India Equity Research I Chemicals & Fertilizers	Initiating coverage	
Deepak Fertilizers & Petrochemicals Ltd.	INR:88	

## **Emerging Star**

Deepak Fertilizers and Petrochemical Corporation Limited (DFPCL) was incorporated in 1979 as an Ammonia manufacturer and today it is a multi product company with two major segments, mainly chemicals & fertilizers. DFPCL is one of the leading producers of industrial chemicals like Ammonia, Methanol, and various grades of Nitric Acid etc. DFPCL is also the largest producer and market leader of Iso Propyl Alcohol (IPA) in India. From a mere Ammonia manufacturer it has transformed itself into chemical & fertilizer manufacturer with manufacturing facilities at Taloja (Maharashtra). It has recently ventured into value added real estate with a retail mall space of 5.5 lakh sq.ft.

#### **Investment Rationale**

**Capacity expansion in Technical Ammonium Nitrate (TAN)- Big growth opportunity:** DFPCL is the only manufacturer of porous prilled TAN in India. The total domestic market of TAN is 6,00,000 MTPA. Company is adding additional 3,00,000 MTPA capacity at its Taloja plant. Post expansion, DFPCL's TAN capacity would stand at 4,32,000 MTPA. Post expansion, DFPCL's domestic market share would move up to 60% plus from the current 30% share.

Gas availability will improve operational efficiency: DFPCL's total natural gas requirement is 0.8 mmscmd for the enhanced capacities, of which 0.73 mmscmd (90%) has already been contracted at an average landed cost of \$ 6.1 per mmbtu. The balance 10% would be purchased from market at spot rate. Improved gas availability would lead to better capacity utilization of chemicals as well as fertiliser plant. Company's fertiliser plant operated at 25% in FY09 due to shortage of gas and phosphoric acid. On the back of an improved feedstock scenario, we have taken 40% and 50% utilization level for fertiliser plant in our FY10E and FY11E estimates, respectively.

Forward integration into farm solutions - *Mahadhan Saarrthie a new initiative:* The Company is among the few Indian fertiliser manufacturers that is now taking steps for forward integration into comprehensive farm solutions and output management. On one hand it would benefit DFPCL as readymade market for its fertiliser products and on the other hand, the company can procure finished products like fresh fruits and vegetables to cater to domestic and international grocery chains, boosting company's revenue.

#### Valuations & Views

We have positive view on the company mainly due to strong financial track record as well as dividend payout history. We believe the valuations of the company to improve further once the TAN capacity expansion is completed by Q3FY11E and also the improved availability of feedstock will result into increased revenue from fertilizer segment. The strong product portfolio of both chemicals & fertilizers and rich customer base clearly reflects the growth visibility. At the current market price of Rs 88 the company is trading at 5.0x FY10E EPS of Rs. 17.8 and 3.2x FY11E EPS of Rs.27.6 We have valued the company using earnings multiple. We initiate our coverage on the stock with a 'BUY' recommendation with a target price of Rs 143, implying an upside potential of 62.0%. At the target price, the stock would be valued at 8.0x FY10E EPS of Rs.17.8.

Key Financials				Rs. Crore
Particulars	FY08	FY09	FY10E	FY11E
Revenues	1059.9	1412.1	1491.2	2162.1
EBITDA (excl OI)	193.5	272.2	304.2	464.8
РАТ	102.8	151.9	157.6	243.7
EPS	11.3	16.9	17.8	27.6
EV/EBIDTA	5.7	4.5	4.1	3.2
P/E	7.8	5.2	5.0	3.2
ROCE	15.9%	19.8%	17.0%	21.4%
RONW	15.0%	19.8%	18.1%	24.0%
Source: Company, KRC Research				

wealth enhancement solutions



### Price Target (INR): 143

Market Data	Nov 19 <sup>th</sup> , 2009
Shares outs (Cr)	8.8
Equity Cap (Rs. Cr)	88.2
Mkt Cap (Rs. Cr)	774.4
52 Wk H/L (Rs)	111/47
Avg Vol (1yr avg)	1,01,818
Face Value (Re)	10
Bloomberg Code	DFPC IN

#### Market Info:

SENSEX	16,786
NIFTY	4,989

#### Price Performance



#### Share Holding pattern (%)

Particulars	Sept-09	Jun-09	Chg
Promoters	42.6	42.6	-
Institutions	10.6	13.0	(2.4)
FII	5.9	3.5	2.4
Public/Others	40.9	40.9	-
Total	100.0	100.0	-

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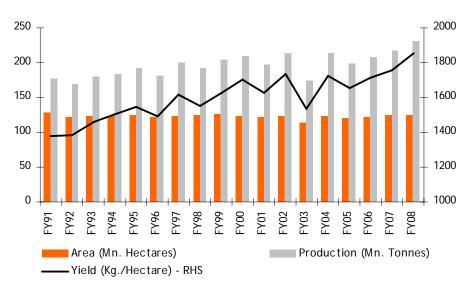


# Industry Overview

## Fertilizer Industry

Agriculture which accounts for one fifth of India's GDP, provides sustenance to two-thirds of our population. Besides, it provides crucial backward and forward linkages to the rest of the economy. From a nation dependent on food imports to feed its population, India today is not only self-sufficient in grain production but also has a substantial reserve. Successive five-year plan have laid stress on self-sufficiency and self-reliance in food grains production and concerted efforts in this direction have resulted in substantial increase in agriculture production and productivity. This is clear from the fact that from a very modest level of 52 million MT in 1951-52, food grain production rose to about 230.78 million MT in 2007-08. In India's success in agriculture sector, not only in terms of meeting total requirement of food grains but also generating exportable surplus, the significant role played by chemical fertilizers is well recognized and established.

This increase in agricultural production has been brought about by bringing additional area under cultivation, extension of irrigation facilities, the use of improved high-yielding variety of seeds, better techniques evolved through agricultural research, water management, and plant protection through judicious use of fertilizers, pesticides and cropping practices.



## Exhibit 1: All India - Area under cultivation & Production of Food-grains

Source: Department of Agriculture, KRC Research

Fertilizers are chemical compounds or substance that contains elements which are necessary for the growth of plant and flowers. There are different types of fertilizers - organic fertilizers, bio-fertilizers and chemical fertilizers. Organic fertilizers are those which are made through natural process like decomposed plants such as manure, worm castings, peat moss, seaweed, sewage and guano, bio fertilizers are Rhizobium, Azotobacter, etc. whereas inorganic fertilizers are manufactured through chemical process.

Plants need around 16 nutrients for growth. While some can be obtained from the atmosphere, others have to be taken in from the soil.

The most important fertilizers in terms of tonnage & value are chemical fertilizers which supply the primary nutrients. Currently there are around 25 chemical fertilizers used in India. These can be classified into nitrogenous (N), phosphatic (P), potassic (K) and complex fertilizers (combination of N,P,K), depending on their nutrient content.

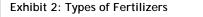
Increase in agriculture production is attributed to plant protection, agricultural research, water management etc.

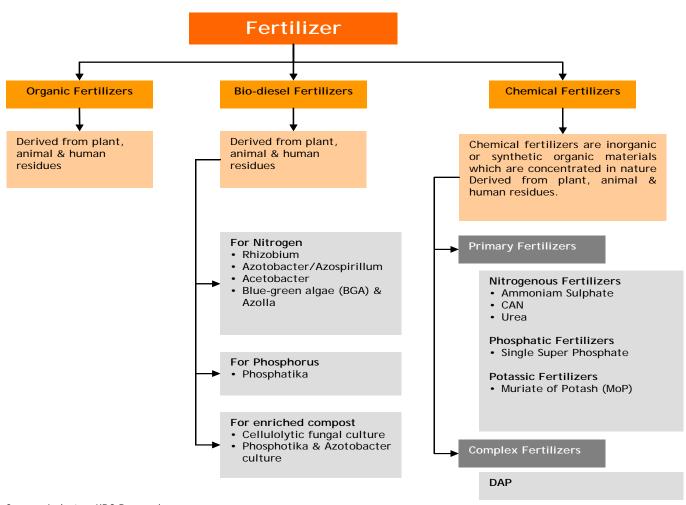
#### Since 1991though

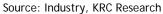
agricultural area under cultivation has remained same, yield has improved because of use of high yielding variety of seeds, better farm practices, increased use of fertilizers and other agrochemicals

*Currently there are around* 25 chemical fertilizers used in India









56 large size fertilizer plants in the country manufacture a wide range of nitrogenous, phosphatic and complex fertilizers The rapid build-up of fertilizer production capacity in the country has been achieved as a result of a favourable policy environment facilitating large investments in the public, co-operative and private sectors. Presently, there are 56 large size fertilizer plants in the country manufacturing a wide range of nitrogenous, phosphatic and complex fertilizers. Out of these, 30 (28 are functioning as on 31.03.2009) units produce urea, 21 units produce DAP and complex fertilizers, 5 units produce low analysis straight nitrogenous fertilizers and the remaining 9 manufacture ammonium sulphate as by-product. Besides, there are about 72 medium and small-scale units in operation producing SSP. The sector wise installed capacity is given in the table below: -

Exhibit 3: Sector wise, Nutrient wise Installed Capacity of fertilizer manufacturing units (as on 31.03.2009)

Sr. No.	Sector	Capacity (Lakh MT)		% share	
		N	Р	N	Р
1.	Public Sector	34.98	4.33	29.0	7.65
2.	Cooperative Sector	31.69	17.13	26.27	30.27
3.	Private Sector	53.94	35.13	44.73	62.08
	Total	120.61	56.59	100.00	100.00

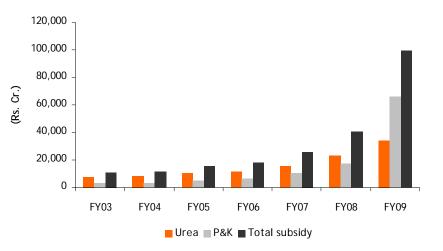
Source: Department of Fertilizer (DoF), KRC Research

## Fertilizer Subsidy:

Fertilizer subsidy has encouraged farmers for increased use of fertilizers to improve yield per hectare The subsidy on fertilizers is passed on to the farmers in the form of subsidized MRPs. The selling prices as notified by Government for the subsidized fertilizers are much lower than the normative delivered cost of these fertilizers at farm gate level. The difference between the normative delivered cost at farm gate level and the notified selling prices is paid as subsidy to manufacturers/importers on sale of fertilizers to the farmers at the subsidized prices. The government is planning to pay the subsidy directly to farmers, but there are many of operational issues in this and nothing has been finalized on the same.

The increase in rate of subsidy on fertilizers combined with increase in consumption of fertilizers has led to a substantial increase in requirement of subsidy. In spite of increase in cost of fertilizers, the Government has completely kept the farmers insulated from this increase in cost and have increased the subsidy allocations to meet the consumption needs of the farmer at subsidized level of prices. The subsidy on fertilizers has been increased sharply over the last few years.

Exhibit 4: Fertilizer subsidy over the last few years:



Fertilizer subsidy for FY10 is estimated at Rs. 55,000 crore, much lower than FY09's Rs. 108,000 crore

#### Source: Department of Fertilizer, KRC Research

The steady increase in fertilizer subsidies over the years has largely been the result of increasing consumption and increases in the costs of inputs of indigenous fertilizers and prices of imported fertilizers from time to time. The cost of various inputs / utilities, such as coal, gas, naphtha, rock phosphate, sulphur, ammonia, phosphoric acid, electricity, etc., as also the cost of transportation, went up significantly during the 1980's.

The gas based fertilizer units commissioned during this period also involved higher capital investment per tonne of installed capacity, necessitating constant upward revision in the retention prices.

The DoF has suggested nutrient based pricing which would bring down the subsidy bill of the government. If this policy is implemented, there would be a huge saving in government spending from FY10 onwards. As per DoF fertilizer subsidy bill for FY10 is likely to be ~Rs. 55,000crore.

#### Fertilizer sector Outlook:

Despite the increase in fertilizer consumption, the fertilizer consumption per hectare still remains low in India. In 2004-05, the fertilizer consumption in India was lower at ~108kg/ha, while it was ~555kg/ha in Egypt, ~510kg/ha in Netherlands, 407kg/ha in Korea, 289kg/ha in China, 197kg/ha in Bangladesh, 146kg/ha in Pakistan and 113kg/ha in USA. With rising population the demand for food grains would increase. Limited area for cultivation and irregular monsoons increase the dependence on fertilizers and hybrid seeds to improve the overall productivity per ha. The domestic fertilizer industry which has grown at a CAGR of 7% in last 8 years is expected to grow at a CAGR of 9-10% in next 5 years. This would be supplemented by favourable policy change, increase in availability of feedstock (natural gas)

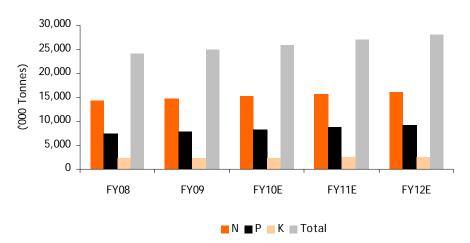
Domestic Fertilizer industry to grow at CAGR of 9-10% in next 5 years



leading to capacity expansions/de-bottlenecking of fertilizer plants.



Demand for fertilizers is expected to grow at 4% CAGR in FY08-FY12E



Source: Department of Fertilizer, KRC Research

## Chemical Industry:

The chemical industry comprises the companies that produce industrial chemicals. It is central to modern world economy, converting raw materials (oil, natural gas, air, water, metals, and minerals) into more than 70,000 different products. Chemicals are used to make a wide variety of consumer goods, as well as thousands of inputs to agriculture, manufacturing, construction, and service industries. The chemical industry itself consumes 26% of its own output. Major industrial customers include rubber and plastic products, textiles, apparel, petroleum refining, pulp and paper, and primary metals.

## Global Scenario:

Global chemical industry is valued at around US\$2.4 trillion.

The global chemical industry is valued at around US\$2.4 trillion, with the EU and US chemical companies being the world's top producers. The US chemical industry is the world's largest, which accounts for over 26% of the global chemical production with an output of US\$450 billion a year.

Some of the major markets for chemicals are North America, Western Europe, Japan and emerging economies in Asia and Latin America. The US is the largest consumer of commodity chemicals, whereas Asia Pacific is the largest consumer of agrochemicals and fertilizers. The largest corporate producers worldwide, with plants in numerous countries, are BASF, Dow, Shell, Bayer, INEOS, Exxon Mobil, DuPont and Mitsubishi.

The pharmaceutical segment contributes approximately 26% to the total industry output, 35-40% of which is dominated by the petrochemical segment. Asia Pacific is the only region in which industry grew faster than the chemicals sector.

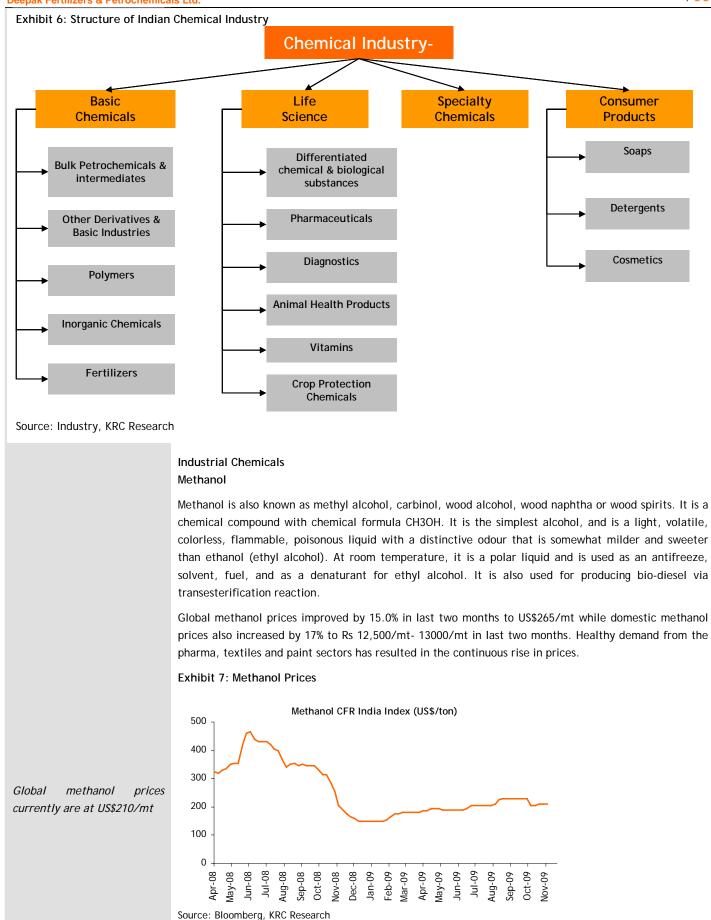
#### Indian scenario:

In terms of volume, India stands 12th largest in the world and third largest in Asia.

The chemical industry is an important constituent of the Indian economy. The Indian chemical sector involves total investment of approximately US\$60 billion and generates employment of about 1 million. This sector accounts for 13-14% of total exports and 8-9% of total imports of the country. A substantial proportion of these exports go to the US, Europe and other developed nations. In terms of volume, it is the 12th largest in the world and third largest in Asia. Currently, the per capita consumption of chemical products in India is about one-tenth of the world's average.

Deepak Fertilizers & Petrochemicals Ltd.

KRChoksey wealth enhancement solutions



High price variations as well as lower demand from

various industries lead to decline in Methanol

production



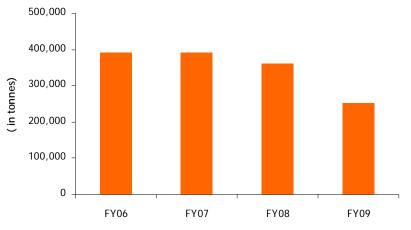
#### Applications of Methanol

- Feedstock: The largest use of methanol is in making other chemicals. About 40% of methanol is converted to formaldehyde, and from there into products as diverse as plastics, plywood, paints, explosives, and permanent press textiles.
- Automotive Fuel: Methanol is used on a limited basis to fuel internal combustion engines, mainly by virtue of the fact that it is not nearly as flammable as gasoline.

#### Indian Scenario:

The Industrial production of methanol has decreased over the period. The production was 251,586 tonnes in the year 2008-09, whereas it was 360,745 tonnes in 2007-08, showing a fall of 31%. The highest production was 391,966 tonnes in the year 2006-07. This was due to high price variation of Methanol as well as lower demand from various industries.

#### Exhibit 8: Industrial Production of Methanol in India



Industrial Production of Methanol In India

# Outlook:

Worldwide, over 90 methanol plants have the capacity to produce over 11 billion gallons of methanol annually. The global methanol industry generates US\$12 billion in economic activity each year. We expect the prices to further improve backed by strong demand from various sectors.

#### Ammonium Nitrate

The chemical compound ammonium nitrate, the nitrate of ammonia with the chemical formula  $NH_4NO_3$ , is a white crystalline solid at room temperature and standard pressure. Ammonia Nitrate is commonly used in agriculture as a high-nitrogen fertilizer, and as an oxidizing agent in explosives, including improvised explosive devices. Ammonium nitrate is also used in cold packs, as hydrating the salt is an endothermic process. For industrial production, the Ammonia Nitrate is produce using anhydrous ammonia gas and concentrated nitric acid.

Ammonium Nitrate prices have risen sharply by 12.5% M-o-M and by 19.1% Y-o-Y to Rs 17,500/mt-18,000/mt. This strong upward movement is seen on account of rising prices of Naptha and Ammonia along with the improving chemical demand. Slump in demand from mining and construction was seen due to the monsoon which is also expected to pick up here on.

#### Raw Materials:

Ammonia, Dilute Nitric Acid and Natural Gas

Applications:

Used by Mining and Construction industry

Source: Industry, KRC Research



# Outlook:

We expect the prices to remain stable at current levels on back of sustained demand from mining industry.

## Isopropyl Alcohol (IPA)

Isopropyl alcohol (IPA) is a common name for a colorless, flammable chemical compound with a strong odor. It has the molecular formula  $C_3H_7OH$  and is the simplest example of a *secondary alcohol*, where the alcohol carbon is attached to two other carbons. Isopropyl alcohol is produced by combining water and propane. There are two processes for achieving this indirect hydration via the sulfuric acid process and direct hydration.

Strong demand from pharma and healthcare with drive the growth of IPA

Isopropyl Alcohol (IPA) prices improved marginally by 1.5% M-o-M to Rs 55,500/mt- 56,000/mt though they were down by 26.5% on a Y-o-Y basis. Prices witnessed strong demand from pharma and healthcare while demand from industrial chemicals improved due to the improving global situation. Paints and textiles also witnessed healthy growth due to the upcoming festival season. These sectors are likely to drive the future demand for IPA. Prices have also seen an upward move due to the rising ammonia and propylene prices.

Raw Materials:

Propylene and Ammonia

Applications:

Used by Paint, Healthcare, Pharma, Agro, Textiles, Organic & Imaging Chemicals.

# Outlook:

The scenario remains encouraging and demand for IPA improved from pharma and textile industry. We continue to maintain our positive view on IPA prices. We expect that pick up in demand is likely to ensure positive trend in IPA prices.

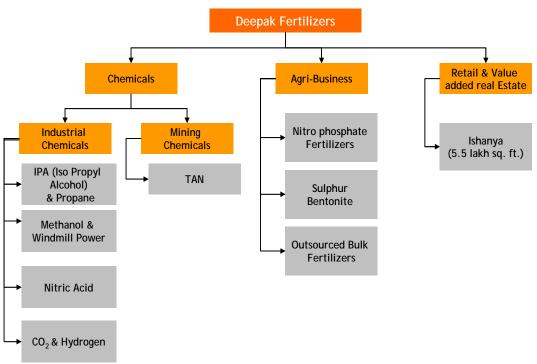
#### **Outlook Of Chemical Industry**

Chemical Industry is poised to posting a double digit growth- back by strong demand The chemical industry in India is poised for explosive growth in the coming years. India's population has grown nearly as large as that of China, with its consuming middle class accounting for about a third of its population. Income in India is rising, which is driving growth of chemicals consumption at high rates. India's GDP growth exceeded 9% for the last fiscal year, fuelling double-digit growth of its chemicals industry. India's government has set in place policies and special economic zones to promote investment in its petrochemical sector, and several key domestic companies have unveiled ambitious expansion plans for the next few years.

#### **Company Overview**

DFPCL- a largest Producer and Market Leader of Iso Propyl Alcohol Deepak Fertilizers and Petrochemical Corporation Limited (DFPCL) was incorporated in 1979 as an Ammonia manufacturer and today it is a multi product company with two major segments, mainly chemicals & fertilizers. DFPCL is one of the leading producers of industrial chemicals like Ammonia, Methanol, and various grades of Nitric Acid etc. The company is the largest producer and market leader of Iso Propyl Alcohol (IPA) in India. The products are benchmarked against the best in the world with world-class manufacturing and quality standards.

## Exhibit 9: Business Model



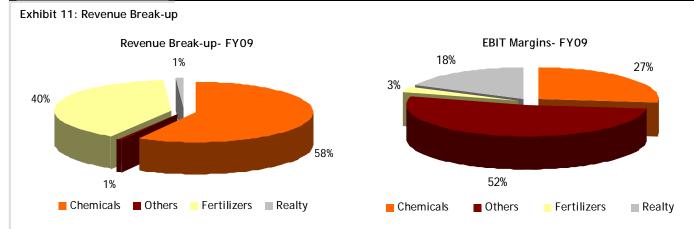
Source: Company, KRC Research

## Exhibit 10: Product Range - Manufactured

Product Range	Current Capacity (MTPA)	User Industry		
Chemicals				
Ammonia (Incl. Hydrogen)	125,400	In house consumption		
Concentrated Nitric Acid	79,200	Defense Sector, Explosives, Pharma, Dyes & refining of precious metals		
Dilute Nitric Acid	297,000			
Methanol	100,000	Pharma, textiles, Paints & explosives		
IPA	70,000	Pharma, Agro-Chemicals., Org. Chemicals, Printing & inks, Healthcare & paints Sector		
Propane	By-product			
Crude IPE	By-product			
Ammonia Nitric (TAN)	132,000	Mining & const. Industry		
CO2	By-product			
Fertilizers				
ANP (Ammonia Nitro Phosp.)	229,500	Agri - input		
Sulphur (Sulp. Bentonite)	25,000	Agri - input		
Source: KRC Research				

DFPCL is poised to ride India's macro economic growth drive- Industrial Chemicals, agriculture and value-added real estate





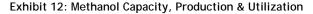
Source: Company, KRC Research

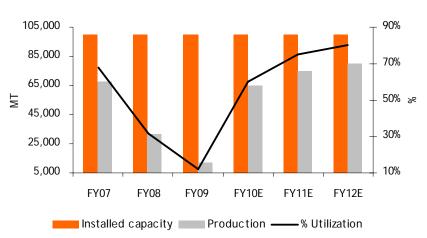
DFPCL is among the leading Indian producers of Industrial Chemicals. Chemicals address the growing needs of industrial customers in the pharmaceuticals, DMT, pesticide, drugs and dye intermediates and refining of precious metals, resin, textile, fertiliser, rubber, petrochemical, fibre, polyester and mining chemicals, among others.

## **Industrial Chemicals**

DFPCL is one to the largest producer of Industrial Chemicals in India, which is addressing the need of multiple users and industries. Company is the market leader in Iso Propyl Alcohol (IPA), Nitric Acid and an important player in Methanol & CO<sub>2</sub>. The key strengths for the company are its customer relationships, loyalty and ability to service the market through domestic geographical advantage.

• Methanol: DFPCL is one of the largest producers of Methanol in India with an installed capacity of 1,00,000 MT per year at Taloja near Mumbai. Due to non-availability of feedstock and uneconomical international prices, the Methanol production was restricted to 12,207 MT in 2008-09 as compared to 31,548 MT in 2007-08. Other major players producing methanol are GNFC, Rama Petrochemicals, RCF, etc.





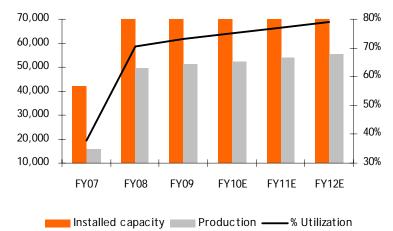
Source: Company Data, KRC Research

DFPCL is one to the largest producer of Industrial Chemicals in India

**Iso Propyl Alcohol (IPA):** DFPCL being a market leader in this product line, the company recorded the highest production as well as sales. The total production of IPA stood at 51,217 MT as compared to 49,447 MT in the previous year.

nokse

Exhibit 13: IPA Capacity, Production & utilization



*Total production of IPA stood at 51,217 MT as compared to 49,447 MT* 

Source: Company Data, KRC Research

Prices of weak nitric acid are currently at ~RS. 9,000/MT

**Nitric Acid:** DFPCL is a market leader in this product line too. The sales volume of Nitric Acid of different grades was 1,14,862 MT in 2008-09 as compared to 1,09,544 MT in 2007-08.

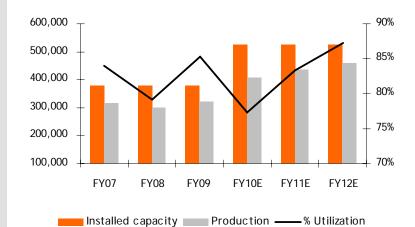


Exhibit 14: Nitric Acid capacity, Production & Utilization

Source: Company Data, KRC Research

• Liquid CO2 & Hydrogen: These two products are the by-products of Ammonia. The demand for the liquid CO2 is expected to be robust going forward. Both these products grew by 39% and 12% respectively during the year.

## Mining Chemicals

## Technical Ammonium Nitrate(TAN)

DFPCL is the market leader in India for TAN, the consumption of this is closely linked to construction, infrastructure, coal mining and mining of other minerals/ores. The growing demand for coal production for meeting power generation targets and additional cement capacities requiring more limestone would further the growth in the mining sector and propel the demand of TAN.

In FY09 the production of Ammonium Nitrate remained stable. The sales volume of TAN came down

Prices of strong / concentrated nitric acid are currently at ~RS. 11,000 -Rs. 13,000/MT

DFPCL - a market leader in

India for TAN



marginally from 1,17,907 MT in 2007-08 to 1,16,724 MT in 2008-09 this was mainly due to plant closure for hook-up of the retrofitted capacities. The sales value increased by 30% from Rs. 165.1 crore in 2007-08 to Rs. 214.7 crore in 2008-09 mainly on account of better prices realizations.

### Agri Business Segment

## Nitro Phosphate fertilizers

DFPCL is one of India's most reputed manufacturers of Nitro Phosphate fertilizers (nitrogen in both nitrate and ammoniacal forms) and speciality fertilizers like Sulphur Bentonite. DFPCL's manufacturing facility is located at Taloja (Maharashtra) with an installed capacity of about 2,30,000 MTPA. Its fertilizers are marketed under the prominent 'Mahadhan' and 'Bhoodhan' brand in Maharashtra, Andhra Pradesh, Karnataka, Gujarat, Madhya Pradesh, Punjab and Haryana. DFPCL markets a host of traded products through its channel, providing a holistic basket of offerings.

## Mahadhan Saarrthie

Mahadhan Saarrthie - DFPCL's initiative to enhance quality and farm productivity

Ishanya- DFPCL's design centre and specialty mall

Strong international technology base

lakh sq. ft

spread across more than 5.5

DFPCL's agri-business continues its focus on integrated nutrient management and providing advisory services to the farmers, through Mahadhan Saarrthie Centres, for enhancing quality and farm productivity. The total number of Mahadhan Saarrthie Centres as on FY09 stood at nine with around 5,000 hectares of cultivable land and a total membership of 5,500 farmers. The success of Mahadhan Saarrthie initiatives and the excellent marketing strategies adopted by the Company has resulted in an increase of around 144% in speciality fertilizers sales from Rs. 28.1 crore in 2007-08 to Rs. 68.5 crore in 2008-09. Company has also successfully commenced exporting fruits and vegetables to the Middle East and the European markets which added Rs. 3.84 crore to the topline.

## Retail & value added real estate business

Ishanya is DFPCL's design centre and specialty mall spread across more than 5.5 lakh sq. ft. It is a single sourcing point for over 52 categories of products, services, materials and knowledge, drawn from across India and the world required for any space, design and beautification. Ishanya is the only centre in India to be endorsed by the Institute of Indian Interior Designers (IIID) and the Confederation of Construction Products and Services (CCPS).

## Strong Technology & Process

DFPCL has strong international technology base. The main aim for company to acquire international technology is for optimum utilization. Company's plant efficiencies are benchmarked to some of the best in the world. Company has also taken many initiatives to make it an innovative, competitive and strong organisation fully capable of meeting global competition.

## Exhibit 15: Efficiency in operations supported by strong technology

Products	Technology
Ammonia	Fish International Engrs. (USA)
Methanol	Davy McKee (UK)
Dilute Nitric Acid	Weatherly Inc (USA)
Concentrated Nitric Acid	PlinKe (Germany)
Ammonium Nitrate	Stamicarbon (Netherlands) & Grande Paroisse (France)
Nitro Phosphate (Fertilizers)	Stamicarbon (Netherlands)

Source: Company, KRC Research

Capacity enhancement projects undertaken by the company will lead to

years

enhanced turnover in coming



#### **Investment Rationale**

#### Capacity addition leads to enhanced turnover

DFPCL's is undertaking capacity expansion projects to meet the increased demand from various segments. The various capacity enhancement projects undertaken by the company will lead to enhanced turnover in coming years.

Various capacity expansion projects undertaken by DFPCL; which are under different phases of completion are as given below.

#### Exhibit 16: Recent Capacity Additions - Drivers of Future Growth

Products	Existing Capacity ( MTPA)	Additional Capacity (MTPA)	Total Capacity ( MTPA)	Total Cost of Project (Rs. in crore)	Commissioning Schedule
Liquid CO2	16,500	16,500	33,000	2.0	FY09
Diluted Nitric Acid	2,97,000	1,48,500	4,55,500	100.0	Q2FY10E
TAN	1,32,000	3,00,000	4,32,000	655.0	FY11E
Sulphur Bentonite (Speciality Fertiliser)	0	2,5000	25,000	16.0	FY09

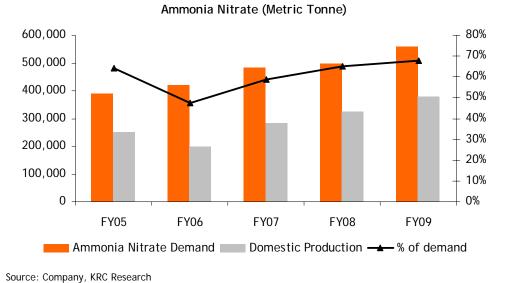
Source: Company, KRC Research

DFPCL has also completed the 15,000 MTPA Ammonia tank at JNPT to create an efficient make-or-buy option, thereby ensuring maximum feedstock assurance. The total project cost for this was Rs. 87 crore. Once these become operational the company will be able to import ammonia and save natural gas, which can be diverted to increase production of other products.

## Technical Ammonium Nitrate (TAN) - Big growth opportunity

DFPCL draws significant revenue from mining and infrastructure sector i.e. 15% in FY 09. Recent budget has allocated Rs.15,948 crore towards NHDP (National Highways Development Projects) and coal production is expected to reach 900 MT in another 8-10 years. This will create huge demand for TAN, which is used as an oxygenator for explosives.

## Exhibit 17: Ammonium Nitrate - Demand & Production



Ammonium Nitrate capacity is expected to be commissioned by November 2010

**KRC Equity Research** 

With the commissioning of new TAN plant, DFPCL's domestic market share would move up to 60% plus from the current 30% share

DFPCL's fertilizer plant operated at 25% in FY09, we expect 40% and 50% utilization level for FY10E and FY11E on back of an improved feedstock scenario

DFPCL's Mahadhan Saarrthie concept is poised to create competitive advantages out of agronomy and direct farmer linkages DFPCL is the only manufacturer of porous prilled TAN in India. The total domestic market of Ammonium Nitrate is 6,00,000 tonne. The market share of the company stands at ~30% in the domestic market, which we expect to improve further and also it has a small strategic presence in export market.

(RChokse)

DFPCL's current capacity of TAN stands at 1,32,000 MTPA with utilization at 89%. DFPCL is expanding additional 3,00,000 MTPA capacity at its Taloja plant. Thus the total capacity after expansion will stood at 4,32,000 MTPA. The capital cost for this project would be Rs 655 crore and funding for the same would be through debt as well as internal accruals.

After the completion of expansion, we expect capacity utilization of 75% in its first year. The topline is expected to be Rs 740 crore with additional capacity i.e. 44% contribution to the total sales. We believe that the mining and infrastructure segment is going to be big business driver for the company going ahead. With the commissioning of new TAN plant, DFPCL's domestic market share would move up to 60% plus from the current 30% share.

## Gas availability will improve operational efficiency

The two key raw materials used by DFPCL are Natural Gas & Propylene. Due to shortage and price volatility the company had to restrain its production levels. Methanol and Nitro phosphate units were running at sub-optimal capacity due to non availability of gas. This has resulted into higher operating cost for these segments.

DFPCL is now firmly connected to the National Natural Gas Grid and has access to natural gas produced anywhere in the country. DFPCL also has tied up for gas from multiple resources like PMT, KG-basin and ONGC. DFPCL has its own 42 km. pipeline from Uran to Taloja ensuring a steady gas supply for its plants. For Propylene, DFPCL has entered into a 7-year long term contract with Bharat Petroleum.

Of DFPCL's total natural gas requirement of 0.8 mmscmd for the enhanced capacities, about 0.73 mmscmd (90%) has already been contracted at average landed cost of \$ 6.1 per mmbtu. For the balance 10% DFPCL plans to buy gas in the spot market, which will meet DFPCL's entire gas requirement and help DFPCL streamline its manufacturing activity and keep the volatile raw material cost under control.

Improved gas availability leads to better capacity utilization of chemicals as well as fertiliser plant. DFPCL's fertilizer plant operated at 25% in FY09 due to shortage of gas and phosphoric acid. On the back of an improved feedstock scenario, we have taken 40% and 50% utilization level for fertiliser plant in our FY10E and FY11E estimates, respectively.

#### Forward integration into farm solutions- Mahadhan Saarrthie a new initiative

DFPCL is among the few Indian fertiliser manufacturers that is now taking steps for forward integration into comprehensive farm solutions and output management.

Agri - services strategy taken by the company is based on four pillars -

- (1) Strong agronomy
- (2) Customized fertiliser manufacturing.
- (3) Direct farmer contact through retail chain and

(4) Produce procurement comprising fresh fruits & vegetables catering to retail and food processing sectors in India and abroad.

The various initiatives undertaken by DFPCL to involve farmers in various activities will benefit it in two ways. On one hand it will act as readymade market for its fertiliser products and on the other hand, DFPCL can procure finished products like fresh fruits and vegetables to cater to domestic and international grocery chains. This will prove to be a big revenue booster going forward.

The total number of Mahadhan Saarrthie Centres as on FY09 stood at 9 with around 5,000 hectares of cultivable land and a total membership of 5,500 farmers. Going forward DFPCL plans to increase the number of such centres.

"Ishanya", a largest design

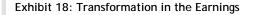
centre and speciality mall

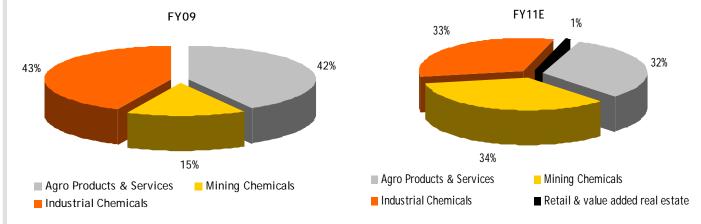
#### Entry into retail & value-added real estate segment

DFPCL has entered into retail space with "Ishanya", a design centre and speciality mall spread across more than 5.5 lakh sq ft. in Pune. This is a single sourcing point for over 52 categories of products catering to home/office owners, architects, designers, builders and developers. The key brands at Ishanya being Home Town, @ Home, Croma, Sonyworld, Bose, F&F, FAB India, Armstrong, Berry Floors, Painted Rhythum, Maspar, Ecoscapes, IIID etc.

More than 60% space has already been leased out with around 50 stores (over 5,000 brands) already open. Lease rental is expected to generate annual revenue to the tune of Rs.30 crore and Rs.10 crore is expected to be generated from other allied facilities in the mall. In FY09 the mall attracted 1.5 million footfalls with 35% conversion.

DFPCL plans to put 85% of the mall on rental basis in period of 18 months. DFPCL has already reached breakeven in this business. We expect a topline of Rs 14.3 crore in FY10E from this business.





Source: Company, KRC Research

## Exhibit 19: Calculation of Fertilizer subsidy in case of DFPCL

Particulars	Rs.
Cost of Production (per MT)	9605
Other cost	3362
Freight Cost	384
Dealers Margin	192
Farm Gate Price	13543
MRP	6807
Subsidy	6736
Total NP Production (FY10E)	91800
Total Subsidy (Rs. Crore)	62

Likely subsidy to be received by DFPCL Rs. 62.0 crore Only producer of IPA in India

Availability of gas from KG Basin to enhance operational

Fertilizer segment dependant

Delay in gas availability to

adversely affect operations &

efficiency

on monsoons

profitability



# SWOT Analysis

# Strengths

- Market leader In chemicals like nitric acid, ammonium nitrate and methanol
- Only producer of IPA in India.
- Tie-up with global leaders to keep company's products updated technologically and also help it in launching new products.

# Opportunities

- Government's enhanced focus on infrastructure and opening of coal sector offers great opportunity for mining chemicals division.
- Specialty fertiliser and farmer consultancy presents the company with additional growth avenues.
- Value added retail venture has got tremendous potential in long term.
- Availability of gas from KG basin will enhance operational efficiency.

Source: KRC Research

# Weakness

- Relying on gas manufacturing companies like RIL, GAIL for main raw material - gas
- Change in gas pricing to directly impact DFPCL's margins
- No control over process of finished goods

# Threats

- Delay in availability or non availability of gas may have adverse impact on top line and bottom line of the company.
- Delay in rain or deficiency of rainfall may have adverse impact on the Fertilizer segment of the company.



#### Financial Overview

#### Quarterly Performance

#### Q2FY10

- Deepak fertilizer posted better then expected numbers in this quarter backed by higher fertiliser trading sales. Net sales declined by 5.1% y-o-y, mainly due to shutdown of one of the nitric acid plant for 40 days and decline in chemical prices on y-o-y basis.
- Operating margins de-grew by 183bps y-o-y, mainly on account of higher low margin fertiliser trading sales.
- > PAT stood at Rs 36.1crore thus declining by 13.6% y-o-y and 7.2% q-o-q.
- During the quarter, DFPCL commissioned its fourth Nitric Acid plant augmenting its total DNA capacity to 445000 tpa., while the additional 300000 tpa. Ammonium Nitrate capacity is expected to be commissioned by November 2010.

#### Exhibit 20: Q2FY10 Financial Snapshot

Particulars	Q2FY10	Q2FY09	Q1FY10	Y-o-Y	Q-o-Q
Net Sales	350.9	369.8	242.4	-5.1%	44.8%
EBITDA	68.1	78.5	57.8	-13.3%	17.9%
OPM	19.4%	21.2%	23.8%	-183 bps	-443 bps
PAT	36.1	41.8	38.9	-13.6%	-7.2%
NPM	10.3%	11.3%	16.1%	-102 bps	-576 bps
EPS	4.1	4.7	4.4	-13.6%	-7.2%

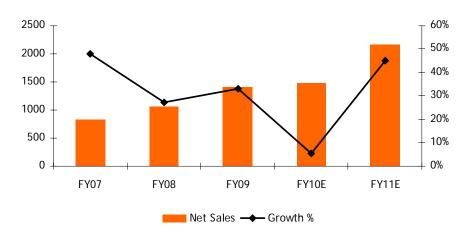
Source: Company, KRC Research

## **Financial Analysis**

#### Net sales to grow at CAGR of ~24%

The revenue for the company is expected to grow at a CAGR of 24% FY09-FY11E backed by robust growth from its mining chemicals segment i.e. TAN where the company is expanding its capacity. The Fertilizer segment will also contribute as the availability of gas has improved. The diversified product mix will act as the future revenue growth driver of the company.

Exhibit 21: Net sales & Growth - FY07-FY11E



Source: KRC Research

Operating margins de-grew, mainly on account of higher low margin fertiliser trading sales.



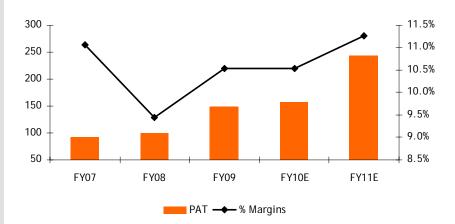
#### Operating margin to improve by 222bps

Diversified product mix will act as the future revenue growth driver of the company We expect that the EBITDA margins to improve in the coming years mainly due to improvement in revenue visibility as operating matrix. Also the improved product mix would add on to the growth. Going forward on the back of strong revenue inflow from TAN, Isopropyl and also from the nitro phosphate fertilizer would result in improved margins.

#### PAT to register a growth at a CAGR of 27% from FY09-11E

We expect the PAT to register a CAGR growth of 27% FY09-11E, on a back of improved revenue mix and gaining stability. We expect the net profit margins to improve in FY11 to 11.3%.

## Exhibit 22: Net Profit & Margins - FY07-FY11E



Source: KRC Research

#### Sensitivity Analysis

#### Exhibit 23: Impact Analysis of change in realization of TAN on DFPCL's PAT

% Change in TAN Realization	-15%	-10%	-5%	0%	5%	10%	15%
TAN Realization	19779.5	20943.0	22106.5	23270.0	24433.5	25597.0	26760.5
PAT (Rs. Crore)	226.3	232.1	237.9	243.7	249.5	255.3	261.1
% chg in PAT	-7%	-5%	-2%	0%	2%	5%	7%

From the above table we can see that 5% decline in realization of TAN would impact DFPCL's PAT by 2%

## Exhibit 24: Impact Analysis of change in realization of IPA on DFPCL's PAT

% Change in IPA Realization	-15%	-10%	-5%	0%	5%	10%	15%
IPA Realization	51,664	54,704	57,743	60,782	63,821	66,860	69,899
PAT (Rs. Crore)	236.0	238.6	241.1	243.7	246.3	248.8	251.4
% chg in PAT	-3%	-2%	-1%	0%	1%	2%	3%

From the above table we can see that 5% decline in realization of IPA would impact DFPCL's PAT by 1%

## Valuation

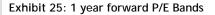
We have positive view on the company mainly due to strong financial track record as well as dividend payout history. We believe the valuations of the company to improve further once the TAN capacity expansion is completed by Q3FY11E and also the improved availability of feedstock will result into increased revenue from fertilizer segment. DCPCL being the only producer of Isopropyl in India with a market share of 70%. The strong product portfolio of both chemicals & fertilizers and rich customer base clearly reflects the growth visibility.

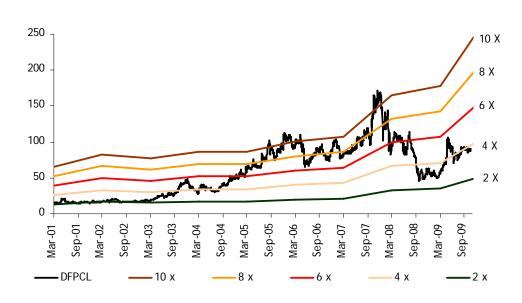
At the current market price of Rs 88 the company is trading at 5.0x FY10E EPS of Rs. 17.8 and 3.2x FY11E EPS of Rs.27.6 We have valued the company using earnings multiple. We initiate our coverage on the stock with a 'BUY' recommendation with a target price of Rs 143, implying an upside potential of 62.0%. At the target price, the stock would be valued at 8.0x FY10E EPS of Rs 17.8.

## Valuation Bands

## P/E 1 year forward

Historically, price performance of the stock has been in the range of 8x - 12x its earnings during normal market conditions. The recessionary phase during the whole FY09 led the price decline severely and the stock traded in the range of 2x - 5x but it has shown some revival as the global market improved as well as the commodity prices. We feel the stock has the potential to trade at higher levels and looking at the past trend and the potential growth drivers discussed above, we have taken an earnings multiple of 8x FY10E EPS of Rs 17.8 to arrive at the target price of Rs 143.





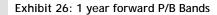
Source: Company, KRC Research

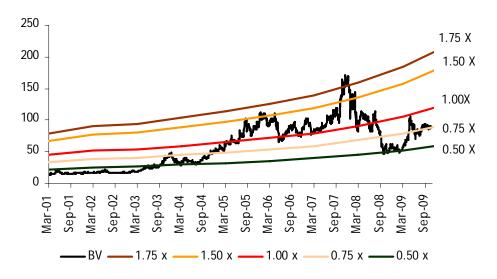
We recommend BUY on the stock with a target price of Rs. 143/share

Trading at lower end of P/E band

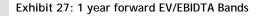
Trading at lower end of P/B

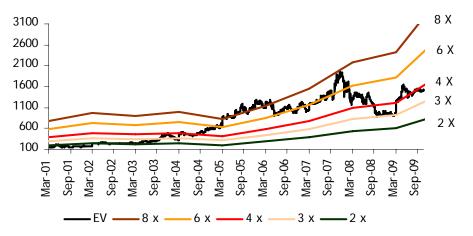
band





Source: Company, KRC Research





*Trading at lower end of EV/EBITDA* 

Source: Company, KRC Research

## **Relative Valuation**

Co.'s	CMP	М Сар		P/E			P/BV		E	V/EBIDTA	
			FY09	FY10	FY11	FY09	FY10	FY11	FY09	FY10	FY11
DFPCL	88.0	776.2	5.2	3.2	2.6	1.0	0.8	0.7	4.5	4.1	3.2
GNFC	93.2	1,448.5	4.3	5.6	4.7	0.5	N/A	N/A	2.5	3.7	3.4
RCF	71.6	3,950.1	10.4	20.1	17.0	1.3	2.2	2.1	5.9	12.4	10.8

Source: Bloomberg Consensus Estimates, KRC Research

# Financials

Profit & Loss Account

(Rs. Crore)

FIUIT & LUSS ACCOUNT				
PARTICULARS	FY08	FY09	FY10E	FY11E
Revenues	1059.9	1412.1	1491.2	2162.1
Expenditure	866.4	1139.9	1187.0	1697.2
EBITDA (excl OI)	193.5	272.2	304.2	464.8
Other Income	21.4	36.0	44.7	43.2
EBITDA (incl OI)	214.9	308.2	348.9	508.1
Depreciation	44.9	52.6	66.0	85.5
EBIT	170.0	255.7	283.0	422.6
Interest	15.9	40.5	59.7	69.4
PBT	154.1	215.2	223.3	353.2
Тах	51.2	63.3	65.7	109.5
РАТ	102.8	151.9	157.6	243.7
EPS	11.3	16.9	17.8	27.6

# **Balance Sheet**

SOURCES OF FUNDS	FY08	FY09	FY10E	FY11E
Share Holder's Fund	698.8	803.1	928.8	1102.8
Share Capital	88.2	88.2	88.2	88.2
Reserves and Surplus	610.6	714.9	840.6	1014.6
Loan Funds	349.4	607.8	853.0	926.0
Deferred Tax Liability	61.7	65.1	65.1	65.1
Total Liabilities	1109.9	1475.9	1846.9	2093.8
APPLICATION OF FUNDS				
Fixed Assets				
Gross Block	1039.2	1266.0	1466.0	1899.0
Less: Depreciation	487.7	536.8	602.8	688.2
Net Block	551.5	729.2	863.2	1210.8
Capital Work-in-Progress	9.2	8.0	8.0	8.0
Project under execution	239.0	235.5	235.5	235.5
Investments	142.7	154.5	154.5	154.5
Current Assets	417.3	619.4	867.6	894.6
Inventories	79.1	98.5	101.4	141.4
Sundry Debtors	216.8	271.9	277.8	396.9
Cash & Bank Balances	30.0	159.0	389.2	206.1
Loans & Advances	90.3	86.7	96.9	145.9
Current Liabilities & Provisions	251.1	271.2	282.2	409.7
Current Liabilities	207.4	218.8	230.0	331.9
Provisions	43.8	52.3	52.2	77.8
Misc. Expenditure	1.2	0.5	0.0	0.0
Total Assets	1109.9	1475.9	1846.9	2093.8



C	Cash Flow Statement
	Deutleuleur

Particulars	FY08	FY09	FY10E	FY11E
Cash Flow Summary				
Net Profit before Tax & Extraordinary Items	151.5	212.0	222.7	353.2
Adjustment For				
Depreciation	44.7	52.4	66.0	85.5
Interest (Net)	8.8	12.3	59.7	69.4
Others	-3.9	40.9	0.5	0.0
Total Adjustments (PBT & Extraordinary Items)	49.6	105.6	126.2	154.9
Op. Profit before Working Capital Changes	201.1	317.6	348.9	508.1
Adjustment For Working Capital Changes	-2.1	-88.0	-7.0	-82.5
Cash Generated from Operations	199.0	229.6	342.0	425.5
Extra ordinary items & Taxes Paid(Net)	-52.9	-57.5	-65.7	-109.5
Net Cash from operating activities	146.1	172.0	276.3	316.1
Cash Flow from Investing Activities				
Purchased of Fixed Assets	-218.7	-237.0	-200.0	-433.0
Investment in Group Cos/ JV's	69.9	-15.3	0.0	0.0
Others	14.6	45.7	0.0	0.0
Net Cash Used in Investing Activities	-134.2	-206.6	-200.0	-433.0
Cash Flow From Financing Activities				
Proceed from 0ther Long Term Borrowings	-80.6	91.6	245.3	72.9
Others	109.5	138.5	0.0	0.0
Interest Paid	-15.1	-33.9	-59.7	-69.4
Equity Dividends & Corporate Dividend Tax Paid	-30.8	-32.8	-31.6	-69.6
Net Cash Used in Financing Activities	-17.0	163.5	154.0	-66.2
Net Inc/(Dec) in Cash and Cash Equivalent	-5.0	128.9	230.3	-183.1
Cash & Cash equivalent (opening balance)	35.1	30.1	159.0	389.2
Cash and Cash Equivalents at End of the year	30.1	159.0	389.2	206.1



Per Share Data	FY08	FY09	FY10E	FY11E
EPS	11.3	16.9	17.8	27.6
Cash EPS	16.4	22.8	25.3	37.3
Book Value	79.2	91.1	105.3	125.0
Liquidity Ratio	FY08	FY09	FY10E	FY11E
Debt-to -Equity	0.5	0.8	0.9	0.8
Interest Coverage	10.7	6.3	4.7	6.1
Inventory Turnover Ratio (Days)	42	40	40	39
Debtors Period (Days)	75	70	68	67
Working Capital Turnover	6.4	4.1	2.5	4.5
Valuation Ratios	FY08	FY09	FY10E	FY11E
EV/EBITDA	5.7	4.5	4.1	3.2
EV/Sales	1.0	0.9	0.8	0.7
P/E	7.8	5.2	5.0	3.2
P/BV	1.1	1.0	0.8	0.7
Operating Ratio	FY08	FY09	FY10E	FY11E
EBITDA Margin	18.3%	19.3%	20.4%	21.5%
Net Profit Margin	9.4%	10.5%	10.5%	11.3%
Tax/PBT	33.3%	29.4%	29.5%	31.0%
Return Ratio	FY08	FY09	FY10E	FY11E
RoCE (%)	15.9%	19.8%	17.0%	21.4%
RoNW (%)	15.0%	19.8%	18.1%	24.0%

Source: KRC Estimates



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Rating Legend	
Our Rating	Upside
Strong Buy	More than 25%
Buy	15% - 25%
Hold	10% - 15%
Reduce	Nil - 10%
Sell	Less than 0%

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