of holding excess paddy inventory. The reason is that all 'aged' paddy no matter whatever vintage (in terms of harvest year) is priced the same. Consequently, if paddy is stored for more than a year then its value is determined by the next year's paddy prices. We believe that those processors such as REIA that are holding excess inventory (Table 6) could see significant inventory write-offs if current year Basmati paddy prices are less than those of the previous years.

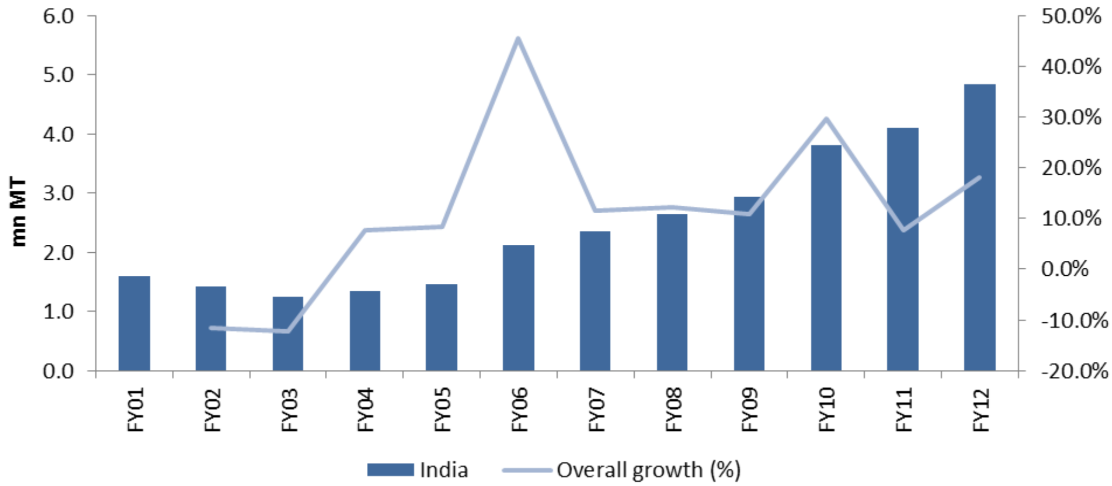
Recovery Rate is similar

The Recovery rate is the amount of rice that can be milled from a given quantity of paddy. The industry producers are consistently recovering 65% of the paddy for milling. By-product production--husk at ~20% and bran of ~9%--is fairly standard across the industry. All processors have access to the latest and improved technologies in processing and storage and we therefore assert that there are limited competitive advantages in recovery.

Production

Total Basmati rice grown was estimated to be around 4.7 mn MT in FY12 (Exhibit 4).

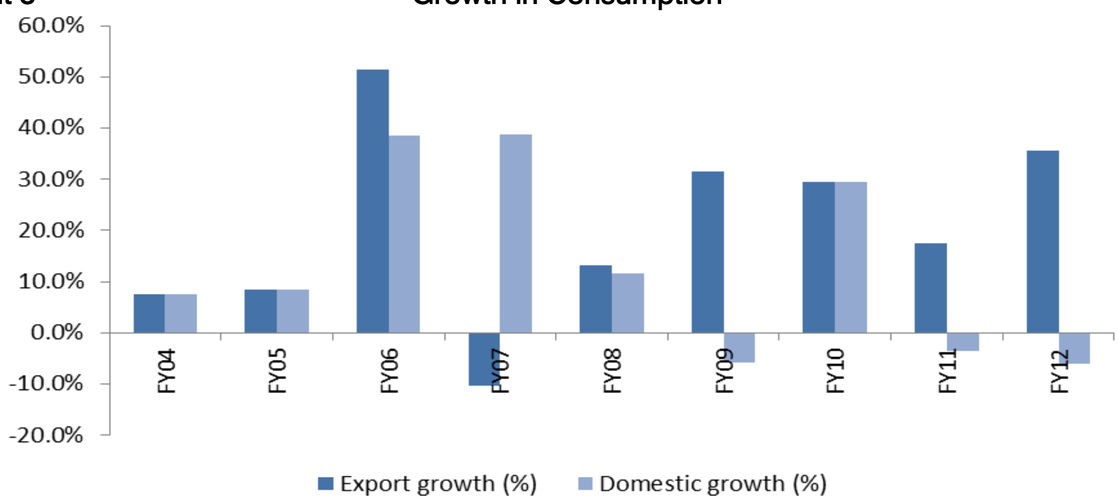
Exhibit 4 **India Basmati rice production**



Source: Horizon Research, Company, APEDA

In the domestic market, we believe that demand will expand on account of growing taste for packaged products, increasing disposable income, which results in a rise in demand for premium products and the growth in organized retailing. We estimate that overall domestic demand of Basmati rice has grown at 10.5% CAGR during 2001-12 (Exhibit 5).

Exhibit 5 **Growth in Consumption**



Source: Horizon Research, Company, APEDA

Of the total worldwide export of Basmati, India's share is ~78% (3.2 mn MT) and Pakistan's share is ~22% (0.9 mn MT). Major Export markets include UAE, Saudi Arabia, Iran, Kuwait and UK in FY12.

Rice export to Iran had declined in FY11 following US sanctions. Now, as per a new payment mechanism, Iranian importers can make payment in Indian rupees which will help bypass sanctions. Under the earlier mechanism, Indian exporters were selling Basmati rice to Dubai-based traders, who would then supply the Basmati to local traders in Iran. With direct Basmati exports to Iran, logistic costs will come down making Basmati more competitive prompting Iranian traders to buy more. Demand for Basmati rice has witnessed a sharp rise from Iran, UAE and Iraq (Table 7).

Table 7 **Country-wise CAGR - India (FY06-11)**

Countries	Volume	Value	Realisation	Contribution to India's Export - FY11
UAE	*58.0*	*75.4*	*11.0*	28.0
Iran	*131.4*	*165.5*	*14.7*	19.3
Iraq	*149.7*	*168.6*	*7.5*	1.4
Overall	*13.4*	*27.6*	*12.5*	

Source: Horizon Research and APEDA

Branding

Switching from one brand to another is not very difficult as most of the products are perfect substitutes of one another and are readily available in the market. In our market survey of the domestic market, we have noticed no difference in price between rice of similar age and quality supplied by any processor. In the domestic market we believe that even those rice processors that have 'brands' possess limited pricing power. Most processors with brands in the domestic market have diluted their brands through brand extension to lower quality Basmati rice.

Expenditure on advertisement by major Basmati rice processors REI Agro and KRBL has averaged only 0.01% and 1.2% of total revenues respectively during the past five years.

Exhibit 6:
Basmati rice of various processors displayed at a supermarket in Delhi

Source: Horizon Research

Table8 **Some of the major brands in Basmati rice**

Listed processors	Brands	Unlisted processors	Brands
KRBL	India Gate, Doon	Amira Foods	Amira
Kohinoor Foods	Kohinoor, Charminar	Sunstar overseas	Hello
LT foods	Daawat, Heritage	Best International	Best
REI Agro	Raindrop	Deva Singh Sham Singh	817 Elephant
Chaman Lal Seta Exports	Maharani	Shri Lal Mahal	Shri Lal

Source: Horizon Research

Export price realizations are higher than domestic realizations

In the export market we have observed that many commercial buyers of Basmati take extensive quality assurance measures before purchase. Commercial buyers require strict control of quality throughout the production chain, including knowledge of the specific variety and the use of pesticides and chemicals during production and storage. However, once it has been established that the processor has consistently been able to maintain quality standards the processor is able to command a slight pricing premium.

Of the total Basmati rice production (4.7 mn MT) in FY12; head rice[7] recovery is around 3.5 mn MT (75%) whereas the remaining is broken rice (1.2 mn MT). Generally, a major portion of head rice (3.2 mn MT) is sold in the export market and fetches better average price realizations (per Kg). In India, both head rice (0.4 mn MT) and broken rice (1.2 mn MT) are consumed due to which the average realization in the domestic market is lower (Table 9).

Table 9 **KRBL's domestic and export realizations (INR/Kg)**

Particulars	FY07	FY08	FY09	FY10	FY11
Domestic	23.2	27.5	30.4	31.0	37.9
Export	32.6	41.0	76.8	65.1	59.0

Source: Horizon Research

Realizations have declined by CAGR 2.9% between FY10-12 but the paddy cost has also increased by more than 2% reflecting increased competition in the export market (Table 10).

Table 10 **Exports from India**

Particular	FY10	FY12	CAGR (FY10-12)
Volume (in mn MT)	2.0	3.2	8.1
Value (US$ mn)	2,297	3,072	5.0
Realisation (US$/MT)	1,139	956	-2.9
Paddy Cost (US$/MT)*	415	476	2.3

* Paddy cost of FY09 for FY10 and FY11 for FY12
Source: Horizon Research, APEDA

Removal of Minimum Export Price will have marginal impact on the larger processors
Currently, there is no Government regulation on Basmati rice except that a Minimum Export Price (MEP) has been in place since March 2008 (Table 11). MEP was introduced to ensure the availability of rice in the domestic market. The Government recently stated that it is contemplating removing MEP entirely. We believe that the removal of MEP could lower average realizations across the industry as competition for export orders will intensify. However, given that paddy sowing has been affected by a poor start to the monsoon[8] season, it is unlikely that the MEP will be removed in the near future.

Table11 **Minimum export price (MEP)**

Date	Announcement
Mar-08	Implemented MEP at USD 900/MT
Apr-08	Increased to USD 1,200/MT
Jan-09	Declined from USD 1,200/MT to USD 1,000/MT
Sep-11	Declined from USD 1,000/MT to USD 900/MT
Feb-12	Declined from USD 900/MT to USD 700/MT
Jul-12	MEP can go off totally - As per news articles

Source: Horizon Research

SELECTED COMPANIES
We have reviewed REIA and KRBL which we believe are representative of the industry as a whole.

[7]Milled rice (65% of paddy) with length greater or equal to three fourth of the average length of the whole grain is called head rice. Whereas, the remaining (one forth) is broken rice.
8 The monsoon accounts for 80% of the rainfall in India and occurs from June through September

REI Agro (REIA –INR10.9- BSE) Rice Industry

	EPS	EV/EBITDA	PMV		
	EPS	EV/EBITDA	PMV	Market Cap	INR 10,422.9 *mn*
FY12	INR 2.02	6.6	INR 1.38	Dividend:	INR 0.20
FY13P	INR 2.52	5.7	INR 8.33	Share O/s:	958.0 *mn*
FY14P	INR 2.85	5.2	INR 9.12	52-Week range	INR 29.65 INR 7.60
FY15P	INR 2.90	5.0	INR 11.74		

SUMMARY AND OPINION

REI Agro (REIA), headquartered in Delhi (India), with revenue of INR42.2 billion in FY12 is the largest Basmati rice processing company in India, by volume. It was incorporated in 1994 by Mr. Sanjay Jhunjhunwala and Mr. Sandip Jhunjhunwala. Rice accounts for 99.5% of REIA's revenues with the remaining coming from wind power. ~85% of REIA revenues come from domestic sales. The current stock price is at a premium to our estimated Private Market Value™ (PMV™)[9]:

- REIA has consistently entered into new businesses such as wind power and retail that offer limited synergies with the Basmati business. None of these new businesses have added any value to shareholders.
- During FY10-12, REIA undertook a significant capacity expansion to expand its owned capacity at Bawal (Haryana) to 118MT/hour at the cost of ~INR 15 billion from 103MT/hour (61MT/hour: owned; 42MT/hour: leased [which is now surrendered]) in FY11. We believe that this expansion was excessive both in terms of capacity and cost incurred. Our estimates based on REIA maintaining current growth rates (9% expected during FY12-17) show that they will be unable to fully utilize this capacity till beyond FY17.
- REIA rice has limited brand visibility compared to its peer companies' brand (i.e. "India gate" – KRBL, "Kohinoor" - Kohinoor Foods and "Daawat" - LT Foods). We believe low brand presence restricts REIA's ability to compete with any new players and also to pass on the rising raw-material cost to the ultimate consumers.
- REIA has been maintaining a comparatively high inventory as compared to other Basmati rice processors. We believe that REIA is holding excess inventory and could see decline in realizations if current year Basmati paddy prices are less than those of the previous years. In FY12 REIA inventory days were 420 days and receivable days were 115 days and this ultimately could result in obsolescence and increased bad debt levels. In comparison KRBL inventory days were 354 days and receivable days were 50 days in FY12.
- High leverage (4.3x) and low interest coverage ratio of 1.6x lead us to believe that REIA will be unable to significantly increase procurement levels of paddy which will limit their revenue growth. Total debt increased by 3.7x during FY07-12 to INR47 billion (of which short term debt is INR 34 billion). Debt also includes foreign currency convertible bonds (FCCB) of USD105 million raised in November 2009. FCCB's will mature on 13th November 2014. The company's non-convertible debentures of INR 2.8 billion will also mature in FY14 and FY15. As per our Z score analysis for predicting bankruptcy, REIA is in the distress zone with a score of 1.2x (Distress zone - <1.81x).

OUTLOOK

We expect REIA revenue to grow by 8.3% annually through FY17 due to rising Basmati paddy production. We estimate EBITDA margin to decline from 20% in FY12 to 19.7% in FY13P. We further believe that higher interest cost would impact the net profit adversely. Net margin is estimated to reach 4.9% in FY13P. At over 5.7x FY13 EBITDA of INR 9.8 billion, we believe REIA stock is trading at a 28.2% premium over our estimated PMV of INR 8.5 per share.

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[9]PMV is the price an informed industrialist is willing to pay for the total enterprise under current market conditions. It includes control premium and synergy benefits. Gabelli Asset Management Company (GAMCO Investors) developed Private Market Value analysis and applied it in conjunction with the presence of a catalyst. The investment methodology process is trademarked by the firm as "Private Market Value with a CatalystTM". (For more information on PMV see: http://www.gabelli.com/news/articles/reg-selby_123099.html)

KRBL (KRBL–INR21.7 - BSE) Rice Industry

	EPS	EV/EBITDA	PMV	Market Cap	INR 5,306.3 mn	
FY12A	INR 2.92	6.1	INR 20.88	Dividend:	INR 0.30	
FY13P	INR 4.30	5.5	INR 27.09	Share O/s:	244.0 mn	
FY14P	INR 4.54	5.2	INR 30.08	52-Week range	INR 31.45	INR 12.75
FY15P	INR 4.85	4.9	INR 35.47			

SUMMARY AND OPINION

KRBL, a Ghaziabad (Uttar Pradesh) based company is India's largest Basmati rice processer in terms of capacity (127 MT/hour rice processing). The promoter family has been engaged in agro products trading since 1886. The company was incorporated as KRBL in 1993 and was listed in 1995. Mr. Anil K. Mittal, Mr. Anoop K. Gupta and Mr. Arun K. Gupta are the majority shareholders. In 2003, KRBL acquired a sick integrated paddy of 150 MT/hour milling capacity at a very low acquisition cost of USD 3.6million and spent additional INR 1.1billion on renovation and modernization. Rice accounts for 94% of KRBL revenues with the remaining coming from power (4%) and others (i.e. sale of by-products etc.). FY12 revenue was INR16.3billion with volume growth of CAGR 9.8% during FY07-12.The current stock price is below our estimated PMV:

- KRBL owns the largest paddy milling capacity of 195MT/hour located at two different states in India. In Ghaziabad (Uttar Pradesh), it has a 45 MT/hour capacity, which has a utilization rate of ~90%. Dhuri (Punjab) capacity of 150 MT/hour has utilization level of ~20%. Overall the utilization rate is around 30%-35%.It has excess capacity at Dhuri which they will now utilize for processing non-Basmati rice as the Government has lifted the ban on non-Basmati exports in September 2011.
- Branded products contribute more than 95% of the company's total revenues. In 1998 the company launched its two well-recognized brands i.e. "India Gate" and "Doon" in the domestic market. "India Gate" has ~25% market share in both domestic and export branded Basmati rice segment. To maintain their market position and improve brand recall value, KRBL has spent INR 275 million in FY12 and an average of 1.3% of revenues in last 3 years on brand promotion and advertisement. The spending is significantly higher than its competitor REIA, which has spent INR 6.7 million in FY12.
- KRBL is India's leading branded Basmati rice exporter with 5% share in volume and 6% share in value in the total India's Basmati rice exports. 56% of KRBL's rice revenues come from exports with the Middle East contributing about 70%.
- Lower inventory turnover ratio of 354 days (420 days of REIA), low receivable days of 50 days (compared to 113 days of REIA), high interest coverage ratio of 2.6x (compared to 1.6x REIA) and low debt/equity of 1.7x (4.3x of REIA), ensures easy availability of bank financing in the coming paddy procurement cycle.
- KRBL's RoE at 10.4% and RoA at 3.7% is comparatively higher than REIA's RoE at 8% and RoA at 2.6% in FY12.

OUTLOOK

We currently estimate that KRBL revenues will grow at 6.2% CAGR to INR 22.0 billion during FY12-17 and EBITDA at 6.5% CAGR to INR 3 billion by FY17. We have estimated EBITDA margin to improve by 30 bps to 14.3% in FY13 mainly due to lower average paddy procurement cost of INR 17/kg in FY12. Current valuation is at 5.5x FY13 EBITDA. Our FY13 PMV of INR 27.1 implies that the stock trades at a 19.7% discount to PMV (based on 6x EV/EBITDA).

INVESTMENT CASE AND CONCLUSION

India's agriculture industry is heavily reliant on the annual monsoon rains and there are clear indications that FY13 will see deficient rains in most parts of India. Propitiously, the impending failure of this year's monsoon should translate into increased Basmati rice production and in particular increased PUSA 1121 production due to their lower water requirement as compared to non-Basmati rice. PUSA 1121 has changed the dynamics of the industry. Since FY09 Basmati rice production has increased almost 1.9x on account of rise in cultivation area and higher productivity of PUSA 1121.

Though a probable decline in credit availability, high existing inventory levels and increase in cultivation of Basmati should ensure that Basmati paddy prices will not appreciate in FY13, rice processors will be unable to benefit as increasing competition has resulted in declining margins and significant over capacity.

Within the industry we believe that REIA will face significant pressure on margins compared to their competitors as they do not have any brand visibility, have a minor presence in the export market, and, with the highest inventory days in the industry will face inventory obsolescence and margin pressure. In the past REIA has successfully undertaken several fund raising activities including through an IPO, GDR, QIP issue, rights issue, 2 FCCB issues, spun off a their retail subsidiary, and, they have raised over INR 47 billion in debt through a number of banks. We believe that in the past REIA has been able to raise capital when needed to finance operations and capacity expansion but if this access to capital stops it could lead to significant disruptions in their operations. Their aggressive expansion and disproportionate expenditure on new facilities has affected shareholder value. Due to these factors, we believe REIA stock is a sell.

KRBL has an edge over other processors. Their presence in export and domestic markets, lower inventory levels and debt/equity of 1.6x (4.5x of REI Agro) and high interest coverage ratio of 2.6x (compared to 1.6x REIA) should ensure that EBITDA margins are maintained.

Investors looking to benefit from the Basmati industry must be selective and take a call based on the PMV of the company.

Rohit Anand, the Research Analyst who prepared this report, hereby certify that the views expressed in this report accurately reflect the analyst's personal views about the subject companies and their securities. The Research Analyst has not been, is not and will not be receiving direct or indirect compensation for expressing the specific recommendation or view in this report.

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A **Buy** rated stock is one that in our view is trading at a meaningful discount to our estimated PMV. We could expect a more modest private market value to increase at an accelerated pace, the discount of the public stock price to PMV to narrow through the emergence of a catalyst, or some combination of the two to occur.

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