# Management Discussion and Analysis

## Overall Economic Scenario

The Indian economy performed poorly in the Financial Year 2012-13. Faced with economic turbulence abroad and an unsupportive policy environment at home, industrial activity slowed steadily through the year, critical infrastructural projects stalled and private corporate investments lost much of their dynamism. A weak south-west monsoon in 2012 added further stress. Food prices shot up, keeping inflation and interest rates high through most of the year, while rural incomes lost momentum, consumer demand, as a result, slowed sharply, impacting business performance and profitability across the board. The country's current account deficit widened significantly, putting severe pressure on the rupee. At the same time, with domestic economic activity slowing, Government revenues lost buoyancy, worsening the already weak state of Government finances. With the economy was under severe pressure and rating agencies threatening a downgrade, the Government finally swung into action in the second half of the year, announcing a series of critical reforms. These measures have undoubtedly improved the extant economic environment in the country, but deeper structural and administrative reforms are needed for the economy to regain momentum, and fully realise its long term potential. The slow down was reflected in all sectors of the economy but the industrial sector suffered the sharpest deceleration.

The global economy is in an extended slow down since 2008, financial markets crisis, though an initial upward momentum is being seen in later part of fiscal year 2013, especially in developed markets while emerging markets have slowed down. Despite slowdown concerns, the commodity cycle remains uncertain and prices remain high. Exports from emerging and developing countries have been detained by weak global economic activity.

On the domestic front too, macro-economic indicators are raising concerns about growth which is being revised downward by independent agencies to just above 5% per annum. Since last quarter of Financial Year 2011, the actual GDP growth rates of 9% plus p.a. are now down to 5% plus p.a. in last quarter of Financial Year 2013. Domestic interest rates are still very high despite RBI lowering Repo rate by 125 bps and hence not conducive to new investment decisions. The forex situation looks precarious and there is a sharp depreciation of 11% in local currency since beginning of May, 2013. Meanwhile economic atmosphere has been vitiated with constant stream of negative news, stretched government finances and pessimistic emerging industrial scenario and high current account & fiscal deficit. Currently good monsoon rains in 2013 seems to be silver lining on the horizon of dark clouds all around. First half of rainy season has been good or above average for most parts and even distribution is good this season. Inflation remains sticky due to primary food inflation and is expected to improve if good rains were to be confirmed by end of Monsoon season in September, 2013.

It was a challenging year with several shocks in the global and domestic environment. Your Company however, fortified by its philosophy of accepting no limits, innovative thinking and being positive change agent, successfully took on the challenge of performing in a very volatile environment.

## 1) Overview of Business

Jain Irrigation Systems Limited (JISL) or (Jains) is the flagship Company with 14 subsidiary operating companies (including 2nd step subsidiaries) with diverse businesses across the globe and aggregate revenues of ₹ 50 Billion. Your Company is a leading agri-business Company, present in entire value chain. It is the second largest micro irrigation Company globally and is largest manufacturer of micro irrigation systems in India. It is also the largest manufacturer of Mango pulp, puree and concentrate in the world and the third largest manufacturer of dehydrated onions. JISL is also India's largest manufacturer of polyethylene pipes, leading PVC pipe manufacture and is furthermore the largest manufacturer of Tissue Culture banana plants in the world. JISL is additionally into hybrid & grafted plants; greenhouses, poly and shade houses, bio-fertilizers, biogas and green energy (solar & wind), solar water heating systems, solar panels, solar water pumps and wood substitute plastic sheets. These plants are ISO 9001 & HACCP certified and meet International FDA statute requirements. Solar Energy Heating & Lighting Equipments, Solar Pump and Bio-Energy sources are new additions. Over the past few years JISL has done a few of acquisitions and merged a few companies. All acquisitions and mergers have been a strategic fit with the intent of strengthening the business and increasing reach in every segment. JISL renders consultancy for complete or partial project planning and implementation e.g. watershed or wasteland and / or crop selection and rotation.

Each of our products is an outcome of an effort to conserve nature's precious resources through substitution or value addition. This is the legacy of a deliberate and conscious endeavour that stems from a deep-rooted concern for nature with same intensity for development and growth of agriculture, resulting in higher income for farmers.

## 2) The Strategy

We have launched new business model for our main business of micro irrigation systems (MIS). Our goal is to leverage our strengths to continue to expand our business in long term as well as in the short to medium term. We intend to be best water, food & natural resource management Company, while creating value in entire agriculture value chain.

The principal elements of our current strategy are:

**a) Consolidation, while maintaining leadership position – Sustainable Growth**

We are currently largest suppliers of micro irrigation systems (MIS) in India. Our strong brand name, extensive agricultural expertise and broad network of dealers has contributed to our aggressive growth in India in last 11 years. Last year we aimed to consolidate this growth by focusing on receivables collection. With significant de-growth in revenue and resultant lower profitability, we have taken all the pain of consolidation of our MIS business in FY 2013. Coming FY 2014, we are moving in positive revenue growth territory.

To sustain growth, we have aimed to take end-to-end water solution projects by transporting water, creating new water reservoirs, creating irrigation systems and assisting with agronomy through our canal command

area projects. We have successfully completely few of such projects. Few African countries have shown also good interest in such projects due to our inherent competencies and technical supremacy in this field.

**b) Focus on Positive Cash flow and deleveraged Balance Sheet**

Since not many financing option were available to farming and delayed subsidy on irrigation products has created enhanced burden on Company in form of stretched receivables. The solution was envisaged in form of NBFC and it has got support from IFC Washington, who has agreed to subscribe to Equity Capital of this NBFC. Eventually this entity shall become a role model for other public and private sector bank function in rural credit.

The start of our (NBFC) – Sustainable Agro-Commercial Finance Limited (SAFL) will eventually be a role model to create financial liquidity into the farming sector. Cautious steps are being taken to ensure that the building blocks being laid down to build a large rural credit institution are well cemented before higher growth. The process is on and moving in positive direction and we are happy that farmers has given overwhelming response. We expect a overall disbursement of ₹ 100-150 Crore and approximately 25,000 to 30,000 farmers to be covered till the end of this financial year [FY 2014].

According to a farmer survey by Morgan Stanley, conducted in 2012: a) MIS usage among farmers was low; b) water scarcity, better yield and lower costs drive adoption; c) surprisingly, credit availability is a more important enabler than interest rates.d) MIS is a multi-year investment theme. Therefore, NBFC is a step in the right direction.

We have planned to reduce receivables primarily by change in business model of Micro Irrigation. We have been able to reduce the same by more than ₹ 400 Crore in the year under review. Receivables are further expected to come down in FY 2014.

We believe, as we are turning around, we are seeing very good opportunity into various business lines. We would still remain at least for another year, very cautious on the receivables, somewhere if required we will bargain with the growth but we will not compromise on cash flow. We shall keep our Capital Expenditure (Capex) under strict discipline. We have brought down, our Capital Expenditure target from ₹180 Crore to ₹130 Crore for the current financial year. Additional focus is on reducing inventory level.

Thus, we have charted out plan to reduce our debts by ₹ 500 Crore by the end of current financial year.

**c) Capital fund infusion to achieve sustainable growth.**

We have deployed significant long term funds in this year under review. (please see para below). The major benefit of this fund infusion is interest reduction and long term growth fund availability. Full blown benefits will be available to us during the current financial year and years to come. The other benefit is with improved cash flow and liquidity in the functioning of the corporate finance, the rating will also tend to improve, which will in turn provide us opportunity to access low cost funds at appropriate time.

During the year under review, the Company has been able to raise fund by allotment of 4,97,33,893 Equity Shares of ₹ 2 each for cash at a premium of ₹ 78 each aggregating ₹ 3,978.71 million.The shares have been subscribed to Mount Kellett, a Financial Institute based in USA and International Finance Corporation, Washington. Allotment of 3% 4,000 Foreign Currency Convertible Bonds (FCCB) of $ 10,000 each due 2017 aggregating $ 40 million, convertible at a price of ₹ 115 per share and 6 M LIBOR linked External Commercial Borrowings with an average maturity of 6 to 10 years aggregating $ 75 million. Share Warrants of ₹ 16.2 Crores has been subscribed by Promoters. Additionally FCCB US$ 10 mn & ECB – US$ 14 mn (Total US$ 24 mn) has been received on 29th April, 2013 from DFI's.

**d) Managing exchange risk/volatility:**

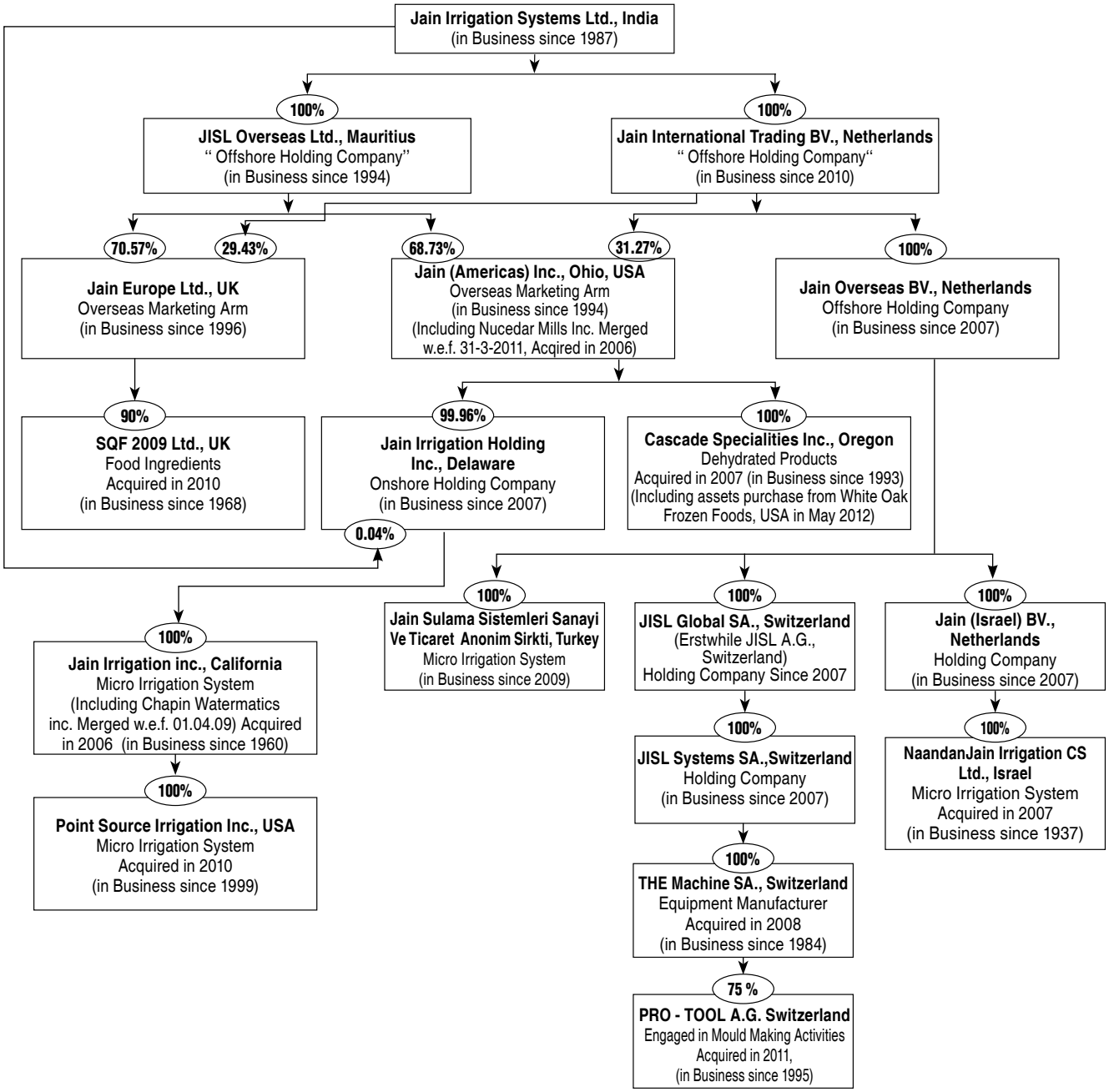
Indian rupee has depreciated significantly against all major currencies. The pressure on cost from all front and mark to market effect on foreign currency borrowing, has made us rethink and tweak our strategy for business. We are now more focused on export markets and bidding for overseas projects in Africa and other countries.

In our Fruit business where major customers are from European and United Kingdom geographies, the rupee depreciation has resulted in a gain to us.

We shall achieve net foreign exchange earning in current fiscal and in future. We have also built significant overseas operations that shall be generating net surplus in foreign currency

## 3) Corporate Structure

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




### A) Overseas Holding Companies

**a) JISL Overseas Ltd.,** Mauritius 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 UK and USA based overseas subsidiaries. It holds70.57 % in Jain Europe Limited and 68.73% in Jain Americas Inc, Ohio, USA. For the year ended 31stMarch, 2013, JISL Overseas Ltd. Had share capital of US$79.23 million. The said Company had a loss of US$ 738,239 for the year ended 31stMarch, 2013.

**b) Jain International Trading B.V., Netherland** is a wholly owned subsidiary of the Company and is incorporated in 2010 under the laws of Netherland. For the year ended 31st March, 2013,Jain International Trading B.V. had share capital of US$ 62.96 million. The said Company had a loss of US$ 107,574 for the year ended 31stMarch, 2013.

**c) Jain Overseas B.V., Netherland** was a wholly owned subsidiary of the **JISL Overseas Ltd** Mauritius and was incorporated in 2007 under the laws of Netherland. During the year **Jain International Trading B.V., Netherland had purchased 100% shares from JISL Overseas Ltd and became holding Company of for this Company.** The said Company had a loss of US$676,853 for the year ended 31stMarch, 2013.

**d) Jain (Israel) B.V. Netherland** is a wholly owned subsidiary of the Jain Overseas BV., Netherlands and was incorporated in 2007 under the laws of Netherland. The said Company had a loss of US$ 1,435,472 for the year ended 31stMarch, 2013.

**e) JISL Global SA, Switzerland** is a wholly owned subsidiary of the Jain Overseas BV., Netherlands and was incorporated in 2007 under the laws of Switzerland. The said Company had a loss of CHF17,591 (approx. US$ 18,773) for the year ended 31stMarch, 2013.

f) **JISL Systems SA, Switzerland** is a wholly owned subsidiary of the JISL Global SA., Switzerland and was incorporated in 2007 under the laws of Switzerland. The said Company had a profit of CHF1,175,976 (approx. US$ 1,255,008) for the year ended 31stMarch, 2013.

g) **Jain Irrigation Holdings Inc. Delaware, USA** is a subsidiary of the Jain Americas Inc., USA and was incorporated in 2007 under the laws of USA.

**B) Overseas Marketing Companies**

a) **Jain (Americas) Inc., USA** (Including Nu Cedar Mills Inc., USA merged w.e.f. 31stMar 2011) is a wholly owned subsidiary of the Company and was incorporated in 1994, under the laws of Ohio, USA. It is our key marketing, distribution and investment arm in the United States. For the year ended 31stMarch,2013, Jain (Americas) Inc. had sales of US$ 24.12million.

b) **Jain (Europe) Ltd., UK** 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 31stMarch, 2013,Jain (Europe) Ltd. had sales of GBP 30.47 million(Equivalent to US$48.14 million).

**C) Operating Subsidiary Companies**

a) **Jain Irrigation Inc., USA** (Including Chapin Water matics Inc. merged w.e.f. 1st April 2009 and Point Source Irrigation Inc.) is a wholly owned subsidiary of the Company through the Jain Americas Inc. Jain Irrigation Inc. is engaged in drip tape manufacturing and distribution business based in California. For the year ended 31stMarch, 2013, the Company had reported revenue of US$ 61.42 million.

b) **Cascade Specialties Inc. USA** (Including White Oak Frozen Foods)is a wholly owned subsidiary of the Company through the Jain(Americas) Inc. It is engaged in onion, garlic dehydration and frozen foods business with specialization in natural low bacteria and organic dehydrated products. For the year ended 31stMarch, 2013, the Company had reported revenue of US$ 33.06 million.

c) **NaanDanJain Irrigation Ltd.** Israel is a wholly owned subsidiary of the Company through the Jain (Israel) B.V. It is engaged in the manufacturing of drip / sprinkler irrigation. NaanDanJain also has manufacturing facilities in Chile, Brazil, and Spain. For the year ended 31stMarch, 2013, the Company had reported revenue of NIS 449.13 million (Equivalent to US$ 117.52 million).

d) **THE Machines SA, Switzerland** is a wholly owned subsidiary of the Company through the JISL Systems SA. It is a Switzerland based manufacturer of plastic extrusion equipment with laser technology. For the year ended 31stMarch, 2013, the Company had reported revenue of CHF 16.41 million (Equivalent to US$ 17.51 million).

e) **Jain Sulama Sistemleri San. Tic. A.S., Turkey** is a Turkey based manufacturer of drip / sprinkler irrigation. The Company is owned to the extent of 100% through Jain Overseas B.V. For the year ended 31stMarch, 2013, the Company had reported revenue of TRL 33.18 million(Equivalent to US$ 18.52 million).

f) **SQF 2009 Ltd., UK** is based in Sleaford town in Lincolnshire County in the East Midlands region of England. The Company is owned to the extent of 90% through Jain (Europe) Ltd., UK. The Company had reported revenue of GBP 36.65million (Equivalent to US$ 57.91 million). The Company has a put option to acquire remaining ownership over the next 2 years from other shareholders at an EBIDTA multiple each year.

g) **Pro Tool AG, Switzerland** is a Switzerland based manufacturer of plastic injection mould. The Company is owned to the extent of 75% through the THE Machine SA., For the year ended 31stMarch, 2013 the Company had reported revenue of CHF 1.58 million(Equivalent to US$1.69 million). The Company has an option to acquire remaining ownership over the next 9 years from other shareholders at an agreed fixed price.

h) **Eurodrip S.A. Greece** In February 2006, we acquired 7.39% in Eurodrip through Jain (Europe)Ltd. The Company has sold its holding during the year.

**4) Competitive Strengths**

We believe that the following are our principal competitive strengths

a) **Strong brand and leadership position in our businesses in India.**

We are one of India's leading manufacturers of micro irrigation systems, piping systems and agro-processed products. Our MIS products are customised to assist in meeting the special requirements of our customers in India. We have worked with farmers to provide them training and introduce them to more advanced processes and technology as well as with Indian state governments and international organisations to develop technology and support new initiatives to assist farmers. We have maintained our leadership position with extensive research and development in plant, in lab and on farm to improve our products. We have built an extensive and loyal distribution and dealership network throughout semi-urban and rural India, selling flagship brands such as Jain Drip, Jain Sprinklers, Jain Pipes, Chapin and FarmFresh, which are well known in the Indian and international markets. We believe that our strong brand presence and leading market position and understanding of our customer's needs makes us well-placed to capitalise on growth opportunities in the Indian and international markets for our products.

b) **Total solutions provider across the agricultural value chain.**

We have utilised our agriculture expertise and relationships to participate across the agricultural value chain and diversify our revenue. In addition to our micro and sprinkler irrigation systems, plastic piping and solar pumps which are used in irrigation, we also supply bio-tech tissue cultures which help farmers reduce growing time and create higher crop yields. In addition, we work with our customers on a turnkey basis providing engineering, soil and water analysis, water resource estimation, crop planning, irrigation and fertigation scheduling, marketing assistance and other agronomical and technical support and training. We purchase onions, tomatoes and other vegetables for vegetable dehydration from our contract farmers and others and are a major consumer of mangoes for our fruit processing operations. We believe that being involved across the value chain leverages our knowledge, relationships, brand name and strong distribution network to provide total solutions for farmers.

**c) Diverse revenue streams from different geographies**

We have production and processing facilities across India and our sales have been growing in various states in India and internationally, which makes our sales and production less susceptible to weather or other risks in a particular region. We aim to expand internationally by looking for opportunities for future growth, especially in progressive agriculture markets. Our revenues are further diversified across the wide range of products we sell. Additionally, no single customer accounts for more than 5% of our revenues in Fiscal 2013. This diversification can help insulate our overall sales and operations from adverse conditions affecting any one of our business segments or products, a particular region or a particular customer.

**d) Experienced management and large pool of agriculture professionals.**

Our senior management team has deep experience in the industries in which we operate. We believe that the experience of our management team in the agriculture sector and international markets will help us increase our penetration internationally and expand the range of our product offerings. Our management team also has long-standing relationships with many of our major customers, distributors/dealers and suppliers. Further, we have one of the largest pools of committed agricultural scientists, technicians and engineers in the private sector in India, comprising over 1,000 agricultural scientists, technicians and engineers. Our after sales support, training and other services are one of our main selling points.

**e) Flexible and scalable business model.**

We believe that the flexibility and scalability of our existing production facilities and distribution network will help us meet increased demand for our products. Our presence in India with ten manufacturing plants provides us a low cost, centralised manufacturing base.

The scalability of our existing facilities enables us to increase our production capacity through the installation of new equipment and production lines. Our manufacturing facilities enable us to produce a wide range of products with different specifications, such as inline tubing, flat dripper tubing, PC emitters, sprinkler pipes, impact sprinklers, PVC/ PE pipes, casing and screen pipes and duct pipes with different diameters and working pressure ranges, and processed and dehydrated fruits and vegetables using different organic feedstock. This assists us in meeting the specific demands of our customers and reducing the impact of seasonal changes in production volumes for specific products such as our agro-processed products and piping systems.

**f) Wide dealer and distribution network.**

We have over 3,000 dealers in India selling our products exclusively. Most of these dealers come from farming backgrounds and are influential in their respective regions. This strong local sales force gives us a deep understanding of the needs of our customers in India and assists us in providing strong after-sales support and sharing our knowledge with our customers. We can leverage our production facilities to further expand our distribution reach by adding additional dealers in new areas.

**5) Overview of Segment**

**[A] High-Tech Agri Input Products**

This segment comprises of Micro and Sprinkler irrigation systems, PVC Pipes, Biotech Tissue Culture and other agri inputs. The segment has de-grown a little over 12% YoY at ₹ 22,948 million mainly due to acute drought in major states in the country during the year and change in business model as a part of consolidation process in MIS/SIS segment for enhanced financial discipline in the business. The growth was contributed by PVC Pipes and Tissue Culture at 18% and 54% respectively while the MIS/ SIS revenues de-grew by little over 25% YoY. The profit before tax for the segment was also down 26.7% YoY at ₹ 5,171 million. The Company has added 5,280 MT pa in MIS and 3,720 MT pa in Piping division to cater additional demand.

**a) Micro and sprinkler irrigation**

**i) Industry**

The industry is broadly divided into the organized and unorganized segments in the country. Your 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 ₹ 33 bn. and it is growing at a fast pace. Currently only 5 million Ha (7% coverage) of the possible 69 million Ha area is covered under the micro and sprinkler irrigation in the country. However, as per Government task force, 17million Ha of land can be easily brought under micro irrigation coverage in the country by 2017, while by 2030 the extent of MIS/SIS coverage may reach 69.5 mn Ha.

The prospect for global growth of the MIS industry is strong. Experts estimate that by 2025 the majority of developed countries will confront issues resulting from a scarce water supply, with all major economies switching to MIS to mitigate the disruption that such a shortage could cause. Although MIS's popularity continues to grow, high initial costs have hindered its wider application. Despite this, over the last 20 years, there has been a six-fold increase in the area under micro irrigation. North America and Europe have the highest rates of utilization, with the United States being the first country to employ micro irrigation technology in its fields and achieving the highest micro irrigated area. Asia is in the development phase in its use of the technology, with both India and China adopting the technology, albeit with low utilization rates. India and China both represent attractive growth opportunities for the MIS industry.

**ii) Performance**

FY 2013 was a year of poor farmer sentiment, across agri-inputs – fertilizers, crop protection, seeds, farm equipment, and micro irrigation systems (MIS). MIS revenues have declined driven by a combination of delayed monsoons and drought-like conditions in a few key MIS states. To compound matters we have

adopted a new business strategy.

The domestic revenues dipped 27.1% YoY while exports also went down over 6%. The business contributed a little over 41% of turnover of the Company's total turnover. The division is under a planned slowdown in view of change of business model. The states of Maharashtra, Andhra Pradesh, Tamil Nadu continue to dominate sales of this division. The business incurred ₹ 916 million capex during FY 2013 while adding 5,280 MT pa of capacity. The Alwar plant is fully functional now. The current year looks stable and growth oriented with good water availability and SAFL support on financing, however, second half may become more important for growth prospects.

**iii) Opportunity & Outlook**

Almost 50% 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 agricultural growth rate 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 XII plan period. Recently in 2010 the Cabinet Committee of Economic Affairs approved the "National Mission on Micro Irrigation" (NMMI) during the Eleventh Plan period. This again demonstrates the sustained focus of the government on pushing the micro-irrigation as a tool to conserve the water and address the issue of food security. The Union Budget reflected an overall increase in thrust towards agriculture.

Your Company has continued its training and extension activities for benefit of farmers throughout the country. Thus, during the year under review, the extension activities were carried out in the country covering over 200,000 farmers in 15 states.

**iv) Risks & Challenges**

Government policies and allocation amount towards central subsidy could influence the growth prospects of this business. Extended cash-flow, could, apart from causing pressure on managing the working capital requirements, also have negative impact on the profitability of this business. With very high working capital requirements causing higher interest cost, the net profit margin of this business remains under pressure for the industry.

The growth in industry requires a large pool of trained sales people on a continuous basis, skilled people are required for implementation of the system and a dedicated dealer network is required in the far flung areas of the country. The uneven distribution of rainfall in the country, consecutive drought like situation for 1 or 2 years and fluctuations in the polymer prices are constant threats faced by the industry. Due to fragmented land holding in the country, the average farmer holds very small piece of land but irrespective of his size of holding the level of services required are almost the same. This fragmented holding therefore results in high transaction cost for the Company.

There are a large number of players in the industry whose influence is restricted to a small surrounding area, who neither maintain quality of the product nor are able to give any quality service. These players tend to spoil the market due to their practices and may provide backlash against the concept of Micro Irrigation.

Recently, large industrial groups with deep pockets have entered the industry through acquisition or fresh initiatives. It remains to be seen if they have long term view about staying in the business.

Also there has been significant growth of players in unorganized sector. These companies with their low cost and non-system oriented products are taking away certain market share from organized sector, especially in replacement market.

Your Company is well poised to take on competition and maintain leadership with more than 50% market share as it has offering available for customers at different price points without compromising quality of products.

**b) PVC Piping**

**i) Industry Indian Scenario**

India's plastics industry is projected to grow dramatically in the coming years The country's plastics processing sector, for example, is expected to grow to 150,000 machines in 2020. The PVC industry is integral to the MIS industry. The PVC pipes business is driven in large measure by demand for pipes used in agriculture, including agriculture unrelated to MIS. With agriculture expected to continue its tepid growth in India, and the positive correlation historically observed between the growth rates of agriculture and PVC, experts project that the PVC sector will grow by around 9% over the next two years.

Jain Irrigation, with a 15% share, is one of the three 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. Increased micro irrigation spends, higher allocation towards rural water infrastructure for potable water, push for urban infrastructure by government agencies and Command Area Development Programme will improve the demand situation for the industry.

**ii) Performance**

During FY 2013, this business contributed just under 21% to corporate turnover of the Company. The revenues grew at 18% in FY 2013 over the last year's level. The capacity addition during FY 2013 was 3,720 MT pa at a cost of ₹ 92 million. At 18% it was one of the fastest growing business in the Company during FY 2013. Also it is 2nd ranked in revenue terms at corporate level.

**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 continue to increase. 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. The Company is considering establishing one more production centre in the eastern part of country in near future. A large part of the Urban Infrastructure projects in the current five

year plan towards irrigation, drinking water supply and sanitation, provides ample opportunity to scale up production. Current year looks promising for this business as demand has seen sudden spike up for business with good water availability.

**iv) Risks & Challenges**

Delays in government decision/ spending and limited availability of PVC resin in India is the potential threat to the otherwise rosy picture for the future of the industry. Low cost and low quality manufacturers continue to twist healthy markets. Volatility in price of raw material (PVC resin) is another dampening factor on demand. Due to heavy anti dumping duty, cost of PVC resin has been artificially increased by domestic processors, affecting end product demand.

### c) Biotech Tissue Culture

**i) Industry**

The industry is broadly divided into two segments

1) Fruits and vegetables

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 revenues crossed ₹ 672 million a growth of 54% YoY. The Company spent ₹ 194 million on capex to add 20 million Tissue Culture plants capacity. The unit maintains highest quality together with all certifications from third party quality agencies.

**iii) Opportunity & Outlook**

The outlook continues to be excellent and demand shows improved uptake in the coming season. Now, many State Governments are evincing keen interest in promoting tissue culture. The Company has the opportunity to diversify the business, produce fruit, ornamental and other fruit plants. The Company has also started production of tissue culture pomegranate plants, onion and even mango. Research and Development to create Citrus plants has been successful. 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. The revenues in this segment have remained flat ₹10,002 million. The major contributors to growth were Fruit 3.8% and Dehydrated Vegetables 2.8%, while Sheets degrew 16% and PE Piping revenues remained flat. This FY 2013 the Solar business became part of Green Energy division and hence the numbers of segment YoY is not comparable unless regrouped.

### a) PE Piping

**i) Industry**

The applications of PE pipes are growing at a fast pace and yet new applications are being developed for the product. In applications like sewage & effluent disposal, due to the tougher environmental laws and stricter application of the same by the Government departments, the replacement of cement/metal pipes by PE pipes is becoming very relevant. Such possibilities are significant especially since the larger diameter PE pipes are now indigenously 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 market share is in excess of 30%. The Company is operating in all segments of the applications like cable duct, sprinklers, gas distribution, water conveyance, house service connection, sewage conveyance, effluent disposal, sand stowing, dust suppression etc.

**ii) Performance**

The business at ₹ 2,868 million remained flat mostly due to increased exports and lower (7.6%) revenues in domestic business. The business in domestic area is mainly catering to infrastructure sector segments like Telecom, Gas Pipelines of water etc which is facing slowdown. The unit spent on capex ₹ 127 million in FY 2013.

**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 for 4G layout 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 as newer cities are being added every year. The telecom sector in India is growing well, more so, the recent allocations of licence for 3G & 4G applications augur well for the telecom sector demand.

In water transmission and distribution business there are around 200 firms registered with BIS, but the national players are only 3 and Jain Irrigation is the only player to manufacture pipes of up to 1600+ mm dia. 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. Lack of awareness about quality needs at the customer's end provide significant challenge. Also conversion to HDPE from steel or concrete is still not easy due to unwillingness to change old specification at engineering levels.

**b) Onion and vegetable dehydration**

**i) Industry**

Dehydrated Onion is the largest used general food ingredient. This industry is dominated by supplies from USA, followed by India and Egypt. USA is also the largest consumer of this ingredient followed by Europe, Asia & South America etc. Dehydrated Onion industry uses less than 2% of world's total fresh onion production of approximately 70 million MT. Agro processing in India provides an important link between the country's rural and urban economies by combining food produced in farms and villages with growing demand in the cities for high value, packaged food. As a result, the agro processing industry has expanded, growing at about 14% and contributing to 10% of India's manufacturing GDP and 13% of the country's exports. India's total food market turnover is over US$69.4 million, of which the "value-added" food market of the agro processing industry now contributes US$22.2 million. Even accounting for the industry's recent growth, agro processing in India remains underdeveloped. Only 2% of India's total agriculture and food produce is processed. India's dairy industry is the sector with the highest processing rates at 35%, with only 13% processed by the organised sector.

**ii) Performance**

The business has grown at little over 9% CAGR in last 5 years. It achieved a revenue level of ₹ 1,701 million in FY 2013 a growth of 2.8% YoY. The capacity remained constant at a little under 19,000 MT pa. The business maintains all necessary and desirable quality standards for a food product business and even beyond most of times as the product is exported to MNC's. This provides an opportunity to integrate the business of dealing with farmers for inputs as well as output towards 'ONE STOP SHOP' concept of the Company.

**iii) Opportunity & Outlook**

Outlook for vegetable dehydration industry in general and dehydrated onion industry in particular looks positive. Large multinational companies with very popular household brands are looking towards consolidating the number of suppliers and trying to align with select few suppliers who can provide better traceability and sustainability. This puts the Company in a very good position due to its backward linkages, relationship with farmers, contract farming programs, ability to supply from two different origins with different seasons and product quality attributes and Company's sustainability in general. Company has seen its business grow with quality oriented large multinationals over last few years.

Worldwide Onion dehydration industry is estimated to be around 180,000 MTPA. The industry is growing globally at 3-5% per annum. The Company now has capacity to produce approximately 28,000 MT per annum of finished products between its three plants in two countries. This makes the Company the third largest dehydrated onion producer in the world. Company has also expanded its business by increasing the usage of dehydrated onion in the custom made dry ingredients blends for food industry through its subsidiary in the UK for European market. Demand for naturally produced low micro products and organic dehydrated vegetables continues to grow. The Company estimates that with growing demand of its finished products and general upward movement of food prices globally, the Company will be able to achieve further growth in sale and better realization in the coming year. The Company is also looking at increasing production of value added products like fried onion, frozen onion, dry vegetable ingredients industrial blends and other vegetables in the coming years.

Company has also made good inroads in offering related vegetables like garlic, dehydrated leeks etc., the results of that will be visible during financial year 2014 and onwards.

**iv) Risks & Challenges**

The biggest challenge for any agro processing industry is the availability of right quality material at right price and the required quantity. Poor monsoon, changing climate, competing crops pose risk in terms of availability of the raw material itself, which can result in lower production in a particular year. Part of this risk is mitigated by the contract farming program undertaken by the Company, under which the Company secures 100% of its raw material for its US operation and a significant portion of the Company's raw material requirement for its Indian operations. Apart from challenges on raw material availability front, the other challenge is the rising energy and other costs. Company also faces stiff challenge from low cost / low quality producers who can adversely affect the overall market. Dehydrated onion is viewed as basic ingredient by many food processing companies where switch over to different suppliers is a frequent occurrence. To address this, Company has moved into value added custom blends via its UK based business to create long term association.

**c) Fruit processing**

**i) Industry**

The fruit and vegetable processing industry has a huge potential in India, with India ranking 2nd in the world in production of fruits and vegetables but is at the lower rung of the value chain in terms of processing. The availability of fruits and vegetables is varied due to diverse agro climatic conditions. Despite the large production of fruits and vegetables, it is estimated that only approximately 6 per cent of total agro output of India is currently processed as against up to 60-80 per cent in some developed countries. India's share in the global food trade is only 1.5%. All of this implies that there is a great potential to grow this industry. An increase from 6% to 20% in terms of processing and increase in value addition from 20% to 30% will translate into quantum jump in the size of the processed fruit and vegetable industry.

The installed capacity of India's fruit and vegetable subsector has increased from 1.1 million tonnes in January 1993 to 2.1 million tonnes in 2006. It is estimated that processing fruits and vegetables accounts for around 2.2% of India's total production. The major items of this subsector include fruit pulps and juices, fruit-based ready-to-serve beverages, canned fruits and vegetables, jams, squashes, pickles, chutneys and dehydrated vegetables. Recent additions to the space include vegetable curries in restorable pouches, canned mushroom

and mushroom products, dried fruits and vegetables and fruit juice concentrates. Globally, demand for fruit juices made from exotic fruits like Mango, Peach, Banana, Papaya etc. is growing at rate faster than juices from traditional fruits like Apple, Orange etc.

**ii) Performance**

The business contributes a little over 10% of corporate turnover and is growing steadily through the years, the 5 year CAGR being 15.7%. The business reported a revenue of ₹ 3,607 million a growth of 3.8% YoY. Despite Totapuri mango quantity having grown significantly due to lower raw material prices last season (i.e. 2012 Fruit season for mango) the revenues did not grow significantly. The capex of ₹ 99 million was incurred by the business during FY 2013. It has maintained all quality certification required and necessary for a food business.

**iii) Opportunity & Outlook**

India's Economic development has registered a growth rate of 8% over 2006-2010 but tapered off thereafter. Contributing to this flourishing economy is the agriculture sector, where productivity is showing an increasing trend. Keeping pace with the world production of Fruits and Vegetables the production in India has also grown and now accounts for 15% of world's vegetable production and 8% of world's fruit production. The focus has now changed from grains and cereals to fruit and vegetables owing to change in consumption pattern resulting in increase in demand for fruits and vegetables.

The fruit and vegetable processing industry is critical to fruit and vegetable sector. Although, the horticulture sector has grown by 10%, only just over 2% of the produce is processed, resulting in huge post harvest losses. Fruit and vegetable processing establishes the vital linkage between agriculture and industry. In order to sustain the growth in the economy, Government has realized the need to support this vital link and has been providing support to accelerate growth in the sector. The sector has seen exponential growth with demand for fruit juices, beverages, convenience foods growing by around 30% YoY.

The demographic profile of the consumers has been changing. With increase in disposable incomes and standard of living, the consumption pattern is shifting from basic foods to more healthy, convenience foods resulting in growing demand for processed food in general and processed fruits and vegetables in particular.

There is a marked shift in the International markets with emphasis being laid on wellness products and products having nutritive/therapeutic properties. There is also a shift from the usual products such as Citrus and Apple to more exotic products like Mango, Guava, and Pomegranate etc. which are increasingly being researched for their wellness aspects.

New markets such as China, Russia and Africa are opening up and the existing markets such as Middle East are moving up the value and quality chain. With opening up of US and Japanese markets for fresh Mango, the taste profile is witnessing a change, resulting in opening up of these markets for processed products also.

The demand for tropical fruit purees and concentrates and processed vegetables is growing rapidly within India as well as in International markets. The new format stores have added a different dimension to the distribution and sale of products, opening up opportunities, hitherto nonexistent. The packaged juices/ fruit beverages have seen a growth of more than 30% YoY and the consumption of fruits and vegetables as whole has shown an increase of 2.3% CAGR whereas that of cereals has decreased.

With a view to offer products with therapeutic values, the Company is working on offering products from Amla (Indian Gooseberry) and Mangosteen in the International markets.

Company is also working on setting up a processing line for processing Mosambi, the most widely consumed juice in India and also other citrus varieties. The Company was successful in standardizing process and technology for these products, hitherto not processed in India.

Orange is the largest processed and consumed juice in the world. To be able to meet the growing demand for this juice within the country, the Company has drawn up plans to cultivate the processing variety of Oranges in India.

**iv) Risks & Challenges**

The biggest challenge in any agri processing business is the availability of required quantity of raw material at the right time and at the right price. The changing climatic conditions are adding uncertainty to the entire agriculture and horticulture sector with a year of plenty followed by severe scarcity. To mitigate this risk the Company is pro-actively working to expand its sourcing base and is promoting the concept of integrated development of agriculture and establishing backward linkages. The successful model of contract farming in Onion and integrated development in case of Banana is being extended to other fruit crops such as Mango, Pomegranate and Tomato. Company has successfully evolved the concept of 'Ultra High Density' plantation of Mango, which will revolutionise the mango growing, making it one of the most profitable crops for the farmers. The Company has also evolved a basic standard of good agricultural practices in association with IFC, called 'JainGAP', which has been recognised by Global GAP as the intermediary standard and is being implemented by the Company both in its contract farming program for Onion as well as contact farming program of Mangoes. This will result in higher productivity at the farm levels, better availability and price stability for the Company apart from taking into account the concern of traceability to farm gate and health of the farmer and farm labour.

The other major risk is the ever increasing cost of energy. The spiralling fuel oil prices are not only mounting pressure on the processing costs, but also directly and indirectly increasing the cost of various inputs. The Company is utilizing its

bio-waste to generate energy to offset these rising costs.

There are fiscal and non fiscal trade barriers in the form of multifarious certifications and import tariff's being put by importing countries which adds to cost.

**d) PVC Sheets**

**i) Industry**

Major markets for Company's products are Europe and United States of America. The market is divided into two segment; Sign & Graphics (S&G) and Building Materials Market (BMI)

In the BMI segment, Lumber the traditional building material was being replaced by PVC. 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 Wainscot and Bead boards. The inherent qualities of PVC such as impervious to water absorption; protection 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 market is serviced by 7 manufacturers and some Chinese imports.

The S&G 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.

This segment is serviced by 5 manufacturers. Some China products have attempted to penetrate the market.

**ii) Performance**

This business has de-grown a little over 16% at ₹ 1,517 million in current year. The domestic revenues have grown up by 10%, while export shows a downfall of 18% thus resulting in overall de-growth.

**iii) Opportunity & Outlook**

The economic downturn has resulted into some players exiting the market and others redefining their basket of offerings. This consolidation in the industry will benefit both the manufacturer and the end user. US housing market has started showing sign of recovery and is expected to come back on growth track, while signs are positive, nothing can be certain. We have introduced several new products to the market place: A digital print sheet for optimum print quality, sheet for the environmentally (EFS) conscientious market place which has been received well. We have started to get good response from domestic marketing expect it to grow in robust manner in future.

**iv) Risks & Challenges**

The economy has been slow and this poses a challenge. The unemployment rate is another factor adding to the uncertainty at the marketplace. However, other indicators such as the US stock markets show a quite healthy trend. Major corporations are showing profits, the market continues to adopt 'just in time' requirements and this has the manufacturers carrying the inventory burden. Housing statistics show an improvement but has been slow paced. The Company has modified its marketing strategy, which has resulted in current year surpassing several previous results. The trend going forward is cautiously optimistic.

**e) Green Energy**

Even though the Company operates in various segments of the Solar business including Solar Pumps, Solar PV Module, Solar Power, Solar Thermal systems etc. The following paragraphs are totally focussed on Solar PV Module, their applications like pumps and Solar Power segment, as its contribution is the highest in the Green Energy division.

**i) Industry Structure**

Due to high Solar radiation and high number of sunny days India has lot of potential for developing Solar PV and Solar Power. India is 4th currently after Japan, Germany, and USA in terms of installed Solar Power of 110 MW in the calendar year 2012. India is also 2nd largest in world at 11 MW per annum or 10% of world Solar PV production.

India has more than 80 Companies with latest installed capacity of 1.8 GW (March 2012) out of which 15 Companies manufacture Solar cells with more than 700 MW of installed capacity. So far 1,044 MW capacity of new grid Solar Power projects have been commissioned by 16 states with Gujarat leading and Rajasthan being a distant second.

**ii) Performance**

The business comprises of Solar Photovoltaic, Solar Thermal, Wind Power, Solar and Biogas Power businesses. The revenues for segment were ₹ 2,203 million reflecting growth of a little over 30%. The capex incurred by the business was ₹ 186 million, while 1 million litres of thermal and 5 million watts of power capacity was added during the FY 2013. The segment holds potential for fast growth and could achieve significant position in corporate turnover in future.

**iii) Opportunity & Outlook**

The Jawaharlal Nehru National Solar Mission (JNNSM) is the fulcrum of India's solar mission and the driving force for all policy framework. By 2017-2022 i.e. XIVth Five year plan it is estimated under JNNSM that

i) 20 GW of Grid Solar Power.

ii) 2 GW of Grid Solar Applications and

iii) 20 mn sq. mtrs of Solar Collectors

would be installed in the country.

India is among leading countries in emerging/ developing countries for Solar PV Power. Water pumping through Solar PV Module is excellent, simple, reliable with life of 20 years. Commercial lighting for security systems, billboard sign, outdoor and street lighting and signalling can all be put on Solar PV. The consumer electronics sector already uses small Solar PV cells for watches, calculators and cameras. To support Telecommunication Towers and Wind mill sites also Solar Power is being put to use. The Solar PV application specially in remote un-electrified areas is relevant in Residential Power segment.

An IREDA estimate had targeted 18,000 villages for Solar electrification by end of 2012. States like Rajasthan and Gujarat receive plentiful of Solar radiation with potential to produce 20 MW per sq. km of area and it is not much lower elsewhere in the country.

The GOI through the CERC has introduced Renewable Purchase Obligation (RPOs) on all power consumption, as per the requirements of the National Action Plan on Climate Change [NAPCC]. As per the RPO requirements, 15% of all power in the country has to be sourced from renewable

energy sources by 2020. For solar power in particular, the RPO requirements has a carve out of 3%. This implies that by 2020, at least 3% of power consumed in India has to be sourced from solar power. As of the end of 2013 March, solar accounted for a little over 0.6% of the overall installed capacity in the country.

DISCOMS both public and private, open access consumers and captive consumers with a capacity of over 1 MW are obligated entities, who have to fulfill a solar RPO. Currently all states except Arunachal Pradesh and Sikkim have declared a solar RPO, which are set at an average of 0.35% by March 2013. This implies that a distribution utility that distributes 1 million of electricity in a year is under obligation to source 3500 kWh of it from solar energy. An obligated entity can fulfill its solar RPOs by either setting up its own solar power plant or by purchasing power directly from the producer by signing a PPA or by purchasing RECs.

As of May 2013, a capacity of 129 MW has been registered under the REC framework, of this 111 MW has been registered in the last six months. The price discovery for solar RECs is expected to fall towards the floor prices as the supply of RECs increase.

MNRE had planned 800 MW through bundling of power mechanism [ as in phase 1 of the JNNSM], and 750 MW through a Viability Gap funding [VGF] mechanism in 2013. MNRE has decided to go ahead only with the allocations for 750 MW based on VGF.

Rising grid electricity prices, frequent power interruptions, costly diesel back up electricity and falling cost of solar PV have made solar PV an attractive technology. The parity for residential and agricultural consumers has not been achieved in any of the states and these markets will still take a few years to take off without any policy support. The MNRE provides up to 30% capital subsidy on the roof tops systems [off grid] with project size up to 500 kw. A Company can claim 80% accelerated depreciation in the first year off installation under section 80IC. Installation and use of solar power is considered to be a CSR activity and expenditure incurred to procure solar power can be shown as such.

**iv) Risks & Challenges**

Despite all potential the Solar PV and Solar Power or other applications have been slow on take off so far in the country. Some factors which inhibit the growth of Solar industry in general are:

- High capital cost of setting up a Grid Solar Power plant.
- Absence of conducive regulatory mechanism.
- Absence of decentralised structure for decision making and policy implementation.
- Absence of RPO mechanism strictly.
- Reframing of the Renewable Energy certificates and their trading mechanism.
- Absence of access to reasonable cost of funding.
- No control of quality of imports of PV panels.

## 6) Risks and concerns at corporate level

The Company has significant experience in managing risks related to farming, weather, seasonality, global markets, currency fluctuation and impact of government policy. During last few very volatile years, this experience and expertise has helped Company to navigate turbulent times in a smooth manner resulting in sustained growth, improved margins and increasing market share, despite historical financial meltdown and violent disruption of all types of global markets.

The risk management, inter alia, provides for periodical review of the procedures to ensure that executive management controls the risks through a properly defined framework. The Company has identified the risks and their owners within the organisation and the following risks have emerged as the top 5 risks:

- Continuous fund requirement due to longer tenure for receivables
- Seasonality in agriculture and monsoon
- Currency fluctuations
- Aggressive strategies of competition & mushrooming of many new competitors
- Integration and profitability of acquisitions

**Continuous fund requirement:** Challenges in managing cash to cash cycle (payment for procurement to collection for sales) needs continuous fund infusion. This results in increased long term capital requirements. This risk is especially relevant for a growth oriented Company and the kind of business Company operates in.

**Seasonality in agriculture:** Company's performance is also dependent on the seasonality in agriculture sector.

**Currency fluctuations:** Adverse changes (appreciation) in the exchange rates leading to erosion in export income. Also large amount of Company borrowing is in foreign currency, therefore, adverse (Depreciation) exchange rate movement of Rupee can result into notional loss for mark to market accounting treatment. However, Company is a net foreign exchange earner and has a natural hedge not only on trade related transactions but also partially on debt raised in foreign currency.

**Aggressive strategies of competition:** The competition adopts aggressive strategies (large sales force, credits, products offered at multiple price points etc.) and competition from unorganised sector (aggressive pricing) results in pressure on sales/margins.

**Integration of acquisitions:** Inability to capitalize on the opportunities arising from the acquisitions due to sub optimal integration of the people, process and technology from the acquired entities is one of the risks associated with the recently completed acquisitions.

## 7) Analysis of the Standalone Financial Performance

### a) Net sales

₹ in Million

| Business | 2012-13 | 2011-12 | Change | Change % |
|---|---|---|---|---|
| Micro Irrigation Systems | 14,030 | 18,842 | -4,812 | -25.5% |
| Piping Systems | 10,166 | 9,063 | 1,103 | 12.2% |
| Agro processed Products | 5,309 | 5,129 | 180 | 3.5% |
| Plastic Sheets | 1,517 | 1,805 | -288 | -16.0% |
| Other Products | 3,039 | 2,259 | 780 | 34.5% |
| **Net sales** | **34,061** | **37,099** | **-3,038** | **-8.2%** |
| Domestic | **27,571** | **30,374** | **-2,803** | **-9.2%** |
| Export | 6,490 | 6,725 | -234 | -3.5% |
| **Export to Total** | 19.1% | 18.1% | | |

*Sales excludes incentives*

Net Sales on standalone basis has decreased by 8.2% to 34,061 million vis-à-vis 37,099 million in the previous year. This decrease in revenues primarily reflected decreased sales of Micro Irrigation Systems, and Plastic sheets.

Our total domestic revenue decreased by 9.2% in fiscal

2013 to ₹ 27,571 million from ₹ 30374 million in fiscal 2012. The revenues from exports have decreased by 3.5% in fiscal 2013 to ₹ 6,490 million from ₹ 6,725 million in fiscal 2012. Export sales accounted for 19.1% standalone sales in fiscal 2013 as compared to 18.1% in fiscal 2012.

i) **Micro Irrigation Systems:** Revenues from domestic sales of our Micro Irrigation Systems decreased by 27.1% in fiscal 2013 to ₹ 12,707 million from ₹ 17,436 million in fiscal 2012, primarily due to decreased retail sales in States like Maharashtra, Andra Pradesh and Madhya Pradesh States. During the same period. Exports of Micro Irrigation Systems decreased by 6% to ₹ 1,323 million from ₹ 1,407 million as compared to same period previous year.

ii) **Piping Products:** Revenues from domestic sales of our Piping Systems increased by 10.6% in fiscal 2013 to ₹ 9,466 million from ₹ 8,558 million in fiscal 2012. The revenues from export of Piping Products Increased by 38.7% in fiscal 2013 to ₹ 700 million from ₹ 505 million in fiscal 20121 mainly due to increased sales in Asian continent.

iii) **Agro-Processed Products:** Revenue from exports of Agro-Processed Products decreased by 0.8% in fiscal 2013 to ₹ 3,092 million from ₹ 3,117 million in fiscal Revenues from domestic sales of our Agro-Processed Products increased by 10.2% in fiscal 2013 to ₹ 2,217 million from ₹ 2,102 million in fiscal 2012 mainly due to increase sale to Coke India.

iv) **Plastic Sheets:** Revenues from our Plastic Sheet products decreased by 16.0% in fiscal 2013 to ₹ 1517 million from ₹ 1,805 million in fiscal 2012, mainly due to decrease in sales in USA and European market.

v) **Other products:** Other product includes Solar Water Heating systems, Solar Photovoltaic Systems, Tissue Culture Plants and Agricultural products. Revenues from other products increased by 34.5% in fiscal 2013 to ₹ 3,039 million from ₹ 2,259 million in the fiscal 2012, mainly due to higher sales of tissue culture plants & solar products.

**b) Operating Income** ₹ in Million

| Particulars | 2012-13 | 2011-12 | Change | Change % |
|---|---|---|---|---|
| Incentives & Assistance | 1,048 | 712 | 336 | 47.2% |

Operating income includes accrued export incentives & assistance under VKYU Scheme & Transport Assistance Scheme of GOI for our agro processed products division and Mega Project incentive from Maharashtra Government.

**c) Raw materials consumption** ₹ in Million

| Particulars | 2012-13 | 2011-12 | Change | Change% |
|---|---|---|---|---|
| Polymers, Chemicals & additives, Fruits & Vegetables, Consumables, packing material, etc. | 21,688 | 20,541 | 1,147 | 5.6% |

Raw materials consumption increased by 5.6% to ₹ 21,688 million as compared to ₹ 20,541 million in the previous year mainly due to increase in polymer prices by 12.4% and Vegetables by 24%. During the same period, polymer consumption decreased to 178,385 MT from 199,244 MT representing an decrease of 10.5%; however in value terms the increase is 0.6%. The consumption of fruits and vegetables has decreased to 228,069 MT from 257,755 MT representing a decrease of 11.5%, however in value terms, the decrease is 2.7%.

**d) Other Expenses** ₹ in Million

| Particulars | 2012-13 | 2011-12 | Change | Change% |
|---|---|---|---|---|
| Other Expenses | 7,378 | 7,253 | 125 | 1.7% |

Other Expenses increased by 1.7% to ₹ 7,378 million as compared to ₹ 7,253 million in the previous year, mainly due to the increased power and fuel expenses.

**e) Employees Benefit Expenses** ₹ in Million

| Particulars | 2012-13 | 2011-12 | Change | Change% |
|---|---|---|---|---|
| Employees Benefit Expenses | 1,737 | 1,722 | 15 | 0.9% |

Employee costs increased by 0.9% to ₹ 1,737 million as compared to ₹ 1,722 million in the previous year. The increase is mainly due to new employment.

**f) Finance Costs** ₹ in Million

| Particulars | 2012-13 | 2011-12 | Change | Change% |
|---|---|---|---|---|
| Interest Expense | 3,757 | 3,203 | 554 | 17.3% |
| Bank charges | 355 | 420 | -65 | -15.5% |
| Loss on foreign currency translation | 310 | 611 | -301 | -49.3% |
| **Total** | **4,422** | **4,234** | **188** | **4.4%** |
| Less: Interest Income | 215 | 151 | 64 | 42.4% |
| Less: Gain on foreign currency translations | - | 58 | -58 | -100.0% |
| **Interest & Finance Charges (Net)** | **4,207** | **4,025** | **182** | **4.5%** |

The net Finance Cost increased by 4.5% to ₹ 4,207 million as compared to ₹ 4,025 million in the previous year, mainly due to long term loans raised for growth capex, increase in working capital utilization for growth as well as delay in subsidy disbursement by Government and increase in interest rate. The overall finance cost is 12.4% in of net sales in current year as against 10.9% in previous year.

**g) Fixed Assets** ₹ in Million

| Particulars | 2012-13 | 2011-12 | Change | Change% |
|---|---|---|---|---|
| Gross Block (net of disposal) | 27,072 | 24,001 | 3,071 | 12.8% |
| Less: Depreciation | 7,347 | 6,142 | 1,205 | 19.6% |
| **Net Block** | **19,725** | **17,859** | **1,866** | **10.4%** |

Gross block increased by ₹ 3,071 million during the year, mainly due to expansion & modernization plan implemented across all divisions. In the current year we have increased installed capacities in plastic processing to 577,460 MT as compared to 568,479 MT in previous year, substantial increase of 20 million plantlets in Tissue Culture and 1 million ltrs in Solar Water heating systems and 5 MW in Solar Photo voltaic Systems. New Capex has been financed out of long term loans and internal accruals during the current year.

**h) Investments** ₹ in Million

| Particulars | 2012-13 | 2011-12 | Change | Change% |
|---|---|---|---|---|
| Investment in wholly owned subsidiary (WoS) | 6,958 | 4,259 | 2,699 | 63.4% |
| Other Investment | 45 | 48 | -3 | -6.3% |

The increase of ₹ 2,699 million in investments is mainly on account of capital/ loan infused in the WOS based in Mauritius and Netherlands. Increase in Other Investment

is mainly on account of capital/ loan to Sustainable Agro Commercial Finance Ltd. (SAFL) the NBFC.

**i) Inventories** ₹ in Million

| Particulars | 2012-13 | 2011-12 | Change | Change% |
|---|---|---|---|---|
| Inventories | 11,570 | 8,012 | 3,558 | 44.4% |

The overall inventory has increased by ₹ 3,558 million during the current year compared to previous year, is mainly on account of increase in Finished Goods Inventory by ₹ 1,346 million, raw material by ₹ 1,694 million and Material in transit by ₹ 476 million.

**j) Trade Receivables** ₹ in Million

| Particulars | 2012-13 | 2011-12 | Change | Change% |
|---|---|---|---|---|
| Gross Receivables | 16,245 | 20,458 | -4,213 | -20.6% |
| Less: Provision Doubtful Debts | 258 | 172 | 86 | 50.0% |
| **Net Receivables** | 15,987 | 20,286 | -4,299 | -21.2% |

The decrease in net receivable was 21.2% at ₹ 15,987 million compared to ₹ 20,286 million in the previous year mainly due to lower MIS sales and collection from government subsidy.

**k) Short Term Loans and Advances** ₹ in Million

| Particulars | 2012-13 | 2011-12 | Change | Change% |
|---|---|---|---|---|
| Short Term Loans & Advances | 3,952 | 2,402 | 1,550 | 64.5% |

Short Term Loans & Advances increased by ₹ 1,550 million in Current year mainly due to increase in advance for Trade Purchase

**l) Current Liabilities** ₹ in Million

| Particulars | 2012-13 | 2011-12 | Change | Change% |
|---|---|---|---|---|
| Current Liabilities | 30,433 | 32,253 | -1,820 | -5.6% |

Current Liabilities decreased by ₹ 1,820 million to ₹ 30,433 million in current year from ₹ 32,253 million in the previous year mainly due to decrease in short term borrowing by ₹ 1,588 million and trade payable by ₹ 56 million.

**m) Long Term Borrowing** ₹ in Million

| Particulars | 2012-13 | 2011-12 | Change | Change% |
|---|---|---|---|---|
| Long Term Borrowing | 11,779 | 9,979 | 1,800 | 18.0% |

The Long Term Borrowing has increased by ₹ 1,800 million to ₹ 11,779 million in the current year from ₹ 9,979 million in the previous year. This is mainly due to new capital investment in Solar Power project and capital investment for expansion & modernization plan implemented across all divisions.

**n) Shareholders Funds** ₹ in Million

| Particulars | | Equity Capital | Preference Capital | Share Premium | Other Reserves | Retained Earnings | Share Warrants | Total |
|---|---|---|---|---|---|---|---|---|
| Balance as on 1st April 2012 | | 810.36 | - | 6,220.14 | 3,400.48 | 8,340.66 | 347.93 | 19,119.57 |
| a) | Changes during the year (Equity Shares) | 99.47 | - | 3,879.24 | - | - | - | 3,978.71 |
| b) | Conversion of Warrants | - | - | - | 347.93 | - | (347.93) | - |
| c) | Adjustment for unrealized gain/ loss due to hedging derivatives | - | - | - | 144.18 | - | - | 144.18 |
| d) | Adjustment for ESOPs | - | - | - | 28.43 | - | - | 28.43 |
| e) | FCCB Redemption premium | - | - | (25.34) | - | - | - | (25.34) |
| f) | Equity share issue expenses | - | - | (75.68) | - | - | - | (75.68) |
| g) | Allotted during the year | - | - | - | - | - | 161.81 | 161.81 |
| h) | Profits for the Year | - | - | - | - | 301.06 | - | 301.06 |
| i) | Profit transferred to General Reserve | - | - | - | 30.11 | (30.11) | - | - |
| j) | Dividend (incl. Dividend Tax) | - | - | - | - | (266.12) | - | (266.12) |
| **Sub Total (a to j)** | | **99.47** | **-** | **3,778.22** | **550.65** | **4.83** | **(186.12)** | **4,247.05** |
| **Balance as on 31st March 2013** | | **909.83** | **-** | **9,998.36** | **3,951.13** | **8,345.49** | **161.81** | **23,366.62** |

*^ Refer Note No. (2), (3) & (4) of financial statements.*

**o) Dividend**

The Board has proposed to pay dividend on Ordinary Equity Shares and DVR Equity Shares @ ₹ 0.50 per share (25%) to all eligible Shareholders, subject to approval of Shareholders at the ensuing AGM. The dividend cash-outgo (including dividend tax) would be ₹ 266 million as against ₹ 471 million in the previous year. The dividend pay-out as percent of Net Profit works out to 88.39% as compared to 17.55% in previous year.

₹ in Million

| Particulars | 2012-13 | 2011-12 | Change | Change% |
|---|---|---|---|---|
| Equity Dividend | 227 | 405 | (178) | (44.0%) |

***Disclaimer:*** *The Management cautions that some of statements above are directional and forward looking and do not represent correctness of the underlying projections as they are dependent on various factors some of which may be outside control of management.*

– • –