



Seventy Eighth Annual Report 2008-09





Green Revolution?

On-farm water management could increase global crop production by about one fifth, a modelling study by German and Swedish researchers indicates. However, even intensive water management on present cropland will not be sufficient to accommodate the food demands of a growing population in a warming world, the scientists report in the current edition of Environmental Research Letters.

Today, about 15 million square kilometres, roughly ten percent of the total land surface, is covered by cropland. A study suggested that without substantial improvements in water productivity or other measures to increase yields on present cropland, an expansion by about ten million square kilometres would be required if the world population rose to ten billion in 2050.

With moderate management intensity, parts of South America and parts of Africa show large potentials of increasing crop yield by more than 20 percent. Pronounced increases can be achieved mainly in regions where present yields reach less than one tenth of what could theoretically be reached if water supply was unlimited, as in large parts of Africa. Globally, a moderate and feasible management scenario suggests that crop production can be increased by 19 percent, which is comparable with the effect of current irrigation that amounts to 17 percent. Studies suggest exploring options of more efficient irrigation and expansion of irrigated agriculture, of plant breeding and genetic engineering, and of more effective trade with agricultural products from water-rich to water-poor regions.



is a green planet our prime responsibility?

“We believe when we heal the earth, we heal ourselves”

We are committed to adopt and implement responsible and sustainable environmental standards. The BHL leadership encourages employees at all levels to implement sustainability initiatives and inspire them to embrace conservation ethics. BHL has taken significant steps during the year to implement various sustainability projects and to make sure that employees have access to environmental education resources and materials.

BHL has successfully integrated the precept and practice of sustainability into its work culture and business practices – a significant step in the direction to achieve an economic, social and environmental balance throughout the entire operation and production chain. BHL pledges to continue to implement practices that promote economic security, social betterment and environmental stewardship. We will strive towards continual improvement of performance in the following areas.

Eco-efficiency

- Creating products while using renewable resources and reducing waste and pollution.
- ‘Green fuel’ through the fuel Ethanol programme.
- Using renewable resources to generate energy and manufacture products.
- ‘Wealth from waste’ for improving the soil profile and Carbon and Nitrogen ratio.

Environmental Protection, Health & Safety

- Creation of awareness on various environmental issues.

- Going beyond regulatory compliance and adopting clean technologies and improvement in management practices.
- Implementation of best practices in process safety, occupational health and system integration in operations.
- Implementation of clean technology to mitigate global concerns.
- Reduction of CO₂ emissions through renewable energy apart from reduction in the emission of harmful gases (NO_x and SO_x).



does our new Mission have a shade of green?

We are promoting the use of eco-friendly substitutes for non-renewable fossil fuels. We use sugarcane to create ethanol that can be used as a complementary green fuel to gasoline. This effort will help us create a pollution-free environment. As the threat of global warming increases over time, we are taking carefully considered measures to reduce greenhouse gas emissions, protect and enrich our precious forest resources and conserve invaluable environmental resources. We generate surplus power from sugarcane bagasse residue which we supply to the UP State Electricity Grid. Our eco-efficiency measures include the following.

- **Renewable resource as feedstock**

An important by-product of the sugar industry is molasses. Molasses contain about 40-45% sugar, which is diluted to bring sugar content to 10-15% for further fermentation process. The recovery of alcohol is about 8-10% and the rest of the raw material used finds its way into the effluent, which is deeply colored and contains high organic as well as inorganic substances called '**spent wash**'. At BHL, we treat this as a '**resource**' to produce methane-rich biogas and bio-compost. The biogas is utilized as an energy source for producing steam and

power. The residue - bagasse is gainfully utilized in manufacturing of environment friendly and completely wood-free Medium Density Fibre (MDF) and Particle Boards.

- **Energy conservation**

We recognize energy as the most precious resource and has been in the forefront in energy conservation. Our efforts are driven by the utilization of waste heat, the timely replacement of inefficient equipment, condensation and flash steam recovery and management of energy and energy audits by in-house/external experts. Our efforts in energy conservation have resulted in significant decline in specific energy consumption in our manufacturing facilities.

- **Waste and Water recycling**

At our manufacturing facilities the recycled hot water (post condensation), as well as spent wash are gainfully utilized in diluting molasses for the manufacturing process. This not only reduces effluent generation but also reduces water consumption in the distilleries. A continuous effort is being made to reduce consumption levels by following a '**Reduce, Reuse and Recycle**' approach.



has it become imperative to nurture a green planet?

The ecological balance is precariously placed. It is our duty and responsibility to invest our time and resources towards a better environment.

Over the years Bajaj Hindusthan Ltd. has taken several significant steps towards managing and reducing the environmental impact of its operations. We have been consistently making significant investments in cleaner production, modern machinery, efficient processes and

effluent treatment and management facilities. Some of the progressive measures include investments in the following areas:

- **Co-generation with renewable fuel:** Over the years our pioneering effort in co-generation with renewable fuel (Ethanol) has won us praise the world over.
- **Biogas:** Our Biogas plant for distillery effluents at Kinauni, Palia, Gola, Gangnauli, Khambarkhera and Rudauli

are setting new standards for sugar manufacturing facilities across the country.

- **Evaporation Systems:** We have installed and successfully operate multi-effect Evaporation Systems at our Rudauli, Gangnauli, Khambarkhera, Gola and Palia plants.
- **Bio-composting:** Bio-composting facilities are available at all our manufacturing facilities across the country.

• **Wet Scrubbers & ESP:** Installation of Wet Scrubbers & ESP, a state-of-art technology to restrict emissions.

• **Green Belt development:** Green belt of adequate width and density in 33% of the total plant area is provided to mitigate the effects of fugitive emissions all around the plant as per the Central Pollution Control Board guidelines in consultation with the local District Forest Officer.

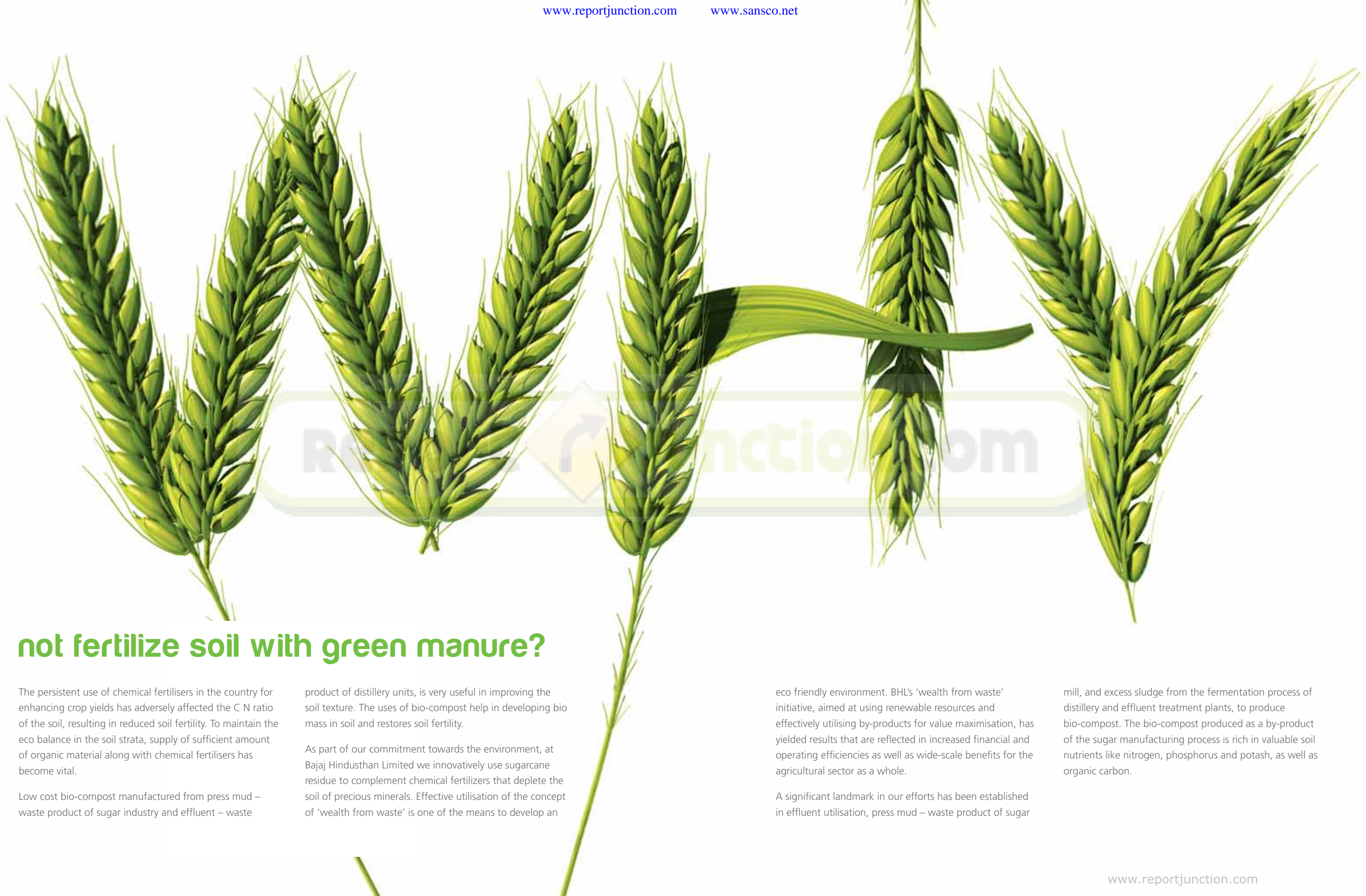


can't wooden furniture be green?

Bajaj Hindusthan Limited (BHL), through its subsidiary, Bajaj Eco-tec Products Ltd. (BEPL), has pioneered the manufacture of environment-friendly and completely wood-free Medium Density Fibre (MDF) Boards, Particle Boards, High Density Fibre (HDF) Boards (plain & pre-laminated) and Laminate flooring in India. Produced from sugarcane bagasse residue from its sugar mills, our products have a wide variety of applications – from furniture and interior design to Speaker cabinets and sound insulation.

With three plants located in Uttar Pradesh, BEPL has commenced trial production of MDF and Particle Boards.

With a total manufacturing capacity of 210,000 cubic metres per annum (160,000 cubic metres of MDF Boards and 50,000 cubic metres of Particle Boards), these wood-substitute products will meet the rapidly growing demand of the construction and furniture sectors, conserving valuable forests and preserving the precious environment. The production of MDF, Particle boards, HDF and laminate flooring reflects the environmental consciousness of the Bajaj Hindusthan Group. It is estimated that BEPL's production of 1,60,000 cubic meters of MDF Boards will save around 1,00,000 mature trees from being felled every year.



not fertilize soil with green manure?

The persistent use of chemical fertilisers in the country for enhancing crop yields has adversely affected the C N ratio of the soil, resulting in reduced soil fertility. To maintain the eco balance in the soil strata, supply of sufficient amount of organic material along with chemical fertilisers has become vital.

Low cost bio-compost manufactured from press mud – waste product of sugar industry and effluent – waste

product of distillery units, is very useful in improving the soil texture. The uses of bio-compost help in developing bio mass in soil and restores soil fertility.

As part of our commitment towards the environment, at Bajaj Hindusthan Limited we innovatively use sugarcane residue to complement chemical fertilizers that deplete the soil of precious minerals. Effective utilisation of the concept of 'wealth from waste' is one of the means to develop an

eco friendly environment. BHL's 'wealth from waste' initiative, aimed at using renewable resources and effectively utilising by-products for value maximisation, has yielded results that are reflected in increased financial and operating efficiencies as well as wide-scale benefits for the agricultural sector as a whole.

A significant landmark in our efforts has been established in effluent utilisation, press mud – waste product of sugar

mill, and excess sludge from the fermentation process of distillery and effluent treatment plants, to produce bio-compost. The bio-compost produced as a by-product of the sugar manufacturing process is rich in valuable soil nutrients like nitrogen, phosphorus and potash, as well as organic carbon.



don't we find a greener alternative to carbon fuels?

Clean energy from sugarcane

In this age of environmental pollution, ethanol has come as a breath of fresh air. Ethanol is an alternative, sustainable and renewable fuel. Every tonne of sugarcane used to produce ethanol absorbs 0.17 ton of carbon dioxide (CO₂), which otherwise is a greenhouse gas that actively contributes to global warming and climate change. The emergence of this eco-friendly fuel saves India considerable foreign exchange and also generates additional employment in rural India.

In August 2002, the Government of India advised blending 5% ethanol with gasoline. The sugar industry immediately undertook an investment of Rs. 900 crore to produce fuel ethanol.

Sugarcane can produce either sugar or ethanol. Sugarcane today contributes to 70% of global sugar production.

Today, Bajaj Hindusthan Limited, with an emphasis on maintaining the fine balance of nature, has evolved as India's largest and the world's sixth largest producer of ethanol.

Chairman's Letter

Dear Shareholder,

The scare of the global economic recession, initially compared to the Great Depression of the 1930s was widely anticipated to have adverse consequences on the emerging economies of Asia dependent largely on the developed western economies for trade and commerce. Fortunately, this fear was misplaced. Stronger and with more robust financial resources after the experience of the Asian currency crisis of the late 1990s, the recession was milder here than was feared earlier. More than that, particularly in India, the government responded promptly through timely financial stimulus and welfare packages that helped a quick rebound. The challenge now is to sustain these initiatives while controlling inflation.

The primary challenge for any organisation is defining what we need to do in economic eventualities. Do we just decide to stay afloat or do we gear ourselves to evolve, reallocate, redefine and re-establish? The first option may

be a risk averse one but has its own pitfalls more synonymous perhaps with the "change or perish" theory. Indian industry however, has shown a remarkable tenacity to work and learn through this change particularly in the past two decades. In hindsight, perhaps the first tectonic shift occurred when the reforms set in 1991 paving a new economic order for most of the industry. The second business environment shift happened at the initiation of the present decade in early 2000. Sunrise industries like IT and BPO matured and the service sector started contributing over half of India's GDP. Manufacturing matured successfully with new competition from abroad.

After riding two decades of post reforms growth, the first test came in terms of global recession setting in and hitting domestic markets. The big challenge now was on how to handle evolution in a sluggish environment. It was time to learn new lessons, understand or may be restate opportunities and threats and finally consolidate growth despite the restrictive business environment.

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India Inc in the past six quarters has shown a remarkable resilience when faced with the challenges of global meltdown. Sectors like automobiles sprung surprises through wonderful sales figures. The Indian IT industry after some sluggishness in the first quarter of the present fiscal, recorded performances far above expectations in the second quarter. Real estate which was hit by high interest rates and falling prices reorganized its product offerings to affordable housing - starting from as low as Rs. 2 million in metropolises. The banking industry stood its feet despite the financial meltdown. Due credit should also deservedly go to the Reserve Bank of India with its forward looking, spontaneous yet cautious approach to reformist policies. Critics now acknowledge that India has been insulated from this meltdown in the financial sector with not a single bank affected through the sub prime crisis, a result of RBI's conservative approach to financial sector reforms.

Any business environment in a sluggish period is largely interdependent with government policies. The fiscal stimulus packages offered by the government in three major installments has certainly helped the business environment to look up given the reduction in duties and taxes. Direct sops through excise cuts have also helped in creating a reasonable demand in the economy which is so critical to inject life into the product markets.

With supportive government policies in a sluggish economy, the next step is an assertive industry ready to take on recession with affirmative action. The normal management mantras of cost control, supply chain management, deepening the role of human resource management, consolidating core markets, all play into action simultaneously. Corporates across sectors have taken up all possible measures which finally resulted in an almost U-shaped recovery curve for India.

Inherent amongst the fight back also lay threats and challenges. For example, the production fall and high prices in the food sector could usher in a new set of uncertainties. The threat remains and certainly cannot be wished away in the immediate future unless major steps on the production side are not adopted. Take the case of the sugar sector which would always have a growing demand given that the country has one of the lowest per capita consumption and the fact that sugar remains one of the cheapest sources of food energy in India. Trends for the immediate future however reflect a fall in inventory as a result of a fall in production levels when compared to the accelerating demand.

However, the regulation of the industry has seen upturn and downturn in prices not necessarily in consonance with inputs costs, thereby putting severe strain many a times on the normal finances of the company. Typically, the industry has faced the challenge of downturn through debt restructuring and prudent input cost management. In Bajaj Hindusthan, we have gone a step ahead and decided on diversification. Two mainstays of diversification however were sacrosanct. First, it has to be a viable option related to the core operations of the company. Second, it has to be in an area that would have a well defined future in terms of demand and prices and would offset the sugar cyclicality. The recently announced foray into the power sector by our group was a natural outcome taking leverage of our existing land and the huge demand existing for power.

A good set of managers should be capable of riding all business cycles. The stakeholders, the consumers and the employees - all remain the same. Only the environment changes. For Corporate India, the primary challenge has always been to reshape with this changing environment. The dogmas of performing remain the same. The second quarter of 2009-10 has sprung an unexpected surprise by clocking a GDP growth of 7.9 percent. Trends speak of the third and fourth quarter clocking in impressive growth figures despite the high food prices and consequently, a rise in interest rates. Two major changes however have happened in the Indian economy. First, the worst phase is certainly over and new winners have come out in almost every sector. Second, the next level of recovery would happen based on the foundation of the lessons learnt in the past. With the new GDP projections being revised upwards at around 7 percent levels for 2009-10, this spurt in growth should bring in a sustained increase in demand for Indian industry.

In this backdrop of cautious optimism, at Bajaj Hindusthan, we have the vision and the strength of determination to seek strategic avenues of growth for a resilient tomorrow.

Warm regards,

Shishir Bajaj

Chairman & Managing Director