



MANAGEMENT DISCUSSION AND ANALYSIS

The Indian economy is on a sustained uptrend with GDP growth rate hovering a little over 9% for the last three years. The 2008-09 growth estimates however hover around 8% or lower due to slowdown in manufacturing sector accentuated by slow growth in agriculture, mining, construction sectors.

The inflation has been rising consistently touching a 12.63% level in August 2008. The RBI has tried to contain the WPI inflation by slew of monetary measures of rate hikes and reduction in liquidity. The external situation is moving fast with US dollar strengthening against all major currencies world over and Rupee breaching the Rs.44 mark against dollar depreciating close to 10% on YoY basis. The Index of Industrial Production (IIP) is hovering just over 5% mark.

Agriculture in 2007-08, according to Government estimates had grown by over 3%. The major reasons for such a poor performance were low investment, low water use efficiency, imbalance in fertilizer use, distorted incentive system and low post harvest value addition. The poor agricultural growth have lead to problems in price stability and supply side concerns in essential commodities. The Economic Survey in the past had called for an inclusive growth in the economy which implies that a large population should participate in the growth. With just under 60% of the population engaged/dependant on agriculture, they share less than 20% of the output in terms of value, causing a grave imbalance. This imbalance can only be set right by following policies centered around the rural and agriculture population. While there is good intent in the Government to improve rural/ agricultural economy, execution is tardy and beneficiaries at the bottom of the pyramid are hardly getting any benefits. Revival of this sector will require significantly higher resource allocation and an integrated development plan which will incorporate a holistic view of all round development.

1) Overview of Business

Your Company is one of India's leading agri-business companies, operating in diverse but integrated segments of the agri-business value chain. Your Company is one of India's largest manufacturers of irrigation systems, plastic pipes and plastic sheets and now also the largest mango processor and largest onion dehydrator in the country.

The Company's product range includes Micro Irrigation Systems ("MIS") consisting of drip and sprinkler irrigation systems; Piping Systems consisting of PVC pipe and polyethylene ("PE") pipe products- Plastic Sheets consisting of PVC sheet and polycarbonate ("PC") sheet products; Agro-Processed Products consisting of dehydrated onion and processed fruit purees and concentrates; and other products such as agricultural tissue culture and Solar Water Heater and Solar Lighting Systems.

The Company's overall business prospects are significantly integrated to the agriculture economy generally and horticulture sector in particular. The movements in the overall industrial economy and the external sector also have a significant effect on the business of the Company. Thus, the Company's performance is subject to seasonality in the agriculture sector and also partly dependant on Government policies at both Central and state level. To offset the risks of the agricultural sector the Company has built a diversified portfolio of industrial products.

External events and their impact on business has been increasingly volatile and challenging.

Now days, historical trends do not necessarily provide ready guide to future. Managements must keep constant vigil and respond in dynamic manner to effects of unfolding developments almost on 24 x 7 basis. This must be done while keeping focus on long term strategy and adherence to core values.

Our business during last year has also faced such challenges and has effectively managed them to provide another year of sterling growth and consistant profitability.

Current year seems to more challenging. We are on our guard. Our outlook is more cautions while keeping our convictions on growth intact. We have a task on hand to maintain growth rates near the one's we have achieved over last 5 years.

2) The Strategy

Your Company's primary business strategy is to play a key role of catalyst in providing value added long lasting solutions through it's products and services to problems of water security, food security and energy security.

This strategy is being implemented by pursuing well co-ordinated initiatives such as increase in product and services portfolio, increase in geographical reach, creation of value added products with help of fundamental research and development and by creating awareness to effect knowledge transfer to farmers.

- Growing the business organically and through select strategic partnerships and mergers and acquisitions The aim of the Company is to be among the top three global players in each of its major business segments such as Micro Irrigation Systems, Plastic Sheets and Agro-Processed Products. In addition to organic growth, the Company will evaluate on a case-by-case basis potential acquisition targets, that offer an opportunity to grow the business, production capacity and/or expand its capabilities or geographic reach. The Company intends to pursue those acquisitions that are related to its key strengths, are synergistic and in its assessment, have manageable integration risks. Your Company may also enter into strategic partnerships with leading overseas manufacturers and distributors of similar products with coverage in markets where the Company is presently under-represented.
- Focusing on the agri-supply chain The plan is to sell products and services at various levels of the agri-supply chain, leveraging the existing strong brand in India and established domestic and international distribution networks. For example, for the domestic farming customers the Company plans to provide an integrated "full service" product offering assistance to them at every step of their crop growing cycle with products and services which are synergistic with the current products of the Company. The Company plans to help its customers to improve their crop yield such as, through Micro Irrigation Systems and higher quality planting material like the selected high yielding and hybrid onion varieties presently supplied to its contract farmers.



The Company also plans to work with its customers to take their agricultural projects from conception to completion on a turnkey basis, providing services such as engineering, soil and water analysis, water resource estimation, crop planning, irrigation and fertigation scheduling, marketing assistance and other agronomical support. The Company believes that these activities are also complimentary to and synergistic with the vegetable and fruit dehydration and processing activities downstream in the agri-supply chain. The Company intends to achieve further vertical integration of its activities in the agri-supply chain such as through expanded upstream contract farming arrangements to support the downstream Agro-Processed Products business.

- **Expanding into new growth products and markets** The Company will continue to expand its product range with new and innovative products in areas such as PVC window and door profiles and other building products made from PVC Sheets which are believed to have a cost advantage over traditional wooden (lumber) products. Your Company also plans to further penetrate the urban and commercial applications for its PVC Piping Systems, focusing on India's increasing need for housing, sewerage, water supply, telecommunications and other infrastructure. The Company plans to enhance its distribution reach by adding new dealers and distributors to penetrate into new domestic and international markets, particularly in Africa, the Middle East and the East and

West coasts of the US. Furthermore, there are plans to foster strategic alliances with global players so as to have access to their distribution reach for marketing the Company's products.

Recently company has signed MOU with Mekorot of Israel to expand its activity in water infrastructure Area.

In case of fruit & vegetable processing company plans to add vegetables other than onion to its portfolio. It also will increase capacities in IQF fruits.

- **Maintaining cost competitiveness** Your Company seeks to be a cost-competitive high-quality producer and is focused on maintaining its cost competitiveness in the domestic and international markets. There are plans to further increase productivity and production while reducing costs by continuing to invest in new equipment, improving the material management system to minimize wastage and production losses, improving the working capital cycle to reduce the interest costs, refinancing the higher cost debt with lower interest debt and exploring ways to use the solid waste produced by our food processing facilities to generate electricity etc. Since 2004, The Company has engaged in contract farming, whereby it sources the raw materials for its onion dehydration business by buying-back onions at pre-determined prices from over 2,000 farmers, covering approximately 3,000 acres of farm land. The Company provides such farmers with various agricultural inputs and services.

3) Key Products

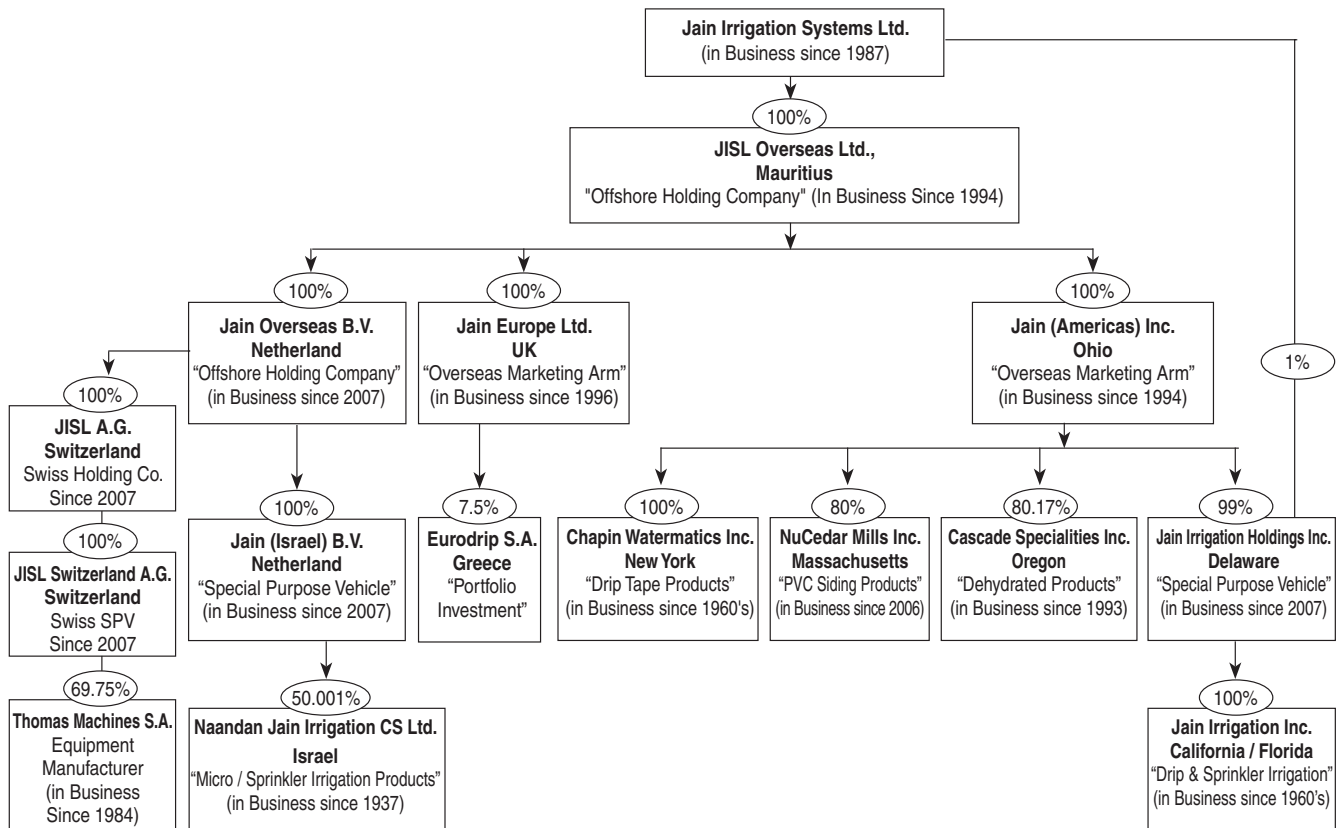
A brief synopsis of our products and their application is provided in the table below.

Product	Use and Applications	Brand Name	Logo
Drip Irrigation Systems	Farm Irrigation & Landscape	Jain Drip	
Sprinkler Irrigation Systems	Farm Irrigation & Landscape	Jain Sprinkler	
PVC Pipes	Water Supply, Farm Irrigation, Plumbing, Cable ducting	Jain Pipe	
High Density Polyethylene ("PE") Pipes	Water, Sewerage, Effluents, Cable ducting, Gas distribution	Jain PE Pipe	
PVC Sheets – Free Foam – Integral Foam – Rigid	Trim boards, display boards, sign boards, banners Marine industry, advertising, signs boards, interior designs Industrial applications, partitions, interior designs	Ex-cel	
Poly Carbonate (PC) Sheets – PC Compact – PC Corrugated	Building, construction, transport, advertising Greenhouses, stadium and industrial roofing	Ex-cel	
Dehydrated Onions	Processed food, soups, recipes, salads, retail	Farm Fresh	
Fruit Puree and Concentrates	Juices, baby foods, confectionary	Farm Fresh	
Tissue Culture Plants	Agriculture plantation	Jain Tissue Culture	
Solar Water Heating & Solar Photo-voltaic	Domestic and industrial uses, Hospitals, Dairies	Jain Sun Watt & Jain Jyot	



4) Corporate Structure

The below table sets forth the current corporate structure of the Company



JISL Overseas Ltd. is a wholly owned subsidiary of the Company and was incorporated in 1994 under the laws of Mauritius. JISL Overseas Ltd. acts as a holding company for the overseas subsidiaries and all of the overseas subsidiaries are directly held by JISL Overseas Ltd. For the year ended 31st March, 2008, JISL Overseas had share capital of approximately US\$ 64.24 million out of which \$ 24.58 million was infused in the year FY 2007-08. The said Company had a profit of \$97,457 for the year ended 31st March, 2008.

Jain (Americas) Inc. is a wholly owned subsidiary of the Company and was incorporated in 1994, under the laws of Ohio, USA. It is our key marketing and distribution arm in the United States. For the year ended 31st March, 2008, Jain (Americas) Inc. had sales of US\$23.02 million.

Jain (Europe) Ltd. is a wholly owned subsidiary of the Company and was incorporated in 1996, under English laws. Jain (Europe) Ltd. is our key marketing and distribution arm in the UK and other European countries. For the year ended 31st March, 2008, Jain (Europe) Ltd. had sales of GBP 15.04 million.

Chapin Watermatics Inc, USA is a wholly owned subsidiary of the Company thru the Jain Americas Inc. Chapin is engaged in drip tape manufacturing and distribution business based in Watertown near New York. The Company has reported revenue of US\$13.13 million in the 12 months to March 2008.

Cascade Specialities Inc. USA is owned to the extent of 80% by the Company thru the Jain (Americas) Inc. It is engaged in onion and garlic dehydration business with specialization in natural low bacteria and organic dehydrated products. The revenues for 12 months ended in March 2008 were US\$12.89

million. The Company has definite agreement to acquire over the next 4 years remaining ownership from other shareholders at an agreed EBIDTA multiple each year.

NuCedar Mills Inc. USA is a start up venture engaged in the manufacture of PVC sidings thru a patentable product for the home building market in USA. The Company has commenced production in 2007-08 for test marketing reaching Revenue of US\$ 3.23 million.

Erstwhile Aquarius Brands Inc. USA now known as Jain Irrigation Inc. is a California based manufacturer of drip irrigation systems for agriculture landscape and nursery applications and is a wholly owned subsidiary of the Company thru the Jain Irrigation Inc. In first full year of ownership by the Company the said company has achieved a sales level of US\$34.14 million in the 12 month to March, 2008.

NaanDan Jain Irrigation C.S. Ltd. Israel is owned to the extent of 50.0001% by the Company thru Jain (Israel) B.V. It is engaged in the manufacturing of drip irrigation. NaanDan also has manufacturing facilities in USA, Chile, Brazil, Spain & Australia. The Company has reported revenue of NIS349.86 million in the 12 months to March 2008. The Company has a call option to acquire remaining ownership over the next 2-10 years from other shareholders at an agreed fixed price.

Thomas Machines S.A. is a Switzerland based manufacturer of plastic extrusion equipments with laser technology. The Company owns 69.75% of Thomas Machines thru JISL Switzerland Ltd. Revenue for the 12 months to December 2007 is CHF12.20 million. The Company has a call option to acquire remaining ownership over the next 3 years from other shareholders at an agreed fixed price.



5) Competitive Strengths

The Company believes that the following are its principal competitive strengths to successfully execute the earlier mentioned strategy.

- **Strong brand in India** Jain Irrigation is one of India's leading manufacturers of Micro Irrigation Systems, Piping Systems, Plastic Sheets and Agro-Processed Products. Since the Company commenced operations in 1986, it has built an extensive distribution network throughout semi-urban and rural India, selling flagship brands such as Jain Pipe and Jain Drip, which are well-known in the domestic markets. Company's MIS products are customized to assist in meeting the special requirements of its domestic customers. Management believes that the Company's strong brand, leading market position and understanding of the customers' needs, makes it well-placed to capitalize on growth opportunities in the fast growing domestic markets for its products. Formation of Jain Irrigation was preceded with other group companies that dealt with agriculture since 1963. Thus, there is 44 years of a strong relationship and mutual warmth with the larger agricultural community.
- **Flexible and scalable production facilities** Management believes that the flexibility and scalability of the Company's existing production facilities will help it meet increased demand for its products. The scalability of the Company's existing facilities enables it to increase its production capacity through the installation of new equipment and production lines. For example, the Company can increase the capacity to produce our PVC/PE pipes and Plastic Sheets by upgrading critical equipment such as screws/barrels and gear boxes, or if greater capacity enhancement is required, by adding new extruders. The Company's flexible manufacturing facilities enable it to produce a wide range of products with different specifications, such as PVC / PE pipes with different diameters and working pressure ranges and processed and dehydrated fruits and vegetables using different organic feedstock. This flexibility assists the Company in meeting the specific demands of its customers and reducing the impact of seasonal changes in production volumes for specific products such as the Agro-Processed Products and Piping Systems. The ability to expand production across product streams is demonstrated by the achievements in the past 48 months in which Company has increased its PE pipe capacity, more than eight times to 81,360 tons as of 31st March, 2008 from 8,676 tons as of 31st March, 2003. It increased the PVC sheet capacity by almost 4 1/2 times to 36,300 tons as of 31st March, 2008 from 7,735 tons as of 31st March, 2003 and it increased the PVC pipe capacity by 2.75 times to 98,010 tons as of 31st March, 2008 from 35,600 tons as of 31st March, 2005. Your Company plans to continue this aggressive capacity build up in current and coming year so as to maintain substantial organic growth across most of the divisions.
- **Cost competitive high quality producer** The Company's modern, large-scale production facilities, the de-centralization of its plastics manufacturing facilities in Jalgaon, Hyderabad and Udumalpeth near Coimbatore in India, the increasing de-centralization of the food processing and dehydration facilities throughout India, closer to the growing regions for the raw material and

efficient working capital management, make your Company a cost competitive manufacturer of various products. While the Company is committed to maintaining international quality standards for all its products, the success in meeting the quality requirements of the international customers is demonstrated by your Company's increasing export sales. The overall export sales increased by 12% to Rs. 454 crores in fiscal 2008. The Company's plastic processing, onion dehydration, fruit processing activities, tissue culture activities and solar division had achieved ISO 9001 certification. The Company's plastics processing was certified under ISO 14001-2004 Environment Management System certification by TUV NORD Germany in 2005-06.

- **Experienced management & sales teams** With significant experience in the plastics manufacturing, fruit and vegetable dehydration and/or fruit processing industries, the Company's senior management team has deep experience in the industries in which it operates.

The Chairman, Mr. B. H. Jain is the founder and is acknowledged as one of the pioneers of micro irrigation in India. The experience of the Company's management team in international markets will help it increase the penetration of strategically selected countries and expand the range of its product offerings in existing export markets. The management team also has long-standing relationships with many of the major customers, distributors/dealers and suppliers. Further, the Company has a strong local sales force, which together with the management team give the Company a deep understanding of the needs of the domestic customers.

- **Diverse revenue streams** Although the Company's business and its prospects are significantly integrated with the Indian agricultural sector, your Company also derives a significant portion of its revenue from non-agricultural sources, such as from sales of piping systems to commercial, industrial and government customers, and sales of PVC sheets to the home building construction industry. In fiscal 2008, the Company derived a little over 50% of its revenues from non-agricultural sources. The revenues are further diversified across the wide range of products sold. This diversification can help insulate the overall sales and operations from adverse conditions affecting any one of the business segments or products.

6) Overview of Segments

A) High-Tech Agri Input Products

The segment comprises of Micro and Sprinkler irrigation systems, PVC Pipes, bio tech tissue culture and other agri inputs. The segment has grown at almost 42% over the previous year at Rs. 6141 million. The main growth engine was the MIS/SIS business at a robust 75% growth. The segment profit has grown by an impressive 75% over the earlier year's level, while the capital employed grew at a little over 62% reflecting the creation of additional capacities during the year.

a) Micro and sprinkler irrigation

i) Industry The industry is broadly divided into the organized and unorganized segments in the country. The Company is the largest player in the organized sector. In view of the involvement of a large number of components in a system, all of which are not available with a single



manufacturer, it is difficult to hazard a guess about the exact size of the industry as most of the figures are derived on the basis of information available from different sources. While the Company controls 55% of the Micro Irrigation business in the country, it has a market share of 35% in the Sprinkler irrigation business in the country. The current estimate of industry size is Rs. 12 bn. and growing rapidly. Currently about 2.0mn Ha of possible 70 mn Ha are covered under the micro and sprinkler irrigation in the country. However, as per Government task force 17mn Ha of land can be easily brought under micro irrigation coverage in the country in the near future, say by 2011-12.

The world over the MIS/SIS industry is undergoing a consolidation phase with M and A activity at its highest in the last 30 years or so. The Company has now got a firm foothold in the mature North American market with two significant acquisitions to gain a 10% market share. The JV with Naandan gives it strategic access to markets the world over, specially in Europe, South America, Australia and ME Asian countries, while it faces a demand explosion in the fastest growing Indian market.

ii) Performance While the tonnage of the business has grown by a respectable 47% compared to the earlier year, 12% increased realizations led to growth in revenue terms at 64%. The business contributes a little over 35% of the Company's turnover. The division has been growing at a CAGR of 66% plus on the back of projects in the States of Andhra Pradesh, Gujarat, Tamil Nadu and the philip provided by Maharashtra continues. The business added 12,690 MT of capacity during the year under review, while Fixed Assets addition was to the tune of Rs. 610 million.

iii) Opportunity & Outlook Almost 60% of the arable land in the country is still rain fed. The Government (Central and State) provide 50% capital subsidy for promoting the use of Micro Irrigation by farmers. While targeting an agriculture growth of 4% per annum the government had also placed higher targets for farm credit and agriculture investments at 2% plus of the GDP for the XI plan period.

State government have also started work on new concept of 'On Demand Irrigation' which will help farmers to do more productive farming. Another initiative called 'No Lift Without Drip' will encourage wide spread use of Micro Irrigation Systems even in crops such as cereal and pulses. Adoption of Micro Irrigation System is becoming more prevalent even in crops such as Cotton, Chillies, Onions, Potatos and other vegetable crops. States from Northern Parts of India are picking up speed especially with Horticulture crops. All in all, outlook for this industry in very positive and opportunity is immense.

Your company is making significant investment in production capacity and in network building so that it can maintain the unprecented compounded annual growth rate of 60-80% in this division going forward as well.

iv) Risks & Challenges The growth in markets is dependent on Government policies and release of capital subsidy etc in the short term. The growth in industry will need a large pool of trained sales people and a dedicated dealer network in the far flung areas of the country. The uneven distribution of rainfall in the country and fluctuations in the polymer prices are constant threats faced by the industry. Low cost quality competition is another threat.

b) PVC Piping

i) Industry Indian Scenario: During the year 2007-08 the Indian industry used 1373 KT of PVC Resin, achieving a growth of 13% over previous year. Out of this about 70% i.e. 972 KT was consumed for pipes & fittings. For the year 2008-09 Indian PVC industry in general looks forward to consume 11% more and looks forward to a CAGR of 10% up to the year 2012-13, matching the Global pace. Jain Irrigation, with a 15% share, is one of the handful major players in the organized market. Rest of the industry, being small and medium scale in nature, is unorganized, fragmented and scattered near the user belts in the country. However, there are 3 major players in the organized sector. Increased micro irrigation spends, push for urban infrastructure by government agencies and Command Area Development Programme will improve the demand situation for the industry.

ii) Performance During the year 2007-08, this business contributed just under 16% revenue for the Company. While the business has grown at a steady 10% in revenues, the realizations were increased by 9%, while the tonnage grew at 1% to reach just under 46,221 MT. The business added 12995 MT of capacity during the year under review, while the Fixed Assets addition was to the tune of Rs. 107 million.

iii) Opportunity & Outlook While the expansion of capacity undertaken last fiscal year is complete, in view of increased budgetary allocation from government, demand is expected to significantly increase. Hence the Company has again decided to enhance the capacity by another 15972 MT, the full effect of which will be observed in FY 2008-09. In a full year's operation the investment would generate Rs. 298 mn of incremental revenues.

While the government infrastructure spends are increasing all the time, the government programmes continued for safe drinking water, urban and rural sanitation, Rain-water harvesting and integrated watershed management programme etc. are expected to generate substantial demand for piping products in the coming years. In the year 2007-08 the company has started a complete range of PVC SWR pipes and moulded fittings to strengthen the product portfolio. Additionally, during the current year a production centre is established in Tamil Nadu to move closer to the customers' demand centres and would be establishing two more centres in the north part of country in near future. A large part of the Urban Infrastructure projects in the current five year plan is towards irrigation, drinking water supply & sanitation.

iv) Risks & Challenges Delays in government decision/ spending and prices of PVC resin remain the potential threats to the otherwise rosy picture for the future of the industry. Low cost low quality manufacturers continue to twist the healthy markets. Increase in price of raw material PVC resin is another dampening factor on demand.

c) Biotech Tissue Culture

i) Industry The industry is broadly divided into two segments-

- (1) Fruits and vegetables and
- (2) Leafy Plants and flowering Ornamental Plants.



The industry is not organized although some big names did start forays in this industry in the mid 1990's. Most of the players are engaged in tissue culture for cut flower exports, where the model of business is quite different. The Company started with banana as the main crop for tissue culture and the efforts have really paid off. The industry is still growing at an estimated 25% per annum.

ii) Performance The sales in business crossed Rs. 100 million for the first time during the year, reflecting a 51% growth over the previous year. The quantity increase at 9.4 mn plantlets contributed 47% of the growth while 3% increase in price realization was achieved during the year. Keeping quality of plants as the top priority company had implemented four stage diseases testing program. Unit has also undergone BCIL Certification, certification standard for commercial tissue culture laboratories by Department of Biotechnology, Govt. of India. The Unit has also received "Rajeev Gandhi National Quality award, 2007" for efforts and commitment to quality in the field of Biotechnology industry.

iii) Opportunity & Outlook The outlook continues to be excellent and demand shows improved offtake in the coming season. Now, many State Governments are evincing keen interest in promoting tissue culture. The Company has opportunity to diversify the business & produce fruit & ornamental plants & other fruit plants. To begin with in coming year company has started production of tissue cultured pomegranate plants. There is also an export potential to other Asian countries which can be tapped.

iv) Risks & Challenges Lack of skilled work force and the risk of legal problems in case of non-performance of the planting material in the farmer's field are the major challenges facing the business.

B) Industrial Products

The segment business includes the varied business lines like PVC Sheets, Polycarbonate Sheets, PE pipes for industrial applications, Fruit processing, and onion and vegetable dehydration. Business in this segment has grown at just under 29% over the earlier year's level at Rs. 5948 million. The major growth came from the fruit processing business at a whopping 102% level backed by a good Mango season and an additional revenue from Pomegranate processing. The segment profit has grown by just under 7% over the earlier year's level, while the capital employed grew at a little over 24% reflecting the creation of additional capacities during the year.

a) PVC & PC Sheets

i) Industry The market is divided into two segments; Graphics Market (GM) and Building Materials Market (BMI)

The BMI segment showed the largest growth in using PVC sheets over the last decade. Lumber the traditional building material was being replaced by PVC. The inherent qualities of PVC such as impervious to water absorption; protected against insect attacks and a life term warranty promulgated the product over traditional Lumber. Further, availability of good quality wood was a problem as resources were drying up and cost of processing was escalating.

The basic uses of PVC in BMI was in Trim, used as surrounds for windows and garage doors, Corner Boards, Soffits and interior applications such as Wainscoat and

Beadboards. This segment uses sheets 12.5 MM and thicker going up to 30 MM.

The market is serviced by 7 manufacturers and some Chinese imports.

The GM market has been using PVC sheets in manufacturing Sign and Graphic boards, Point-of Purchase displays and large print mediums. This industry has stayed with PVC for over 3 decades. However, the sheets properties have been undergoing changes to meet the new technology of printing that is constantly evolving. The sheets used in this industry have to be of a very high quality surface and dimensional tolerances have to be very stringent, Cost though being a factor, the print industry has yet to find a medium that could replace PVC.

This segment uses 1 MM to 12 MM thickness. This segment is serviced by 5 manufacturers. Some China products have attempted to penetrate the market.

Polycarbonate Sheets have been traditionally used in Glazings, Roofing, Security windows, some Sign and Display applications in the General Purpose segment. At the high end, Aeronautical applications, Eyewear, Compact Discs have been its niche markets.

ii) Performance

The adverse effect of continued slowdown of American Housing Industry has led to decline in PVC Sheet business revenue by about 36% over the previous year, however it is a decline 31% in terms of volume.

Building Materials Market

The home mortgage crisis in USA has severely impacted the housing industry and consumption of raw material in the Building industry segment fell by 40 %.

New home building has virtually come to a stop in lieu of high inventory levels of unsold homes. Adding to this is the non availability of funds for new home purchases. The area where this segment showed a slight growth was in the remodeling area. Most of the application in this field was towards repairs and replacement.

EX-CEL sheets in the Building Market saw a decline in sales. Some of this decline could be attributed to our losing a major distributor in the Mid Atlantic region of USA. The housing crisis was the major factor in our loss of sales. However, this was the case with all other manufacturers and our decline in sales has been in line with the lesser offtake in the industry as a whole.

Our inventory levels are high and all measures are being taken to reduce the levels but at the same time assuring the market of continued supply. Our quality has been exceptional.

The introduction of NuCedar was well received by the market. However, the housing crisis has been an entry barrier. None the less as a product it is unique and will see it penetrate high end market segment and gain volumes. We have had several main line building products manufacturers contacting us for possible cooperation and/or marketing arrangements. This speaks well of the product.

Graphics Market

This segment was effected by the credit crunch resultant of the mortgage crisis. However, both in Europe and USA, EX-CEL has held its own. This was achieved by adding manpower, opening new warehousing facilities and maintaining the exceptional quality and services.



The economic conditions have resulted in Graphics market cutting back on projects and reducing inventory levels to JIT. The emphasis of this market is to seek out manufacturers who will provide cut to size material and do custom jobs. This is aimed at reducing inventory and cutting back on labour. This market has trended at 5% growth annually and is expected to maintain this level.

The factor that will have an affect is the entry of High Speed Digital printers in place of the Screen print machines used previously. This requires a sheet of exceptional quality with a near pristine surface.

We have introduced the New Digital White which is manufactured to meet the standards required for the high speed digital printers. We expect to make good inroads into this segment. Our broad offering of products has aided in our consolidating the market place. 2 years ago our major market was second tier distributors and regional players. Today we are a major supplier to all 1st tier distributors. This is significant progress given that we do not have any manufacturing facilities outside of India.

The PC Sheet business has grown marginally at 5% over the previous year's level on the back of 12% tonnage growth while the realizations suffered 7% decline in this business due to reduction in PC raw material prices world over.

Polycarbonate product category saw a good growth in the domestic market and we continue to export. Our continued arrangement with Sabic and their increased offtake augurs well for this product line.

iii) Opportunity & Outlook The economic downturn will lead to some players exiting the market and others redefining their basket of offerings. This will create a vacuum of supply that can lead to possible JV's and Cooperations between like minded manufacturers operating in the same market segments and could open up a new vistas leading to a stronger resource pooling and reduction of duplicated costs which ultimately will benefit both the manufacturer and the end user.

The JAIN name has been fore front in publications in Plastics and Irrigation industry magazines due to the recent acquisitions. This gives the companies a greater exposure for growth.

iv) Risks & Challenges A lot will depend on the price of resin. The fluctuating oil prices do not provide any comfort. The industry as a whole has put through price increases and the reaction of these will be felt in the coming months.

The slow recovery of the housing industry and the credit crunch could further debilitate the levelling of the down markets.

Any slowdown in world economies will have a direct impact on the recovery speed.

A sluggish market is expected over the next 12 months to 18 months.

b) PE Piping

i) Industry The applications of PE pipes are growing at a very fast pace and yet new applications are being developed for the product. In applications like Sewage & Effluent disposal the tougher environmental laws and stricter application of the same by the Govt. departments, the replacement of cement/metal pipes by PE pipes is becoming very relevant. Such possibilities are huge,

especially since the larger diameter PE pipes are now indigenous available within the country itself. The Company's presence in gas and cable duct segments of the PE pipe business is commanding and hence the overall industry share is 30%. The Company is operating in all segments of the industry like cable duct, sprinklers, gas distribution, water conveyance, house service connection, Sewage conveyance, Effluent disposal, sand stowing, dust suppression etc.

ii) Performance This business saw a healthy 130% growth in revenues over the last year's level reflecting a phase of consolidation in the industry, while the tonnage increased by 132% over the earlier year's level. However, with all user industries like telecom, gas, water and sewerage having good plans for growth and capital expenditure, the future is very bright for this business. The business added 24036 MT of capacity during the year under review, while Fixed Assets addition was to the tune of Rs. 194 million.

iii) Opportunity & Outlook The Company has successfully continued to get large supply contracts with multinational companies for supply all over the world as a preferred supplier with very encouraging revenues. The massive infrastructure projects undertaken under the Bharat Nirman Yojana, increased investments by telecommunication industry and plans for piped gas in cities, continue to be the potential demand drivers for the industry. All the Gas Distribution companies are continuing their growth plans. The natural gas production is expected to double to 190 mn cubic mtrs per day by 2009 as per the estimates of Ministry of Petroleum and Natural Gas. On the telecom side, in view of the ever expanding market, the government has started releasing additional spectrum for normal as well as 3G and 4G applications. The demand for next 18 months is expected to be around 250,000 kms of duct pipes. In water transmission and distribution business there are around 200 firms registered with BIS, but the national players are only 5 and Jain Irrigation is the only player to manufacture 1000 mm and above dia pipes up to 1600 mm dia. Jain Irrigation is the only player to manufacture 1000 mm and above dia pipes for sewerage applications. Jain irrigation has become the first company in India to successfully install indigenously manufactured 2 km long 1200mm dia. HDPE pressure pipe-line in Kolkata. The company has also formed a strategic association for Indian market with 'Mekorot' (a Water Management & Treatment expert Israel Govt. company). With this added strength, Jain Irrigation now has developed the capability to provide a complete solution to Water Management, Waste-water Treatment and judicious use of treated water.

iv) Risks & Challenges The unstable raw material prices and business cycles of the end users and delay in implementation of projects remain the major risks faced by the business segment. Lack of awareness about quality needs at the customer end provide significant challenge. Also conversion to HDPE from steel or concrete is still not easy due to unwillingness to change at specification level.

c) Onion and vegetable dehydration

i) Industry Dehydrated Onion industry is lead by USA who accounts for around 60% of world's total production. USA is also the biggest consumer of dehydrated onion in the world followed by EU, Latin America, etc. Total capacity

