

TATA CHEMICALS

71st Annual Report - 2009-10



Living, Industry and Farm Essentials.

Serving Society Through Science







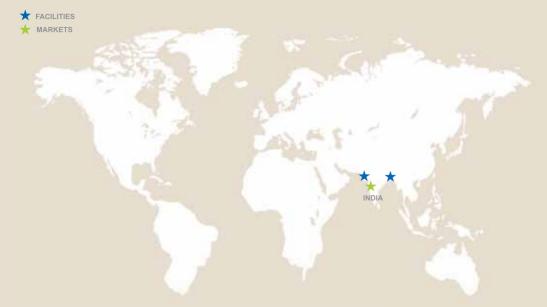
Tata Chemicals Limited Profile

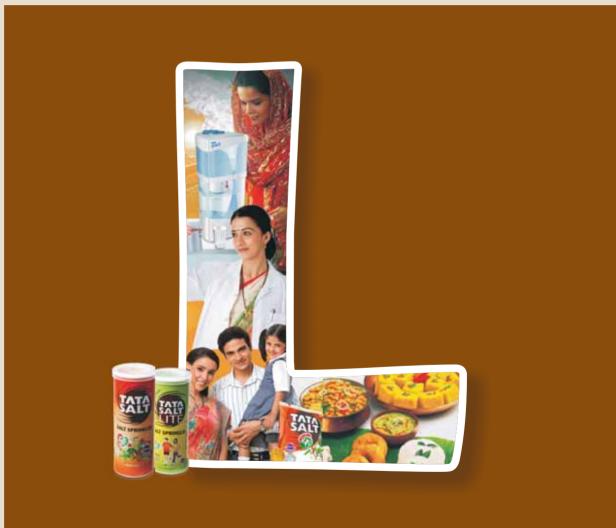
Tata Chemicals Limited is a part of the US \$ 70.8 billion Tata Group. Established in 1939, TCL is currently the second largest producer of soda ash in the world with manufacturing facilities in India, UK, Kenya and USA. It is India's leading Crop Nutrients Player with its own manufacturing of urea and phosphatic fertilisers and a leading player in crop protection business through its subsidiary Rallis. TCL is the pioneer and India's market leader in the branded, iodised salt segment and Tata Salt has been recognised as India's No.1 Food Brand for more than five years.

TCL has undertaken several key steps recently to leverage its expertise in sciences to develop high-tech and more sustainable products. It has set up the TCL Innovation Centre in Pune to develop world-class R&D capability in the emerging areas of nanotechnology and biotechnology. TCL has also invested in a Centre for Agri-Solutions & Technology (CAT) at Aligarh to provide advice on farming practices in general and crop nutrition practices and solutions in particular. The company has also entered into a JV with Temasek Life Sciences Laboratory Ltd (TLL), Singapore for development of jatropha seedlings and agronomic package of practices.

Businesses

Tata Chemicals operates broadly in three sectors – Living Essentials, Industry Essentials and Farm Essentials. It is structured in order to address all major segments of consumers in society namely **Household** (Living Essentials), **Industry** (Industry Essentials) and the **Farmer** (Farm Essentials).







Living Essentials

The pillar of Living essentials covers products that are basic/essential to daily living e.g. salt, sodium bicarbonate or baking soda products, fresh produce and now water related products.

The Consumer Products Business (CPB) comprises predominantly of Tata Salt, a branded iodized edible salt, and Sodium Bicarbonate and water purifiers among other offerings. The company has launched a new refined salt, I-Shakti. The special Tata Salt Lite caters to the niche market of low sodium salt users with 15% less sodium than ordinary salts. Topp Salt is a brand of edible salt created for export. I Shakti, a cooking soda, is targeted to help the leavening of the consumers.

To leverage its reach with farmers and housewives TCL started Khet-Se, a 50:50 joint venture in 2007 with Total Produce, Ireland, one of the largest fruits and vegetable distribution company in the world and Europe's largest and most accomplished fresh produce provider, to set up a fruits and vegetables distribution business in India.

To meet the challenge of providing safe drinking water to India's population, TCL, launched 'Tata Swach' in December 2009 – a unique and innovative water purifier that combines low-cost ingredients such as rice husk ash with nano–technology. The product combines technology, performance, convenience and above all, affordability to serve a basic human right of millions of consumers.

- Tata Salt Market leader in the national branded salt segment. TCL's salt portfolio has 60% market share in the national branded salt segment
- I-Shakti is the second largest salt brand. Tata Salt Lite - market leader in the low sodium salt category within the first year of its launch
- Tata 'Swach', the low cost water purifier launched in 2 states – Maharashtra and Karnataka. National Roll-out, initiated









Industry Essentials

The second pillar, Industry essentials, consists of products that are essential raw materials required for key industries such as glass, detergents, mining and chemical processing.

TCL's journey as a soda ash manufacturer began in Mithapur, on the western coast of Gujarat. For many years, the synthetic soda ash plant at Mithapur represented the sum total of TCL's soda ash manufacturing activities. In 2006, TCL's soda ash capacity took a significant leap when it acquired the UK-based Brunner Mond Group, one of the world's leading manufacturers of soda ash and sodium bicarbonate. Through this acquisition, manufacturing facilities in Northwich, UK and in Lake Magadi, Kenya joined the TCL fold. In early 2008, TCL successfully completed the acquisition of US-based General Chemical Industrial Products (GCIP), thereby gaining access to some of the world's largest recoverable trona ore deposits which can be very economically converted to soda ash at GCIP's plant in Green River, Wyoming. The acquisition of GCIP increased TCL's soda ash capacity to around 5 million tonnes per annum. Moreover, about 60% of this capacity is based on natural soda ash units at Wyoming and Lake Magadi. TCL's customer base now encompasses some of the world's leading and recognizable companies such as Procter & Gamble, Unilever, Church & Dwight, Saint Gobain, NSG-Pilkington, Asahi, Owens Illinois, Guardian and PPG.

- Owns 35% of global low cost and sustainable natural soda ash capacity
- Caters to key global players of the glass and detergents industry, due to favourable geographical diversity being the only soda ash player with manufacturing facilities in 4 continents
- Has a wide variety of innovative branded bicarb offerings for the industrial market





FARM FSSENTIALS

Farm Essentials

Inputs needed to improve productivity of the farm as a whole e.g. fertilizers, pesticides, specialty nutrients, seeds, agri-services and crop protection constitute the third pillar of TCL.

The Crop Nutrition and Agri-Business has its presence across all the three key agro-nutrients; viz. nitrogen (N), phosphorus (P) and potassium (K). While the nitrogenous fertilizer, urea, is manufactured at Babrala in the northern state of Uttar Pradesh at one of the industry's most efficient plants, phosphatic fertilizers DAP and complexes are manufactured at Haldia in West Bengal in eastern India and MOP is imported. To secure the raw material supply of phosphatic rock for its Haldia plant, in 2005 TCL acquired an equal partnership in the Moroccan company Indo Maroc Phosphore S.A. (IMACID), along with Chambal Fertilisers and the global phosphate major, OCP of Morocco.

The company also helps small farmers enhance the yield from their land by providing end-to-end solutions through its network of Tata Kisan Sansars (Tata Farmer Centres) in the northern states of Uttar Pradesh, Punjab, Haryana, Uttarakhand and West Bengal, Bihar and Jharkhand. The centers are one-stop resource centers; they stock seeds, pesticides and fertilizers; lease out farm equipment and implements to farmers who cannot afford to buy expensive modern machinery; provide agronomy services like soil testing and mapping and fertilizer testing; facilitate credit finance, arrange crop insurance and even provide buyback facilities.

Through Rallis, its subsidiary, TCL will look to enhancing value creation as well as accessing business synergies in the agri-inputs sector — crop nutrition and crop protection. Currently, TCL is a dominant player in the crop nutrition segment. Rallis has a leadership position in the Indian Crop Protection industry and with this; TCL will strengthen its presence in the entire agri-input space.

- Leading player in urea and phosphatic fertilizer segments
- Manufactures Urea and Phosphates at Babrala & Haldia plants respectively
- Strategic stake in IMACID, Morocco
- JV with Total Produce of Ireland to provide fresh produce from the farmers to the retailers





WENT RESENTATION

Innovation Centre

Tata Chemicals established the Innovation Centre in Pune, India in 2004. The Centre was set up with the objective of developing world class R&D capabilities in new knowledge-based products, cutting edge technologies and emerging areas of nanotechnology and biotechnology. The Centre would thus help develop a wider range of value added products and build new business lines for the future.

TCL has recruited world renowned scientists with high levels of capabilities in their field of specialisations. The Centre has built a state-of-the-art infrastructure with latest equipment for development work.

With the Innovation Centre having filed 36 patents (including 14 international filings) and in the process of filing several more, its success and capability has been established.

Since inception, the Innovation Centre has interfaced with TCL's business units and explored the development of new products higher up the value chain - the Innovation Centre has contributed significantly to the development of the nanotechnology-enabled cartridge/bulb in Swach.

Innovation Centre has established a young, highly experienced, and technologically advanced team that is eager to make its mark through innovation and patenting. The Centre has now moved from being TCL-centric to having a much wider base of clients, from the Tata group as well as external companies.

The team of Innovation Centre scientists is working in the following areas: Advanced materials, Biochemicals and metabolites, Green chemistry and catalysis, Alternate energy and Nutraceuticals.

- Working with leading academic and research institutes like CSIR, MIT, Purdue University and IIT Chennai among others in developing innovative technologies
- 40 Scientists Working in the area of Nano and Bio Technology



