

AN ENTREPRENEUR DECIPHERED



Padma Shri Dr. Bhavarlal Hiralal Jain (b. 1937), founder chairman of Jain Irrigation Systems Limited, a Rs. 3,000 crore company, had a surprisingly humble beginning in his trading career. Later on, he turned to manufacturing activities — from refined papain to processed fruits on the one hand and PVC pipes to microirrigation systems on the other. Indeed, it was he who pioneered microirrigation on a large commercial scale in India. True to his maxim, he has established leadership at home and abroad in his field of activities, acquiring many companies worldwide. That apart, what distinguishes him is his reaching towards an Indian model of management in which he tries to integrate the native wisdom, ranging from ahimsa (as reflected in the strictly vegetarian factory sites and the ever-present eye for environmental protection) to the institution of joint family system (as reflected in the organizational make-up and the paternalistic style of HR operations). The Gandhi Research Foundation and the Anubhūti Residential School at Jalgaon are two of his other lasting contributions.

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Editors

I. L. Dudhedia Gimi Farhad B. Krishnakumar

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Foreword

This volume is a compilation of some articles written on the life and work of our founder chairman Shri Bhavarlal H. Jain, affectionately called 'Bhau'. It also contains some of his recorded interviews in newspapers, journals and books. Admittedly, we at Jain Irrigation Systems Ltd, (JISL) were remiss in not keeping updated records of all that was being written or spoken about him. As such, the compilation is an incomplete one. However, we do believe that someone might be inspired by reading this unique story of an individual leading an unusual enterprise - a multinational organisation rooted in rural Indian ethos.

One of the basic lessons of history is that no one ever learns a lesson from it! Looking back at some of these writings, we now realise with mixed feelings that some of the scribes had predicted this and gently forewarned us about the imminent downward trajectory of JISL. It happened that we did not pay heed to the writing on the wall. We can only commend, with hindsight, the writers for their analytical acumen. Some after-the-event analysts were not very sure of our capability to stage a splendid comeback. We are indeed glad that what followed proved them wrong.

One of the major problems which confronted us while compiling these writings was that there were repetitions. This was perhaps unavoidable, for each one was writing for a different set of readers at different points in time. Nevertheless, we thought we should edit them without marring the basic expression and purpose of the writers whatsoever. We have taken the liberty of effecting minimal deletions. We believe we have caused the least damage to the original text and request the writers to bear with us for considerations of greater readability, factual corrections and respect for the readers' time.

In conclusion, our only claim is that we have taken care to present this collection as the retelling of the trials, tribulations and triumphs of an enterprise pioneered by a human being struggling to overcome his humble beginnings. We hope this will at once inspire specialist readers like students of management as well as the general public.

We will have reason to be proud if this mission is even partly realised.

- Editors

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A Rich Harvest

“A Rich Harvest” is the first important article we could lay hands on - its importance lying in the financial analysis and predictions, as also in its realistic recapitulation of the beginning of the organisation.

Business, not Service

In the late fifties, the marginal-farmer-descendants of Kasturchand Jain — Hiralal and Dalichand — decided that they would send young Bhavarlal to college, and then for a law degree. In 1963, Bhavarlal decided not to take up the post of Deputy Collector for which the Maharashtra State Public Service Commission had selected him. Instead, he opted for business. He got an Esso dealership in kerosene and crude oil and received the family's total savings of three generations, - Rs 7,000 - to buy empty drums. With this, he set up Jain & Brothers.

“Those were the days when kerosene and diesel had to be marketed, not distributed as is the case today,” says Jain. Going door-to-door, farm-to-farm, Jain managed to do quite well. He then acquired dealerships for crude oil, petrol and high speed diesel and later even for LPG, “which also needed aggressive marketing in those days,” adds Jain. He soon set up and came to own a chain of six petrol pumps.

Having acquired agencies for the complete range of oil products, as well as outlets in Jalgaon, Bhusawal and Dhulia, Jain, by the end 1970, acquired a dealership to sell the Rajdoot motorcycles and Escorts tractors. He also set up a service station for repairing and maintaining motorcycles and tractors, and even began selling vehicle spares, tyres, tubes and batteries. Then, more in tune with his farming instincts, he began acquiring agencies for various agri-products - farming equipments, insecticides, fertilisers and seeds. Soon Bhavarlal began selling PVC pipes to farmers (PVC pipes were then manufactured *only* by Wavin,



Innovation

There used to be frequent complaints regarding short deliveries by kerosene retailers. Consumers felt cheated because when you poured kerosene from a distance, the foam on the top gave a feeling that the measure is full. However, it was not so. To avoid such tricks on part of the retailing competitors, Bhau thought of an innovative idea of installing a pump like the one used for dispensing petrol/diesel, right in front of his shop. This made history. For the first time, at least in India, somebody had installed a pump for retailing kerosene. This not only enhanced the credibility of Jain & Brothers, but also gave added confidence to the consumers and the general public about its integrity and desire to be extra conscious and sensitive to the consumer's needs.

Garware Plastics, Chemplast and Finolex). By 1978, all these line of activities chalked up combined sales of over Rs 10 crore. It was around then that Jain decided to get into manufacturing.

Enter Industrial Ventures

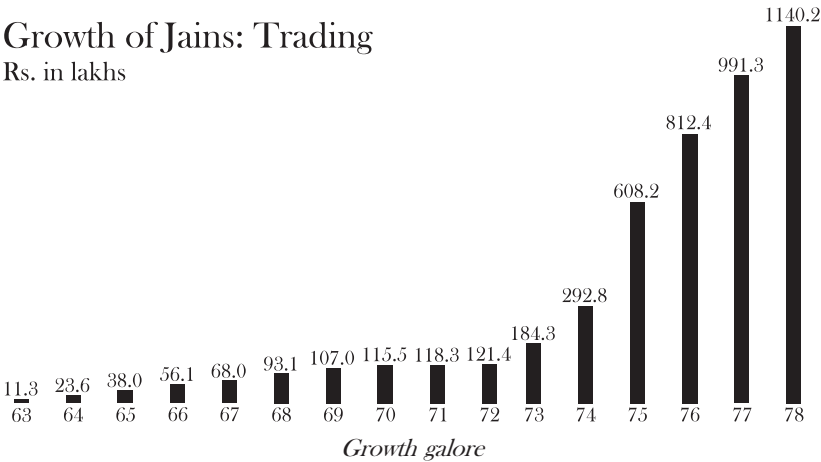
After an abortive attempt to start manufacturing insulation tapes, he began making an enzymatic product called Papain. Willy-nilly, Jain had returned to an agro-based industry. The secretion from the skin of raw, unplucked papayas was tapped, collected, dried and sold for use

in baby foods and other applications including beer clarification. Unwilling to cater to the domestic market where, he says, price, not quality, was the determining criterion, Jain began concentrating exclusively on exports. Today, compared with the US \$5 a kg that crude Papain used to fetch him in the early eighties, the Refined Papain his Group manufactures fetches him over US \$ 60 a kg. “By next year, we hope to meet FDA standards in the US and this product could fetch us a price of over US \$ 85 a kg,” says S. M. Udani, banking & financial controller of the Group. *(This price was realised in 1993-94)*

Simultaneously, Jain decided to set up a pipe manufacturing division too. Since the manufacture of PVC pipes of diameters of 110 mm and less was reserved for the small scale sector, Jain decided to set up small units (six in all at Jalgaon), all with a capital aggregating to not more than Rs 52 lakh. “So in 1980, I bought a Windsor machine with a 100 tonnes *(per year)* capacity which could assure me production of PVC pipes worth Rs 50-60 lakh,” he explains. “I already had a market worth Rs 30 lakh and was confident of increasing sales to over Rs 50 lakh in a year’s time.”

The six units in Jalgaon manufacturing PVC pipes took just two and a half years to be set up. Last year Jain began setting up two more units at Sendhwa in Madhya Pradesh, and acquired one more unit at

Growth of Jains: Trading
Rs. in lakhs





Ladies peeling and cutting papaya for candy

Udaipur in Rajasthan during October 1984. With these nine pipe manufacturing units, Jain has become the largest manufacturer of such pipes in India, with a 25 per cent market share. (*PVC sales were over 7500 tonnes valued at Rs 14 crore.*) Last month, he also concluded a deal with the Jindals, who sold him their two PVC pipe making machines for Rs 45 lakh.

In addition to all this, Jain has helped set up Jain Foods at Jalgaon itself, which, though a separate activity by itself, was actually a consequence of making Papain. The papayas from which the Papain was extracted (*by making incisions on the skin*) had no takers even after they had turned ripe. Jain Foods was set up to buy these papaya fruits which were then peeled, washed, cut into small pieces, boiled, sweetened, and treated with additives and preservatives to make glace fruit or fruit candy used by confectioners and bakers. Today, candy sales figure is in excess of Rs 96 lakh and there are hopes that this figure will more than double in a couple of years' time.

Of the Jain Group of Companies, Jain personally manages the pipe manufacturing units at Jalgaon and Sendhwa. He also looks after Jain Plastics and Chemicals that makes Papain, and Emco Transformers

Emco Transformers

Emco Transformer Ltd was a family owned and managed company which went into red mainly because of dissensions in the family and the next generation being uninterested in continuing the business. The company however had an excellent reputation in terms of quality and customer service. It was offered to Bhau by a close friend Mr C. P. Mehta, who insisted that this was an excellent opportunity for growth and diversification into a new line with tremendous future prospects.

Bhau, however, had at that time a different priority. Two budding engineers, Rajesh and Shailesh, were just starting their business careers. They were sons of Bhau's other close friend Suresh B. Jain, who was too preoccupied to decide on an appropriate career for them. Bhau thought it as much his duty, as that of his friend Sureshdada, to set them up in their emerging business career. He therefore conveyed to Suresh B. Jain that he would take this company, manage, develop and hold it in trust for the boys. Once it was profit making and well set, he would hand over the reins to Rajesh and Shailesh so that they could invest their futures in this company and take it places. He also offered Sureshdada the option to contribute whatever he could towards the purchase of the company and said that the remaining amount could be paid later as per his convenience.

Emco Transformers today is creating history in the power sector. Bhau is immensely happy that the well-managed profitable unit which he handed over to the boys is today poised to reach new heights.

Ltd, Bombay, a public limited company in which he bought an 80 per cent stake just last year. The other units, notably the PVC pipe manufacturing facility at Udaipur, Rajasthan (sales reached Rs 3.8 crore last year, expected to touch Rs 5 crore this year), are being looked after by a cousin. Jain Foods is managed by his brother, while all the other trading activities are run by Jain's uncles and cousins. The Group, which accounted for combined sales of Rs 60 crore last year, is expected to make Rs 80 crore this year. Jain himself believes that his Group's sales should easily exceed Rs 100 crore by 1989-90, and some observers believe that it could exceed even that. *(The Group sales were at Rs 107 crore in 1989-90)*



Emco Transformers: Entrance, Thane, Bombay (1986)

Foundations of Success

It is obvious that the Jains have done extremely well for themselves.

What has made them succeed?

They weren't the first people to make PVC pipes in India. But today, reportedly, Chemplast is planning to close down its PVC pipe manufacturing division, Finolex is concentrating more on cables and not on pipes and Wavin, in spite of being the only PVC pipe manufacturer with a foreign collaboration since the early sixties, is lagging far behind the Jains. Garware Plastics is also stagnating. *(Extrusion equipments, both of Chemplast and Garware Plastics, were purchased by Jains in 1985 and 1986 respectively.)*

According to Jain, he was lucky to have got into pipe manufacturing just when the market was booming. According to others, it was because of the unique combination of experience that the Jains had in the areas of trading, farming and marketing. "It is obvious," says one competitor, "that had they not been selling PVC pipes earlier, they would not have had a market ready to pick up the pipes they had started making". Secondly, it was also fortunate for the Jains that companies like Chemplast were not as much interested in selling PVC pipes as they were in selling PVC resin. Had it been otherwise, the competition could have easily punched a hole in the Jain enterprise's bottom line,

particularly as it was not only a late entrant but also dependent on Chemplast and others (*resin manufacturers*) for its raw material.

Catering to individual farmers also gave Jain access to markets other than government, agencies, and the single largest customer segment for such pipes. With farmers going in for more sophisticated irrigation systems, Jain had begun tapping a market that had unlimited potential.

Challenges of Rural Place

Yet this does not completely explain the phenomenal success achieved by the Jains. For it must be remembered that while being based in Jalgaon might have been advantageous in terms of the market, the town's remoteness and lack of infrastructure were obstacles that Jain had to contend with. Jalgaon is after all in a remote corner of Maharashtra, far from the ports through which imported PVC resin comes. The communication network is bad, and there is no airport within a radius of 150 km. However, both the western and central railway lines run through the town. It has an uninterrupted power supply, and as it is a classified backward area it allows sales tax and excise duty benefits. The last reason is also why several other companies like the Garwares have started manufacturing units around similar backward areas.

"As for communication, we have a hot line facility with Bombay through which we route all our national and international calls," says Udani. A facsimile facility with New York, USA, where the Jains recently opened another office to monitor exports and imports, gives them yet another communication link with the world of business outside the sleepy looking Jalgaon. "Moreover, we belong here," asserts Jain. As far as liaison with government agencies and the like goes, they have men stationed in the major cities.

Financial Genius

However, the group's prime asset has been Jain's amazing skill in managing his finances. "In a way, I've always overtraded," admits Jain. He recounts how even when he started Jain & Brothers, his investment of Rs 7,000 went only in the purchase of empty drums. "The kerosene and the diesel I purchased on credit, which I rolled over to the next

Ordinary People, Extra-ordinary Work

Infrastructural bottlenecks, paucity of skilled manpower, a non-existent pool of professional and talented management people, were but a few challenges that an industrialist based in an industrially backward rural India has to cope with. Bhau had to devise his own methods of “creating his own men”. For this he had to unlearn what he had studied in his academic life and observed in his subsequent business life. He had come across mainly three models of management – Government run public sector, large MNCs of the likes of Esso or large corporates such as Escorts. Nowhere in these models could he fit his enterprise. He therefore developed new processes, novel methodologies for recruitment and retention of whatever human resources were available in this undeveloped area.

Indeed, he developed a distinct culture for growing a relationship with each person from the bottom to the top of the organisation - He never treated them any different. After cultivating a relationship, he tried an experiment to study if commitment could take the place of competence, and whether hard work could replace lack of job-knowledge. It was difficult. Even simple things like time-discipline and task-discipline had to be inculcated in these simple people, drawn from the agrarian society.

One thing was certain. He loved these people. And they in turn came to love him, and finally revere him, thus strengthening their bond. It was soon discovered that these ordinary people could do extra-ordinary work. The international and national laurels that followed have their seeds in this basic unique philosophy of building trust and relationships rather than treating people like employees.

larger installment of supplies,” he recalls. “I do not consider overtrading as something abhorrent as long as the funds generated, say around 80 per cent at least, are ploughed back for productive purposes,” adds Jain. This is evident even today when one finds that against a net worth of Rs 7.35 crore (inclusive of revaluation reserves of Rs 3.97 crore), loans and liabilities came to around Rs 9 crore last year.

Faith in Jain’s competence is borne out by the opinion that machinery suppliers, raw material suppliers and bankers have of him. Cincinnati Milacron, for instance, considers the Group as quite

Overtrading

Overtrading essentially means going beyond one's means. I, for one, always expanded my business and sales without prior and proper arrangements for adequate working capital availability. I therefore did run into liquidity problems time and again. However, I never once dishonoured any document and could always manage my credit rating with the suppliers to remain intact. This always helped me to sell more, though at reduced margins. As a result my turnover increased disproportionately and I could capture markets where others, more cautious, never took the risk and lagged far behind in the race.

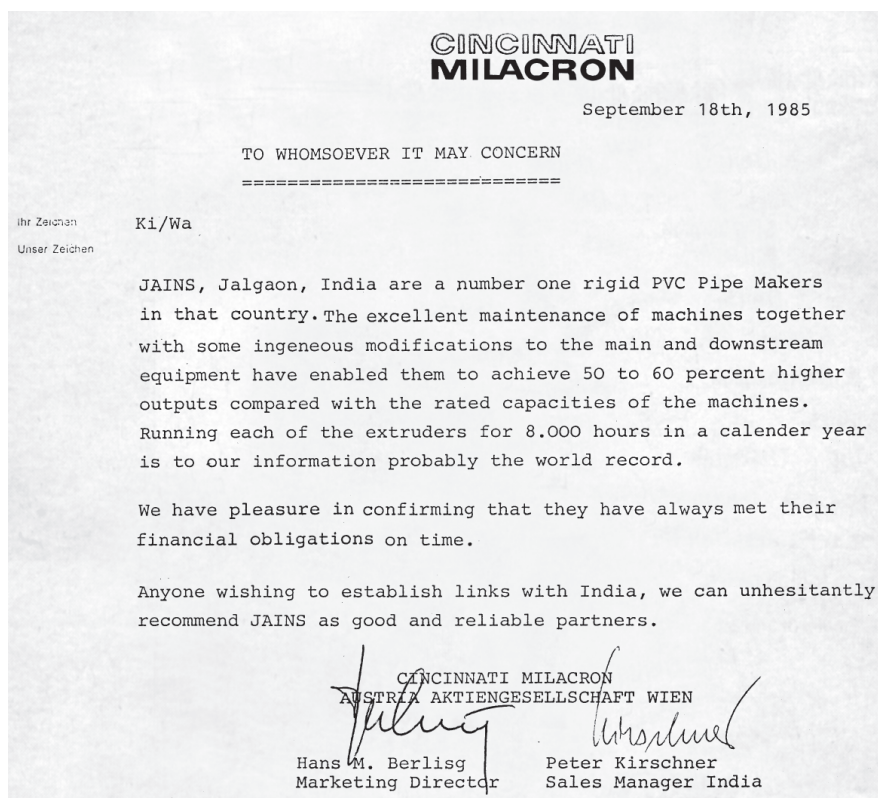
The principals or the suppliers always liked this policy of mine of 'high turnover at lower margins'. To such a firm they would extend higher credit so that the subject firm could increase its turnover. Moreover, overtrading helped me create a history which came to my rescue during the times of restricted availability or fixation of quotas by the companies. They always considered past performance for determination of quota during such difficult times. I could therefore earn good profit during the shortages because companies made high allocations based on my past records.

Thus a judicious use of overtrading as a tool for quick expansion is helpful as long as you are sincere and serious about meeting your requirements and keeping your head above water. I always thought creditworthiness was more important than cash balances. For me therefore, overtrading became a way of life.

- Bhau

creditworthy, which is borne out by its recent agreement to supply three machines on deferred payment terms extending to three years to the Jains. And that too, without insisting on a letter of credit or bank guarantee. Again, Vista Chemicals, USA, which has been procuring PVC resin for the Jains for the last four months, allows the Group open credit to the tune of US \$ 800,000 without insisting on bank guarantees. And the banks themselves have together allowed the Group to have banking credit to the limit of Rs 21.48 crore.

"In fact, once when we tried to discourage Bhavarlal H. Jain from overtrading a few years ago," confesses one banker, "he simply asked us, 'How else do I grow?' He pointed to the penal interest we were



Letter from Cincinnati Milacron

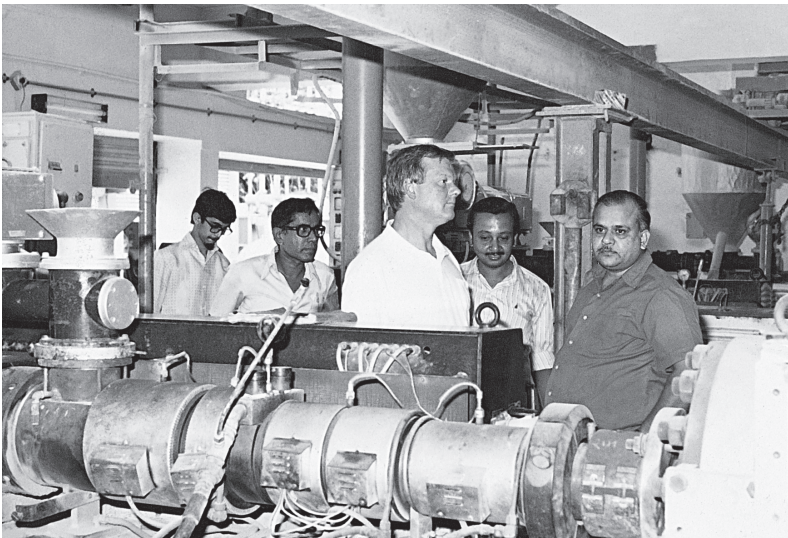
paying to the RBI and asked us, ‘Aren’t you also overstretching yourselves?’ ”

A crucial factor that has contributed enormously to the growth of the Jain Empire has been an excellent collection record, another sign of sound fund management. In spite of having the government agencies as his single largest customer base, it is amazing to discover that the average credit outstanding in respect of Jain’s manufacturing units barely came to 31 days, while inventories stood at less than 4 per cent last year (the record for earlier years is equally good). Even so, Jain has systematically reduced his dependence on sales to the government sector from over 80 per cent of total sales of PVC pipes six years ago, to just around 56 per cent today.

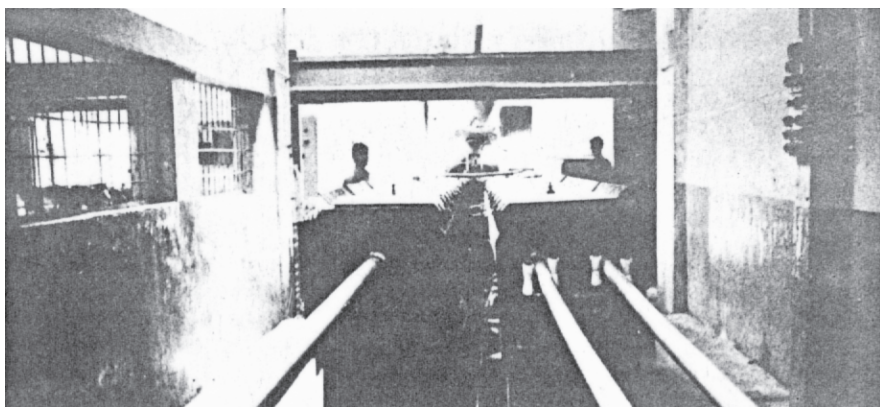
Product Quality

Yet another important reason behind Jain's successes has been his acknowledged commitment to quality production, which has in turn meant keeping abreast of technological developments in this area. Says Dr B. Vaidyanathan, production manager of Jain Group's PVC manufacturing units at Jalgaon, "Today we are the only PVC pipe manufacturing unit in the country, which has computer controlled mixing machines, and Cincinnati extruder machines which we've modified to give us much more than the capacities they were rated for."

Vaidyanathan's statements are borne out by Peter Kirschner, Marketing Manager, Cincinnati Milacron, Austria (a subsidiary of the US engineering company), who marvels not only at the technical innovations carried out at the Jains' units, but also the speed at which expansion has taken place. Kirschner points out how the Jains have achieved such a level of competence that in recent years, they even began commissioning Cincinnati extruders without waiting for technical advice from the supplier firm – an achievement few can boast of. A



*Peter Kirschner from Cincinnati Milacron takes a look
at the multiple extruder head - a Jain innovation*



Reverse flow of technology

second confirmation of these skills: HMT has reportedly requested the Jains to collaborate technically to manufacture such extruders in India.

Vaidyanathan goes on to explain how he and his team added a preheater for the PVC resin going into the Cincinnati extruders. Then by modifying the screw design and barrel, they were able to get a capacity of 410 kg an hour against its rated capacity of 250 kg an hour.

“Taking a cue from the Jains, Cincinnati introduced a new screw and barrel design called the Superconical. Nevertheless, the company

Dr Vaidyanathan – BV as he was known – rose to the position of Director in 1994. His premature demise in December 1995 caused irreparable loss to the organisation.

could still guarantee an output of only 330 kg an hour, as against our 410 kg an hour,” adds Dr B. Vaidyanathan. “Then, since downstream units were not capable of taking an output of 410 kg an hour, we introduced a twin extrusion system for the first time in the world, and have now gone on to triple extrusion too for small diameter pipes of 20-40 mm. Soon we hope to have quadruple extrusion systems too.”

Vaidyanathan also proudly points to the low wastage at the Jain

Companies associated with the Jain Group		(Rs lakh)
Name of unit	Main activity	Turnover
Accurate Pipes & Plastics (P) Ltd, Udaipur, Rajasthan	Manufacturing PVC pipes & fittings	380
Jain Foods, Jalgaon	Manufacturing Fruit candy	96
Jain Metal & Material Supply Corporation, Jalgaon	Marketing building materials	11
Jain Brothers, Jalgaon	Marketing agro inputs & petroleum products	390
Jain Brothers Auto Agencies, Jalgaon	Marketing & servicing tractors & two wheelers	140
Jain Warehousing Corporation, Jalgaon	Warehousing	15
Shirish & Co, Jalgaon	Retailing LP gas	33
Dhulia Gas Agency, Dhulia	Retailing LP gas	78
Malegaon Gas Co, Malegaon	Retailing LP gas	18
Bhusawal Gas Agency, Bhusawal	Retailing LP gas	115
Ajantha Traders, Pahur	Marketing petroleum products	102

units – just around 5 per cent against the norm of 6 per cent in most developed countries. “For us the need to trim costs is greater, as PVC is much more expensive in India,” he explains. “Even this waste gets recycled, of which 4.92 per cent is recovered, giving us an ultimate loss of only around 0.08 per cent against the international norm of 1 per cent,” he adds.

Expansion & Diversification

The Jains have also begun introducing new types of pipes. For instance, they plan to shortly introduce double walled pipes, which are corrugated on the outside but smooth inside, thus saving almost 20 per cent on the raw material yet improving on the inherent strength of the pipe. *(Indeed, we did introduce these, collaborating with Rib-Loc Australia. Though cost effective, there was very limited success due to customer resistance to the pipe’s light weight and hence discontinued.)* Such innovations, coupled with rigorous quality control have given the Jains a reputation in the market that could well be the envy of almost

The Jain Group's financial profile (1985-86)				(Rs lakh)
	PVC Pipe	JPCL	EMCO	Total
Sales	4,348.31	76.42	223.30	4,648.03
Other income	1.87	59.10	9.95	70.92
Gross sales	4,350.18	135.52	233.25	4,718.95
Gross profit	204.41	34.73	16.31	255.45
Depreciation	32.35	14.99	6.87	54.21
Tax	33.97	5.04	---	39.01
Net profit	138.09	14.70	9.44	162.23
Share capital	152.55	24.50	48.52	225.57
Investment allowance reserves	64.17	14.82	---	78.99
Revaluation reserves	169.15	227.54	189.56	586.24
Other reserves and surplus	58.83	23.54	55.70	138.07
Net worth	444.69	290.40	293.78	1,028.87
Loans and liabilities	750.73	168.75	100.38	1,019.86
Net block	390.41	411.09	260.90	1,062.40
Total assets	1,228.86	464.92	398.04	2,091.82

any pipe manufacturer.

Not content with their undisputed supremacy in the manufacture of PVC pipes, the Jains now plan to diversify into three areas. The first, relating to manufacture of PVC window profiles, foam tiles and roof tiles, is already on the anvil and is expected to go on stream as demand for such products develops. *(This was found unviable. Hence discontinued in 1997.)*

At Farmer's Service

The second area of diversification is in drip irrigation systems for which a new company, Jain Irrigation Systems Ltd, has been formed. The company is in technical collaboration with James Hardie, USA, one of the largest irrigation equipment manufacturers in the world (group annual turnover in the region of Rs 1,500 crore) through their European subsidiary based in Italy. Unlike earlier companies in the field, which

included big names like Coromandel Indag, Voltas, Kirloskar and Jyoti, the Jains will offer a total irrigation system.

“This will include testing the soil, crop pattern, weather patterns and land topography before we devise a system for the farmer. In addition, we will supply all the 20 odd parts needed and not leave it to the farmer to procure odds and ends from others. Besides these services, we also intend offering the farmer a guaranteed service to suit his changing needs for at least 10 years,” explains Mr R. B. Jain, Bhavarlal’s cousin and director of the Company.

“During the last seven years, only 4,000 acres have been brought under drip irrigation by all the companies put together. We intend getting at least 10,000 acres under our drip systems in the first year itself. We have already covered around 3,000 acres. Farmers realise the benefits of such a system whereby water consumption gets reduced by at least 50 per cent and agricultural output increases by around 25 to 40 per cent, and so the potential for marketing such a system is virtually unlimited,” says Jain.

To ensure that the drip irrigation system finds easy acceptability, the company began installing such systems for large and influential farmers. Clients include Sharad Pawar and other sugar barons in the state of Maharashtra. The strategy is obviously paying off as other farmers watching the results of these systems have begun showering the Jains with enquiries.

To partly finance this project, expected to cost around Rs 7 crore, the Jains plan going public (the first unit in the Group to do so) and raise funds around Rs 2 crore from the capital markets.

Backward Integration

The third area of diversification, and possibly the most promising, is the Jains’ plan to set up a project worth Rs 100 crore for producing 50,000 tonnes per annum, tpa, of PVC resin. “Today, we consume 28,000 tpa of PVC resin and have become the largest processors of this resin in the country,” says Jain. So it was natural to go in for backward integration. However, the application has been pending with the

government for two years now. Now that the government of Uttar Pradesh has decided to sponsor it (earlier it was Maharashtra), Jain reckons his chances to be better. “The economics are in my favour,” he says. “Uttar Pradesh needs industry and I need 28,000 tonnes of PVC resin a year from now onwards. As for the rest, I am even willing to guarantee export if domestic sales are not possible.” *(This PVC resin project could not be pursued for want of license from Government of India.)*

Once this project gets cleared, the Jains could easily rank foremost among the new industrial groups in India.

Grooming Second Generation

Jain is now concentrating on developing a second generation of management. The group has already been apportioned between his sons, cousins and uncles. “I do not like to think of this bifurcation of responsibilities as a family / business division,” emphasises Jain. “I’d rather think of it as planning for a transition, a smooth change of men in control. I’ve never believed in luck or accidents – only in deep thinking and planning.”

“I do not consider overtrading as something abhorrent as long as the funds generated are ploughed back for productive purposes.”

Jain Irrigation : Fertile Plans

Merely taking risk and nurturing high ambition don't make an entrepreneur. Hard work and determination coupled with aggressive marketing and plough back of funds help an entrepreneur succeed.

Destiny also intervenes in a subtle, but sure way. The go-getter in an entrepreneur keeps an eye on everything including complex issues like R&D and simple issues like in-house DTP.

When Jain Irrigation Systems Ltd, (JISL), till then unheard of by investors, went public in October 1988 with Rs 1.11 crore equity issue

BHAVARLAL HIRALAL JAIN

JALGAON

Date 27.09.1988

My Dear,

You would be pleased to know, just as much as I am pleased to convey, that we are going Public. JAIN IRRIGATION is one of those Industrial projects which has emerged strong both in its conception and in its implementation. My conviction that it would be our flag-ship - a blue chip company - is even stronger.

It is not as though I want you to invest big money. Some names are close. Some have been helpful when not many were willing to help. They have carried fragrance for many many years. I know some names mean good omen. The idea is I should have your name on the Register, this being our first public offering.

A small PROMOTERS QUOTA for preferential allotment has been reserved. The application form should reach Jalgaon before 17th of Oct.

With warmest personal regards.

Yours Sincerely,

BHAVARLAL JAIN.



Road Show - maiden issue

In the picture R B Jain, C P Mehta, Bhau, Anil Jain and S M Udani

it was oversubscribed by about thirteen times. And now, the Rs 10 paid up equity share of the Company is being traded at around Rs 40. Though this does not adequately sum up the reason why the soft-spoken and mild-mannered Bhavarlal Jain and his Group of Companies are in the mega-reckoning, it certainly points towards where Jain could take his Group.

Bhavarlal, the go-getter that he is, has come up the hard way with his unmistakable survival instinct and dogged determination in the face of odds as the only major inputs to count on through most part of his business career. Bhavarlal to-date has grown remarkably, to be able to boast about managing a diversified Group of Companies with a combined turnover of Rs 83 crore, fixed assets of over Rs 6 crore and profit (before tax and depreciation) of Rs 83 lakh.

It has at least taken longer than two decades for Bhavarlal to realise that a soothsayer's words uttered in 1962 were prophetic. "With the last ten rupees I had with me, I went to this astrologer. He predicted that I would soon be in business relating to oil, soil and iron. I thought then the guy is talking through his hat, as I had been just gazetted by the Maharashtra State Public Service Commission as an officer for Nagpur

Mother's Instinct

Indeed, Mr B. M. Jain's advice came close on the heels of my mother's message : "Do something which will not only fill the bellies of you and your family but do something that will enable you to feed even the birds and the animals who do not have words to speak. There is no one to attend to their woes." The only vocation that could meet such a mandate was agriculture.

division," recalls Bhavarlal nostalgically. However, what prevailed on Bhavarlal and strengthened his resolve to be a businessman was his subsequent meeting with B. M. Jain, a leading businessman from Jalgaon, who goaded him into business and even volunteered to help financially.

Humble Beginning

It was then that he decided against his first love of being a legal luminary and plunged into retailing kerosene oil, acting as a sub-dealer in Jalgaon. "My real learning of business methods and management was acquired when I was the sub-dealer of Esso, noted for their aggressive marketing", recounts Bhavarlal. Selling kerosene oil has had its impact on Bhavarlal. "Selling door to door at a price 40 per cent lower than the then prevailing market price has injected in me the spirit of competition and determination", adds Bhavarlal.

Soon recognition came Bhavarlal's way with Esso awarding him four dealership agencies, against their principle of 'one individual, one



Bhau with his mother Gaurabai

agency'. Hard work and determination apart, what differentiates Bhavarlal from other successful businessmen is his integrated approach. As Bhavarlal takes pains to explain, it is his approach to get into related fields and provide the consumer a whole complement of goods and services that has made him a different breed.

Integrated Approach

"From oil, we gradually got into selling auto spares, lubricating oil and domestic gas. Soon we became known for genuine auto spares in Jalgaon. Later we began trading in cars and trucks as sub-agents for Standard Motor Company and Ashok Leyland. This sort of an integrated approach is being followed even today by the Jain Group of Industries. When I think of irrigation, I consider fertilisers, high-yield seeds, agricultural implements and other inputs and even marketing the produce. This is exactly what our Group does in the case of Papain," says Bhavarlal with discernible conviction.

It was in 1978 that the Jains purchased a sick unit originally commissioned as a banana powder factory. The erstwhile owners failed to produce an acceptable quality of banana powder. The Jains adapted the equipment for processing papaya latex into Refined Papain, an industrially critical export-oriented enzyme. The Jains today help farmers grow papaya, buy their produce, add value by manufacturing refined Papain and market it abroad.

By end 1978, Jains saw their first consignment of Papain reach American shores. Tempered with rigorous marketing drive and greater accent on R&D, Jains could export Rs 1 crore worth Refined Papain to date. Incidentally, Jains were the first to export Refined Papain from India and they have been the recipients of at least a dozen awards from Central and State governments in recognition of their efforts. For providing supplementary income to farmers, Jains have put up a papaya processing unit and launched Jain Candy, which has an annual turnover of Rs 2 crore today.

Following up their 'integrated approach', Jains made an entry into PVC pipes and fittings, a product related to the farming community. Cashing in on the Maharashtra State Government's incentive schemes,

in a brief span of two and half years Jains have set up six units in Maharashtra. “With two more pipe units having been commissioned recently in Sendhwa, an adivasi backward area of Madhya Pradesh, the current annual turnover of PVC pipes at Rs 75 crore might well touch Rs 100 crore soon,” projects Bhavarlal. (*This prediction turned out to be correct.*)

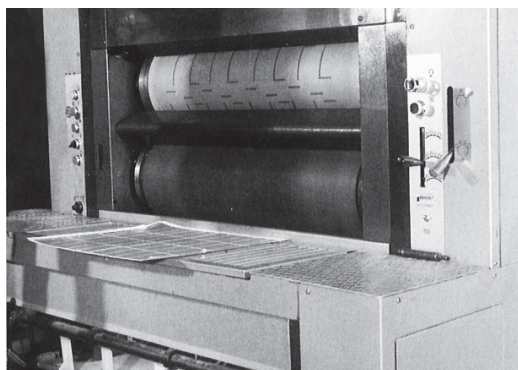
It is no mean achievement that the Jains are the *numero uno* PVC pipe manufacturer in the country, producing 22 per cent of the nation’s requirements, in terms of sheer tonnage with an annual production of about 28,000 tonnes.

“We are the second largest Papain producer in the world, next only to a manufacturer based in Zaire, Africa, where papaya plantations grow wild. With more accent on our R&D facilities based in Jalgaon, which are recognised by CSTRI, we have been able to produce the world’s best quality Refined Papain,” explains Bhavarlal.

In an attempt to broadbase their operations, the Jains acquired in late 1986, Emco Transformers Ltd, reportedly one of the leading manufacturers of high voltage transformers. According to Bhavarlal, the company has ambitious plans to manufacture high voltage mainline regulators with GEC collaboration and thus, would become the first to manufacture them in the country. The company with a turnover of about Rs 8 crore in the second year of operations has projected a turnover of Rs 20 crore in the next two years.

The Jains today are seriously considering South India as a profitable market for the pipes with the only two major manufacturers out of reckoning – Wavin having already folded up and Chemplast having turned sick. “Negotiations for the PVC plant to be based in South India, more likely to be in Tamil Nadu, are at an advanced stage,” declares Bhavarlal.

Yet another manifestation of Jain’s belief in self-sufficiency is the printing works based in Jalgaon. What began as an attempt to cater to in-house requirements, the printing unit has a current revenue of about Rs 60 lakh. “Plans are afoot to introduce more sophisticated printing



Four Colour Printing Press - a novelty at Jalgaon then

equipments. With an aggregate investment of Rs 75 lakh in EDP, telecommunications network, DTP systems and offset multi-colour machines, we will soon prove what an integrated approach is all about,” says Bhavarlal with confidence.

A brief foray in to printing

Pramod Madane met me casually while I was in Mumbai. He proudly mentioned to me that he had a small offset printing press in Mumbai and that he hails from Jalgaon. I knew that there were no offset colour printing jobs being done in Jalgaon and it was still only having the letter press type of printing. After about half an hour’s discussion, I offered to help him financially or even partner him to set up a modern 4-colour offset printing press if he was willing to shift to Jalgaon.

Eventually we did that and our business boomed. However, I discovered that Pramod Madane and his relatives in the press were carrying out practices which could hardly be described as ethical and fair. I therefore exited from the company, allowing Pramod Madane to continue the business. It was nice of Pramod to take this in the right spirit and we maintained our personal relationship till his demise, notwithstanding the severance of the business relationship.

- Bhau

The Italian Connection

Precisely in the same vein, the Jains went hammer at their drip (micro) irrigation project and succeeded in acquiring collaboration with the prestigious James Hardie Irrigation SRL (Italy), the world's largest manufacturer of irrigation equipments with a sales volume exceeding US\$ 250 million. "Jain drip irrigation systems have already become a household name with farmers in Maharashtra. They are destined to play a significant role in ushering the second green revolution in India," says a Jain spokesman who preferred to remain anonymous.

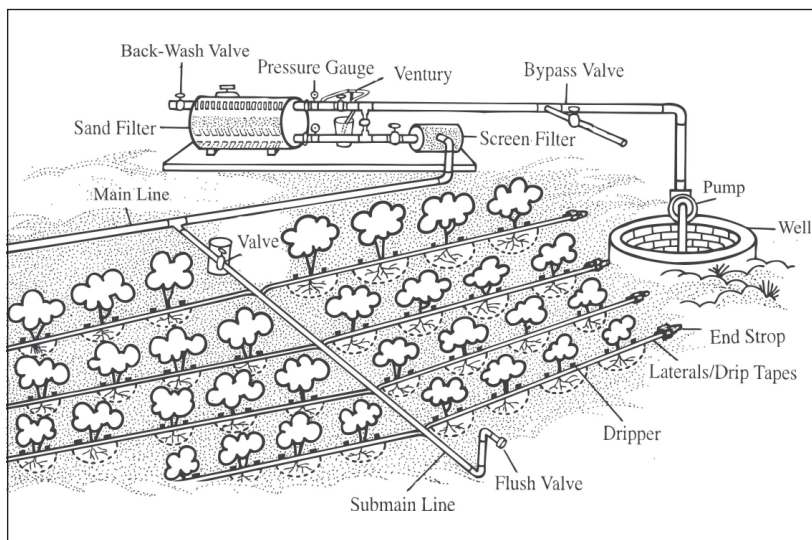
Under drip irrigation, the specific irrigation needs of different crops, soils and climatic conditions are taken into account. By directing a small, precisely controlled, uniform quantity of water, nutrients and other desired inputs directly to the root zones, the drip irrigation method offers savings upto 80 per cent in water resources, and upto 50 per cent in operating costs. Studies around the world have shown that the system can improve productivity by as high as 230 per cent.

JISL has installed drip irrigation systems on over 3,200 acres and on the current turnover which is placed at Rs 3.30 crore, it has earned a pre-tax profit of Rs 11.64 lakh. The company has projected a turnover of Rs 13 crore for the year 1989. The implementation of the project on the company-owned 10 acre plot at Bambhori, Jalgaon district, is reportedly progressing and is expected to be completed by June 1989.

With a project outlay of Rs 7.8 crore, JISL is confident of installing drip systems on over 13,000 acres during 1989. "This would represent only 0.01 per cent of the total market potential. With the demand destined to rise in geometric progression with the Central Government contribution of 50 per cent to State Government towards subsidy for drip systems, we should do better", says R. B. Jain, one of the younger members of the Jain clan.

Support for Drip

As we go to press, Haryana has declared a subsidy on drip irrigation of 25 per cent or Rs 5,000 per set, whichever is lower, for farmers in the state. Reportedly, the Gujarat state government is also considering the



Sketch of a typical drip irrigation system; demonstration model - concept selling!

proposal of allowing subsidy ranging from 25 to 75 per cent. Considering that more than 6,000 acres of cultivated land have been brought under drip irrigation in Maharashtra during the last 18 months, the prospects of JISL appear brighter.

Moreover, on January 16, the Government of Maharashtra state announced a top priority scheme for drip irrigation and subsidies to the extent of 30 per cent to the cost of cultivation under the drip technique for all farmers, regardless of their size of holding. Under the above scheme, impounded water in two or three irrigation dams would be supplied to farmers through water-saving drip technology.

Interestingly, the S.G. Barve Commission, which investigated the water and land potential in the state, had earlier observed that if all the water available were utilised, the state could double its cultivable area from 23.3 lakh hectares to a maximum of 52.6 lakh hectares. "Under drip irrigation, this could further be augmented to 70.6 lakh hectares as of now," says Bhavarlal. Considering that the Maharashtra Government is already subsidising drip irrigation equipments in a phased manner vis-a-vis the size of holding, the top priority thus accorded to the drip irrigation technique could only unfold happier times ahead for JISL.

“This is just the trickle. More states would soon follow,” says the optimistic Jain.

Not to become complacent, the Jain Group is exploring more opportunities in the agro-base industry, telecommunication, plastic raw materials and building machines.

Financial Status

The Group has set itself an ambitious sales target of Rs 90 crore for 1989 and Rs 100 crore for 1990. Considering that the turnover in 1981, when the PVC pipe activity had just commenced, was merely Rs 2.80 crore and thereon the Group has grown at an annual rate of 354.90 per cent to achieve a turnover of Rs 79.50 crore in 1988, the Jains have the potential to forge ahead and realise their targets.

Likewise, the net profit of the Group after tax which stood at Rs 24 lakh in 1981 increased to Rs 85 lakh in 1988. Of the total profits earned by the Group between 1981 and 1988, about Rs 5.40 crore have been retained as reserves. During this period, the assets have been revalued to the extent of Rs 6.23 crore. As a result, the net worth of the Group which stood at Rs 81 lakh in 1981 rose to Rs 13.75 crore, registering an annual growth rate of 212 per cent. Disregarding the revaluation profit, the networth indicates an annual growth of 116 per cent, from Rs 81 lakh to Rs 7.52 crore, during the eight years in question.

The plough-back exercise of the Group has had its impact on the fixed assets block (net), which from Rs 1.04 crore in 1981, has risen to Rs 13.40 crore in 1988.

This net block when juxtaposed against the net worth of Rs 13.75 crore, proves a sufficient indicator of the degree of internal generation of funds for expansion. “For working capital requirements, the Group has been allowed by four commercial banks, fund-based and non-fund-based limits totalling to Rs 35 crore.

The Jains’ corporate philosophy is that creating is the most satisfying element in business, which should be built brick by brick. Investors can expect that in a few years, the Jains would have added many more activities to their expanding industrial base.

Integrated Approach by Jains

The two important services – Basic and Support – are shown in detail in the following chart.



Concept Selling

Whenever a novel concept is to be introduced, the minimum that the pioneer should do is to study the successes and failures of that given industry. Recognising this truth, Bhau had to research as to why such a wonderful and useful technology like drip irrigation did not take root in India. His findings were clear. Everyone who undertook selling drip irrigation in the past, did so more as a trading venture and took a short-range view of selling the hardware and making money. However, drip irrigation is a technology which cannot be promoted merely through a simple 'buy and sell' attitude.

Bhau took the view that micro irrigation needs development and deployment of soft skills and services alongwith the state-of-the-art hardware. In short, he firmly concluded that to be successful in this enterprise, he needed to pursue this as an article of faith, as a long term proposition and take an integrated view beginning with educating not only the customer, but even the opinion makers and the administrators, without whose help its popularisation would be difficult.

As a result of this imperative, Bhau developed an integrated approach and embarked upon providing primary services such as water and soil sampling, testing, making a layout and correlating it to the rainfall, temperature data, and finally installing the system. Thus proving the claims he made regarding its performance. This entailed training and imparting other skills to the farmer. Only such an approach could bring about success.

"It is my approach to get into related fields and provide the consumer a whole complement of goods and services that has made me a different breed."

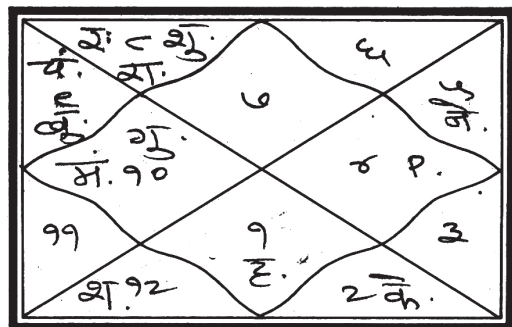
Explosive Growth Ahead

This is one of the earliest recorded interviews of Bhau. It expatiates on the rationale behind the decision to invest in the business of drip irrigation as well as for "an unusual case of reverse technology flow," as Rabia Hira terms it.

An entrepreneur is not just ambitious and hardworking, resolute and daring. He garners support from multiple sources - family, relatives, friends, acquaintances and even strangers. Besides getting such valuable support, Bhau also demonstrates financial acumen, impeccable creditworthiness and fine-tuning of cash flows.

In 1962, Mr Bhavarlal Hiralal Jain visited an astrologer, who predicted that he would soon be in a business related to "iron, soil and oil". A little later, he met Sureshdada Jain's father, the incumbent MLA from Jalgaon, who pushed him into business and even offered his help. He took the plunge, started retailing petroleum products as a sub-dealer of Esso, the famous American multinational. The marketing managers of this company were renowned for their aggressive marketing techniques even in rural areas. Jain acknowledges that he learned the basics of competitive business methods, management and marketing techniques from them. This also injected in him a rock-hard sense of determination to succeed in life.

Bhavarlal Jain was born in Vakod village, close to Jalgaon, near the world-



Extract of Bhau's Horoscope

famous Ajanta caves into a respected family of agriculturists. They never imagined that Bhavarlal would one day be selling kerosene door-to-door in their own neighborhood, especially with a business and law degree in his pocket. Esso was really pleased with his performance and soon awarded him four dealership agencies, making an exception to their normal practice of “one individual, one agency”. From kerosene, he gradually diversified into retailing crude oil, lubricating oils, petrol, diesel, domestic gas and auto-spares. He became known as a reliable supplier of authentic auto-spares. This was followed by agencies for tractors (Escorts Ltd), cars (Standard Motor) and trucks (Ashok Leyland). Right from the beginning, he received unstinted support and active help on a day-to-day basis from his family members and friends.

Bhavarlal observed that Papaya milk (latex), when processed with chemicals, turned into Papain and was used as an agro-based enzyme. He found that it could be used extensively as an essential industrial input in baby food processing and pharmaceutical industries, and also in breweries not only in India but throughout the world. He ventured into this line pouring everything he had, into it.

The process begins with the extraction of latex from semi-matured fruit. The latex is stabilised and processed using Ultra and Microbial Filtration. The Ultra filtered concentrate is thereafter spray-dried to fine powder. The company has poured a lot of funds into an in-house R&D and has now successfully developed de-odorised, ultra purified Papain which is exported to all the five continents. “Jain Papain” now meets as much as 20% of the global demand. The Jain Group is now the second largest producer of refined Papain in the world, next to a manufacturer in Zaire where papayas grow wild. Jains have won several national and international awards for this performance. After latex extraction, the scarred papaya fruit is turned into fruit-candy, thus earning more revenue for the farmer.

Agri Product: Water Conveyance

Says Bhavarlal: “Agriculture is the very soul of India’s economy. We were associated with the farming sector since generations and one of our areas of diversification was the marketing of PVC irrigation pipes.

At one stage in 1980, when our principals could not meet the demand for PVC pipes from our customers, we started manufacturing them in a small way.” From a mere 20 kg per hour then, this Group has now built up a capacity of 4600 kg per hour with advanced high-capacity extrusion lines imported from Cincinnati Milacron of Austria.

Even in this hi-tech field they added their own revolutionary technical innovations to these already advanced machines (such as micro-processor controlled mixers, pre-heaters and quadruple-extrusion heads among others) which boosted the production capacity of these imported machines by as much as 60%. Cincinnati Milacron has acknowledged that by running each of its extruders for more than 8000 hours per calendar year, the Jain Group has established a world record. Its dramatic technical improvements are now being incorporated in the latest machines produced in Austria – an unusual case of reverse technology flow.

Today, the Jain Group is the single largest manufacturer of PVC pipes in India with a market-share exceeding 20%. With 8 units already functioning, the turnover from PVC pipes alone will cross Rs 70 crore, by March, 1992. This expectation was validated.

Agri Product: On-Farm Water Distribution

The next logical step was drip irrigation systems built around PVC piping. It acquired collaboration with the world-famous James Hardie Irrigation SRL (Italy), the world’s largest manufacturer of irrigation systems and equipment. Under the drip irrigation system design, the irrigation needs of specific crops, soils and climatic conditions are taken into consideration.

A small, precisely controlled, uniform quantity of water, requisite fertilisers, required nutrients and other desired inputs are directly supplied to the root zones. Drip irrigation offers great savings of as much as 80 per cent in water requirements and upto 50 per cent in costs. Worldwide studies have shown that land productivity can grow by as much as 230 per cent.

By March 1992, the sales of drip irrigation systems manufactured at Jalgaon will cross Rs 40 crore out of which, a huge chunk of Rs 10

crore will be from exports. But this is only a drop in the ocean. The total potential acreage to be covered in India by drip irrigation is a mind-boggling 13 crore acres. In the whole of Maharashtra, last year, the fresh areas brought under drip irrigation did not exceed 10,000 acres.

In January, 1989, the State Government of Maharashtra announced a top-priority scheme for drip irrigation and subsidies to the extent of 30% towards the cost of installation of the drip irrigation technique to all farmers, regardless of the size of their holdings.

The S. G. Barve Commission appointed by the Maharashtra Government, investigated the water and land potential in the state and observed that if all the available water were to be utilised for irrigation without any wastage, the cultivable area in Maharashtra alone could be increased from 60 lakh acres (24 lakh hectares), to a total of almost 175 lakh acres (70 lakh hectares) if irrigation wastages are eliminated and drip irrigation technique is applied.

Imagine this scenario being repeated in every state, which is sure to happen. Jain Group's pioneering entry into drip irrigation could provide the means for expanding their turnover even more rapidly.

Energy Supply Product

One of the other substantial areas of operation for the Jain Group is high-voltage transformers. In 1986, the Jains acquired Bombay-based Emco Transformers Ltd. This company has drawn out ambitious plans to manufacture high-voltage mainline regulators in collaboration with GEC for the first time in the country. By March 1992, the turnover of this company should cross Rs 20 crore.

In-house Publishing

The Group has also set up Parees Offset Pvt Ltd at Jalgaon, equipped with the latest single colour, two-colour and four-colour printing machines and the full range of pre-print and post-print equipment, enabling this unit to be self-sufficient and quite capable of handling the toughest printing jobs from the design stage onwards. The annual turnover of this unit, which handles many outside jobs apart

from catering to the entire in-house requirements of the Group, has crossed Rs 1 crore.

More opportunities are being explored in agro-based industries, telecommunications, PVC resin, and machine building. It also plans to manufacture PVC window profiles, foam sheets and corrugated roof sheets.

Financials

In 1981, when only PVC pipe production had just started, the Group turnover was less than Rs 3 crore. Since then, the Group has expanded at a stupendous annual growth rate of almost 355% and will cross a turnover of Rs 130 crore by March 1992. The group's net worth has registered an annual average increase of 212% over the last decade. With the booming demand for drip irrigation systems and PVC pipes, and the onset of one more normal monsoon this year, it is possible that this unusually and consistently well-managed Group's annual turnover may grow so rapidly that it could cross the Rs 1000 crore mark before the year 2000. This would propel the Jains into the elite company of the latest mega-industrialists.

Mr Jain will be able to handle the forthcoming mega-growth of his empire with ease. He is a master at financial leveraging and finely-tuned over trading. He has built up an impeccable record of creditworthiness. Even reputed foreign suppliers of machinery and raw-materials offer him credit of as long as three years without LCs or Bank Guarantees. This sounds incredible, but it's true.

One reason for his legendary success in funds management is an excellent collection record. Such meticulous attention to controlling

This was not to be, because of diversification into unrelated fields, which occurred during the period 1995-97. This put the Corporation under enormous financial stress and its fortunes dwindled. The turnover in 2000 was a mere Rs 199 crore. Fortunately, come 2007-08, the corporation bounced back to a turnover of over Rs 2000 crore.

production costs and cash flows permits him to meet his financial commitments comfortably at any level of turnover. This in turn allows him to grow at a blistering pace without the slightest hint of financial instability.

Succession Planning

Jain is busy in developing the second generation of his family into capable managers, supported by professional executives. The Group's several companies have already been allocated to his sons, cousins and uncles. He is determined to ensure a smooth transition of power and responsibilities. He refuses to believe in luck, only in planning. His credo is: "You can command Nature if you learn to obey Her".

Interview:

Ms Rabia Hira visited Mr Jain's offices and plants several times and tried to unearth secrets of his success. Excerpts from interview.

Q. We have learnt how you acquired an Esso dealership for kerosene and heavy diesel oil in 1963, received Rs 7,000 from your family to buy empty drums and then launched your star spangled career. But what were your very first business experiences after you graduated from a Commerce and Law College?

A. After finishing my studies from Law College, Mahim, Bombay University in 1962, I acquired an Esso dealership for kerosene in 1963. I felt that my responsibilities as a Government official would confine me to a beaten path. I had an inner urge to give free vent to my inherent innovative and creative zeal. I also felt that I had the responsibility of bringing up my family in terms of material standards and social standing, to improve their way of life, after they had given me the opportunity to equip myself for a higher social position. All this I could do by setting up a business where I could combine my zeal and mettle to further my family's advancement. My mother stoutly stood by me in those days.

Q. We admire the way in which you started from almost nothing. Going back to childhood and your days as a young adult, would you say that it was your family's unstinted support and encouragement which

nurtured a deep-seated confidence in you and gave you the courage to take on big risks at such a young age?

A. There is no doubt that my family's unstinted support and encouragement has been largely responsible for my higher education. In fact, because of that, I felt I had an obligation towards them. I had ventured into business with a very limited stake. Though the risks I assumed for the growth in my business were comparatively large, they were calculated to be within limits to enable me to meet my commitments in time. Hard work, planned effort, the support of my family members and friends, were all combined and helped me meet my commitments repeatedly without fail. This gave me the assurance and confidence to continuously endeavour to grow, without fear of failure.

Q. How did you initially acquire your basic business acumen?

A. With experience and constant exposure to the market, I continued to learn and sharpen my basic business instincts.

Q. Your flair for overtrading and using financial leverage to its utmost limits is legendary. This skill is exactly what enabled many legendary business tycoons in America, Europe and elsewhere and also, of course, in India, to build up gigantic, individual business empires of colossal size by international standards within their own lifetime. Did you acquire this skill of financial leverage on your own or were you initially guided by someone else?

A. I would rather say that a businessman, who does not use the resources he possesses to yield the utmost, has chosen to be satiated with the status quo. Alternatively, those who use their resources to the utmost will always grow faster. This element, together with my good fortune of having loyal family members as my partners and some sincere friends to consult or to advise me in my ventures, ensured the success of my business ventures.

Q. This mastery over the creation and optimal productive use of finance and your impeccable reputation can enable you to aim for, and achieve a Group turnover of Rs 1000 crore by the year 2000. Why is it

that you are planning in terms of reaching only a turnover of Rs 500 crore by the year 2000?

A. In my efforts to generate growth for my Group, I cannot lose sight of my basic commitments to a certain philosophy. I wish to concentrate my investments in areas around Jalgaon so that I can serve the community in the area of my birth, and as far as possible, grow in the field of agricultural inputs augmented by manufacturing and technology inputs. Additionally, I strongly feel that pursuit of money for the sake of money as the sole purpose of business is a deeply corrupting influence and thus, self-defeating. In fact, I have chosen to invest in businesses which also serve social ends like drip irrigation (water and soil management), manufacture of foam sheets (substitute for wood) etc.

Similarly, we now have proposals in the pipeline for the manufacture of solar heaters, PVC ball valves, PVC foot valves etc, which will conserve scarce natural resources or electricity. Many of these require concept-selling but I feel that I have to be true to my philosophy of business. The Jain Group must undertake such challenges. To my mind, making money by serving a public end, even though it is difficult, is far more rewarding than merely making money the easy way, like in real estate or in trading.

As for our turnover, however, I must correct the impression that we will not reach a turnover of Rs 1000 crore by the year 2000. We will reach that figure. Our existing turnover is already well above Rs 100 crore.

Q. No man can reach great financial heights alone. Who do you give credit to for being by your side when you first started out and who do you rely on most now?

A. As I have said earlier, I had my family, brother, uncles and cousins who joined me as my business partners and with their support and hard work, we have grown together. They have proved to be my most reliable support, solid as rock.

Q. To what extent is your Group's management style truly professionalised, with genuine and complete delegation of authority?

A. We are still not a formal organization and thus there is no well-demarcated organisational structure. We have a combination of specialists carrying out their responsibilities in their field and senior managers, including family members, fulfilling their duties in areas coordinated under their control.

If by professionalism one means commitment to work and result, we are professionalised; but if it means a 9.00 am to 5.00 pm work culture, we are far from that. Our style of functioning is "open doors" and operational directors and senior managers are fully accessible. At each level, every individual knows the limits within which he can operate and if he needs assistance, how he can obtain it.

Q. With a genuinely professionalised management you can aim for a turnover of Rs 5000 crore by the year 2010 and be ranked as a multinational. Are you thinking in these terms and if so, what steps are you initiating to build up an army of capable professional executives to achieve this?

A. It is difficult for me to speculate what the shape of this organisation would be in the year 2000 and beyond. We are certainly endeavouring to emphasise export-oriented ventures for the Group's growth. We have our hands full with various proposals which we are evaluating but all of them can be successfully launched with local investment. I wonder whether the foreign exchange policy, curbs on

Globalisation winds from 1994 onwards brought about a complete change in the business outlook of the organisation. After the financial crisis was over in 2002, the Corporation went on to acquire foreign units for greater access to the world. The years 2006-07 and 2007-08 saw the corporation acquire twelve business entities in the fields of micro irrigation, plastic sheet and food processing. The number of production units outside the country is six as on date.

imports or regulation of exports will necessitate our looking for ventures outside India in future.

My convictions do not permit me to invest in production units beyond our soil, though our realm of marketing may well encompass the whole world.

Q. Global success and domination in any field or for any product is based on utmost competitiveness. We feel that you must not only be deeply aware of this, but you must also be one of the most enlightened industrialists in India on this subject due to your success at achieving the No. 2 position worldwide in production of Papain. Do you not agree that we, in India, can become world-leaders in many fields such as steel, textiles, castings and forgings, medium-technology engineering products, electrical equipment, agro based products, plastics based

**एकल्या कारभारणींच जवा
भरल्यालीं पायपांची गाडी
पांच मिनिटांत खाली केली
तवांच म्या वळखलं
'जैन-पाइप' आल्यात!**

पर नित्त हलक-फुलक हाडत म्हणून 'जैन-पाइप' फाररा म्या म्हणू !

म्या पाईपलाईन शिबारात टाकायची म्हणाली नुसला की जी अला खी मला शानमना शिकवायला लागला किमियाचं, लोखंडाचं, रस्ताचं साळ वाहप पाहून जातं. आखरीस म्याच चार चौघाकडं गेलो, सोला जोळ्यानं पायलं ! मग बाजार पायला. रिकवांचा अंदाज घेला अन् घुसली दुकानांत खी 'जैन पाईप' घेऊनच बाहेर !

आय, परतरेक वायवाश्च 'जैन पायपांचा' अन् सरकारचा ISI चा शिक्का हातो म्हजी मलाबाजार पडार वरवीं तर ग्यारंटी हायेच की ! सरळ पंगला जोडता येतो, शक कडो की पेत नाय ! अन् खली बेश मंजी या वायवातून पाणी लई जोरत चालून म्हजी मोटार कमी चालून बळखळ पावी !

म्हणून मंडळी पाईप घ्यायचं म्हणाल तर माझां ऐका 'जैन पी. वी. सी. पाईप' घ्याता अन् किमोडर खावा.

**जैन पाईप
मॅन्यु. कंपनी**

आणि सहव्यवसायी संस्था
पो. बॉक्स क्र. ११५, उज्जयिनी ४२५ ००१
फोन ५६५१ व ३२०३
मुंबई कार्यालय: ४०१३३, पोलीस कोर्ट स्ट्रीट,
मुंबई ४०० ००१ फोन: २६२५२००

ISI
१५. ४२५०० १९८१

जैन पाइप

Picture of this rural Maharashtra woman has been identified with Jain Irrigation;
- creation of brand equity

products, chemicals, software, leather products, diamonds and jewellery, tourism, civil engineering etc.? Are we not being held back only due to lack of vision and an absence of fanatical zeal to become internationally competitive in specific fields?

A. I strongly believe that we Indians are second to none in caliber, intellect, business acumen and skills. However, we have been held back by restrictive public policies and crisis of character which have made our business approach unethical. Freedom from the Permit Raj and more meaningful support to entrepreneurial efforts cannot fail to give Indian businessmen and industrialists a high standing in the international market.

Q. Indian labour, with a few exceptions, is one of the least productive in the world. Is this due to archaic and counter-productive labour laws? Or is there some other missing element which stops Indian workers from becoming the most productive in the world?

A. Our social legislation is largely responsible for making labour in the organised sector less productive. Qualitative changes are badly needed in our labour laws.

Q. What will be your young Group's turnover by March 1992 and how will it be distributed among your various activities?

A. Our Group's turnover will be approximately Rs 130 crore by March 1992. The break-up should be something like this. The PVC Pipes & Fittings should contribute Rs 60 crore and Micro Irrigation Rs 30 crore. Drip Irrigation Exports are expected to be Rs 10 crore and Rib-Loc Pipes, a new product will generate Rs 8 crore. Our Refined Papain Exports will be at Rs 2 crore. Emco HV Transformers will bring in Rs 20 crore.

Q. Whether it is worldwide technical superiority in the production of Papain or making available huge quantities of PVC pipes at the most competitive prices or becoming the market leader in drip irrigation systems, you are obviously able to fine-tune your product to the market in the most optimum manner. What is the basic secret of your outstanding success as an agro-based industrial group?

A. As you have stated, we try and tune up with the customer and market sentiment – their requirements and demands – and then introduce the product with optimum pricing in the market at opportune time and in most favourable location. To put in the terms of a farmer, one could say, “You can command Nature if you obey Her.” Anyone can succeed in business if one keeps tab on the pulse of the market.

Q. What makes Jalgaon an attractive industrial growth centre compared to other cities in Maharashtra?

A. This is the soil which gave birth to me and it is my home district. Jalgaon lacks nothing which other cities in Maharashtra have and thus is as attractive a center for industrial growth as any other.

Q. What should the Government do to attract more industries to Jalgaon?

A. The Government should improve power and water availability.

Q. Do you plan to start a good MBA college in Jalgaon?

A. Yes, I plan to have a management institute in Jalgaon which in addition to providing MBA courses would also provide courses for managing agro-based industries, co-operatives and so on. However, we would prefer to locate this new institute in a rural setting and run it as a residential institute with an emphasis on character building and developing work oriented personalities.

(A beginning has been made in the form of establishing an international residential school based on experiential learning and the same objective as was stated then. It has been named ‘Anubhuti’. It began its journey in July 2007.)

Q. Are there any plans for improving other modes of transport, such as AC IIInd class sleeper coaches originating from Jalgaon or AC luxury buses?

A. Whereas the rail facilities have improved, we hope they continue to improve. As the demand for luxury AC buses develops, I am certain someone in Jalgaon will meet that demand.

“I strongly feel that pursuit of money for the sake of money as the sole purpose of business is a deeply corrupting influence and thus, self-defeating.”

The Fountainhead

Creating, developing and sustaining friendships is an entrepreneurial attribute. Among his friends, Bhau has politicians, industrialists and authors of high stature. It is not the short term immediate benefits out of them but the long term goodwill they create that sustains an enterprise.

Rising Star

The story of Bhavarlal Jain's meteoric rise from kerosene peddler in the sleepy town of Jalgaon to the top of an Empire that boasts of a turnover of well over Rs 100 crore reads better than the success story of Dick Whittington's fabled rise to stardom. The only difference being that Dick had his cat to fall back on to counsel him and guide him in



Journey from push-cart to Mercedes Benz, albeit a second hand one!

hard times. Bhavarlal had no one. For that matter when he started out, he had neither experience nor capital.

Indeed, the Group fit comprises one public limited company, numerous private partnership small companies with a current annual cash profit of nearly Rs 7 crore. It is unbelievable but true that it was built on a meagre capital base of just Rs 7,000.

All that Bhau (as Bhavarlal Jain is affectionately called in Jalgaon) had, when he embarked on his business venture about three decades ago, were two degrees in his pocket and one appointment letter. If he did have anything else, it was the will and the determination to make it to the big time league, come what may.

Today, bankers and mutual fund managers fall head over heels to offer him finance at cut-throat rates and it is difficult to imagine that Bhau once had to plead with the head of his joint Marwari family for Rs 7,000 so that he could start a business. A little bit of added persuasion from his mother and one of his uncle's did, however, help him secure the capital.

Quiet Entry

Convincing the Esso district marketing development officer (DMDO) however was quite another feat. "I can still vividly recall the day the young man came to see me," H.R. Handa, the then DMDO reminisces. "The young Marwari could make a very

Buddy Handa Auditorium

Man of Learning & Knowledge

Bhau's Friend, Philosopher and Guide



H.R. Handa, "Buddy" as he was commonly known, was a scholar, orator and close friend. He was a great source of strength to Bhau for over three decades till his death at Jalgaon, while at work in 1997. The auditorium at Gurukul, Jain Hills, has been named "Buddy Handa Auditorium" in his fond memory.

convincing plea for a kerosene dealership for which perhaps his legal training helped him. I tried to dissuade him and make him realise the folly of wasting the MPSC's offer and venturing into a totally unrelated area. But the youth stuck to his guns. Handa recalls, "I finally got him a sub-dealership with an existing dealer and told him that his career would depend on the business he would be able to procure in the first four months."

But why kerosene of all the businesses in the world?

"I somehow got hooked to the idea of doing this business, while I was doing my apprenticeship with a law firm in Jalgaon," says Jain. "I knew that the competition in Jalgaon was fierce and there were already three companies in the field. However, this did not deter me. I always thought that this business had plenty of growth potential, especially in the nearby hamlets."

However, even in 1962, Rs 7,000 was a meagre amount – not really adequate to launch a business. However, it was good enough to get him 115 barrels of kerosene on credit. A small shop was also arranged on a rental basis.

Earning Goodwill

Jain's business acumen was evident from the very beginning. The day he started, his business turned out to be fortuitous. The then finance minister, Morarjee Desai, announced a kerosene price hike. The cost of a barrel (200 litres) went up from Rs 58 to Rs 85. No, the young man did not make a fortune by withholding supplies for a day. In fact, he did just the opposite.

He had a big board placed outside his shop. It simply said that kerosene would be made available at the old rates. The word spread around town and it was not long before residents and shopkeepers alike started queuing up outside his shop. Nearly 50 per cent of his stock was sold off in a day. While Jain had missed out on a fast buck, he had effectively capitalised on an opportunity and earned the lasting goodwill of the people of Jalgaon.

Expanding Frontiers

However, Jain knew that mere retailing would not be the right path to his goal. He soon started building markets outside Jalgaon. His first sale wasn't easy either. The 54-year-old plastic monarch, who today moves around in a Mercedes Benz, recalls that after traveling about 30 km's he tried to hire a cycle for his onward journey. But the shop owner refused to give him one because he did not know Jain and the young man did not have the money for a deposit. It was then that the young Jain learnt a lesson that was to help him considerably in life. He realised the importance of establishing one's credibility.

At the end of its first year, the new firm – Jain & Brothers – had earned a profit of a little less than Rs 30,000 and had carried forward stocks worth Rs 1,00,000. The story of success had begun.

Jain & Brothers soon became a force to reckon with amongst the kerosene dealers of Jalgaon. The expanding business and a zeal for plain hard work helped Jain get a dealership from Hindustan Petroleum (Esso, in those days). In the course of time, they acquired a few more petrol pumps in and around Jalgaon. And by branching off into other product lines, the Jains soon had a flourishing trading outfit.

Industrial Adventure

Jain got his second break in 1977-78. Just around the time he had begun his career as a kerosene dealer in 1963, a factory that made banana powder came up in Jalgaon. The factory, which was to be run by a co-operative, never really took off despite the fact that it was equipped with the best of machinery. It had started with a modest capital base of Rs 5 lakh and the total losses of the company had, by end of 1977, gone up to Rs 23 lakh.

When the factory was put on the auction block, there was but one brave bidder from Nasik who was willing to stake his fortune to acquire the factory. This gentleman technocrat, who was already producing Papain, had figured that the machinery, with a little modification, could be used to manufacture Papain – an industrial chemical derived from the milk (*latex*) of the papaya fruit.

When Jain heard that a rank outsider was planning to bid for the factory, he approached the members of the co-operative and sought to acquire the factory himself. "I did not know why that Nasik fellow wanted the factory. Nor did I possess any technology. However, the very fact that someone else saw some value in it was good enough for me," he explains with a touch of modesty. "Neither me nor my family had the funds. But I was confident that I would not be restrained by the want of money," he adds.

For a person who had never gambled this was big risk, indeed. The auction commenced and both parties started the bidding. Twenty lakh, 20 lakh 50 thousand, 22 lakh it went on. When the Nasik dealer finally stopped at Rs 28 lakh 50 thousand, the reckless streak in Jain burst out and he bid Rs 30 lakh.

Raising Finance

The local man won hands down. Then came the reckoning. The co-operative decreed that Rs 10 lakh (over and above the earnest money of Rs 1 lakh) was required to be paid within 10 days. The balance, as a special favour to the local man, could be remitted within the next six months.



V. S. Damle, Chairman, UW Bank at the JPCL plant - while inaugurating the plant on 15th August 1980, accompanied by the other members of the Bank's Director Board, Bhau and R B Jain

Even for a near-veteran kerosene dealer, who was by that time an expert in rolling finances, the task seemed very tough. The family could spare a couple of lakh of rupees, at the most. The rest? No one was willing to wager a bet on Jain.

However, he managed to get the chairman of the United Western Bank, Satara, to push his application for Rs 20 lakh through. “The bank does not advance loans to purchase secondhand assets,” was the stock response he received over the telephone when he spoke to Mr V. S. Damle, the chairman, the day after he had clinched the deal. But the enthusiasm with which Jain spoke not only impressed, but also wooed the chairman. “The bank does finance people and you know me, Mr Damle. I shall repay every rupee I have borrowed,” was Jain’s retort.

So, the money did come his way and it took care of his immediate needs. Another 8 lakh was given by a well-wisher at 24 per cent per annum. The balance was paid by rolling over the suppliers’ money and delaying payments with their acquiescence and a promise of paying interest on such delayed funds.

From crude papain to highest purity

To get an entry in the field of Papain, India was exporting Papain in crude flakes form. Bhau from the very beginning resolved that if USA and the European countries can refine Papain, why can’t we do the same in India? He therefore doubled his efforts for refining crude Papain and adopted a multi-pronged approach towards the problem: Filtration, chemical precipitation, etc. Ultimately it was ultra-filtration – a method used for purification of blood – which was adopted for this purpose. Strangely it worked wonders. The whole process was extremely tedious and time consuming. Disappointments on the way were plenty. But the young and bright chemical engineer R. B. Jain never gave up. Bhau on his part provided him with every possible moral and financial support to try new filter aids, newer media and equipments to achieve the ultimate technology for production. Together they slogged and created history by producing the highest purity papain in the world – a distinction they held for over 15 years thereafter. They made a mark and kept their leadership position unassailed till the end of the life-cycle for the product.



Jack Haim of USA, Bhau's first customer of papain

Agro-based Industries

Jain finally took possession of the factory on the auspicious day of Mahavir Jayanti, 24 April, 1978. With his IIT-returned cousin on the job, the factory, after some initial teething trouble, soon started manufacturing Papain and thus contributing to the profits of the growing Jain empire. Setting up a papaya fruit-candy plant was the natural off-shoot - which took care of the papaya waste.

Interestingly, Jain's foray into pipe manufacturing was also the result of a supplier's inability to meet the growing demands of the chemical firm. Today, the Jains are the undisputed leaders in the plastic pipes' field with an annual capacity of 12,000 tonnes.

What is interesting is that all their manufacturing units are agro-based and centered around Jalgaon. Many units still enjoy the SSI exemptions, although they are clustered under one roof. Each unit is looked after by different scions of the family.

Strategic Plan

Till recently, the Jains presented a united front. A formal separation was, however, effected a few years ago, after Bhavarlal Jain, the patriarch, suffered a massive heart attack. The parting was, reportedly, extremely amicable. For all practical purposes, at least thus far, it has been limited

only on paper. Bhavarlal Jain's younger brother Kantilal has taken over the reins of the food industry while the trading arm has been distributed between his uncles and cousins.

Work Culture

Exuding a high degree of confidence even today, Jain puts in nearly 12 hours of work everyday. A strict disciplinarian, he expects a great deal of sincerity from his line workers and his executive staff.

Thanks to his humble roots, the man is considerably austere in all that he does. The Jains still live in rented homes. "I always felt that the money from the business should be ploughed back into it. That is the only way to ensure growth."

With such a closely knit work-force, it is not surprising that the labour-management relationships continue to be extremely cordial in all his factories. Jain claims that he knows most of the 2,500 employees by their first names. The loyalty and admiration of his staff can be gauged from the fact that to date there has been no strike in the factory.

Today, the 54-year-old patriarch has no plans of retiring, despite his ill health. "I would like to try and do everything all over again," he exclaims. "Life is growth. It can stop only in the grave," he was summing up his philosophy of life.

The Mark of a Man

The baron of Jalgaon, the 54 year-old patriarch, of the up coming Jain Group of Companies, Bhavarlal Jain, talks on politics, life, business, government, and a host of other subjects.

Q. What do you think of the liberalisation measures initiated by the present government?

A. I believe the country can become a super-power if the government implements even 50 per cent of the measures contemplated. Any system that has 150 persons sitting in one place and drafting laws aimed at governing 850 million people, just cannot work. Bureaucracy will have no option but to live within the changed scenario.

Q. Why do all industrialists attack the bureaucrats?

A. In a bureaucratic set-up there are too many people who are authorised to say no. It is much simpler to say no than to say yes. Saying yes means that you are accountable for your actions. This negative aspect of our bureaucracy is what has really put off the industrialists.

Q. What kind of a role do you envisage for the government?

A. What we require is some degree of enlightened guidance. The country is too vast and lacks resources to disseminate information. The Government should take on itself the responsibility of educating its citizens and should not attempt to control and restrict their activities. It should play the role of an enlightened instructor and not a policeman. What we require today, in a dynamic society, is more of justice and less of law.

Q. Why have you never ventured outside Jalgaon?

A. My roots are in Jalgaon and I am a firm believer in the theory that man cannot be estranged from his roots. If an opportunity for growth is provided, anyone would willingly settle down in the city of his birth.

Q. Would this theory hold good for the Indian non-residents?

A. Yes. The roots are so deep that no one would like to die on foreign soil. If an opportunity is made available, they will certainly come and settle down in India. I always felt that the government has never fully appreciated the role of the NRIs.

Q. Why are all your activities agro-based?

A. I am a son of the soil. Farming runs in my blood. My great grandfather who had migrated from Rajasthan with nothing but a *lotta* took to farming. My grandfather used to sell farm products like *ghee* carrying tins on his head for miles. Even as a youth, I always wanted to help the poor farmers.

Q. Did you at any point in your life make a wish that you should one day roll in wealth?

A. Strangely enough, I was never interested in earning money for

its own sake. I always cherished the thought that one day I would achieve something – something people would remember me by. I never believed in accumulating wealth.

Q. Why have you never dabbled in real estate? I believe that the real-estate business saw many fortunes in the '70s.

A. True. But I never believed in speculating in land. I dislike the concept of unearned black money. I believe that unearned income gets converted into wealth of a kind that will eventually degenerate and destroy subsequent generations.

Q. But do you feel that honesty pays in business? “Why be honest if honesty does not pay,” is the general principle that is followed by most industrialists?

A. It would be wrong to say that honesty does not pay. I have never bribed a single supplier or a bureaucrat. The accretion of my assets should amply serve to disprove the myth that you have to be dishonest to be rich.

Q. How far has political patronage contributed to your success?

A. Absolutely nothing. I have got all my agencies on merit. I have neither resorted to bribery nor to political influence to build my business.

Q. But you are known to be very close to Sureshdada Jain and Sharad Pawar.

A. I certainly do have political friends. But I have not used this friendship to further my business interests. My respect for Sharad Pawar stems from his knowledge and understanding of agricultural problems.

Q. Do you feel that you are indebted to society and you have to repay your obligation by donating a part of your earnings?

A. I do feel indebted to the society. Yes, I certainly plan to do something for my native village. My dream is to put Jalgaon on the export map of India and make a name for it in the international community. I aim to increase the export earnings of my Group from the current level of Rs 15 crore to Rs 100 crore in the next three years.

“I believe that unearned income will eventually degenerate and destroy subsequent generations.”

Undiluted Ambition

An entrepreneur does not ever rest on his laurels. He is constantly in search of more avenues for growth. You will see here how Bhau, sensing the opportunity, plans to expand his micro irrigation business using his fund management talents.

Growing Business

Watering other people's fields is good business. Or ask B. H. Jain, chairman of the Jain Irrigation Systems Ltd. The 54-year-old industrialist managed to rake in a cool Rs 3.02 crore as net profit on a turnover of Rs 16 crore. And this year he's hoping for even more. "The prospects for the current year are encouraging - the turnover is poised to rise to Rs 35 crore, including Rs 10 crore in exports," predicts Jain confidently. *(JISL posted a turnover of Rs 35.54 crore in 1991-92)*

Given the company's growth record, that is certainly a plausible target. In 1987-88, the first full year of its operations, JISL had notched up a turnover of Rs 2 crore. That has grown rapidly to Rs 3.67 crore, Rs 9.6 crore and Rs 16 crore in subsequent years. And this year, it has already chalked up Rs 7.8 crore by September (compared with Rs 3.26 crore during the same period last year).

Pioneering Micro Irrigation

Headquartered in the industrial backwaters of Jalgaon district of Maharashtra, JISL was set up in the closing days of 1986 when its promoters realised that the agri-business was getting into the big league. Hitching its wagon to the Green Revolution, the company used a combination of aggressive marketing and thorough field investigations to hit the front ranks in the drip irrigation business.

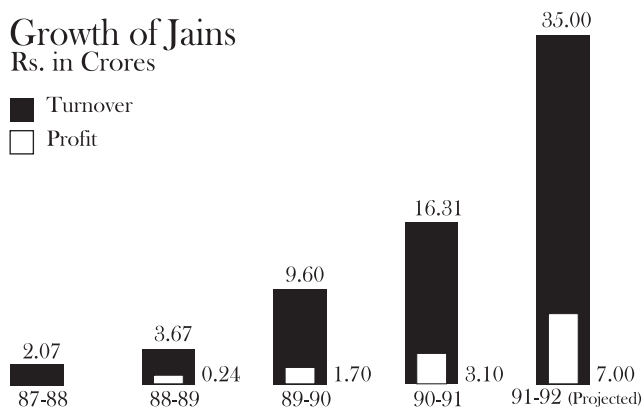
The Green Revolution had transformed large tracts which were under dry-land farming. Moreover, it had generated a new awareness of water management among farmers coupled with dropping water tables, that spelt an ideal expanding market, waiting to be exploited. And JISL decided to cash in on the opportunity. “Drip irrigation is the answer to many of the problems of water management,” points out R. B. Jain, director, JISL, Jalgaon.

True, drip irrigation wasn’t exactly unknown in India. Even before the Jains set up shop, farmers in Tamil Nadu had been using the drip system for several years. Moreover, there were nearly five odd manufacturers, who were touting the technology, out of which at least two were big players.

Holistic Thinking

What differentiated JISL from the competitors was the thoroughness of their field study. Most companies were loath to do a proper investigation of soil and water conditions. That often led to the emitters in the pipes getting clogged by impurities ranging from salt to sand. Consequently, the market was languishing.

JISL took a different track. First, they got into a technological collaboration with James Hardie of Italy. Also, they added a basic research and development effort and created a field investigation set-up to monitor the tailor-made systems. Using CAD-CAM for designing the systems,



correlating agronomic and climatology data for framing a proper irrigation system, the Jains brought a degree of professionalism to the market.

The high level sophistication in manufacture has been backed up by CSIR approved R&D laboratories of the company. Their R&D farm covers 145 acres spread in three sites. Trials on as many 32 vegetables, fruits and field and plantation crops have been undertaken to refine and fine-tune the irrigation system.

Small wonder, JISL has quickly cornered two-thirds of the market in Maharashtra and slightly over half the total market in the country. What has added to their reputation is the fact that constant after-sale monitoring and servicing is part of the package they provide.

Bright Times Ahead

Undoubtedly, JISL also managed to rope in some government help. The Maharashtra State Government subsidises the farmers for installing the drip system. As the subsidy comes to a hefty 50 per cent of the cost, many a farmer have been persuaded to go in for drip irrigation.

More good times seem to be in the offing for JISL. A committee of the Union Government's Agriculture and Cooperation Department,



Flourishing sugarcane crop growth under drip contrasted with the crop under traditional irrigation method

earlier this year, came up with some interesting facts. It noted that despite drip irrigation being practised in the country for the last 10 years, only about 50,000 acres (20,000 hectares) had been covered, some 35,000 acres (14,000 hectares) in Maharashtra alone.

Consequently, it recommended bringing 2.5 lakh acres (1 lakh hectares) under the system in 1991-92, and 12.5 acres (5 lakh hectares) by the end of the Eighth Plan. It also recommended a uniform rate of 50 per cent subsidy from the Union Government for the farmers opting for the system. That could mean an investment of a staggering Rs 1,700 crore in the Eighth Plan for the drip system. It costs about Rs 7,000 per acre (Rs 17,000 per hectare) to install a drip irrigation system.

Industrious Expansion

That's certainly a big cake. And the Jains are going full steam ahead to make sure that they can carve out a large slice of it. They have drawn up an ambitious expansion and diversification plan, which will take in all Rs 57 crore. For that, the Jains intend to go in for a rights issue of Rs 45 crore, while the remaining cash will be generated by a Rs 10 crore loan from the ICICI and internal accruals. That's another smart move – with the JISL scrip hovering around Rs 160 in Bombay's Dalal Street, raising the money shouldn't be too much of a problem.

Exports too form a big part of the company's future game plan today. It has already set up a Rs 9.5 crore, 100 per cent export oriented unit (EOU) and started stalking markets in the Gulf region, South Asia and even some Western countries. In the last financial year it had exports worth barely Rs 17.03 lakh. This year, it has already mopped up some Rs 3.45 crore so far. By the end of next three years, calculate the Jains, exports will form a full 50 per cent of JISL's turnover.

Future Prospects

R. B. Jain believes that the potential for drip irrigation in India is as much as 5 crore (50 million) acres. "We have barely scratched the surface," he feels. Today, the JISL plant in Bambhori, near Jalgaon, is capable of manufacturing 150 km of lateral tubing, 1.5 lakh drippers and a matching number of other components and filtration systems per day.

That adds up to a capacity of covering some 50,000 acres per year. And the company says that it could double its capacity easily.

If the Union Government Committee recommendations create the kind of market conditions the Jains expect, JISL is certainly sitting on a fortune.

For the Jains, dry lands with a water source have certainly proved to be cash lands.

*“A businessman, who does not use the resources he possesses to yield the utmost,
has chosen to be satiated with the status quo.”*

Eager Beavers of Jalgaon

Nothing succeeds like success. No wonder, the impact of the pioneering efforts of Bhau in micro irrigation caught the attention of the powers-that-be, who paid visits and tributes.

Jain Group, the expert in concept selling, has not only made a name for itself all over India, but has also put Jalgaon on the world map for agricultural and industrial plastics. Bhau ascribes the Group's 'weakness', namely, 'passion for growth' to his persistent expanding and diversifying activities.

Common Thread

What was Devi Lal doing in Jalgaon on the day V. P. Singh's ministry collapsed?

Who are the agricultural experts of the World Bank visiting in the township of Khandesh?



Shri Devlil, the Deputy Prime Minister of India, visiting JISL R&D Farms (01-01-1992)

Who is defence minister Sharad Pawar's closest agriculturist-cum-industrialist friend in Maharashtra?

Who are the concept sellers in the areas of irrigation, plastic pipes, Papain and wood substitute?

Who are the regular winners of the Chemexcil's export awards?

Which is the group to whom Cincinnati Milacron, the famous company from Austria extended credits without bank guarantees on most of the purchases of their equipment?

Whom did Gujarat chief minister Chimanbhai Patel recently visit and later initiate steps to approach and organise World Bank assistance for reclamation of coastal area, waste lands through the technology of drip irrigation?

All the questions have only one answer – the Jains of Jalgaon, a medium sized industrial house with an annual turnover of over one billion rupees.

Leadership

Led by Bhavarlal Jain, the founder chairman of the Group, who has the sharp acumen of a businessman and the humility of a peasant, the Group over the last three decades has demonstrated resilience, unflinching commitment to quality, and passion for growth and social consciousness for conservation. Today, the Group is poised for an exponential growth.

Speaking to The Independent at Jalgaon, Jain claimed that the Jain Group is the largest producer of PVC pipes in India, the second largest exporter-cum-manufacturer of Papain in the world and the pioneer of micro irrigation systems in the country. The Group's EMCO Transformers Ltd is also amongst first seven in India, he said. "All these distinctions have been achieved during a short span of 13 years (1978-91)," he added.

Farming Roots

Born in a farming family, Jain opted out of the civil service to do business. He began with dealership of the multinational company Esso,

subsequently to become the market leader of the area in the whole range of petroleum products within five years. He diversified in the automotive trade to take on the franchise of Escorts Ltd, Ashok Leyland, Standard Motors, Rajdoot motorcycles and auto parts, including tyres, and batteries.

“The farming obsession and experience,” Jain said, “prompted dealerships of farm inputs like seeds, fertilisers, PVC pipes, electric motor pumpsets and equipments like tractors and farm implements. During 1963 to 1977, many more dealerships of reputed companies were acquired, mostly in the field of farm inputs. The growth was swift.” Sales turnover reached around Rs 10 crore and the Jains were soon acknowledged as leaders in most of the fields they covered, he said.

First Agro-based Product

In 1978, the Jains ventured into purchase of a sick unit originally conceived and commissioned as a banana powder production factory. The erstwhile owners could not produce an acceptable quality of banana powder. The Jains adapted this equipment for processing papaya latex into refined Papain – an industrially important export oriented organic enzyme used in baby foods, breweries and meat tenderisation.

In December 1978, the first consignment of Papain left the Indian Ocean to reach the shores of the United States. Informed Ajit Jain, a mechanical engineer, the third son of Bhavarlal, “Today the Company sells Papain at Rs 1,500 per kg and qualitatively falls in the Grade I category constituting 20 per cent of the global market.” With the help of a rigorous marketing drive and R&D back-up, the Jains put up Papain processing unit and launched Jain Candy.

Second Agro-based Product

In 1980, Jains conceived of an idea of getting into the manufacture of PVC pipes and fittings, yet another product related to farming. When the suppliers of PVC pipes could not meet the growing requirements of Jain’s customers, the Group went into the manufacture of rigid PVC pipes with a small Indian extruder with a capacity of 100 tonnes per annum. Within six months, Jain was able to import a higher capacity

sophisticated extruder from Cincinnati Milacron of Austria, and by 1984, with planned expansion programme, the Jain Pipes factory at Jalgaon had a production capacity exceeding 20,000 tonnes annually.

In the next two years, other units in Madhya Pradesh and Tamil Nadu were established to increase the annual capacity by about 10,000 tonnes. These units have a combined annual turnover of around Rs 84 crore. Today the Jains have diverse products like PVC fittings, specialty pipes and spirally wound Jain Rib-loc pipes. Available in diameters of 100 mm to 1,000 mm, the Rib-loc pipes are light weight, yet strong and are used in non-pressure gravity irrigation etc. Ajit says, “The company is a pioneer in this technology and has bagged a 250 km pipeline covering 15,000 acre area project on turnkey basis in Aurangabad.”

Meanwhile, the Institute of Trade & Industrial Development had already recognised Bhavarlal as a self-made industrialist and awarded him the ‘Udyog Patra’ in 1982.

The desire to grow and diversify led them towards acquisition of major share of EMCO Transformers Ltd, Bombay, a sick unit in 1986. Since then, the turnover of the transformer unit has increased to Rs 15 crore annually.



Receiving “Udyog Patra” award from Mr M Hidayatullah, Hon. Vice President (1982)

Yet Another Agro-based Product

With the setting up of the Jain Irrigation Systems Ltd, a new technological agri input unit in the field of micro (drip) irrigation in collaboration with James Hardie SRL (Italy) commenced with a capital outlay of Rs 7.80 crore in 1987. The company is now poised for expansion and diversification with an outlay of Rs 55 crore.

Spreading Conservation Theme

“Upcoming projects,” Jain elaborated, “include exploitation of solar energy for heating water and introduction of wood substitute plastic sheets.” The theme is conservation, says Jain. When Jain pioneered the micro irrigation technique it was to save water. He is now engaged in developing an altogether new wood substitute plastic sheet with a view to save forest wealth of the nation. Solar energy shall also be harnessed to conserve scarce electric power.

Over the last three years, the company has supplied and installed micro irrigation systems on over 40,000 acres of land, valued at over Rs 45 crore, and has covered 34 different crops.

Expansion Plan

The forthcoming Rs 45 crore rights issue of Jain Irrigation is mainly for expansion of the domestic division product range and diversification and expansion of the export division products. Full production potential would be attained by 1995-96, when its turnover is projected at Rs 200 crore, of which Rs 85 crore would be from the exports, he added.

“The Company has come to the conclusion that it will have to essentially invest in the equity of marketing networks abroad,” says Jain. It will thus be either acquiring interest in the existing distribution network of the continent/US or go for a complete takeover of such trading companies which have established business contacts, he said. However, he demurred from revealing the names of the companies involved.

Wood Substitute

The Jains have entered in a joint venture with Glynwed International. Glynwed, through its subsidiary, Plexite Plc in UK, has

developed and patented wood substitute plastic material branded as 'Timbron'.

Jain said, "Plexite (UK) has formed a joint venture in India under the name of Plexite India Pvt Ltd. Jain Irrigation has 25 per cent equity stake in the company. The initial manufacturing facilities for the Timbron profiles will be set up in Gujarat."

Jain Irrigation will be manufacturing the plastic sheets in their 100 per cent EOU division. According to Jain, Glynwed, through its worldwide network, has agreed to buy back the production.

The company expects to net a turnover of over Rs 3 to 5 crore in the very first year, beginning January 1993. The turnover is expected to grow to Rs 20 crore by the year 1995.

Personnel Resource

Today, the Group's turnover is over Rs 107 crore, and has fixed assets of over Rs 20 crore. "Conviction and commitment," Bhavarlal says, "is a way of life for over 1,500 people that keep the wheels of industry moving at Jains." The employees aren't unionised and senior personnel believe that dedicated hard work is rewarded. The Jains strictly disallow smoking or even drinking tea in their premises. Instead, the workers are offered bananas and milk at subsidised rates.

Successors

Jain's sons - Ashok, Anil, Ajit and Atul - have picked up the trait of hard work from their father. Ashok, the eldest is the anchorman who operates from Jalgaon, coordinating production, planning, and development of the human resources. Anil travels 200 days a year in different continents to promote exports. Eventually he contracted ulcers, but his zeal to work continues. Ajit is fondly called Kapil Dev - the master all rounder. Atul, the youngest, is under training and assists Anil in export promotion. He has an American accent following his shunting very often between Jalgaon and New Jersey. The brothers represent a fine blend of feudal values with capitalist ideas.

"You can command Nature if you learn to obey Her."

Treading on Fertile Ground

A penchant for growth puts an entrepreneur, many a time in a quandary. However, an entrepreneur worth his salt, looks forward to such challenges and comes up heads against all odds. That is what makes him an entrepreneur.

Healthy Growth

Consider this scenario: A company proposes to almost double its turnover in the current fiscal year; exports are expected to more than triple; a massive expansion programme has been envisaged which would catapult its turnover to the magic figure of Rs 200 crore resulting in a beefy bottomline. Moreover, the company has the advantage of being backed by a management with excellent foresight.

An investment in this scrip at this juncture is sure to make you a millionaire in a matter of three years. Worth the wait, isn't it?

Well, these are the special highlights of Jain Irrigation Systems Ltd (JISL). This five year old baby of the Jain Group of Industries, Jalgaon, has grown rapidly, or rather, exponentially. Its turnover has stormed up from a mere Rs 3.59 crore in 1988-89 to Rs 9.50 crore in 1989-90 and further to Rs 16.08 crore in 1990-91. And during the current year, the turnover is going to at least double. (*This did happen.*)

Alongwith sales, profits too have kept pace. JISL's bottomline has surged from Rs 24 lakh in 1988-89 to Rs 1.10 crore from 1989-90 and then to Rs 3.10 crore in 1990-91.

And all this on an equity base of a mere Rs 3 crore. It's no wonder then that the EPS for the current year has surpassed even the paid up value of the shares. JISL's (micro irrigation) market share of 65 per

cent in Maharashtra is expected to pep up by another 10 per cent this year and its all-India share of 55 per cent will be bolstered further by another 5 per cent by the end of 1991-92.

But there is one weakness with the Group's nerves: a passion for growth. Not resting on past achievements, JISL is thinking anew. The company's existing capacity is to be doubled by next fiscal year. JISL will thus be able to manufacture plastic sheets of various polymers – polycarbonate, polypropylene, ABS and acrylic.

Realising that the company's targeted production and exports can not be met solely through exports promotion effort, JISL has decided to essentially invest in the equity of marketing networks abroad. This would enable JISL to ensure adequacy of both, margin and market for its growing production capacities. JISL is taking steps to seek permission from the government for such investment abroad. Encouraged by the government's liberalisation measures, JISL is actively engaged in finalising its plans to go global as a strategy in the nineties.

Wide Range of Irrigation Products

As a pioneer in the field of micro irrigation, JISL has developed a vast range of point source irrigation systems consisting of emitters or



Sprinklers for closely spaced crops



Pop-up sprinklers for landscape irrigation; in the picture is a filthy drainage nalla transformed into captivating garden at ISKCON, Pune

micro sprinklers and pop-ups. While the pop-ups are ideally suited for lawn and turf applications, the micro sprinklers can cover areas of upto 3 meters radius. The emitters irrigate only the root zone of the plant. None of these devices provide efficient and continuous strip of irrigation required by row crops.

Thus, to provide increased water use efficiency for the closely spaced row crops like sugarcane, vegetables, cotton etc, JISL has obtained a licence from Chapin Watermatic Inc of New York, the patent owners of the multi-chambered drip irrigation hose branded as turbulent twin-wall or cane turbulent twin-wall, for the manufacture and use of the Chapin technology and brand names. The RBI has already approved of the payment of lump sum amount and royalty. Commercial production is expected to commence by August this year (1992).

With this collaboration, JISL will expand its product range and will be the first in the country to produce multi-chambered line source tubing, the most efficient form of micro irrigation for the purposes of row crops. Chapin products are rated number one in the US. Since the tubes will be manufactured for the first time in the country, they will be free from onerous import duties and fat margins of the original producers.



Fruits of perseverance

JISL expects to market the Chapin Turbulent Flow Twin Chambered Tubes at much lower prices than the familiar line source tubing of the important equivalent tubes. This will therefore come as a boon to the farming community. At the time when the prices (*of micro irrigation systems*) are increasing all around, there would at least be one product made available to the farmers at prices lower than those prevailing currently. And the indigenous manufacture of the tubing and its low pricing is expected to offer great marketing advantage to Jain Irrigation.

And then, of course, Jain's continuous expansions into core and diversification into related activities, tremendous thrust on exports and national conservation indicates sure success for this company. This, in investor parlance, implies nothing but higher profitability and richer dividends.

The Hero Behind the Group's Success

For Bhavarlal H. Jain, the founder chairman of the Jain Group, it has been the hard way up the success ladder.

Dynamic a person that he is, Jain opted out of the Civil Services (not many would have the guts to do so) and started on his own in

1963. Five years of dedicated work saw him emerging as the market leader, in the whole range of petroleum products. This prompted him to diversify into automotive trade and take on the franchise of leading automobile manufacturers like Escorts, Leyland, and Standard Motors.

But his love for farming brought him back to his family farm. And the experience brought in dealerships of various farm inputs and equipments inclusive those of seeds, fertilisers, PVC pipes, tractors and farm implements, and electric monoblocks.

In 1978, Jain made banana powder unit operative for the manufacture of Papain, an enzyme. He encountered stiff resistance in marketing/exporting this agro-based product. However, his tireless marketing efforts drew the attention of Papain users the world over, who recognised and accepted the superiority of the Refined Papain of India, making it a 100 per cent forex earner. And the company Jain Plastics & Chemicals Pvt Ltd was the recipient of many export performance awards thereafter.

In 1980, when the suppliers of PVC pipes refused to pass on PVC pipe manufacturing technology, he went ahead into the manufacture of rigid PVC pipes and accessories with a small Indian extruder. He neither had skilled/trained operators nor had any polymer scientists/technicians

End of an Era

Since Papain was an agro-based product, its availability was always climate-sensitive and hence uncertain. Buyers abroad, therefore, were continuously trying to develop a substitute which could be more dependable. They settled for bromelin. The demand for Papain plummeted. By this time, the size of our other business had grown multi-fold, and we discovered that to continue the Papain unit was no longer a profitable proposition. Resultantly, though reluctantly, we decided to discontinue the product line after a good 24 years. After all, like human beings, even products have their life cycle. The Papain era of 24 years catapulted us into the international arena and brought home as many as 20 laurels at state, national and international level.

to handle PVC pipe manufacture. Despite this, he went ahead with the production plant and surmounting all obstacles, within a year and a half, he was in a position to import a large sophisticated extruder from Cincinnati Milacron of Austria. Well phased expansion programmes enabled Jain Pipe enhance its capacity to 20,000 tonnes per annum by 1984. The next two years saw its other units in Madhya Pradesh and Tamil Nadu increase the annual capacity by about 10,000 tonnes.

Burning Desire to Grow

In 1986, Jain acquired a major share in EMCO Transformers. This was a sick unit running into losses. However, using his entrepreneurial skill he converted this unit into a high turnover and profit making company in a short span of two years.

He also set up Jain Irrigation Systems Ltd in 1987 for supplying to farmers a new technological input in the field of micro (drip) irrigation systems in collaboration with James Hardie SRL (Italy), acknowledged leaders in the field. Before him, some of the multi-national companies had tried their best to popularise micro irrigation technology in India. Despite their prolonged efforts they had failed miserably. Jain therefore began analysis of the failures of those companies and succeeded in developing an integrated solution to market micro irrigation systems successfully. From a small capital outlay of Rs 7.80 crore in 1987, the company is now poised for massive expansion and diversification programme with an outlay of Rs 55 crore. Even the growth of the drip

Financial highlights				(Rs crore)
	Full Year Mar 1992 (Projected)	Half Year Sep 1991	Full Year Mar 1991	Half Year Sep 1990
Turnover	30.00	8.17	16.08	4.17
Gross profit	6.00	1.77	3.43	0.58
Net profit	3.90	1.36	3.09	0.18
Equity	3.02	3.02	3.02	3.02
EPS (Rs)	12.90	--	10.23	--

(micro) irrigation systems has been phenomenal – from a meagre 1500 acres in 1987 to over 30,000 acres in 1990, covering 32 different crops.

The quality of the product has also found several export markets. Encouraged by export possibilities, a 100 per cent EOU has been established in Jalgaon, along with a modern mould shop.

But Jain hasn't clamped the brakes here. He is now engaged in developing an altogether new wood substitute plastic sheet with a view to save the forest wealth. The solar energy would then be harnessed to conserve scarce electric power. Thus whether it is conservation of forest, forest or power, Jain's vision and plans are in tune with national priorities.

New products and technologies and exports would see the turnover of the Jain Group of Industries cross Rs 200 crore by 1995, inclusive of exports to the tune of Rs 85-90 crore.

If only there were more of his kind in this country!

"I strongly believe that we Indians are second to none in caliber, intellect, business acumen and skills."

Our Shares Are Better Than Gold

From a dealer of a multi-national to a leader. For Bhau, this has been a tremendous transition. A staunch nationalist, even as he provides impetus for earning foreign exchange from advanced countries, he remains glued to his core endeavour - welfare of the Indian farmer.

Interview

Mr Mehraboon Jamshedji Irani met Mr Bhavarlal Jain in Jalgaon and discussed with him among others, the history and the future plans of the Group. Excerpts:

Q. You are acknowledged as the 'Father of micro irrigation systems' and a 'self-made industrialist'. How do you feel to be referred to as the same?

A. It gives me a tremendous sense of fulfillment of a dream with which I began my business career. I do not think all my dreams have been fulfilled. There is a lot that has to be and will be done for the prosperity of the farming community and generating foreign exchange for the country. I am continuing with this theme in mind.

Q. From a humble beginning of Rs 7,000 in 1963, you have attained the status of being the chairman of a Group of over Rs 130 crore turnover. How do you look at the complete history of the Jain Group and can you reflect at the achievements attained over the years?

A. It is true that these volumes and achievements are based on a foundation which has been nurtured with a certain philosophy. Growth per se is not enough. If it has to be enduring, it must have a solid philosophical basis. I always thought before I acted and with the growth attained, I have now learnt to think twice before I act. Achievement

with humility has been the tradition of this family and I can only hope that the next generation will carry the torch in similar spirit.

Q. Out of the Group's turnover of Rs 130 crore in 1990-91, Rs 78 crore has been from the pipe units. Yet, it is the irrigation project which made you go public. Why have you not thought of sharing the rewards of the PVC units with the public? JPMC, Jayee, JPPL, JPCL - all the companies of the Group manufacture PVC pipes. Why so many separate units manufacturing the same product?

A. When we began in 1978, it was with an investible surplus of mere Rs 2 lakh. The total sum of money available was enough only to start a business on a small scale. Soon thereafter, a new incentive scheme was launched in Maharashtra, which permitted unlimited sales tax exemption for a period of seven years if one were a small scale unit. We therefore began the PVC pipes operations under an extrusion line which could be accommodated within the SSI limit. SSI units enjoyed demand preferences and at times, price preferences throughout the country. It was therefore economically extremely profitable and necessary that we stayed within small scale.

Moreover with three uncles, brother, cousins and the extended family, we have in all 32 adult members in the Jain clan. This became very convenient for forming small scale units one after the other. You



The large joint family has been the reservoir of strength for Bhau

thus find that over a period of two-and-a-half years, we set up five small scale units for making pipes. In fact, each one of them was set up as if out of the profits of the earlier ones. This is the background as to how small scale units came into existence and continued to be there.

Some of these benefits have now been exhausted and we are actively considering amalgamation of these units to form a medium sized unit and go public with some additional projects in the very near future. (*Amalgamation was approved by the High Court on Mar 17, 1993.*)

Q. What is the total market size of PVC pipes in India? What is your market share and what are your gross margins? Who are your main competitors in PVC pipes?

A. The estimated current total market size for the PVC pipes in India is around 75,000 tonnes, which works out to Rs 240 crore at current prices. The highest volume we have achieved is 23,000 tonnes. This has given us anywhere between 20 to 30 per cent of the total market. Our gross margins are about 10 per cent and net margins are 2 to 3 per cent. Our main competitors are Finolex, Supreme, Uniplas and Bharat Pipes. Out of these, Finolex is very close and we have been trying to keep to the top slot.

Q. PVC and LLDPE are imported. In the light of devaluation and import curbs, how has the company managed to import its raw materials? What is the position today?

A. We had to resort to market borrowings to meet the very high working capital requirements. All said and done, the overall demand itself has shrunk and we are hardly producing 60 percent of our capacity as far as PVC is concerned. A good portion of LLDPE has been made available by IPCL through their import lines and as such, the normal growth in terms of LLDPE processing has been maintained despite import curbs. The position has improved today though margins have reduced.

With the entry of Reliance Petrochemicals in PVC resin, it is expected that the PVC imports will go down. However, the indigenous producers will have to follow realistic pricing policies. It can only be

hoped that they will not continue to exploit the situation arising out of import restrictions.

Q. What is the difference between landed cost of PVC resin (imported) and cost of domestic PVC? Please give prices.

A. The difference between the price of imported PVC and domestic PVC is Rs 3-5 per kg. Imported PVC is cheaper even after paying 120 per cent duty. Indigenous producers refer to this phenomenon as dumping by other countries, whether the rates of imported PVC are higher or lower. Taking shelter of this perceived dumping, some of the indigenous producers have jacked up prices by about 35 per cent over the last two years.

Q. It is stated that Jain Irrigation will have to invest in equity of marketing networks abroad. Will it be easy? Can you elaborate?

A. It won't be easy for two reasons. The government has to accept it as a concept. Moreover, such a move will be interpreted as threat by the foreign host country.

(The Government of India has to go through a whole lot of procedural changes and they must have sufficient foreign exchange reserves before they can accept such a risk of allowing Indian entrepreneurs to invest funds as equity in foreign countries.)

The concept is mutuality of interest and interdependence. In theory, it must work and what is good in theory will turn out to be better in

Times change

This situation has vastly changed since 2000. Ever since the GoI permitted direct foreign investment, flow of foreign funds have swelled our reserves beyond the country's expectation. Today the problem is, what to do with these accumulated dollars. Indeed, they are becoming a drag particularly because the fluctuating exchange rate, so far, has been a losing proposition for RBI. Earlier non-availability of foreign exchange was a problem; today excess availability of foreign exchange is a liability. Times change; and when they change, they change so fast beyond all expectations!

practice one day. If it has to happen, let me tell you that we will be amongst the first.

Q. It is learnt that you are going for line source tubing in keeping with changing technology. Is it a part of Jain Irrigation Systems Ltd or a separate entity?





A. It is a part of Jain Irrigation Systems Ltd.

Q. Can you give a brief idea about the future plans of the Group and the targets you have visualised?

A. We shall reach Rs 350 crore by 1995 and Rs 500 crore if not more by the turn of the century. *(This was not to be. In 1995-96 the turnover touched a low of Rs 212 crore – the beginning of the downturn. By 2000-01 our losses continued though the turnover increased to Rs 344 crore.)* I hope to be amongst the first 50 in the country in terms of a Group.

Q. What is your advice to your shareholders?

A. No speculation or prediction, but investors are bound to harvest good returns. Tata Investments is one of the largest single private shareholder today and it has started acquiring this share when the price

EQUITY SHARES EACH OF		RUPEES 10.00	
AMOUNT PAID UP PER SHARE		RUPEES 10.00	
Reg. Folio No.	28945	Certificate No.	44758
Name(s) of the Holder(s) TIWARI VIJAY KANGILAL			
No. of Share(s) held	FIFTY ONLY	**50**	
Distinctive No(s) 3021837 TD 3021886			
Given under the Common Seal of the Company this 25th DAY OF JANUARY 2001			
			
			
Company Secretary / Authorized Signatory			
Note: No transfer of any of the Shares comprised in this Certificate will be registered unless accompanied by this Certificate.			

JISL Specimen Share Certificate

was as low as Rs 32. They have not sold a single share so far to the best of my knowledge.

My advice to my shareholders is: “Hold on to the shares. They are better than any gold with you. If you can manage, acquire more within your means.”

(Interestingly the share price touched Rs. 770 in 2008.)

Ranking of Jain Irrigation Systems Ltd. over the years							
Media	Year	Super Rank	Sales	Market Cap	Net Worth	Assets	Profitability
Economic Times	1995	353	353		149	163	
Economic Times	2002	421	347	97			
Capital Market	2004	229	331	229		195	233
Business Standard	2006	171		171	256	176	241
Dun & Bradstreet	2007	222		207	196		244
Capital Market	2007	185	185	130	216	185	254
Business Today	2007	156	164	198			219

Notes: Not all publications have ranked by all parameters.

Even the same publication has not adopted the same parameter in all the years.

The blanks represent non-availability of data.

Ratings as indicators of health?

Ratings by the financial institutions ipso facto pertain to a given period. They are therefore at best parameters of the health of the organisation as seen from the tunneled vision of the capital market. However, they do reflect the state of affairs at that period. It has been well researched all over the world that organisations which are ‘Built to Last’, have undergone violent fluctuations in their market capitalisation. Those facts however do not eat into the vitals of the organisation. These are the crude indicators as far as they go. Unfortunately, more often than not, though, they do not go very far. The table above bears testimony. Jain Irrigation continues its march from a good company to a great company, notwithstanding what happened during the crisis period 1997-2002.

“Growth, to be enduring, must have a solid philosophical basis.”

Passion for Expansion

Inexhaustible energy and unquenchable passion for growth are also characteristics of an entrepreneur. With the boundless energy of a youthful industry leader, Bhau plans to go global to extend the reach and presence of his corporation, JISL. It seems, the more his organisation grows, the more energy he gains for its future march ahead.

"Obsession with quality and service must change the meaning of 'Made in India' in overseas markets," asserts Bhau.

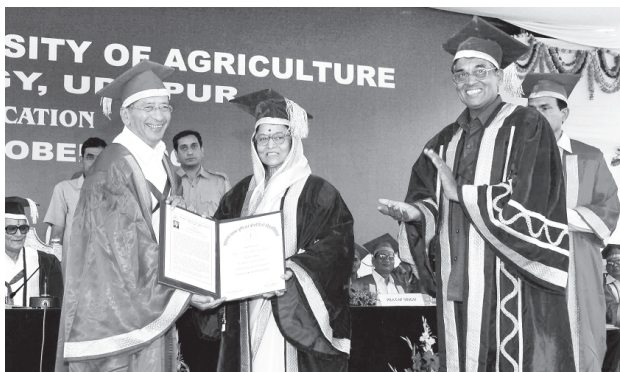
A small sleepy little town in Maharashtra - Jalgaon - has a unique distinction. It is the home of the second largest producer of Refined Papain in the world. Papain is an agro-based enzyme extracted from semi-matured papaya. The Jain Group of Jalgaon meets about 15 to 20 per cent of the global demand for this enzyme. The Group has already notched up an export turnover of Rs 100 lakh per year from this single product, earning precious foreign exchange.

The Jains suffer from one soft spot - a passion for growth. Jain Irrigation Systems Ltd (JISL), which went public with its micro irrigation project with a fixed capital outlay of Rs 7.8 crore in 1987, is now all set to go global. It is coming out with a Rs 45 crore rights issue mainly to part finance its expansion of the domestic division product range and diversification-cum-expansion of the export division products. The diversification of the export division products includes production of plastic sheets of various polymers.

The dynamic chairman of the Jain Group, 54-year-old Mr Bhavarlal H. Jain, can easily pass for a youthful 40 with his boundless energy. From humble beginnings, he has taken his Group of companies to heights which others can only dream of. But Mr Jain does not like to



D. Litt. conferred by NMU, Jalgaon in the august presence of Smt. Pratibha Devising Patil, then Governor Rajasthan



D. Sc. conferred by MPUA, Udaipur

desert his rural background. “We believe the heart of our business is rural,” he avers.

JISL is quietly bringing about a second Green Revolution in Maharashtra and other states. Over the last three years, the company has supplied and installed micro irrigation systems on over 40,000 acres of land, covering 34 different crops.

JISL has also chalked out plans to go global. It has come to the conclusion that it will have to essentially invest in the equity of marketing networks abroad to expand its global presence. Thus, it will either acquire interest in existing distribution networks on the Continent or USA, or go for complete take-over of such trading companies, which have established business contacts over the past many years.



D. Sc. conferred by KKV, Dapoli



D. Sc. conferred by TNAU, Coimbatore

JISL has also received some offers of joint collaboration from foreign corporations.

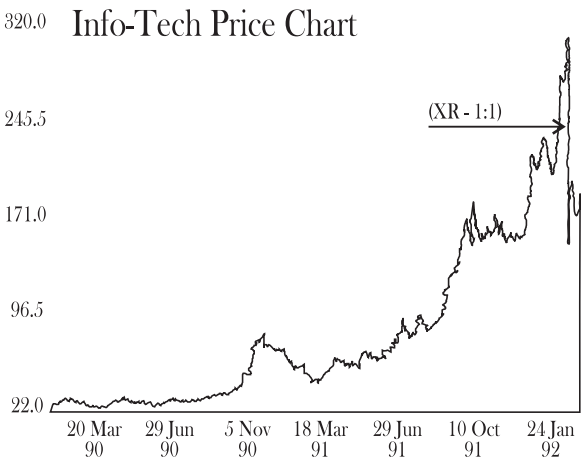
The company is coming out with a rights issue to part finance its various expansion activities. The rights issue of partly convertible debentures is being offered to the existing shareholders on a 1:1 basis and will increase the equity capital of the company to Rs 9 crore after the conversion in October 1992 from the current level of Rs 3 crore. Of the debenture of face value of Rs 150, the convertible portion will be Rs 80 and the non-convertible portion Rs 70.

“We believe the heart of our business is rural.”

Mr Jain has a mania for quality and an obsession to keep India’s flag flying abroad. He says, “Whatever we are making now is not very easily acceptable abroad because today, ‘Made in India’ is almost an abuse.” The Jains want to change this image. They are entering into

The global march of JISL has done India proud in as much as the area under micro irrigation in India is now second only to the area in USA. Insednetly, this has also earned Bhau three honorary doctorates in a span of ten months. Today, JISL is the second to none in terms of cutting edge technologies. They all flew in with the acquisition of the veterans in the field like Chapin, Watermatics and Aquarius in USA.

collaboration with Chapin Watermatics Inc, New York, for the manufacture of multi-chambered drip irrigation hoses. With this technical tie-up, the company will be in a position to offer any type of irrigation system to meet individual farmer/crop requirements. The company will also be able to export these multi-chambered irrigation systems.



Violent movement of share prices do not always reflect the health of the company. They could be reflection of market condition, government announcement or world trends

Turning the Wheel of Success

Entrepreneurs are masters of the balancing act. Bhau, on one hand, evolves a home-grown effective approach for micro irrigation business and on the other, devises creative, mutually beneficial human resource practices. He comes out with flying colours on the test of his entrepreneurial credentials – maintaining sound fundamentals, assuring technology competitiveness, developing happy human resources, presenting spectacular performances, enhancing growth potential etc.

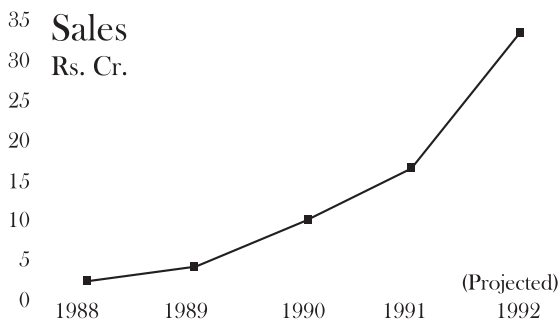
Attaining Leadership

When Chimanbhai Patel, CM, Gujarat, flew in from Surat to Jalgaon in a state helicopter in December last year, he had a mission: To study, visit and see for himself the farms where drip irrigation was in operation. His intention was to return home and adopt drip irrigation in the dry regions of his state, which reel under the vagaries of the monsoon every year.



*Shri. Chimanbhai Patel, the Chief Minister of Gujarat :
“Jalgaon is the MECCA of drip irrigation” (20-12-1991) Bhau and R B Jain on either side*

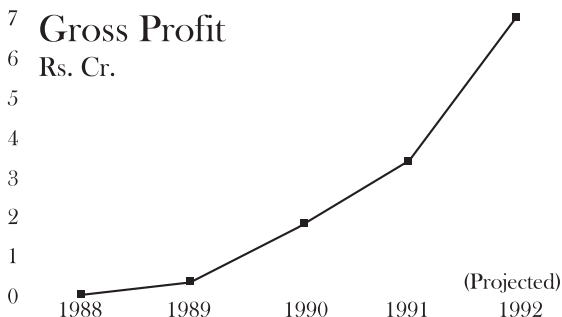
Sales Rs. Cr.



After visiting farms around Jalgaon, Sangli and Nasik, the Chief Minister was hardly disappointed. So enamoured was he, that he invited Bhavarlal Jain, chairman and

founder of the Jain Irrigation, to participate in the development of agriculture in Gujarat in a big way. This is just one of many examples of the kind of success Jain Irrigation Systems Ltd (JISL) has achieved in a short span of about five years.

Gross Profit Rs. Cr.



Today, Jain Irrigation has become synonymous with drip irrigation in India. It is the largest manufacturer with an all India market share of around 60%. The rest is shared by some 70-odd companies which include big names like Voltas, which has been a fore-runner in the field of drip irrigation and hopes to sell Rs 4 crore worth of equipment this year as against Rs 35 crore of JISL. For a late entrant, this performance is, by any standards, exemplary.



Bhau with his father (1973)

The Mantra of Success

The concept of drip irrigation or micro irrigation emerged on the Indian scene in the early 1970s. Yet for nearly two decades, till Jain Irrigation closed its first full year of production, it remained obscure, away from any kind of urban publicity.

What made the Jains attain this unprecedented feat?

“I inherited farming from my father. I have tilled the land myself. Our rural roots have helped us a great deal,” asserts B. H. Jain.

Though an industrial venture by itself, it was closely linked with agriculture. Shri S. M. Udani, group financial advisor, elaborates, “Each system that we sell is customised to suit the buying farmer’s requirement. Without knowing farming, it is very difficult to satisfy a customer fully.”

Furthermore, what helped the company was its approach. “To enable the farmer to achieve maximum productivity, we have to take care of say, fifty aspects, some of which involve tedious spade-work. Most of the earlier entrants made half-hearted attempts. They took care of forty and left the rest to destiny. Perhaps, that made all the difference,” explains Udani.



S. M. Udani

Bhau’s association with S. M. Udani dates back to 1963, when Mr Udani was manager (credit) with Esso. Versatile, rational, intelligent, strict, hard working – these are only some of the attributes we can ascribe to him. He retired from our active service in Oct, 1994. His friendship with Bhau continues unabated.

There is an actual example of this precept. The company started with low density polyethylene as the main raw material for manufacturing plastic tubes. Experience suggested that these tubes were breaking

because of the heat. So it switched over to linear low density polyethylene (LLDPE). Reportedly, it is the only company using LLDPE as raw material.

Early Hiccups

Despite such deep rural roots, the Jains found irrigation a bit tough in the beginning because the concept was virtually unexplored. As it meant an additional investment for the farmer, convincing him that he would reap twice the amount he sows took some real doing. "In the first year, for some of the systems we sold, we had agreed for one-year credit," recalls Udani.

With such tight conditions for resources, how did the company make profit from the word go?

"Group support," says B. H. Jain. "In the initial stages, Jain Pipes, a closely-held group company supplied raw material to Jain Irrigation at concessional prices."

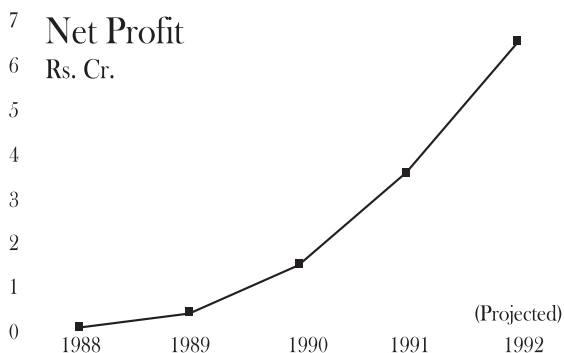
With the farmers getting convinced, the demand increased and the credit period decreased. Now the average credit period is around two months. Even this, to a student of Indian economy or agriculture, who knows the repaying ability of the farmer, seems questionable.

What is the level of defaults in payments?

"It is zero. We supply only after a letter of guarantee from a bank. The question of defaults does not arise," explains Jain. In sum, earlier drip irrigation had remained within the reach of resourceful farmers only. Not any longer.

Fortuitous Support

To encourage the use of drip systems, several state governments have announced subsidy schemes to the farmers, consequent to the Union Government providing a sum of Rs 150 crore for the same



purpose. In an economic scenario where subsidy has become a dirty word, it is indeed praiseworthy of the Central Government to put the tax-payers' money to good use.

Does it mean that if the subsidy were to be withdrawn tomorrow, it would adversely affect the future of drip irrigation systems in India?

Bhavarlal Jain denies this emphatically. He states that 74% of the total sale of irrigation systems is to non-subsidised farmers. With the encouragement provided by the government, the company has geared itself to probe much deeper into the vast potential market, which it has "barely scratched".

Enlarging Product Range

For closely-spaced crops like sugarcane, cotton etc, the existing micro irrigation systems do not give the same water usage efficiency as line source tubing. It is for this purpose that JISL has obtained a license for the manufacture and use of technology and brand names from Chapin Watermatics Inc, US. Commercial production is expected to start by August this year.

JISL is not resting merely on exports and is upgrading itself technologically. It is now setting up a joint venture in India with Plexite (UK) under the name of Plexite (India) Pvt Ltd, in which it will have a 25% equity stake.

Besides a number of manufacturing firsts, it (*JISL*) has executed several large drip irrigation projects, such as Tata Tea's plantations at Siliguri and Marnwar covering 160 acres, an Indo-Bulgarian apple project in Srinagar and A. V. Thomas Group plantations in the South to name a few.

When the Jains pioneered micro irrigation, the watch-word was conservation. Today, they are doing it all over again. This time they plan to harness solar energy to introduce solar water heating systems for domestic and industrial hot water applications and domestic lighting, which should open new vistas for them.

Micro Irrigation System

The conventional method of irrigation has meant a tract of land submerged under water indiscriminately. "But too much need not necessarily be too good," is what the drip irrigation theory says. "For maximum productivity, inputs need to be optimum and not maximum," is the cardinal principle of this theory.

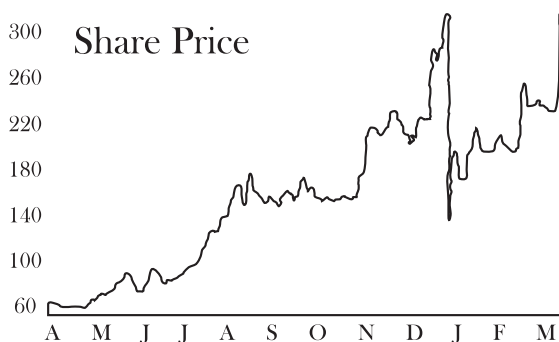
Drip irrigation aims at providing optimum quantity of water at the right area instead of flooding the whole field with water. It results in 30-70% saving of water, increases crop yields by as much as 30% and saves labour costs. It is ideally suited for irrigating different types of terrain and soils.

The micro irrigation system delivers water to the crop using a network of main lines, sub-mains and lateral lines, which are nothing but pipes, smaller diameter pipes and tubing with emission points spaced along the lengths of tubing. Each emitter or orifice supplies a small, precisely controlled, uniform optimum quantity of water, nutrients and other growth substances directly into the root zone of the individual plant as per its requirements. In this way, the plant never suffers from stress brought about by the withdrawals of moisture and nutrients.

Investment Prospects

The performance of the company in the current year is spectacular. For the half-year ended September 1991, sales have almost doubled to Rs 8.17 crore over those in the corresponding period last year. There

is a 205 per cent increase in the gross profit at Rs 1.77 crore, while the bottom line has swollen more than six-fold to Rs 1.36 crore. On equity of Rs 3.02 crore, the company is heading for an EPS nearly twice its face value.



Quoted at around Rs 270 (ex-right), its current year's projected earnings are discounted around 15 times. The company has declared a rights issue of partly convertible debentures, PCD, to part-finance its expansion-cum-diversification plans in the ratio of one debenture for every share held. Each PCD of Rs 150 consists of a convertible portion of Rs 80 and a non-convertible portion of Rs 70. The convertible portion would be converted into two shares at the end of six months from allotment. The equity capital which now stands at Rs 3.02 crore will triple to over Rs 9 crore after the debenture conversion compared to the current price. The conversion terms should provide a bonanza to investors.

The EPS for this year could be a little compressed. However, three years from now, it could be placed around Rs 26-27 on the enhanced equity. For prospective investors, JISL does not promise windfall gains in the short-term. However, they can expect a decent return of at least 30-40% per annum in the next three years.

Interview

For Bhavarlal H. Jain, addressed as 'Bhau' respectfully by one and all knowing him, success has not come the easy way. From a farmer to an industrialist it has taken three long decades before the seeds sown by him reaped fruits. But he may not have to wait just as long to reap the fruits of the seeds he is sowing now.

When will he start reaping them? Capital Markets Technicals finds out in an exclusive interview with him.

Q. What prompted you to enter a green field area such as micro irrigation systems?

A. We had a strong footing in agriculture right from the beginning since I come from a family of farmers. We wanted to take up manufacture of agriculture products. We were also looking for a technology that saves water. We knew about the success of micro irrigation in Israel and we decided to put all efforts into it.

Q. How extensively has this concept spread in India?

A. It has spread out faster in Maharashtra, as it is a water deficient state. Since it is a new concept, it has taken a little longer to catch on. But with government assistance plus our own efforts at popularising it, the pace has quickened. These systems are very efficient in crops like papaya, mango and sugarcane.

Q. How much does it cost to install an MIS per acre?

A. The installation cost of a drip irrigation system ranges between Rs 8,000 and Rs 13,000 per acre.

Q. Would not such a high cost make it within reach only to the rich farmers?

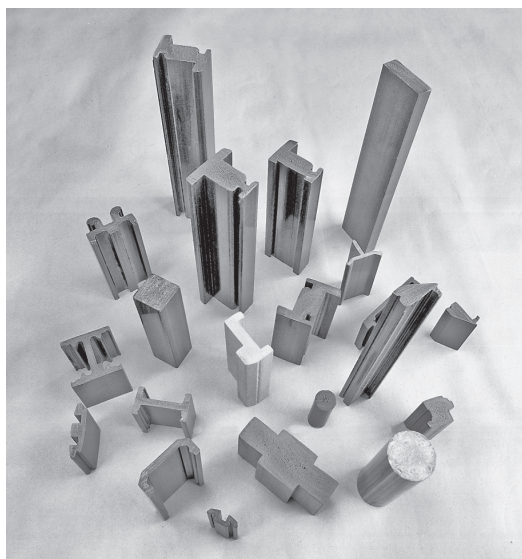
A. Yes, it does. Being an additional investment, poor farmers cannot afford it.

Q. On what basis are you projecting such a phenomenal growth, after growing 100% every year during the past three years?

A. Even amongst the upper strata of farmers, we have only scratched the surface. Equally important is the fact that the pay-back period is not long. It ranges from around three months minimum to two years at the maximum. Against that, each system that we sell has a guaranteed life of five years. Last but not the least is the help from an unexpected quarter. The Union Government plans to bring 12.5 lakh acres (5 lakh hectares) by the end of the Eighth Plan. The government has provided Rs 150 crore for the scheme as subsidy. This scheme will definitely help the small and marginal farmers having land holdings upto 4-5 acres (1.75-2 hectares).

Q. What is the secret behind the success of JISL in so short a span of time? How did you succeed where others failed?

A. There are two main reasons. The first is our rural base. One cannot succeed in this business sitting in air-conditioned cabins. It is imperative to know the nitty-gritty of farming. Second, we have a committed workforce. Take for instance, our engineering talent. We have got four extrusion lines of which, one is imported. The other three



Timbron

were fabricated by our engineers in-house. The cost of all the three taken together was less than the cost of one imported machine for which we had paid about Rs 1 crore. Similarly, for our PVC foam sheets, we developed technology in-house instead of relying on foreign know-how.

This has surprised almost everybody in the industry across the globe.

Q. Now that you have succeeded in the domestic market, what are your future plans for the company?

A. We plan to enter foreign markets firstly by tying up with foreign collaborators and then exporting the output. We have obtained a licence for use of advanced technology from Chapin Watermatics Inc, US, to manufacture drip irrigation systems and components superior than what we are manufacturing today. We are also setting up a joint venture with Plexite (UK) to manufacture “Timbron” which is a wood substitutable plastic material. We also plan to introduce solar water heating systems in the domestic market in the near future.

Q. Where would you like to see Jain Irrigation three years down the road?

A. The ongoing expansion-cum-diversification programme would be implemented over the next eighteen months. When fully operational, which could be 1995-96, we expect a turnover of around Rs 300 crore. Half of that should come from exports.

I would like our company to be amongst the top three micro irrigation companies in the world. *(Company is second largest in the world as of 2007-08.)*

Timbron

Bhau is obsessed with exploring innovative ideas, propositions and products. Getting into Timbron as a promising wood-substitute, was one such venture in conservation of forests. A product which worked and felt like wood, seemed like a great idea. Unfortunately, the product was based on polystyrene and lacked impact strength. R&D efforts to improve this and some other properties failed. Therefore, though a good product, it had to die under its own weight. Like us, even our JV partners Glynwed Plc of UK failed in this venture.

New ventures do not always pay : but once they do, they compensate for earlier failures. The search must therefore always continue. “You may not be an inventor; but you can always be a friend to innovation and creativity”, says Bhau.

Tea or Coffee? – No, No!

Milk and Fruits? – Yes, Yes!

The late Dr Herbert Shelton, father of the science of naturopathy, would have been pleased to hear this. There is a virtual ban on the consumption of tea, coffee, and tobacco within the precincts of the Jain companies. Except for a few special visitors like the overseas buyers, these items are a luxury for the rest. That’s not to suggest that the Jains are bad hosts. In fact, when it comes to hospitality, it is traditionally Indian at Jalgaon. That is, of course, only for the outsiders.

What about the insiders – the employees and workers? It is stricter. There are no exceptions. Workers get milk instead of tea and coffee.

For a person who hasn't seen this live, it is difficult to believe, especially, if one looks at the cooperation extended by staff members at all levels and all times.

Wasn't there any resistance ever to such a policy?

"There was," says B. H. Jain, "in truck loads. In the beginning, there was a lot of hue and cry, which lasted for about six months. But we were convinced that these things ruin health. And we made our intention clear – we will not incur any expenditure which spoils the health of our own people."

Despite such stringent policies, the trouble-free industrial climate which the Group has enjoyed is commendable indeed. And for this, the company doesn't have a formal HRD wing.

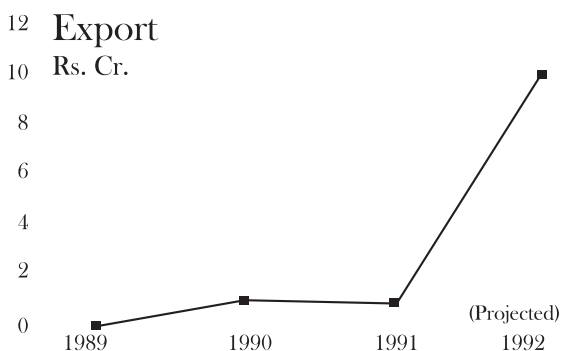
Is it possible to run a company with manpower of seven hundred without a proper human resources department?

"We take care of the human aspect ourselves as it is the most important and crucial one for any business in general, and ours in particular. We have tried to maintain a flat organisation structure. I know most of our executives on a one-to-one basis. Whenever I meet them, my first question would invariably be concerning their problems," avers Jain.

Exports: Born in Düsseldorf, brought up in Jalgaon

It all began as a surprise for the company, the plastic industry and the exporting community alike. Exports were not visualised when the project was conceived. "The idea of exports germinated on the

suggestion of Cincinnati Milacron – the plastic processing equipment supplier – at a plastic fair at Düsseldorf in Germany," says Anil Jain, managing director, JISL.



JISL soon set up a 100% export oriented unit last April. This unit manufactures irrigation system components, custom-moulded plastic components and PVC foam sheets. For the purpose it has set up its own tool room for making dyes and moulds. It has so far developed over 100 dyes and moulds for foreign customers employing state-of-the-art technology.

From a mere Rs 95 lakh in 1989-90, total exports are expected to be Rs 10 crore in 1991-92 of which, irrigation systems components will constitute Rs 5 crore, PVC foam sheets Rs 4 crore and customised plastic components, Rs 1 crore. In plastics industry, such growth in export earnings is not easy to find.

Jains didn't find it easy either at the beginning. "We had hordes of problems initially. Series of sample rejections, non-availability of the required material, stringent delivery schedules. There was no difference between us and other Indian exporters as far as the difficulties were concerned. But we didn't give up while others did", asserts Anil Jain.

Next year, PVC foam sheets will form the major constituent of the export turnover. PVC sheets are exported to the UK and Belgium, irrigation systems to the Middle-East, moulds and dyes and polycarbonate (PC) sheets to the US. For the manufacture and exports of PC sheets, GE Plastics (a joint venture between General Electric of USA and IPCL) has agreed to provide technical and marketing assistance to JISL in addition to supplying the PC resin.

Anil Jain explains his company's success saying, "We look at quality in totality. When dealing globally, quality consciousness begins right from the time one receives an enquiry from a buyer. When a receptionist receives a phone call, it is not restricted to the product alone."

*"Creating is the most satisfying element in business,
which should be built brick by brick."*

A Doyen of Drip System

It is perseverance that rewards entrepreneurs while engaged in their work. They use their knowledge with great intelligence and leave their singular stamp on the work they undertake. In the process, they set examples worthy of emulation.

Bhau demonstrated courage, perseverance and initiative in pioneering the spread of micro irrigation systems across the country.

Efficient Water Use

Futurologists are necessarily inspired persons of pragmatic vision. They can be cool, rational, calculating and even having absolute faith in God. Herbert G. Wells, George Orwell, Friedrich Nietzsche, Jacob Burckhardt, Oswald Spengler, Arnold J. Toynbee and Sorokin were people who had the wisdom to foresee what is going to happen.

One such person in India, who could see far ahead of his time, is Dr N. Mahalingam. He has been tirelessly piloting the concept of diverting every drop of rainwater for irrigating the water-starved millions of acres of land in our country to boost up the economy. The strategy propounded by Dr N. Mahalingam for macro economic levels has caught the attention of our planners.

Another such person is Mr Bhavarlal H. Jain. He has been spearheading the task of implementation of the efficient water management system at micro level i.e., at field level. The efforts of Dr N. Mahalingam at macro level and that of Bhavarlal Jain at micro level are sure to enable us to catch up with the levels of Israel. Opportunity knocks at the door of people and it is up to them to make use of the same.

Mr Bhavarlal H. Jain of Jalgaon rose from rags to riches through hard work, perseverance and intelligent use of knowledge to convert a



Demonstration and R&D Farms at Jain Hills

barren area into a prosperous zone. What was a beginning with Rs 7000 in 1963, blossomed into a turnover of Rs 142 crore in 1992 and provided employment to thousands with potential to stabilise indirect employment for millions. His effort was a case of million-dollar miracle, which is required to be appreciated, applauded and emulated.

Eminence Acknowledged

What really catapulted Mr Jain to prominence was the concept of drip irrigation, the significance and relevance of which to Indian conditions has been brought out by Dr N. Mahalingam from time to time. Here is a man Mr Jain, who pioneered an integrated approach to drip system in a manner worthy of approbation.

Mr Jain, ably assisted by a self-motivated professional team, spread the message and created awareness throughout the country. The growth of the drip irrigation system has been phenomenal from a meagre 1500 acres in 1987 to cover 65,000 acres of 32 different crops in 1992. He proved that the contribution, which the drip technology can make towards National Agricultural Productivity, is no longer under a cloud.

“In drip,” he has persistently declared, “we are producing and propagating something of value not only to our own mission, but also to the entire nation.” The need for an economy to emulate his example to achieve a higher per capita income, more employment and rural development will be revealed if we take a peep into the development of our economy in the past 45 years.

After 45 years of Independence, our economy has been liberalised and allowed to play an active role in the world market.

In such a scenario, we have to understand our strengths and weaknesses so that we may equip ourselves in such a way as to overcome hurdles in our economic development on sound lines.

Genesis of Micro Irrigation

Drip irrigation was first tried on commercial scale for vegetables in Israel during late 60’s in the Arava Valley, which is a desert area with brackish water. The different agricultural conditions in this region were not conducive to achieve a reasonable level of production and profitability. It soon became apparent that drip irrigation almost doubled the yields.

Israel has miraculously converted her sandy desert with climatic adversities into a sound agricultural base with the introduction of drip irrigation system. The average yields in different countries are given in the adjoining Table 1.

Table 1

Country	Average yield kg / ha		Cropped area ha/capita	Water availability mn l/capita
	Cereals	Roots		
Israel	2295	39,003	0.10	0.37
Japan	5671	25,034	0.04	4.43
India	1627	14,417	0.20	2.17

Indian Contexts

“India has good soil, abundant water resources and sunlight on almost all the 365 days in a year. Our agricultural scientists are known for their genius and solid contributions. Our farmers are hard working. Even then it is a mystery that the contribution per worker in India has been just 2.5% of the Japanese worker in agriculture.”

With the innovative visionary B. H. Jain as its chairman, JISL continues its campaign to enthuse and educate the farmers with customer-oriented practices.

Reaping the Benefits

Having gone a round the factories (including the 100% export oriented unit) and the farms where drip irrigation systems are put to effective use and having heard the exhilarating experiences of Mr Jain, I feel that my trip was undoubtedly a pilgrimage to the “Mecca of Drip Irrigation”.

Farmers all over India and from each block should see the farms where Jain Irrigation Systems are put to use. When they establish a model farm in each of the districts, each farm will draw, inspire and enthuse thousands of other farmers.

Most of us unfortunately entertain a feeling that India is a poor country and that we lack most of the resources, which the developed countries are blessed with. One who visits Jain Irrigation farms will come out with an enriched inspiration that India is blessed with abundant resources, which are yet to be exploited for our prosperity.

“There are challenges. But each challenge opens up a threshold of unlimited opportunities. Believe me, we can establish 150 Israels within India. All that is needed is courage, confidence and hard work coupled with initiative.”

I want farmers all over India to know about the Jain miracle. Having seen it myself, I have no hesitation in recommending the same to the farming community.

“In drip we are producing and propagating something of value not only to our own mission, but also to the entire nation.”

The Micro Irrigation Miracle

Bhau keeps throwing challenges to his staff to upgrade their competencies through innovation and reverse engineering. His confidence can be experienced by his cool manner of answering even the most tricky question in this article.

Arid Countryside

The word 'Jalgaon' literally translates 'a town with plenty of water'. But that is not true of the region. A veritable inferno during the summer, with temperatures in the high 40s, it gets only a passable amount of rain during the three short months of the monsoon. It simply cannot compare with the rain levels of the Konkan belt, and must be classed as a relatively dry region.

The Roots and the Dreams

This is where the Jains come in. Bhavarlal Jain, the Group's chairman, pioneered an integrated system approach to the subject of 'drip irrigation'. With collaboration from James Hardie Irrigation, the acknowledged world leaders in the field, he set up Jain Irrigation, a public limited company, to manufacture and supply micro irrigation systems, and propagated the message of water conservation throughout the country.

What exactly is micro or drip irrigation?

A network of flexible lateral tubing is laid across an entire field, with 'drip valves' fixed into the tubes at regular intervals regulating the amount of water that goes straight to the roots of the plants at low pressure. This ensures direct regular water supply to the roots, without the wastage that is endemic to ordinary irrigation methods.

“Since I come from a farmer’s family, I had a strong footing in agriculture right from the beginning,” says Bhavarlal, known to everyone in his factories and in Jalgaon as simply ‘Bhau’, the respectful vernacular for ‘elder brother’. “We wanted to take up the manufacture of products related to agriculture. I had read about the success of micro irrigation in Israel, and decided to put all effort into it in India!”

Since it was a new concept, it was hardly easy to spread the message. But the Jains had already built up strong goodwill in their trading activities over the years, and in the PVC pipes and fittings they made for domestic and export markets. The farmers trusted them and decided to have a go at the new-fangled idea.

“You cannot do this business sitting in an air-conditioned cabin!” quips Bhavarlal. “It is imperative to know the nitty-gritty of farming. We were fortunate in having a committed work-force, for instance, our engineering team. Three of our four extrusion lines were fabricated in-house; only one is imported. Similarly, for our PVC foam sheets, we developed technology in-house instead of relying on foreign know-how. This has saved us enormous amounts of money and given us plenty of confidence that we can tackle any project.”

Mark of an Entrepreneur

It is a long way for the patriarch of the Jain family to have come since the time he was a hawker of kerosene oil, over three decades ago. Indeed, the man’s story is a classic of “rags to riches”. Born into the family of a small farmer-trader, the lad was determined to educate himself and better the lot of his kin. When he was stopped by his mother

It is heartening to note that at Jains we believe in reverse engineering. Rarely do we import the same equipment a second time. In-house expertise has not only helped in reducing the import costs to 1/3rd of the original, but has given added confidence to our people for easy maintenance and operation of these equipments. ‘Adaptation’ and ‘Innovation’ are the catchwords with Jains.

from studying saying, “You will lose your eyesight if you study late night with a kerosene lamp,” he sat under the benevolent glow of a street lamp to hone up on his lessons.

Acquiring a B Com, then an LL B, and success in MPSC, he was gazetted to join government service. Business was in his blood. And in 1962, with a meagre capital of Rs 7,000, he threw himself into trading.

The business moved on to the sale of agricultural implements, fertilisers, seeds, pesticides, and even tractors. He toured the countryside on foot, on a bicycle or the humble ST bus; and over the next 15 years, built up an excellent reputation for the name ‘Jain’ among farmers and suppliers alike.

Industrious Dash

In 1978, Bhavarlal acquired a sick industrial unit, which was designed to produce banana powder. By modifying the said equipment, he commenced production of Papain – an industrial enzyme.

He thereafter ventured into PVC pipes manufacturing – a vital requirement in agriculture for conveyance of irrigation water from the water source to the farm boundary. In a short span of five to seven years, he secured No.1 position in the industry, catering for about 20% of the country’s requirement.

However, it was Jain Irrigation Systems Ltd, JISL, which put him on the national scene. Producing and supplying yet another agricultural input, micro irrigation systems for on-farm distribution of water, JISL has become synonymous with the concept of drip irrigation in India. Today JISL is the largest manufacturer, with an all-India market share of nearly 60 per cent. The rest is shared by some 70 odd companies, including big names like Voltas and Premier Irrigation.

Agriculture – A Mission

Last year, Chimanbhai Patel, Chief Minister, Gujarat, flew in to Jalgaon to see for himself the farms where drip irrigation was in operation. So impressed was he with the success of drip systems that he invited Bhavarlal Jain to participate in the development of agriculture in Gujarat in a big way. This is simply one example of the kind of success stories JISL can boast about in just six years of its business life.



*Mr Dalichand Oswal -
Bhau's Uncle*

Mr Jain's own life-story, beliefs and concepts make fascinating reading. Shirish Nadkarni met the modest, unassuming trader-turned-industrialist at his sprawling R&D farm for an exclusive interview. Excerpts:

*Q. There was a time when you sold kerosene door-to-door. Was that before you had completed your studies in commerce and law, or afterwards?*²

A. Much later. After graduating in commerce and law, I kept terms for my M Com, for which my uncle, who worked in Bombay, bore all the expenses while I was in Bombay (1956-61). I appeared in some competitive examinations too. I was duly selected by the MPSC as a gazetted officer and placed in the Maharashtra Government Revenue Department .

But then, I was not happy to be in the government service. I therefore went into trading. There was no planning as such. It was purely a matter of entrepreneurial spirit, which pushed me into various fields of human endeavour. First there was the trading activity which lasted for 15 years. Then we began the industries like Papain, PVC pipes, irrigation systems, and transformers. Currently, we are in III phase – diversification into various sunrise activities.

Q. Which was your first overseas collaboration, and how did it come about?



Bhau with Mr Omar Bakhi, the one who helped initiate the micro irrigation journey

A. The first one was the James Hardie Irrigation of Italy. When we went in 1986 to the US to attend an international exhibition on micro irrigation at Fresno, California, we judged that Hardie was the largest company and the undoubted leader in the field of micro irrigation. They told us that India was covered from Europe, the headquarters being Italy.

When we approached the Italian office of Hardie, they told us they had a sub-office in Muscat, and we would be coming under that. So I eventually ended up with one Omar Bakhi, their regional manager for Middle East. He was the first visitor to our PVC Pipes and Papain plants, and agreed to be our collaborator. They educated us on how to go about drip irrigation, especially the operational aspects – how to design an irrigation system.

Q. How do you mean, “Design an irrigation system?”

A. You may not know it, but drip irrigation is not merely a network of piping. Hydraulics, agronomy and engineering are all involved. More than that, it involves a very close rapport with agriculture as a subject. And since agriculture is dependent on many variables, and especially on nature, you have to study the climate, humidity, rainfall, soil and crops. Then you have to correlate this data to design a particular system.

So you need this kind of broad exposure, which, of course, we

developed on our own. You see, their experience was not directly relevant to India, except for some experience in the Middle East, which is closer to our conditions. But James Hardie did train us on how to design a particular system.

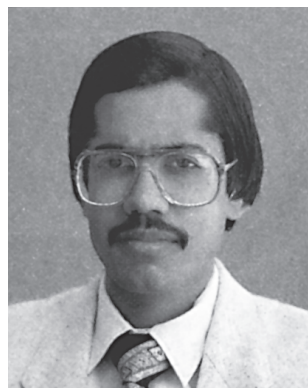
Q. Do you mean to say that each micro irrigation system is custom-designed?

A. Of course. It has to be. That is the concept of micro irrigation. We had such tremendous rapport with the local farming community that they agreed to try it out. We had built up that level of credibility in the market. This credibility was not built up overnight; it has been a continuous process over the years. We were in business since 1963 – for selling agro inputs, i.e. fertilisers, seeds, pesticides, tractors, equipments, etc. So the farmers already knew us, and were comfortable dealing with us.

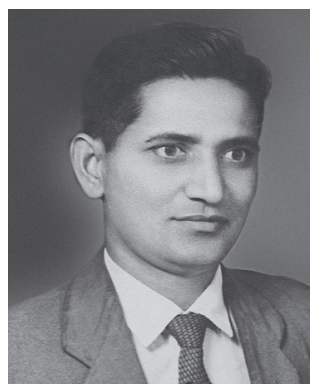
Q. Are you usually personally involved in the designing of the systems, or you leave it to the engineers?

A. As far as the engineering aspects of my enterprise are concerned, I have always made it a point not to interfere with the experts, because I am not an expert in that field. My feel for agriculture was my greatest strength. The kind of unified approach, and the extension that was needed for pioneering this concept – these were my jobs. My job was never designing a system. For that purpose, we had a brilliant chemical engineer from IIT, Kharagpur, R B Jain, who also happens to be my cousin.

Over the years, marketing and finance have been handled by me, but operational support for finance and accounts always came from G R Oswal, another cousin. And



*R. B. Jain :
The Engineer behind*



Mr G. R. Oswal



Ajit, Ashok, Atul, and Anil with Bhau

major policy matters that affect the future of an enterprise have always been under my command for decisions.

Q. When did you begin to progressively withdraw from the day-to-day running of the companies, and stick to policy decisions?

A. My four sons started getting into the day-to-day operations of our companies from 1987 onwards, one by one. Two of them are actively involved in the daily running of the companies. Ashok, the elder son, looks after administrative matters. Anil, the second son, deals with our collaborators. Ajit, the third son, an engineer, handles the operations. The youngest one, Atul, has gone to Ahmedabad to attend a 15 day course ‘How to inherit and run a family business?’ (Looking at interviewer’s facial expression, he continued.) No, don’t laugh; it is quite a rigorous course!

Q. Did your other three sons also go through such an orientation course?

A. No, they had the opportunity of working directly with me. So they did not really have to under go such formal training in business schools. As far as my youngest son is concerned, we can now afford this kind of luxury. He spent a year or so in the Middle East, trying to

penetrate the market there. But now that he is here, we thought it a good idea to give him some classic business school exposure.

Q. There is a feeling that some of your new projects are moving away from agriculture, which has been at the core of all your enterprises. Any comment?

A. It is a wrong perception, and I will tell you why. A fragmented approach towards life or business restricts your growth. If money-making is the chief objective, you would go to any and every business within the parameters of the law to achieve that objective.

As far as we are concerned, we have taken agriculture to be our mission, and we have fitted plastics into agriculture. So far, we have been dealing only with inputs into agriculture. When we were traders, we sold seeds, fertilisers, pesticides. When we started manufacturing, we sold PVC pipes and micro irrigation systems, which are also inputs to agriculture.

But there are some more inputs that have become relevant and vital to the progress of this country: hi-tech agriculture, bio-technology and tissue culture, for example. Liquid fertiliser is yet another which is a very natural extension of my present business, since it can be fed through the drip tubing. Nobody could have brought liquid fertiliser into the country earlier. We have set our minds to do it, because we feel we are best qualified to do so.

(We had to subsequently discontinue production of liquid fertilisers mainly because our collaborators wanted us to continue with imports rather than manufacture it within the country. Secondly, fertiliser control order did not permit continuation of these fertilisers in liquid form.)

We have worked out an integrated approach. Let us complete the circle! We are selling input; therefore, we should buy output, and process the output, so that the circle (agriculture value chain) is completed. We have now identified onions and bananas as products which we should purchase from the farmers, process them and then export the value added product.

Q. But is it likely that you may not make much profit from this integrated approach?

A. It is possible, and we are prepared for that. As I told you, money-making is not our primary objective. We are going ahead with our integrated plan. If some things do not work out initially, that does not mean we will abandon the project. It may take us some more time, but we will persist with it.

(Considerable initial losses both in onion dehydration and fruit processing plants notwithstanding, we persisted on continuation and improvement of these ventures mainly because we had a strong belief that these businesses do have bright future prospects. It took us nearly 7 years to make two ends meet and the total losses had amounted to around Rs 55 crore by then.)

The second area we selected for activity is exports. I am wedded to the concept of exports. Thus anything you want to buy from my country, and if you are convinced about my ability to supply it, I will be happy to process such an order. Plexconcil has this year selected us as the top award-winner in the plastics processing industry in the country. Does that not tell you something?

“We are selling inputs. Therefore, we should buy output and process it to add value, so that the agriculture value chain is completed.”

Hotshot Entrepreneurs

Entrepreneurs don't easily give up. They steadfastly keep working against all odds, finding numerous ways to surmount them. They are farsighted and guided by their own value system. In this article you will meet Bhau demonstrating these characteristics and more - to inspire you. Besides you will spot his simple habits - an example in walking the talk.

Entrepreneur to the Core

Calling any successful businessman an entrepreneur would be easy. There are many rags-to-riches stories making the rounds: Of men who struggled and went on to become millionaires, of oft-lauded heroes to look up to for inspiration. However, of men with furrowed brows, obstinately sticking to their guns - in times when making a quick buck matters - and making it big in a subtle fashion, tales are few.

The conservative Bhavarlal Jain may sound like a wise old owl spewing age-old philosophies. No doubt, his no-coffee-or-tea-at-work dictum may border on the eccentric but then the golden rule has worked. Nobody is complaining - not if the sales keep peaking steadily. In true old-fashioned entrepreneurial spirit, Jain believes in a certain value system and sticks by it. He is farsighted in his mission but never compromises on his style of living. Jain never attended a management school but he knows the game - and plays it by his rules. He is not alone in his lessons-never-learned-nor-sorely-missed experience.

Take the world greats like William Hesketh Lever. His aggressive, hound-like business strategy was honed by instinct; his concern for employees was down-to-earth. Lever believed that his company had an obligation to do more than just pay salaries; it should also be in the business of raising the total quality of life of its workers and their families

- a time-tested tradition that has withstood management rules. A more recent exemplary is Walt Elias Disney. The great master of cartoons knew how to promote business. Far removed from the confines of a management rulebook, Disney's gut feeling told him that to deliver consistently quality service, an organisation had to develop both a service and product strategy. These men set out to do things they believed in and, in the process, created history.

Pioneering efforts

Stamp of the Entrepreneur

Stacy Standley III, managing director (India) of Inner-Asia Consulting Group, a San Francisco-based company, was experimenting with pure vegetarian Rajasthani food made in *desi ghee* on a Sunday evening in January, 1994. He happened to be one of the regular-dozen-a-week visitors from USA, Europe and Israel to Jalgaon, who are put up at the Jain Hills farmhouse. Stacy would rather be happy signing trade tie-ups or collaborations over a scotch at Bombay's Belvedere Club. But, Bhavarlal Jain, the Jain Group chairman, has his own way with people, problems and prosperity. And, hardly anyone seems to dislike it.



Early to rise, makes you healthy, wealthy and wise

His employees and others close to him, fondly call him Bhau (brother in Marathi). Bhavarlal Jain (57) is the patriarch of the town's largest industrial group. A teetotaler, he walks 6 km every morning around his magnificent farmhouse with his wife, friends and his toddler grandson, and practices yoga. His professed mission is: "I want to leave behind a better world than the one I inherited".

Paving the Way for Success

He is largely known as the pioneer of drip irrigation in India. However, he corrects the belief, "I have only pioneered the success of drip irrigation in India, while the business was being tried out for at least 15 years before I started."

Having been a farmer by profession himself and a trader of equipment utilised by farmers, Jain had a deep insight into the hard lifestyle and feeble economics of the farming community in Maharashtra. His general knowledge of Maharashtra's water deficiency (not more than 22 per cent of its land can be cultivated with all its underground water resources) came to his help when he attended a conference on non-conventional irrigation at Fresno, California, USA, way back in 1985. Within a couple of years thereafter, his micro irrigation venture was on its way.

Innovative Adaptation

What made Jain a success in a field where other companies like Jyoti, Premier and Voltas could not attain much?

"People make the mistake of treating irrigation systems as products. We integrate the hardware (components, tubing, filters and creepers), and the software (analysis of the soil, the crop and the climate). The result is a custom-made scientific system for every farmer, who enjoys a lifetime after sales support."

It is actually amazing to note that today, the micro and sprinkler irrigation systems are not meant only to conserve water or to put them to use in areas of water scarcity. The real selling point is that they are automated to provide water at low pressure as well as liquid fertilisers

to the plants in the required quantity and quality at the required intervals. This more than doubles the yield and enhances quality of the crop. There is minimum manual handling. Saving of water is inherent or only a consequential advantage. Outside Maharashtra, their systems are sold in 14 states all of which are not necessarily water scarce. The truth is that, rains do not affect Jain's sales which have been doubling every year despite five successive good monsoons.

Effect of Subsidy

So what really does affect its sales?

When a farmer buys the irrigation system, he pays only 50 per cent of the price, and the rest is paid by the State Government.

Is this huge subsidy the real reason for its success?

"Though it was my effort that convinced the government to introduce subsidy on these products, the whole process is mismanaged. I would only be too happy to see the subsidy abolished. That may even increase my sales," smiles Mr Jain.

While this may not sound entirely true, it's a fact that for 1993-94, the government's notification for the release of the subsidy was issued by Jan '94 end, a mere two months short of the year-end. The states are so slow in releasing the dues that the March-end balance sheet shows huge debtors, amounting to more than 6 months' sales.

If subsidy abolition is not the problem for Jain, there must be real big problems that he has faced or he might be anticipating. How this first generation entrepreneur tackles them could be the clue to this group's future growth. "When I face a setback, I simply double up my effort," says Bhavarlal Jain.

Mark of an Entrepreneur

He had in the past taken over a sick banana powder making plant and converted it to produce Papain, an enzyme made from papaya latex. Today, Jain is world's second largest Papain maker. He put significant amount of money in R&D that ultimately when it came to selling the finished goods, he was almost broke. From this experience,

he learnt the lesson of having at least one high volume cash generating business to fund the developmental payout. His closely held company Jain Plastics, one of the largest PVC pipe maker, does this job for him.

And, though margins in this business are falling and volumes are rising, he has maintained his edge by exporting and diversifying into more value-added products like screen pipes and casing pipes.

Current Affairs Analysis

However, as far as the future is concerned, we foresee two major problems for the Group: one, of increased competition and the other, of managing the growth.

Highly Competitive Market

Jain Irrigation Systems Ltd, JISL, has already attracted good competition. Not far away in Nasik, EPC Irrigation is fast on the move. Larger companies like Voltas and Premier are already in the fray. Though JISL's turnover has been doubling every year since inception (Rs 65 crore in 1992-93), the profit margins have been receding. The net profit (excluding non-operating income) was 18.88 per cent of sales in 1990-91, 15.89 per cent in 1991-92 and 10.72 per cent in 1992-93. The current year figures are not going to show a trend reversal either. Anil Jain, MD, projects the 1993-94 sales at Rs 90 crore and net profit at Rs 12.50 crore. This means the sales are no more doubling.

However, this is not seen as a problem at Jains. Bhavarlal Jain says, "Setting turnover targets has never been our fancy. It is so simple to take over running companies, or set up cement or sponge iron plants and take the turnover beyond a thousand crore rupees in a few years. But, we are not in that game," he avers. The problem of competition for him, therefore, is mainly the problem of competing with people who want to make a fast buck. This also means positioning his products differently in the market as the best combination of superior technology and personalised monitoring. And all this requires putting to optimum use his farming instincts outside Maharashtra too.

What he needs to do now is to get equally close to the farmers in

other states, so that they understand that they are not buying hi-tech plastic gadgets, but irrigation systems that could probably double their crop and improve their family economics. This requires not only a nationwide intense marketing effort, but also a futuristic R&D effort.

Towards this end, the company is putting up an ultramodern research facility at a rough cost of Rs 5 crore. Agriculture scientists have already been appointed to man this venture. Genetic engineering experiments are envisaged. A number of tissue culture plant species are being developed in laboratories and green houses, and a sizable success is achieved in the crop of banana. Selection of banana again shows the hands-on approach of the Jains. Jalgaon and the nearby areas have vast cultivations of banana. Further experiments are planned on a host of flowers and fruits. Cash plantations like bamboo and teak are also being successfully experimented upon since 1988.

JISL of the nineties will be a wholly different company from what it is today. It will be a complete agriculture techno-management company, of which irrigation systems will only be a part. JISL already possesses technologically important tie-ups with foreign collaborators.

It has also begun to upgrade and streamline its management systems in tune with international standards according to ISO 9000 QMS series of standards. TUV of Germany has recommended ISO 9001 for its Papain unit and ISO 9000 systems implementation is in process for its irrigation systems and polymer products too.

The Jains are certainly not going to compete with others on the

Investor Snapshot	Financial Summary (Rs Crore)		
<i>Current Activities</i> <ul style="list-style-type: none">• Micro Irrigation Systems• Plastic and PVC sheets <i>New Projects</i> <ul style="list-style-type: none">• Tissue Culture• Green Houses• Water Soluble Fertilisers• Timbron (woodlike polymer product)	Year	1992-93	1993-94
	Income	64.95	90.00
	Net Profit	8.75	12.50
	Equity	10.26	10.26
	EPS (Rs)	8.53	12.18
	Dividend	24%	--
	Recommendation:	--	HOLD

turnover plank. They are prepared to beat the competition in terms of concepts, quality and the direction of growth. This is because, they have an edge over others not in terms of capital (it is a small Rs 170 crore turnover group), but in terms of a strong belief that agriculture will be tomorrow's biggest industry. And they already possess a huge lead over any other company in this field.

Corporate Governance

The second problem, that of managing the growth, generates from the fact that every inch of the factory and the office premises and the plantations and the farmhouse bears the mark of Bhavarlal Jain's sense of cleanliness, methodicity and aesthetics. This typicality also has its flip side.

Though an informal 19-member executive board has been formed to contribute to strategic decision making, the possibility of his four sons and other relatives dominating the show cannot be ruled out. More than that, it also creates a culture, which is too difficult to change when the Group really takes off in terms of number of activities and volumes.

Human Resource Policy

No tea or coffee is served inside the factory and office premises. *Does this mean the company will not hire a top class professional who takes tea and smokes?*

Yes. The policy is nonvariable and abiding. There are many examples where many have just given up smoking to their own delight and happiness of their families. 'No Smoking Policy' is not an example of eccentricity of the old fashioned chairman, but is indeed born out of the deep concern for the health of the associates and welfare of their families. If anything, this is being acclaimed as an added benefit of working at Jains. A good thing is a good thing; period.

The company has an office in New Jersey. How would employees manage to have the same ways of living and working there?

The policy remains the same, within the bounds of local situation.

In pursuit of excellence

Obtaining international accreditation is one way to reassure oneself that one is on the road to excellence. Also that the world will recognise this fact one way or the other. Bhau believes that ISO is not only meticulous book keeping, but also a process, which leads one to proceed and finally achieve excellence. He was therefore very keen to get such an international certification. He knew that it entailed a huge amount of background work and a great degree of consistency, not normally adhered to by manufacturers. He was clear that he did not want to be a run-of-the-mill producer. Hence he set his mind in obtaining the ISO certification and be among the first distinguished fifty in the country. Many burned the midnight oil under the leadership of Mr I L Dudhedia to achieve this.

The defining moment was here. The auditors' team of TUV Germany finally arrived for pre-assessment audit. They had a two day long audit programme with all the concerned technical and non-technical staff, and were pleased to find the deep penetration of system in the spirit of the ISO programme. Finally they arrived in Bhau's cabin to assess the level of commitment to this subject by the top management. They began with commercial and routine questions but probing deeper, crossed over to the technical aspects. They perhaps forgot that Mr Jain was neither a scientist nor a technocrat. However, at the end of the meeting, they inadvertently addressed Bhau as Dr Jain. The preceding technical discussions misled them to address him as 'Doctor'. No wonder the ISO certification was granted to the Papain unit in 1995 at the pre-assessment stage – an unprecedented step by TUV Germany.



Micro propagation of tissue is an extremely promising bio-technological technique for enhancement of agri-resources productivity and reduction of crop life cycle. We have pioneered and commercialised tissue culture of banana plantlets of the Grand Nain variety. The banana farmers have benefitted immensely since the productivity has jumped by over 100% and harvesting cycle has reduced by about 30%. This has enabled the farmer to obtain higher return per unit of water, land and every other resource employed.

Notwithstanding teething troubles, the business has been a resounding success. Much to the delight of the customers, the technology has enabled banana growers to grow banana in non-banana growing regions as far as the North-East. Neither customers nor farmers there had ever seen banana growing on such a scale and with such an outstanding quality. This has enabled the customers to obtain good quality banana at an affordable price. Earlier the Jalgaon Banana used to go as far as Jammu & Kashmir. What a waste of national resources in terms of transport and packaging, resulting in environmental pollution!

Picking Out New Projects

“I often tend to philosophise on propositions and get on with concept selling without proper research to back the feasibility of the

Till date, even when the turnover in India has reached Rs 1,740 crore, JISL continues to have the same policy in place. If any top-notch professional insists on spoiling his lungs and inviting a heart attack, he is requested to go outside the campus, have a puff there and then come back. However, to everyone’s surprise, not a single professional, whether from home or abroad, appears to be doing so. It has just become a part of the culture. Nobody seems to even remember that smoking is not permitted within the campus. Nobody does it and therefore nobody feels like doing it! That’s it.

project. I start things on intuitions and hunches and pack them with enthusiasm that is uncommon among others. This could be one of my weaknesses,” discloses Bhavarlal Jain. “However, now this weakness has lost relevance as funding of any new project will require detailed research on viability to satisfy the institutional lenders or prospective equity investors,” he is quick to clarify. For example, his new project –

Even in offices and plants overseas, we are incentivising associates who wish to adopt 'No-Smoking, No killing for food - way of life' with encouraging results.

solar energy water heating systems – is backed by his conviction as well as a thorough research on the subject.

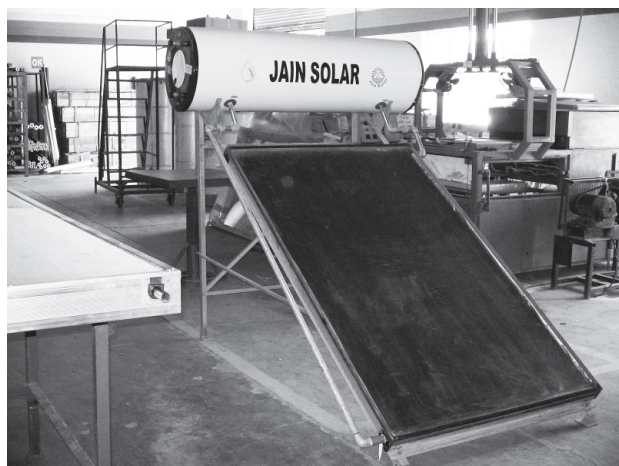
More than 50 players in this field of solar energy heating appliances have been trying out these systems over the last 10 years without considerable success. In this way, this project is similar to irrigation systems where a lot of people toyed with the idea years before him. Jains' will be the first organised effort costing about Rs 10 crore aimed at solar energy into homes, hotels and hospitals on a mass scale.

Investment Prospects

JISL has decided to make a GDR issue of \$ 30 million to fuel its major projects in horticulture, plantations and solar energy systems. It will once again make history by pricing the issue at a 10 per cent premium over the ruling market price of Rs 330. Being quoted at a P/E ratio of



Bhau at the New Jersey Office



Jain Solar Water Heater System

over 30 and then pricing its GDR issue at a premium will certainly benefit its shareholders more than a bonus issue would, believes Anil Jain. Jain Plastics is also proposing to go public with an equity issue to fund its Rs 70 crore project in mid-1994.

The division has finally reached a turnover of Rs 20 crore in 2008 which can be considered as critical mass. Next year's target will be around Rs 50 crore. And by year 2013-14, the division turnover is expected to reach Rs 200 crore. Though delayed, the success is remarkable.



Jain Solar Lighting System - Jain Jyot

The Dream: Prosperous Farmer

Assuming that you succeed in all these projects, what would you like your Group to be?

“I believe that quality is a journey and not a destination. We have to continuously strive for that. Above all I want the next generation to own better ideas than I do,” avers the senior Jain.

The sun never sets on the Jain Hills – is the final dream.

“When I face a setback, I simply double my effort,”

Sowing New Seeds

Entrepreneurs often know the market pulse well. Not keeping all eggs in one basket is another important attribute of any entrepreneur. Bhau made a strategic decision about export thrust and diversification. He had enough money from GDR – his reputation had gone beyond the oceans – to fund all his plants. Moreover, he was also exploring the new opportunity which was coming up in the form of corporate farming.

Irrigation Market Perspective

Jain Irrigation pioneered the concept of drip irrigation in the country and today rules the roost with a 65% share of the Rs 100 crore domestic market.

Why then is the Rs 63 crore Jain Irrigation Systems so keen to diversify and reduce its dependence on a market that has been growing at an annual rate of 46% over the past six years?

The reason: subsidies, which will soon start disappearing, and so will Jain Irrigation's assured market. Explains Chairman B. H. Jain: "The traditional buyer of an irrigation system is the debt-ridden farmer. These farmers are accustomed to relying on government largesse for buying these systems, which, in most cases, works out to 50-75% of the total cost."

Concedes managing director Anil B. Jain: "Companies involved only in drip irrigation are likely to be affected in the long term."

Currently, drip irrigation systems contribute for more than 90% of the turnover. The game-plan is to reduce this to 30% over the next two-three years.

MARCH 1994

Bankers Trust Company is pleased to announce its appointment as
Depository Bank for the sponsored Depository Receipts (EDRs) of




Jain Irrigation Systems Ltd.

Jain Irrigation Systems Limited

US\$30,000,000

We have been chosen to participate because our Clients consider us
to be the best. Our culture will be focused on working smarter,
better, and faster in the pursuit of our common cause:
delivering unparalleled Client Satisfaction.



Bankers Trust Company
Corporate Trust & Agency Group

Global Depository Receipts Issue - 1994

Export Drive

On the cards are a host of projects, involving an investment of approximately Rs 107 crore (from a \$ 34.5 million global depository receipt, GDR), most of which will be for export-oriented units. "Over the next couple of years, we want to ensure that export earnings constitute close to, if not more than 50% of the total turnover," points out chairman B. H. Jain.

Drip irrigation systems too, will form a part of the export thrust, which will be concentrated largely on developing countries. Recently Jain Irrigation bagged a \$ 300,000 order in Egypt.

Branching Out

The diversification programme was flagged off when Jain Irrigation tied up with Kemira Agro of Finland for the manufacture of water-soluble fertilisers. A new company Jain Rahan has been promoted for tissue culture project, the aim being to bring home the bacon from overseas markets. And the Jains are also keen on solar water heating systems.

Water soluble fertilisers – powder or liquid – were almost unknown to Indian farmers prior to our entry in the field. We picked up the idea from Israel and JV partner Kemira Fertilisers, BV, Holland. These fertilisers could be dispensed through the fertiliser tank, given as an attachment to the micro irrigation system. Application of water soluble fertilisers through drip fertigation, was an innovative attempt. It did meet with reasonable success. However, transportation costs turned out to be exorbitant. Hence the product usage remained confined only to about 1% of the big farmers.

Moreover, we had to depend on imports from our JV partners and difficulties in maintenance of quality till the product reached the farmer worked out to be intractable. To produce these in India was the only way to make it affordable as well as feasible. At this stage, the JV partners said that they would not transfer the technology till the Indian market reached a decent size. They did not agree to provide the know-how. As a consequence, the JV fell through and we had to disband the business.

“The importance of alternate energy sources will become more important now and so will the task of convincing people to go for them. The thrust will be on heating and not on power generation,” explains the chairman. Adds managing director Anil Jain: “We believe the main focus in solar energy will be heating.”

In what could be construed as an attempt at forward integration, the Jains have plans to set up greenhouses. The focus will be on horticulture products, which could be grown independent of external climatic influences, ensuring a steady export market.

Value-addition is another popular Jain buzzword. In the works is a project to make banana pulp – Jalgaon produces 1.6 million tonnes of bananas annually – which will be exported.

The Jains are also considering branding their products. Surveys have revealed that there is strong potential in branded commodities, provided the right brand pull is created. Although the final decision has yet to be taken, depending on the demand, the products could either be in concentrate or puree or juice form.

New Opportunity

Meanwhile, Jain Irrigation is eagerly looking forward to the fallouts of the easing of the Land Ceiling Act in Maharashtra. This will allow corporate to buy large tracts of uncultivable land for development, even up to 1,000 acres and more. The Jains are very optimistic on this score.

For one, instead of selling irrigation systems for small tracts of land (ideally 2-2.5 acres), the company can now focus on the volumes game by selling large systems to big buyers. Jain Irrigation itself is looking for a joint venture with an overseas company to enable it to take up around 5,000 acres of land and develop it commercially. Says B. H. Jain: “With a venture like this, I can demonstrate how agriculture can be made into a professional and profitable business.”

Clearly, green thumbs and green backs have a lot in common.

“It is my strong belief that agriculture will be tomorrow’s biggest industry.”

Success Story

With a compelling work ethic, Bhau, entrepreneur to the core, has built his organisation responsive to required speed all around. He did India proud by his Ex-Cel brand of plastic sheets marketed in developed countries. While developing new products and services, he keeps strengthening his R&D thrust.

Work Ethic

A 30-feet-tall metal idol of the Sun God, which stands on the sprawling 165-acre estate of the Jain Group of Industries, signifies the Group's corporate philosophy. Prominently displayed slogans like 'Work is life' or 'Work for the pleasure of working' abound on the premises - indications, as it were, of the deeply ingrained work ethic of Bhavarlal Jain, the first-generation patriarch of the Group.

Achieving Eminence

The success story of the Jains - a medium-sized industrial house based in Jalgaon, northern Maharashtra, which manufactures a diverse

Change is also Creativity

Having erected the Sun-Man on the top of Jain Hills, Bhau was very happy looking at the majestic towering figure from the bottom of the hill. However, he had also undertaken the afforestation of the hills on a war-footing. In about seven years he discovered that the imposing statue of the Sun-Man was no longer visible because the trees all around had totally hidden it. He therefore relocated it on another hill across the road. As usual, he has undertaken afforestation of even that hill. But it will be at least another seven years before a need to relocate may arise. Create something and keep creating, undaunted by the contradictions, so natural to the process of creation and creativity.

range of products – began with Bhavarlal H. Jain, the founder architect of the Group. Starting off with a paltry capital of Rs 7,000 in 1963, Bhavarlal traded in petroleum products, fertilisers, metal sheets and later tractors. In 1978, he converted a sick banana powder manufacturing unit into Papain processing unit – and from this point onwards began his rise to prominence in the industrial sector.

Over the years, the Jains have won laurels at both, home and abroad. The Group has pioneered the concept of not only micro irrigation systems but also spirally wound, lightweight, large-diameter, Rib-loc pipes in India. It is now the second largest producer of Refined Papain (an enzyme used in food and pharmaceutical industries) the world over.

Bio-Technology Projects

Recently, Bhavarlal Jain joined a delegation, headed by the Maharashtra Chief Minister Sharad Pawar, to Israel, even before diplomatic ties were rebuilt with that country. The visit enabled him to think and devise the concept of total agriculture for Indian farming. Quick to realise that water scarcity was likely to become a perennial problem, he signed an MOU for pioneering tissue culture technology and green house concepts.



*Bhau in Israel alongwith Sharad Pawar, Chief Minister of Maharashtra (May 1993)
at the signing ceremony of various collaborative ventures*



Grand Nain Tissue Culture Banana Bunches - bending the plants on account of their weight necessitating props to be put up

A visit to the sprawling Jain estate reveals the enormous amount of work that has been undertaken. The scientists at the tissue culture laboratory are involved in re-duplication of the ‘Grand Nain’, ‘Basrai’ and ‘Shrimanti’ varieties of banana among others. Simultaneously, work is on to develop tissue cultures of horticulture crops, ornamental flowers, teak and bamboo.

Meanwhile, four new laboratories are being set up with the help of the Rahan Meristem Group of Israel. The Jains have made an investment of Rs 20 crore in these plants, each of which will have the capacity to produce five million plants per annum. The capacity of the existing plant is 1.5 million.

Two other popular varieties of banana from Israel – Williams and Zelic – are being grown in green houses on the farm estate. Clones of these Israeli varieties – which yield up to 40 kg per stalk as against conventional Indian varieties, which yield 20 kg per stalk – are expected to be supplied by the Group to farmers in Jalgaon shortly.

(Out of the many Israeli-American varieties, finally, we chose Grand Nain for micro-propagation through tissue-culture. This was mainly because it was researched to be agro-climatically more suitable for cultivation in this region, export-worthy and popular both, in Europe as well as US. It is less susceptible to diseases and viruses and has greater

potential in terms of weight of the bunch. After initial reverses, the business progressed from sale of 30,000 plants in a year to about 1 crore plants in the year 2007-08.)

Pushing MIS Exports

The total micro irrigation system (MIS), being manufactured at a newly set up separate plant in the Jain Irrigation complex, has already started creating waves. The domestic sales of the system to date have aggregated to over Rs 129 crore.

A new range of drippers and unique state-of-the-art line source tubing is being added to expand the existing product range. Field research activities have been augmented and a separate R&D division has been created in the manufacturing plant for meeting future needs. The company has plans of expansion in the export market by offering integrated turnkey projects to its clients involving the application of high technology agro-consultancy. And its recent tie-up with the Israeli Agency, AGRIDEV, was towards achieving this objective.

EOU Activities

Meanwhile, the company's brand name for plastic sheets Ex-Cel has already become a significant player in the European market and is also doing well in the US. PVC integral foam sheets have now been added to the Ex-Cel family of rigid foam PVC sheets; and the Group will soon add to this range polycarbonate, acrylic sheets and polycarbonate corrugated sheets and polystyrene-based Timbron wood-substitute profiles. The Jains have also embarked on the manufacture of custom-molded articles, and are currently negotiating the supply of sophisticated molded electronic and medical components to major buyers in the US and Europe.

Harnessing Solar Energy

The Group has now set its sights on the manufacture of solar water heaters, and recently signed a technical license agreement with Amcor Limited, Israel, for the transfer of technology in the field of solar water heating. The product is expected to be launched in the Indian market in the last quarter of 1994.

"I want my enterprise to make the land greener, the houses more beautiful and the small farmers more prosperous."

Looking Forward

Bhau like any other first generation entrepreneur, has developed his own work ethic. He believes in speed, in doing in time and within budget whatever requires to be done. He is very clear in his thought processes and expresses his unreserved opinions.

Pioneer of Drip Industry Success

“Agriculture,” says Bhavarlal Jain, “is the very soul of India’s economy”. He should know, for today, he is acknowledged as one of the country’s leading pioneers in agricultural technology and methods that have changed the face of the parched earthscape around Jalgaon. His name is synonymous with the drip irrigation technique, a system of controlled water management that can constitute the very backbone of India’s agricultural advancement.

Successful Adventures

The success story of the Jain Group’s founding father, Bhavarlal Jain, is a fascinating one : the stuff of which legends are made. And that seems appropriate enough for a man who has achieved the rare distinction of becoming a living legend. Though his start in life was with a law degree in his pocket, his destiny lay in the soil. This since he was born into a long established family of agriculturists in Wakod village, close to Jalgaon, the same land that nurtured, centuries ago, the exquisite art of Ajanta. He soon abandoned any ideas of making the law his profession, and with capital made available by his family, he started retailing kerosene as a sub-dealer of the American MNC, Esso.

A modest enough beginning, but for the young Jain, it was a challenge, a chance to learn and use aggressive marketing techniques and business methods, selling kerosene door-to-door at a price lower



Wakod Village where Bhau was born

than the market rate. Esso was not slow in recognising the extraordinary drive and potential of this young man, when it broke with precedent to award him four dealership agencies. From kerosene, he diversified into retailing petrol, diesel, domestic gas and lubricating oil.

The turning point came with his venture into the process of making the enzyme Papain from papaya milk. Papain, he discovered, was in universal demand as an essential ingredient used in food processing and pharmaceutical industries. The small venture grew and his company poured funds into R&D to develop deodorised, ultra-purified papain. Today the Jain Group is the largest producer of Refined Papain in the world, meeting 20% of the global demand.

The marketing of PVC pipes, again started in a small way, saw some remarkable innovations: with high capacity extrusion lines imported from Austria, the Jain Group added its own technical innovations to these already advanced machines, such as pre-heaters and triple extrusion heads, which boosted production capacity by as much as 60%. These improvements were incorporated into the latest

machines being produced in Austria. Today, the Jain Group is the single largest manufacturer of PVC in the country.

Agri Irrigation

The association with the farming sector led naturally to the next step of acquiring drip irrigation systems built around PVC pipes. This technique, whereby precisely controlled amounts of water and nutrients are directly applied to the root zones, offers enormous water resources and cost savings with a dramatic increase in productivity.

Social Commitment

With the Group's net worth registering an annual average increase of 212% over the last decade and a track record in financial management, which has enabled growth and diversification at tear-away speed, it is reasonable to predict that by the year 2000 the turnover will reach the Rs 1000 crore mark. However, in the words of the man whose credo is 'Work is worship', "In my efforts to generate growth for my Group, I cannot lose sight of my basic commitments in a certain philosophy - to concentrate my investments in and around Jalgaon so that I can serve the community in the area of my birth. In fact, I have chosen to invest in businesses which also serve a social end like drip irrigation, manufacture of foam sheets, (and those) which will all conserve scarce natural resources."

Exclusive Interview

The dynamic chairman of the Jalgaon-based Jain Group of Industries, Mr Bhavarlal Jain talks to Network on a wide range of subjects, from hi-tech agricultural to his personal commitments and work ethics. With this interview, we present here a profile of one of the most remarkable industrial pioneers of the country alongwith some glimpses into his private thoughts and opinions as an individual, family man and loving grandfather.

Q. How would you define your personal work philosophy?

A. It is stated in just three words, "Work is life". This is a statement depicting our work culture and the Group's corporate commandment.

Q. What are your plans for your birthplace, Jalgaon? When will your plan to start a management college bear fruit?

A. I have chosen to have a commitment - to make, as far as possible, all investments and locate our ventures in and around Jalgaon. I owe my growth to the soil and people of Jalgaon, and therefore, it is my responsibility to reciprocate by ploughing back capital to the maximum extent I can for fostering development and employment opportunity here.

In our priorities we are developing a training centre for advanced agri technology for use by farmers in India. After it is developed, we plan to extend it into a Rural Management Institute as a first step prior to fashioning a full-fledged Management School.

Q. You are known to be committed to key conservation issues. What concrete form has your commitment taken?

A. It is true that we are committed to key conservation issues and our products represent it: micro irrigation systems conserve water. The various plastic sheets we manufacture are wood substitutes. We are going into production of solar heaters, which is another area of energy conservation.

Q. What are your views on the recently concluded GATT world trade negotiations and the Dunkel Draft?

A. I have no doubt that the recently concluded GATT world trade negotiations and the Dunkel Draft would be to the advantage of economic growth for both, industries and agricultural sectors, as far as the country is concerned. It is time we shed off our sheltered existence and get into the international mainstream. This would certainly attract a high degree of competitive pressure, but it is only such a challenge which can assure required advancement so badly desired to convert a developing economy into a developed country. I have no doubt Indians, both in the field of industry and agriculture, can acquit themselves handsomely and prove equal in their offerings to match the best in the world.



(This was not to say that every provision in the GATT or Dunkel was fair. It only suggested that there is a ground for further negotiation and that they must be continued.)

Q. What has held Indian industrialists back from achieving global domination in any field? Do we, as a nation, lack the professional approach to reach the top, internationally?

A. Primarily it has been the government restrictions which have shackled the Indian industrialists from playing a global role in all fields. Once these shackles are broken and industrialists are given equal opportunity, there is no question that Indian entrepreneurs would find a place of respect and success in the international market. We are equipped to absorb advanced technologies and since we are a low cost producing area, we have an edge in the international sphere over high cost developed economies. Should we be able to maintain our traditional Indian ethos, we cannot fail to reach somewhere close to the top, globally, in the next decade.

Q. You have successfully orchestrated the explosive growth of your business empire year after year. What would you say is the right mix for achieving such steady growth for other medium-sized groups in India, in today's economic climate?

A. I believe it is primarily the spirit of entrepreneurship which counts for growth, and it is a combination of identifying an opportunity and willingness to assume risk to mobilise the wherewithal to cash the opportunity. Additionally, this spirit of entrepreneurship must be backed with a mindset to ensure that what is required will be done within time and within budget, notwithstanding obstacles. The rest is a very mundane affair of managing resources.

Q. Do you agree that as a nation we are not educating our children properly? What can be done about this?

A. We, for the sake of our posterity, must reorient our educational system totally. We must shed off the remnants of the colonial system and refashion it for a vibrant, independent and growing nation. The whole system has been diseased with corruption and decay. There is no hope of salvage unless we change it to produce youth who are well

educated, cultured and committed to values that foster the result - achievement, hard work, integrity and dignity of labour.

Q. If you had a choice of sending your grandson to MIT or to Bombay's IIT, which would you opt for? How would you rate the best of our professional institutions against those of the USA/ UK? Why can't we set up world-class educational institutions in India?

A. In my assessment, our professional institutions can compare with the best in the world, provided they are allowed to operate without interference from self-seeking politicians and bureaucrats. Let them be managed by those who are competent to do so and these can then stand out as world class educational centres indeed.

As for my grandson, he will decide where and what to study when he reaches that age.

Q. Do you have any activities unrelated to your work? Have you had the time to develop any hobbies?

A. I read a lot and I contribute whatever time I can to promote community welfare. I believe the best an individual can do is to keep oneself fit in body and mind so that he is able to contribute his best self in whatever task he may undertake. I certainly spare all the time I can for this purpose.

Q. What are your five favourite books?

A. I don't think it is possible to single out any favourite books. Except reading fiction, I enjoy reading various authors who deal with philosophy, work culture and management education, apart from scriptures.

A day in the life of the Patriarch

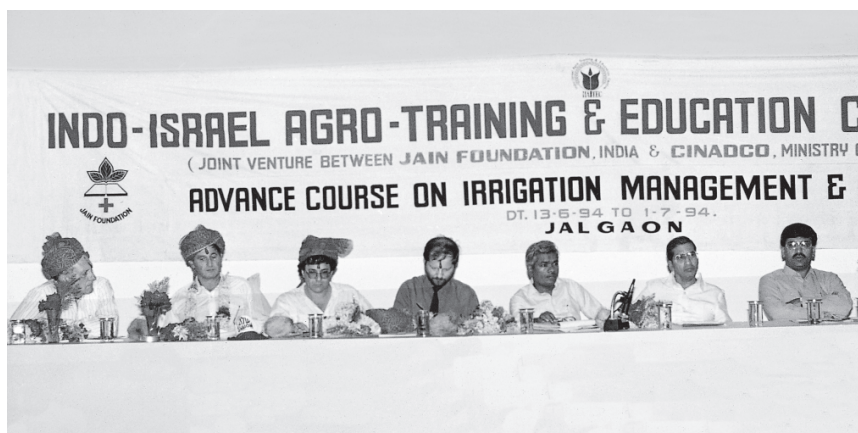
"I get up at about 5 am and go for a walk at our R&D farm. Some friends and my grandson, Athang, join me. Later we do yoga and meditation. By 8 am I finish my morning routine and thereafter start attending to my commitments. I receive visitors at our Jain Hill farmhouse or have discussions with my associates regarding development and progress of new projects.

Looking Forward

By about 11 am I go to the factory and attend to whatever requires my attention. I have lunch with my sons and some selected friends and colleagues in the factory. After lunch I take some rest. Thereafter I get back to work, but I finish my evening meal before sunset. After work I go home and play with my grand-children and spend a few hours with my family, till I leave with my wife and grandson to retire for the night at my farmhouse at about 11 pm.”



With his wife Kantabai and grandson Athang on the morning walk



Integrating the Israeli connection (1994)

The Israeli Tie-up

The Jain Group, this year, has signed some significant agreements with a country that has achieved the most stupendous success in agriculture : Israel.

Speaking of these, Mr Jain says “Jain Foundation has signed an agreement with an agency of the Government of Israel to develop a centre for training of farmers in the Israeli way of agriculture, deploying advanced technologies. The first training under the aegis of Jain Foundation and CINADCO has commenced on June 13, 1994.

Between 1996 and 2001, JISL went through a rough patch. At the same time, the Israeli local MI manufacturers raised a hue and cry regarding CINADCO’s know-how transfer MOU with Jain Foundation. This was because though a trust, it was a private trust, supported by JISL. Moreover, there was a change in the top leadership of CINADCO in Israel. This MOU, thereafter, went into cold storage and remained there for about a decade. Subsequently in 2007 CINADCO has expressed a keen desire to work with JISL under an Indo-Israel agri-initiative programme. History is repeating itself because today JISL has also become a part of the Israeli MI industry, having acquired a significant stake in NanDaan.

Use of these technologies would help in improvement of yields, quality of produce and thus result in better incomes for the agriculturists. Deployment of such technologies can also result in our producing agro-based products of international quality which can bring in substantial export earnings. This can also assist in our developing agro-based industries like food processing, with consequential favourable results for the agriculturist and for the national economy”.

Other technological know-how being acquired from Israel includes the pioneering of tissue culture technology and green house concepts. New laboratories are nearing completion with the help of Israel's Rahan Meristem Group. Jalgaon farmers can expect to be supplied with high yielding Israeli banana varieties.

Rahan Meristem, Israel, went into deep financial crisis and could not keep its part of the bargain to provide training to our people. It did provide protocols and starting material for different banana cultivars. As such, Jain Rahan Bio-tech Pvt Ltd, Jalgaon, had to be finally merged with JISL on 01.04.1996.

Mother Knew Best

When the going was tough, Bhau got going with his hard work and strategic thinking. Entrepreneurs at such junctures begin receiving support from unexpected areas – government subsidy and liberalisation in this case.

Miracle on the Barren Hills

Amid the dusty, barren hills outside Jalgaon, a small city about 400 km northeast of Bombay, lies an oasis of neatly cultivated green fields of banana and papaya plants and grapevines. This is where Bhavarlal Hiralal Jain watches over his \$ 34 million (revenue) Jain Irrigation Systems Ltd, one of India's most successful and forward looking agricultural companies.

The arid soil blooms because of Jain Irrigation's drip irrigation systems, which provide a specified amount of water directly to the root zone of each plant. This technology increases average yields by 45% and takes only 30% of the water used by traditional canal irrigation systems – a critical factor in water-scarce areas like Jain's home state of Maharashtra in Western India.

Trading Years

As a boy, Jain helped farm his family's land in the village of Wakod (population 2,000) near Jalgaon. However, after earning a law degree from Bombay University in 1962, Jain, now 57, was prepared to settle into a comfortable civil service post. Fortunately, his mother had other ideas. "My mother convinced me to take more risks and start a business on my own," Jain recalls. She even gave me a guideline when she said, "Don't merely do something, which will help feed the bellies of people associated with you. Do something that will take care of even the animals and birds as well as plant life."

In 1962, a major petroleum company was looking for a distributor in rural Maharashtra. Jain convinced his family to contribute their total savings – about \$ 1,000 back then – to become the distributor. As the business grew, he brought in uncles, brother and cousins to help out.

Over the next 15 years, the Jains expanded from petroleum distribution into trading fertilisers, seeds, insecticides, electric pump sets and then cars, trucks, motorcycles, tyres, and even pharmaceuticals. Later they also manufactured plastic pipes and Papain, an enzyme derived from papaya (latex) that is used in pharmaceutical industries. Sales hit \$ 13 million (at current exchange rates) by 1985.



Bhau's mother Gaurabai

Beating the Blues

“But I am a farmer at heart,” Jain says. His heart leaped in 1986 when he visited an agricultural products trade show in Fresno, California and saw drip irrigation system technology. Turning the trading businesses over to family members, Jain set out to license the irrigation technology and start a business to manufacture it. The Italian owners were willing, but not so the Indian bureaucracy. “The bureaucrats didn’t understand why we needed a technology to distribute water,” says Mr Jain. “They didn’t understand how crucial it was for the farmers as well as Indian agriculture.”

After 18 months of haranguing government bureaucrats in Delhi, Jain was finally given a license to start his irrigation company in 1987. At first, the farmers were almost as tough to convince as the bureaucrats were. “We had to educate them about how it could help,” says Jain. As a kind of showroom, Jain created the oasis in Jalgaon, as well as other demonstration farms around the country, and invited farmers to visit so they could witness firsthand the miracles his systems could perform.

Strategic Thinking

Still, few farmers could afford the \$ 500-and-up cost of Jain's drip system, and Jain was unable to reduce prices because of low volumes and high tariffs on imported raw materials for the system's plastic parts. So he went into a higher-margin business to support his irrigation project: plastic sheets, used as signs and windows. Today plastic sheets account for 40% of Jain Irrigation's revenues.

Ironically, Jain got his biggest break from the same bureaucracy that had first stifled him. In 1989, the Indian government created a subsidy program for small irrigation systems, paying up to 50% of their total cost. The following year Jain Irrigation's sales nearly doubled, to \$ 5.5 million; this year irrigation sales are expected to hit \$ 27 million.

The Prospects

"As farmers become more aware of the benefits, word of mouth, instead of the subsidy, is driving sales," explains Tapasijee Mishra, an analyst who follows the company for SSKI-Smith New Court, a Bombay-based securities firm. Noting that only 0.5% of the agricultural land in India suitable for drip irrigation uses drip system, Mishra expects the market to grow at 30% for at least the next four years.

What a prediction! The sales of micro irrigation division has been growing continuously at the rate greater than expected / predicted by Mishra of SSKI. Indeed, the graph below illustrates the phenomenal growth year upon year.

Growth Plans

Thanks to Prime Minister Narasimha Rao's liberalisation program, businessmen no longer need government approval for every investment. Jain is using his newfound freedom to diversify. He has begun to manufacture green houses, liquid fertilisers and solar water heaters.

To fund these projects, Jain Irrigation raised \$ 30 million in equity capital on the Luxembourg Stock Exchange early this year. Jain and his family own 31% of the company, a stake worth \$ 36 million.

“This wouldn’t have been possible before the Rao Government policy of liberalisation,” says Jain. “Now I can really grow.”

The company’s turnover in 1994 was Rs 92 crore. As of March 2008, sales from India alone accounted for Rs 1,720 crore. The company has, therefore, as predicted by Bhau, grown multifold and gone places. In fact, all over the world.

“It is time we shed off our sheltered existence and got into the international mainstream to convert a developing economy into a developed country. ”

From The Grassroots

Using ingenuity, creativity and vision, Bhau has overcome seemingly insurmountable hurdles. With his holistic approach, Bhau has identified and included several synergistic products. In order to succeed in his aggressive marketing, he has created a unique rural dealership network in stark contrast with the traditional distributor-dealer network approach.

Building Empire from Scratch

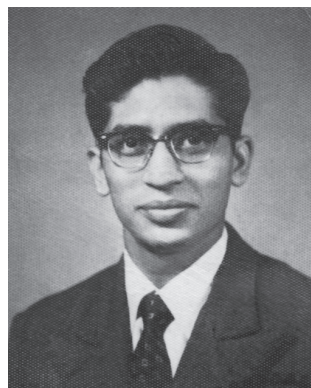
Here is a modern fairy tale about a winning investment. A young Marwari belonging to a trader-farmer family gave up a cushy job he had secured as a gazetted officer. Instead, he invested Rs 7,000 and a lifetime in business.

Today, 32 years later, it is easy to agree that as 25 year young Bhavarlal Jain had made the right, if evidently risky, decision. Jain is today chairman of the Rs 210 crore Jain Group headquartered in Jalgaon, Maharashtra.

The performance indicators of the Group's flagship company, Jain Irrigation Systems Ltd, JISL, give a pretty good idea of just how rapidly this low-key businessman from this little-known town, 420 km northeast of Bombay, is getting ahead. Turnover leapfrogged from Rs 35.50 crore in 1991-92 to Rs 65.00 crore in 1992-93 to Rs 92.70 crore last year. This year, it should be up to about Rs 150 crore.

Export Advance

Much of that impressive picture has been painted by exports. They have doubled



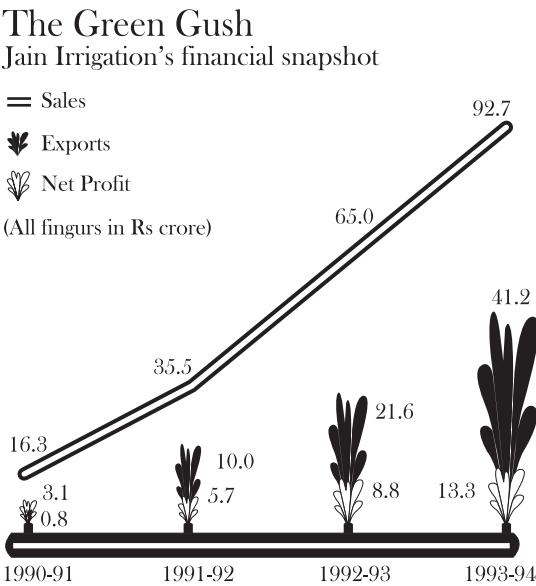
The young Bhau (1961)

consistently each year since 1991-92: from Rs 10.00 crore to Rs 21.60 crore and from Rs 21.60 crore to Rs 41.20 crore the last year. In 1993-94, besides being the top Indian exporter of PVC (polyvinyl chloride) sheets, JISL was also the country's second largest exporter of PVC pipes. That trend of doubling exports will more or less hold in 1994-95 if the target of Rs 75 crore is met. In other words, half of JISL's turnover this year will come from exports.

Surmounting Obstacles

What makes Jain's story special are reasons beyond just raw growth. He is currently one of the best examples of Indian entrepreneurship. Like other entrepreneurs, he has faced innumerable hurdles: a paltry seed capital, a rural background, virtually no exposure to business matters, location of industry in a backward region. However, through sheer determination and ingenuity, he has surmounted all obstacles.

There is more. Most entrepreneurs seem to have only one big idea within them and they are rarely able to build on their initial success. Not so for Jain. Constantly hunting less explored areas that are synergistic



with agriculture, plastics and exports, he is currently in the process of weaving an intricate structure of businesses.

Family Support

It was not always so good. Jain had to struggle to complete his education. The turning point was when he chose to take local dealership for the petroleum products. His business instinct was soon evident. Instead of selling kerosene in the heart of Jalgaon, as was the practice, he adopted a door-to-door approach. It worked.

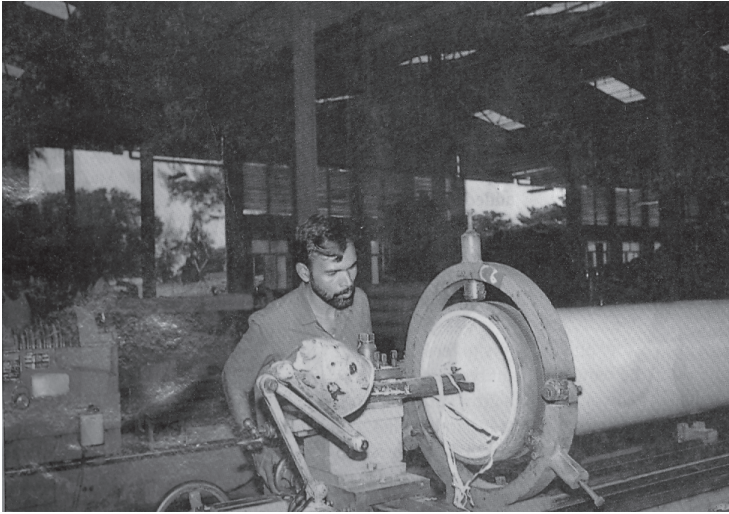
Later, he was joined by family members including his brother, uncles and cousins. His father had retired by then. Says Jain: “They submerged their identities so that I could fulfill my ambition to set up businesses.” Being the first graduate in the clan, Jain was the natural leader. Recalling the early excitement, he says, “All of us were charged with the feeling that we were destined to do something special.”

Between 1962 and 1978, Jain took up dealerships for a variety of products including fertilisers, farm machinery and tractors, seeds, pesticides and PVC pipes. Among the 59 principals he represented were the likes of Ciba-Giegy, Escorts and Ashok Leyland and National Seeds Corporation. He was glad for this association for more than just immediate profit. He learnt his basic lessons in modern business during his interaction with executives of these companies, especially Esso. As he admits, “They taught me about aggressive rural marketing. This background became my asset for the future.”

Forays into Industrial Activities

Jain made his first foray into manufacturing in 1978, when he took over a sick banana powder unit and used it to produce Papain, an enzyme derived from papaya. Papain is used extensively in baby foods, breweries, meat preservation, chewing gum and toothpaste industries. The entire production, worth Rs 2.60 crore the last year, is exported.

Next step came in 1980, when Jain got into making PVC pipes, used to supply water for irrigation in farms. This adventure came about almost accidentally when one of Jain’s suppliers of PVC pipes



The PVC pipe unit: a happy accident

(Chemplast) failed to make sufficient PVC pipe supply as required by Jains. Instead of throwing up his hands, he bought an old machine from Calcutta and had it repaired. From then on there was no looking back. Within two years, he added several more imported machines to become the largest producer of PVC pipes in the country.

To take advantage of government concessions for small-scale industry, Jain set up several such units, all on the same premises. Though separate legal entities, they had many common facilities, making for cost efficiency and operational flexibility. He went on to set up a strong dealer network in rural areas, permitting aggressive marketing. In 1992-93, to avail of excise benefits, he amalgamated the individual pipe companies into Jain Plastics and Chemicals Ltd (JPCL).

Freedom of Responsibility

In 1985, Jain partitioned his business amongst family members, so that each branch had clearly demarcated areas of responsibility and opportunity to grow. His explanation, “This gave everyone the freedom to manage his own business. At the same time, I could devote more time to train my sons and reduce the possibility of any future conflict between succeeding generations.” All this while, Jain had also been

training his cousins and nephews. His concern: “Ensure that the second generation does not squander the achievements of the first.”

Value Added Product

At about the same time, Jain realised that he needed to move into the next stage of value-addition. PVC pipes were high-volume low-margin products. As numerous small manufacturers began to sprout all over, Jain found it hard to compete with them on price since the cost of transporting pipes is high. As his son, Anil Jain, 30, now the managing director of the Group, remembers, “In 1985-86, we thought that we had reached a plateau in PVC pipes. So, we decided to move from marketing a commodity product to a value-added one.”

That is how the journey into micro irrigation systems (MIS) began. MIS is a network of pipes that carries water and nutrients to feed each plant the requisite quantity at its roots. It is generally used to grow cash crops besides finding use in landscaping and agro-forestry. In 1988, JISL was set up with the promoters providing half the equity and public contributing the rest.

Initial Hurdles

The concept of micro irrigation was not new to India. It had been around since 1972, and several companies – including Voltas – were already in. However, the idea had stagnated. When JISL approached an Israeli company, Netafim, it refused to share the know-how. Therefore, Jain settled for James Hardie Irrigation of Italy.

Jain also had a torrid time before finally convincing government officials about the need to import micro irrigation technology. That done, there was the mindset of the Indian farmer to deal with. The problem, in Anil’s words: “Farmers had been taught that more water meant more yield. And here I was telling them to use only 30% of their current consumption.”

Two-thirds of JISL’s branded plastic sheets exports find their way to Europe. Exports have helped Jain Irrigation grow by 161% in just two years.

Rural purchasing power was another hurdle. Though government agencies subsidized MIS purchase to about a third, farmers nevertheless found the cost prohibitive, given their small holdings. The procedure to disburse the subsidy was complex too, leading to innumerable malpractices. Says Jain, “If subsidies solve two problems, they create three more.”

JISL’s approach to popularising the MIS concept was innovative. Instead of selling it as a product, it was marketed as a package, one that included, among other things, a survey of the terrain, installation (by engineers), after-sales service, agronomic support and field research. Says Anil, “In India, most agricultural dealers were used to selling components. But we were selling a complete package with service.”

Marketing beyond Shores

The company’s growth was rapid and today the company has a 65% share of the national market. However, Jain was dissatisfied; believing that rural purchasing power in India was far from reaching the point where investment-intensive products like his would be bought in large numbers.

JISL, therefore, began to explore overseas markets for MIS, recording some success for the first time in 1988-89, especially in West Asia and South East Asia. This small, initial triumph was to play a crucial role in the Group’s approach because it was the first taste of just how large the potential outside India was.

His familiarity with plastics – thanks to PVC pipes – led Jain, in 1991, to establish a 100% export oriented unit to make PVC sheets under the JISL fold. These sheets are popular as wood substitutes and are being increasingly used all over the world for interior decoration, signage and green houses. Within just two years of starting production, the company was making a range of PVC sheets – free foam, solid, and integral and also polycarbonate sheets.

JISL now plans to produce other kinds as well: polyethylene and polystyrene sheets among them. If these plans materialise, JISL will become one of the most diversified plastic sheets manufacturers in the world.

In-house Technology Development

As with ventures before it, the road to PVC sheet production was rough. Jain could not persuade any major foreign company to part with the technology. Therefore, JISL had to develop it all by itself. That story had a happy ending: Since the company didn't have a foreign collaborator, it was free to export the products to any country it chose.

Sales, under the brand name Ex-Cel, took off especially in Europe and plastic sheets today account for 60% of JISL's exports. Today, the company has dealers and distributors in Europe (where two thirds of sheet exports are consumed), the US and South East Asia, plus representatives and offices in Austria, Belgium, Hong Kong, Singapore, Israel and the US.

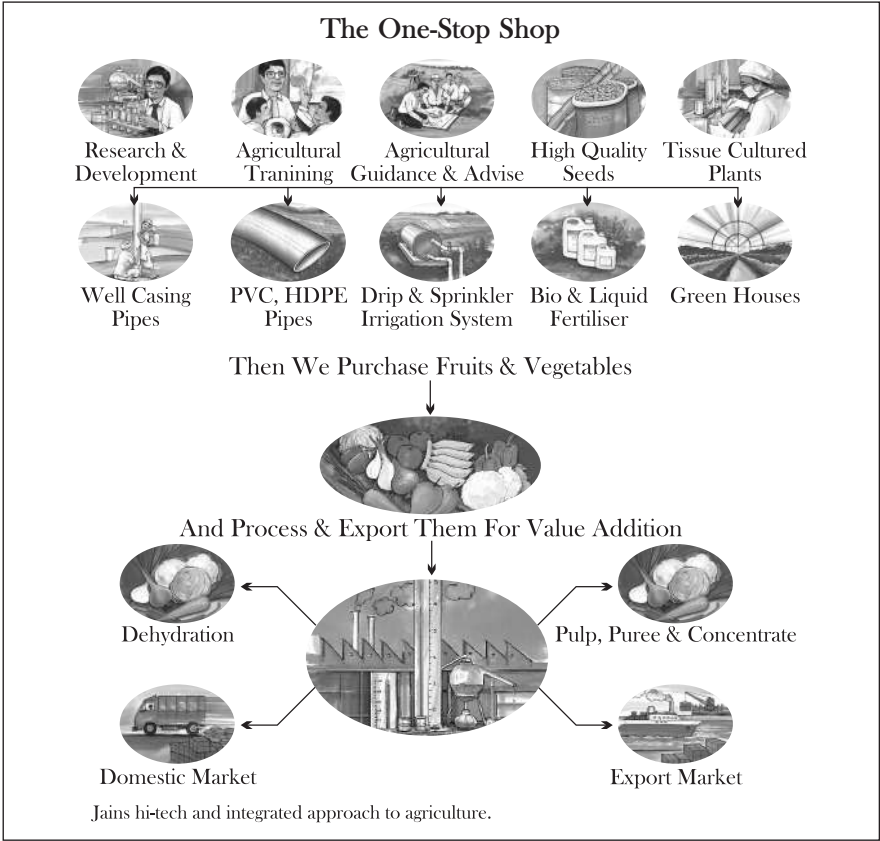
Considering how critical a role exports have played in JISL's fortunes, it is not at all surprising that the company accords it top priority. After all, between 1991-92 and 1993-94, though domestic sales grew by 102%, it was exports that permitted the company to grow by a considerably higher 161.1 %.

JISL is already providing warehousing facilities to its distributors abroad. In Europe, JISL is also exploring the possibility of tying up with General Electric Structured Products – part of General Electric – for technology and product distribution. Additionally, it is also trying to acquire a distribution outlet in the continent.

JISL has been marketing its products through wholesalers. The advantage of this arrangement is that the company has to deal with fewer people to market its products abroad. Says Anil: "This way, increasing export capacity doesn't create any strain on the management."

New Horizons

Now the Group is readying to enter its next ambitious phase of growth. The picture that Jain has in mind is simply this: that his Group produces a variety of the inputs –ranging from the existing MIS to seeds to liquid fertilisers to agro-consultancy to tissue culture – that go into farming. As Anil puts it, "We are moving away from being a micro irrigation supplier to a one-stop-shop for hi-tech agro-equipment."



Jain's integrated approach for global Indian Agriculture

Equally, Jain wants the Group to buy farm produce and sell it, either fresh or processed, at home and abroad. And, much of this plan rests on the premise of high value-added exports.

The number of projects on hand is mind-boggling. In food processing – where many of these lie – the new units will mainly convert fruits and vegetables into purees, pulps and powders. A canning unit will produce shelf-stable products for both, the Indian and overseas markets.

To negotiate this virtual stream of new projects, Jain is relying primarily on foreign partnerships: “We usually try to enter into joint ventures. This helps us cut the time barrier.”

In the Class of its Own

Several large companies have entered the agro-business in great excitement in recent years. Today it is practically fashion.

What distinguishes Jain's effort from others?

The answer: "They have been getting into particular areas of agriculture, such as horticulture. However, we are talking about supplying a total package of hi-tech agricultural inputs, buying back agricultural produce and adding value before exporting it. I don't know of any other organisation which has taken such an integrated approach." In fact, he expects the recent surge in agro-exports to help his business, as it should, logically bring the big players to his doorstep.

New plastics venture will make large-diameter spirally wound plastic pipes, plastic rods and tubes, polyethylene (PE) pipes, polybutylene (PB) pipes and fittings, polystyrene foam sheets and sub-soil tubing. While some of the products are aimed at the Indian market, the rest are for international ones.

Spreading Wings

Within hi-tech agro inputs, one is a JV with the Finnish company, Kemira Agro, to make liquid fertilisers, which can be administered through MIS. JISL has also entered into JVs with nine Israeli firms in a variety of agriculture related areas.

But, why Israel?

Responds Anil: "It is one of the most agriculturally advanced countries in the world. Their agronomic know-how is simply

The birth and death of a product

Polybutylene, PB piping systems were used for hot water conveyance applications such as domestic solar water heating systems. This was clearly a business synergistic with our solar division product. We had already begun manufacturing PB tubes and even installed these at some places. However, the technology and the raw material supplied by a renowned manufacturer was discovered to be defective. As such, the product died a natural death.

phenomenal.” He finds Israeli technology far more relevant than that from elsewhere because the climatic conditions in the two countries are fairly similar.

Support Services

Jain also plans to enter what he describes as “support services”. One, a bank (the application is still pending with the Reserve Bank of India) to finance agri-exports – he expects a boom here – on the lines of Credit Agricole of France. He does not expect to be alone for long but “by the time other banks get ready, I will have already developed the expertise.”

(We were very close to getting a banking license from R.B.I. However, for some reasons R.B.I. took a policy decision : not to issue banking license to any corporate house. The said rule is still in vogue.)

Another addition to the stable is the recently floated Jain Securities International Ltd. This company will enter share broking – but with a difference. It will tap primarily rural savings for investment in capital markets. H.R. Handa, 65, a senior group director, says, “The proposed bank and Jain Securities will both finance agro-exports, with the initial thrust in Maharashtra.”

And like consumer durables manufacturers, which have set up finance companies to fund the purchase of their brands, Jain proposes to do likewise for products like the solar water heater.

Collaborator	Nature of Collaboration
Rahan Meristem	Banana tissue culture technology
Azrom Metal Ind	Green Houses
Eldar Electronics	Sophisticated climate control systems
Hishtil Dagan Nursery	Seedling nurseries
Hazera	Vegetable and field crop seeds
Amcor	Solar water heaters
Yamit Filters	Filtration systems
Hoveve Agriculture	Dried fruits and vegetables
CINADCO	Centre for training Indian farmers in hi-tech agri

Non-core Diversification

One project that does not quite fit into the Jains' neat diagram for the future is an export-oriented granite-manufacturing unit in Khammam, Andhra Pradesh, which they have recently taken over. Jain candidly puts this foray down to his obsession with the stone.

The business part of his argument is this: today, most of the granite exports are in the form of rough blocks. While a cubic metre in rough blocks sells between \$ 850-1500 (Rs 26,350 - 46,500), in the finished form the realisation could be as high as \$ 8,000 (Rs 2.5 lakh).

The interviewer's reservation came true. JISL lost about Rs 15 crore in this venture. It had to be finally merged with JISL in 2005. This was one of the unrelated diversifications. However, the principal reason for the failure of the project was the export market for black galaxy stone block, the mainstay, crashed from US\$ 800/m³ to US\$ 400/m³ upon China's entry into this field.

Financing the Project

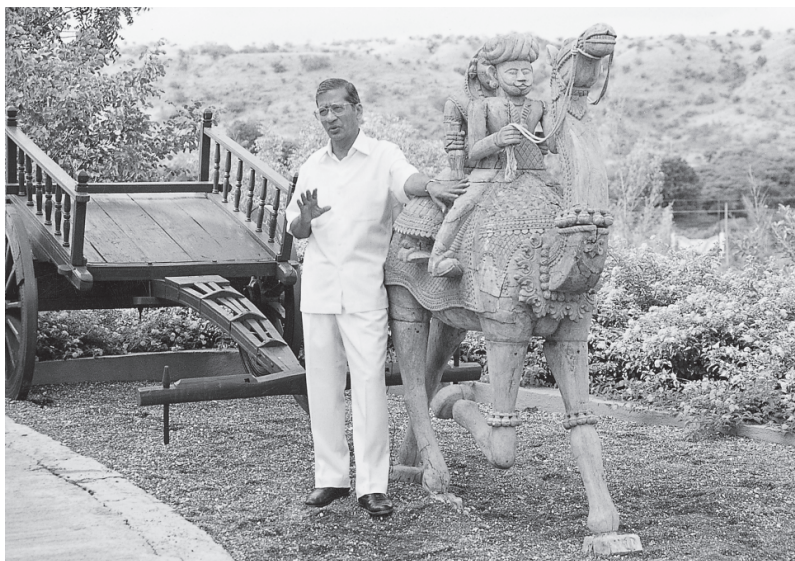
Where will the money for so many ventures come from?

Early this year, JISL raised \$30 million (Rs 93 crore) via a Euro-issue to finance the hi-tech agro-inputs units. "JPCL will go in for a public issue later this year to fund the food processing ventures," says Handa, and expects a substantial premium on its public offering.

Says he: "The Euro-issue was not merely a source of funds with substantial premium. It was also an opportunity to project the Jains' image in their export markets." Reserves, which have grown sharply over the past year to an impressive Rs 135.70 crore, should contribute the rest.

Rural Affinity

Although having units in Jalgaon has its merits – corporate tax holiday, for instance – Jain could have easily chosen the high city life for himself. But, he doesn't want to lose his roots; which is why, as a reminder, he keeps a wooden sculpture of a camel and a cart in the



Remmebering his roots

porch at home. The camel is a reminder of his Rajasthani origin; the cart symbolises agriculture that has brought the family wealth.

Although having his headquarters in Bombay would have been far more convenient, Jain has resisted the temptation so far because ‘there is a complete loss of identity’ there.

Succession Strategy

What role does Jain see for himself in the days to come?

The patriarch is clear: He plans to withdraw gradually from operational matters within the next three years, leaving the second generation in charge: “My job hereafter would be twofold: first, to maintain the organisational culture developed over 32 years and adapt it for the future; second, to instill a sense of quality consciousness.”

The second generation too intends to leave gradually the operations in the hands of professionals. Says Anil: “The top promoters will spend increasingly more time on new ideas and projects. Hands-on management by the directors will remain only in certain critical areas and these areas would change from time to time.”

That makes eminent sense because success in the past need not necessarily guarantee it in the future, which is infinitely more complex. Even assuming that Jain has tied up the best collaborations possible, operating such a slew of new-area projects profitably will require management skills of extraordinary depth.

Risk Analysis

There is the danger of the Group spreading itself too thin. In fact, some of the projects at proposal stage are in areas as disparate as real estate development, information technology and airlines.

Within agri-related areas, synergy seems to exist. However, it seems too complacent an assumption that the buyer of one product from their one-stop shop will necessarily pick up another product as well. Larger, specialist, tightly-focused companies in each of these fields could prove troublesome to the Group in the long run since they might be able to achieve greater economies of scale.

Cheap imports could cause damage, too. The danger in this mega dream is one of losing focus and failing to concentrate adequately on each of the new ventures.

In sounding a warning of the possible pitfalls of the “mega-dream,” he cautioned Bhau of the following dangers – (a) the group spreading itself too thin, (b) losing focus from the core business, (c) cheap imports could hurt. The future proved these warnings right.

However, if Jain does succeed in his ‘integrated’ gambit, he will rank among a handful of first-generation Indian entrepreneurs to have built a towering edifice by heaping one big idea on another.

Growth By Integration

For Bhau, integration runs as a single strong thread tying together all the activities. It is developed around the conservation and agriculture themes, using forward or backward links and finding synergy. Jains have popularised the concept of plasticulture – beneficial use of plastics for agriculture – through its PVC pipes and micro irrigation systems.

Integrating Agri Value Chain

At a time when most of his peers in business are putting their eggs in as many baskets as possible, Bhavarlal Jain of the Rs 240 crore Jain Group is busy integrating. And this, believes the 57-year-old chairman, is the most outstanding facet of his business philosophy.

“There is a link between the past and the future,” he says. “We started off with seeds but we didn’t stop there. We went further and began dealing in tractors and fertilisers. A farmer prepares the bed with the tractor, then sows the seeds and then applies fertilisers – throughout the entire process, our customer remains the same. What we are doing is simply supplying inputs in an integrated manner from a single source. What we have started doing now is ‘buying back the output from the farmer and adding value by processing it.’ This is the way we integrate the agricultural value chain.”

Little wonder then, that in the past 16 years, the Group has grown from a small trading unit with a single product facility to a multi-divisional, multi-product entity that offers a whole range of integrated services to the agricultural consumer. Its flagship company, Jain Irrigation System Ltd (JISL), has five divisions under its fold and manufactures, apart from drip irrigation systems, plastic sheets, filters, moulds and dies. The other component of the Group comprises Jain Plastics & Chemicals Ltd (JPCL), which has three divisions that produce plastic pipes, papain, dehydrated onion and moulded fittings.



New horizons, new hopes

Value Addition and Synergy

Despite its growth, however, Jain has not lost sight of his target market. And his game-plan is incredibly simple. Starting off with agricultural inputs, he went on to add plastics to this range (*terming it 'plasticulture'*) and is now coming out with value-added products both for the domestic as well as export market. While drip irrigation systems and polymer sheets and PVC pipes are already being exported, tissue culture banana plants will probably follow suit in the near future. The Group's new product lines include water soluble fertilisers, solar water heaters, greenhouses, plastic sheets, PC corrugated sheets and custom-moulded plastic articles.

Also on the anvil is a possible foray into banking and financial services. With the support services – Jain Securities International Ltd, Atlas Computers (P) Ltd and Jain Foundation – already in place, it should not take too long to translate the blueprint into reality. If this looks anti-synergistic, Jain emphasises it's not so. The new ventures would focus on the modern demands – namely, financial services and information technology – for the rural sector.

The firm Jain Securities was formed largely to substitute the Agriculture Bank concept. This outfit was to provide merchant banking services and generate deposits from rural India. Similarly, Atlaz Computers, a software firm, was to be mainly used for finding new solutions to the complex agricultural problems. However, they could also act as stand-alone entities providing services outside the organisation.

Destined to do Agri Reform

Interestingly, Jain's decision to stick to his knitting is born out of his long-standing commitment to the agricultural sector. It goes back to the 70s when nationalisation of Esso Standard Eastern Inc forced him to start trading in auto products. Five years later, when his auto dealership had found a firm footing, Jain came across something that changed his life. One evening he spotted an oil rig sporting the message: 'Agriculture, a profession with a future'. A farmer's son, Jain was moved and made up his mind to concentrate on rural, agrarian India – farm, farmers and farming.

Slowly, Jain began to trade in related agricultural items like irrigation systems, PVC pipes, fertilisers, seeds and pesticides. This necessitated a good distribution network and warehousing facilities, which in turn helped the fledgling Group gain a firm footing in the rural market. And to this day, this dedicated consumer-base has helped the company consolidate and grow. Not surprisingly, Jain is reluctant to get into anything that is totally divorced from his core interest.

Model Entrepreneurship

The manner in which Jain made the transition from trading to manufacturing is an excellent example of his entrepreneurial spirit. Jain Plastics & Chemicals Ltd (JPCL) was born in 1978 when Jain acquired a sick banana powder making plant in his native Jalgaon. A technocrat from Nasik had also wanted to buy this plant and modify it to manufacture free-flowing Papain from papaya latex. Bhavarlal Jain knew nothing about Papain, its manufacturers or users. His logic was that if someone from Nasik could make a go of this project, so could he.



Progressive farmers on a trip abroad

Even if he failed to manufacture Papain, he reasoned, the six-and-a-half acres of land with 50,000 square feet of built-up area could be used as a warehouse for trading operations.

The defunct plant was bought for Rs 30 lakh. Bhavarlal Jain invested just Rs 2 lakh, but the manner in which he raised the remaining Rs 28 lakh is testimony of his persuasive power. The United Western Bank Ltd, UW, had a policy of not lending money for takeover of sick units. Bhavarlal Jain, however, argued that since no funding agency ever finances a project but the person behind it, his reputation as a borrower should be considered rather than the nature of the asset. Convinced, the UW bank chairman Mr V. S. Damle lent him Rs 20 lakh. The remaining Rs 8 lakh were raised by borrowings at higher interest from the open market.

Soon, JPCL started exporting Refined Papain. It was of course not so straight forward and effortless. First, farmers had to be persuaded to cultivate papaya on their farms. They were supplied with high yielding papaya seeds to make plantation economically attractive. They were required to be trained on latex collection. Appropriate tools for putting incisions on the raw papaya fruit were to be distributed. Flat umbrellas were made available for preventing the wastage and contamination of

Home grown technology comes to our rescue

‘Atomiser’ was considered to be the heart of the spray drying process equipment. Being the most critical part, Larsen & Toubro, the engineering giant, had to also import this from Denmark. After taking over the sick unit, Bhau discovered that the atomiser was not functional. He asked his colleague Mr G H Naik to open each and every part and find out what was wrong with it. At the same time he asked Larsen & Toubro’s technical personnel to visit and assess the damage and give a quote for repair, alongwith a time schedule for completing the job. He received a response



G. H. Naik

from L & T, quoting Rs 10,000 and six weeks minimum for completing the repairs. In the meantime, Mr G H Naik had dismantled the atomiser and discovered that only one bearing was not functioning well. His sixth-sense told him that if he puts in a simple bicycle ball bearing, the atomiser would probably work. There was a risk that if it did not, we would lose all the bearings and would have to wait for 6-weeks till these were air-freighted from Denmark. With complete faith in Mr G H Naik’s inventive skills, the entrepreneur in Bhau decided to take the plunge and asked him to assemble the atomiser with his improvised modification and take a trial not later than the next morning. To everyone’s delight, the atomiser worked flawlessly and thus began Jain’s successful foray into Papain exports.

latex. Above all, collection centres had to be organised at places near the farmers’ village for their convenience and ease. Moreover, assured minimum price was used for payment towards the latex.

Second, the product had only foreign market and Mr B. H. Jain had no experience in export marketing. He had never visited until then, any foreign country. Armed with knowledge about some customers, plenty of confidence and persuasive skills he, however, did succeed in getting a huge order during the first visit itself.

In 1980, the Group installed a small extruder, with capacity of 100 tonnes per annum, and subsequently began manufacturing PVC pipes. In six months' time, two more extruders were installed. Before long, there were five separate small scale units manufacturing various grades and sizes of PVC pipes.

Seven years later, Jain Irrigation Systems Ltd was born. Its drip irrigation technology, which aids in conserving and supplying scarce water resource in drought-prone areas made it ideal for Maharashtra. Manufacturing a drip irrigation system required sophisticated technology, but the greater challenge lay in convincing the conservative Indian farmer to accept it. Once again, the Group's experience in serving the agricultural community came in handy: Fifty progressive farmers from Maharashtra were taken to Israel by the company at subsidised cost to help them appreciate the benefits of the system. Result: to-date about 1,20,000 acres have been covered, translating into sales worth Rs 130 crore.

Jain sums up his strategy thus: "What we are doing is facilitating the second Green Revolution in the country. New technology, new seeds, modern water management, liquid fertilisers, tissue culture - they are all part of this."

Going by the growth of his Group, this nose-to-the-ground policy sure seems to be bearing rich fruits.

"Given a proper exposure to modern technology for optimising agri output, our farmers will rise to the occasion and are second to none."

The Jains Empire

With Bhau, “Work is life” is not a mere slogan. It takes concrete shape in integrating selling of farm inputs with buying farm outputs, in employing productivity techniques aimed at farmer welfare and in making money without losing sight of environmental concerns, social responsibilities and human relationship. This way, he has chosen to oil the wheels of the rural economy rather than lose all sense of purpose in any large city.

The Company:

Given that water is one of the essentials of life, the Jain Group has a vital role to play in maintaining the survival and subsistence, i.e., the very existence of life. The company is headquartered in Jalgaon in the steppe-like north of the state of Maharashtra. It produces micro irrigation systems or, more precisely, systems for spray and drip irrigation covering every stage-from collection of water in the well to finally its distribution in the field.

It was in the 1980s that Jain produced his first drip irrigation installations in association with James Hardie as his collaborator, the pioneers of this water-saving technology. Technology-exchange contracts have been signed with a whole range of countries. The factory manufactures mainly plastic components (pipes, connectors, spray-heads and drip-nozzles). These facilities/plants would not be out of place in any “classic industrialised country” as far as organisation, cleanliness and technology are concerned.

The extrusion machines for making the plastic pipes are the best on the market, and the machine-tools used in the moulding process come from the US, Germany and Switzerland. Jain claims a market share of 64% in India.

Jain's second product is natural Papain, processed from latex, which is extracted from half-ripe papaya. Thanks to the state-of-the-art micro filter technology, he is able to offer a first-rate standardised product on the world market.

Together with his other products such as solar water heating systems, plastic roofs and complete greenhouses, not to forget tissue cultures, Jain achieved a turnover in the region of about US\$ 50 million in fiscal year 1994-95.

Besides a range of products being manufactured, fruits such as mangoes, grapes and guavas are cultivated on the experimental R&D, demo farm, training & extension centre near Mohadi, 7 km from Jalgaon city.

As the activities of Jain Group of Industries also include tissue cultures, a particularly important project is devoted to the development of a banana cultivar adapted to the region. The new strains belong to the Grand Nain and Dwarf Cavendish varieties. Jain's goal with the tissue-cultured banana plantlets is to revolutionise banana production in India and export fresh banana.



Tissue Culture : Banana plantlets being hardened

A vegetable dehydration plant for onions, green peppers, carrots and other vegetables, with a capacity of 15 tonnes per day, is under construction.

The man

Bhavarlal Jain comes from a farming-cum-trading family that grew cotton, sorghum and chilli and other agricultural products near Jalgaon and dealt in cotton, groundnut and ghee (clarified butter). In agriculture, such a ubiquitous presence helped business expand in the sectors of farm supplies such as irrigation equipment, high yielding seeds, pesticides, fertilisers and agricultural implements such as tractors and tillers. In the first 15 years, the Jain & Brothers achieved a turnover of Rs 115 mn (Rs 11.5 crore), while at the same time Bhavarlal was honing the progressive ideas he calls his “ideology.” Everything – house, factory, personality – must be in a continuous process of improvement and development in order to shape the society of the future.

Another of Jain's ideas is: Don't move ahead on a lot of fronts independently; instead think how you can link things together. Everything – fertilisers, seeds, the irrigation systems, bio-pesticides – must come from a single source. But there's more to it than just that: “We also buy the farm produce of farmers to whom we supply the inputs. This completes the agriculture value circle and consolidates a relationship of trust with our customer, the farmer.”

Setting up such a giant of a firm with global links in the wilds of Jalgaon takes a lot of guts. The nearest city is Bombay, over 400 km (250 miles) to the south-west. Against all the odds, Jain has managed to steer a remarkable success course for his company, especially over the last ten years.

Interview of a Revolutionary

Q. How do you square your message, “Leave the earth a better place than you found it”, with your irrigation system, which also pumps fertilisers and other chemicals into the ground?

A. It is beyond doubt that the principle of fertigation improves the productivity of the orchards. Environmental pollution by supplying liquid fertilisers at root zone is infinitely less harmful than that caused by applying chemicals in solid form.

(Above all you use 30% less chemicals and provide them in small doses which will cause minimum harm to the microbial population in the soil. Moreover, most of the quantity applied is absorbed by plant reducing residue levels)

Q. Is your message, with its philanthropical overtones, compatible with doing good business?

A. We’re not so much interested in what we can earn with a given system or systems. Our contribution lies in improving society and the environment. It’s quite simple: What we “borrow” from nature we must pay back many folds, or the generations that come after us will not be able to survive.

Making a profit must not be allowed to become an end in itself but should be a necessary outcome of entrepreneurial leadership. If you are only interested in profits, you have to compromise on environmental protection or personal relations. So, even if you take a philosophical view of business and entrepreneurship, this does not exclude making money.

We are closely involved and interested, via the Jain Foundation, in the wellbeing of the people of this remote area through rural development. But that does not make us a welfare institution, not even by a long chalk.

Q. A lot of Indian businessmen have found fame and fortune abroad. Why has Bhavarlal Jain stayed at home?

A. I’m needed here. I don’t feel the slightest urge to settle in Bombay or London or New York. If you look a round you in the town of Jalgaon, you’ll see signs of our presence everywhere. We are the biggest employer. We play an active role in anything of any size that takes place here. When it’s a matter of entertaining visiting VIPs, we place our amenities and facilities at their disposal.



JISL plant at Bambhori, Jalgaon

In huge cities with their teeming millions, all sense of a useful life with a purpose is lost. It takes generations in America to reach the size of an Exxon or a GM or a Ford. Here, out in the country, I can feel my finger on the pulse of life every day. In New York, Bombay or London I'm a drop in the ocean – a lost identity.

Q. You are the “biggest” man in Jalgaon. Do you feel capable of solving the many pressing problems of Indian farming?

A. The second agrarian revolution is taking place right here. It's not for nothing that people from India and a round the world journey here day-after-day to see the progressive face of farming. As my message implies, one should never be satisfied with the achieved, never rest on one's laurels. There must always be a better solution to any given problem. Progress is a never-ending process. It's like a river that flows on and on.

Q. Can one man with an idea do this alone?

A. Absolutely. Every revolution starts with just one man. A revolution arises in the thoughts of one person, and that person must carry it forward. Take Socrates or Jesus Christ, for example. I am a part of this revolution, its harbinger and its instrument too.

“I am proud of the fact that we have added value to so many lives and put this quaint little town of Jalgaon on the world map.”

All Manufacturing Outlets Approved

Entrepreneurs are acutely aware of the various problems associated with their business. Bhau is no exception. He demonstrates how micro irrigation was not spreading fast enough in India, despite having tremendous potential. His incisive comment about the lobby of dam builders covertly resisting the spread of micro irrigation systems clearly shows his in-depth analysis of the problem.

For fifteen years, B H Jain was engaged in core trading activities representing many national level organisations in agricultural inputs. Thereafter, he ventured out with his own companies to reap the benefits of the seeds of hard work that he had sown till then. So when his flagship firm, Jain Irrigation Systems Ltd (JISL) notched up a turnover of about Rs 75 crore last year, this chairman of the Jalgaon-based Jain Group was more than smiles from ear to ear.

He claims that while his business acumen comes from his teetotaler, no-smoking, vegetarianism and other habits that include neither tea nor coffee, his stability comes from the unstinting support of his wife and four sons who have all joined in the same business. And the secret of his health and vigour, according to him, lies in the 90 minute walk that he undertakes everyday in his farm, which keeps him in close contact with Mother Nature.

He swears by a time-tested, age-old dictum that goes as 'Work is worship'. And he goes on to add that hard work, only hard work and nothing but hard work can make a man successful the honest way in business.

He accepts the fact that his company was in the media limelight some time back for the wrong reasons simply because, the protagonist in question having a similar Jain surname happened to be from the

same home town as his. He vehemently denies (as the accompanying picture shows) wielding any sort of political baton to further his business interests.

The category of infrastructural industry generally includes roads, power generation, communication and canal irrigation. These assets are owned by the State. An attempt to sell the concept that micro irrigation should be considered as infrastructure industry was made by us.

However, it was argued that micro irrigation sets are properties belonging to an individual and not owned by the community. Hence, MIS cannot be categorised as an infrastructure industry. We had pleaded that it is not the nature of ownership which should be the sole criterion for classification. The purpose of the technology and the cascading effect it creates for enrichment of the targeted community should also be considered. Purpose, we reasoned, was as important as, if not more than, the ownership.

In the ultimate analysis everything belongs to the society. Micro irrigation fulfills the same purpose as canal irrigation does. In fact, it does that in a much more economical, efficient and effective manner. It enhances the productivity and adds to the GDP, besides conserving scarce resources like land, water and electricity. Moreover, it is environment friendly and quick yielding.

The Planning Commission did indeed accept the concept and assured us in writing that it would be implemented.

Interview : Saturday Close-up

Subjoy Bosu quickly freewheels with B. H. Jain on a number of current issues, from farming to traveling.

Q. What is the present status of micro irrigation as far as the Planning Commission is concerned? What are the benefits that you will stand to gain as a result of this?

A. The Planning Commission has, in principle, given us the go-ahead in writing, which is very commendable on its part. The government will now provide us with the GR (government resolution) or the GO (government order) – as they are commonly referred to –



Bhau with Mr Madhu Dandavate, the then Deputy Chairman of Planning Commission

expanding on its decision to give micro irrigation (MI) an infrastructure industry status. This will help the RBI, NABARD, other banks and financial institutions to provide us extended credit, notwithstanding Narsimharao Committee norms.

Secondly, we would get major tax breaks which are generally in the range of 10 years and upwards. Last but not the least, there would be major concessions on long term financial loans especially from foreign financial institutions which can be anywhere in the 3.5 per cent bracket. Additionally, we are also expecting that the World Bank through IFC would give us money at lower rates and of longer duration, which apart from benefiting us, would also facilitate the passage of this technology.

Q. Why is it that micro irrigation as a concept has not caught on in India that well as was expected?

A. Everything takes time to become familiar. It is a 25 year-old technology wherein the hardware has to be refined followed by the software, which has to be added thereafter. The software, comprising the survey, the system design and so on, has to be understood very well and requires a certain level of literacy, education and awareness.

Also, each project is tackled on a case-by-case basis. Unfortunately, the powers-that-be have no background and exposure to micro irrigation,

MI. Hence, there is less focus on this area. Another very important reason is that the lobby of dam builders is extremely strong. Since they feel threatened by MI, they will go to any lengths to prevent the concept from becoming popular.

Q. You have a strong export focus. Why?

A. Exports not only make us a foreign exchange earner but also give us recognition in many ways as a worldwide player. Also, we become very quality conscious because that is what counts particularly abroad. Our primary markets are the Middle East, Africa and the US. By the year 2000, we are aiming for an export turnover of Rs 200-250 crore. Presently about 50 per cent of our total turnover comprises exports under two major brand names, 'Farm-fresh' for fruit products and 'Ex-Cel' for plastic sheets.

Q. Coming to quality, how do you ensure that your manufacturing plants stick to meticulous levels as far as the world standards are concerned?

A. All our manufacturing outlets have been approved by world quality majors. Both of our food plants are expected to be given the official stamp of ISO 9000 by the Germany based TUV in March next year. In fact, one of our food processing plants, which incidentally is also the first in India, has received the approval of the Food and Drugs Administration (FDA) of the US recently.

Q. What is the present status of your proposed merger of Jain Irrigation and Jain Plastics and how would your business interests get affected post-merger?

A. The decision is currently pending with the Mumbai High Court but we expect a final order to come through by mid-December this year.

In terms of business benefits, firstly, we expect major savings in terms of administrative costs and overhead expenses which include cut-downs pertaining to octroi as well. The second benefit would comprise those related to combined purchase decisions. And lastly, with a combined turnover of more than Rs 450 crore post-merger, we would

automatically qualify to be among the first 200 companies in India.

Q. You are planning major corporate restructuring exercise apart from aforesaid merger. Please throw some more light on this aspect.

A. To be short and sweet, we are taking four major steps in this direction apart from the plastics-irrigation merger. First, we are in the process of broad-basing the board of directors. Second, we have appointed a professional finance director in the core management team. Third, we are aiming for separate directors for the domestic and the export markets. These markets are tending to become more specialised. And the last, we have appointed Dalal and Shah as our auditors.

Q. Please tell us in brief about the steps you are undertaking on the financial front to restructure your business needs.

A. Apart from seeking adequate working capital from banks, we are rescheduling our term debts as well as trying to replace high cost borrowings with cheaper funds. Additionally, we are also aiming for conversion of rupee term loans into foreign currency loans. Lastly, our focus is also on conversion of some rupee term loans into preference share capital.

Q. You must not have forgotten your days of traveling for months on no-end. Do you still travel out of choice or by default?

A. It is true that at one time, during my early days, I used to travel continuously, till 1995, for days together. I think I must have spent about a third of my whole life-span traveling on every conceivable mode of transport and that includes trams, horse-drawn carriages and bullock carts as well. Now, I travel once a year, maybe, but that is mostly out of choice. I still cannot get over my traveling memories, though.

*“Hard work, only hard work and nothing but hard work can make
a man successful the honest way in business”*

Apology of No Avail

Readiness to accept mistakes and own up one's responsibility is a rare entrepreneurial attribute. Bhau publicly displayed it in the publication of "I'm sad, I'm happy, I'm confident."

Rare Courage

It may be the first time in the history of Corporate India that the chairman of a company has advertised his follies and misjudgments. On 26 November, through a half-page advertisement in The Economic Times, B.H. Jain, chairman of the Jain Group apologised to his investors. The advertisement read: "I am sad that, for the first time since our inception, we have fared badly. We ventured into unknown areas like finance, information technology and granite at the cost of our core business. I feel it is my duty to account for, to own up, to admit my misjudgments, to apologise."

Jain's apology follows the announcement of massive losses by the two listed companies of the Group – Jain Irrigation Systems Ltd (JISL) and Jain Plastics & Chemicals Ltd. (JPCL)

Ambitious Growth Plan

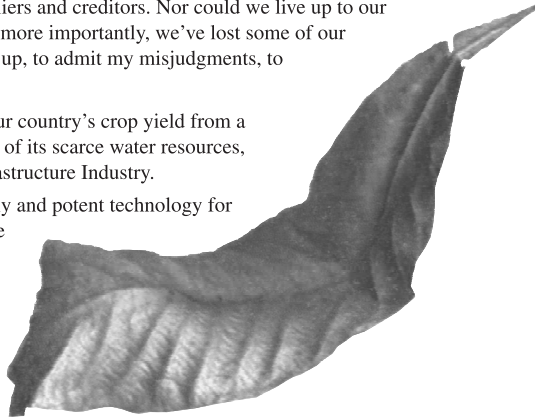
The story of the Jain Group, a Rs 400 crore company, is a typical case of a small but very successful company's ambitions gone haywire. JISL, the Group's flagship with its roots in rural Maharashtra, made history in 1994 when it raised \$ 30 million through a global depository receipts (GDR) issue. With its niche in the business of micro irrigation systems, the company grew phenomenally from a turnover of Rs 2.5 crore in 1988 to become a Rs 250 crore integrated agri-business company by the year ended March 1997.

This ad was conceived and written by Bhau himself. The ad evoked unprecedented positive response from people of all stratas of society.

I'm sad - that for the first time since our inception, we've fared badly.

We ventured into 'unknown' areas like Finance, IT, and Granite at the cost of our core business. With the result that we couldn't keep our commitments to our suppliers and creditors. Nor could we live up to our shareholder's expectations. We have lost money but more importantly, we've lost some of our reputation. I feel it's my duty to account for, to own up, to admit my misjudgments, to apologise.

- I'm sad that for an industry which can increase our country's crop yield from a minimum 30% to an incredible 210% and save 50% of its scarce water resources, Micro Irrigation hasn't yet been accepted as an Infrastructure Industry.
- I'm sad that in spite of being the most eco-friendly and potent technology for agriculture, world financial institutions including the World Bank haven't integrated Micro Irrigation in their funding pattern for irrigation projects around the world.
- I'm sad that in a field where wholehearted encouragement should be expected, restrictions, duties and taxes are being imposed.

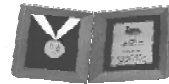


I'm happy - that the greatest international recognition in the field of irrigation, the Crawford Reid Memorial Award, has been bestowed on me. I'm told that only 16 people have won it in the last 19 years and that I'm the only Indian and second Asian amongst them.

- I'm happy that within a short span of 10 years, Jain Irrigation has grown from Rs. 2.5 crores to a Rs. 250 crore Company.

- I'm happy that we are exporting equipment and expertise not only to Africa and Europe, but also to the very country we had initially imported from; the USA. Not surprisingly, in Micro Irrigation, we're ranked among the first five in the world. I believe, we're fast racing to position number three.

- I'm happy that though we burned our fingers venturing into unrelated areas, we didn't lose a single customer worldwide in our core business and our employees firmly stood by us, productive as ever. It has been a chastising experience from which we've emerged not unscathed, but financially disciplined, more mature, and certainly more focused.



THE CRAWFORD
REID MEMORIAL
AWARD . 1997 .

I'm confident - that despite the hurdles, we can not only bring due recognition to this industry, but also bring about a second green revolution in this country. Because our fundamentals are rock solid. Work, hard work continues to be an obsession with us. And hard work not only pays, but also brings honour and preserves character. With our voracious appetite for growth and a policy of plowing back profits into our business, I believe there's a lot more we're capable of achieving. This is only the beginning.

A stylized, handwritten signature in black ink.

B. H. Jain
Chairman

JAIN
IRRIGATION
J A L G A O N

Courage of Conviction

To publish or not to publish such an ad was a matter of debate within the management. Many pros and cons were discussed and debated. However, finally, Bhau insisted that if it does not serve any other purpose, it does cleanse his conscience. “I do not think a man can ever possess an asset higher in value than his conscience,” he concluded.

The response to the ad, which exhibited Bhau’s forthright approach, integrity and above all character, was overwhelming. Even today, after more than ten years, there are many who recall the ad.

The apology was in response to the happenings in the past. There is more to the ad than a mere apology. It also projects the positives of the present and confidence in the future.

Encouraged by its immense success in the business of micro irrigation systems, the company ventured into nearly a dozen new businesses. Says Anil B. Jain, managing director: “We wanted to be a global corporation. Thus we diversified into all possible areas where we saw an opportunity.” Most of the diversifications, such as granite, computer software and financial services, weren’t even remotely related to the Group’s core business of irrigation systems.

The Calamity

The misjudgment of the management has splashed red all over its balance sheet and cast a shadow on the financial future of the Group. For the year ended 30 June (15 months), JISL reported a net loss of Rs 13.37 crore on a turnover of Rs 282 crore. However, the company had not provided for Rs 14.70 crore in depreciation. Jain Plastics reported a net loss of Rs 13.42 crore. Here too, the company had not made any provision for depreciation of Rs 2.40 crore. The over ambitious ventures of the Jains have cost the Group’s shareholders dearly. JISL scrip, which peaked at Rs 290 in September 1994, is currently quoted at Rs 12.

The huge losses are mainly on account of interest charges. While JISL’s interest outflow was Rs 56 crore, Jain Plastics’ payout amounted to Rs 17 crore. The total borrowings of the Group are estimated at Rs

400 crore, with an average annual interest outflow of Rs 75 crore. “If the Group does not manage to get out of loss-making businesses and retire nearly Rs 100 crore high-cost debt, it will be just matter of time - before it goes down under the heavy debt burden,” says an analyst with a brokerage firm in Mumbai.

This analyst was not alone in his doomsday prediction. Only that the capability of the management to stage such a dramatic come-back was not envisaged by him.

Pulling Through

The Jains too have realised the urgency to restructure their businesses. “The writing on the wall is clear for us. From now on we want to concentrate just on our core businesses – agriculture and plastics,” says Anil Jain. Apart from consolidation of its irrigation, food processing, agriculture and plastics business, the Group intends to sell off its investments in telecommunications and computer hardware company Atlaz Technology, the multimedia venture Pixel Point, the financial services arm Jain Securities, and Gowtham Granites.

The Jains hope to realise Rs 80 crore by disposing off their investments in unrelated areas. Given the general recessionary state of the market, the Group won’t find it easy to quit the loss-making businesses quickly – it had invested Rs 15 crore in the granite business alone. Jain Securities, the financial services arm of the group has virtually no liquid assets worth anything. Nearly Rs 10 crore is stuck in various bought-out deals.

Indeed, the overall situation was painful. The management restructured the loans, reduced the capital to half, disposed of unrelated businesses and finally in August 2002 took the extreme step of selling a major stake (49.4%) to an American Venture Fund to raise around Rs 185 crore – an all cash deal. Thus it managed a smart comeback by 2002-03. The stock peaked to over Rs.750 as against Rs 12 in 1997-98. It not only proved that the Corporation’s foundation was rock solid but also that Bhau’s confidence was well placed.

By the time these assets become liquid enough, the interest costs will have eaten up their net worth. Sitting on a pile of illiquid assets and paying high rates of interest on borrowings, it will be a long time before the Group turns around.

Wedded to Agriculture

In ascribing the Crawford Reid Memorial Award as honour of an Indian farmer, Bhau has demonstrated his humility. Like a true entrepreneur, his single-minded devotion to the welfare of the farming community has helped him develop an all-inclusive one-stop agri-shop concept, dedicated to meet most, if not all, needs of the farmer.

News & Views : Bhavarlal Jain Gets Coveted Crawford Reid Award

A new day dawned in the history of India when Shri Bhavarlal Jain, chairman, Jain Irrigation, was presented the prestigious “Crawford Reid Memorial Award”, before an elite gathering of over 900 members of The Irrigation Association of US.

Shri Jain is the first Indian and only the second Asian to receive this award, since its institution in 1979. A Non-Profit Organisation constituted by members of irrigation companies, professionals and government bodies from all over the world gives this award to recognise individuals for the significant achievements in promotion of proper irrigation techniques and procedures for their work outside United States. Mr Anil Jain, managing director of the company, received the award on behalf of his father, who could not be physically present due to indisposition of health.

While presenting the award on behalf of the Association, Mr Jack Lenga complimented Shri B H Jain for his initiative. He further lauded

Citation : Crawford Reid Memorial Award to Bhavarlal Jain in recognition of his significant contribution to the micro irrigation industry outside the United States and for promotion of proper irrigation methods for bringing major advancements.

his effort like a second green revolution in India. His efforts and total commitment to the cause of micro irrigation in India was also appreciated.

Being honoured with the Crawford Reid Memorial Award was indeed a very proud moment. In the industry circles, this award by Irrigation Association of US is considered equivalent to the Nobel Prize or Stockholm Water Award. The award is a matter of pride not only for the company but also for the country, whose farmers are now complimented for adopting modern scientific methods of micro irrigation popularised by the company that is helping usher the second Green Revolution.

Shri Bhavarlal Jain's written response read at the event considered this award as an honour to the poor farmers of India. Shri Jain is sore about the fact that the world's concept of irrigation is comprising only of construction of dams and distribution channels and water ways. He wishes this connotation would change and that micro irrigation industry would be considered as part and parcel of larger irrigation systems.

Crawford Reid Award was awarded in Asia for the first time in 1993 to Hon. Mr Abdul Rahman Bin Abdul Aziz Al Sheikh of Saudi Arabia for planting one million trees in the water starved sandy desert.



The Crawford Reid Memorial Award - the plaque and the citation



Mr Anil Jain, MD, receiving the award on behalf of Bhau (1997)

Q. You have been awarded the “Crawford Reid Memorial Award” recently. While it is a matter of pride for our country, what does it mean to farmers?

A. The Crawford Reid Award has changed the perception that Indian agriculture is tradition-bound and Indian agricultural practices are still primitive. The world has in this award recognised that given a proper exposure to modern technology to harness the available scarce water resources for optimising agri output, our farmers will rise to the occasion and are second to none.

Q. While presenting the award, you have been complimented with bringing a second Green Revolution in India. Could you elaborate this for our readers?

A. Year after year, our country faces a drought in one part and floods in another, which not only nullifies the efforts of our farmers,

“Awards and recognitions are but milestones which remind us of our responsibility and obligation to do better in future than what we did in the past. If anything, these inspire us to raise our level of commitment for achieving or surpassing our stated objectives”- Bhau.

Other Recipients of Crawford Reid Memorial Award

- 1979 Francisco J. Jimeno, Mexico
- 1983 Robert S. Tait, Canada
- 1986 James S. Coulthart, Australia
- 1987 Terence D. Heiler, New Zealand
- 1988 Robert Williams Freeman, Canada
- 1989 Jan Feyen, Belgium
- 1990 Luis Santos Pereira, Portugal
- 1991 Len Ring, Canada
- 1992 Melvyn Kay, England
- 1993 Abdul Rahman Bin Abdul Aziz Al Shaikh, Saudi Arabia
- 1994 Marinus Gijssberthus Bos, Netherlands
- 1997 Bhavarlal H. Jain, India

but also puts them through economic hardships. Between the two conditions, viz. flood & drought, the latter is worst. To me, therefore, the proper utilisation of limited available water resources in drought-prone perennially water-starved regions was of paramount importance.

Very often, just for want of water in the final stage, a substantial crop is lost. Thus as early as in 1985, I had concluded that adoption of drip irrigation system will greatly save unnecessary wastage of water. Taking this as a mission, I started manufacturing micro irrigation systems and introduced it in India since 1987.

It did not end only there. The introduction of modern technology was multi-dimensional like introducing green house practices and developing tissue cultured plantlets. This, on one hand ensured adequate water irrigation to the plants and on the other, multiplied the yield per hectare, raising our farm productivity to acceptable levels in the international markets and increasing the scope of export. Probably this all-round development should have been the reason for the attribute 'A Second Green Revolution'.

Q. This award is given to you in recognition of significant services rendered outside US for promoting proper irrigation techniques and procedures to bring about major advancement of industry. To which single most achievement of yours can this be attributed to?

A. A complete range of services from farm equipment to survey and engineering of soil fertility and then providing a comprehensive package, all under one roof, and developing the concept of one-stop shop for hi-tech agriculture are my major achievements.

Q. From dealerships of agro inputs – fertilisers, seeds, pesticides, tractors and crude oil – to pioneering micro irrigation systems. How did this transition take place?

A. Agriculture has always been our core interest right through. Irrigation is an important adjunct. As we have contributed in our own way to usher in the use of PVC pipes for conveyance of water for irrigation upto the farm boundary on a large scale, the use of micro irrigation systems for on-farm distribution of irrigation water blended well. Incorporating liquid fertilisers in the system added up to overall economy for the farmers' inputs. With economy of inputs on one side and increased yields on the other, our farmers began to adopt this system as it was highly profitable. That is how it happened.

Q. Service having been your desire, why was irrigation chosen? Can we relate it to the opportunity of buying a sick unit which was originally designed to manufacture banana powder?

A. As I have mentioned earlier, we have been wedded to agriculture and irrigation is a part of it. We could serve much better by exposing newer techniques and modern equipment to our knowledgeable farmers. The result it has produced is before you to analyse.

To the other part of the question, I should say that buying of a sick unit did not have much to do with our emphasis on irrigation except that we could interact more intimately with the farming community for organising papaya plantation and latex collection for our product Refined Papain. This interaction perhaps has helped kindle our empathy for the farmers.

Q. You have always advocated the cause of micro irrigation to be integrated in to the larger irrigation systems. How do you feel this can help a vast nation like India?

A. The very vastness of our country, which is termed as a subcontinent, with diverse climatic conditions, soil chemistry, and ground water resources etc, calls for this system.

As you know, our government has been seriously considering, since the last 25 years, creation of a national water grid by interlinking all major rivers in India. This project requires an astronomical investment in terms of money, manpower and equipment. As the resource requirements are staggering, our country just cannot afford it and the implementation therefore has become difficult. I also do not see the possibility of it happening in the near foreseeable future. Till then, the flood waters have to be harnessed only by constructing dams.

How do we take this stored water to far flung areas across thousands of hectares of arid lands without loss of seepage etc?

Micro irrigation is our immediate answer. Therefore micro irrigation systems should be considered a part and parcel of the larger irrigation systems and recognised as an infrastructure industry by World Bank and other allied agencies for concessional and long-term financing. That will provide a stimulant for the growth of this industry and the agri produce will grow by leaps and bounds. It will not be difficult to imagine the abundance of farm yields when it happens.

Q. There is also a strong opinion making circles that micro irrigation should be included in the infrastructure sector. Be that so, then it can be funded by World Bank and other funding and aiding agencies. What steps have you, as a pioneer in this thought, taken to achieve this?

A. I have prevailed upon our consortium of bankers to take up this matter with the Government of India and World Bank authorities. I am also requesting the media to voice this just opinion in the interest of increasing agri output, which ultimately will increase world food output.

Q. We have discussed a lot about what you have contributed today. Coming a little to your personal life, you have begun very modest and achieved laurels. What is the significant cause of your success?

A. I have always believed in Thomas Alva Edison's often-quoted words: "Genius is 1% inspiration and 99% perspiration," and my teammates also think and act accordingly. The success is not only mine, but ours.

Q. What in your opinion is lacking as the biggest challenge for Indian farmers, particularly the sugarcane growers?

A. The biggest challenge for the Indian farmer is lack of credit support, speedy and clean delivery of credit. He also has to adopt latest techniques for improving the per unit efficiency of his resources – water, land and capital. Unless he learns to adopt high technology, the fate of the farmer including the sugarcane growers can never be improved. Unless the farmer learns to treat his farm as his factory (industry) and looks at farming as a commercial enterprise, we will not see the required improvement.

In case of sugarcane growers, over-irrigation has spoiled most of their lands and as such they need to reclaim the same by use of modern techniques such as MIS, liquid water soluble fertilisers and improved varieties of planting material.

BHJ doctrine : Agri Sector Growth

Q. The government has earmarked 60% spending for agriculture. What is your specific advice to the government?

A. The government should prioritise as under:

- Complete the ongoing irrigation projects within the deadlines.
- Invest in soil conservation and water harvesting structures to achieve better recharging rate.
- Make application of drip irrigation compulsory for cash crop farming for better utilisation of available well and canal water.

- Reclaim water logged, saline and other lands rendered unproductive due to use of over-irrigation / excess water.
- Sell waste lands including undulated hilly, coastal terrain and help their cultivation with the help of modern agri technology and inputs including MIS.
- Consider drip irrigation as a forward integration of the irrigation technology, which enjoys the infrastructure status.
- Treat the subsidy given to farmers as an investment for creation of infrastructure for agriculture and assistance for empowerment of marginal farmers, rather than financial aid/assistance.

In order to bring about a million hectares under MIS, the government will need to provide about Rs 2,400 crore in the 9th Five Year Plan by way of subsidy, which should be considered as an investment.

When the government can treat the investment on irrigation storages as a “grant”, why cannot the drip Subsidy also be considered as an Investment rather than a Subsidy?

Bhau, envisaging the urgency for bringing wasteland under cultivation, undertook wasteland reclamation projects through watershed planning and rain water harvesting in conjunction with drip technology. This effort proved to be a harbinger for giving a new direction to the higher use efficiency of per unit of land, water as well as other resources. The government was soon to take this movement on a national scale and discovered that without technological interventions, such an exercise was simply not feasible. The Jain Hi-Tech Agri Institute, (the farm resource R&D, training and extension centre of JISL) is an inspiring monument which serves as a live example for thousands of farmers, government officials, agri students and scientists to learn from and emulate.

*I have always believed in Edison's words: "Genius is 1% inspiration and 99% perspiration."
My team-mates also think and act accordingly. The success is not only mine, but ours.*

Jains on Rekindling Efforts

Bhau's painstakingly built business empire was going through a deep crisis. A faint hearted industrialist would have succumbed under the pressure; not Bhau. Unperturbed, he used his financial management skills to tide over the situation. A major crisis was averted. Revealing fortitude and tenacity, Bhau, slowly but surely, led the company on the path of recovery.

Incurable Optimist: B. H. Jain

Mr Jain's purpose is to earn a place of pride for Indian agriculture in the field of exports by augmenting productivity and adding value. His objective is to put a rural, mofussil town like Jalgaon on the world map. His creations are already attracting people not only from across the country but from 20 different nations across the globe.



A fruitful enterprise

Mr Jain has conscientiously tried and achieved a symbiosis between pursuit of material progress and promotion of environment. Mr Jain's stated mission is "Leave this world better than you found it." He is fulfilling that mission every inch and in everything that he is doing.

Mr Jain represents a character that is intensely Indian. His businesses are driven more by ideology than by profit. His reach extends far beyond erection of physical assets. Commitment to rural upliftment through meaningful assistance in the areas of health, education and culture are a part of his daily life. All business people are called "ssociates" and Mr Jain treats them as collaborators in creation.

Mr Jain and his team are a phenomenon, an institution in the field of agriculture.

Ambitious Plans Gone Awry

Now the Jains of Jalgaon have identified what is good and bad in their businesses. They have learned the hard way the fact that a strong hold on what is called core business is a source of strength and future stability. The core businesses of JISL – micro/drip irrigation systems and plastic pipes – have enormous growth potential. Yet, two years ago, the company tried out diversification exercises into totally unrelated areas of granite, finance and information technology. It was a mistake, the Jains agree. But, for what is called 'error of judgment,' Jain Irrigation Systems Ltd (JISL) had to pay a heavy price.

The higher interest burden was partly because of the blockade of funds in receivables for longer than normal periods, especially in the case of exports. This compelled the company to resort to the high cost market borrowings for bridging the working capital gap. "Now we are on our way out of the crisis", says Mr Anil Jain, managing director, JISL.

Remedial Measures

The company has persuaded the bankers to release additional working capital in the current financial year. Financial institutions are restructuring the long-term loans. ICICI has already done it as of March

From down-in-the dumps to high-up again

During the turbulent times, the financial position of the company had worsened to an extent that even our bankers suggested that the best way forward would be to file an application with BIFR and thus try to hold the fort. However, Bhau considered the move as 'timid'. He maintained that he would fight till the end and pay every one, albeit late.

He left no stone unturned and sold his personal property, pledged the gold ornaments of the family, even accepted a minority status on the board. Concurrently he led an austerity drive for a long period of about five years. All these ultimately vindicated his stand when the company bounced back to glory with its share price rising from Rs 8 to over Rs 500 in a short time.

this year. Other institutions like IDBI will also restructure the loans very soon.

“As a part of the restructuring strategy, the company has decided to divest the other non-core businesses which will ensure a steady flow of liquidity,” says Mr B H Jain, chairman of the company. “If the company and the financial institutions do not act in unison, the Company will certainly head for sickness,” the chairman adds.

The company is putting all its efforts to come out of the shell shock. The forward-looking Jains are completely optimistic of turning around from the red by the end of the financial year 1999. *(This took a little longer, in 2001-02)*

Strong Foundations

The background of the Jains shows that they have the resources and wherewithal to rekindle the company. More importantly, they have an unequalled expertise and field experience in drip irrigation. They have completely absorbed the technical know-how transferred to the company by various collaborators from time to time. The company also has a strong Research and Development (R&D) support for timely product innovation, introduction of new products and techniques.

Refocusing to strengthen the core areas of competence will continue to provide impetus to its long-term growth. This is enough to

build up a strong industrial empire with the financial resources, experience and expertise in this area, especially in view of the strong recommendation of the Agricultural and Co-operation Department of the Government of India to expand the agricultural area under drip irrigation in the country.

The draft 9th Plan has given highest priority to agriculture production to grow by 100 per cent and has also committed that the subsidies for agro inputs, including drip irrigation will be enhanced during the Plan period. The government focus on agricultural area has also infused a high level of confidence. “We expect that the National Agricultural Policy, which is likely to be announced soon, will lay emphasis on promotion of drip irrigation application and water management concept,” says Mr Jain.

True to its credit, JISL is the only company in the country, which has done basic and pioneering work and gained insight into these areas. With an awareness of the advantages of drip irrigation system as a water management technique, the company can play a pivotal role in agricultural development by helping the farmers utilising the existing irrigation facility for at least double the acreage. The company has already emerged as an unbeatable giant in this area in the domestic market and also as a force to reckon with in the global market.

R&D as a Key Strength

The support of the R & D Division is significant in helping the company consolidate its position in the market. This division is accredited with large team of agricultural scientists, engineers and agronomists. “That is one of our strengths”, says Mr Anil Jain. This division is fully devoted to developing new products, improving existing products as well as production techniques for cost reduction and energy conservation.

It has developed tube holding stakes, moulded quick-release HDPE couplings, micro sprinkler adapters, hydro/pneumatic plastic fittings and various tools for assistance in installation, operation and maintenance. These are only some of the achievements of this division.

Similarly, in the area of farm R&D, the tissue culture unit of the company has carried out a large-scale micro propagation of Grand Nain banana plantlets. This unit has created a new milestone in the history of the company and is making all efforts to standardise protocols for micro propagation on clones of papaya, teak, garlic etc.

Considering the R&D effort in agro industries sector, the company was conferred DSIR National Award in the year 1995 and again in 1996 for its efforts in technology absorption in agriculture.

The company has got one of the best farming research infrastructures in the country. The contribution of this division towards agricultural production and productivity development in the country, especially in the western region, is significant. It has to its credit, several pioneering efforts in the area of hi-tech farming.

Last year the R&D had undertaken, for the first time in the country, treatment of liquid and solid waste through bio-filters. As a result, it has avoided use of high-energy consuming pumps required for effluent treatment plants. Incidentally, this step has generated a by-product, vermicompost – an organic fertiliser that is rapidly gaining ground for use in organic farming. This ‘creation of wealth from waste’ innovation is a pioneering effort of the company.

Look Before You Leap

When compared to the base and infrastructure that the Jains have created in their traditional business, jumping into other areas where they have no expertise should be viewed as an uncalled for loss-making proposition.

The growth of the company over the last decade bears a testimony to their expertise and superiority. Mind it; others who jumped into the areas – micro/drip irrigation without any experience, where the Jains are presently a dominant force – were not successful. Thanks to their strong agricultural background and commitment the company could emerge as a king in the area.

Like the Jains, many others have also burnt their fingers badly in the areas of granite and financial services. As a result, they found steep erosion in the bottom line of their core businesses.

Investments made in the area of granite are huge – more than Rs 25 crore. However, this business did not make any operational loss. For the financial year (15 month period) ended June 1997, the granite subsidiary – Gowtham Granites Ltd – recorded a turnover of Rs 5.38 crore which is nearly three times higher than the previous years. Still it is far lower than the total investment made in that area. Profit after tax was at Rs 41.10 lakh, up from Rs 35.90 lakh in the year 1996-97.

“We are getting out of this business not because this was unprofitable. In fact, this unit was of course making profits,” says Mr Anil Jain. According to him, the original objective of getting into this business was to increase the basket of the company’s export products.

“At that point in time, this was considered a sunrise business and at present with the rupee depreciation, this can become more profitable,” he opines.

Then, why is the company planning to get out of this business?

Answers Mr Jain, “Because we want to stay in the business where we have leadership at home as well as abroad. But in granite we cannot be in the top slot. This is compelling us to get out of this business. Moreover, we will be able to give more attention to our core business.”

Silver Lining

It was in the year 1992 that the company started manufacturing plastic sheets from its export-oriented division. Plastic products, sold under the brand name Ex-Cel, include PVC rigid sheets, PVC foam sheets, PVC integral sheets, moulded plastic items, polycarbonate (PC) compact sheets, PC multi-wall sheets as well as PC corrugated sheets. The idea behind setting up this division also was to earn more foreign exchange. Today, this unit brings home a substantial export income, last year’s being Rs 6.09 crore. This year the plastic division of the company received an export award. No doubt, today, Jain Irrigation is emerging as a major player in plastic processing.

The business of dehydration of vegetables brought an export income of Rs 5.89 crore. In onion dehydration also, JISL is hopeful of becoming a global major.

Similarly, the company invested heavily into the projects of Atlaz Technology Pvt Ltd and Jain Securities. While Atlaz Technology, engaged in telecom business, sucked a sum of about Rs 11 crore, the company has made currently unrealisable investment of over Rs 17 crore in Jain Securities. This had pruned the purse of the Jains and the core businesses have been put to losses.

Consequently, the company incurred a loss of Rs 28.21 crore for the period ended June 1997 on a turnover of Rs 394.30 crore. Export turnover of the company for the period was at Rs 134.10 crore.

Confidence and Optimism

“But we are sure that we will be able to get out of these loss-making businesses, though with bruises. We have good assets in Gowtham Granites. It has potential granite mines and most modern machineries, which can be realised for good amounts. Selling these companies will enable the parent company to repay the high cost loans. At the same time, we will continue to concentrate on increasing the revenue of the parent company. The company also has some surplus assets in Jalgaon and Mumbai to liquidate. That will happen in a course of three years. Now we are not in a hurry to dispose off these assets as the overall market remains depressed,” says Mr Jain.

“Now the core businesses are on path to normalcy. And in the next couple of years, we are confident, the company will recover and achieve its blue-chip status. The business volume will rise with the expansion of market base,” he says.

The Jains are dedicated to make the company financially stronger. With the rectification of the mistakes of diversification, the core businesses are getting deliverance to glide across an era of growth.

History of Jain Irrigation Systems Ltd

As a trading house, Mr Jain's business firm was the first to sell kerosene oil through a dispensing pump, second to emerge number one Esso dealer in India for sale of light diesel oil and third to set up the multi-product purpose agro centre alongside a petrol pump in 1975. Innovation has been part of Mr Jain's personality from year one.

Mr Jain spotted an opportunity in 1978 for processing raw papaya latex into an enzyme called Papain. From inception till today, Mr Jain's business maintains 'the number one' position as manufacturer-exporter of highly purified Refined Papain in the world. This is a tribute to the indigenous R&D effort.

In 1980, Mr Jain ventured into manufacturing of yet another agro-product - PVC pipes. In this field, he heralded a marketing revolution by creating a network of 120 retail dealers at tehsil grassroots level in rural India. Not surprisingly, he soon commanded the number one position in the industry.

What really pushed Mr Jain on the national and international scene was his pioneering zeal in setting up the first listed company in the rural area in 1987: Jain Irrigation Systems Ltd. This company pioneered an integrated approach for drip irrigation and eventually harbingered Second Green Revolution in the country.

Mr Jain was the first to bring tissue culture, green houses, bio-fertilisers, bio-pesticides, rainwater harvesting and host of other hi-tech agro concepts which became a part of the grand design to open the flood gates of technology for the Indian farming community.

Recently, Mr Jain has set up food processing units for dehydration of onion and vegetables and for producing banana and mango pulp/puree. These facilities are unique and the only ones of their type and size in India. They have the cutting edge world-class technologies. This is in fulfillment of Mr Jain's vision of establishing an integrated business, which first supplies hi-tech agro inputs and then buys back the output from the farmers for further value addition and exports. Mr Jain believes this to be the way to "establish leadership in whatever one does at home and abroad."

In 2007-08, JISL has become the third largest player in the world in the field of onion dehydration.

Today, this small enterprise has blossomed into not only an industrial house of repute, but is recognised as an institution that is interwoven into the very fabric of the society, which it stands to serve. All the focused industries, which Mr Jain leads, are impacted with high social content and are in harmony with national priorities: agriculture, export and solar energy.

Ever true to his native instincts, Mr Jain is back to farming and aspires to demonstrate that farms can become factories. The 1051 acres R&Dfarm, personally supervised by Mr Jain, demonstrates hi-tech agri techniques/practices in all its facets, and undertakes basic research on agronomic practices and development of varieties of vegetables and fruits.

His latest venture is solar water heating systems. This will tap the abundant power of the sun, conserve energy resources and preserve the environment.

Having centered his production activities at Jalgaon, Mr Jain has contributed induction of an investment of over Rs 500 crore in this town and employment to over 3,000 people and indirectly created jobs/opportunities for livelihood of about another 10,000 families. International visitors and collaborators are highly impressed by the unique feature of his having developed a committed and versatile work force in a rural based mofussil culture and work environment to handle multidimensional diversified business, production, and technological and R&D activities.

The central government's national awards for R&D in agro-industry and AIPUB's Nalla Vazai Award for outstanding contribution in popularising drip and fertigation in banana tissue culture plantations are but a few recognitions of these efforts.

Future investment outlook

JISL covered more than two lakh acres under micro irrigation for more than 35 crops. It has an established network of nearly 22 zonal offices and 375 dealers in India.



Mr Ajit B. Jain receiving fellowship of AIPUB on behalf of Bhau

JISL manufactures a wide range of plastic sheets under the brand name “Ex-Cel”. The major exports (nearly Rs 135 crore in 1996-97) are accounted for by this division.

The main problems for JISL started when it ventured into information technology, financial services, granite mining etc.

Performance

The company’s turnover has grown phenomenally from Rs 62.68 crore in 1992-93 to Rs 435.5 crore in 1996-97 (15 months). The profitability was adversely affected with company reporting a net loss of Rs 28.40 crore in 1996-97 against a net profit of Rs 14.63 crore in 1995-96.

Prospects

The company has initiated a major restructuring exercise and divesting unrelated businesses. The completion of exercise in two-three years’ time will release surplus of nearly Rs 100 crore which will ease out the interest burden substantially.

The company is expected to come back to black in the year 1998-99 with a projected net profit of Rs 7.44 crore.



PVC sheet plant - JISL, Jalgaon

Recommendation

The worst seems to have been over and the share price does not seem to have any major downward risk. One cannot fundamentally recommend the scrip for investment at this stage. However, technically, the charts suggest the potential for the scrip to touch a level of around Rs 35 in near future. The investors are thus recommended to hold on for the time being.

Export of non-traditional items to the developed nations is an obsession with Bhau. He has led the Group companies to capture the European and US markets and created brand equity for his Ex-Cel Plastic Sheets used for signage, display and interiors. The Group's passion for quality and excellence has earned them over 38 export awards at state and national levels. The Jain Group exports have already crossed Rs 100 crore in 1998; they have now reached Rs. 454 crores.

"Soul-searching compellingly revealed that sorrow and sufferings are to be taken as part of life, never mind the minutes, days, months and even the years."

Back to Plastics, Irrigation

Flexibility is one of the traits with which entrepreneurs are blessed. When Bhau decided to concentrate on the core strength of JISL, he indicated his readiness to rectify some policies without compromising on philosophy. Actions that followed were not only in keeping with his cardinal principles, but were also aligned to his vision.

Righting the Course

The Jalgaon-based Jain Group has realised the value of core competency and focusing on core activities, and is now concentrating on plastics, irrigation systems and fruit and vegetable processing. The Group has taken up a major restructuring programme whereby it has discarded its activities in non-core areas like IT and telecommunication. According to Mr Jain, the group chairman, JISL is hiving off surplus

From “Ideology Driven to Profit Oriented”

At the time, Aqua as a venture capitalist exchanged as much as 49.4% of JISL equity for a price of Rs 185 crore, it did exert influence and tried to inculcate its own management culture in the constitution and culture of JISL. It insisted that JISL must stop being driven by ideologies such as, national good, benefit of the farmer, share of the associates, etc. It exhorted us not to get into or stay in any business which does not lead to profitability and make economic sense. The founder painfully realised that as a commercial corporation, profit must be given its due place in its working and basic corporate philosophy.

JISL corporate philosophy profile did not specifically contain any such prescription either in its credo, mission, vision, or guiding principle. The word ‘profit’ was thus added in the guiding principle at this stage.

assets. “The loan component is being restructured, while we are adopting a profit-centred approach,” he says.

“The Group’s three companies – viz. Jain Plastics & Chemicals, Jain Kemira Fertilisers and Jain Rahan Biotech – are being merged into the flagship company Jain Irrigation Systems. This merger makes JISL a one-stop shop for the manufacture and marketing of hi-tech agro inputs and helps buy back agri produce. It will purchase, process and add value to the farmers’ produce,” claims Mr Jain.

These were merged with effect from 01.04.1996 vide H.C. order of 30.3.1998 . The Israeli Rahan Biotech and Finnish Kemira Fertiliser collaborations had already been terminated. After the initial struggle, tissue culture activities blossomed into a full-fledged profitable unit, post merger. Today the banana tissue culture unit with a capacity to propagate 20 million plantlets is the largest production facility not only in the country but probably in the world.

Improving the Outlook

The Jain Group’s think-tank has estimated that it will be able to recover a round about Rs 35 crore from the sale of non-core businesses and the surplus real estate in a phased manner. Another Group company, Jain Securities International, is expected to bring in Rs 9 crore from various bought-out deals that it has entered into.

“In fact, after its strategic disinvestments, the company has projected 30 per cent growth annually,” says Mr Jain. “In the plastics processing segment, we have a substantial presence as we are manufacturing PVC pipes, micro irrigation components, PC and PVC sheets and injection moulded components. In order to cut costs as well as for operational convenience, our PVC pipe manufacturing facility has been relocated at the main plastics complex. There is a programme on to enhance the capacity utilisation of the PC sheet division through supply agreements reached with some of our customers including the GE Group. Our moulded component exports have also been witnessing large volumes leading to better revenue realisation,” he adds.



PVC Pipe plant - JISL, Jalgaon

Incidentally, JISL is the largest producer of micro irrigation systems in the country. In addition to manufacturing and supplying necessary components and systems for cost effective and efficient micro irrigation systems, JISL also undertakes turnkey projects offering complete support including system planning, design, installation, after-sales service, and agronomical and technical support services.

“We expect to gain immensely from the government’s thrust on agriculture through our drip irrigation business,” says Mr Jain. He sees vast business opportunities in measures such as qualitative improvement of the agriculture, increase in subsidies, policy initiatives to bring waste and barren land into productive agriculture/agro forestry, and increased public and private investment in agriculture as well as agro based industries.

Production Scenario

The agro processing division comprises two important activities – making fruit pulp and puree from papaya and mango fruit, and dehydration of onion and other vegetables – all for exports. The onion dehydration plant as well as the banana/mango pulp processing plant were commissioned recently. Here also, the company is taking steps to

Albeit a bit late, the Government of India has finally taken strong measures for boosting the sagging agricultural productivity and economy. Its emphasis on accelerating the completion of irrigation projects, raising the outlays on subsidies for drip irrigation and promoting fruit and vegetable processing activities – all augur well for JISL. The move and the development are in keeping with the vision of the Bhau that the company will gain immensely from the government's thrust on agriculture. His robust optimism has been vindicated by the mega debt-waiver scheme for farmers announced by the government in the 2008-09 budget. The government is at last, blissfully awakening!

improve its capacity utilisation, minimise processing costs and improve profitability.

“Due to our R&D efforts, there is an improvement in quality and increase in yield,” Mr Jain claims. “The agronomic practices have been standardised and commercial cultivation using hi-tech practices has been undertaken in the captive farm for ensuring supply up to 25-40 per cent of the raw material for our agro processing division,” he adds.

“Once the drip irrigation sector gets infrastructure status, the growth of our agro-products division will spurt – from Rs 400 crore (Rs 4 billion) now to Rs 2,000 crore (Rs 20 billion) within a year,” he asserts.

The agro-products division consists of drip and sprinkler irrigation, PVC and HDPE pressure pipes, bore-well casing pipes, MDPE (gas) pipes, green houses and banana tissue culture.

JISL has also set up a viable unit producing solar water heaters, which notched up a sales figure of 2,000 units in the initial two years.

The division has developed over 1,000 acres as Hi-Tech Agri Institute for R & D, demo, training and extension. Simultaneously, while undertaking basic and applied field R&D, it also cultivates onions, vegetables, mangoes and other agri products for eventual processing through its onion & vegetable dehydration and food processing plants.

“Our goal is to produce quality goods at optimum cost and market the same at reasonable price so as to achieve total customer satisfaction, fair return for all other stakeholders and continued growth for the corporation through sustained innovation. In order to achieve this goal, we shall work hard, manage men, material and money in an integrated, efficient and economic manner keeping in view that social responsibility and environmental concerns are equally relevant,” says Mr Jain.

“The personal needs and the family comforts depend on work, not vice versa.”

Harbinger of the Second Green Revolution

Foraying into uncharted territories is wont with entrepreneurs. In his own humble way that is what Bhau has done - investing in the unpredictable, low yielding agri-based industries. Diuturnal patience and indefatigable perseverance always pay.

It is well known that the state of Maharashtra is one of the most industrialised states in the country. It is less widely known that the state, despite agro-climatic limitations, also occupies a prominent place in agricultural production.

A significant reason for this is the farm-friendly policies of the Government of Maharashtra, which has always supported innovations in agriculture.

Agriculture in the Maharashtra State has always been dominated by the co-operative sector. The development of industries like sugar, cotton spinning and weaving is evidence of this success. Unfortunately, despite the state government's attempts to boost agro-based industries and horticulture, the private sector has made very little investment in agriculture in the last 50 years. The only areas where the private sector has played a role is in setting up units to make chemical fertilisers, pesticides and seeds. It is against this background that the Jalgaon-based Jain Group's contribution in the last two decades should be evaluated.

A Pioneer

The Jain Group has been a pioneer in its field. It has relentlessly worked for agricultural development by introducing the latest agri technologies, products and processes in almost all fields relevant to

enhancement of agricultural progress and productivity. By investing about Rs 300 crore (3,000 million) in agro-based activities, the Group has spearheaded the second Green Revolution in the country. (The investment has reached a staggering figure of Rs 700 crore (Rs 7 billion) in 2008.)

The Group manufactures vital agricultural inputs, including drip and sprinkler irrigation systems, PVC and HDPE piping systems, tissue-cultured banana and other plantlets as well as bio-fertilisers (vermi-compost) and bio-pesticides (neem-based products).

To complete the agricultural value chain, the company has also set up two state-of-the-art plants – onion and vegetable dehydration and banana and mango fruit processing – as 100 per cent Export Oriented Units (EOUs). The Group is a leader in papaya latex spray drying and the world's largest supplier of Refined Papain. The Group was the first to export Refined Papain from India in 1978.

Strong R&D Focus

The Group has a strong R&D focus, with over 600 acres of agricultural land devoted to research and development. Here, trials are conducted on agricultural, agro-forestry and horticultural crops and products. The R&D farms also provide demonstrations and training, not only to the Group's own staff and dealers but also to the farmers and government personnel. The R&D farms have also set up experiments for wasteland reclamation, soil conservation and use of saline, water logged and ravine lands. The farms have pioneered a variety of water harvesting, storage and conservation techniques.

This integrated approach has made the Group the country's largest 'one-stop hi-tech agro-shop'. It has been able to achieve outstanding success by forming alliances with world leaders in their respective fields. It has succeeded in marketing these products throughout India through a wide network of dealers, distributors, sales and service offices and depots staffed by qualified agriculturists. The Group is perhaps the only private sector organisation that has a total strength of about 200 agricultural engineers, scientists and agronomists. (The number has grown to 380 at present)

A constant thrust on quality management has seen the Group's exports of agro-products during the past decade zoom to Rs 100 crore (Rs 1,000 million). But more important than this, especially to the community as a whole, is its overall contribution to national agricultural productivity and conservation of natural resources like water and land.

"People are easily motivated. Nobody wants to do slipshod work."

Jain Group of Industries

This is a study, done on behalf of All India Management Association, of twenty pioneering companies of India, the likes of Gujarat Ambuja, Larsen & Tubro, Ranabaxy Laboratories, Titan Industries, Wipro Infotech and Jain Irrigation. It was collated by - Dr Arun Kumar Jain, who is currently a professor at IIM, Lucknow and was formerly the CEO and Principal Research Officer, Jain-Bond Strategy Research. The study was published by AIMA in association with Excel Books, New Delhi in a book form in 1997 under the title “Corporate Excellence”. The idea was to understand their best management practices, strategy development, technology management etc.

The Background

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



Bhau with Dr. A. K. Jain

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 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, applying hypothesis and breeding new ideas. For a country suffering from poor agricultural productivity signifying excess inputs usage as well as wastages, it holds potential to fulfill dreams of providing high returns to farmers, preserving and adding value to food crops, while 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 combination of India’s vastly under-utilised natural resources, rural population, and state-of-the-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 fulfill Gandhiji’s dreams of Swarajya – i.e. self-rule based on self-sufficiency.

Pioneer Entrepreneur

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, vermi-culture, 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 to chip in for maximising the productivity revolution.

One individual who has made money and reputation this way is Mr Bhavarlal Jain (or simply, Bhau – the respected elder brother), founder-chairman of Rs 370 crore Jain Group of Industries, JGI. 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 JGI manufactures an impressive range of agriculture-related hi-tech products including new seeds and tissue culture plantlets, micro irrigation systems and plastic tubing for water management, liquid fertilisers, high yield fruits and other farm products. Each product enjoys a pioneering status in its industry.

The Present

JGI is a value-ridden and value-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 the Jain Group's sales jumped from Rs 50 crore in 1991-92 to Rs 370 crore in 1995-96, the company's various projects were suffering from time 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

The company's various projects were suffering from time and huge cost over-runs ... It was in a severe cash crunch ... Between all this, Bhau maintained equanimity, a cool poise and reassuring confidence.

signs of the company being in severe cash trouble and products being pushed into the 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 the twin companies, Jain Irrigation Systems Ltd., JISL and Jain Plastics & Chemicals Ltd, JPCL.

Between all this, Bhau maintains equanimity, 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. The 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, with placards hanging around all over the office that 'Work is life', 'Work for the pleasure of working...'

The Origins

A farmer's son, Bhau, with some help from relatives, completed his law degree from Mumbai University. He was selected to join the civil services; instead he dropped the idea and ventured to start a business with a dealership of kerosene and diesel oil of Esso Petroleum in 1963. The next few years were spent in making 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 irrigation pumpsets, seeds, fertilisers, pesticides, PVC pipes to motorcycles,

cement and tractors. Inspired by a quote ‘Agriculture: a profession with 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 someone from outside Jalgaon can turn it around and make it profitable, why not native 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 crude 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

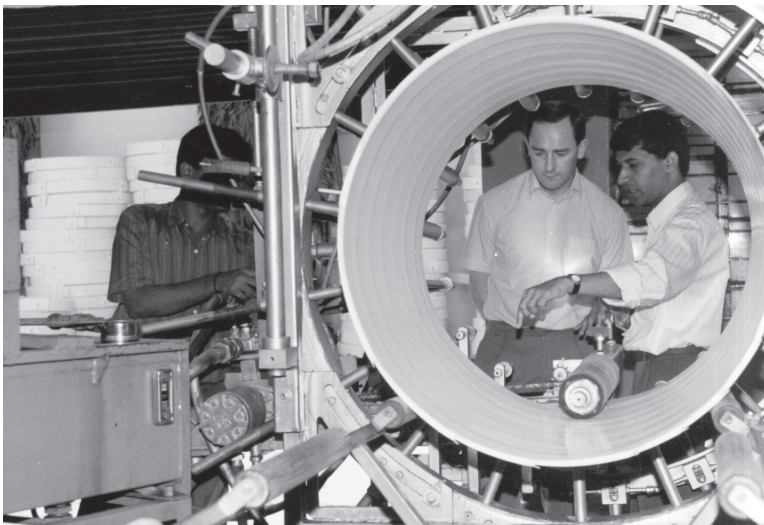
In 1980, Bhau started manufacture of PVC pipes since demand outstripped supply. Initially a second-hand machine was procured and as demand and profits grew, more machines were added. The rigid PVC pipes have a strong resistance to all acids and other corrosive material, are non-toxic and hence a good substitute to iron pipes. In time, the strict adherence to quality and delivery created brand equity for ‘Jain PVC pipes’. JPCL, created in 1992, has become the largest PVC pipe exporter in India despite a crowded market.

Entry into Micro Irrigation

In 1988, Bhau set up JISL (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 filtration and nutrition supply control components). This was a value-added product over simple PVC pipes and something eminently suitable for Maharashtra and even the Indian climate. But it was new concept, which had to be sold to the users who have been fixated on the belief that ‘more water

and nutrients means more and better product'. The farmer had to be educated on the benefits and cost effectiveness of this new technology, which essentially minimised wastage since both water and nutrients went straight to the roots of the plant and did not spill around. The company sponsored and organised a 12 day study tour of interested and progressive farmers in Maharashtra at the time of the agri-tech exhibition in Israel. JISL got a boost in 1990 when the Indian government created a subsidy programme for small irrigation systems compensating the farmer with up to 50% of the cost. The following year JISL's sales doubled. Major innovations included offering micro irrigation systems, (MIS), as a complete product and service package, including a survey of the soil and land, installation, agronomy support and post-sales service. As a kind of showroom, the Jains bought a remote, rocky, barren hill and converted it as an experimental model farm for educating the farmers about the latest innovations in agricultural technology.

JGI has introduced further innovations in the PVC pipe industry. Specialised pipes under brand name 'Jain Rib-Loc' are mainly used as low-pressure gravity pipes for water and urban sewerage systems. Other uses for spiraled pipes are for sub-soil drainage, culverts, sewers and



Jain Rib-Loc — specialised low pressure gravity pipes

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 cost of this diversification project was originally Rs 48 crore, which has been overshoot due to project delays for various reasons. The Group has also moved into tissue culture, green house, liquid fertilisers, solar heaters, granite quarrying and polishing, fruit processing and vegetable dehydration.

The Jains also attempted entry into hi-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 explanations for these diversifications are forthcoming. Apart from being flush with cash in the aftermath of a successful Euro-issue in 1994-95, it is ascertained that there are opportunities in processing, for instance, onions, a staple vegetable abundantly produced 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 also help improve the quality of cash crops and substantially increase farm productivity, thereby adding to the farmers' income.

Farmers would be provided with disease resistant, high yielding variety saplings produced at the Jain Hill Laboratory through tissue culture in green houses. These plants will be nourished with liquid fertilisers 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 fertilisers. 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 agriculture output and adding value to it.'

Support Frameworks for Growth Strategy

Research and Development

To give shape to the dreams of Bhau, JGI has created impressive, state-of-the-art R&D facilities, both at the company's farm and factories. On the experimental farm are studied plant geometry, agronomy, protection and various other aspects of crop development. The company also undertakes trials and experiments for its new range of products on variety of crops. 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, JISL 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. JGI along with their 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 for training and extension through their Centre for International Development and Co-operation in Agriculture.

In the Global Market

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 sales 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 crore as compared to Rs 92.25 crore during the previous year, representing an increase of 57%. While during this period, the domestic sales increased by 28% from Rs 51.02 crore to Rs 65.11 crore, exports showed an increase of 92% from Rs 41.23 crore to Rs 79.37 crore.

Here the leadership philosophy 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.'

The company is currently the largest producer of Papain in the world, meeting about 20% of the world demand. This is 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.

JISL signed an MOU with a South African firm for the manufacture and marketing of its newly invented sprinklers. While JISL in India would manufacture for the foreign company, marketing worldwide was to be done by an overseas joint venture company.

The future

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, a million

dollar question each still literally was: 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, was it simply bad investments?

In 1987-88, the turnover of JISL, the flagship company was Rs 2 crore. In 1995-96, it exploded to Rs 215 crore. In this stupendous growth phase, some 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. Restructuring would need drip irrigated, concentrated and focused nutrition to selected plants, avoiding spillage and wastage of scarce resources.

Key social values

Respect for roots

JGI has so far resisted the temptation to move to nearby Mumbai, instead choosing to play 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 back the maximum capital 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, and PVC Sheets (often used as wood substitutes).

Social development

Since 1982, the Jains have institutionalised the public charitable trust. 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 mobilise the wherewithal 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.’

Globalisation 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 ethos, we cannot fail to reach somewhere close to the top globally in the next decade.’

We understand that now, after ten years, Dr Jain is writing a sequel “Revisiting Corporate Excellence”, featuring the same companies. This is bound to make interesting reading.

“The Spirit of entrepreneurship must be backed with a mindset to ensure that what is required will be done within time and within budget.”

Leave this world better...

Shrinivas Pandit, management counsellor and HR professional, profiled twenty-two exceptional industry leaders of India. The list includes the likes of V Kurien and N R Narayana Murthy. Shri Pandit stayed with Bhau at Jalgaon for a considerable time, which gives the article authenticity.

Jalgaon displays a rare ‘work is life’ culture. Through his deeds, Bhavarlal Jain, popularly called Bhau (brother), has demonstrated that agriculture, the agro processing industry and related businesses can be made profitable by educating farmers. Seventy per cent of our population is dependent on agriculture. It is our very lifeline in which, Bhau saw the opportunity to build a modern agro-business.

He charged up the hitherto sleepy Jalgaon with dynamic experimentation in farmers’ education and progressive farming. When former agriculture minister, Government of India, Annasheb Shinde visited Jain’s establishment, he wrote in the visitors’ book: “If the central government and state administration put all their might behind Jain and a hundred other such industrialists, then our motherland will be industrialised in no time.”

Hi-tech Integrated Agri Shop

The Jain Group is India’s unique one-stop hi-tech integrated agricultural shop. The Group helps the farmer to produce higher yields and better quality produce by providing superior saplings, efficient water and fertiliser management systems and agronomical guidance. It then buys the yield and processes it at its modern vegetable dehydration and fruit processing facilities. The Group produces the finest quality dehydrated vegetables and aseptic fruit purees.

The Group is engaged in:

- Cultivation of agricultural and horticultural products, nursery raising, agro forestry.
- Provision of agricultural services like R&D, demonstration, training and extension, turnkey agro-project consultancy and implementation, wasteland reclamation, soil conservation, and rainwater harvesting, water storage and conservation.
- Supply of agricultural inputs like micro and sprinkler irrigation systems, PVC and HDPE piping systems, tissue culture plantlets and greenhouses, water soluble solid and liquid fertilisers, vermi-compost, bio-fertilisers and neem-based bio-pesticides.

All these inputs result in increase in yield ranging from 30 to 230 per cent and a reduction in water consumption of 50 to 70 per cent.

Heady Brew of Entrepreneurship

Jalgaon is a vibrant town with a surprisingly clean railway station (no wonder, it's maintained by the Jain Group). Jalgaon's precincts are dotted with three manufacturing facilities where over 3,000 people are constantly at work, despite it being the hottest place in northern



Bhau with wife Kantabai

Maharashtra. This is an act of creation, an act of will of a visionary who, with three heart attacks behind him, still enthusiastically toils for 12 hours a day to bring prosperity to the Jain Group, farmers and Jalgaon.

Bhau was born in a Marwari family, a community known for commercial acumen and hard work. His father was an agriculturist and small trader. After securing degrees in law and commerce and a coveted job as a state government officer, Bhau sought his mother's guidance. She advised him to go into business instead, since starting one's own business offered a greater challenge. Bhau heeded his mother's advice. With a meagre seed capital of Rs 7,000, he took up a small kerosene agency, under the name Jain & Brothers. The agency grew to become the Jain Group with an annual turnover of Rs 400 crore.

Bhau says he owes what he is today to his mother's farsightedness. In the initial stages, the joint family provided reliable human resources and much needed emotional comfort. His wife submerged her identity in his aspirations, giving him unqualified support, cooperation and encouragement.

Buddy Handa and Subir Bose, executives of the American oil giant Esso, had an influence in aggressive marketing, while friend Shaikh Chacha borrowed funds from the market to help Bhau tide over his difficulties. In addition, V S Damle of United Western Bank, Sethia of State Bank of India, D R Mehta of SEBI and Justice Dharmadhikari inculcated in Bhau the qualities of mind and heart necessary to conduct business with a certain value system. Birth in a business community, a supportive joint family network, contact with company executives, and the enormous possibilities of building a purposeful business based on agriculture were potent ingredients for Bhau's entrepreneurial success.

Creation of Business Goodwill & Identity

Having opted for business, it is important to build customer goodwill. I ask, 'Bhau how did you do it.'

He says, "When I became a franchisee kerosene dealer of Esso in February 1963, an opportunity presented itself. The budget increased the price of diesel from Rs 58 to Rs 85 per barrel. The day after the

budget, there was a long queue at my shop. I chose to pass on the benefit of the pre-budget price to the customers. This laid the foundation for their goodwill at the very start of my business.”

If he owed any money, to Esso or to banks, he would go on the appointed day and repay whatever he could. He would apologise for not being able to pay in full and would ask them to forgive him. The point is that he would not avoid them or miss appointments on false pretexts.

The goodwill he created by such acts rolled over to build a network of contacts of substantial significance.

In the short space of three years, Jain Brothers became Esso’s biggest diesel dealer in the Khandesh and Marathwada regions, bringing Bhau in close contact with hundreds of agriculturists and farmers. Sensing the link of diesel to the business of agriculture, Bhau redefined his focus. Instead of calling himself a diesel agent, who was also selling some seeds and fertilisers, he advertised the Jain Group as suppliers of seeds, fertilisers, pesticides, PVC pipes and diesel for agriculture. The focus was enlarged and the emphasis was changed – from a mere agent of an MNC oil company to a self-made Group, which provided integrated inputs for agriculture. Esso went into the background and Jain pitch-forked to the centre stage in a creative crafting of a meaningful identity.

In pursuance of this widened horizon, the Group made several breakthroughs:

- Purchased a sick dehydration unit; innovatively modified the equipment to produce Refined Papain instead of banana fruit powder; manufactured and exported Ultra-Refined Papain from India for the first time and has been the largest exporter of this product since 1978.
- Pioneered the introduction of drip irrigation systems in India and introduced the concept of an integrated approach, bringing under one roof all the activities related to the agro-business.
- Established, primarily for export, one of the largest dehydration units in this part of the world to produce flakes, granules and powder of vegetables like onion, garlic, and capsicum.

- Established one of the largest fruit processing plants with a rated capacity to process 100 tonnes per day, to make purees, pulps, concentrates etc.

Jalgaon on the World Map

Bhau's innovations are impressive. As Bhau says, "In 1963, Jalgaon had no special identity. I am proud of the fact that we have added value to so many lives and put this quaint little town on the world map. I believe this was achieved largely on account of my vision, supported by solid hard work." He continues: "Inspiring people by example is the method I followed for creating a committed and motivated team. We have received six state awards and 57 national awards for outstanding export performance, exceptional R&D achievements and entrepreneurship. To top it all, we received the international Crawford Reid Memorial Award for 'significant contribution to the micro irrigation industry outside the United States.' "

Bhau explains: "Micro irrigation is a scientific method of irrigation carrying desired water and nutrients directly to the root zone of the plant, drop by drop. Its advantages are early maturity, better quality and higher quantity. It is ideal for problematic soils and water, saves labour and up to 70 per cent water. It is successfully working on more than 40 crops covering over four lakh acres.

Our market share in India is about 60 per cent. We export to more than 30 countries covering all five continents, with an export turnover of Rs 75 crore. We are recognised as world leaders in providing custom-made irrigation systems. Jalgaon is the first district town in rural Maharashtra, perhaps in India, to have had a company that raised Rs 100 crore in a Euro issue.

This fine performance put Jalgaon on the world map. But then the Group faltered.

The Sad Patriarch, model of Transparency

With such a distinguished record of achievements, how did Bhau fail?

His own explanation is an exercise in perfect communication and provides a case study for students to learn how to establish understanding and empathy by presenting facts and owning responsibility.

I am Sad... I am Happy... I am Confident...

On November 26, 1997, Bhavarlal Jain placed a half-page advertisement in The Economic Times apologising to his shareholders, suppliers and creditors for his misadventure in diversification. It was probably the first time an Indian Corporate had chosen this route to make a public apology for follies and bad performance.

Such transparent communication reflects the sincere person that Bhau is, and aptly conveys the mixed feelings that he was going through.

Bhau's confidence about the future is based on his tested fundamentals on the conduct of business and track record of performance. The Jain Group went through three agonising years, but today it is almost out of the woods. If the customer is king, then dealers and distributors are kingpins.

Bhau's masterstroke is his letter 'Eclipse Cleared' dated March 15, 2000 addressed to his dealers and distributors. The excerpts reproduced below show why. He wrote:

Eclipse Cleared

Our company has sustained colossal losses during the past three years. Every stakeholder bore the brunt of this loss – be they customers, dealers/distributors, general as well as core promoter shareholders, creditors, banks and financial institutions, or suppliers, associates, government and the society at large. The atmosphere was agog with rumours, defamation, backbiting and calumny. It was a nightmare. During this period, we felt neglected, faced ridicule, deception, indifference and at times humiliation. We had to face situations not dreamt of before. Personal property, whatever little it was, including family ornaments, had to be either pledged or sold. While doing all this, there was fleeting anxiety whether or not we will get through this ordeal.

There, however, was a reservoir of self-confidence and the great

assurance of worthy deeds well done. Even during the weakest of our moments, we bore malice towards none. Solace, therefore, became the source of strength. Soul-searching compellingly revealed that sorrow and sufferings are to be taken as part of life, never mind the minutes, days, months and even the years. The journey to light through darkness is long and painful anyway. Yes, there were moments of hope, but for a greater part there were dark clouds of gloom, a plethora of problems and at times, crippling blows.

A few acquaintances, relatives and friends volunteered help but by and large we had to fight our own lonely battle. Rock solid and sustained support did come from our dealers/distributors and our customers, both domestic and overseas. Notwithstanding the inconveniences experienced by them, they never turned their back on us. Associates also took their turn. However, the saving grace came, though belatedly, from banks and financial institutions. Amongst the banks and financial institutions, the State Bank of India, the United Western Bank, ICICI and SICOM did go an extra mile and took a conscious decision to assist the company in every way possible. Local banks and credit societies also extended their helping hand in their own way and within their limits.

Taking into consideration the good work done by the company in the past, the bright prospects for its future and unimpeachable integrity and foresight of the promoters, all of these institutions, within the limitations of their rules and regulations, have achieved an outstanding feat never before experienced even by most of them. The well wishers and the sympathisers alike displayed their concern, vouched for us and did whatever they could. They even put to use their friendly influence and powers of persuasion. Similarly, the accommodation offered by some of the suppliers is unforgettable.

Everyone brainstormed time and again and after prolonged deliberations finally came out with a restructuring scheme which was to be a 'New Deal' for the company. The implementation of the revival plan began on February 28, 2000, the day on which my business career commenced 38 years ago. I was overwhelmed by the coincidence. History was created; the organisation was saved. Through the arduous passage, the founder-

promoters though distressed and pained, stood their ground resolutely. Those directors and associates, who were directly responsible to make this happen and who heroically dared the odds day in and day out, heaved a sigh of relief. Obviously, it is going to take some time to complete the formalities and for things to be the same as they were earlier. Now it is our turn to perform.

The eclipse has cleared. Let us forge our way with renewed vigour, zeal and fortitude.



Bhavarlal Jain
Jalgaon

Diversification Gone Haywire

What is Bhau's diagnosis of the Group's colossal failure?

He says, "Between 1992 and 1994, we diversified into unrelated areas like granite, computer hardware and software and merchant banking. These projects were conceived based on instincts, and under the influence of the then euphoria in the economy. Businesses like information technology were found to require a high degree of technical leadership. The organisation was not ready to provide it and the professionals who were relied upon did not measure up. The granite business was acquired and expanded out of personal preference, rather than as the result of an in-depth study of the business or any market survey. The merchant banking business was headed by a professional who was good at marketing but failed in documentation and securitisation."

"This must have affected the working capital," I probe.

"Yes," says Bhau. "All these investments went bad and led to a large-scale diversion of working capital funds. The interest burden increased and in due course even the core businesses like pipes and irrigation suffered for want of adequate working capital. Setting up sizable food processing facilities with an investment portfolio of Rs 125 crore, without realising that by its very nature food processing can take longer than envisaged to generate positive cash flows, also adversely impacted shareholder value."

Honest, if defensive, he says: “We bit off more than we could chew and diversified beyond our horizons. We tried to diversify into businesses without building an organisational base for them. This cost the company something like Rs 100 crore in a short period of three years. Most of them were not errors of judgement, but were the result of an indomitable will and spirit, which said ‘we can do everything.’”

I am blunt. “Bhau, you are sugarcoating the bitter pill. You went beyond your knitting. You did not assess your in-house core competencies. Thinking that ‘If MNCs can do it, why can’t we?’ led you into a trap. The shrewd businessman in you gave way to the idealist who courted disaster. What have you to say?”

Bhau frankly admits, “In a way, you are right. The nationalist got the better of me, the nationalist with a thirst for diversification. ‘If professionals can do it, why can’t we?’ I thought, and the innovator in me won out. I am never shy of making mistakes. ‘Let us try, whatever the cost, because the cost has never been a criterion in my life. MNCs are money-driven. Money was not my motivation, mover, driver, or originator. I have created wealth as a consequence.”

“The three differing thoughts tore me apart – integration, diversification, professionalism. I had a craze to put an Indian organisation on the international scene. I got carried away. I started eleven projects to be implemented in a period of two-and-a-half years. I had no organisation. If I don’t know, I thought, I’ll do it by hiring someone. Integration – original thought, and diversification – borrowed thought. Ideology got the better of me, so I don’t call myself a successful businessman. I am going through terrible pain because of that. I will do very well as an author, philosopher, and writer.”

Professionalisation Fails

I ask, “But Bhau, you hired professionals, didn’t you?”

He becomes pensive: “The professionals I selected were good people, but not efficient. In business, if goodness is at the cost of efficiency, you cannot survive. Some were talkers, and not doers. Most of them were failures in life. Whatever you do, you must make a mark.

You must do something, which nobody has done, or do something uniquely. My selection was based on ideology. I did not behave like a professional. I behaved like a patriarch. I am now a changed man. Now when we recruit, apart from assessing the candidate's philosophy, I want to assess his thinking methods, his competence and his values. What we need today are persons to turn the Group around. I want my company to be a blue chip."

Like many business patriarchs, Bhau is convinced of an urgent need to induct professionals. He is a changed man after experiencing failure. His selection criteria were not professional. To professionalise a family-run Group requires a wholehearted commitment from not only the patriarch, but also from all family members. Issues of organisation culture, image in professional circles, key results areas, authorities and the support due to outsiders require serious and sincere application. Professionalisation is an issue of synergistic matchmaking; that is the direction Bhau and his sons are probably moving towards.

However, the fact remains that Bhau is creative; he built a meaningful agro-industrial enterprise in a town away from industrial belts, developed a purposeful Group from his family members and some professionals, and showed performance despite setbacks.

Social commitment skills

What skills did he use to realise his dreams and achieve productive growth when he was not a 'professional'? How did he conceive, promote and build the edifice brick by brick?

Bhau details the essentials:

- The firm belief is that given an opportunity, every man has an ability to rise to the occasion and produce results;
- Everything becomes routine after six months. So what you really need is not technical competence beyond a limit, but thorough planning and original leadership;
- Social commitment is itself a skill, which we utilised. Basically society will feel that these people will be doing more good than

others. It's a great technique. And if you use it genuinely, it will lead to great results. Most people forget this. In their total attachment to bottom-line results, in their pursuit of creation of wealth, they neglect this particular agenda of social commitment. If we do not participate in anything happening in Jalgaon, say, in a conference on ayurveda and so forth, then I am no one. I should be a part of it. I used people skills.

- The 'work is life' formula was seen in action. It had a tonic effect. With this skill, we created extraordinary work out of ordinary people.

The Entrepreneur in Bhau

I have visited the Jain Group's facilities in Jalgaon several times. All the plants are modern. Appropriate technology induction and skill upgradation has taken place during different growth phases. The skills he used provide a clue to his astounding success.

I have observed Bhau using social skills to mobilise action.

- **Connecting:** Bhau connects through his hospitality system, which works with German precision. It expands his network of contacts. His staff at Mumbai and Jalgaon is ever ready to serve you. They book tickets, arrange transport and look after you with affection.
- **Bonding:** In his conversations, Bhau never says 'my company'; he always says 'our company', whether he is talking to a supplier, creditor, banker, stranger or journalist. With the use of affinitive words like 'our, we, let us' he establishes a bond on the emotional level.
- **Sharing:** He communicates his ideology, values, beliefs, philosophy, results and actions to his employees in Marathi, the regional language. He shares his person-hood, without the veneer of personality. His transparency allows him to appeal directly to his interlocutor's conscience.

Through skillful rhetoric, Bhau evokes a positive response to his obsession, 'work is life'. People do work for him. He does not talk of profits, probably because 'profit' is a bad word in our country, yet he has made profits. If asked, he admits that profits are essential. But he believes that profits follow work. He also has the social skill to skirt that, which is not palatable, without losing focus.

Bhau is a skillful communicator, more so a pathfinder.

*"I am never shy of making mistakes; let us try, whatever the cost,
because the cost has never been a criterion in my life."*

The Farmers' Messiah

Entrepreneurs are very often pioneers. Bhau is an excellent example. The concept of micro-irrigation was pioneered by him on such a large commercial scale. As opposed to settling for an established business, he carved out a new business. This is exactly what distinguishes a pioneer and a settler. And a pioneer remains a life-time pioneer. Bhau keeps own pioneering new projects like tissue culture, biotech etc.

From being a roadside kerosene vendor to a Rs 400 crore hi-tech agri entrepreneur, Bhavarlal Jain's pioneering innovations are enriching the lives of over two million Indian farmers.

"Adversity is a great teacher," admits Bhavarlal Hiralal Jain. In which case, his past five years were super educators for he survived five heart attacks, two bypass surgeries, one angioplasty, and Rs 160 crore of business losses. Obviously, a lifetime of pioneering has sent him a severe health bill.

But, Jain continues to dream anew and remains India's leading agriculture-based entrepreneur, one of Asia's best.

Jain's soaring story dived after 1995 when ambitious diversification into software, financial services and granite quarrying went awry. On November 26, 1998, his public apology to shareholders appeared as an advertisement in The Economic Times. It was an unprecedented move in the universal corporate habit of frantic buck-passing.

"Goodwill bailed me out," he says. For banks generously restructured loans, a foreign buyer offered Rs 185 crore in fabulous terms. "We are turning the corner," he asserts as afternoon sunshine floods his splendid office in Jalgaon, Maharashtra.

Earning goodwill colours his career like the purple and red bougainvilleas bordering his 1,000-acre Jain R & D Farm. A 15-minute drive from Jalgaon railway station, the sprawling green property stunningly contrasts against the searing heat and surrounding bone-dry landscape. Terraced garden, discreet white buildings, water reservoirs and 5,000 employees are a testimony to India's greatest private sector agriculture effort.

Fifteen years ago, Jain's newly acquired land lived on 30,000 litres of water a day. Now his rainwater harvesting and water conservation provide 30 lakh litres daily!

"Leave this world better than you found it," goes Jain's basic conviction as he goes about cultivating an agricultural revolution. Millions of Indian farmers have benefited from his pioneering drip irrigation method. Jain's micro-propagated higher yield banana crop earns farmers around Rs 2 lakh per acre and the regional per capita farming income of Rs 15,000 is the second highest in Maharashtra. Jalgaon, once a sleepy backwater town, is riding a boom wave.

Jain's path breaking 'Integrated Approach' creates a profit cycle for farmers. It first helps them maximise growth and then guarantees them a good price for their produce.

Jain develops soil improvement and water conservation methods as well as high yielding fruit and vegetable varieties. He then purchases fruits and onions, processes them with state-of-the-art technology and exports to over 40 countries.

The far superior product quality standards in the West made Jain realise the importance of research and testing. His hi-tech laboratories are acknowledged as the finest R&D centres of their kind in India. Yet, 94 national and international awards don't tell his whole story. Jain has hitched his profits to national development. It's a brilliant clarity of vision that mixes agro-based corporate success with socio-environmental responsibility. Mahatma Gandhi would have liked this man and his work.

"Between labour of love and love of labour, I would choose the latter," says Jain. He is a workaholic. "Nobody was born in the world

"Adversity is a great teacher."



DSIR Award (1995) – A rare distinction from a Central Government Scientific Body

believing Saturdays and Sundays must be days off,” he says. His corporate philosophy asks workers to place company work above personal needs and family problems. “That’s because the personal needs and the family comforts depend on work, not vice versa,” he tells them.

Jain’s new corporate credo asks his workers to think like owners. They are encouraged to take decisions. “In doing so, if they make an honest mistake, the company will bear the costs,” he says. “There is no employer, no employee in our company. All the people working together are associates only.” Every new employee has to undergo a one-week orientation course, during which the corporate philosophy is explained.

Everybody, from his sons to senior executives, from the chauffeur of his gleaming white Mercedes to people of Jalgaon, calls him Bhau, Marathi for ‘respected elder brother’. Judge a man by the respect and love, or lack of it, from his colleagues. In Jain’s case, he appears more as their father figure than a corporate head. “People are easily motivated,” he says. “Nobody wants to do slipshod work. It’s only greed for money that comes in the way of excellence.”

Money has never been his priority. “If I believe in something, then money, time or effort becomes immaterial in pursuit of it,” he says.

Nor is wealth an indicator of the depth of his feelings or expression of it. He goes out of his way to proudly show off his ‘ashram for cows’, a quaint, spacious refuge for aging bovines, his tribute to a good friend, D R Mehta, retired SEBI chairman.

Personal secretaries and people barriers do not exist in Bhavarlal Jain’s organisation. He himself answers his phone. “It helps me keep my feet on the ground,” says Jain. “I don’t want to be cut-off from my people. It’s a question of gratitude, the mother virtue that holds all other virtues together.”

“Eighty per cent of what I am is due to my mother,” says Jain. Gaurabai Jain told her son, “It wasn’t enough to take care of self and fellow humans. Someone had to look after birds, beasts and other beings.” The illiterate, enlightened mother taught him honesty and a deep reverence for nature and today Jain’s companies conserve precious resources, recycle waste, promote environmentally friendly pesticides and relentlessly plant trees.

Gaurabai and Hiralalji Jain had set off the beaten track in their Wakod village near Jalgaon. Hiralal was the first of the family to be born in Maharashtra. Their ancestors had fled Agolai near Jodhpur, Rajasthan, escaping from recurrent drought and famine. Hiralal found he could not cope with the money lending business he briefly dabbled in. Sorrows of people were too much for him, he told his wife. He began trading in agricultural produce. That lesser obsession with money probably passed on to their son Bhavarlal, born at sunrise on December 12, 1937.

Gaurabai believed children should not go to school until they were seven, as academics put too much pressure on the child’s tender mind. A delayed start to formal education meant Jain missed the civil service eligibility, after getting his law degree. But the books-addicted son’s life proves that his mother’s theory hasn’t done too badly.

Bhavarlal went to junior school in his village, high school in Jalgaon and college in Mumbai. After graduating in 1962, he became a kerosene distributor in Jalgaon. The same year, Morarji Desai’s budget hiked kerosene prices by nearly 50 per cent. But Jain was the only dealer who

“Between labour of love and love of labour, I would choose the latter.”

continued selling old stock at pre-budget prices and soon there were half km-long queues stretching outside his shop. It was Jalgaon's first taste of Jain's concept of earning goodwill as higher profit.

Bhavarlal Jain had his big break selling Papain, a multi-purpose papaya-extract enzyme. In the cold winter of 1978, he took a sales trip to New York on a \$ 30 a day budget. It was his first trip abroad. A friendly receptionist at this cheap motel helped him plan his sales itinerary. Jain managed a five tonnes order from Jack Haim of Enzyme Development Corporation. With this newly acquired capital, Jain sped on his road map of life. He began manufacturing low cost PVC pipe systems that would soon transform irrigation in the country. Next, he imported drip irrigation technology from USA for the first time in India. Precious water resources were dripped directly to the plant roots with minimum liquid loss.

No wonder Jain is hailed as the 'Father of Drip Irrigation in India'.

One value-added step led to another. Saving farmers from the middlemen's clutches graduated to giving them international exposure. His company sponsored a subsidised trip for 150 local farmers to the World Agriculture Conference in Israel. Within two years, the farmers had made enough money to pay for their own trip. Now the 'Jain Gurukul' hosts periodic seminars and education programmes for farmers and local people.

"Three basics form the cornerstone of every activity in my life," says Jain, "conservation of precious resources, export (which automatically reflects pursuit of quality) and finally the protection of environment."

Within these parameters, and the fourth attribute – fierce patriotism – his unique business model combines ancient tradition, high technology, street-smart common sense and timeless wisdom. His R & D farm is now a national showpiece on innovative private sector agriculture, where international visitors gush their awe and amazement in guest books.

“Comparing ourselves with the best of world standards takes care of any complacency,” says Jain. At age 64, he belongs to a younger gung-ho generation firmly convinced about India’s inevitable future superpower status. “If you believe that, you won’t find a better friend than me,” he says.

The economics route to it lies in agriculture-based industry and software, he believes. “Industrial growth based on borrowed capital and technologies can only temporarily fuel the economy. India’s core strengths are its vast land, climate conducive for agriculture, water and human resources.”

Jain says he doesn’t have any political ambition. But wouldn’t he as a politician, be in a better position to deliver his dreams?

“At my age, I just can’t go through the mud and dirt of the political process where straight talking doesn’t work,” he says. “Dedicated young people should get involved though.”

‘A farmer, who grows two blades of grass where just one grew before,’ quotes Jain, ‘is far better than a politician’. But then Jain identifies himself as a farmer and earthy language colours his fluent English. His mind is forever zooming ahead and now he wants to see his drip irrigation systems on global maps. “Wherever in the world, if three tenders are short listed for drip irrigation turnkey projects, my company must be on it.”

His sons Ashok, Anil, Ajit and Atul are deeply entrenched in the same business. Young, well-educated and ambitious, these chips of the old block regularly involve themselves in local philanthropic, cultural and health promotional activities.

From hard selling the new LPG cylinder concept to Jalgaon households in the 1960s to selling micro irrigation and tissue culture to illiterate farmers, needs a stubborn, tenacious streak. Can that sometimes translate to ‘an ‘I’m always correct’ attitude?

“It’s a fine line,” admits Jain. “Like the fine line between envy and jealousy.”

Or it is the fine difference separating a master strategist and a messiah. But there is no doubting the value of Bhavarlal Jain's brilliant rural poverty elimination methods. He crucially feeds the nation's progress.

Future Indian history will give him far more attention than he is getting now.

More Crop Per Drop

With entrepreneurs, speed is what matters most. Quick to assimilate lessons and swift to act on them for a new direction. What is beyond understanding is the help received from unknown quarters — Aqua International. What role did destiny play in bringing this US company investing in water related businesses and Jain Irrigation together.

Incredible but Factual

It is the stuff that dreams and legends are made of. A young farmer, whose forefathers had in 1897 migrated from arid Rajasthan to a rain-starved corner of Maharashtra, becomes the first in his family of cotton and vegetable cultivators to gain education, starts vending kerosene on pushcarts, and within 40 years evolves this vocation into a diversified enterprise that boasts a turnover of Rs 347.51 crore. What's more, his four capable sons are charting spectacular growth plans for their listed corporate house, Jain Irrigation Systems Ltd, JISL.

Bhavarlal H. Jain, the founder chairman, says: "The company is aspiring to a turnover of Rs 1,000 crore over the next four years."

Five heart attacks, two bypasses, one angioplasty and recent hospitalisation for observation have not shaken his commitment as he affirms, "I emerge reinvigorated after every such setback."

Every morning he walks around his complex, consulting with his employees he calls "associates", and then works at his office as the life-long chairman of his enterprise.

Pre-eminence

With over 2,600 "associates" worldwide, 80 per cent of them locals, Jain Irrigation Systems Ltd (JISL), headquartered in Jalgaon in north

Maharashtra, has established its leadership in such diverse spheres like micro and sprinkler irrigation systems and polyvinyl chloride (PVC) pipes as well as polycarbonate (PC) sheets. In addition, it deals in agro-inputs like high yielding seeds, bio-fertilisers and tissue culture, agro-processed products like fruit purees and pulps, dehydrated onions and vegetables, and solar water heaters.

“There is a strong synergy amongst all our products which are essentially environment-friendly and find application at all levels in agriculture,” remarks Jain.

Miscontrued Overstretching

A series of financial debacles from 1996-97, however, eventually compelled the Jains to cede their majority equity holding to an overseas fund in a debt-restructuring pact entered into on 20 August 2002 with a lock-in period till 31 March 2005.

They did divest their shares by September 2005 having gained handsome returns on their investments. The fund almost doubled their investment in just three years.

“Whatever could go wrong went wrong,” recalls the 38-year-old managing director Anil Jain of those bleak years. The company eventually got snared in a debt trap, as the capital market crashed and interest rates went up, and it had to borrow from the private market as banks declined to lend.

Fortuitous Helping Hand

Specifying that the accord with Aqua retains managerial control with the promoters, Anil Jain says, “It was while our company was in the process of converting some of its loans to long-term investments and getting some penalties waived that it was approached in April 2001 by Aqua International Partners L.P. of San Francisco.” Negotiations and due diligence became protracted owing to the 11 September 2001 terrorist attack on the US and the border impasse with Pakistan, he mentions.

With the theme of water and water-related activities, Aqua's primary interest in JISL stems from what it sees is the global potential in drip irrigation and JISL's ability to emerge as a global leader. A member of the \$ 12-billion Texas Pacific Group, Aqua is a \$ 325 million fund established in 1997, with support from the US Overseas Private Investment Corp (OPIC). Like in all venture funding agreements, the Jains may well regain equity control by exercising the buy back option any time after 31 March 2005.

Its agreement with the strategic investor entailed JISL to make preferential allotment of 2.37 crore equity shares of Rs 10 each to Aqua at Rs 77.37 per share, making a total investment of Rs 183.37 crore, that is, \$ 40 million by the then exchange rate. Aqua thereby wrested an equity holding of 49.4 per cent on the expanded equity base of Rs 47.62 crore, the move whittling down the promoters' stake of the Jains from 72.27% to 35.6% on the current equity base of Rs 22.79 crore.

These issue proceeds are being leveraged by JISL to repay its creditors and redeem existing secured and unsecured debt in the form of non-convertible debentures and cumulative redeemable preference shares issued under the debt restructuring scheme, as also to use the balance funds as long-term working capital.

Bitter Pill

While the agreement resulted in Bhavarlal Jain being anointed chairman for life, Ashok Jain, his eldest son who is 40, was re-designated from vice-chairman to president. Aqua is now represented on the nine-member JISL board with two American and two Indian nominees - including its managing director John Sylvia - and will influence long-term policies as the largest shareholder.

The re-designations have left unchanged Anil Jain's position as managing director, while Ajit Jain is no more joint managing director, but chief operating officer. The youngest brother Atul Jain has not been a Director and is now chief marketing officer. Another member on the board who has lost his directorship is R. B. Jain, the senior Jain's cousin and a chemical engineer from IIT, Kharagpur, who is now chief technical officer.

There is a provision for increasing the representation of Aqua, the promoters and the independent members/lenders nominees by one each.

Ashok Jain indicates, “JISL has hitherto managed to repay most of its debt, which extended to over Rs 235 crore.” Moreover, on 15 December 2002, JISL signed an agreement for sale of two sets of polycarbonate (PC) sheet production equipment and other assets to GE Plastics India Ltd. The latter, in turn, leased back these facilities to JISL as a 100 percent Export Oriented Unit (EOU) for exports to GE under its brand name as also domestic sales and exports in the name of JISL, the manufacturers. The turnover is hence unlikely to be affected by the sale of equipment and other assets.

Brief Chronicle of JISL

It was after graduating from Mumbai’s Poddar College that Bhavarlal Jain passed the Maharashtra Public Service Commission (MPSC) examination and was appointed Deputy Collector when he had a change of heart and opted to become a first generation entrepreneur. He bought some drums and kerosene and in 1963 moved from Wakod, where his forefathers had settled 5 km from the renowned Ajanta Caves, to Jalgaon, Maharashtra’s major banana growing district located 40 km away.

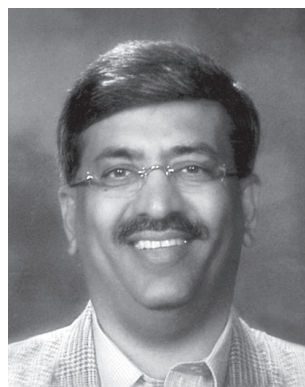
Dr V. R. Subramaniam, an entomologist and manager with JISL, says: ‘Jalgaon has desiccating winds, with temperatures ranging between 7 and 44 degree celsius and rainfall that ranges between 650 and 750 mm, though last year it was recorded at 400 mm.

Bhavarlal Jain set up a family partnership concern called Jain & Brothers and soon acquired dealership of Escorts tractors and Rajdoot motorcycles. By 1970, he had added agricultural implements, seeds, fertilisers and pesticides to his portfolio and had started selling PVC pipes as Garware and Chemplast dealer.

Export Thrust

In April 1978, Jain Brothers embarked on their first manufacturing venture when they cornered a sick banana powder plant at an auction

for Rs 30 lakh when they had only Rs 2 lakh as investible surplus. After modifying the plant for the production of Papain from papaya latex, Jain set off for New York in quest of customers. The heartening response positioned the company on the international map as India's foremost supplier of Refined Papain, an enzyme for pharmaceuticals. This business was terminated last year as its viability was eroded by synthetic substitutes produced in the West, says Anil Jain. (Please refer page ...) "We transferred most of the plant equipment to our fruit processing activity," he adds. "But our foray into Papain processing helped our company gain valuable insight into the agricultural sector, helping us build enduring ties with farmer communities and also acquire basic experience for our food businesses."



Ashok B. Jain

Water Conveyance

The year 1978 was also the time Jain Brothers was rechristened Jain Plastics and Chemicals Ltd, overall sales nudging Rs 11 crore from Rs 10 lakh in 1963, a 110-fold increase. In 1980, the company commenced manufacture of PVC pipes with an annual capacity of 100 tonnes, since augmented to 37,000 tonnes, making it India's single-largest producer of PVC pipes. Sales in 2002-03 of these plastic piping systems accounted for 40.12 per cent of the overall turnover, with the plastic sheet division contributing 24.25 per cent, micro irrigation systems, another 17.96 per cent, agro-processed foods, 15.27 per cent, and solar water heaters, 2.4 per cent. The PVC and PC sheets are exported under the brand name Ex-Cel.

"A close-knit dealer distribution network in the rural areas together with continuous automation, upgradation of product facilities and in-house R&D for optimum capacity utilisation has kept us at the forefront," notes Atul Jain. "The growing export range now extends to casing and screen piping systems." The machinery was imported from Cincinnati Milacron, a global leader in plastics processing machinery and mould

making equipment. “Cincinnati also gave us credit and raw material,” Anil Jain says. “We improved upon their equipment and expanded production through technology, becoming the country’s largest producer of PVC pipes.”

The Rs 521 crore (2002-03 turnover) Pune-based Finolex Cables Ltd and Mumbai’s Rs 567.15 crore DCW Ltd are JISL’s key competitors in the PVC sector. Finolex’s challenge is, however, dimming as it produces mostly PVC sheets, which account for a mere 2.2 per cent of its business this year, and slipping sales have compelled the company to prune its manufacturing capacity and review the scale of operations. DCW’s PVC division, however, showed a brisk turnover growth of 20 per cent, to Rs. 304.47 crore, with production rising from 62,344 tonnes to 64,834 tonnes. Since PVC is already the most widely used thermoplastic in India, with a growth rate of over 15 per cent, the space is not cluttered.



Anil B. Jain

Holistic Thinking

Ashok Jain maintains that his company has an edge as it has meticulously built up a ready kinship with the farmers through an integrated rural marketing approach that includes contract farming. Says he, “We sell them vital inputs such as the micro irrigation systems and genetically superior planting materials, offer them agronomical guidance, then buy back their produce, adding value to it for sale to overseas and domestic markets.” JISL has over the years built an enduring brand equity with its product range, namely, Jain Drip, Jain Sprinklers, Jain Tissue-Culture, Jain Pipes, Jain PE pipes, Jain Solar Heaters, Farm Fresh processed vegetables and fruits, and Ex-Cel Plastic Sheets. The corporate establishment comprises the Jain Plastic Park for the micro irrigation systems (MIS), plastic piping and sheet, the 1,000 acre Jain Agri Park for the R&D farm and tissue culture facilities, and the Jain Food Park for onion dehydration and fruit processing.

Global Marketing Reach

“Our company has 27 marketing offices in India and two overseas, in Twickenham in the UK and in Columbus, Ohio,” says Anil Jain. “We export to 60 countries worldwide, our clients ranging from farmers who buy our farm inputs to multinationals like Coca Cola, Nestle, the Netherlands’ Cargill, Riedel and United Warehousing and Forwarding, Canada’s Dobexco Foods, UK’s Sleaford and John A. Taylor, Iran’s Pakdis, Cibtak and Noosh Mazandaran, Japan’s Taiyo Kagaku and FIC, SKF Foods of Denmark, Worlee, Trokost and Schumacher of Germany, Culinar of Sweden, Grupo of Guatemala, Lee Pineapple of Malaysia, and NADEC of Saudi Arabia.” Its processed foods and dehydrated onion serve a clientele that includes McDonald’s, Coca Cola and Pepsico.



Ajit B. Jain

Its pipes, used for cable ducting, and conveying water, gas, effluents, band-width and the like, are sold domestically to the Tatas, Reliance, L&T, the Aditya Birla Group, BPL, Bharti, HLL, Mahanagar Gas, Gujarat Gas and Himachal Futuristics.

One-stop Agri-shop

In 1986, the Jains renamed their company Jain Irrigation Systems Ltd and on 17 October 1988, listed it on the capital market with a public issue of 410 lakh equity shares of Rs 10 each at par. Ajit Jain recalls how 1989 proved to be a watershed for the company as it successfully pioneered water-management through micro irrigation. “This initiative led to the introduction of such high technology concepts as an integrated systems approach, a one-stop-shop for farmers, infrastructure status to micro irrigation, and farm as industry into Indian agriculture,” he observes. In 2002-03, JISL produced 4,023 tonnes of tubing and 631 tonnes of mouldings with sales of Rs 60 crore, projected to increase to Rs 101 crore next year.

Senior vice president Charitra Jain, who is no relative, looks after the world class food processing facility he helped set up in 1994 for dehydrating onions and vegetables and for producing fruit purees, concentrates and pulp. “These plants are ISO 9001 and HACCP certified and meet international Food and Drugs Administration (FDA) statute requirements,” he claims. “They combine modern technologies of the West and the vast, mostly untapped agricultural resources of India, using local human resource; at the same time, we have set ourselves a goal to become a major and reliable global supplier of food ingredients of the finest quality.”

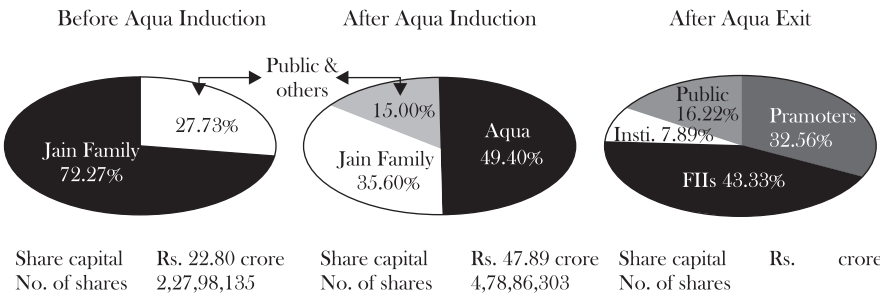


Atul B. Jain

With a yearly production capacity of 2,700 tonnes, the onion and vegetable dehydration plant and a customised multi-storeyed mill imported from the US, the only one of its kind in Asia, is capable of slicing, chopping, kibbling, mincing, grinding, granulating and pulverising dehydrated onion products with applications in fast foods, pizzas, soups, gravies and ready-mix shelf foods.

“The average Indian onion has a mere 13 per cent solid content, that is, the volume left after dehydration, whereas we have developed a type that yields 22 per cent and are working on enhancing this to 25 per cent, attained by Californian onions,” Jain mentions. The company has

Shareholding Pattern



smaller dehydration units also at Vadodara and Nashik and an ancillary fruit processing plant in Sangli.

Dr K Nag, the laboratory head, is one of the 16 doctorates Anil Jain says his company employs, apart from “the largest number of agro-scientists in India’s private sector”. He mentions that while his facility can trace any of the 48 pesticides in use in India, the stringent standards imposed by the Jains on their own fields and on their contract farmers and the scrupulous in-house cleaning processes have ensured that their full range of agro-produce conforms with WTO stipulations.

Dr V P Singh, who is senior manager with Jain’s tissue culture propagation facility for micro-propagating tissues from carefully selected disease-free mother plants of banana, indicates that JISL has so successfully adapted Grand Nain strain of banana that the demand has far outstripped its production. JISL produced 32 lakh plants last year, 34 lakh this year and has targeted 45 lakh for next year. This variety was introduced through collaboration in 1994 with Rahan Meristem Ltd, an Israeli banana germplasm company, which accounts for a tenth of the worldwide export of banana seedlings.

“While the normal banana will yield one crop in 18 months, Grand Nain yields the season within 10 months,” Singh explains. “Sucker cultivation from elite banana plants has increased yields by 30 per cent.” Apart from Maharashtra, Jain now has customers for its banana plantlets in Gujarat, Karnataka and Uttar Pradesh and cultivators have seen their profits soar from Rs 25,000 an acre for their normal banana yield to Rs

Share Price



70,000 to Rs 1 lakh an acre with Grand Nain strains, says researcher Kalyani Moharir.

Subramaniam adds that JISL's research laboratory has yielded banana juice, which is golden yellow and clear, but it is on a laboratory scale and not yet ready for commercial launch.

Research is also on-going on a 145 acre plot with densely planted mangoes of different varieties, including the famed Alphonso, for eventual commercial use for the fruit processing plant, he notes. JISL markets its foods under the brand name Farm Fresh, now readily recognisable in the US and Europe.

Anil Jain says JISL had planned to diversify into the allied field of food processing as it had foreseen competition emerging from pipe makers who mushroomed in the mid-1980s. "Their low investments spawned a ready unorganised sector that compromised on quality, rendering it difficult for us to compete," he explains.

On-farm Water Distribution

As the company repositioned itself as JISL in 1986, it forged a five-year technology partnership with James Hardie Irrigation of Italy. But while Hardie's systems were designed for large farmers, Jain adapted them for the smaller landholders in our company.

"Introducing water conservation techniques was, however, a painstaking process as the mindset of the Indian farmers was that more water spells more crop," says Ajit Jain. "To expose them to the virtues of this system, we took these farmers, clad in dhotis and Kolhapuri chappals and who had never before left their districts, to demonstration farms and even workshops and seminars in Australia, Hawaii, Israel and California."

The Jains themselves established a pilot R&D demo farm in Jalgaon to prove that the system works in India as well and carried out various techniques in wasteland reclamation through watershed planning and water harvesting techniques like micro irrigation, terracing, bunding, and recharging groundwater.

It was whilst attending an international micro irrigation conference in California in 1985 that Bhavarlal Jain found drip irrigation ideal to counter water scarcity. "The Centre too has recognised the worth of this system in the last Union budget by setting up a task force on drip irrigation chaired by Andhra Pradesh Chief Minister N Chandrababu Naidu with my father as a member," Anil Jain remarks.

An ardent admirer of the Jains' enterprise, Shivajirao G Patil, ex-Rajya Sabha MP and chairman of the Indian Sugar Exim Corporation Ltd, nonetheless mentions that the capital cost of a drip set is daunting for the average Indian farmer, extending to as high as Rs 35,000 per acre. Both, Ajit and Anil Jain indicate that such costs depend on the area cultivated and the crop sown, but assert that the returns are prodigious. Maharashtra accounts for around half of the 1 million acres cultivated nationwide under the drip method.

"A study by the Indian Institute of Economics shows, for instance, that drip irrigation, costing Rs 33,595 for a 2.11 hectare banana field, ensures per hectare increased yield of 153 quintals and increased profitability of Rs 32,500 with the life of the drip set being five years. Fertilisers can be applied through the system as well, a process termed fertigation, cutting down on extra labour," observes Ajit Jain.

Ashok Jain maintains, however, that the Maharashtra Government's scheme of providing a 50 per cent subsidy to farmers installing drip sets-with a ceiling on the number of beneficiaries per district - was very popular and hence JISL was invariably overflowed with orders. "But subsequently this subsidy was reduced to 35 per cent and we have been informed that corruption has undermined this scheme," he points out. "Besides, with Rs 30 crore subsidy dues pending to us from the government, we have decided to abandon the scheme and are now selling our drip systems on cash payments at a 15 per cent discount." JISL has managed to sustain profits as it now receives payments up front, he adds.

Recklessness Penalised

It was from 1996-97 that JISL's fortunes started dimming. "Between 1994 and 1996, we ended up committing to 12 different projects that were partly expansion, partly related diversification and partly unrelated diversification," says Anil Jain. Apart from the debt trap, some projects encountered a disaster like the onion dehydration plant. "While the price of onions had hovered around Rs 2 per kg for the past 20 years, it spiraled to Rs 40 per kg just as we were setting up the plant, rendering it unviable to start operations," he recalls.

"We also faltered with some companies we acquired/set up, namely, Atlaz Technolozy Pvt Ltd, Gowtham Granites Ltd and Jain Securities International Ltd." The company's Jain Sunwatt solar water heating systems, however, did not fare badly. It was launched in 1994 following a technical licence agreement with Israel's Amcor Ltd.

Credentials Validated

In late 1998, JISL engaged KPMG to assess the long-term viability of the company and its product demand. "But our lenders felt that though we were re-channeling profits into the growth of the enterprise, they would wait and watch if we were capable of a turnaround," he says. As JISL had a large number of lenders, it took almost three years to convince them of the proposal for the loan restructure, though certain banks like American Express and Deutsche Bank withdrew.

Learning the Lessons

Bhavarlal Jain remembers how 20 years of the 'we can do it' spirit and the post-liberalisation euphoria had led his enterprise into these ill-fated forays into finance, info-tech and granite. "We took risks in the quest of sunrise industries with a bright future and excellent profit profiles, but soon discovered that managing them was infinitely more complex," he declares. "What's more, we could not provide them leadership and pressure from them drew attention and resources away from our existing strong main business lines at a crucial time."

But referring to his company's on-going efforts to turn the corner, he affirms, "It is the daily renewal of faith in quality and excellence and in continuous innovation that presupposes improvement." While acknowledging that his "associates" and shareholders have in the recent past not secured the dividends they deserved, he deems the prospects bright now. "We have redefined our priorities and while we were ideology conscious in the past, we are now profit conscious as well," he maintains. "This is necessary in today's competitive world."

He is nonetheless clear that JISL's focus will remain on its core competencies in agro-industry, with possible forays into academia pertaining to agriculture as it already enjoys collaborative and post-graduate research with various universities.

"It is the daily renewal of faith in quality and excellence and in continuous innovation that presupposes improvement."

Notable : Bhavarlal Hiralal Jain

Entrepreneurs are unconventional people. They do not get into run-of-the-mill vocations. They tend to break traditions. They enjoy meeting challenges head-on. They get extra energy when they come across seemingly unsurmountable obstacles.

As ‘millions-of-people-across-the-globe-go-hungry’ becomes only a news item, Bhau Jain undertakes the ‘mission impossible.’

Concern for the Poor

An estimated 852 million people went hungry between 2000 and 2002 according to the UN’s Food and Agriculture Organisation. But not all food issues in developing economies translate to bad news. One man has worked tirelessly in India since 1989 to introduce plastic micro irrigation systems to agriculture and thereby pull world’s farm labour and farmers out of hunger and poverty. He’s Bhavarlal Hiralal Jain, founder and chairman of Jain Irrigation Systems Ltd.

Jain himself started out in relative poverty. In 1963, he pooled the savings of three family generations – the equivalent of \$ 160 – and started selling kerosene from a pushcart. Turnover was \$ 23,000 in year one. That is a tribute to his entrepreneurship.

Increasing Farm Output

Inspired by a quote – “Agriculture: a profession with future” – Jain then added farm equipment, PVC pipes, and sprinkler systems to his range, and by 1978, sales had grown to more than \$ 2.5 mn. The firm got into processing plastics in 1980 when it started extruding PVC pipes at the rate of 100 tonnes per year. The PVC pipes were a replacement for GI pipes used on irrigation water storages and open wells for bringing irrigation water from the source to the farm boundary. This usage of PVC pipes not only reduced water losses but also saved electric power.



*Receiving Gandhi - Ambedkar Social Justice Award from Justice (Retd.)
Chandrasekhar Dharmadhikari (2002)*

Capacity now runs into the tens of thousands of tonnes a year. *(Currently the capacity is 1,00,000 tonnes.)*

1989 was a watershed year for Jain – the firm started developing and marketing drip irrigation systems for smallholder farmers to help them increase farm yields. The drip irrigation systems are made up of plastic tubing as water transporters and plastic moulded water emitters supplying required quantity of water to the plant at its root zone. What is more, this same system can be used to supply fertilisers using fertigation tank. This approach reduces the fertiliser requirement and eliminates labour cost. This heralded the era of what Jains called as ‘Plasticulture’. The micro irrigation concept proved successful.

Jains also entered into the bio-technology field through propagation of tissue culture banana plantlets. Their Grand Nain variety has become so popular that not only local farmers but also banana growers from several other states have been booking orders for the same. The demand has always been outstripping the production capacities though Jains have been continuously increasing the same.

As a result of micro irrigation and superior planting material, farm yields shot up to the extent that more vegetables and fruits were being produced than could be sold and consumed locally. The solution? Jain started setting up world-class food processing facilities for dehydration of onions and other vegetables, and production of fruit pulps, purees and

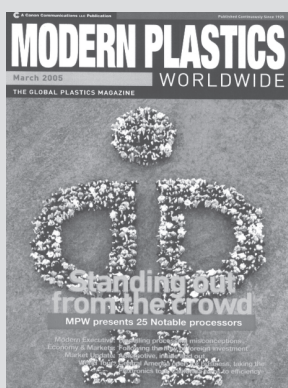
concentrates. Jain would then purchase output from his smallholder irrigation customers, process it, and market it nationally and internationally.

“The Indian population is growing, so we need to grow more food,” says Jain. “At the same time, water is a precious commodity in the subcontinent nay, globe. Micro irrigation systems are a perfect means to save scarce water and to increase production as they generate more crop per drop,” notes Jain.

Exports of Plastic Items

Utilising their expertise both in extrusion as well as injection moulding, Jain Irrigation expanded its plastic processing activities to produce various polymer sheets and moulded components for export market. Beginning with PVC sheets, Jain Irrigation developed the in-house technology of processing PC sheets – a singularly unparalleled accomplishment. Jain Irrigation also supplied a variety of moulded components to stringent requirements of customers like GE. Today, Jain Irrigation has the rare distinction of processing largest variety of plastics and plastic items under one roof.

‘Modern
Plastics Worldwide’
(An international
publication from
California, US)
presents 25 notable
plastic processors.
They span the globe
ranging from
Harold Faig,
Milacron,
Cincinnati, Ohio,



US to Alfred a Bulitz, MD, Gira Plastics, Radenvormweld, Germany, to Hong Huan Ching, CEO of Coxon Group, Taipei, Taiwan. Highlighting leaders of extrusion firms, academics, consultants, and injection moulders. True to his guiding principle that he will establish leadership in whatever he does at home or abroad, Bhau ensured internationally comparable quality for his products. Bhau has been included in the illustrious list.

“We took risks in the quest of sunrise industries with a bright future and excellent profit profiles, but soon discovered that managing them was infinitely more complex,”

Irrigating the Future of Agriculture

Real entrepreneurs do not just do business; they weave into it their work philosophy. In Bhau's case, it revolves around concern for environment and responsibility to the society. Bhau not only defined his corporate philosophy in clear terms but also personally explained it to the senior management.

‘One who solves the problem of water is worth two Nobel Prizes, one for science and another for peace.’

- John F. Kennedy

Recognitions and Rewards

Winning a lot many national and international awards as recognition over the years, last in the line being EIMA Technical Innovation 2005



Atul B.Jain & Ajit B.Jain receiving EIMA mechanical innovation award from Masomo Goldano, Chairman, Unacompo, Italy(2005)

Award, Jain Irrigation Systems Ltd (JISL) has time and again proved its competence in carrying out its responsibility and obligation to do better in future than what it did in the past. Its search for innovation, exceptional merit and outstanding performance in the Agriculture Sector has been unending.

Corporate Philosophy

The organisation's mission is to leave the world better than it was found with a vision to establish leadership in whatever it does. Its guiding principle states that in order to translate the corporate philosophy into action, its members will work hard, very hard. They will manage their resources, men, material and money, in an integrated, efficient and economic manner keeping in view that social responsibility and environmental concerns are equally relevant.

With this noble philosophy, the organisation has trekked the heights of success in a very short span of time since its establishment in 1963. The various corporate wings comprise of Jain Plastic Park, Jain Agri Park and Jain Food Park. Along with these, the various activities of agricultural services include agricultural R & D, demonstration, training and extension, turnkey agro project consultancy and implementation, wasteland reclamation and soil conservation, and water harvesting and storage.

The organisation has dedicated itself to the development of agriculture and agro-processing by providing India's only one-stop-hi-tech integrated agricultural shop where the farmers are first helped to produce quality farm products, then these products are bought by the organisation, required value addition is done to these and then the products are exported.

In an informal interaction at his house at Jain Hills, the chairman, Shri B H Jain asserted, "At the core of organisation's success lies its commitment to shared values and work culture; and the organisational belief that 'work is life and life is work.' In this work culture the organisation has no hierarchy. Every one is owner and every one plays a role. The extent of ownership and the nature of responsibilities may differ, but the organisation belongs to one and all. And this defining value system makes Jains different from other business groups".



Jain Hi-tech agriculture institute

Sustainable Agri Development

At Jains the central theme is: “agriculture sustainability and environmental protection”. The Group offers the best mix of agriculture, environment and industry. The Agri Park deals with R&D, plantations, biotechnology, resource management, training and extension etc. The Food Park deals with food processing activity and exports of processed food. The Plastic Park is a contribution to agriculture through plastic processing (plasticulture). The Group thus deals right from training to agri- inputs, technologies, planting material to processing of farm produce and exports.

With a shared value system, the organisation has inculcated a feeling of belongingness among employees, which makes them feel responsible of the unit they are handling and so a better result is generated. Besides business activities, training and extension is the major focus. The Jain Hi-tech Agri Institute, only in the fifth year of its operations itself, set a landmark of 30,000 visitors this year for training and demonstration of various hi-tech agricultural practices.

Mr Ajit Jain, joint managing director, says, “Micro irrigation system in India is not a product but, a concept, and therefore farmers need to be given training and education if we have to succeed”. Incidentally, many

players in the micro irrigation industry differ with him on this and for them, irrigation systems are commodities. He justifies his approach saying, “Had it been so then JISL may not have been the consistent market leader in an industry where even Israeli companies are present.”

All Round Leadership

Today, with more than 3000 committed employees working to achieve excellence for a common cause, JISL has established its leadership in diverse products like micro and sprinkler irrigation, banana tissue culture, dehydrated onions, fruit purees, plastic pipes and sheets. With a lot many innovative ideas, progressive attitude and a leading tempo in the hearts of the management team, the organisation aims to expand its business and take it to newer heights.

But, success has not come by easily. It has taken days and nights of involvement of the founder Mr B H Jain, his four sons, Ashok Jain, Anil Jain, Ajit Jain, and Atul Jain and the worker family of JISL. The company also faced many obstacles.

The most interesting thing that I came across during my visit was the proud listing of all failures among success in the Corporate Gallery. When I asked Bhavarlal Jain at breakfast about this unique thing, he said, “All of us fail, but like to remember only success. Remembering success is good. But, it is better to remember failures, which can guide you better than success.”

Pilgrimage Centres

Over and above the excellent achievements in business, the Jain campuses at the outskirts of Jalgaon comprised of Jain Hills, Jain Valley and Jain Fields that the founder Mr B H Jain has built, are places worth visiting. Commenting on the beauty of the place, the Ambassador of Israel to India, Dr Yehoyada Haim, wrote in the visitor book, “If Shahjehan was alive today, he would have said, ‘if there is paradise on earth, it is here, it is here, it is here.’”

Not surprising that the campus has attracted many VIPs, including Chief Ministers of Gujarat and Andhra Pradesh, the Union Agriculture

Minister, the Vice President of India and many other dignitaries over the years, besides about 30,000 other visitors that came last year for training and study. Not only they hailed the work done by JISL in sustainable agriculture, but also praised the beauty of the campus, so meticulously built by the great visionary, Mr Bhavarlal Hiralal Jain.



Bhau with Dr. Rajendra Malose

Dr Rajendra Malose from Chandvad of Nashik district had written a poem in Marathi with the title “A Dreamer with Passion.” Later, when he heard of Bhau, he came over to Jalgaon and found that the dreamer of his poem actually existed in flesh and blood. He has since turned Bhau’s great friend.

A Dreamer with Passion

On hills and forests were stones all over
A dreamer – he gathered them all together
Formless and angular, of no beauty or grandeur
Drew ridicule and derision from every corner
But the dreamer was calm and his eyes shone
For, his vision saw an idol in every stone
Forming these idols was the mission of his strife
Love was his strength and his faith his life
His touch awakened the long inanimate
Out stood the idol his vision articulate
In the tale of its birth the idol does offer
A living tribute to its creator – the dreamer

May the foresighted dreamer achieve the targets through his vision and bring a drastic change in the face of Indian agriculture and prosperity to farming community. The blessings he has received are countless and may the numbers touch the sky.

“At the core of an organisation’s success lies its commitment to shared values and work culture: work is life and life is work.”

Around the World with a Handcart

Repayment of social debt in gratitude as a duty is an aspect of any entrepreneur's life. Bhau, an ardent philanthropist, has now largely diverted his mind towards social welfare, keenly monitoring every thing personally, however big or small.

From Rags to Riches

“Woh phool sar chadha jo chaman se juda hua;
Izzat use milee jo watan se nikal gaya”.

(A flower, when plucked from the garden, is worshipped. So also, the man, who leaves his homeland for a cause, earns respect).

Like many others in Jalgaon, Bhavarlalji is a migrant to the city. However, what distinguishes him from others is that his forefathers faced the rigors of migration twice: First from Rajasthan to Vadali and then from Vadali to Wakod. This perhaps was fortunate for him, as



Late Ranidanji Jain Madhyamik Vidyalaya & Smt. Kantabai Jain Junior College, Wakod

blessings also came to him twofold, not only in the form of means and money, but also in the form of vision and wisdom.

It is this ‘vision and wisdom’, not the means and money of the 70-year-old founder-chairman of Jain Irrigation, which has helped him take his establishment, a MNC, yes an Indian Multi National Company, to such heights not only in our country but in 107 countries around the world.



Newly laid road and solar lights at Wakod

Reaching such a goal requires a different kind of determination, hard-work and commitment. However, a closer look at Bhavarlalji’s life clearly reveals that he did all this and more.

Modest Business Commencement

Bhavarlalji himself recalls, “I had a meagre capital, the combined savings of three generations, in my hands when I started selling kerosene in Jalgaon on a pushcart in 1963.”

“Kerosene?”

“Yes,” he replied. “I had a keen interest in agricultural products and rural life. Can you dissociate kerosene from such life?” he asked and then elaborated further, recalling his mother’s advice, “She said to me, ‘You can fill your belly easily, like anyone else in this world, and there is nothing great in this. You should try to do something that would also feed the animal world.’ ” He paused for a moment and then continued, “Her advice remained stuck in my mind for ever.”

“I kept thinking about her advice and decided to do something, which would not only feed other people but would also care for the

birds, the cattle and other animals. Hence I opted for agriculture, the only industry which is capable of doing all this.”

So, with a pushcart, his journey began. Since he did not have enough money to fulfill his dreams, he spent fifteen years of his life marketing agro-products – from PVC pipes to sprinklers and seeds. He also worked as a dealer with various national and multi-national manufacturers.

Eventually, he earned the respect and trust of his business associates. This background helped him in his industrial ventures.

Manufacturing Enterprises

In April 1978, Bhavarlalji took over a sick unit in Jalgaon and started producing Purified Papain from papaya latex and soon became the top-most supplier of highest purity Refined Papain in the world. Papain put Bhavarlalji on the international map. Thereafter there was no looking back. Just two years after this landmark achievement, Bhavarlalji started manufacturing PVC pipes in 1980, micro irrigation systems in 1989 and then started food processing in 1994.

During this period, he kept his organisation engaged in R&D, which resulted in Jains introducing hi-tech concepts to the Indian agriculture industry such as integrated system approach, one-stop agri-shop for farmers, infrastructure status to micro irrigation and manufacturing micro and sprinkler irrigation systems, agricultural inputs, agro-processed products and plastic pipes as well as plastic sheets.

The Jain's strong dealer-distributor network in the rural areas helped him become the market leader in micro irrigation and the largest producer of PVC pipes in the country.



Gaurabai Ghat at Wakod on banks of the Waghoor river



Anubhuti entrance

Repayment in Gratitude

After his success with business at home and around the world, Bhavarlalji has turned his attention to social work. He believes that one must give back to society through whatever means possible and this is not necessarily with money alone. With this thought, he has started a residential international school, named Anubhuti, which provides education through the ‘experiential learning method’. Deserving children from the rural community are being given scholarships here so that they too would have an opportunity to get good education.

The way in which 70-year-old Bhavarlalji has completed his school project in nine months, shows how young he is to face any kind of



Pannoramic view of Anubhuti, the newly started residential school

“One must give back to society through whatever means possible and this is not necessarily with money alone.”

challenge even at this age. Today, people regard him as a very successful businessman who heads a Rs 2,000 crore Indian Multi National Corporation. However, on meeting him one fails to find a businessman in Bhavarlalji. Instead, one finds a reformer, a man with rare vision and a caring, father-like person.

Gandhi Research Foundation is another not-for-profit joint venture envisioned by Bhau in collaboration with NMU. It is dedicated to academic and applied research on Mahatma Gandhi's life, work and philosophy.

Providing safe custody of literature by and on Gandhiji is one of the prime objectives of the foundation. Bhau is in the process of building up a research library; among other things collected are about 1500 books 4156 photographs, 52 films and many stamps and coins featuring Gandhiji.



Photo Library of Gandhi Research Foundation

Greening India

Uncommon common sense, inborn integrity and a propensity to work hard - Bhau gainfully combines these with the education and knowledge that he has acquired. His thirst for knowledge and pragmatic approach to life have given him extreme clarity of thought. One can see this in the stance he takes on burning questions related to farmers.

On one hand, he disapproves of the blanket waiver for farmer loans, as he thinks that it cuts across our very culture; on the other, he endorses that determination of prices of agri produce calls for a paradigm shift in the thinking of policy makers.

Paying Price; Realising Value

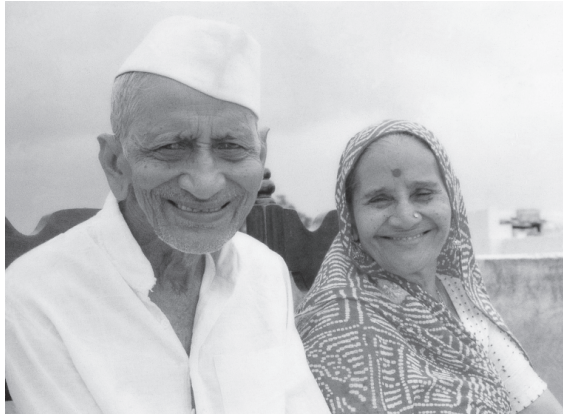
“After a 90 minute early morning walk, it is the usual yoga and exercise for 40 minutes. I spend more than two hours in maintaining this body, which is growing old at the age of 71, with five heart-attacks.”

It is like a badge of honour that Jain Irrigation Systems Ltd's chairman Bhavarlal H Jain wears his 'five heart-attacks, two bypass operations, one angioplasty and one instrument' sitting here (pats his heart)... So you have quite an interesting medical history sitting before you. “I've only recently celebrated the silver jubilee of my first heart-attack that came in 1982 at the company campus, Jalgaon,” he says cheerfully.

First-hand Farming Experience

Hailing from a humble agricultural background, Jain understands better the needs of farmers – access to the latest in agricultural technology and inputs – and is pained that India's ruling classes do not really understand what ails Indian agriculture today.

He describes his father as ‘a petty trader’ who had gone through just three classes in the local language. “My mother was an illiterate woman who had all the world’s wisdom and a heart that was as large as it could be. I did not inherit any wealth but a lot of wisdom from them; wisdom combined with integrity is what they gave me.”



Repositories of wisdom and integrity

He recalls how his father would travel to different villages either on foot or by bullock-cart, collect samples of cotton – 10 kg from one house, 20 kg from another – process them, clean them and sell them at the weekly market. “Gradually he bought some land, which I inherited; in all 56 acres. Our total revenue till 1972 from the four or five pieces of land was not more than Rs 12,000.” Last year his company’s sales topped Rs 1,200 crore!

The young Bhavarlal went through four years of education in his village (Wakod), after which his father sent him to Jalgaon to complete his high school, and then to Mumbai for a B Com followed by LL B, which he completed in 1961.

Agricultural Inputs

“I did prepare some briefs for a leading advocate, but my heart was really in business,” says Jain. In 1962 he had three options – pursue a career in law, join service as a first-class gazetted officer as he had passed the Maharashtra Public Services Commission examination or start a small business. He chose the latter. “There was not much money available, and with great difficulty my mother gave me Rs 7,000, which was the total seed capital available in 1962. So I began my career with it but couldn’t do much except run an agency business where you don’t need a lot of money for selling somebody else’s products.”

With that money he bought some empty containers, took an apprenticeship for Esso, and later became its agent. “For 15 years I marketed Esso petroleum products, so my rural marketing skills were honed and developed by those guys!” Gradually he started dealing in agri inputs like fertilisers, seeds, pesticides etc. In 1978, he acquired a sick unit and manufactured Papain, and later commenced making PVC pipes in 1980.

Drip Irrigation

Next came drip irrigation, “Around 1985 I went to an international trade fair in Fresno in the US and saw that there was a technology that saved water. I knew from experience that Maharashtra would forever be short of and hungry for water, and decided to get into this business.”

As for the response to this new technology in the late 1980s, he says “Forget the farmers, both, the opinion-makers and the bureaucrats had to be educated on what I was talking about. When I went to get the license to send US \$ 30,000 – big money in those days – the officer concerned asked me a funny question. ‘We are not importing water; there is no import substitution in this technology, so why should I allow you to send this US \$ 30,000 outside the country? I don’t think this is appropriate technology for India.’ This was the first response from a bureaucrat.”

Jain adds that at the level of opinion-makers/politicians, “most were simply not aware of such a technology except for a few like Sharad Pawar and his brother. The farmer is always the last in the link when it comes to awareness of any technology; so he didn’t know anything either.”

The man who today holds leadership position in drip irrigation in India and has played a major role in bringing profitability to the banana farmers of the Jalgaon region and beyond, had to launch an ad campaign ‘to educate the public on the benefits of water savings.’ “It cost me Rs 50 lakh. Mind you, this was not a product but a concept-selling campaign,” he shrugs.

Now there are 54 players in the field, Jain being the largest with over 55% of the national market share. He is credited with having brought 80 per cent of banana cultivation under drip. Asked if he had any doubts in the initial years, Jain says, “For me it was an article of faith; I believe water will be the igniting part of World War III and there will be fights for water not only between countries, but within the country – states, districts, tehsils and villages.” He is alarmed at the shrinking per capita availability of water in India and asks: “Do you know that in 1947 we had 6,000 cubic metre of water availability per capita and now it has come down to 1,250 cubic metre, which is just the borderline for declaring yourself water scarce?”

On the continuing distress of farmers and their perennial quest for water he says, “Recharge of water source and judicious use of water is the answer. Micro (drip and sprinkler) irrigation has been declared a national policy and provided sufficient funding, but unfortunately the utilisation is not as good as it could be.”

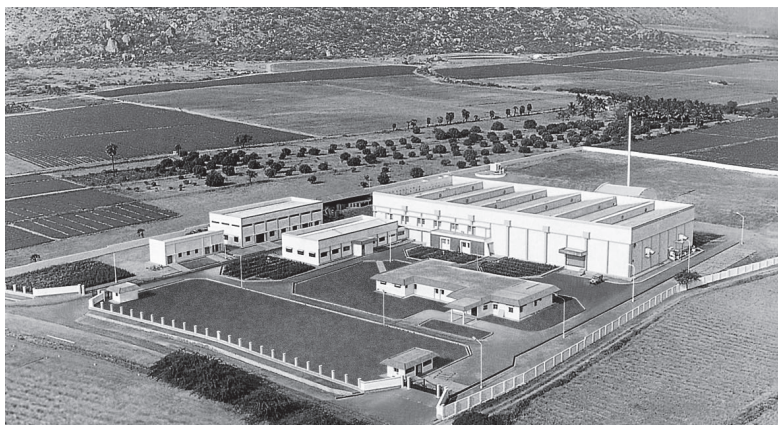
On the crops that benefit the most from micro irrigation, Jain says, “Water guzzlers, obviously; but there isn’t a single crop which does not benefit from it, whether it is the tea gardens of Assam, the banana belt of Jalgaon, the grapes of Nashik or the oranges of Nagpur. As for rice, in the South we have a factory near Coimbatore and rice farmers are gradually accepting drip irrigation. It also gives very good results for coconut.”

Jain says, he keeps in close touch with farmers and his doors are always open to them. “For me, interacting with farmers is a rejuvenating experience, so I’ve cut layers of bureaucracy to be in direct touch with farmers.”

What ails Agriculture

“Inefficient delivery mechanisms are responsible for the agri sector’s woes,” he says. “Even when allocations are made, agriculture is unable to accept/absorb them because the delivery mechanism is so lousy.”

He is not excited by massive debt waiver schemes. “The policy of making farmers debt-free per se looks very good but is not a long-term



JISL factory and farms at Udumalpet near Coimbatore, Tamil Nadu

solution. It cuts into our very cultural roots. You are telling them to borrow and not pay.” He feels waiver of interest and repayment of capital over easy, long-term instalments would have been better.

Jain believes that any boasting about our progress and growth rate will fall flat if we don’t take the concerns of agriculture on board.

Jainspeak

Q. How do you reflect on your journey so far?

A. This year we are targeting a sales figure of Rs 1,800 crore; last year we did Rs 1,200 crore.

Q. What was your expectation?

A. There was no time to expect or imagine; I just had a dream, and the dream had to be implemented the next morning. There was neither a blueprint nor a master plan; it was a continuously evolving process, depending on resources. We kept expanding along the way.

Q. What is your dream for Indian agriculture?

A. Water management, water treatment and increasing the area under irrigation. Of the total irrigation area, not even 1.5 per cent is under micro irrigation. Moreover, intervention of biotechnology and applied research is required for improving agri yields.

Q. What does Indian agriculture really need to pull out of the 2-3 per cent dismal growth rate?

A. "The policy makers need to be farmers, which we don't have," says Jain. "The problem is that farmers are not diplomats, they cannot speak good English; all they can do is toil. And their culture is based on hard work; sweat is all they can offer. It is difficult but the first requirement is that the policy / opinion-making level comes from the farm sector so it really feels for the farmer."

"Unfortunately, most of the time, we look only at short-term policies or quick-fix solutions; you need to be a statesman and not a politician if you are looking at the long-term interest of the country. A statesman is one who looks to the interest of the next generation; a politician is one who is interested only in the next general election. And we have many politicians but very few statesmen. Mahatma Gandhi was even above statesman."

Q. What do you think is the reason for suicides by farmers?

A. I am deeply saddened by farmers committing suicides. It never happened before but is happening and happening increasingly now because the gap between the haves and have-nots has widened. This is going to invite a lot of unrest. The root cause is the unfair price for agri produce.

Q. Are we paying too less for the food we consume?

A. As compared to everything else, we pay much less. But to keep prices low is the national priority. But yes, these prices are pathetically low. While other prices have gone up by 10-100 times in post-Independent era, food prices have not gone up in the same ratio because this is connected to the poor man. So a paradigm shift has to take place."

Q. What are your views on genetically modified crops?

A. For fibre or non-edible oilseeds, it's a welcome development. For food crops I'm yet to make up my mind because it has very long-term ramifications, yet to be studied. For crops like cotton there shouldn't be any hesitation. But they bring in a new set of diseases and pests, controlling which is a problem. A lot can be said on both sides.

Q. What is that frustrates you?

A. The youth, because it has lot of skills, but is losing all its culture. And if you do not have a culture and blindly follow somebody else's culture, then this kind of growth can play havoc with you, which is happening.

Q. What do you dream for India?

A. The country must and will emerge a superpower. But whether it would remain homogenous and integrated, with various strata of society, the rich and the poor, different classes, being able to maintain peace ... I have serious doubts. If we do not take care of that aspect, all this growth will simply evaporate or prove to be suicidal.

Q. What is that concerns you most?

A. I fear increasing restlessness because the gap will grow between the section that is not getting enough and that which is getting more than enough. This is a mismatch. Our greatest challenge is to achieve a balance between retaining our culture while still growing. Growth is inevitable and must happen. I'm sure we'll become a superpower sooner than the world thinks, but internally we must take care of these cultural shocks.

Q. With so much work to do when do you relax?

A. Oh, I do that by constantly finding a different subject to talk/think about or work on.

Q. What are your food habits?

A. Pure vegetarian, not even eggs; more emphasis on fruits and vegetables than grains and I think that has kept me alive.

Q. Do you like music?

A. Never really developed ear for good music...

Q. What is your preferred reading?

A. Books and articles on management or philosophy.

Q. Are you fond of movies?

A. Not anymore; saw so many movies when I was young. I get fed up with the kind of noisy and violent movies we get these days. My favourite remains Awara.

“For me, interacting with farmers is a rejuvenating experience, so I’ve cut layers of bureaucracy to be in direct touch with farmers.”

The Winner Comes in from Cold

The first pro-farmer budget has come after 60 years of Independence. While this budget has swayed the capital market sentiment, Bhau is not impressed. Instead, sensing the global market environment, he is preparing his organisation for growth.

Growth Environment

Finance Minister Shri P Chidambaram's new found love for the farm sector – he mentioned the words 'farm', 'farmer' and 'agriculture' dozens of times in his last two Budgets – has had an unintended beneficiary. The stock of Jain Irrigation Systems Ltd (JISL) the world's second-largest drip irrigation company, has risen from Rs 411.10 on February 28, 2007, when Chidambaram presented his first "pro-farmer"



The essential farmer

Budget, to Rs 612.8 on March 13, 2008, a fortnight after the second such Budget.

But JISL is more than just a company focussed on the agri sector and micro irrigation in particular. It is also a big player in piping systems and plastic sheets. These three businesses account for more than 80 per cent of the company's turnover. Says Bhavarlal Jain, chairman, JISL: "We expect to end this year with a topline of Rs 2,000 crore and hope to double this to Rs 4,000 crore by 2012."

Aiming High

Almost all of JISL's businesses have achieved critical mass. In drip irrigation, it is now eyeing the numero uno spot globally in micro irrigation (Netafim of Israel is the largest player with annual sales of US\$ 450 million, or Rs 1,800 crore). This is JISL's main business segment, and it is obviously banking on the government's increased emphasis on irrigation to deliver the numbers. "In five years, micro irrigation will be the biggest business and will account for 35-40 per cent of our topline," says the chairman. Analysts point out that areas like irrigation and fruit processing are priority areas for the government. "Land on a per capita basis has been reducing and to that extent, the existing land will receive priority," says V K Sharma, director and head of research, Anagram Stock Broking.

Other divisions of JISL are also jogging along. "I expect each of our businesses to grow at least 25 per cent per annum over the next few years," says Jain. Over the next two to three years, JISL will invest Rs 200 crore across its businesses to grow both, top and bottom lines. While that may not seem large, it is important to note that the company operates on the philosophy that every rupee invested should generate revenues of Rs 5. "We expect our investment to generate revenues of Rs 1,000 crore," says Anil, second elder son of Bhavarlal and managing director, JISL.

In piping, it is the largest player in India. But the fact that JISL is the preferred supplier of telecom ducting for Alcatel globally is not very widely known. Optic fibre cables require polyethylene ducts to protect them. "Alcatel has bought such pipes from us for its projects in

Algeria, Mozambique, Libya, Botswana, Peru and Greece,” says Ajit Jain, joint managing director, JISL, and Anil’s younger brother. In India, its customers include Bharti Airtel, Reliance Communications, Tata Teleservices, Vodafone and BSNL.

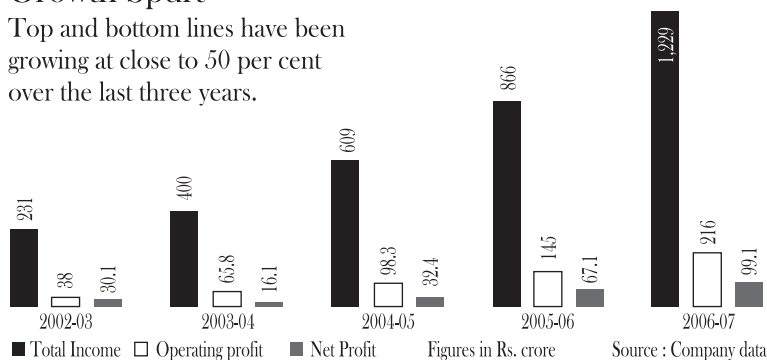
Another emerging line of business is piped gas. “We are looking at sewerage systems and desalination plants also. Overall, infrastructure will be a huge business opportunity for us. This will include irrigation, potable water and telecom. All these sectors need pipes,” says Ajit.

Then, JISL sees food processing as a growth area. In fact, its annual report claims that it is the world’s largest processor of mangoes and pomegranates. “We are looking for buyouts in North India to process fruits in that part of the country. Setting up a greenfield project will take time and an acquisition will be a faster way of going about it,” says Rajnikant B Jain, director (technical), JISL, adding that mango pulp of good quality is not available once the mango season ends.

“If the pulp is made available at a reasonable price through the year, it will have a huge market,” he says. He is examining options like mango or banana milk shake. His target customer segment: school-children; and the target MRP: Rs 5-7. “The eventual goal is to ‘consumerise’ these products. Maharashtra alone offers a Rs 2,000-crore market for such products,” he adds. JISL is also trying to figure out the logistics of sourcing milk. “Quite a few dairies are available for sale and we are looking at them,” says Rajnikant.

Growth Spurt

Top and bottom lines have been growing at close to 50 per cent over the last three years.



Growing Inorganically

JISL has acquired 10 companies, albeit small ones, in India and abroad over the last three years. But in keeping with its investment philosophy, it extracts more bang for its buck than usual. The Group prides itself on low-cost, high-value buy-outs that deliver results quickly. The buyout of Pricol Group's agriculture and dehydration facility near Coimbatore in April 2005 is a case in point. "We bought this unit, which had 1,250 acres of irrigated land and Rs 100 crore in accumulated losses, for Rs 17 crore," says Ashok Jain, vice chairman, JISL. This deal saved the company over Rs 30 crore in taxes. "Today, the acquisition is worth over Rs 100 crore," he adds.

Likewise, the 2006 buyout of the US-based Cascade Specialities' vegetable dehydration facility in Oregon cost \$ 4.75 million (Rs 21.85 crore then). The unit, which had been losing money for five years prior to that, ended 2007 with a profit of \$ 8 million (Rs 32 crore). "We put in another production line and bought a second hand drier from a company that was closing down. Eventually, capacity was doubled," explains Ashok.

The acquisition strategy is simple. "We look at parameters like quality of management, the extent to which the product line is compatible

Big on Deals				
Domestic Acquisition/Merger Deals				
Target Company	Business	Nature	Effective Date	Size *
LMP Gujarat Agro Exports	Vegetable dehydration	Buyout	Jan 16, '06	5.00
Parle Bisleri	Mango processing	Buyout	Feb 8, '06	14.60
Asian Vegpro Industries	Vegetable dehydration	Buyout	Apr 19, '06	1.60
Overseas Acquisition/Merger Deals				
Target Company	Business	Nature	Effective Date	Size #
Chapin Watermatics, US	Micro irrigation	buyout	May 1, '06	6.25
Aquarius Brands, US	Micro irrigation	buyout	Feb 15, '07	21.50
Naandan Irrigation CS, Israel	Micro irrigation	50% stake	Jun 4, '07	21.50
Thomas Machines SA, Swiss	Drip irrigation	69% stake	Mar 3, '08	N.A.
* Figures in Rs crore #Figures in US\$ million N.A.: Not available Source: Company data				
JISL has been very active on the M&A front over the last three years, but the ticket size has been small.				



The Winner

with ours and finally, the technology that an acquisition will bring us,” says Anil, who has overseen all the acquisitions.

Betting on Water

Water is likely to emerge as JISL’s biggest bet going forward. Chairman Jain is palpably excited at the sector’s potential. “Countries are considered water-scarce if water availability falls to 1,000 cubic metre per person per annum. In India, the figure is at 1,250 cubic metre per person per annum levels, down from 6,000 in 1947,” he says. His youngest son, Atul, is overseeing the project which has four components –water conservation, water distribution, water treatment and water creation.

JISL has conducted a pilot study across five urban centres in Karnataka on water management – that includes delivering clean, drinking water to households. The company’s role here is limited since this is still largely a state government initiative. But the market is expected to open up now that tenders have been invited for supplying water in 12 cities, including Mysore, Chandigarh, Hyderabad, Bangalore, Pune and Nagpur. A clearer picture about the potential of this sector is

expected to emerge over the coming months. “We will be present across the entire spectrum of the water vertical and position ourselves as an end-to-end solution provider in this segment.” says Atul Jain.

In fact, this links up very well and offers synergies with its bread and butter drip irrigation business. Chairman Jain points out that drip irrigation is prevalent across Israel; in India, it enjoys a penetration of just about 2 per cent. “I am convinced that our water business can grow to a size of about US\$1 billion (Rs 4,000 crore) in four to five years,” he says categorically.

Other Businesses

Alternative energy is yet another area that the company is betting on. According to Rajnikant, JISL has done some work in the areas of bio-ethanol and bio-gas. “Earlier, the economics were not in our favour. Now, with a barrel of oil ruling at US\$105, many things are looking feasible. Bio-gas, for instance, is a viable alternative,” he says. The idea is to provide a viable form of renewable energy. With its experience in agriculture, JISL thinks it has acquired a lot of expertise in the areas of bio-ethanol and bio-gas. It is currently looking at options in this segment, but has not yet drawn up concrete plans for any projects in this sector.

The Early Days

All the Jains are looking at the future with confidence, but the going wasn’t always this smooth. JISL went through a really rough patch in the late ’90s. A number of expensive diversification projects in IT, telecom, finance and granites failed to take-off and the company ran

The JISL Portfolio in %

High-Tech Agri Products	29.70
• Drip Irrigation,	
• Sprinkler irrigation	
Plastic Piping Products	33.50
• PVC pipes & fittings,	
• PE pipes & fittings	
Agri Processed Products	13.80
• Dehydrated vegetables,	
• Processed fruit purees,	
concentrates, frozen fruits	
Plastic Sheet Products	20.70
• PVC sheets,	
• PC sheets	
Other Products / Services	2.40
• Tissue culture, hybrid &	
grafted plants,	
• Solar water heaters,	
Photovoltaic appliances,	
• Education & training,	
• Turnkey & consultancy services	

into problems. Says Bhavarlal: “We used to take inter-corporate deposits at very competitive rates of about 12 per cent. As the risk perception (about JISL) increased, that figure shot up to 22 per cent.”

Over the next five years, nothing seemed to go right for it. “We took on 12 projects at the same time. It was a mistake and the company suffered immeasurably,” he admits candidly. Eventually, all these new businesses were either sold or shut down. This cost the company over Rs 200 crore. Worse followed. JISL, which had clocked sales of Rs 440 crore in 1996, saw that number drop by more than half to Rs 190 crore in 2000. The stock, too, was down sharply from Rs 460 to Rs 9 during the period.

But those dark days are now firmly behind it. As JISL looks at carving out a larger global presence, the chairman is clear about how he sees the Group. “We want to be a global company with an Indian touch,” he says. Exports and foreign sales currently account for 30 per cent of its topline. “In five years, I see about 50 per cent of our revenues coming from abroad,” he adds.

JISL’s global journey ahead promises to be interesting.

The Growth Impetus: Schemes announced in the 2008 Budget will help JISL.

Announcement: Accelerated Irrigation Benefit Programme (AIBP).

Salient Features: 24 major and medium irrigation projects and 753 minor irrigation schemes to be completed in 2007-08. Outlay for AIBP increased from Rs 11,000 crore in 2007-08 to Rs 20,000 crore in 2008-09.

Impact: Should augur well for Jain Irrigation given that irrigation will continue to be a huge focus area for the government.

Announcement: Irrigation & Water Resources Finance Corporation (IWRFC)

Salient Features: IWRFC will be set up with an initial capital of Rs 100 crore.

Impact: This will also include 14 irrigation projects. That’s good news for Jain Irrigation.

Announcement: Rajiv Gandhi Drinking Water Mission (RGDWM)

Salient Features: The allocation for this mission has been enhanced to Rs 7,300 crore in 2008-09 compared to Rs 6,500 crore in 2007-08.

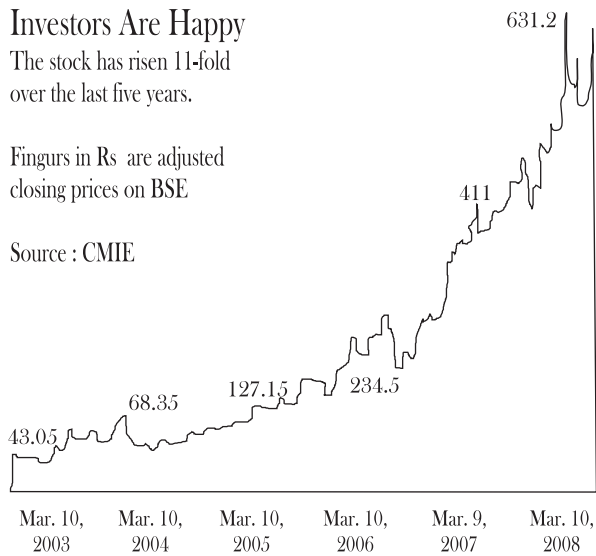
Impact: Water is likely to be a big story for the company. Could be beneficial in the long term.

Investors Are Happy

The stock has risen 11-fold over the last five years.

Fingurs in Rs are adjusted closing prices on BSE

Source : CMIE



“We will be present across the entire spectrum of the water vertical and position ourselves as an end-to-end solution provider in this segment.”

A Fruitful Enterprise

Ability to study and analyse projects under consideration is an essential quality of entrepreneurs. They may finally take a calculated risk or decide to go ahead on the basis of a hunch or gut feel; but it does not stop them from making a thorough enquiry. Bhau displays this attribute in comparing his supplier's equipment quality with the best in the world. He does not hesitate in lavishing praise where it is due.

Agricultural Roots

“Give us a piece of land that is barren and we can make it lush green, provided there are enough resources and will power,” says Bhavarlal H Jain, chairman of Jain Irrigation Systems, waving at the green campus of the 700 acre Jain Hills headquarters in Jalgaon city, about 400 kilometres north-east of Bombay. “That was the case with this land. It was once a dry, rocky, mountainous region.”

The farmers in this high-yielding banana belt are beholden to him for having brought them a value-added integrated agricultural system that includes training, water and soil analysis, optimum utilisation of water resources through drip irrigation, and tissue culture.

Jain Irrigation is an integrated agricultural company that in addition to providing drip irrigation systems and components, is also into fruit and vegetable processing, PVC, polyethylene and polypropylene piping systems, plastic sheets, tissue culture and solar energy appliances. Jain, the son of a ‘farmer and a petty trader in cotton,’ has not forgotten his agricultural roots.

At the heart of the Group's operation is an agri-research centre (Jain Hi-Tech Agri Institute) in Jalgaon where farmers get first-hand experience with modern technology in water and soil management, tissue

culture and more. They return armed with knowledge and technology and the likelihood of doubling their yields.

Jain is a lawyer by education, but he says his heart has always been in business. He inherited farmland from his father in the early 1960s, and as he tended the land, he began trading. His seed capital was Rs 7,000 (US\$ 1,000 then).

In 1985, while attending an international trade fair in the United States, Jain saw how drip irrigation could result in huge water savings. Through technical collaboration, he gradually transferred the technology to farmlands in India. Today he is the largest player in this field, with a 50 per cent market share.

Value Addition

Jain's venture into fruit and vegetable processing came with a plant he set up in Jalgaon around 1995. Then came five years of difficult times as the company weathered the general economic downturn. "We have now started making money and are the largest processors of fruits and vegetables in India, with a market share of over 15 per cent," says Jain.

In 2006-07 Jain's food processing business handled 200,000 tonnes of fruits and vegetables, with fruit processing – pulp, pulp concentrates, clarified juice and juice concentrates – comprising 100,000 tonnes. Tomato puree and dehydrated onions form a chunk of its vegetable processing business, with the latter being totally exported. "This year we should be able to handle over 300,000 tonnes," says Jain.

Able Allies

The company's association with Alfa Laval began in 1995 after the fruit processing plant was set up. "The first job they did for us was the automated fluid-handling system with pumps, valves and piping of the fruit factory," recalls Jain. "In 1996 it was very difficult to get an international standard piping job done in India. We selected Alfa Laval, and I'd like to put on record our deep appreciation for its service, particularly in meeting international standards."

Jain has continued to purchase fruit processing equipment from Alfa Laval. “In mango and papaya processing, we use its decanters for removing black specks,” says Jain. “We also use the decanters to remove grit in guavas and for processing other fruits, too.” At Jain Hills there are 100,000 mango trees, including 30,000 Alphonso (the king of mangoes), planted over 100 acres.

Promising Times Ahead

Currently, Jain Irrigation exports its processed fruits, vegetables and other products to 130 countries, with the US and Western Europe being the dominant markets.

Jain sees a bright future for the processed food industry in India. No other country can match India’s wide range and profile of fruits – pomegranate, guava, mango, custard apple, banana and other tropical fruits, he says, adding that 60 per cent of the world’s mangoes are produced back in India. “Others have no chance in this fruit,” he says. “They have been trying for 30 years to duplicate the Alphonso, but have failed.”

At Jain’s state-of-the-art Jalgaon food processing plant, the new season has just begun for crushing pomegranates (the plant can handle up to 600 tonnes per day). A pilot project is on for making sweet lime concentrate for a global food major.

Conservation Endeavours

Business unit chief Sunil Deshpande explains the company’s environmental policy: “Currently, all the water we use comes from water harvesting and nothing goes out from these premises. The water is recycled and goes back to our farm, as does



*State of the art facility
at the food processing plant*

the solid waste after it is converted into bio fertiliser. On the anvil is a power plant using agricultural and food plant waste to generate electricity and bio fertiliser.”

Deshpande says that the company now looks only for equipment that consumes minimal power and steam while giving better output and meeting safety and environmental standards. The Alfa Laval evaporator used for juice concentration fits these criteria, he

says, noting: “In the evaporator we had been using since 1998, we used one kilogram of steam to evaporate a litre of water. But with the Alfa Laval evaporator we need to use only 0.3 kilogram of steam per litre of water, providing a two-thirds savings. The entire economics of this food processing operation is based on how much steam you consume. Since we use heavy fuel oil, a scarce resource, thanks to rising oil prices, we have to be competitive, and the equipment has to be energy efficient.”

The Alfa Laval evaporator has the capacity to handle 7,500 litres of fluid per hour. “We can run mango, guava, pomegranate, orange and sweet lime juice on it,” Deshpande says. “The holding time is low, so the quality of the end product is good. It is fully automatic and trouble free.”

Jain adds that the right technology can cut about half of the processing cost. A challenge is the high price of fuel oil used to create steam. “But we are now trying to get into bio energy for this purpose, maybe through bio gas, and that will give us an advantage over others.”

Growth Roadmap

For the present, though, next to drip irrigation, Jain says, food processing will be the mainstay of the company’s operations. “Food requirements are going to increase as living standards improve,



Fruits from Jain Farms

particularly in developing countries, and there will be more demand for processed food,” he says.

Jain explains that while the entire company has grown over five years at a compounded rate of 42 per cent, nearly five times India’s average GDP growth rate, the fruit and vegetable processing business has grown at 60 per cent over three years.

Jain’s vision is to make it (*JISL*) “a billion-dollar company within three years.” Sales in 2006–07 from Indian operations alone were around INR 12 billion (USD 300 million). “This year (2007–08) the company is targeting INR 18 billion (*US\$ 450 million*),” Jain says. “This will be achieved largely through organic growth, but a part of it will come through acquisitions.”

Embracing new technology

The first Alfa Laval plate evaporator was commissioned at the Jain Irrigation food processing plant in Jalgaon in 2006. “An evaporator is used specifically for concentrating heat sensitive products like pomegranate up to 65 Brix,” says Vijay Galgali, Alfa Laval’s branch manager in Pune, India. “Because of the versatile design of the evaporator, Jain uses it for concentrates of fruits such as mango, tomato and sweet lime.”

Alfa Laval’s Alfavap and Alfacond technology, explains Galgali, helped the company to get better-quality products.

Alfa Laval decanters work, he says, “like a magic box in terms of removal of black specks from mango pulp.” This has helped Jain get reduced labour time for manual slicing and inspection of mangoes, improved plant hygiene, lower operational costs and improved yields.



Inside the fruit processing plant

Company chairman Bhavarlal H Jain says, he is delighted with Alfa Laval's service. "The company's response to the needs of the customer has been exemplary," he says. "Its decanters were commissioned on time, and whenever we needed any help, it was always there for us."

"The evaporator is of excellent quality and is on par with any international equipment – American, Italian or German," Jain says. "It is reliable, energy efficient, and virtually maintenance-free."

"Give us a piece of land that is barren, and we can make it lush green."



The Man, the Mission, the Message

In this seventieth birthday tribute to Bhau, Dnyan Mayur, a retired highly successful business executive, sums up possibly all that has preceded in this volume in a brilliant and touching manner.

Shri Bhavarlal Hiralal Jain, affectionately called ‘Bhau’ (respectful address for elder brother) by thousands of his friends, admirers and employees is one such giant among contemporary Indians who have achieved greatness by their extra-ordinary hard work.

Bhau’s incredible rags-to-riches life story – from his very humble beginnings at Wakod in rural Khandesh to the pinnacle of industry and subsequent recognition at the highest national level in India – has been amply documented. He has been filmed, photographed, interviewed, written about and honoured numerous times by prestigious national and international media and business publications. That his life is a uniquely inspiring success story and that he is a modern business leader par excellence is thus very well-known. However, even at the very personal level, Bhau is a wonderful human being approaching the Vedic ideal of “Purushottam”.

Besides being an entrepreneur, he is a thinker, a writer, a philosopher, and a teacher, a coach, a guide, a student ever eager to learn new things, a motivator, an innovator, a philanthropist and a community leader. And he is a loyal friend, a proud father and a very loving grandfather. He immensely enjoys all of these roles and carries them out with remarkable distinction.

It is only by a stroke of good luck that one comes across and gets to know people like Bhau for there are so few of them. Fortunately, during my periodic visits to India, I am blessed with the opportunity through Rajabhai, a close friend of him, to visit and spend some time with him.

Even through these brief and infrequent encounters, certain aspects of his personality become immediately evident. His life is an open book of profound wisdom from which we can learn a lot. So here is the Bhau I know as an every-day human being and some of the things that impress me most about him.

Vision

If I were to describe Bhau by just one word, then out of a million possibilities the one that jumps up in my mind is “visionary”. Big things come out of big ideas and Bhau is a man of big dreams. As Stephen Covey says in his celebrated ‘Seven Habits of Highly Effective People’, first things first – begin with the end in mind. Bhau has an intuitive feel for where he wants to go and every thing he has done in his exemplary career of over forty years has been with a single-minded focus on his vision.

He wants to begin by helping the local economy. He wants to do it scientifically through the development of industry, be it plastic pipes and sheets, irrigation systems or food processing. He wants the business to be agriculturally based utilising local resources in order to maximise benefits to the region. He wants to do it on a large scale and, of course, ethically.

‘Not ambition but low aim is crime’ – Bhau has taken this adage to heart and put it in action. “If Tatas can do it, why can’t I? If America can do it, why can’t we do it? Right here, bigger, better.” This is the essence of his thought process. Bhau’s broad, long-term vision is a flourishing Khandesh, an industrial Maharashtra, and a developed and globally respected India.

To his credit, Bhau recognised before most experts did that judicious water management for irrigating over 43 million hectares of non-productive, barren land was the key to the success of the nation. Continuously expanding the area covered by drip irrigation, the so-called Second Green Revolution is a significant part of this vision. He proudly calls himself “son of the soil” and agriculture is his true passion.

Work Ethic

Bhau is a man of action with an incredible get up and go. Once his vision is set and his mind is made up, no obstacles, neither the Indian bureaucracy nor persistent health issues, can deflect his mind or energy from the pursuit of his vision. It is this work ethic and personal discipline that helped Bhau fight off the pain and anxiety of no less than five heart procedures, beginning at a relatively young age.

Bhau does not indulge in empty talk and meaningless political discussions, a rare talent in India. He is a practical, serious, scholarly man not given to display of emotion or celebration without achievement. He believes that work ethic defines character and character defines the man, not his worldly fame. Bhau leads a very clean, simple and principled life with no indulgences and no vices. A wonderful example of his emphasis on clean life is the fact that workers at the Jain factories get a glass of healthy milk and banana rather than tea and samosas during their snack breaks.

He has a well-planned daily routine that he follows scrupulously. He works hard and expects others to do so. Work is indeed life for him.



*Receiving Jannalal Bajaj Fair Practices Award from
Gopinath Mundhe, Dy. Chief Minister, Maharashtra*

Excellence

The first thing you notice when you see or visit anything pertaining to Bhau – any of his offices, his factories, his laboratories, his gardens or his farms – is his pursuit of excellence. Clearly, Bhau believes that if something is worth doing, then it must be done well. There is no better example of this than his residential/business complex in the enormous sprawl of his fabulous property at Mohadi, which could easily be the envy of the Ambanis and Bachchans. In just a few years, he has converted the dry wasteland on the outskirts of Jalgaon into a literal “Nandanvan” (paradise).

Everything about him is first-rate. He is an A-plus man running an A-plus operation, so much so that all his children and grandchildren have names starting with the alphabet A. This is not an accident. It is the vision. It is the dream. It is the expectation. Surely this must put considerable pressure on the youngsters to perform in an A-plus manner. And so far, nobody has disappointed him.

Bhau’s pursuit of excellence is also manifest in his heroes and in the people he surrounds himself with. Jawaharlal Nehru is his political hero, JRD Tata is his ideal business leader and Mahatma Gandhi his life-time idol. There can be no better role models to follow.

Continuous Improvement

It seems to me that one of the most important keys to Bhau’s success is his focus on continuous improvement in personal life as well as business practices. Bhau keeps up with the developments in advanced countries, both in technology as well as management techniques, and aggressively adopts those suitable and appropriate for his businesses.

I have a distinct recollection of one of his medical visits to the US in the early eighties. At that time personal computers (PCs), in their really primitive form, had just started coming out. Even the most sophisticated US businesses were not using the PCs then. When Bhau heard about the Apple LISA PC during his trip, he asked his assistant to learn as much as possible about it, see how the Jain Group could use it and then go ahead and buy it. And he did. I was stunned. Needless to

say, today the Jain Group has a very modern IT center fully equipped with the best equipment.

Bhau is a voracious reader and has an impressive collection of books in his personal library. Innovation, on-going research, making the most of limited local resources, waste-minimisation and an insatiable thirst for knowledge are the drivers of continuous improvement in Bhau's approach to life and business. Calculated risk-taking is also a part of Bhau's continuous improvement process. A wonderful example of this is his underwriting the financial guarantees for up to five years when he first introduced the drip irrigation system to hesitant farmers unfamiliar with the new technology.

Principle-centered Leadership

Family-controlled large business houses have existed in India for decades and many of them have been very successful and profitable. However, ethical practice has rarely been a strong point of Indian business. The Jain Group stands in shining contrast to this unfortunate fact, thanks to Bhau's principle-centered leadership. Bhau has injected his personal values of honesty and integrity to the fullest in his businesses, a rare accomplishment in the Indian business environment.

Bhau meets people from all walks of life, in all kinds of positions, in public and private sectors. And among his friends are people like poet Mahanor, sculptor Sudhir Deshpande, Agriculture Minister Sharad Pawar, Dr Susil Munsli, businessman Rajabhai Mayur and Suresh Jain just to name a few among the ranks of writers, artists, politicians, professionals, business people and social reformer, all excelling in their own fields, and representing a very wide spectrum of personalities and attributes. Bhau understands the value of people and their relationships. He deals with them with equal ease and naturalness, never compromising on his basic principles and values.

Deeply founded in the Indian philosophy and culture, Bhau is immensely proud of his background, his parents and his early childhood influences. He has a clear sense of his roots, his calling and his destiny. He derives much of his strength from this clarity.



With Sharad Pawar at his Baramati farm house

Philanthropy

Bhau's philanthropic activities under the auspices of Jain Charities have been well described in the numerous books and articles written about him. He is now dedicating more and more of his time and resources for community leadership and charitable activities, starting his efforts right in his birthplace of Wakod, his field of activity, Jalgaon and beyond to other places in the region. His emphasis, as always, is on making education, health-care and employment/business opportunities available to deserving people.

He is a frequent speaker at formal and informal functions and his speeches are most informative, interesting and inspiring. That itself is a major community service in motivating and guiding, among others, young people.

He is an activist for the farmers and is a strong supporter of low-interest loans and rightful price-floors for their products.

Humility

The personal trade-mark of this high-achiever is not a Rolls Royce, a Rolex watch or diamond-studded gold cuff-links. The most strikingly visible characteristic of Bhau is the ever-present smile and his almost unbecoming humility. This unassuming man literally shines in his simple, clean attire, pleasant manner and friendly conversation. He is, indeed, “Bhau” to everybody in the true sense of the word.

Walking the Talk

Bhau is a man of few words and more action. He does not preach. He demonstrates things by doing them. He shows by personal action. He walks the talk. The true legacy of a great leader is to train and leave behind him people better than himself.

Bhau has raised, trained and developed four wonderful sons – Ashok, Anil, Ajit and Atul – all highly successful business professionals in their own right. And Bhau achieved this not by force, not by direct demands or in anyway lecturing, controlling or constraining them. True to his philosophy, Bhau leads them by example. Bhau says, “If they can see your actions and behaviour, why do you need to tell them anything?” What a refreshing thought for those of us prone to giving long, deafening lectures to our innocent children.

Bhau is a team player and believes that the future belongs to those who think collectively, consult and cooperate. And consistent with this approach, all major business and family decisions are taken jointly under Bhau’s unobtrusive guidance.

In summary, Bhau is an enlightened businessman with a purpose. His personal mission is based on five cornerstones – patriotism, promotion of agro-business, social commitment and responsibility, gratitude for the local people and leaving a legacy for future generations and community.

Today, on his seventieth birthday, we salute Bhau with respect and admiration and wish him decades of peace, health and happiness. We need his wisdom and guidance for the years to come. Jalgaon needs him. In his famous poem “Psalm of Life”, Longfellow says—

Lives of great men, all remind us
We can make our lives sublime
And departing, leave behind us
Footprints on the sands of time

Bhau will be with us for many more years. He has already changed the world around him for the better. He has created giant footprints on the sands of time. Bhau has been instrumental in bringing the Second Green Revolution to the farmlands of India with more than 60% and ever-increasing drip irrigation coverage. This is a landmark achievement worthy of the Ramon Magsaysay award or the Nobel Prize for Peace.

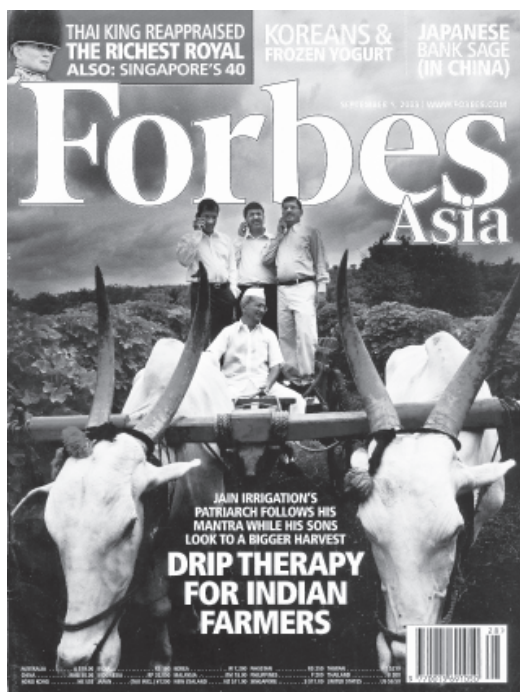
"If America can do it, why can't we do it? Right here, bigger, better."

Drop By Drop

Forbes Magazine first did a story on JISL in 1994, some fifteen years after our foray into manufacturing. This is the second one by Forbes, almost fifteen years later. To put it differently, Forbes has looked at us at two points of time in our journey – first, when we were trying to consolidate our position and now, when we are galloping towards the top slot in our chosen fields. Apart from the undisputed worldwide credibility of Forbes which goes a long way in creating goodwill among all stakeholders, such periodical reviews also enable us to gain new insights into our own activities. They call our attention to the writing on the wall, as they say.

Dreaming of a better future for India's downtrodden farmers, Bhavarlal Jain created the world's second-largest micro-irrigation company.

Until recently, Ram Krishna Khodpe and his four brothers were eking out a meager living cultivating cotton on their 5-acre farm in the semi-arid region of Jalgaon in India's western state of Maharashtra. To supplement his family's income, Khodpe ran a small shop selling sugarcane juice.



Then two years ago, he saw a drip irrigation system being demonstrated in his village. This uses a motorized pump to push water through long black plastic tubes that are laid out in rows along the base of the plants. Instead of flooding the field, just the required amount of water "drips" slowly through intermittent holes in the tubes directly onto the plant's roots.

This irrigation-efficient system, Khodpe was told, could double crop yields and save up to 60% of the water that flood irrigation methods consume. The system wasn't cheap: \$600 an acre of which, half would come from a government subsidy. Scraping together the family's savings, Khodpe took the plunge.

He reaped a bonanza. The yield on his cotton crop increased two and a half times, earning Khodpe \$1,200 an acre, enough to recover the cost of the device in the first season. The family landholding has since expanded to 40 acres, says a beaming Khodpe as he walks visitors through his flourishing fields.

Changing the fortunes of poor Indian farmers like Khodpe has been a lifelong mission for Bhavarlal Hiralal Jain, founder-chairman of Jain Irrigation Systems, the leading supplier of this technique in India. Pursuing this altruistic goal doggedly over a 45-year business career, he's achieved global scale for his Jalgaon head-quartered company. Jain Irrigation has become the world's second-biggest manufacturer of agricultural micro-irrigation systems, behind an Israeli outfit, Netafim.

In India, Jain's tubes cover more than half of the 4 million acres using the microtechnology. But that's still barely a trickle in a country with total farmland under cultivation of 300 million acres, of which less than half is irrigated at all.

The much heralded Green Revolution of the 1960s, with its miracle seeds, made India self-sufficient in staple foods, but in the last decade agriculture's growth rate has notably stagnated. Today Indian farms, highly fragmented and with relatively little in the way of state water projects to channel the seasonal monsoons, produce some of the lowest yields in the world. For example, rice yield per acre on average is 1.3

tons versus 2.5 tons per acre in China. Poor productivity keeps Indian farmers trapped in a cycle of poverty, despite all the subsidies the government doles out. This year's budget provided for a massive \$14 billion waiver on farm debt with state-owned banks.

Stepping up public investment in the sector, notably in irrigation, has become a priority for the government. That's no political wonder—65% to 70% of India's population is dependent upon agriculture for its livelihood. In 2004, an official study group said efficient water management through micro-irrigation could help many save on fertilizer and labor, as well as the precious liquid itself.

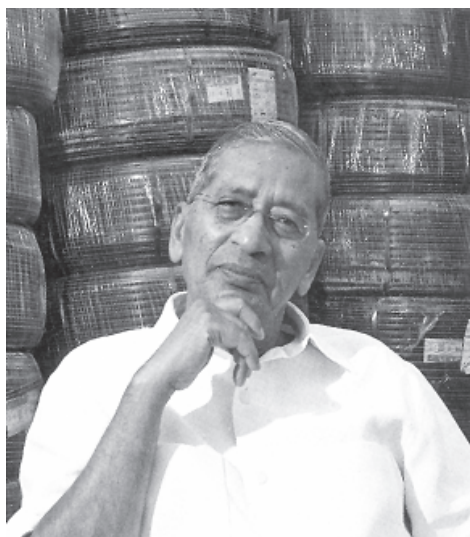
All good news for Jain Irrigation, whose revenues last year rose 58% to \$545 million with net profits increasing by 59% to \$31 million. (The company has broadened into contract farming and agricultural tissue culture, and is the country's largest processor of fruits and vegetables and the biggest producer of dehydrated onion.) Since 2005, the company's share price has tripled. Despite a recent fall in the Bombay market, Bhavarlal's 32% stake, which he holds with his family, is worth \$300 million today.

What works in India applies abroad. So Jain has acquired six companies overseas since 2006, including irrigation firms in the U.S., Israel and Switzerland. According to analysts, UBS Securities India, these acquisitions give Jain a fuller product range, enabling it to extend its reach into mature markets in the US and Europe.

Bhavarlal, 71, views this momentum as incidental to the higher purpose enshrined in Jain Irrigation's mission statement: "Leave this world better than you found it."

"Money has never motivated me. It's always been the cause," he declares from his sparsely furnished office at Jain Hills, the headquarters. On his office walls are pictures of people he admires most: Mahatma Gandhi; India's first Prime Minister, Jawaharlal Nehru; and John F Kennedy. "They were all dreamers, and so am I," he says.

His friends and colleagues describe him as an agricultural guru. "BH is a son of the soil entrepreneur who truly knows the pulse of rural



Aqua men: Bhavarlal Jain in front of coiled irrigation tubes; his sons (from left to right, below): Ashok, Anil, Ajit and Atul who stressed the importance of water conservation with their slogan, "More crop per drop"

India. I've learned a lot from him," says Kiran Mazumdar-Shaw, chairman and managing director of leading biotech company Biocon, who got to know Bhavarlal in 1979 when he was a supplier of Papain, an enzyme extracted from papayas that her firm was using.

Success hasn't motivated Bhavarlal to give up his strict Gandhian lifestyle. He is a vegetarian who eats only home-cooked food, avoiding processed items like biscuits and chocolates. His preferred attire is white cottons. "I like white because of its purity." This color penchant extends to the surroundings—Jain's offices and factories are mostly painted white. He makes a concession in the yellow, green, blue and brown of the company logo. These are the colors of nature, he elaborates, symbolizing the sun, trees, water and earth.

Having survived five heart attacks and two bypass surgeries, Bhavarlal has handed over operations to his four sons, all of whom work in the company. But he still wakes up daily at dawn and treks to the highest point on Jain Hills, where he meditates and does yoga. Company executives take turns to accompany him on his early morning walk and update him on important issues. His grandchildren tag along too.



From Bhavarlal's meditation spot, the 1,000-acre complex of Jain Hills itself appears a shining advertisement for what micro-irrigation can achieve. Set in the midst of parched lands, it's an oasis of mango and banana trees, home to deer, peacocks and several other species of birds. The Complex includes a training center for farmers, a demonstration plot and research and tissue-culture labs. Tucked away in one corner is a house where three generations of the Jains live.

Bhavarlal was born into a Marwari family in a village not far away. His father and uncles were farmers and petty traders. Having bolder ambitions, Bhavarlal moved to what was then Bombay to study commerce and law, after which he prepared to join the civil service. But his mother, who never went to school and had lost nine children before Bhavarlal was born, urged him to reconsider. "She inspired me by saying I must do something that would help the cattle and birds, and all those who are disadvantaged," he recalls.

It took a while, but Bhavarlal found a route to the land. He began trading in agricultural products—tractors, fertilizers, seeds and pesticides. As the business grew, other family members got involved as well.

In 1978 they moved into manufacturing, starting with Papain and then plastic pipes. Bhavarlal stumbled into his niche when he saw a drip irrigation system in 1985 at an agricultural trade show in Fresno, California. Handing over the trading business to his family (but retaining the plastics factory), he plowed ahead.

In his initial attempt to procure technology from Israel, where modern micro-irrigation had been invented, he found no willing partner.

He persuaded James Hardie Irrigation of Australia to license its technology, but it took him more than a year to persuade India's hidebound bureaucracy to let him acquire the know-how.

Harder still was selling to India's marginal farmers who own less than 2 acres of land on average and could ill afford the then \$400-per-acre cost of the system. By then Bhavarlal's sons had joined the family business / enterprise and were involved with him in grassroot marketing, making house calls on farmers. Rather than talk about the technology, they emphasized the importance of conserving water, touting the slogan "More crop per drop." This underscored the higher yields farmers could get with less water.

"We've always been selling a concept, not just a product," says Anil Jain, 43. Model farms were established to show farmers how their fields could flourish by using this sophisticated irrigation method. Even so, it was a slog. "In those days only 10 out of 1,000 farmers whom we approached got sold on the idea," recalls brother Ajit, 42.

When the government introduced the micro-irrigation subsidy in 1990, it lit up business. With sales way up, the company expanded into fertilizers, plastic sheets, food processing and solar water heaters. That wasn't the end of it. In 1994 the Jains raised \$30 million on the Luxembourg Stock Exchange, using it for a slew of new ventures, including merchant banking, granite quarrying, software and telecom.

Bharvaral says that despite his devotion to an agricultural mission, he became worried, as India first began to boom, that his company was too narrowly based to prosper. So it rapidly diversified.

Disaster ensued. "We couldn't handle the diversity," admits Bhavarlal's eldest son, Ashok, who's now vice chairman. By 1999, losses had piled up to \$40 million and the Jains had defaulted on their loans to banks. There was no money to pay for raw material or even salaries to workers. Jain Irrigation's stock plunged from a high of 450 rupees in 1994 to 9 rupees in 2000.

The nightmare lasted until 2002, when the Jains got a partner in Texas Pacific Group's Aqua Fund, which invests in water and renewable

energy. Aqua took 49% in Jain Irrigation for \$44 million, valuing the company at less than \$100 million. The Jains brought down their stake from 70% to 30%, conceding four board seats to Aqua's representatives.

Anup Jacob, the former partner at Aqua who sat on the company's board and oversaw its painful restructuring, recalls visiting 30 micro-irrigation companies before investing in Jain. "It had a great underlying water asset, and I was really confident that the Jains could pull through. They had their name on the door, so failure was not an option for that family."

It was a long haul back. The lossmaking divisions were either sold or shut down, and the debt the company owed to some 50-odd banks was consolidated and paid off. "While we focused on getting the finances in order and introducing a culture of cash-flow management, we let the Jains do what they knew best—make and sell their products," says Jacob, now a partner at Richard Branson's renewables-focused Virgin Green Fund in San Francisco.

Aqua doubled its money in three years, selling in 2005 to a group of investors, including Temasek. "But we sold too early," says Jacob ruefully, noting that Jain Irrigation's market capitalisation has since jumped to almost \$1 billion.

As for the Jains, those unsuccessful ventures are listed as "failings" in their corporate history. "It's all right if we lose money. But we must never lose the lesson we learned," says Bhavarlal, adding that the word

By the Numbers

Farm Economics

The soil is still a bedrock of the Indian economy, but the nation is looking to boost output under tough conditions.

17.5% Agricultural contribution to India's GDP, versus 11.7% in China.

4.5% Growth rate of Indian agriculture in 2007–08, versus India's overall 9% GDP growth rate.

93 million tons India's annual production of rice, its biggest crop.

\$3 billion Estimated size of India's drip irrigation market, 2008–12.

Sources: Economic Survey of India 2007–08; Ministry of Agriculture; UBS Securities India.

"profit," which was never part of his vocabulary, was subsequently incorporated into the company's mission statement.

Yet, expansion is back on Jain Irrigation's agenda. Anil, who spearheaded the overseas acquisitions drive of the last two years, is targeting the number one position that unlisted Netafim occupies. "India's the world's fastest-growing market for drip irrigation. We'll catch up soon enough," he says confidently. UBS estimates an annual 30% growth in the company's revenues until 2010, driven by the ongoing reforms in India's long-neglected agricultural sector.

The Jains want to leverage their water expertise beyond agriculture. They feel that transforming Jain beyond irrigation is the logical next step. To that end they have recently forged an alliance with Mekorot, Israel's state-owned water utility. Giora Gutman, chief executive of Mekorot's international arm, says that they will jointly tap emerging public-private opportunities in India's water sector. Jain's youngest son, Atul, who is overseeing this expansion, discloses that they have been evaluating a bid on a tender to supply water to Mysore in southern India.

For his part, Bhavarlal continues to have utopian dreams. He's working on a project to distribute low-cost filtered water to poor villages. His other obsession is renewable energy, for which he's devising a model that combines solar, wind and biogas. As for the core business, Jain foresees a dramatic increase in global food prices in the next three years. This, the patriarch predicts, will give agriculture its due place in the sun: "Our time has come."

Drip By Drip

Shriya Bubna attempts a short history of JISL and sets it against the economic recession, which is debilitating business growth all over the world. Added to it is a technical analysis of the JISL scrip done by India Infoline. Juxtapose it with the well considered optimism exuded by Bhau.

Bhavarlal Jain saw an opportunity for business in agriculture when few did. Starting out with just Rs 7,000 of investment 45 years ago, he now oversees a Rs 2,390 crore-turn-over company. His Jain Irrigation Systems Ltd is the second largest micro irrigation provider in the world. Its businesses include manufacturing of drip and sprinkler irrigation system, piping, solar heating and lighting systems, plastic sheets, food processing and bio-fertilisers.

Bhavarlal was originally a small-time kerosene dealer. As the farmers came to him to buy kerosene, he realised he could become a one-stop shop for all their input needs, including tractors. He took over a sick banana processing unit in Jalgaon in 1978 and converted that into a unit to produce Papain from the fruit papaya. Two years later, he diversified into pipe manufacturing, becoming the largest PVC pipe producer in India. And then came a chance happening. He attended a conference in the US on micro irrigation, and on his return launched a company with micro irrigation as its core. In 1988, Jain Irrigation Systems went public.

Sixty per cent of the initial public offering was subscribed by the owners themselves.

There was no denying the potential for using drip and sprinkler irrigation systems. "Micro irrigation helps save on all inputs-water, seeds, fertilisers, energy and labour, and improves productivity by 40-100 per



Bhau in his cabin at JISL factory, Bambhori

cent," says Anil Jain, managing director, Jain Irrigation Systems.

It was not easy convincing farmers and bureaucrats of its viability. Marketing officials had to learn the local language and market the concept in weekly bazaars and at festivals. They even took some farmers to Australia, Hawaii and California to demonstrate the successful implementation of micro irrigation.

The government stepped in only later. A task force on agriculture set up by the NDA government proposed that large areas could be brought under irrigation through drip and sprinkler irrigation: A micro irrigation system costs around Rs 40,000, but the government now provides 50 per cent subsidy.

After the first phase of using the systems for sugarcane, grape and banana cultivation, the next application was for crops like cotton, onions, oilseeds, potatoes and chillies. The last being wheat, other cereals and grains. "Except rice, the system can be applied for all other crops," says Jain.

The next thrust was on exports. The company concentrated on exporting plastic sheets and pipes. But there was also a huge global market for processed foods. But Jain suffered a setback after the US-

based Chiquita Brands International Inc., the world's largest banana processing company, with which he had entered into an export agreement, filed for bankruptcy. The company, nevertheless decided to go ahead with its plans. Today, it has about 3,500 acres under contract farming. It is a supplier of dehydrated foods, fruit puree and juice concentrates to clients like Nestle, Heinz, Unilever and Coca-Cola.

The company has four major revenue streams-micro irrigation, pipe manufacturing, production of plastic sheets and food processing. In the last six years, the company, taking the inorganic route, has grown at a compounded rate of 40 per cent. Even on a stand-alone basis, its revenues have increased by 42 per cent.

Its overseas acquisitions have not only provided the company with superior technology but also access to new markets and distribution networks in the US, Europe and Israel. Global business, which accounts for 20 per cent of its revenues, is expected to grow to 33 per cent in the next three to five years.

"Jain Irrigation, which is spread across the entire agricultural value chain, with the exception of finance and supply of some inputs, is not looking at growing through further diversification but scaling up its existing businesses," says Jain. The company had earlier paid a price for diversifying into new businesses like IT, multimedia and granite, accumulating losses of over Rs 200 crore and loans of Rs 600 crore in 2001. The company was forced to sell 49 per cent stake to the US-based private investment firm Texas Pacific Group in 2002. Three years later, when TPG exited, it had earned a return of 120 per cent on its investment.

Today, the company sees ample scope in expanding its core irrigation business, despite a looming global slowdown. "We estimate majority of growth to happen in India, especially in the water sector where we do not foresee any recessionary impact. In fact, the reduction in raw material cost, such as polymers, will allow us to improve our overall business," says Jain. Besides, with the government focussing on irrigation, the company sees a big opportunity in increasing its presence in the market, which is only at 5-10 per cent currently.



Anil Jain : CEO & MD

Stock Outlook by India Infoline

Positives: Domestic business contributes to 70 per cent of its total earnings. Strong growth is expected in domestic business buoyed by robust demand for micro irrigation systems and agro-processing.

India Infoline has placed the estimated margin for the company's micro-irrigation segment at 27.5 per cent from 27 per cent earlier, in view of continued strength in realisation. The company's realisations have been rising faster than its costs. The revenue growth in this segment is expected at 28.4 per cent, marginally higher than the earlier estimate of 28 per cent.

The agro-processing business is expected to see a strong growth and margin expansion, driven by healthy demand for processed foods and strong price realisations. The company is expected to increase fruit and onion processing capacities by 35 per cent and 20 per cent respectively, this year.

The company is in negotiation for a joint venture with Israel-based water management company Mekorot.

With EBITDA (Earnings before Interest, Taxes, Depreciation and

Amortisation) margins on water management projects being higher than the 9-11 per cent margins in piping segment, if the joint venture wins any water management contracts, earnings from these would offer potential upside for estimates.

Negatives: The overseas subsidiaries have shown lower-than-expected margins owing to the housing slowdown and lower realisations for Israel subsidiary, NaanDan Jain Irrigation Ltd. However, the company has changed revenue mix from overseas business to increase the share of drip irrigation for which agri-based demand remains strong. While this could improve margins by 200-300 basis points during FY09, any slowdown or failure in integration poses some downside risks. The piping division's margins could see near-term pressure owing to delays in capex plans in private sector, especially for telecom, though demand from public infrastructure should partly offset this. A 15 per cent decline on a year-on-year basis is expected in the plastics business owing to weakness in the US housing segment during FY09.

If rupee stays at its current level, forex losses are expected to drag earnings lower by 4-5 per cent. India Infoline has reduced the earnings estimate by 7.5 per cent in FY09 and 10 per cent in FY10 in view of the lower than expected FY08 earnings, which were 12 per cent below estimates.

In line with the downward revision in earnings estimate, the 12 month target price is lowered from Rs 600 to Rs 553 and India Infoline has downgraded the stock from Buy to Add. The revised price represents a price to earnings per share ratio of 23.8X. on FY09 and 17X on FY10.

Irrigation Plus

One of the qualities of an entrepreneur is the ability to view facts realistically. Look at the tone of acceptance while referring to trade union activity and the growing opposition to PVC from environmentalists. It is this realism which leads the entrepreneur forward in his march.

Based in a town appropriately named Jalgaon, the leader in micro irrigation systems is going places, with an acquisition at Watertown in the US.

‘Beyond irrigation, beyond India,’ goes the tagline in the annual report of Jain Irrigation Systems Ltd (JISL). After establishing itself as the numero uno in drip and micro irrigation systems in India, the Jalgaon, Maharashtra-based company has of late diversified into sprinkler systems and plastic piping, as well as land-scape and turf



Bhavarlal Jain is watching the business flow with his sons

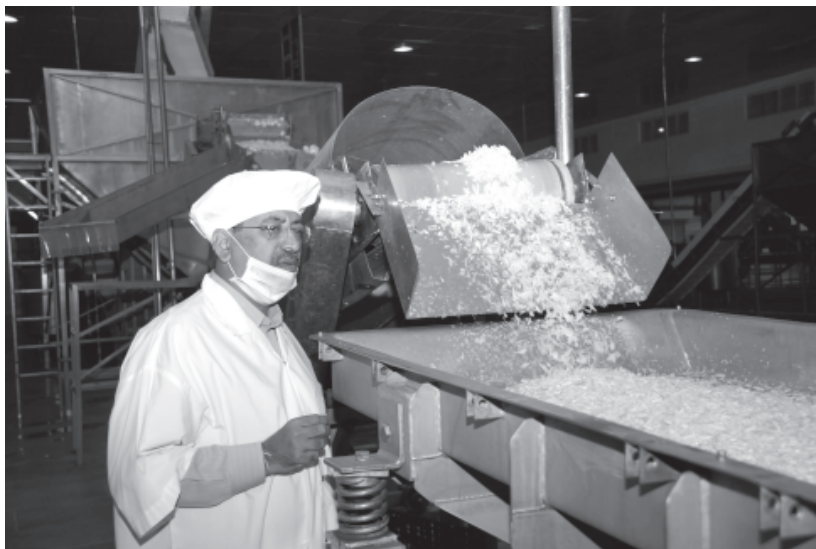
irrigation - related areas, sort of - in addition to food processing, laminated sheets and plastic building products. It has also spread its tentacles far beyond its home town, to Hyderabad and Chittoor in Andhra Pradesh, Vadodara in Gujarat, Udumalpet in Tamil Nadu and, abroad, to the US and Israel.

"I've handed over the running of the companies to my sons so that I can concentrate on charitable works," says group founder and chairman Bhavarlal H. Jain, a septuagenarian with five heart attacks, two bypass operations and an angioplasty behind him, and a pacemaker-cum-defibrillator fitted to keep him going. The going is hectic: though the day-to-day operations of the Rs 2390-crore Group are handled by his 'A' team of four sons. Bhau himself - as he is called by everyone - not only looks after the charities that he describes as "part of our corporate culture", but also oversees the businesses and overall policy decisions.

One of the big ventures the Group has taken on is onion dehydration (ODH), for which it has 40-plus customers the world over. "These include large distributors who buy our 14 kg or 16 kg bags and sell to the end-users in smaller packs for use in various food preparations including cereals, soups and pizza toppings," explains - Ashok Jain, Bhau's eldest son and vice-chairman, JISL. The onions, procured from farmers in the area, are dehydrated, sliced into rings or diced - and even, as a further value addition, fried or toasted for some buyers. The food processing division has plants in Jalgaon, Vadodara and Chittoor. The Udumalpet and Hyderabad complexes house facilities for drip and sprinkler systems and plastic piping.

The plant also produces dehydrated fruits like mangoes, pomegranates, apples and amla. "The great advantage of this plant is that it is versatile - we can change over from one product to another in just three hours," says Charitra Jain, senior vice-president. "We have developed a protocol for vegetables, too. These include cabbage, cauliflower, okra, beet, green and red bell peppers and tomato."

Ashok Jain, who also looks after human relations, explains how family bonding and the human touch are the main functions of HR. Thanks to this open culture, he says, the associates did not leave or



Eldest son Ashok believes in treating his employees like family

agitate even during the bad days from 1996 to 2002, when they didn't get paid regularly. "Any of our associates can meet the chairman directly, without going through 'proper channels' of authority," he points out. "There is no trade union in any of our factories except at the Chittoor plant - where also there are only 52 members. We treat them also the same way: I had dinner with their families at the plant on my first visit - they are all good people!"

The second son, Anil Jain, who is managing director of JISL, is proud of his laminated board plant, which he says is South-East Asia's largest export facility making 100-per-cent PVC (polyvinyl carbonate) and PC (polycarbonate). "We produce sheets of thickness ranging from one millimeter to 32 mm, besides corrugated boards, in 13 colours," he says. Anil, who is in charge of corporate strategy, finance, international relations and acquisitions, says sheet export growth is outstripping that in the domestic market. "We have acquired foreign companies in irrigation, ODH and plastic sheets," he points out.

In the pipe line

Even in pipes, Anil says JISL is bigger than industry biggie Finolex in PVC and PE (polyethylene) pipes combined. "They are bigger in

PVC pipes alone," he says.

The Group's main advantage in the international market is that "we were willing to learn," Anil says: "We provide a service level as if we are a local company, with people who speak the local language and all operations available at the customer's doorstep even though the production is in India." JISL boasts a global customer base that contains big names like Alcatel, Amari Plastics, Cargill, Coca-Cola, GE and Nestle, while its Indian customers include the Aditya Birla Group, Bharti, Hindustan Unilever, L&T, Reliance and Tata. "Our entire philosophy is based on working with and for the farmer," Anil says. "We touch nearly two million of the 100 million farmers in India there is no limit to how much more we can do!" This is why the Group got into food processing, he explains: "We look at the farmer not only as a customer, but also as a supplier - the more we buy from them, the more we can sell to them." So, why the sheets? Obviously, because the Group is already into PVC for its pipes and the raw material sources are all lined up.

The third member of the 'A' team, joint managing director Ajit Jain, is the only qualified engineer among them - the other three are commerce graduates, with Anil having gone on to do his LLB like his



Anil Jain : farmers are not only customers but also suppliers

father. Explaining the Group's ties with Israeli companies - especially the latest set-up, NaanDanJain, he says these are aimed at complementing the JISL range of products, "NaanDanJain is a pioneer and market leader in a variety of products suitable for open-field sprinkler irrigation as well as for irrigation in controlled atmosphere cultivation like greenhouses," he says. "With its product range, we can offer a variety of solutions to crops so far not economically suitable for drip irrigation systems - like cereals, pulses, oilseeds and a variety of vegetables. Also, our worldwide market reach has grown exponentially through its sales network in more than 70 countries."

In the food business, Anil says, the company wants to "build its business by completing the value chain". Beginning with providing better seed stock and planting material to farmers through research at various levels to adapt them to local agro-climatic conditions and introducing disease-resistant and high-yielding varieties, JISL will help the farmer achieve the best productivity; then buy the entire produce for processing.

Knowing their onions

The onions are not making the farmers cry. "I introduced drip irrigation on my 40-plus hectares in 1994," says Anand Oswal, who uses 45 day-old onion and banana plants from JISL's tissue culture laboratories - which, he points out, saves a month and a half of work in producing the seedling. It also saves nine months till the final fruit is cut over the traditional method, while productivity increases tremendously because the plants are all uniform. "I get three crops in 30 months against one in 18 months, with an average yield of 25 kg per banana plant against the earlier 16 kg," he says. "Some are even getting 30 kg to 35 kg, depending on soil and weather conditions."

While Oswal is a big agriculturist, small farmers too sing the Jains' praises. "I have expanded my crop range from traditional ones like urad, jowar, wheat and soya to white onions from seeds the company sells us," says Sudhir Kashinath Patil, who owns less than a hectare at Nashirabad near Jalgaon. "They buy back the onions."

Patil and his neighbouring smallholders grow bananas and other fruits too. "We have introduced bananas in places where they didn't



Ajit wants to build the business by completing the value chain

grow," says JISL agronomist Mohan Chaudhari proudly. "We've gone to Manipur, Nagaland and Punjab, where we got climatic data and analysed it to determine the optimum time for planting and it's succeeded!"

Atul B Jain, who is in charge of marketing, is the youngest of the directors; and it shows in his opinions: "You have to be a little mad to get into agriculture!" he asserts. While the Group is expanding its distribution channels aggressively by building a dealer network of more than 3,000 over the next five years against the current 1,500-plus, Atul is implementing an enterprise-wide resource planning system. He is also spearheading the PE initiative. "Our progress in PE piping over the past four years is mind-boggling," he says. "It has almost caught up with PVC, which took us many years to get to this position."

JISL is today the only company in India with the capability to manufacture pipes of up to 1,600 mm in diameter - that's a huge 1.6 metres! "PE is also more economical for diameters of more than 600 mm," says technical



*R Swaminathan,
Technical Director*

director R Swaminathan, a 33-year veteran in the company. "After 1.6 metres, which will be used for water and sewage, we are looking at increasing our capability to go to three metres - light-weight pipes for culverts and such applications." Also, as he explains, there is opposition to PVC from environment-activist organisations like Greenpeace because of some additives in the manufacturing process; and some countries, like Sweden, have already banned it.

Water projects

Ajit Jain, however, does not see PE replacing PVC totally. "We are pursuing various probable users to go for PE pipes in place of the conventional piping materials," he says. "PE would go longer than PVC in the race of time. But we are growing capacities for both materials for different applications."

Besides its own Israeli operation NaanDanJain, JISL has tied up with Mekorot, the national water company of Israel, to work on Indian water infrastructure projects. The two companies will jointly explore potential projects in the fields of desalination plants, water resource management, water supply systems, municipal water management and waste water treatment and reclamation. "We believe this is the most



JISL's progress in PE piping over the past four years is mind-bogling, says Atul

important step we are taking to further deepen our commitment to the provision of clean and healthy water for households, adequate and timely supply of water to agriculture and industry," says Atul Jain. "As of today, the waste water recycling is totally unexplored in India."

JISL, currently quoted at around Rs 300 on the National Stock Exchange (against a 52-week high of Rs 770) and a price-earning ratio of 16, has the enviable record of having chalked up a 40-per-cent CAGR over the past five years. "Going forward, we are looking at doing better than 40 per cent," says Anil Jain. "This is without taking future acquisitions into account - these would take the CAGR to over 50 per cent over the next three years or so." With the growing importance being given to agriculture and irrigation - the Union government has approved a Rs43,700-crore outlay for the 11th Plan national projects under the Accelerated Irrigation Benefits Programmes till 2012 - that doesn't sound too ambitious. As the company and its founder say, water is life and it's definitely making life better for the Jains.

Begins at home

It all began with Bhavarlal Jain's mother giving buttermilk and grain to the poor women of their village. "She used to do it on the sly, when her father-in-law was not at home!" he says. "So, doing charity is in my genes. It's been an individual obsession, right from the day I set up my first business, a kerosene agency, in 1963. I borrowed Rs 10,000 at the high interest rate of 18 per cent to give a boy so that he could get admission to a medical college. This doctor later invited me to inaugurate his son's medical dispensary!"

This work was institutionalised in 1982 under the Jain Foundation - a trust that continues to concentrate on offering educational opportunities to the needy. "Education is what has brought me



Bhau wants to make quality education available in his region

to where I am," says Jain, who himself became the first graduate in his family when he passed his B Com examination, then went on to earn a law degree and become a Class I gazetted officer in the Maharashtra Civil Services before getting into business. "So I decided that I must do something to build an educational institution if I can."

Jain Irrigation went through a bad phase between 1996 and 2002, but its founder continued to encourage good causes. "I never refused, even if I could give only a reduced amount," he says. "This was despite having had to pledge my wife's and daughter-in-law's ornaments to fulfil our salary obligations."

Once the troubles were over, Jain brought his dream off the back burner. "I was in a dilemma, whether to go in for medical or general education, for mass or class. I decided on the latter, because excellence has always been an obsession with me," he says. And thus was born Anubhuti, an English-medium 'experiential' residential school on the traditional Indian gurukul pattern. Having begun construction on a 40-hectare campus in 2006, he made sure it was ready in nine months, at a cost of Rs 20-plus crore. "It has five-star facilities and a global outlook but is deeply rooted in Indian culture," he says. "I learnt a lot from ISKCON (the International Society for Krishna Consciousness). I even hired two of their people for preparing khichadi for free distribution amongst my associates."

The foundation also organises cultural events in the town, where it brings stars from the firmaments of poetry, drama and discourse. "People are prepared to pay, the functions are over-booked for all three days even at Rs 500 a ticket," Jain says. "We planted a small seed, from which culture has grown. The whole standard of Jalgaon will rise, it will find its rightful place on the national scene."

A Dateline of Founder Bhavarlal Hiralal Jain & Jain Irrigation Systems Ltd.

- 1937 * Born at Wakod, fifty km off Jalgaon, on December 12 to Gaurabai and Hiralal Jain.
- 1948 * Admitted to Std. V, Municipal School, Jalgaon.
- 1956 * Passed Std XI examination from R R High School, Jalgaon.
- 1960 * Passed B Com from Sydenham/Potdar College, Mumbai.
- 1962 * Passed LL B from Mahim Law College, Mumbai.
- 1963 * Selected by the MPSC examination for a gazetted post.
 - * Founded "Jain & Brothers" on February 27 for ESSO Kerosene Oil Agency.
- 1978 * Procured dealership of 67 companies of national and international repute.
 - * JPCL established.
 - * Purchased sick banana powder factory and modified it for production of Papain.
 - * Purchased office space at Nariman House, Fort, Mumbai.
- 1980 * PVC pipe manufacturing commenced.
 - * Production of Papaya Candy commenced.
 - * Jayee and Jain Extrusion & Formulation (P) Ltd commenced.
 - * Jain Compounding & Formulation/Jain Accessories & Fittings commenced.

- 1982 * Received 'Udyog Patra' award.
- * Set up Jain Foundation. (Renamed Jain Charities in 1994.)
- 1983 * PVC Pipes production at Accurate Pipes & Profiles (P) Ltd, Udaipur, Rajasthan.
- * Awarded 'I M M Bata Marketing Award'.
- * Underwent first bypass surgery in Houston, USA.
- 1984 * Honoured with 'A R Bhat Entrepreneurship Award'.
- 1986 * Effected separation of family businesses.
- * EMCO Transformers Ltd. acquired.
- * PVC pipes production at Aarbee Pipes (P) Ltd, Sendhwa, (MP).
- 1987 * Jain Irrigation Systems Ltd. established & activities commenced.
- * Started Micro Irrigation Systems production activities.
- * Energy Distribution Company established for EMCO Transformers.
- * Agreement for Micro Irrigation with James Hardie, Italy signed.
- * PVC resin - High Sea Piracy.
- * New York USA office, 26th floor, River Gate rented.
- 1988 * Jain Irrigation first public issue.
- 1989 * Polytube production started.
- * Manufacturing Licence agreement with Rib-Loc Group, Australia.
- * PVC pipe plant at Gummidipondi, Tamil Nadu.
- 1991 * Plastic Sheet production commenced.
- 1992 * JISL rights issue share distribution at premium effected.
- * Agreement with Chapin, USA.
- * 'Udyog Vibhushan' Award.
- 1993 * Amalgamation of JCF, JEF, JPMC, Jayee, JPCL in APPL effected.
- * APPL renamed as JPCL.
- * Accorded honorary membership, IIIE, Hyderabad.
- * Tissue Culture Lab/Green Houses/Shade Houses erected.
- * Gowtham Granites Ltd established.

- 1994 * Floated Euro Issue of JISL.
- * PE piping system production commenced.
- * IT & Telecommunication Acquired.
- * Publicity & Multimedia Agency started.
- * Merchant Banking & Stock Broking.
- * Underwent second bypass surgery in USA.

- 1995 * JPCL public issue.
- * 'FIE Foundation Award'.
- * First signs of financial crunch felt.
- * PC Mirrorising & Thermoforming unit started.
- * WS Liquid Fertiliser Manufacturing commenced.

- 1996 * JPCL, Jain Kemira and Jain Rahan merged in JISL.
- * Jain Irrigation Europe incorporated.
- * Production of Dehydrated Onion, Bio-Pesticides and Vermi-Compost commenced.

- 1997 * Production of Fruit Pulp started.
- * Dehydrated Onion exported.
- * Central laboratory constructed.
- * Honoured with 'Crawford Reid Memorial Award'.
- * Suffered business losses for the first time.
- * Published "I'm sad," ad owning responsibility for failures.

- 1999 * Sustained still higher net business losses.
- * Production of cable duct and silicoat pipe commenced.

- 2001 * Promoters' OFCD conversion effected.
- * Reduced share capital.

- 2002 * Admitted foreign equity participation by Aqua International.
- * FI's OFCD conversion effected.
- * Papain production discontinued.

- 2003 * Preference Share Capital of Promoters.

- 2004 * REIL Food Processing Plant, Hyderabad, purchased.
- * 'Agricultural Technologies Ratna Award'.

- 2005
- * LMP Onion Dehydration Plant, Vadodara, purchased.
 - * In cooperation with Taiyo, Japan, Fruit Process IQF Project inaugurated.
 - * Terra Agro Farm & Dehydration Plant, Udumalpet, purchased.
 - * Gowtham Granites merged into JISL.
 - * Executed Aqua International exit
 - * Got Advanced Implantable Cardioverter Defibrillator fitted.
- 2006
- * Parle Food Processing Plants (2 Nos.), Chittoor, purchased.
 - * Asian & Sinnar Plants, Nasik, purchased.
 - * Orient Vegexpo Plant, Dindori, purchased.
 - * Eurrisko Plant, Chakan, purchased.
 - * Chapin Plant, USA, purchased.
 - * NuCedar Plant, USA, purchased.
 - * D Litt (honoris causa) by North Maharashtra University.
 - * Gandhi Research Foundation - formed.
 - * D Sc (honoris causa) by Konkan Krishi Vidyapeeth.
 - * D Sc (honoris causa) by Maharana Pratap University of Agriculture.
 - * Adopted native village Wakod for development as ideal village.
 - * Water Conserver of India Award' by UNESCO & Water Digest.
- 2007
- * Cascade Plant, USA, purchased.
 - * Aquarius Plant , USA, purchased.
 - * Standard & Poor listed JISL as an emerging challenger to world's bluechip companies.
 - * Over 50% shares of NaanDan, Israel, acquired.
 - * Commenced 'Anubhuti School'.
- 2008
- * Honoured with Padma Shri by Govt. of India.
 - * D Sc (honoris causa) by Tamil Nadu Agricultural University, Coimbatore.
 - * Thomas Machines, Switzerland acquired.
 - * Onion Dehydration Plant at Bhavnagar acquired.
 - * MoU with Government of Maharashtra for two of the largest agri industries mega projects-investment worth over Rs 550 crores.

An Entrepreneur Deciphered is a compilation of interviews by many journalists with Dr. Bhavarlal H. Jain, as also of some articles. It is a partial record of the way he built up an unusual enterprise — a multinational organization remaining firmly rooted in the rural Indian ethos. It talks of the trials, tribulations and triumphs of a pioneering business organization envisioned by a man struggling to overcome his humble beginnings and the unfortunate conditions of his fellow-men. Piecing together, it would depict the story of the changing face of Indian economy in general and that of Indian agriculture in particular. What is more, perceptive readers will not fail to see in it the interplay of hard work, value systems, human resources development, environmental concerns, pioneering spirit and patriotism. Truly an inspirational read for laymen as well as students of management; indeed for all aspiring entrepreneurs regardless of their fields of activity.

Front cover portrait is a pencil sketch modelled on the back cover photograph of Bhavarlal H. Jain by renowned artist Vasudeo Kamath (b. 1956), recipient of the International Award of Portrait Society of America Grand Prize (2006).



I believe conservation of water is the most important duty of any individual, community or nation. When millions die of thirst & hunger, who has the right to squander water?

Bhavarlal Jain