

**Capital
market**

Technical

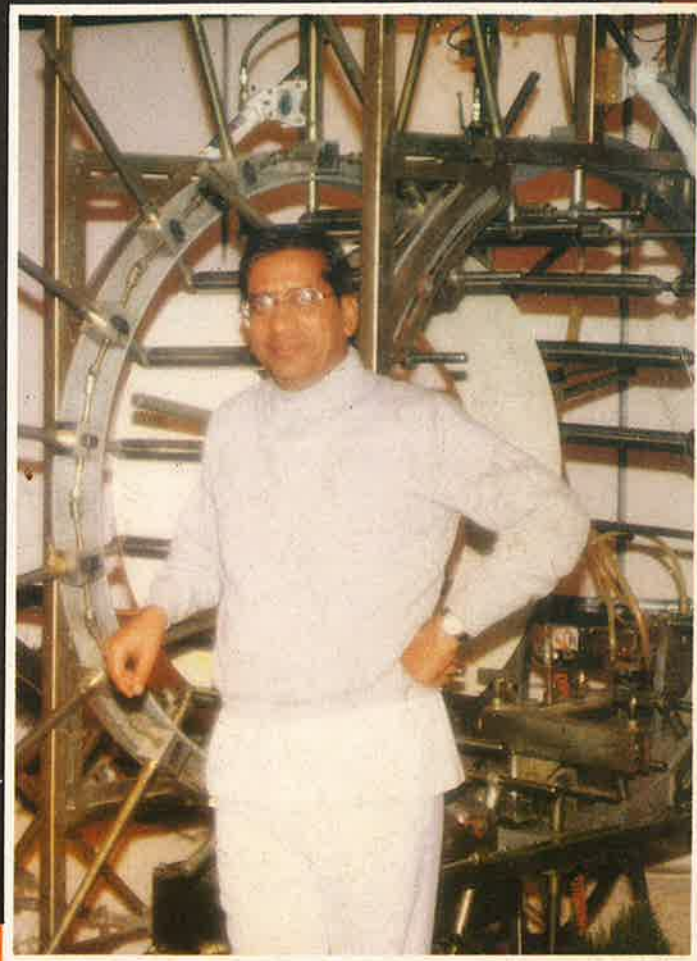


April 6 - 19, 1992

Vol.I.No.15

BHAVARLAL JAIN

**TURNING THE
WHEEL OF SUCCESS
AT
JAIN IRRIGATION
SYSTEMS.**



Plus

- ★ **Comprehensive Technicals**
- ★ **'A' Group Shares**
- ★ **New Issues** ★ **Rights Issues.**

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JAIN IRRIGATION SYSTEMS : For a supplier of drip-irrigation systems, sales and profits have come in floods for Jain Irrigation Systems during the past few years. Now it is busy replanting the treasure to maintain growth of

100% EVERY YEAR

When Chimanbhai Patel, Chief Minister of 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 is 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. 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 Group, 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.

Today, Jain Irrigation has become synonymous with drip-irrigation systems 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 includes big names like Voltas and Premier Irrigation. For a late entrant, this performance is, by any standards, exemplary. Voltas, which has been a pioneer in the field of drip-irrigation in India hopes to sell just Rs.4 crores worth of equipment. Company sources reason that Voltas has not grown as rapidly in this field as the Jains because it is a multi-product conglomerate and drip-irrigation has somehow not received a substantial thrust.

The concept of drip-irrigation or micro-irrigation, was developed in the

early '60s in the U.S., Germany and Israel around the same time. It emerged on the Indian scene in the early '70s. 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. 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 a half-hearted attempt. They took care of forty and left the rest to destiny. Perhaps, that made all the difference," explains Udani. There is an actual example of this percept. The company started with Low Density Polyethylene as the main raw material for manufacturing plastic tubes. Experience suggested that these tubes were breaking under the heat of sun. So it switched over to Linear Low Density Polyethylene (LLDPE). Reportedly, it is the only company using LLDPE as raw material.

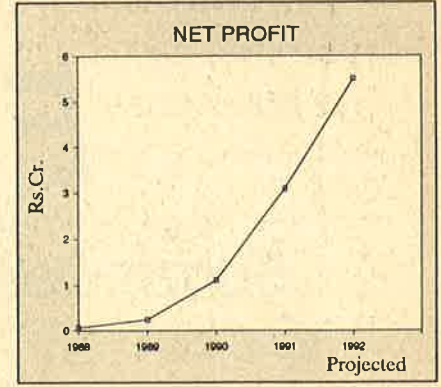
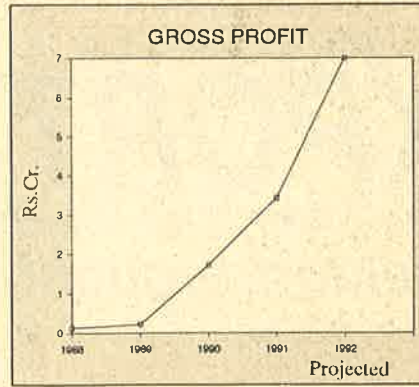
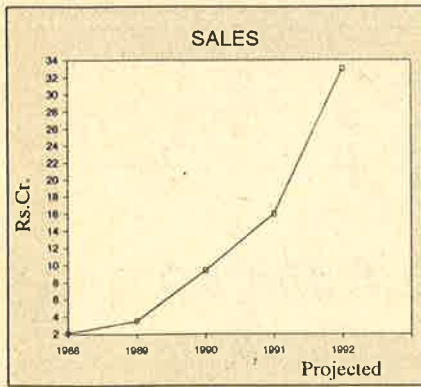
Despite such deep rural roots, the Jains found irrigating a bit tough in the

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? Zero. "We supply only after a letter of guarantee from a bank, the question of defaults does not arise," explains Jain. In sum, drip-irrigation has remained within the reach of resourceful farmers only.

Not any longer. 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 crores for the purpose. So now even the middle income groups are likely to opt for drip-irrigation. In an economic scenario, where subsidy has become a dirty word, it is indeed praiseworthy of the government to put the taxpayers' money to good use. Does it

COVER STORY



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 market which it has "barely scratched"

The performance of the company in the current year is spectacular. For the half-year ended Sep.'91, sales have almost doubled to Rs.8.17 crores over those in the corresponding period last year. There is a 205% increase in the gross profit at Rs.1.77 crores, while the bottom line has swollen more than six-fold to Rs.1.36 crores. On an equity of Rs.3.02 crores, the company is heading for an EPS nearly twice its face value.

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., U.S. They are patent owners of the multi-chambered drip-irrigation hose, branded as Turbulent Twinwall or Care Turbulent Twinwall. The company has received the RBI approval for payment of lumpsum and royalty fees. Commercial production is expected to start by August this year.

JISL is not resting merely on exports and is upgrading itself technologi-

cally. It is now setting up a joint venture in India with Plexite (U.K.) under the name of Plexite (India) Pvt. Ltd., in which it will have a 25% equity stake. Plexite Ltd. is a subsidiary of Glynwed International, a prominent multi-national industrial house based in U.K., producing a range of engineering and home products. Glynwed, through Plexite Ltd., have developed and patented a plastic material which could substitute wood, branded "Timbron". "Timbron" is already being produced and marketed in the U.K. and Belgium.

The initial manufacturing facilities for "Timbron" profiles will be set up in Gujarat. The polystyrene foam sheets with woodgrains would be marketed under the brand name "Timbron"

Glynwed has agreed to buy-back part of the production.

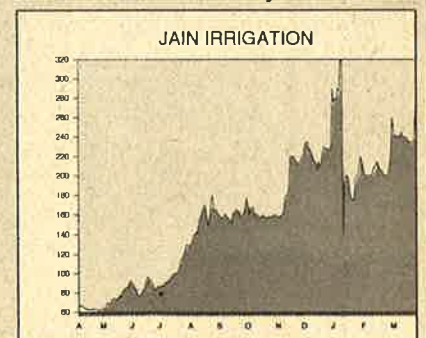
Besides a number of manufacturing firsts, it has executed several large drip irrigation projects, such as Tata Tea's plantations at Siliguri and Marnwar covering 160 acres, an Indo-Bulgarian apple project in Srinagar and A.V. Thomas Group plantations in the South, to name a few.

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 and convert it into electrical power. The Jains' plan to introduce Solar Water Heating Systems for domestic and industrial hot water applications soon, which should open new vistas for them. ☼

Investment Prospects

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 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 crores will triple to over Rs.9 crores after the debenture conversion. compared to the current price, the conversion terms should provide a bonanza to investors.

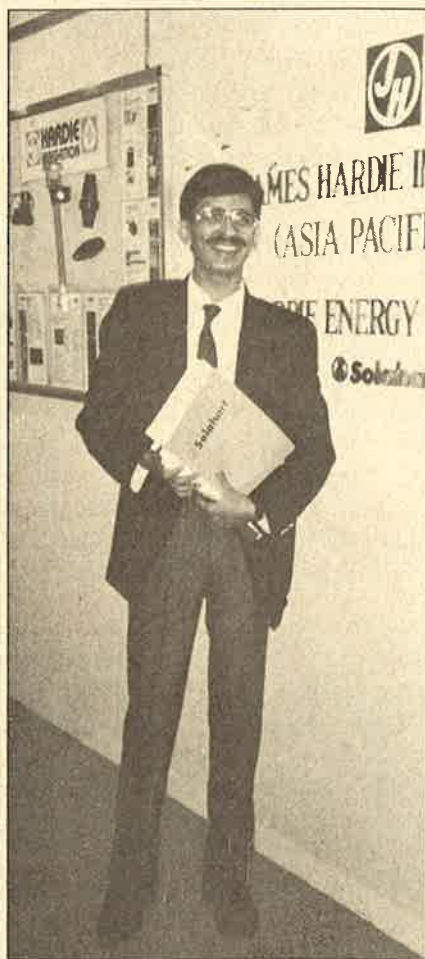
The EPS for this year could be a little compressed. However, three years from now, it could be placed around Rs.26-27 on the enhanced equity. For prospective investors, JISL they are not provide windfall gains in the short-term. However, they can expect a decent return of at least 30-40% per annum in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



EXPORTS:

Born in Dusseldorf, brought up in Jalgaon.

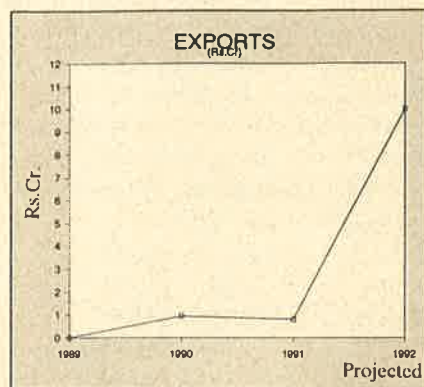
It all began as a surprise for the company. The outcome surprised both, the plastic industry and the exporting community alike. Exports were not visualised when the project was conceived. "It was on the suggestion of Cincinnati Milacron — the equipment supplier — at a plastic fair at Dusseldorf in Germany, that the idea germinated," says Anil Jain, Director JISL. It 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 toolroom for making dies and moulds. It has developed over 100 dies and moulds so far employing state-of-the-art technology. It manufactures these on a job-work basis for foreign customers.



Anil Jain :
He had to slim to see a fat bottom line.

From a mere Rs.95 lacs in 1989-90, total exports are expected to Rs.10 crores, in 1991-92, of which irrigation components will constitute Rs.5 crores, PVC foam sheets Rs.4 crores and customised plastic components, Rs.1 crore. In plastics industry, such growth in export earnings is not easy to find. Jain 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 U.K. and Belgium, irrigation systems to the middle-east, moulds and dies and polycarbonate sheets to the



U.S. For the manufacture and exports of polycarbonate sheets, GE Plastics (a joint venture between General Electric of U.S.A. and IPCL) has agreed to provide technical and marketing assistance to JISL, in addition to supplying the polycarbonate resin to it. 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."

As part of its expansion-cum-diversification plan, the company plans to instal three more extruder lines for PVC foam sheets. The project is already under implementation, and will be implemented in stages by Mar.'93. The full potential will be manifested in 1995-96 when the turnover is projected at Rs.300 crores, of which exports would contribute Rs.85 crores. ☉

MICRO

IRRIGATION SYSTEM

The conventional method of irrigation has meant a tract of land submerged under water. So when it comes to watering the field the farmer pours water throughout the field 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. Thus micro-irrigation, or drip-irrigation, as it is alternatively called, aims at providing optimum water to a plant at the right area which is the root zone and in the right quantity which is decided by previous experience and continuous research.

A micro-irrigation system delivers water to the crop using a network of

mainlines, sub-mains and lateral lines, which are nothing but pipes, their roots and sub-roots with emission points spaced along the lengths. Each emitter

Drip-irrigation Systems aims at providing optimum quantity of water at the right area instead of flooding the whole field with water.

or orifice supplies a small, precisely-controlled, uniform application of water, nutrients and other growth substances directly into the root zone of

the plant. In this way, the plant never suffers from water stress brought about by the withdrawals of moisture and nutrients.

Micro-irrigation has several advantages, which justify the investment one may make by installing such a system.

It provides regulated flow of water only near the root zone of the individual plant, as per the daily requirement. Drip-irrigation results in a 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. Application of fertilizers and chemicals is also possible through the system. ☺

Tea, Coffee?

No, No! Milk, 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, tobacco and nicotine 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's 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 co-operation 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 — that 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 a manpower of seven hundred without a proper Human Resources Department? "We take care of the human aspect ourselves, as it is the most important 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 be concerning their problems," avers Jain. ☺

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 a government officer to an industrialist 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? C M Technicals finds out in an exclusive interview with him.

- **What prompted you to enter a greenfield area such as micro irrigation systems?**

We had a strong footing in agriculture right from the beginning since I came from a family of farmers. We wanted to take up manufacture of products related to agriculture. We knew about the success of micro irrigation in Israel and we decided to put all efforts into it.

- **How extensively has this concept spread in India?**

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.

- **How much does it cost to install an MIS in terms of per acre?**

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

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

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

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

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 to two years at the maximum. Against that, each system that we sell has a guaranteed life of five years. Last but not least is the help from an unexpected quarter. The Union Government plans to bring one lac hectares of land under this system by 1991-92 and 5 lac hectare by the end of the eighth plan. The government has provided Rs.150 crores for the scheme as subsidy. This scheme will



B.K. Jain (Left)
"One cannot succeed in this business sitting in air-conditioned cabins."

definitely help the small and marginal farmers having land holdings upto four hectares.

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

There are two main reasons. The first is our rural base. One can not 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 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.

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

We plan to enter foreign markets firstly by tying up with foreign collaborators and then exporting the output. We have obtained a license for use of advanced technology from Chapin Watermatics Inc, U.S., to manufacture superior drip-irrigation systems and components than what we are manufacturing today. We are also setting up a joint venture with Plexite (U.K.) 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.

- **Where would you like to see Jain Irrigation three years down the road?**

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.275-300 cr. Half of that should come from exports. I would like our company to be amongst the top three micro irrigation companies in the world. ☺