

# Case Study: Jubilant Organosys

An excerpt from Market Movers:  
Lessons from a Frontier  
of Innovation



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## CASE: JUBILANT ORGANOSYS

# SWEET SOLUTIONS



**The opening up of India's economy in the 1990s made Jubilant's sustainability strategy even more valuable.**

Started in 1978 as a bulk chemicals producer, when Indian industry was protected behind high tariff walls, Jubilant Organosys found itself forced to rethink its business model after the opening up of the Indian economy to global trade and competition in 1991. The liberalisation included a gradual reduction of customs duties on chemical products, the prices of which plunged to 30-year lows in the second half of the 1990s. The profits of many firms in the industry were severely depleted.

Jubilant reckoned that it was going to be hard to succeed in this new, competitive global market. So it decided to shift into higher value goods and, over the next decade, transformed itself from an essentially bulk chemicals manufacturer into a low-volume fine and speciality chemicals producer, with a growing focus on supplying the pharmaceuticals industry. It moved itself strategi-

cally higher up the value chain. The company has traditionally relied on an unusual source for its raw material. Most chemicals firms of its kind rely on crude oil-based feedstocks. But accessing them can pose a problem, as their prices are highly volatile and their supply sometimes uncertain. So Jubilant decided to use molasses as its feedstock. Molasses is a waste product from the manufacture of sugar from cane, and India is a huge grower of cane, second in the world only to Brazil. The price and supply of molasses are significantly disrupted only by an extraordinary monsoon. Thus Jubilant was able to stabilise its cost base.

Coincidentally, the choice marked a switch to a more environmentally-friendly way of producing the same products. Molasses is a renewable resource. Its use provides gainful employment for the sugar industry's waste and avoids the need for environmentally-intensive oil extraction.

India is today recognised as a leading global player in generics and a supplier to the pharmaceuticals industry. This success has been

driven by its growing skills base, by big improvements in quality, and by a new breed of entrepreneur. Jubilant has been part of this evolution, and many of its fine chemicals products are now destined for big pharmaceuticals manufacturers. Revenues from international sales account for about 60% of total revenues for the Fine Chemicals division. Even purchases by domestic customers often end up in international markets, as customers are frequently the outsourced operations of international companies.

Jubilant has also developed the capability to come up with new product ideas (it employs 1,200 scientists, who account for almost a quarter of its total staff), and to sell them to western businesses. Jubilant carries out the research in India, sends samples to potential customers and then manufactures them in bulk in India when it has found a buyer. Much of this work is done for life-sciences firms and Jubilant describes its future strategy as being "to become the first-choice outsourcing partner of the life-sciences industry."





## Sustainability performance

### “What differentiates us is the EHS”

As might be expected from a chemicals and pharmaceuticals company, Jubilant's main focus on sustainability has been directed at EHS – environment, health and safety standards. Many of these are imposed by legislation, but Jubilant has gone far beyond local requirements. It is a major supplier of carbamazepine<sup>15</sup> to Novartis, for example, which it produces at a facility that has gained the approval of America's demanding FDA (Food and Drug Administration). Jubilant's facilities are also OHSAS 18001 certified, and the company has been providing training to foster a stronger safety culture, and strengthening occupational safety systems and infrastructure.

Shyam Bhartia, Jubilant's chairman and co-founder, says that the company's rapid growth has been facilitated by its sustainability strategy. It has helped both its inorganic and its organic growth – the former by making it easier to buy companies in developed markets (Jubilant, for example, currently has some 700 employees in the US), the latter by helping it gain a local licence to operate in a sector that is particularly sensitive, in India as elsewhere. To raise its local profile the company has made its own medical facilities available to local communities, supported local schools by providing teaching materials, and set up women's self-help groups. This has helped Jubilant avoid the problems other companies have faced in India, where there has frequently been strife and mistrust between local inhabitants and their corporate neighbours.

Jubilant has been a pioneer in encouraging sustainability reporting in India, producing its own corporate sustainability report (audited by Ernst & Young) since 2003. It was



one of the first companies in India to produce such a report aligned with the Global Reporting Initiative, and has released its 2006-07 report in line with the G3 Guidelines at application level A+.<sup>16</sup> Jubilant believes that this degree of transparency, which is still rare in emerging markets, has helped in attracting institutional investors. Their ownership of the company increased from 7% in 2004 to 32% in 2006. Jubilant believes that its EHS record is also helping to reassure customers that it can be a reliable partner over the longer term, and it has seen a rise in the volume of long-term contracts (those for over one year) in 2007.

Sustainability is now built into new products right from their conception. As the company produces substantial quantities of effluent, the cost of effluent treatment is a prime concern. Businesses in the group cannot put forward new proposals unless they include EHS cost considerations. “In the future, customers will come to you with the expectation that you will just practise good EHS management, without expecting to pay extra for it,” says Rajesh Srivastava, president of the fine chemicals business. Customers, he says, “are

evaluating you against other companies in India and China who have the cost advantage... What differentiates us is the EHS.”

To deal with effluents, as long ago as 1984 the company set up the largest waste-treatment plant in the country for producing biogas from distillery effluents. The energy created now saves the company the equivalent of 250 tonnes of coal a day. Part of the company's bio-degradable waste is also used to produce organic manure, which is being used in progressively increasing quantities by farmers substituting chemical fertilisers. And part is also used for crop irrigation after treatment, as it still contains nutrients helpful for plant and soil. But it took two to three years to convince the farmers that the company was not merely trying to dump dangerous effluent on them. Jubilant employed an agricultural technical university to train the farmers on new techniques and to convey that the company was genuinely interested in their welfare. “Jubilant made the farmers partners,” says Ashok Ghose, the company's chief of Environment, Health and Safety.

<sup>15</sup> An active pharmaceutical ingredient related to central nervous system disorders. Novartis holds the patent for this formulation.

<sup>16</sup> For more information on GRI application levels see the *Sustainability Reporting Guidelines* available at [www.globalreporting.org/ReportingFramework/G3Guidelines/](http://www.globalreporting.org/ReportingFramework/G3Guidelines/)

## Conclusion

### Aiming for the top

There is pressure on health-care costs in all economies, and that looks set to carry on pushing drug prices down. And there is increasing demand for faster and more frequent new products as existing drugs come off patent and become generic. In that challenging environment, Jubilant is hoping for continued rapid growth, based on its relatively low (though rising) cost base and its ability to retain highly qualified scientists.

It is Jubilant's aim to be among the top three in the world in all its major markets. The company is close to being the second largest producer of pyridine<sup>17</sup> and its derivatives globally, catering

to leading pharmaceutical and agrochemical companies. Given its strong customer relationships and its proven reliability, Jubilant expects to be the market leader in the near future. In the market for solid polyvinyl it is third in the world – with 75% of its production exported, mostly for chewing gum to firms like Wrigley and Cadbury. It holds a similar position in the market for latex additives to tyres, and it is the world's second largest producer of carbamazepine. The company acknowledges, however, that increasing globalisation and international competition are going to require it to compete with multinationals not only financially, but right across the triple bottom line of economic, social and environmental performance.

To continue to build its international presence will require more cross-border takeovers – and the positive image created by Jubilant's sustainability reporting and its EHS activities help in making such moves. They also help in recruiting and retaining the top-notch scientists that are so vital to the company's future.

As the company continues to grow and expand internationally, the scrutiny of its activities will almost certainly increase. Stricter environmental regulations are likely in future, including the EU's new REACH legislation,<sup>18</sup> which has recently come into force. Jubilant is well aware of these challenges and knows it will need to innovate constantly to meet new requirements. As a fully fledged member of the global pharmaceuticals community, Jubilant will also have to address some of the most advanced and vexing issues facing the industry, in the areas of bioethics and the use of new technologies in research and development.

*Increasing globalisation and international competition are going to require Jubilant to compete with multinationals not only financially, but right across the triple bottom line of economic, social and environmental performance.*

## BOX 6: INTEGRATION

Jubilant's business model is built on its ability to provide high value-added speciality chemicals and quality research and development services to clients in a cost-effective manner. Yet cost-competitiveness is a challenge in India where costs are higher than in countries like China and where environmental regulation is becoming more stringent. However, Jubilant has succeeded in integrating management of

environmental issues throughout its operations and thereby reducing costs. Effluent treatment costs, for example, are built directly into product development costs. The company has also chosen to use molasses – abundantly available in India as a by-product of sugar production – as its chemical feedstock. Molasses has less cost and supply volatility than the crude oil-based feedstocks used by international competitors, and

is also more environmentally friendly. Jubilant reuses wastes, converting some to biogas – saving the company money by meeting its energy needs in place of coal. Jubilant also uses biodegradable effluents for crop irrigation, which it supplies to the surrounding communities for free, helping build good relations and reduce operating risks.

<sup>17</sup> Pyridine is a basic organic chemical, a building block and solvent in agrochemical, pharmaceutical and other industries.

<sup>18</sup> REACH is the European Union legislation on the Registration, Evaluation and Authorisation of Chemicals. It is intended to standardise the way chemical substances are evaluated for impacts on health and environment, and affects chemicals that are manufactured or imported into the EU in quantities of greater than 1 tonne.





Courtesy of Jubilant Organosys

## BOX 7: QUALITY OF RELATIONSHIPS

Since its origin in bulk chemicals, Jubilant's existence has depended on more than compliance with increasingly stringent environmental regulations. To obtain and keep an informal, societal 'licence to operate', the company depends on local support from those who are affected by issues such as resource use, environmental impacts and

local traffic increases. This is a challenge, given that Jubilant's Indian factories are in rural or semi-rural regions, where community trust in industry is frequently low. Proactive engagement which involves the community, rather than merely seeing them as beneficiaries of charity, has been critical to creating understanding and trust, pre-empting prob-

lems and creating a positive operating environment. This approach to the community has also sped up government environmental clearances, for which community consultation is a pre-requisite, and strengthened customer relationships by providing assurance that the company is identifying and managing this particular set of non-traditional risks.



## Company profile

Jubilant Organosys is an integrated pharmaceuticals industry player, one of the largest custom research and manufacturing services companies in India. Jubilant has a presence across the pharmaceutical value chain: from drug discovery, functional chemistry and clinical research services to custom research and manufacturing for advance intermediates, fine chemicals, active pharmaceutical ingredients and dosage forms.

## key data

### FOUNDED

Founded in 1978 – originally as Vam Organics. It changed its name to Jubilant Organosys Ltd. in November 2001.

### OWNERSHIP STRUCTURE

Listed in India since 1981 – shares are traded in Group B1 at the Mumbai Stock Exchange and at the National Stock Exchange of India

### SECTOR

Pharmaceuticals, agrochemicals and chemicals

### HEADQUARTERS

Noida, Uttar Pradesh

### OPERATIONS

Seven manufacturing locations: Gajraula (Uttar Pradesh),

Nanjangud (Karnataka), Roorkee (Uttarakhand), Nira (Maharashtra) and Samlaya (Gujarat) in India plus Salisbury (Maryland) and Spokane (Washington) in the US

### MARKETS

130 customers in more than 50 countries worldwide, including US, EU, Japan

### MAIN COMPETITORS

Vertellus (USA), Koei (Japan), Lonza (Switzerland), Chang Chun (Taiwan), Dr Reddy's (India), Cipla (India), Hisun (China)

### EMPLOYEES

3,425

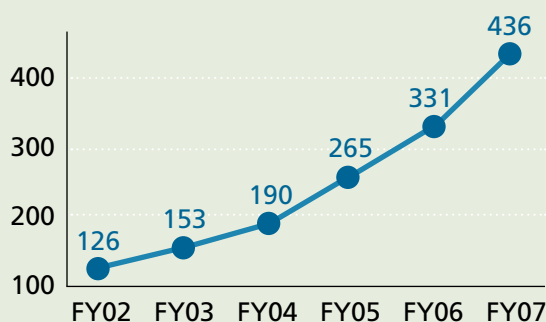
### MARKET SHARE

Aminopyridines – 75%  
Lutidines & Collidines – 56%  
Pyridine and Picoline ~ 40%

### AWARDS AND RECOGNITION

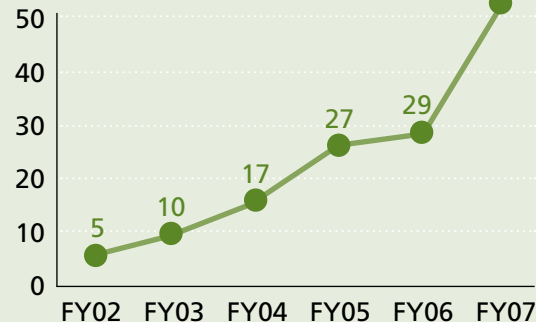
- 2007-08: Golden Peacock Award for Corporate Governance
- 2006-07: Golden Peacock Award for Safety Management (Gajraula unit)
- 2006-07: National Award for Excellence in Energy Management, Pharmaceutical sector by Confederation of Indian Industry (Nanjangud unit)
- 2006-07: Gold Award for Safety Performance (Nira unit) by Greentech
- 2005-06: Golden Peacock Award for Corporate Social Responsibility (Gajraula unit)

### REVENUE (USD MN)



CAGR from 2002 to 2007: 28.2%

### NET INCOME (USD MN)



CAGR from 2002 to 2007: 62.1%

US dollar figures for revenue and net income calculated by authors based on Indian rupee figures supplied by company and average annual Rs:US\$ exchange rate from the Economist Intelligence Unit.

## The Jubilant Organosys business case – the three most important factors

Here we highlight the three most important ways in which sustainability performance at Jubilant is influencing business drivers and supporting business strategy.

### 1. Operational efficiency through environmental efficiency

- Measuring and benchmarking energy and resource consumption, Jubilant identified gaps and improved performance – with links to the bottom line.
- Jubilant's use of sugarcane molasses as feedstock means lower cost and greater reliability of supply compared with international competitors.
- Jubilant re-uses effluents as production inputs and for biogas, which reduces operating costs. For example, biogas saves Jubilant the equivalent of 250 tonnes of coal a day, with corresponding cost savings and lower CO<sub>2</sub> emissions. Currently, the payback period for investment in biogas plant is three years.

### 2. Licence to operate from community development

- Many facilities are in economically backward regions. Disparities between employees and the local population plus general distrust of the chemical industry could cause tensions and disruption.
- Jubilant's participatory approach to social investment, however, brings tangible benefits: avoidance of social conflicts, support from farmers and ease in obtaining environmental clearances.
- Jubilant gained the trust of government, which started using the company as a partner on various social projects.

### 3. Access to capital through transparency and sustainability governance

- Sustainability, transparency and audited reports give national and international investors confidence in the company.
- Major international investors like CitiGroup and General Atlantic Partners are considering Jubilant's sustainability credentials before deciding to invest.

- As confidence increased, institutional investors increased their stake – from 7% of Jubilant's shares in 2004 to 32% in 2006.

JUBILANT BUSINESS CASE MATRIX

	Environmental Performance	Social Performance	Governance Performance
Sales & Market Access			
Operational Efficiency			
Access to Capital			
Risk Mgmt & Licence to Operate			
Talent & Human Capital			
Brand Value & Reputation			

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International Finance Corporation  
2121 Pennsylvania Avenue, NW  
Washington, DC 20433  
USA  
T +1 202 473 3800  
F +1 202 974 4384

[www.ifc.org/enviro](http://www.ifc.org/enviro)

SustainAbility Ltd.  
20-22 Bedford Row  
London WC1R 4EB  
T +44 (0) 20 7269 6900  
F +44 (0) 20 7269 6901  
[london@sustainability.com](mailto:london@sustainability.com)

SustainAbility Inc.  
1638 R Street, NW  
Suite 301  
Washington, DC 20009  
USA  
T +1 202 315 4150  
F +1 202 315 4178  
[washington@sustainability.com](mailto:washington@sustainability.com)

[www.sustainability.com/marketmovers](http://www.sustainability.com/marketmovers)