

Board's Report

Board's Report

To the Members,

The Directors present their report on the financial performance, business and operations of the Company for the year ended 31st March, 2014.

1. Financial Highlights ₹ in Million (except EPS)

Particulars	2013-14	2012-13
Domestic Sales	30,692	27,571
Export Sales & Services	9,816	6,490
Other Operating Income	823	1,048
Sales and Operating Income	41,331	35,109
Operating Profit	5,020	5,793
Interest and Finance Charges	3,908	4,111
Depreciation and Amortisation	1,413	1,195
Profit before taxation and exceptional items	(301)	487
Provision for Tax		
Deferred Tax Asset/(Liability)	414	100
Current Tax Provision	74	86
Profit for the year before Prior Period Expenses	39	301
Profit for the year	39	301
Profit b/f from the previous year	8,346	8,341
Balance available for Appropriation	8,385	8,642
Out of which the Directors have appropriated as under;		
Proposed Dividend	231	227
Dividend Distribution Tax	39	39
Transfer to General Reserve	27	30
Balance carried forward	8,088	8,346
Earnings per Share (₹)		
Basic	0.09	0.70
Diluted	0.09	0.70

2. Operations - Standalone

The overall operating income and revenue was at ₹41,331 Mn for year ended March 31, 2014 a growth of 17.7% over last year's level of ₹ 35,109 Mn. The Hi-Tech Agri Irrigation Input products reported a 14.5% growth at ₹ 26,612.5 Mn in FY 2014 against ₹ 22,798.2 Mn in FY 2013. The Industrial products division grew at a better 34.5% reporting revenue at ₹ 13,448.9 Mn in FY 2014 against ₹ 10,002.1 Mn in FY 2013. The Green Energy products de-grew 23.3% due to conscious management decision to concentrate on cash flow rather than revenue growth and reported revenue of the ₹ 1,769.7 Mn as against ₹ 2,309.2 Mn for FY 2013.

Revenue for the year under review grew by 17.7% over year ago, supported by PE Pipes 61.8%, Fruit Processing 24.1% & MIS 20%. The Net Profit at ₹ 39 Mn against ₹ 301 Mn last year was impacted by the

foreign exchange losses resulting from depreciating rupee and MTM loss of ₹ 1,975.5 Mn against ₹ 934.2 Mn in previous year

3. Dividend

Sr.No.	Particulars of Equity Shares	Amount (₹)
1	25% (₹ 0.50 per share) on 443,119,978 Ordinary Equity Shares of ₹ 2 each	221,559,989
2	25% (₹ 0.50 per share) on 19,294,304 DVR Equity Shares of ₹ 2 each	9,647,152
	Sub Total	231,207,141
3	Dividend Distribution Tax @ 16.995%	39,293,654
	Total (1+2+3)	270,500,795

The Directors propose to the Shareholders a Dividend of ₹ 0.50 each on Ordinary & DVR Equity Shares involving an outlay of ₹ 231.21 million to all eligible shareholders, and ₹ 39.29 million as Dividend Distribution Tax for the year ended 31st March 2014.

4. Fund Raising

a) Sale of Wind Power Undertaking:

During the year under review the Company hived off Wind Power Undertaking which was operating at Theni, Tamil Nadu. The unit included 8 Wind turbines and 28.5 acres of Land and all related assets and liabilities. The average PLF for 3 year period of Wind Turbines was just about 26%. The shareholder approval was obtained by way of Postal Ballot and actual transfer was effected in Q4 FY 2014. The total value of Wind Power Undertaking was ₹ 645 Mn.

b) Equity Warrants Conversion:

As Members are already aware, the Company after obtaining all the necessary approvals had issued 75 lac Equity Warrants at a price of ₹ 86.30 each aggregating ₹ 647.25 mn out of which as per SEBI (Issue of Capital & Disclosure Requirements) Regulations, 2009, the 25% deposit was paid upfront at the time of issue and on payment of balance 75% the warrants were converted into Equity shares of ₹ 2 each on 20-03-2014. The proceeds are utilised for strengthening the long term working capital base of the Company, as proposed while raising the funds.

5. Capacity Expansion and Capital Expenditure

The Company has continued its ongoing growth/maintenance capex and the following table gives the capex incurred for capacity expansion implemented

during the year and the resultant capacity addition in FY 2014:

Sr. No.	Segment name	Unit	Addition in Capacity for FY 2014	Capex FY 2014 (₹ Mn)
1	MIS/SIS	MT	2,410	436
2	Piping Systems	MT	32,750	343
3	Dehydrated Vegetable/ Fruit Puree etc	MT	3,800	429
4	Tissue Culture	Mn. Nos	10	119
5	Others & Corporate	-	-	516
Total				1,843

Growth capex has been detailed at 1-4 above, and rest is either maintenance or corporate capex.

6. List of Awards / Recognition - Financial Year 2013-14

A) Jain Irrigation Systems Limited

Award/Recognition name	Instituted by	Given for
FMB (Managing Globalisation of the family business) Award	SPJIMR - S.P. Jain Institute of Management & Research	Managed Social Contribution in their Family Business
Business Standard - CSR Award	Amity Global Business School, Pune	Winner : Manufacturing Category
PLEXCONCIL Award	PLEXCONCIL	Top Exporter of PVC Foam Sheet
PLEXCONCIL Award	PLEXCONCIL	Top Exporter of Pipes & Hoses
PLEXCONCIL Award	PLEXCONCIL	Top Exporter of Drip Irrigation Systems (MIS)
CNBC Asia India Corporate Responsibility 2013	Omkar Realtors and Developers Pvt. Ltd.	For its outstanding contribution to society
Star Performer Award	EEPC India (Formerly Engineering Export Promotion Council)	Star Performer award 2012-13 in the product group of other agricultural, forestry machinery and parts large enterprise
Global CSR Excellence & Leadership Award (in the category "Accounting for Climate Change")	ABP News	JISL's work with products such as drip and solar which reduce the impact of climate change was a major aspect that was taken into consideration. JISL has registered five CDM (Carbon Credits) projects with UNFCCC even though the carbon market is not showing signs of improvement. JISL's efforts are constant in working towards a low carbon economy
GAIL's - Top Customer Award (Rank-3)	GAIL (India) Ltd. the Youngest Maha Navratana Company	GAIL's esteemed customer for Polymers for achieving 3rd Rank on All India basis based on purchases from GAIL during FY 2012-13
Agriculture Summit 2014 Award of Honour	Govt. of Punjab	For outstanding contribution in Agriculture Development
Innovating for a Better Tomorrow	CNN-IBN & Infosys	For their significant business and social impact. Serving as role models, these innovations have changed the course of India's progress
Transformation Business Award	Financial Times, London & International Finance Corporation (World Bank Group)	Achievement in inclusive Business (Special Commendation)

B) Padmashri Bhavarlal H. Jain – Chairman

Award/Recognition name	Instituted by	Given for
Aadyakavi Maharshi Valmiki Rashtriya Jeevan Gaurav Puraskar	Daryasagar Samajik Sanstha, Jalgaon	Significant activity in the field of Industrial Agriculture
Adarsha Vyapari Uttam	The Poona Merchants Chamber, Pune	"Adarsha Vyapari Uttam" Puraskar 2013
Adhavyu	Indian Agriculture & Food Processing Industry	For the betterment of Food Science and Technology in India both Academic and Industrial
Excellence Award and Scroll of Honour	Indian Council of Agricultural Research, New Delhi	For his Innovative Contributions to Indian Agriculture

7. Other major developments during FY 2014

a) ESOP Variations:

In 2005-08 period the Company had granted 4 lots of 25 lacs Equity Shares to its associates on various dates between 27th January, 2007 and 27th June, 2008 at different exercise price. However, in 2013 the Share price became unattractive the associates were not interested in option exercise despite options having been vested fully in June 2011 i.e. 2 years or more before. Thus, Company's Board, and Shareholders approved revision in Exercise Price to ₹ 60.45 or thereabouts in last AGM on 27-09-2013. Most of associates have now exercised the option and are willing to deposit Exercise Price in Company's Bank Account soon hereafter.

b) FITCH Rating:

The India Ratings and Research, the rating arm of FITCH Ratings group upgraded the Company's short term and long term rating to "investment grade" during the year (November 2013) with a 'stable outlook'. The ratings upgrade did benefit the Company in bringing its overall cost of debt down in 2nd half of FY 2014. However, the full impact of this and possible further upgrading of rating may help Company bring its cost of debt down further in next fiscal year.

c) About NBFC i.e. Sustainable Agro-Commercial Finance Limited FY 2014:

The following table gives details of funds raised by NBFC during the FY 2014:

Nature of funds	From	Amount (₹ Mn)	Remarks
(a) Equity shares (Rights Issue)	Jain Irrigation Systems Limited	556.25	55.62 Mn Shares
(b) Equity shares (Preferential Issue)	International Finance Corporation (IFC)	69	6.90 Mn Shares
(c) Equity Shares (Preferential Issue)	Jain Irrigation Systems Limited & IFC	50.99	5.09 Mn Shares
(d) Equity warrants (Preferential Issue)	Promoter Family	218.94	21.89 Mn Share Warrants
Total		895.18	

Financial Year 2014 was first fully operational year for the NBFC and at the end of FY 2014 the sanctions had crossed ₹ 1,021.5 Mn, while disbursements have touched ₹ 1,014.5 Mn. Even repayment of loans has started and was placed at ₹ 147.8 Mn. The outstanding loans were reported at ₹ 948.7 Mn and during the first year there were no Non Performing Assets (NPAs) at the end of FY 2014. SAFL has 25 offices across Maharashtra while it has strength of 137 people. The SAFL has tied up with 17 Sugar factories for sanctioning loan aggregating to ₹ 570 Mn under third party tie-up, wherein total disbursements were ₹ 369.9 Mn.

8. Other major developments post March 2014

The Company has established a New Onion Dehydration Line (3,800 MTpa). This was commissioned by the Company with a capacity of processing 17.5

metric tons per day. This is the longest dryer in the Country i.e. 70 meters. The dehydration line was fabricated in-house.

Since last 16 years, Company has been in Onion dehydration process and has formed a chain of 4,500 farmers through contract farming. The Company has dehydration lines at Jalgaon and Baroda. Baroda lines have a capacity of 18.0 metric ton per day output and Jalgaon lines have capacity of processing 32.5 metric ton per day output. Capacity of Jalgaon lines have increased by 12.5 metric ton. This new dehydration line helps to process onions in less time.

9. Directors retiring and their background

Shri Ajit B. Jain and Shri Atul B. Jain are retiring by rotation as per Companies Act, 2013 and being eligible offer themselves for re-appointment at the ensuing AGM. Their brief background is as under:-

Shri Ajit B. Jain (DIN 00053299) is BE (Mech). He is Joint Managing Director of the Company since 1994 and is responsible for the pipe division as well as marketing of all plastic products, including drip irrigation, guidance for extension service and development of new applications and products. He joined in 1984 and started his training in production and maintenance in the pipe division. During the period from 1985-1990, he was in charge of establishing our new pipe production plant at Sendhwa (in the state of Madhya Pradesh in India). In 1991 he was appointed Director with the overall responsibility of the pipe manufacturing plant at Jalgaon, including production, maintenance and marketing of new applications & products and adaptation of drip technology for Indian conditions.

Shri Atul B. Jain (DIN 00053407) is a Commerce Graduate. He joined the management team in 1992. He was posted in London office and developed the Food Processing distribution business in Europe and helped the Company to maintain the plastic exports to Europe. He was appointed CMO of the Company w.e.f. 20th August, 2002. Besides overall marketing management responsibility he has also handled all India marketing function of Drip Irrigation and PVC pipe products, PE and other specialty pipes and fittings all over the world. He has been involved with development of new applications & products in overseas markets for food and plastic sheet divisions. He also is at present the Joint Managing Director of the Company.

10. The operations of subsidiaries

The Mauritius based direct subsidiary of the Company has a revenue of \$ 496,899 and made a net loss of \$ 24,497. Summarised Balance Sheet and the Income statement of the said subsidiary is available elsewhere in the Annual Report. The subsidiary has redeemed Preference Shares of holding Company amounting to \$ 5,175,000 during the year under review. The Netherlands based direct subsidiary of the Company has earned an income of \$ 1,675,583 and made a net profit of \$10,349. Summarised Balance Sheet and the Income statement of the subsidiary is available

elsewhere in the Annual Report. The subsidiary has received \$ 75,00,000 as Loan from the Holding Company during the year under review.

Other Subsidiaries

Information on operations of other operating and financial subsidiaries, has been covered under management discussion and analysis (MDA) in this Annual Report.

11. Employee Stock Option Plan (ESOP)

The implementation of Employees Stock Options and Shares Plan, 2005 (ESOP-2005) has continued during the year under review. Till date four lots are issued to eligible associates including whole time directors, and key management personnel. No employee has been issued options entitling such person to subscribe to more than 1% of Ordinary Equity Share capital of the Company.

Details and disclosures in compliance with the Clause 12 of the SEBI (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999 are set out in the table below:

Sr.No.	Particulars	Lot No. 1	Lot No. 2	Lot No. 3	Lot No. 4
A]	Options Granted (on sub divided Ordinary Equity Shares)	25,00,000	25,00,000	25,00,000	25,00,000
B]	Date of Grant	27-Jan-07	04-Jun-07	14-Feb-08	27-Jun-08
C]	Pricing Formula	25% discount on market price on the date preceding the date of grant	10%* discount on market price on the date preceding the date of grant	10%* discount on Market price on the date preceding the date of grant	10%* discount on market price on the date preceding the date of grant
	* Revised by 27 th AGM Resolution. Also see para 7(a)				
D]	Options vested (on sub divided Ordinary Equity Shares)	25,00,000	25,00,000	25,00,000	25,00,000
E]	Options exercised (on sub divided Ordinary Equity Shares)	23,58,050	22,24,625	24,71,250	Nil
F]	The total number of shares arising as a result of exercise of option (on sub divided shares)	23,58,050	22,24,625	24,71,250	Nil
G]	Options lapsed (on sub divided shares)	Nil	Nil	Nil	Nil
H]	Variations in terms of options	None	Yes*	Yes*	Yes*
I]	Money realised by exercise of options - (₹ in Million)	145.14	183.96	280.73	Nil
J]	Total Number of options in force (on sub divided Ordinary Equity Shares)	1,41,950	2,75,375	28,750	25,00,000
K]	Employee-wise details of options granted to:				
	i) Senior managerial personnel	3,77,500	2,03,750	4,56,250	4,56,250
	ii) Any other employee who receives a grant in anyone year of option amounting to 5% or more of option granted during that year	-	-	-	-
	iii) Identified employees who were granted option, during any year, equal to or exceeding 1% of the issued capital (excluding outstanding warrants and conversions) of the Company at the time of grant	-	-	-	-
L]	Diluted Earnings Per Share (EPS) pursuant to issue of shares on exercise of option calculated in accordance with Accounting Standard (AS) 20 'Earnings per Share'	NA	NA	NA	NA
M]	*Where the Company has calculated the employee Compensation cost using the intrinsic value of the stock options, the difference between the employee compensation cost so computed and the employee compensation cost that shall have been recognized if it had used the fair value of the options, shall be disclosed. The impact of this difference on profits and on EPS of the Company shall also be disclosed (in lacs)	NA	NA	NA	NA
N]	Weighted average exercise price and weighted average fair values of options shall be disclosed separately for options whose exercise price either equals or exceeds or is less than the market price of the stock on the grant date.				
	(a) weighted average exercise price (₹)	61.552	82.692	113.60	85.80
	(b) weighted average fair value (₹)	35.022	34.954	55.40	42.22
O]	A description of the method and significant assumptions used during the year to estimate the fair values Black Scholes Method Black Scholes Method of options, including the following weighted average information:				
	(1) risk-free interest rate	7.50%	8%	9%	9%
	(2) expected life, (in years, average)	4	4.5	5	5
	(3) expected volatility, (in months)	6	6	6	6
	(4) expected dividends, and	25% in 2014		25% in 2013	
	(5) the price of the underlying share in market at the time of option grant. ₹ per share (on non sub divided Ordinary Equity Shares)	410.35	459.40	630.15	476.20

The Shareholders and the Board of Directors have approved a new ESOP-2011 with 53,56,000 options through an Employee Trust. The Trustee is independent professional and shall administer the Scheme under the guidance of Compensation Committee. The scheme of 2011 is fully compliant with SEBI (ESOS/ESPS) Guidelines, 1999 as amended up to date.

12. Director's Responsibility Statement

In accordance with the provisions of Section 217(2AA) of the Companies Act, 1956, your Directors state that:

- i) In the preparation of the annual accounts, the applicable Accounting Standards have been followed except, to the extent indicated in notes;
- ii) The accounting policies are selected and applied consistently and are reasonable; prudent judgments and estimates were made so as to give a true and fair view of the state of affairs of the Company as at 31st March, 2014, and, of the profit of the Company for the year ended 31st March, 2014;
- iii) Proper and sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of Companies Act, 1956, for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;
- iv) The Directors have prepared the annual accounts for the FY ending 31st March, 2014 on a 'going concern basis'.

13. Material Developments in Human Resource

"You are the owner of your work", the Company's policy has established a feeling of responsiveness amongst the associates. The Company in turn takes extra efforts to see that associates not only meet their needs and aspirations but also provides extra support to the associates and their families when need arises. This creates a special bond between the associates and the Company management thus illuminating a feeling of 'Owner' in the associates.

Associate Engagement

Various HR initiatives have been adopted by the Company to bring the feeling of "Organisation as a large family under one roof" not only to the associates but their family members in a systematic manner. Many pilgrimage tours were undertaken for the associates and their parents and grandparents. This year one pilgrimage tour of 9 days covered 38 parents and grandparents along with 7 associates. Issue of infertility is increasing day by day and due to lack of proper guidance/treatment, many people give up their

hopes. Company has identified such associates and with proper counseling and treatment, till date, 11 families are enjoying the success of the program with 5 male children and 6 female children and 40 cases are in process. Like every year, 176 children of associates between standard 7th to 10th have been benefited through "Vidyarthi Utkarsh Abhiyan". Educational scholarship for children of associates continued this year too. Deserving children of associates were awarded with the scholarship on need and merit basis. 527 children benefited by scholarships amounting to ₹ 8.556 Mn. Special focus was given for the education of the girl child. Company also tried to cover the children of associates in low income group even though they were not academically meritorious, to encourage them to take up higher studies. Visits of family members of the associates have been conducted at all Company locations in Jalgaon. It gives them the information about the importance of job of their family members and also about the unique work culture of the organization i.e. "Work is Life". Total 145 visits have been organized during whole year and covered 5,437 family members of associates.

Social Involvement:

Blood donation camps were organized twice at 6 months intervals wherein 1,633 units of blood were donated by associates of the Company to local blood banks.

Training:

The Company is helping to meet the academic requirements of students opting for "Agricultural Engineering" by providing them 16 week training which is mandatory at Agri Universities. The students were given one month class room training and three months field training in which students get exposure in survey, design, installation, maintenance of Micro Irrigation Systems and field operations. The training gives them the real experience and trainees who proved themselves during training, were absorbed by the Company in employment. Training is a continuous process for increasing performance / skills of associates and it continues at all our locations all the time.

The location and program-wise training details are as under:

Associates Training 2013-14

Sr. No.	Location	In House Training			External Institute			Total Man Hours
		No. of Programs	No. of Associates	Duration (Man Hours)	No. of Programs	No. of Associates	Duration (Man Hours)	
1	Agri Park	24	284	674	16	66	1,211	1,885
2	Plastic Park	639	9,325	37,421	31	79	1,176	38,597
3	Food / Energy Park	222	4,792	10,460	32	130	2,177	12,637
4	Orientation	9	352	19,712	-	-	-	19,712
5	Overseas Training	-	-	-	1	17	2,128	2,128
Total		894	14,753	68,267	80	292	6,692	74,959

Agricultural Engineers' Training 2013-14

Sr. No.	Location	In House Faculty			External Programs			Total Man Hours
		No. of Programs	No. of Associates	Duration (Man Hours)	No. of Programs	No. of Associates	Duration (Man Hours)	
1	Engineer Training	11	171	35,568	7	178	37,024	72,592
2	Engineer Field Training (3 months)	-	-	-	-	54	41,800	41,800
Total		11	171	35,568	7	232	78,824	1,14,392

Recruitment and Manpower Strength

Recruitment is an ongoing process throughout the year in search of right people at right places which also includes the On-Campus selection for Engineering Graduates and Post Graduates from Agriculture field all over the country. Sometimes, walk in interviews also help to get good people on urgent basis. The recruitment was done on the basis of merit, potential ability, compatibility with the organizational culture, fitness with son-of-the-soil empathy. The strength of the Company reached 8,341 on 31st March 2014, after gross addition of 1,171 during FY 2013-14.

14. Corporate Social Responsibility & Sustainability Report

1) Corporate Social Responsibility

a) CSR activities broad view

The Company has adopted six villages namely Wakod, Shiroli PB, Shiroli PN, Takarkheda, Mohadi and Kadauli in the Jalgaon district for improving the educational, health and sanitation conditions. Company regularly conducts medical camps, seminars about alternative medical disciplines and social awareness. The literary activities among the masses and awards to the poets and writers in this field are conducted and taken care by our charity "*Bahinabai Memorial Trust*". Our Jain Sports Academy supports more than 450 sportsmen for 18 sports with 40 coaches.

b) Gandhi Research Foundation

Gandhi Research Foundation activities are going at full swing amidst ever increasing number of visitors. The graph of students taking exams on '*Gandhi Vichar Sanskar Pariksha*' is also showing upward trend with over 1,18,000 students appearing in 2013-14. We have seen many national and international personalities get associated with GRF this year. Proff. Douglas Allen, Prof of Philosophy, University of Maine, New York, Prof. Michael Nagler, Proff of Comparative Literature, University of California, Berkley, Prof. Michael Lunine, San Francisco State University, Fernando Ferrarra Reviro, Monterrey, Mexico. Other notable personalities those visited and delivered lectures were Dr. Mel Duncan and Dr. Raghunath Mashelkar. Gandhi Research Foundation also received GRIHA 5 star rating. Gandhi Teerth also received the "**Artist in Concrete Award**" in Best Museum Category at Asia Festival in Pune. New Program on '*Kantai Gram Sudhar Yojana*' was launched by GRF for women empowerment and self-sustaining of villages.

c] Direct expenditure on various CSR activities in total spending of ₹ 35.59 Mn for FY 2013-14

d] Anubhuti – 2

Anubhuti-2 is school for underprivileged families in and around the Jalgaon city. This school has first, second, third and fourth standards and will add on one standard every year up to standard tenth. The selection criteria benefits student from really low income families. The student stay in the school from 8.30 am to 4.00 pm. The breakfast, lunch and snacks are also provided. Their activities vary from sports, dance, music, cultural aspects, and presentation skills. The language lab and special dedicated staff for each activity helps to improve the performance of the student. Overall personality development of the student is focus of the school.

e] Kantai Bandhara

The 'Kantai Bandhara' (weir) was inaugurated by the Deputy CM of Maharashtra Mr. Ajit Pawar and Minister of Irrigation Mr. Sunil Tatkare. The ₹ 8 crore project (capacity 1,792 million litres) was funded by the Company. As per the Maharashtra Government directives, the Company is entitled to 50% reservation of the water in storage every year, the rest being allocated for society by the concerned Government of Maharashtra Department. This will provide Company with assured water supply for use in food processing (fruit and onion dehydration), especially during dry summer, droughts and low rainfall months. The region is marked by high temperature, moderate rainfall (700mm annually) and frequent drought. This affects the availability of water for agriculture, human and animal consumption. This storage structure is not only sufficient for Company needs but also for society. It will help reduce off-season water availability and sudden floods in downstream areas. The Girna River catchment covers around 9,000 square kilometers with the water extending 5.6 kilometres from the Bandhara, making it possible for the backwater to support pisciculture. The storage structure will benefit eight villages with a population of 16,000.

2) Sustainability Reporting

The third Sustainability Report is available on our website. This report covers all the operations of

Jain Irrigation around the globe. This report also covers all the information, process and materiality related to Economic, Environment and Social aspects of the organization in the Year 2011-12 and 2012-13. The fourth sustainability report will now be published in the year 2015.

All facilities in Jalgaon are certified as per ISO 14064 GHG- Management Systems and ISO 50001- Energy Management Systems. The Unnati project was extended with target up to 50,000 ha. The ongoing activities related to sustainable agriculture includes project by Unilever – Rajapuri Mango Development program for selected farmers. During the financial year the sustainability related aspects for which Company was issued 13,780 carbon credits from Wind Power projects (now sold) along with 3,620 Voluntary Carbon Credit of Solar power projects. Sustainability goal includes, bringing more and more farmers under Jain GAP.

15. Environment Health and Safety performance

- ▶ The Company is maintaining Integrated Management System (IMS) with integration of ISO 9001, ISO 14001 & OHSAS 18001 system standards. IMS Certifications are earlier completed done at Jalgaon, Hyderabad & Udumalpet plants and systems are maintained with continual improvement. The IMS was also implemented during the year 2013-14 at Alwar and Bhavnagar plants and they have received the certification by TUVNORD for all the three standards. The work on IMS certification for Survey, Design, Installation and Servicing activity is under progress at other locations.
- ▶ Rain water harvesting is done from factory open area as well as from roof top in buildings and same is used for recharging of wells through suitable rain water harvesting structures.
- ▶ Fire hydrant system at Plastic Park, Jalgaon has been made fully operational covering entire manufacturing facility. Internal fire hydrant system is planned for PE Pipe building. Fire hydrant system installation work is in progress at Hyderabad and Udumalpet plants and it is expected to be operational during next financial year.
- ▶ Smoke detection & alarm system is under installation in Server room, purchase, MIS and complete first floor of administration building.
- ▶ Some of the safety measures initiated in the manufacturing facilities are given below:
 - Limit switches are installed at entrances of all underground grinder sections.
 - Timer based automation of fixture table is done at Injection Moulding.
 - Gas Monitor for CO₂, CO, H₂S, O₂ and LEL is purchased and monitoring of these gases has started.
 - LOTO system related tools are purchased and implementation has started.
- ▶ Green cover is increased at various locations by plantation of variety of plants.

16. Internal Controls and Management Information Systems

ERP

Post implementation of SAP across India locations, now some more modules are taken up for implementation which would further improve the efficacy and MIS reports from the system.

Internal Controls

SAP implementation allowed a number of strategies to implement internal control in the business application through process mapping, segregation of duties, authorisations. Independent of the SAP functionality and control check, your Company is proactively identifying the areas for further improvement which shall remain an on going process.

Future

The Company has plan to integrate its IT infrastructure by rolling out SAP at foreign subsidiaries to further streamline Manufacturing, Supply Chain. Local and global reporting, analysis in a common enterprise wide format. It will provide better collaboration with our worldwide units, transparency and efficiency for global operations.

Internal Audit

The Company has continued to avail services of Ernst & Young LLP to conduct internal audit in SAP environment and add value by strengthening internal controls and improving efficiency of operations at same time.

17. Fixed Deposits

The Company, during the year under review, has not accepted nor renewed any deposits from public, under the Companies (Acceptance of Deposits) Rules, 1975. The Company had no unclaimed / overdue deposits as on 31st March, 2014.

18. Auditors

The Auditors, M/s. Haribhakti and Co., Chartered Accountants, Mumbai have furnished a Certificate under Section 139 of the Companies Act, 2013 that their proposed re-appointment, if made, will be in accordance with the said provision of the Companies Act, 2013. The Audit Committee has recommended that M/s. Haribhakti and Co., a firm of Chartered Accountants, Mumbai be reappointed as Statutory Auditors. The Shareholders may reappoint the Statutory Auditors as per AGM Notice already sent separately.

19. Particulars of Employees

As per provisions of Section 217 (2A) of the Companies Act, 1956 only six of the persons in employment of the Company have drawn remuneration in excess of ₹ 500,000/- per month, during the year under review or part thereof as per details in the Annexure to this report.



20. Particulars of Energy Conservation, Technology Absorption, Research and Development, Foreign Exchange Earnings and Outgo.

A] Energy Conservation

Plastic Park :-

In Injection Moulding plant, performance of various old pumps were improved by replacing them with higher efficiency pumps and thereby reducing energy consumption. Insulating pads were installed on barrels of injection Moulding machines and this has resulted in reduction in loss of energy by 10 to 20%. Variable Frequency drives were provided on Injection Moulding Machine to reduce the average energy consumption by 20%. Retrofitting of old Injection Moulding with servo motors resulted in 40% reduction in energy consumption and increase in production due to lower cycle time. In MIS pipe Variable Frequency drive were provided on Turbo of Mixer and Screw Compressor to reduce energy consumption by 20%. The Pipe Cooling Tower & their water circulation pump, operation was automated by making them temperature dependent to reduce the energy consumption by 20%. In Drip line plant, energy consumption was reduced by 20 % by replacement of DC motor & drive by AC motor & Drive. Installed lower watt LED instead of existing higher watt CFL in garden dome light to reduce energy consumption. Common vacuum pump was installed on PVC pipe extrusion lines for barrel vacuum to reduce energy consumption. Energy consumption was reduced by installing short wave heater by replacing old U type heater on socket machines. In Polytube performance of each pump has improved by replacing higher efficiency pump to reduce energy consumption. In PVC sheet energy consumption in grinding section was reduced by using high wear resistant blade material. In PVC sheet 100% reduction in energy consumption during sheet cutting of thickness 6 mm to 25 mm by replacing Saw Motor to Knife Blade. Foggers and green net is provided to chilling plants to avoid the effect of atmospheric temperature on the chilling plant in summer season. This has helped in saving the electrical energy and maintaining required temperature of process water.

Being an environmentally responsible organization and in continuation of our efforts towards well being of environment and society we have implemented energy management system (EMS) as per ISO 50001 and started accounting of our greenhouse gas emissions (i.e. carbon footprint) from the year 2012 – 13 onwards as per the requirements specified in ISO 14064 : 2006 Part – I. Plastic park has successfully undergone Energy Management Systems and GHG verification audit by TUV NORD and was awarded ISO 14064 – 3 & ISO 50001 certifications.

Food Park :-

(a) Fruit

- Modification in sterilizer - Variable frequency drive installed to control cooling tower pumps to save electricity. During sterilization motor electricity consumption was 11.76 KW/Hr which reduced to 2 KW/Hr due to this modification. Net saving in ₹ 1.88 Mn. per annum
- Plant lighting system replaced from CFL to LED type. Net saving in ₹ 0.20 Mn. per annum
- Installed new plate freezer for small pack frozen product. Net saving in electricity ₹ 0.70 Mn. per season.
- Sterilizer piston pump recycling system of seal water installed. Saving in water 96,000 ltrs per day has been realised.

(b) Onion

- Replacement of Conventional lighting with LED lights. Saving of electricity 62,665 kwh/ annum. Total amount saved per year INR 0.50 Mn.

Energy Park :-

Solar pumping system : Under energy saving and energy management program Solar pumping system of 244 HP (27 nos) are installed in Tissue Culture park to supply water for Poly house, Green house and Agriculture. For solar pumping system 277.4 Kwp solar modules are used to generate power and run 27 pumps to supply water for Polyhouse (total 137 HP), Green house (total 54 HP) and Agriculture (total 51 HP). In total solar pumps deliver 53.76 Lakh liters water per day and save electrical energy 6 Lakh KWH/annum.

Agro photovoltaic System: New experiments are initiated at Tissue Culture Park to maximize agriculture land utilization for production of electrical power with solar energy and agriculture food crop combine together on same land. Solar modules are installed at suitable height on pole. The solar modules rotate on their axis and track the sun to generate maximum power. The light transmission at crop level is maintained to grow them as well. The power generated by solar modules is used to run the pump for irrigation at the Tissue Culture Park.

Agri Park & Tissue Culture :-

Measures taken for reducing energy consumption:

- A total of 100kv solar based energy production established at Tissue Culture Park to operate automated tray filling and seeding line and green house operations.
- Rain Water harvesting network had been created to harvest rain water from Poly Houses

used for production of tissue culture banana and pomegranate plants. This enables us harvesting of at least 151,500m³ of water per year.

- Recycling of used and irrigation runoff water in Tissue Culture plant hardening. Irrigation runoff collection has been implemented through subsurface drainage to a water re-cycling pond. Used process water is also collected to a pond. All recycled water is reused after appropriate treatment.
- It is a general practice for most of the biotech R&D labs to run a Polymerase Chain Reaction (PCR) setup in the late evening and allow it to run all through the night and keep the samples at incubation at 4°C in the thermo-block itself. This consumes lots of energy/electricity. The laboratory has made it a policy not to run any PCR reactions overnight and plan in such a way so that all reactions are completed latest by the evening when the associates leave.
- In order to save energy as well as fluctuating power, supply is given only through voltage stabilizers and uninterrupted power suppliers. Supply voltage is monitored with a regulation level of $\pm 1\%$, the supply frequency at $50 \pm 1\text{Hz}$ and neutral to earth voltage to less than 1volt AC and earth resistance to less than 1ohm. This also ensures against any leakage in electricity thereby leading to conservation.

B] Technology Absorption

Plastic Park:-

- In Drip tape plant Company installed a high precision & high speed extrusion line to produce tape product and the extrusion line is capable of producing the Tape with line speed very much higher than that of line usually available in the market.
- Continuing with the efforts towards productivity improvement, Company has installed additional high precision all electric injection moulding machines with hot runner molds for making disc for disc filtration system.
- Sand Blasting machine has been installed to get SA2.5 type surface finish on metal products / parts.
- New Injection moulding machines were procured and installed with advanced technical feature like injection unit with linear guide rail.

Food Park:-

a) Fruit

- Painting of re-con drums automated.
- Non chemical water treatment plant – trials carried out to avoid water scaling in sterilizers. After installation of the non chemical treatment

plant, existing soft water treatment plant will be isolated for cooling towers only.

- Existing ECRC storage converted to 4-10° C cold storage for storing of finished product
- New full length rare earth magnet installed in fruit washer for better control of metal particles.

b) Onion

- Ozone generation system installed for onion flume water.
- Entire line established from concept to commissioning for onion dehydration with enhanced onion processing by 25 % i.e. 125 TPD of extra processing.
- Conversion of steam heated dryer where hot air was made using steam to direct hot air through hot air generator, it saves electricity consumption and water.
- Rotary screen used for removal of suspended fibrous impurities from onion flume water to maintain low turbidity.
- Installation of refrigeration system in DHO packing area to lower the room temperature so that the DHO can be cooled down thereby it will remain crispy which will smoothen milling operation.
- Use of High sensitivity gravity fall metal detectors on onion powder and fried onion packing line.

Energy Park:-

Solar Photovoltaic:

- Expansion of production capacity by adding 2nd Automatic Module manufacturing line of 25 MWp & in Manual line by 5 MWp. So, present Module production capacity is 55 MWp (1st Auto line 20 MWp; 2nd Auto line 25 MWp & Manual Line 10 MWp).
- Development of Transparent PV module using transparent backsheet which is light in weight as compared to traditional transparent module.
- Received IEC - 61215 (ed 2) for all PV modules 3 Wp to 300 Wp & IEC – 61730 Part 1 & 2 for PV modules 130 to 300 Wp
- Successfully passed PID (Potential Induced Degradation) test for 4 different PV module families.
- Development of silicone sealant cartridge filling machine. This machine is able to fill silicone sealant cartridge from bucket because readymade silicone sealant cartridge are very costly as compared to silicone sealant in bucket.
- Development of String Transfer unit for manual line. Previously, it was done by manual flipping. So, it reduces breakage of solar cells during string transfer.



Solar Thermal: During the FY 2013 - 2014, a plastic inner tank for storage of hot water is developed in house for the systems up to 300 liters per day capacity. This reduces the overnight heat loss in the solar water heater system. This development will also increase the life of the inner tank that are traditionally manufactured in either Mild Steel or Stainless Steel by conventional welding process.

C] Research and Development

Plastic Park:-

- New filtration system for MIS : Automatic hydraulic & electrical screen was developed. Its unique features are:
 - ▶ Energy efficient by about at least 10 – 15% over conventional screen filters.
 - ▶ Wide range of availability : 4” to 14”
 - ▶ Available in standard 100 micron screen but other screen sizes are also available on request.
 - ▶ Higher filtration efficiency due to high opening area.
 - ▶ Simultaneous operation of filtration and flushing and this result in time saving.
 - ▶ Filter Screen is available in high quality stainless steel.
 - ▶ Better cost to performance ratio
- Product range of ASTM fittings expanded by developing reducing Tee 1 x ½” threaded, Reducing Bush ¾ x ½” etc., and SWR fittings range expanded by developing 90mm vent coul, pipe cliff 90mm etc.,
- Similarly the PVC fittings – union female thread 20 – 63 mm, Threaded Elbow 63 – 90 mm, single union valve 40 – 75 mm, Elbow 180 mm, reducing Bush 160 x 140, 200 x 160 180 x 63, Top cap 140, 180 etc., were developed.
- 630mm PVC pipe was developed and for export market the pipe was made with Non lead base stabilization system. Production of 630mm PVC pipe was first time in India.
- For the specific requirement of European market, the PVC Integral foam sheet was made with Non Lead, Non Tin stabilization system and the product was accepted for performance and requirements.
- PVC Integral foam sheet products range has been expanded by developing two more new products, namely Rose wood and Dark Brown Integral foam sheets. The market response to the Rose wood and Dark Brown has good and with the colour resembled the wood, the products finds good response and finds application for wood replacement.

Food Park

a) Fruit Processing

New product developed –

- Aseptic Green Mango Puree
- Aseptic Carrot Juice Concentrate
- IQF Ripe Banana Whole and Dices
- IQF Raw Banana Whole

b) Onion Processing

- i] Use of UV lights to reduce microbiology of dehumidified air being supplied to onion mill.
- ii] Retrofit of traction controller in battery operated imported forklift to avoid dependency on imported costlier spares.
- iii] Installation of automatic controlled access, hygiene stations at associate entry as a Pre-requisite requirement to avoid microbiological and foreign matter contamination.

Energy Park

a] 4,000W BLDC motor based solar pump controller

Solar pump controller is used in Solar Pumping system with very high efficiency BLDC motor. Very wide operating range of voltage and wattage enables optimized sizing of solar PV array. MPPT functionality makes the maximum utilization of Solar Power. Sensor less dry run protection, overload, short circuit, reverse polarity protection provided to make a reliable and rigid product. All the components used are from standard makes and by considering the stress on components to get long life of a product.

b] Development of High Efficiency Solar LED Street Light systems

LED base Solar Street lighting system is developed and supplied to the different location in India to save electrical energy consumption. System is based on dusk to dawn operation with dimming operation in the late night to reduce the power consumption. LED Street light saves much more energy when compared to sodium vapor lamps, metal halide & halogen lamps. These are stand alone systems with storage battery, luminary and solar panel on one single pole, hence can be installed in remote locations as well.

c] Battery Less Solar Tracker System

In this project, we developed the smart solar tracking system. This is single axis, time based solar tracking system. It is maintenance free system, as it does not contain a battery. This is rigid and robust electronics design for solar tracking system. It is plug and play solar tracker system.

Agri Park & Tissue Culture

- Twelve flowering related genes had been identified and characterised in Banana. Out of these three genes look very promising and have capability to change flowering time in Banana. This work has laid the foundation of project to reduce life cycle of banana plant.
- In Mango, five genes associated with regulation of flowering and alternate bearing had been identified.
- Significant progress has been made in way to develop tissue culture protocol for mango propagation.
- Micro propagation protocol of coffee has been developed and ready for commercialization.

21.Acknowledgement

The Directors take this opportunity to place on record their appreciation of whole hearted support received from all stakeholders, customers and the various departments of Central and State Governments, Financial Institutions, Bankers, the Dealers and Suppliers of the Company. The Directors wish to place on record their sense of appreciation for the devoted services of all the associates of the Company.

by order of the Board

11th August 2014
Mumbai

Sd/-
Anil B. Jain
Managing Director

D] R & D Expenditure

(₹ in Million)

Sr. No.	Particulars	2013-14	2012-13
a.	Capital Expenditure	13.47	11.68
b.	Revenue Expenditure	153.49	173.87
	Total	166.96	185.55
c.	% of Revenue	0.40%	0.53%

E] Foreign Exchange Earnings and Outgo (₹ in Million)

Sr. No.	C.I.F. Value of Imports, Expenditure and Earnings of Foreign Currency	2013-14	2012-13
a.	C.I.F. Value of Imports Raw Materials, Components and Stores and Spares	5,277.89	5,010.57
	Total	5,277.89	5,010.57
	Expenditure in Foreign Currency (on Cash basis)		
	i) Interest and Finance Charges	584.68	577.70
	ii) Discount/ Commission on Export Sales	114.12	41.30
	iii) Export Selling/ Market Development	12.39	103.15
	iv) Travelling Expenses	10.43	26.13
	v) Law & Legal/ Professional Consultancy Expenses	38.91	46.93
b.	vi) Testing Quality & other Charges	60.03	143.49
	Total	820.56	938.70
c.	Earnings in Foreign Currency		
	FOB Value of Exports	9,229.93	6,113.23
	Interest and Other Income	-	-

Annexure to Board's Report – 2013-14

Statement of Particulars of employees pursuant to the provisions of Section 217(2A) of the Companies Act, 1956 read with Companies (Particulars of Employees) Rules, 1975, as amended upto date.

Sr. No.	Name of Employee	Total Experience (Years)	Designation	Remuneration Gross (₹)	Qualifications	Commencement of Employment with Company	Particulars of last Employment	Last Post	Last Employer	No. of Years (Previous Employment)	Covered Under 500000/ Category w.e.f.
1	Shri Ashok B Jain	31	Vice Chairman	19,633,092	B.Com	12.01.87	Own Business	Partner	Jain Brothers Industries	4	01.04.2010
2	Shri Anil B Jain	29	Managing Director	19,633,092	B.Com., LLB	12.01.87	Own Business	Partner	Jain Brothers Industries	2	01.04.2010
3	Shri Ajit B Jain	29	Jt. Managing Director	19,633,092	B.E.	11.01.85	-	-	-	-	01.04.2010
4	Shri Atul B Jain	22	Jt. Managing Director	19,633,092	B.Com	01.01.91	-	-	-	-	01.04.2010
5	Shri R Swaminathan	41	Director - Technical	8,844,948	B.Tech (Chem)	15.06.82	Service	Plant Manager	Flavours & Essence P. Ltd.	2.5	01.10.2010
6	Shri Manoj L Lodha	16	President - Banking & Finance	8,465,184	CA	05.11.98	-	-	-	-	01.06.2010

1. Shri Ashok B. Jain, Shri Anil B. Jain, Shri Ajit B. Jain and Shri Atul B. Jain are related to each other as brothers and sons of Chairman Shri B. H. Jain.
2. Remuneration includes perquisites and commission.