

# CORPORATE EXCELLENCE



# **JAIN GROUP OF INDUSTRIES\***

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*The basic infrastructure, including land, water and sunlight  
has been waiting to be tapped in India.  
Agriculture is the very soul of India's economy.*

*Bhanvarlal Jain  
Chairman, Jain Group - Jalgaon*

The mid-May heat is unbearable though it is just 9 in the morning at Jalgaon in Maharashtra. For kilometers there is hardly any water reservoir. One wonders how the place got its name—in Hindi it would mean 'a land full of water'. On the contrary, I am informed that there exists a perennial shortage of water. Only recently the government has

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\* Case-study prepared by Dr. Arun Kumar Jain, CEO & Principal Researcher, Jain-Bond Strategy Research with assistance from Ms. Shalini Lal.

extended a pipeline bringing drinking water from the nearby town of Bhusaval. The district of Jalgaon is one of the hottest in the country with peak summer temperatures soaring to as high as 47 degree Celsius. Yet, a quiet revolution is taking place at a not-so-distant rocky hill tract signifying human spirit, endeavour, and possibilities. For business management scholars and economists, it is a fertile ground for testing existing theories and breeding new ideas. For a country suffering from poor agricultural productivity signifying excess inputs usage as well as wastages, it holds potentialities to fulfil dreams of providing high returns to farmers, preserving and adding value to food crops, while at the same time enabling people to stick to their soils (reducing pressure on urban areas). There is another major lesson for Indian economic planners—how to make vast tracts of unproductive, barren, unirrigated land flourish with three major crops in a year. The potential of the combination of India's vastly under-utilised natural resources, rural population, and state-of-art bio-technology and information technology to unleash an economic revolution with minimum dislocation is fascinating. In a country where 70 per cent population still lives in villages, herein could lie the golden mean between capitalism and socialism (or communism), providing economic freedom and social justice and equity to masses. In nutshell, it is probably the only way to fulfil Gandhiji's dreams of *swarajya* - i.e. self rule based on self-sufficiency.

Agriculture farming and processing virtually means adding value from point zero. Till harvesting, it fits the classical definition of a commodity. Only after further processing beyond this stage, does manufacturing, packaging and distribution take place. Most of India's largely illiterate population (48 per cent of total) subsists on labour on the

farmland. Israel, a land-locked, predominantly dry and desert geographical area, has achieved some of the world's highest productivity and value-addition to its farm outputs using advanced techniques of drip irrigation, dry farming, vermiculture, liquid fertiliser, tissue culture, green houses, and employing information technology. For those imbued with vision, entrepreneurship and intrepidity, there could be big money (and fame) in bringing farm technology to India from Israel since the climates are quite similar. At a more fundamental level, the case conclusively shows that India needs to have not only technology for potato (or onion) chips but also computers need to chip in for maximizing the productivity revolution.

One individual who has made money and reputation this way is Mr. Bhanvarlal Jain (or simply, *Bhau* - the respected elder brother), founder-chairman of Rs. 370 crore Jain Group of Industries. A first generation entrepreneur, he has come up the hard way. Starting with a meagre seed capital and little exposure to complex modern business methods, his Jain Group of Companies manufactures an impressive range of agriculture-related high-tech products including new seeds and tissues, micro irrigation systems and plastic tubings for water management, liquid fertilisers, tissue culture, high yield fruits and other farm products. Each product enjoys a pioneering status in its industry.

## **The Present**

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JGI is a value-ridden and driven company, inside out which is its strength and weakness at the same time. As the financial year 1996-97 came to the close, it was obvious that the company was facing severe problems of cash flows. Just like at Core Healthcare, a great debate was on inside the company whether the company had over-extended its operations.

After a period of terrific growth when group sales jumped from Rs. 50 crores in 1991-92 to Rs. 370 crore in 1995-96, the company's various projects were suffering from time and over-runs and consequently, huge cost over-runs. The finished goods inventory and accounts receivable were at an all-time high. These were the unmistakable early signs of company in severe cash trouble and products being pushed into markets. Also under microscopic scrutiny was the issue of mergers and divestments for crucial synergy building within the group companies. In that case the emerging entity would perhaps need a new name, identity and brand. Senior managers had been requested to send in their suggestions for naming the new combined and trimmed *avatar* of JISL and JPCL.

Between all this, Bhau maintains a cool poise and reassuring confidence. He has seen similar situations before and pulled out the company and he feels he will be able to successfully pull it off again. Only worrisome part is that this time the magnitude and scale of problems are altogether different. The key values persist: 'To establish leadership in whatever we do. To leave this world better than we found it. Serving and striving through strain and stress; doing your noblest - that's success.' This vision has been backed by a strong personal work culture system, placards hang around all over the office that 'Work is life', 'Work for the pleasure of working...'

## **The Origins**

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A farmer's son, Bhau, with some help from relatives, completed his law degree from Mumbai University. He was selected to join one of the civil services, instead he quit within a month to start a business with a dealership of kerosene and diesel oil of Esso Petroleum in 1962. The next few years

were spent in making the ends meet and consolidating a fledgling business—but the vision, will, and (unarticulated) strategy was evident and brilliant: within a decade Bhau had created a one-stop departmental store for agricultural inputs.

- At one point the trading firm had 60 prestigious agencies and distributorships ranging from pumps, seeds, fertilisers, pesticides, PVC pipes to motorcycles, cement and tractors. Inspired by a quote ‘agriculture a profession of the future’, Jain later added micro-irrigation and sprinkler systems.

In 1978, came an opportunity to take over a bankrupt banana powder making unit at a price of Rs. 3 million. Bhau’s logic to buy this unit was ‘if others can turn it around and make it profitable why not me with all the assets, resources and rural background’? Taking over the unit, it was decided that instead of making run-of-the-mill banana products, why not make papain—an industrial enzyme with wide applications in the Food and Pharmaceutical industries. The competition in the domestic papain market was intense and it was therefore decided to develop ultra purified Papain for the foreign markets, where a monopoly of two or three western suppliers existed. An in-house R&D unit successfully developed the purification process, wherein the produce received immediate acceptance in global market. Even today JISL is the largest supplier of purified Papain in the world. For Bhau, it was the taste of his first blood in international markets.

## **New forays**

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In 1980, Bhau started manufacture of PVC pipes since demand outstripped supply. Initially a second-hand machine was procured and as demand and profits grew, more machines were added. The rigid PVC pipes have a strong resistance to all acids and other corrosive material,

are non-toxic and hence a good substitute to iron pipes. In time, the strict adherence to quality and delivery has created a brand equity for 'Jain' brand of PVC pipes. Jain Plastics and Chemicals Ltd. created in 1992, has become the largest PVC pipe exporters in India despite a crowded market.

### *Entry into Micro-irrigation*

In 1988, Bhau set up Jain Micro Irrigation Systems (with 50 per cent own equity and rest from the public) to manufacture micro irrigation system products (such as sprinklers, flexible plastic tubes, and water and nutrition control components). This was a value-added product over simple PVC and something eminently suitable for Jalgaon and Maharashtra climate. But it was new concept in that area which had to be sold to the users who have been brought up on the belief that more water and nutrients means more and better produce. The local farmer had to be educated on the benefits and cost effectiveness of this new technology which essentially minimised wastage since the nutrients went straight to the roots of the plant and did not spill around it. The company sponsored and organised a 12 day study tour of interested and progressive farmers in Maharashtra at the time of the Agritech exhibition in Israel. JISL got a boost in 1990 when the Indian government created a subsidy programme for small irrigation systems compensating the farmer upto 50% of the cost. The following year JISL's sales doubled. Major innovations included offering MIS as a complete package, including a survey of the soil and land, and installation. As a kind of showroom, the Jains bought a remote, rocky, barren hill converting it as an experimental model farm for educating the farmers about the latest innovations in agricultural technology.

Jain Group has introduced further innovations in the PVC

pipe industry. Specialized pipes under brand name 'Jain Rib-Loc' are mainly used as low pressure gravity pipes for water. Other uses for spiralled pipes are for drains, culverts, sewers and farm work. These extremely light yet strong and cost effective pipes are manufactured in collaboration with the world leader Rib-Loc of Australia. Well-casing and screen pipes are easy to install and have been introduced for strength and durability and as a substitute for steel. These products are sold in domestic as well as foreign markets.

### *Diversification*

The company has diversified into fruit and vegetable processing with a joint venture named Jain Chiquita Food Pvt. Ltd. The project cost for this diversification originally was Rs. 48 crores which has been overshoot due to project delays for various reasons. The Group has also moved into granite quarrying and polishing. (See Appendix 1 for various projects).

The Jains also attempted entry into high-tech support services such as Information Technology, Banking and Finance. The latter project was dropped at the gestation stage itself. The company dealing with IT has been suffering from losses and may have to be divested sooner.

"The company has never restricted itself by either/or thinking. At Jain Irrigation it is not this or that; it is this as well as that."

The explanation for these diversifications are forthcoming. Apart from being flush with cash in the aftermath of a successful Euro-issue in 1994-95, there are opportunities in processing, for instance,

onions, a staple and heavily produced vegetable in the region. Presently, farmers often have to make a distress sale or even destroy the produce in case of oversupply. The huge



project for dehydrated onions will not only take care of glut but help improve the quality of cash crops and substantially increase farm productivity thereby adding to the farmers' income. They would be provided with disease resistant, high yielding variety saplings produced at Jain Hill Labs through tissue culture in green houses. These plants will be nourished with liquid fertilizers and irrigated through MIS. The final produce will be bought back by the Jains. Bhau explains the value chain, 'there is a link between the past and the future. We started off with seeds but did not stop there. We went further and began dealing in tractors and fertilizers. Throughout the process our customer remains the same. What we are doing is simply supplying integrated inputs. Now what we have started doing is buying back the output and adding value to it.'

## **Support frameworks for growth strategy**

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### *Research and Development*

To give shape to the dreams of Bhau, JGI has created an impressive, state-of-the-art R&D facilities, both at the company's farm and factories. On the experimental farm, plant geometry, agronomy, protection and various other aspects of crop development are studied. The company also undertakes trials and experiments for its new range of products. The farm attracts thousands of farmers from all over the country. In each of the product categories, one theme runs across and that is: achieving market leadership through innovation.

### *Joint ventures and strategic alliances*

A key feature of policy at the JGI has been to forge technology partnerships to cut the time barrier for product launches. Towards the end of 1994, JISI had entered into JVs with nine

Israeli firms in a variety of agriculture related areas such as the fabrication and installation of green houses, tissue culture, filtration systems used in micro irrigation systems, etc. (See Appendix 4)

In Dec. 1994, JGI along with their nine Israeli collaborators signed an MOU with the Government of Haryana to set up a modern hi-tech research and development farm for demonstrating the advanced Israeli technology. In setting up this facility, the Government of Israel has also promised support through their Centre for International Development and Co-operation in Agriculture.

### **In the Global Market**

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Exports have played a critical role in the fortunes of JISL, and as a result have been accorded top priority by the company. Between 1991-92 and 1993-94, while domestic sales grew by 102%, it was exports that permitted the company to grow by a considerably higher 161.1%.

This trend continued through 1994-95, when the total sales for the year went up to Rs. 144.36 crores as compared to Rs. 92.25 crores during the previous year representing an increase of 57%. While during this period, the domestic sales increased by 28% from Rs. 51.02 crores to Rs. 65.11 crores, exports showed an increase of 92% from Rs. 41.23 crores to Rs. 79.37 crores.

Here the philosophy of leadership at JGI is clear: 'to consider the entire world as a potential market and to produce a quality that competes with the best in the world.'

"If India has to ever become a self-reliant, vibrant and export surplus economy, it has no alternative but to concentrate on agro products."

The company is currently the largest producer of Papain in the world, meeting about 20% of the world demand. This was marketed worldwide by Quest International (Ireland), a subsidiary of Unilever Plc.

The largest contributor to exports in the JGI stable presently is the EX-CEL brand of PVC sheets which has penetrated into the exacting markets of Europe and the USA. These products account for about 60% of the groups' total exports. The company has developed dealers and distributors in Europe, the US and South East Asia plus representatives and offices in Austria, Belgium, Hong Kong, Singapore. The Papain and PVC Sheet divisions received the ISO 9001 accreditation by RWTUV, Germany.

By 1995, the company had also opened offices for the distribution of Micro Irrigation components in North and South America. Since 1993-94, besides being India's top producer of PVC sheets, JISL was also the country's second largest exporter of PVC pipes.

Jain Irrigation signed an MOU with a South African firm for the manufacture and marketing of their newly invented sprinklers. While JISL in India would manufacture for the world-wide company, marketing abroad was to be done by an overseas joint venture company.

## **The future**

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JGI faced a similar dilemma as Core Healthcare. Many of the new projects required a longish gestation period. Also, the products were conceptual and often customers needed to be educated on the benefits of the innovation. For the lenders, it was still a million dollar question literally: is it a temporary cash crunch, since most of new projects should bear cash inflows in about 2-3 years time? Or, has the

company over-stretched? Or, is it sheer bad management being unable to handle rapid growth? Or, simply bad investments?

In 1987-88, the turnover of JISL, the flagship company was Rs. 2 crores. In 1995-96, it exploded to Rs. 215 crores. In this stupendous growth phase, many past personal values have obviously become irrelevant or even a hindrance for corporate success. There was little doubt that at JISL the incoming generation of entrepreneurs would have to invest considerable time and effort on laying effective management and information systems, and acquire and develop complex management skills to build upon the solid foundation and to ensure corporate longevity. Just like Core Healthcare, the restructuring would need drip irrigated, concentrated and focused nutrition to selected plants, avoiding spillage and wastage of scarce resources.

## **A P P E N D I X 1**

### **New Projects of the Jain Group of Industries**

- **Tissue Culture**

JISL has set up a Joint Venture with Rahan Meristem in Banana Tissue Culture Technology. This Joint Venture Company shall produce and export Tissue Culture banana, papaya and ornamental plants as well as plants for cut flowers. The results from the pilot tissue culture lab. have been encouraging. Elite material of around 5,000 plants of these varieties have been selected to be used for establishing a mother nursery.

- **Green Houses and Seedling Nurseries**

The company has drawn plans for the fabrication and installation of Green Houses. Recently, the company had

imported from Israel, a 2000 sq. mtr. green-house for its R&D farm, on which on an experimental basis have been planted varieties of tomatoes, strawberry and capsicum seedlings. Fabrication, installation and cultivation of green house technology has been obtained under licence from Azrom, Israel. The company has also finalized technical collaboration with Hishtil Nursery, Israel for import and Indianisation of Speedling Nurseries.

- **Liquid Fertilizers**

The facilities for the production of water soluble liquid and powder fertilizers have been created. Trial crops include banana, grapes, pomegranate and sugarcane. Controlled dosages has resulted in uniform and vigorous growth leading to early maturity and shortening of harvesting duration. Yields are higher by 20%.

- **Solar Heaters**

The company has signed a technical licence agreement with Amcor Limited, Israel for transfer of technology for solar water heating. The company would initially focus on institutional markets and cover Hospitals, Hotels and Industries such as Dairies, Hotels, Chemicals and Textiles where large quantities of hot water is used.

- **Granite**

Granite has become the first choice of builders and architects all over the world, because of its inherent hardness, colours, durability and capability to polish to a mirror finish.

Though India is very rich in its granite resources, commercial mining is largely limited to Andhra Pradesh, Tamil Nadu, Karnataka and Rajasthan. India is also among the top exporters of dimensional stones to Italy, Germany, Japan, Taiwan, France, Spain etc.

- **Fruit Processing**

Processed banana, mango, guava and papaya in the form of pulp and concentrate is in good demand in countries with a temperate climate. Fruit processing would increase the shelf life of fruit and make processed products available around the year. These purees are used in the manufacture of juice, ice cream, yogurt, fruit cocktail and baby food. The finished product is filled in aseptic bags/bins/drums. Here, the quality and hygienic packing of the product are of the utmost importance.

The Government of India has already identified the food processing sector as a thrust area for exports. Further, being the only centre in the country growing residue free bananas, Jalgaon was ideally suited for this project.

- **Vegetable dehydration**

Dehydrated vegetables like onion, garlic, carrot, cabbage, parsley, etc. are popular food ingredients in Europe and the USA. Exotic and mildly spiced ingredients are also increasingly gaining popularity. The logic is that in and around Jalgaon, onions and vegetables of suitable quality and variety are available in abundance. Moreover, the dry climatic condition of Jalgaon provides a unique location advantage, particularly for the dehydration industry. These products provide excellent scope for high value addition in the export markets. Technical support comes from Foodpro International Inc., USA. This process enables year round availability of relatively short season vegetables. Dehydrated products are the base material for the manufacture of instant foods, fast foods and soups as well as for professional caterers and restaurants. Marketing tie-up is with Target Marketing Enterprises, USA.

**APPENDIX 2****Sales and (profit after tax) of JGI**

	Sales		PAT	
	1995	1996	1995	1996
JISL	144.38	210.00	18.73	15.00
JPCL		148.00		7.00

(All figures are in Rs. crores)

**APPENDIX 3****Jain Irrigation Systems (1994-95)**

Product	Installed Capacity	Actual Prod.	Sales (in Rs. lacs)
MIS and Other agricultural related goods, components	9000	3849	8534
Plastic Sheets	13,000	6026	5847
Solar Water Heaters	15,000	Nil	8.5
Others			47
Total			14437.58

**APPENDIX 4****JGI's key collaborative combinations**

Industry	Israeli Collaboration
Banana Tissue Culture	Rahan Meristem
Green House Project	Azrom Metal Industries, Elder Electronics
Seeding Nurseries	Hishtil Dagan Nursery, Hazera
Solar water heaters	Amcor
Fruit processing	Hovev Agriculture
Filtration Systems	Yamit Filters

## A P P E N D I X 5

### **Key social values**

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**Respect for roots:** The group has so far resisted the temptation to move to nearby Mumbai, choosing to play instead an active role in the development of Jalgaon and by providing employment opportunities to local people. 'I have chosen to make a commitment that as far as possible, all investments and other ventures would be located in and around Jalgaon. I owe my growth to the soil and the people of Jalgaon, and therefore it is my responsibility to reciprocate by ploughing the maximum I can to foster development and employment opportunities in this area.'

**Conservation of natural resources and preserving the environment:** This is reflected in the choice of industries the group has ventured into: Solar Water Heaters, MIS, PVC sheets (often used as wood substitutes).

**Social development:** Since 1982, the Jains have institutionalised the public charitable trust 'The Jain Foundation'. The principal goals of the trust are: Advancement of education, provision of medical relief, furthering of rural development and environment, undertaking R&D, promoting sports, games and physical exercise and initiating and supporting projects for the welfare of society in general.

**Entrepreneurship:** 'I believe it is primarily a spirit of entrepreneurship that accounts for growth and it is a combination of identifying an opportunity and the willingness to assume a risk to materialize the wherewithals to encash the opportunity. Additionally, this spirit of entrepreneurship must be backed with a mindset notwithstanding obstacles or other problems, to ensure that



what is required will be done within time and within budget. The rest is the very mundane affair of managing resources.'

**Globalization and country advantages:** 'We are equipped to absorb technologies and since we are a low-cost producing area, we have an edge in international sphere over high-cost developed economies. Should we be able to maintain our traditional Indian ethics, we cannot fail to reach somewhere close to the top, globally in the next decade.'