

A memorable journey in the service of farmers



Corporate Profile

Dr. Bhavarlal Hiralal Jain, Founder Chairman  
12 Dec. 1937 – 25 Feb. 2016

 **JAIN**<sup>®</sup>  
Jain Irrigation Systems Ltd.  
Small Ideas. Big Revolutions.®

# Across this profile



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## Touching lives in more ways than one



# Leave this world better than you found it!

These words define our DNA, articulate our corporate credo and show us the way forward. Our Founder Chairman lived by this philosophy and demonstrated how we can leave behind a better world.



Dr. Bhavarlal Hiralal Jain, Founder Chairman (fondly known as Bhau) seen here during a bountiful harvest (2015)

# An Epic

In India and across the world, agriculture is grappling with myriad challenges with inadequate and unseasonal rains, soil erosion, depleting groundwater and other perils of climate change. The result is that more and more farmers are dependent on the weather gods for water and irrigation needs. A simple innovation has taken a radical step forward to help reduce the suffering of farmers in India and other parts of the world. Drip irrigation, a technique that allows for micro-irrigation of crops, is making sure that small as well as big farmers have access to round-the-year water supply.

This has led to optimum utilisation of precious water, energy and larger volumes of crops and vegetables to feed billions of people across the world. And the man whose down-to-earth ideas revolutionised global sustainable agriculture and transformed the lives of millions of farmers, associates, stakeholders and the society at large is Bhavarlal Jain, affectionately known as Bhau to millions of his friends and admirers.

Our beloved 'Bhau' or 'Brother' and the Founder Chairman of Jain Irrigation Systems Limited (Indian multinational with 30 manufacturing plants worldwide, 10,500+ associates and a revenue of over billion dollars) passed away on 25th February, 2016, at the age of 79.

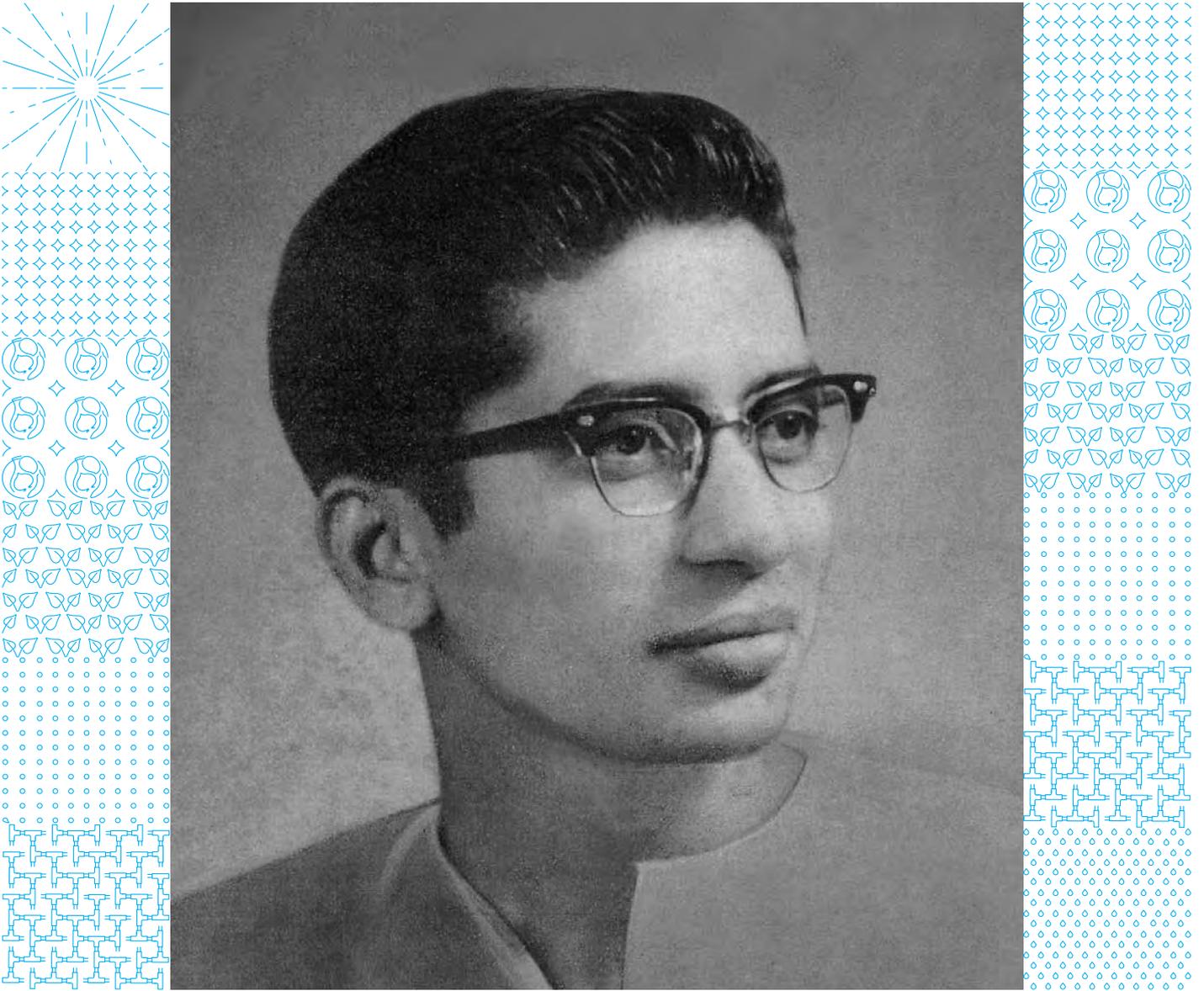
He was a man of many facets – farmer, businessman, social activist, environmentalist, writer, public speaker and a beloved friend and mentor to many.

We, at Jain Irrigation Systems Ltd., are inspired by his epic life and legacy; and are committed to follow his example of creating a better world for all.

# Life



A photograph of our Founder Chairman Dr. Bhavarlal Hiralal Jain, in the early phase of his entrepreneurial journey (1968)



Founder Chairman Bhavarlal Hiralal Jain, after successfully completing LLB (1956)

My religion, my simple middle class agrarian background, have ingrained in me values which guided me by instinct to do good for others and wait for a little while for something good to happen. I have never been disappointed!



Bhau with his wife Kantabai, he credited her for all his successes & accomplishments in life. Here they are seen sharing some happy moments at Jain Hills (1994). She passed away on 6th September 2005

# The Beginning

Bhau was born in farming family in Wakod village of Jalgaon district of Maharashtra on 12th December, 1937. Despite hardships, he remained optimistic till the very end of his eventful life. Bhau's impressive rise from a student struggling to read under the only lamp in the village square, to spurning a government job and starting his own small business of selling kerosene on a bicycle, is now part of a legend.

His journey was never smooth, but adversity was his great teacher. He failed in his initial attempts at entrepreneurship, but never lost hope. He learnt from his mistakes, adapted to changing business realities and evolved with time. But throughout his journey, he was guided by his vision to bring real and fundamental differences in the lives of farmers and the community. He took challenges in his stride and founded the world's second largest drip irrigation company, Jain Irrigation Systems Ltd. (JISL).

## Global recognition

Bhau won 51 national and international awards in his lifetime. In 2007, Bhau was conferred the prestigious UNESCO West-Net 'Water Conserver of India' award by the Honourable Union Minister of Water Resources, Professor Saif-Ud-Din Soz. The award ceremony, held in Delhi, was attended by eminent delegates from the World Bank, UNICEF, UNESCO, Central Water Commission and TERI.

In 2008, Bhau was awarded the Padma Shri, one of India's highest civilian awards by the Government of

India for services in the Science & Technology sector - agriculture science and water technology.

The North Maharashtra University awarded him the degree of Doctor of Letters (Honoris Causa) for 'Remarkable achievements in the field of agriculture, industry and social work'.

Maharana Pratap University of Agriculture and Technology, Rajasthan awarded him the degree of Doctor of Science (Honoris Causa) for distinguished services to the nation by putting up research projects and drip irrigation projects, benefiting millions of people.

Konkan Krishi Vidhyapeeth, Maharashtra also bestowed on him the degree of Doctor of Science (Honoris Causa) for 'Significant Contribution in the field of Agriculture, Horticulture, Micro-irrigation & Water Conservation'.

In 2012, Jain Irrigation Systems Ltd., was awarded 'The Good Company Award' by Forbes for changing the lives of millions of farmers with its modern drip irrigation systems.

He also received the Crawford Reid Memorial Award for promoting proper irrigation techniques, which has been given to only two Asians till date. This remains the most significant, and also the first major recognition on an international platform.



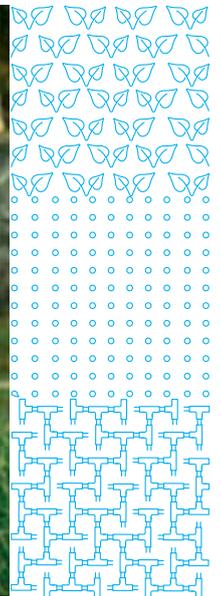
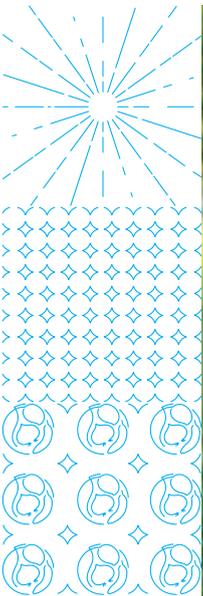
Founder's inspiration  
Mother Gaurabai Jain      Father Hiralal Jain



Founding members who joined Bhau from 1963-65. Seen from L to R: Kantilal Jain, Shivraj Jain, Girdharilal Oswal, Bansilal Jain, Dalichand Oswal (2008)



Bhau explaining Hybrid cotton production (H4) at Wakod farm to Honourable Minister K. M. Patil, GoM (1975)



Bhau displaying onions grown at Jain Hills and watered by Jain Sprinklers (2015)

All my life, my activities have been focused on serving the farm and the farmers. Having a natural empathy for the tiller of the soil, I reached out and focused on ways and means to improve their agricultural inputs for higher productivity.



Bhau interacting with a group of farmers across generation at Jain Hills (2004)

# Empathy for the Tiller

Yes, that was his overriding philosophy of life, whatever be the consequences. One particular year, Jain Irrigation's margins were under pressure, but Bhau would not relent. In one Board meeting, he surprised everybody by leading a discussion on whether the Company should cut its margins, so that the farmer could benefit more.

His contribution to India's agriculture is legendary. He introduced the concept of drip irrigation in India in 1989. Farmers, by using drip irrigation today, are not only saving water, but also are improving productivity and the soil, so that the same land can provide them better yields for decades to come.

Introduced in Jalgaon in 1989 in Maharashtra, drip irrigation replaces the wasteful practice of flood irrigation where fields are inundated with water to grow crops. In drip irrigation, water is allowed to drip slowly from the soil's surface to the root of the plant, aiding what we call 'precision agriculture', optimising the balance of water, energy and fertilisers to enhance output. This immensely improves the water use efficiency which in today's difficult times is invaluable. His consistent efforts to upgrade drip irrigation systems as well as other technologies strengthened JISL's reputation across the world. Today, JISL has become the preferred choice for irrigation solutions. At JISL, we promote water security and food security with the slogan, 'More Crop Per Drop'.

To increase the income of farmers while attaining business growth, Bhau forayed into the food processing sector. The concept of contract farming which Bhau introduced turned out to be a successful venture for farmers and secured higher-than-market prices for them. This business model largely benefited the farming community.

In the arid region of Khandesh, Bhau's work on watershed management, rainwater harvesting and conservation is a significant milestone in the history of agriculture. Under his leadership was built the Kantai Dam on the Girna River near Jalgaon in Maharashtra. It is built as a public-private partnership and is a shining example of its kind. The spread of the water is 5.6 km from the weir. This storage structure is benefiting the surrounding 7-8 villages with populations ranging from 15,000-16,000. It ensures sustainable and secured supply of water for agriculture as well as for drinking purpose.

Bhau set up an Agri Institute at Jain Hills. The institute has a large number of agronomists and doctorates in the private sector, who train farmers across the world on latest farming methods. Besides, he established one of India's leading bio-tech labs that conducts research in various fields of agriculture. These institutions have been instrumental in making possible some of the most impactful agricultural advances like tissue culture banana, strawberry and pomegranate plantlets. Today, we are driving biotechnology initiatives, with a tissue culture capacity of 100 million tissue culture plantlets annually.



Bhau warmly greeting progressive onion farmer Dagaji Keshav Patil (2008)



Bhau operating coal boiler at Pipe Factory (1979)

What do you look for when you enter a particular business? You look for size, you look for growth prospects, you look for depth, you look for reach. Agriculture offers all of this. Agriculture is inherently a very absorbing profession.



Bhau explaining Drip Irrigation in India to John De-Paolo a collaborator (1989)



Bhau describing to Mr. & Mrs. Maier & Mr. Faver about Pipe Extrusion Machines at the Pipe Production Plant during their visit to the factory (1991)

# Enlightened Entrepreneur

Bhau showed the world that a globally acclaimed thought-leader in agriculture could be an astute entrepreneur as well. He passionately sought new avenues of value creation; and through his perseverance established a billion-dollar multinational corporation. His management style was also unique; he gave a patient ear to every stakeholder. He believed every voice needed to be heard.

He was always keen to foray into emerging businesses and adopt new technologies. He was particularly interested in those ventures that had a social impact and affected the disadvantaged sections of society.

At the same time, he never compromised on the quality of products. That is the reason why, even during adversities his customers and associates never deserted him.

He never entirely relied on data and charts to reach an important business decision. He listened to his inner voice to find answers. Bhau's efforts in the field of business have received recognitions from across the

world. A case study on JISL by the Harvard Business School is a part of their graduate programme. Forbes International USA hailed JISL as the only Indian company in the top 50 most influential companies of the world. Fortune hailed JISL as the only Indian Company in the top 51 companies worldwide, who change the world by Doing Well by Doing Good.



20 hp demo Solar Pump installation at Jain Valley being tested by the solar technical team (2010)



Bhau with his four sons, Atul, Anil, Ashok and Ajit at Kantai Dam (2014)

Entrepreneurship is not limited to business only. There can be social entrepreneurs and even political or spiritual entrepreneurs. Gandhiji was a political as well as spiritual entrepreneur. The practice of entrepreneurship can be applied to any discipline of human activity.



Bhau felicitating CM of Gujarat Narendra Modi at Jalgaon (2009)



Bhau with TC Lab associates - A unique feature of this lab is that it is entirely run by women associates as Bhau believed in empowerment of women (2008)

# Social Engineer

Bhau believed innovative ideas could bring societal change. His ideas were not restricted to the realms of business alone. He devoted a considerable amount of time to education and community upliftment. He focused on imparting value-based education to children. He thought opportunities for quality education should be available to every section of society. Bhau founded the Anubhuti English Medium School for underprivileged children. The school provides free education, books, wholesome meals and other necessities to hundreds of bright youngsters. He believed that the aim of education should not only be personal material advancement, but collective wellbeing.

Before starting Anubhuti English Medium School, he started Anubhuti International Residential English Medium School that follows modern teaching methods and curriculum. While providing international-quality education, it also retains relevant Indian customs and values that are appropriate in forming the character of the young generation learners.

Bhau also established the Gandhi Research Foundation (GRF), a monument in the memory of Mahatma Gandhi who greatly influenced his life. The

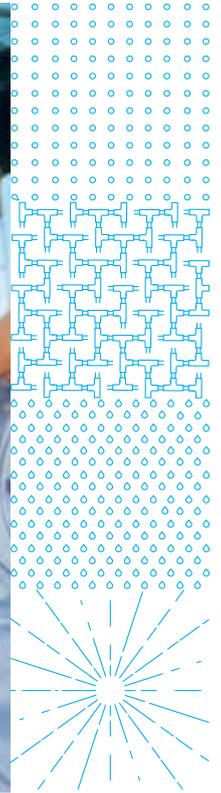
GRF is one of Bhau's significant contributions in the field of social enterprise. A thematic, state-of-the-art, interactive multimedia museum, the Gandhi Teerth, an extensive library, classrooms and state-of-the-art archives occupy a whole of 81,000 square feet and is located on 20 acres of orchards and landscaped gardens at Jain Hills, Jalgaon.



Bhau explaining to D. R. Mehta (Ex. Chairman SEBI and Independent Director in JISL) how terracing was done on the hilly slope to facilitate cultivation of mango and other fruits at Jain Hills (2002)

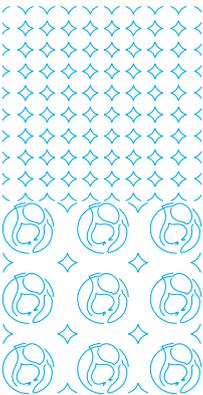


Bhau discussing with the villagers, the importance of water conservation during construction of 'Kantai Dam' on the Girna river, Jalgaon (2013)

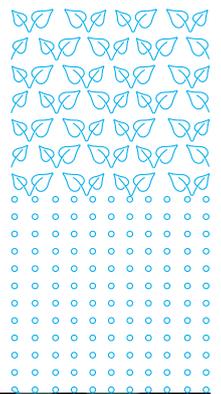


Bhau explaining future farming technologies to Former President of India and Bharat Ratna A. P. J. Abdul Kalam at Jain Tissue Culture Park, Takarkheda, Jalgaon during his visit (2014)

Environment and economic conditions are closely and inherently interwoven. No progress or economic development can be sustained without ecological and environmental regeneration.



Bhau along with Marathi Poet N. D. Mahanor, Dalichand Oswal, Dr. D. N. Kulkarni, G. R. Oswal displaying varieties of banana grown with tissue culture (2008)



Bhau explaining nursery grafting technique with Devendra Fadnavis, CM, Maharashtra State & Girish Mahajan, Irrigation Minister, GoM (2016)

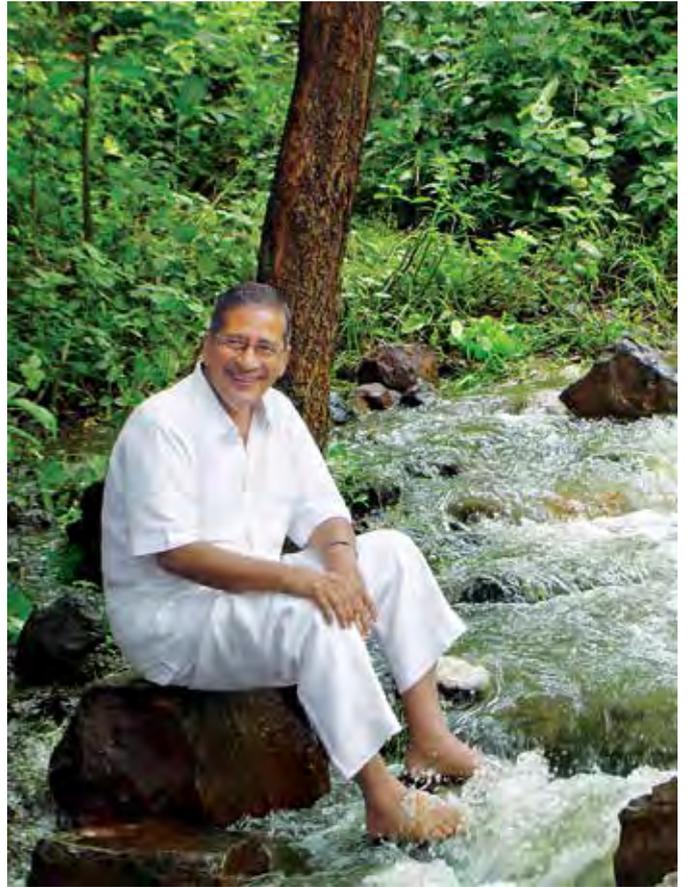
# Green Crusader

Bhau believed that we must endeavour to establish and maintain optimal, self-perpetuating and self-upgrading equilibrium between natural resources and human & animal life. This, according to him, was an essential precondition for sustainable human progress. He wholeheartedly supported initiatives to aid biodiversity and sustainable development. His work in the world of agriculture and water management reflects his concern for the environment.

Under Bhau's leadership, JISL diversified its product portfolio to include renewable energy solutions with solar photovoltaic (PV) modules to harness the sun's energy.

JISL also introduced a wide range of solar-powered devices, including water pumps, water heaters, street and home lighting. It also generates electricity and gas using biogas plants for running the school, GRF and some of the food processing plants.

Bhau also transformed Jain Hills and its environs into a fertile green paradise, planting millions of trees and energising the combat against climate change.

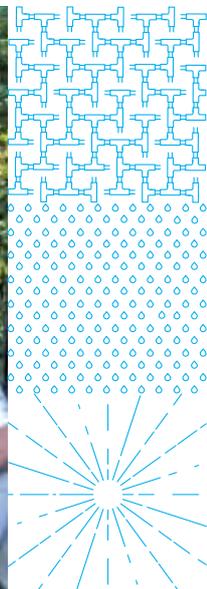


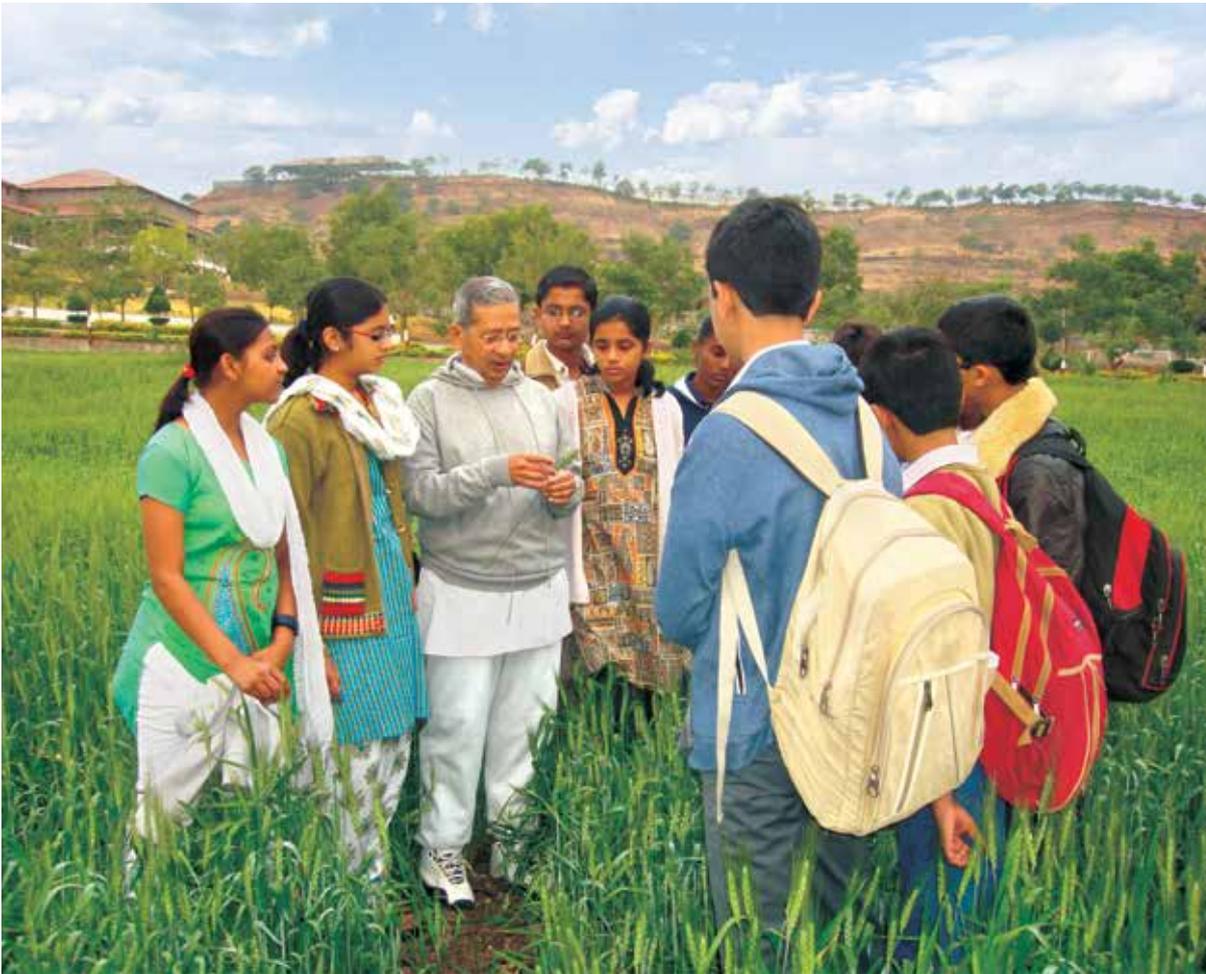
Bhau dedicated his life to water management and conservation. It was his vision which transformed this once barren landscape (Jain Hills) into an oasis of greenery.

Here he is enjoying the abundant water flowing from Jain Sagar (2003)



Bhau enjoying drip irrigated grapes in the company of Sharad Pawar (CM of Maharashtra State) and Sureshdada Jain (MLA) (1988)





Bhau explaining the symbiotic relationship of agriculture and life to Anubhuti school students during his Sunday interaction (2009)

I would like to tell the story of my humble work and experiences to the youth of today, who are on the verge of entering a practical world.



Bhau with Raghunath Mashelkar, former Director General of the Council of Scientific & Industrial Research and a Director of Gandhi Research Foundation (2013)



Bhau extolling the virtues of renewable energy to the next generation (2008)

# Man of Ideas

Bhau was a man of ideas and profound experience, which he passionately loved to share with the world. His rich knowledge and eloquence on various subjects made him a much sought after public speaker - nationally and internationally.

His anecdotes and stories enthralled, entertained and enchanted his audiences. During his last visit to the US, he gave an hour-long speech on his journey as an agricultural entrepreneur. This prompted Prof. Ray A. Goldberg, (George M. Moffett Professor of Agriculture and Business, Emeritus) to call him his brother. Later, the professor, along with other professors and the Dean of Harvard Business School visited Jalgaon with a delegation. Today, Harvard Business School uses JISL as a case study for their graduate programme.

Being a prolific writer, Bhau wrote several books in English and Marathi. His book, 'A Telling Tale' is based on his learnings and the experiments he conducted in watershed management. It can be useful for the general public as well as for students, because the subject is pertinent and the narrative is lucid. His book 'Aajchi Samaj Rachana' (Concept of Today's Social Constitution) on the ills of the social structure, written decades ago, is relevant even today. His books, 'An Entrepreneur Deciphered' and 'The Enlightened Entrepreneur' reflect his unique perspectives on business, society and the world around.

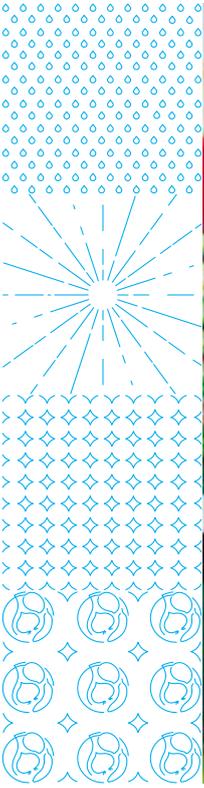
'Tee aani Mee', (She and Me) published in Marathi, Hindi and English is an autobiographical account of his life with his wife which gives an underlying message to society.



When two 'Watermen' come together the ripples can be felt at vast distances! Bhau brainstorming future of rivers in India with Shri Rajendra Singh (2014)

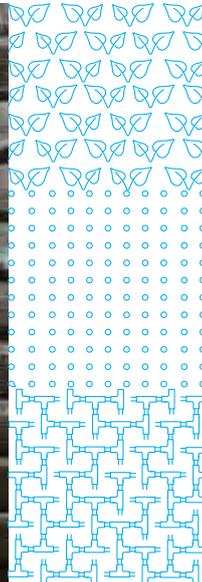


Bhau at the function to release his first book on societal reforms necessary in India to build a harmonious society (2001)



Bhau felicitating Prof. Emeritus Ray A. Goldberg, Agri Business (Harvard) at Jain Hills (2012)

The scientific world must realise that it is the industrious men who can commercialise their pioneering work and put it to good use. It is they who can unlock the applied value of science and create products that serve humanity.



The man who pioneered Drip Irrigation in India in a big way and made millions of small farmers happy and prosperous. Bhau believed "When farmers progress, Nations prosper." (2008)



Bhau was always exploring new frontiers. Here he is observing with keen interest the pomegranate TC plant in TC Lab (2013)

# Devotee of Science and Industry

In his writings, Bhau unequivocally proclaimed that industry is the vital link between the laboratory and the market. He thought that a scientific work, no matter how ingenious, can only gather dust if it is confined to the cupboards. Knowledge and know-how need entrepreneurial zeal and zest to transform them into tangible gains.

He looked upon research and development as the critical step to facilitate any commercial innovation. He often regretted the fact that the scientific community and businesses work in isolation and tried hard to bridge this gap.

Under Bhau's leadership, JISL focused on scientific techniques, innovation and technology to enhance its business value. JISL uses modern hi-tech irrigation systems and innovative technologies in order to save precious water and significantly improve crop yields, especially for small farmers.

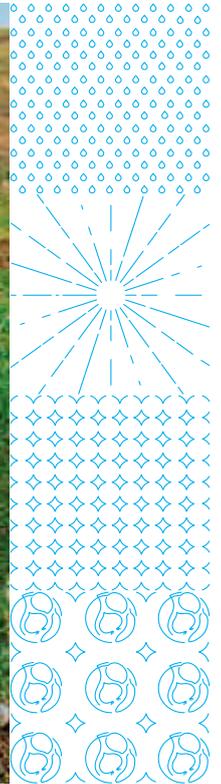
Jain Integrated Irrigation Solutions (JIS) can be adopted in canal command areas to enhance the efficiency of water use up to 85% vis-à-vis 40% in the conventional irrigation methods. This is based on the concept of bringing water from 'Reservoir to Root', which includes lifting water from the reservoir, creating a pipe distribution network, and optimising water utilisation, using advanced irrigation and automatic techniques.

Bhau trying the onion seed sowing machine developed with the help of Jain Technology (2010)



Bhau receiving Doctor of Science award from Pratibha Devisingh Patil, Chancellor, MPUAT & Governor, Rajasthan (2006)





Bhau tilled his farm in the traditional way before transforming it with technology (1999)

As a son of the soil, I dug wells, laid non-pressure cement pipelines for farm irrigation, later replaced the cement pipes with PVC pipes, constructed a farmhouse and cattle sheds. I produced hybrid cotton seeds, high yielding chillies, and also ushered in ratoon cropping for hybrid jowar. With this kind of first-hand feel and experience, I became part and parcel of the rural ethos; and, thus, rejuvenated and cemented my links with the farm, farmer and farming.



For Bhau 'Soil' was Mother of all life on this Earth (2008)



Bhau discussing utility of nuclear energy in agriculture with Dr. Anil Kakodkar (former chairman of the Atomic Energy Commission of India) at Jain Hills (2013)

# Son of the Soil

Bhau's tireless efforts to convert traditional agriculture to modern farming, closely acquainted him with the intricacies of farm operations and the psychology and environment of rural life. He quickly grasped the realities with his inherent farming instincts. His subsequent exposure to higher learning and the decade-long experience of trading in farm inputs further honed his skills and insight. Bhau's invaluable farming experience enabled him to lay the foundation of JISL, and transform the lives of millions of farmers globally. And it all started from his native district of Jalgaon.

His hi-tech irrigation techniques have created several millionaires in the parched region of Jalgaon. The water conservation activities and the smart usage of water to convert an arid hill into a green park hosting numerous demonstrative projects has earned Bhau another epithet, Krishi Pandhari (Protector of Agriculture) Bhau put Jalgaon on the global map. He helped uplift the region through demonstration farms;

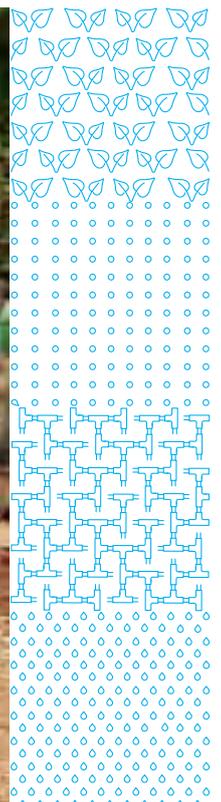
he brought agricultural prosperity in a dry area and introduced innovation in agriculture and horticulture.

His achievements have been recognised by the Government of Maharashtra and global institutions like UNESCO, IFC and others in the US.

While the efforts are felt across crops, his most notable success has been in micro propagation of tissues for enhancing bananas and reduction of the crop life cycle.

The research and consequent commercialisation of the tissue culture of banana has benefited farmers by improving production by over 100% and reducing the harvest cycle by 30%.

Sugarcane farmers, using drip irrigation, have seen their average yield more than double to around 60 tonnes per acre, compared to the country's average yield of around 25 tonnes per acre. There are a few farmers who are even reaping a yield of 100 tonnes per acre.

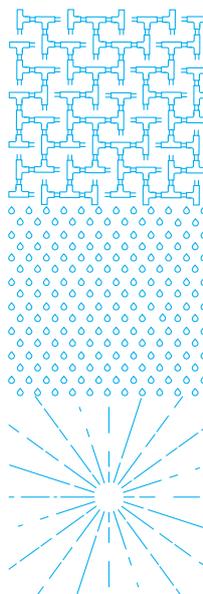


Visionary Bhumi Putra - A son of the soil who spent his lifetime nurturing 'Mother Earth' (2009)



Bhau believed in the potential of villages to become centres of sustainable growth (2009)

One of Gandhiji's primary thrusts was channelising of human intellect and talents towards social, cultural and environmental development.



Bhau was deeply influenced by the Gandhian philosophy of rural empowerment and developed technologies for the prosperity & dignity of small farmers (2015)

# Innovative Gandhian

Born into a Jain family, Bhau was well acquainted with the virtues of Ahimsa, Brahmacharya, Aparigraha and Anekant Siddhant (Concept of non-violence, celibacy, non-possessiveness and nothing is permanent). These virtues were further reinforced when he read about Gandhiji's philosophy of Sarvodaya and its inspiration 'Unto This Last' by John Ruskin. They helped him understand what great souls meant by 'non-violent living' or 'life based on truth'; that is 'the life of a tiller and craftsman is the life worth living'. By dedicating his life to agriculture, he became an ardent Sarvodaya practitioner in modern times.

His early orientation to morality and Gandhian philosophy helped Bhau lay an ethical foundation for his enterprise. Undeterred by the challenges that shook his business to its core, he pursued his business with steadfast ethical conviction and inspired thousands of associates, and small farm-holders around the world. Without compromising on his principles, he consciously refrained from any business that exploited scarce resources or the weaknesses of other human beings.

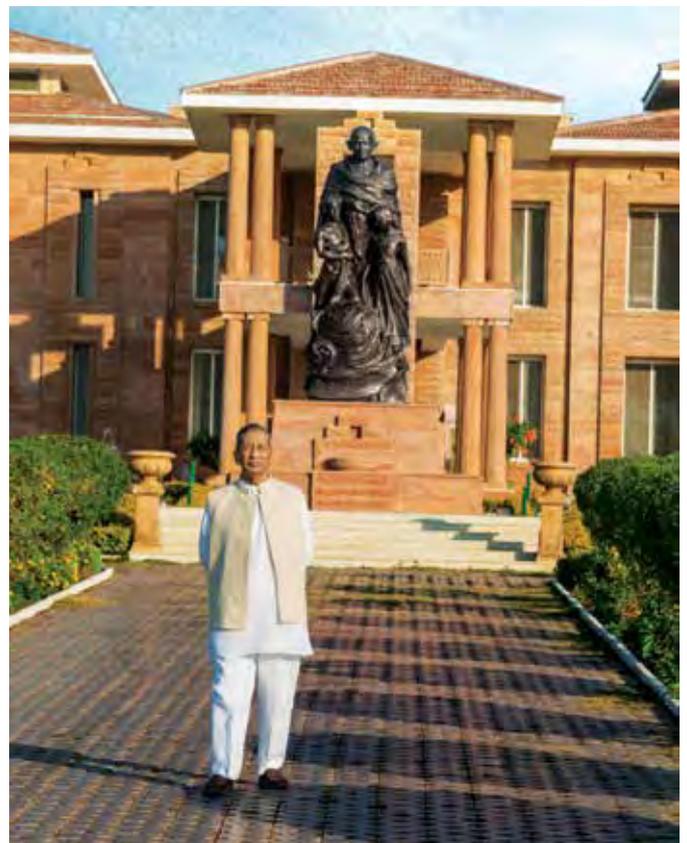
By promoting micro-irrigation, Bhau not only encouraged 'precision agriculture' and water conservation in the subcontinent, but offered a technology with a human face to millions of farmers. Bhau wanted to create something substantial, so that Gandhiji's life-work and his vision may be preserved for posterity. His vision transformed into a reality in the form of the Gandhi Research Foundation (GRF).

To help the children to grow with right orientation, Bhau wanted them to get acquainted with Gandhiji's life, work and thought. He initiated a programme called Gandhi Vichar Sanskar Pariksha (GVSP), with this purpose. Thanks to GVSP, over two hundred thousand

students get a chance to read Gandhiji's literature every year, throughout the country.



Bhau receiving Gandhi-Ambedkar award from Justice Chandrashekhar Dharmadhikari, for his *pioneering efforts in social transformation and effectively proving that business and social cause can co-exist* (2003)



Bhau standing before "Father of Nation" whose ideas are so relevant to build the India of Tomorrow (2014)



Nation Honours our Founder Chairman with 'Padma Shri' for services in the science & technology sector – agriculture science and water technology. Bhavarlal H. Jain, Founder of Jain Irrigation Systems Ltd., receiving the 'Padma Shri' one of India's highest civilian awards from the President of India Pratibha Devisingh Patil (2008)

Taking  
forward the  
legacy of our  
beloved Bhau

*“Enterprise instead of Money,  
Hard work instead of Wealth  
and Responsibility instead of Glory.”*

# Jain Irrigation - Committed to Create a Difference

Jain Irrigation Systems Limited (JISL) is a multinational organisation of Indian origin operating across multiple businesses. We are into the businesses of drip and sprinkler irrigation systems, PVC & PE piping systems, tissue culture, green houses, bio-fertilisers and solar products. We also manufacture aseptic fruit purees and concentrates, frozen fruits and dehydrated vegetables.

We have pioneered a revolution with modern irrigation systems and innovative technologies using cutting-edge research and development. Our aim is to save precious water and energy, while at the same time enhance crop yields, using global agronomical knowledge to benefit millions of small as well as large farmers.

We have also ushered in a new concept of large scale Integrated Irrigation Projects and 24x7 water supply projects. 'More Crop Per Drop' is our approach to water security and food security.

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, along with unwavering focus on the growth of agriculture, resulting in higher income for farmers.



**More  
Crop  
per  
Drop®**



# Corporate Philosophy



## Our Vision

Establish leadership in whatever we do at home and abroad.

Our Mission Leave this world better than you found it.

## Our Credo

- Serve and strive through strain and stress
- Do our noblest, that's success

## Our Goal

Achieve continued growth through sustained innovation for total customer satisfaction and fair return to all other stakeholders. Meet this objective by producing quality products at optimum cost and marketing them at reasonable prices.

## Our Guiding Principle

'Toil and sweat' to manage our resources (men, material and money) in an integrated, efficient, economic and sustained manner. Earn profit, keeping in view commitment to society and environmental.

## Our Quality Perspective

Make quality a way of life.

## Our Work Culture

Experience: Work is life, life is work.

## Our Guidelines

### Customer and Market

- Commit to total customer satisfaction.
- Build and maintain market leadership.

### Quality excellence

Strive continually to reach and maintain quality in every aspect.

### Safety and health

Secure safety and health of associates and other assets.

### Environment and society

- Protect, improve and develop environment.
- Cherish the symbiosis and nurture creative partnership between the society and environment.

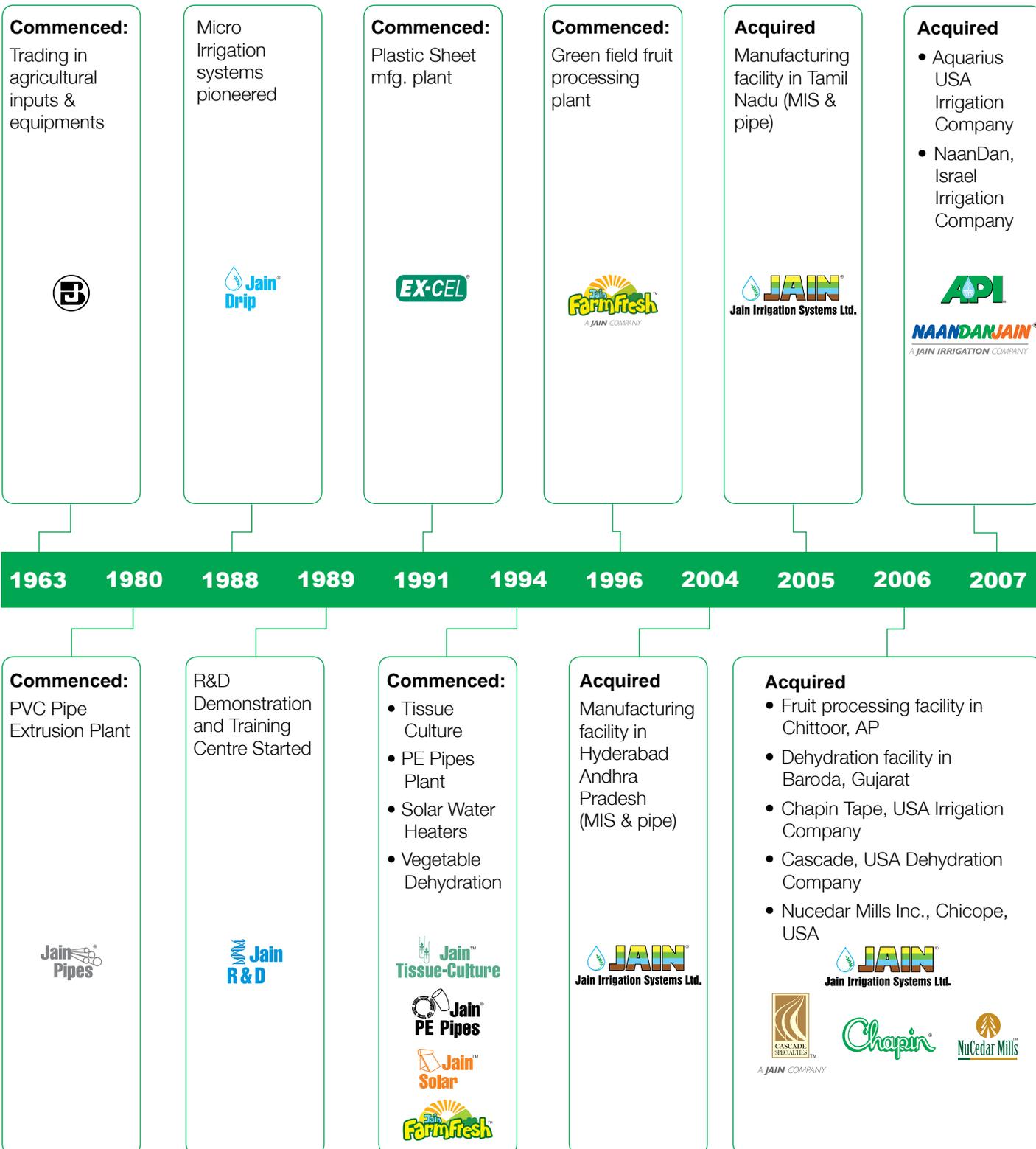
### Development of other stakeholders

Adopt transparency and fair practices for continuous sustainable growth.

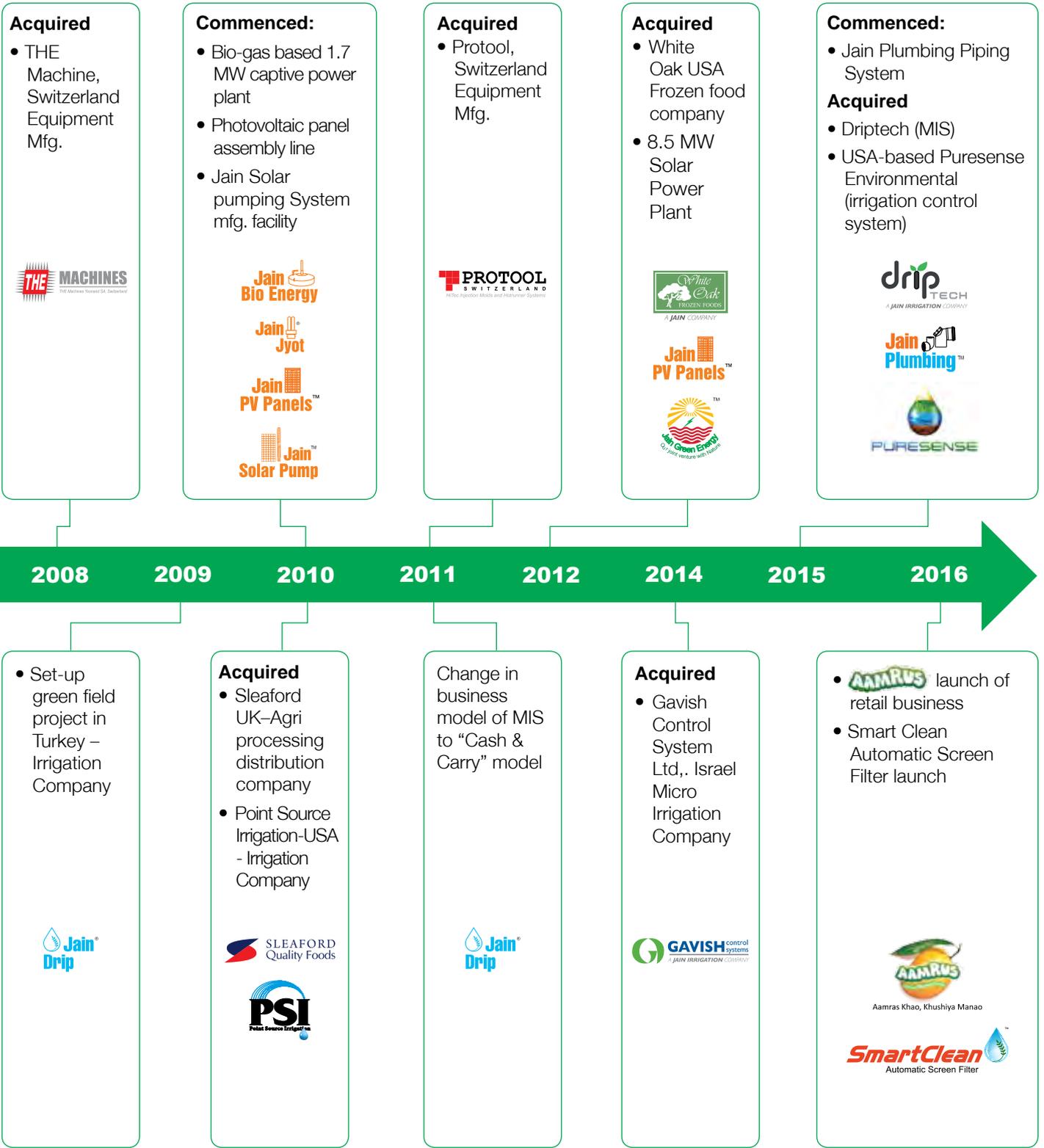
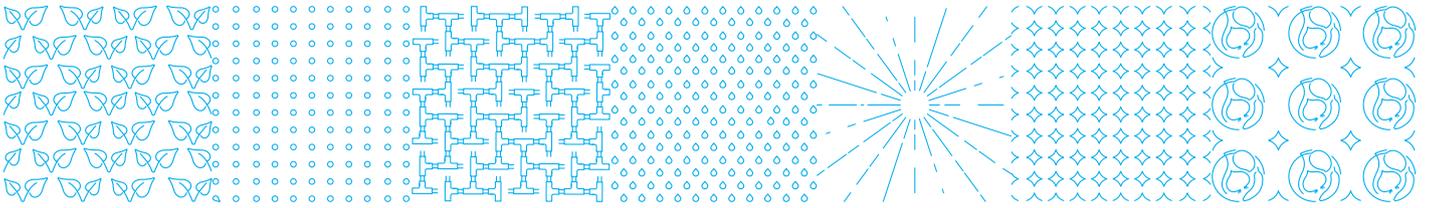
**Small Ideas. Big Revolutions.®**



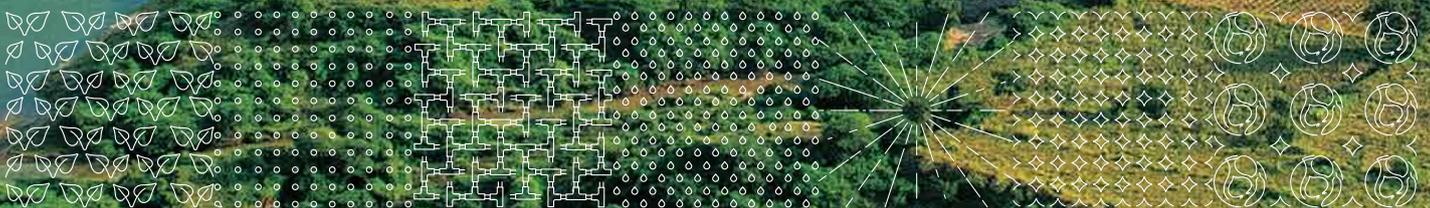
# History and key milestones



Demonstrated strategy for growth by gaining technology, newer markets & newer products



# Defining Jain Irrigation



# 1963

Started our trading business in agricultural inputs and equipment

# ₹ 64<sub>+bn</sub>

Aggregate revenues as on 31st March, 2016

# 5.2<sub>mn</sub>

Farmer lives have been touched

# 30<sub>+ years</sub>

Rich industry experience in creating sustainable value for stakeholders

# ₹ 40,333<sub>mn</sub>

Market capitalisation as on 28th August, 2016

# 10,500<sub>+</sub>

Associates globally

# No.1

In mango processing globally

# No.1

In tissue culture production of banana and pomegranate globally

# No.1

Manufacturer of plastic pipes in India, covering a wide range of pipes and fittings

# No.1

In solar Agriculture Pump globally

# No.2

Largest microirrigation company globally

# No.3

In onion and vegetable dehydration globally

# 10

Line of businesses across irrigation systems, piping systems, PVC sheets, food processing, tissue culture and renewable energy among others

# 30

Manufacturing plants across the globe

# 120<sub>+</sub>

Countries reached through our products

# 8626<sub>+</sub>

Dealers and distributors base globally

# Proud Moment

## Jain & MIT win global innovation Award



Jain Irrigation Systems Ltd. in partnership with Massachusetts Institute of Technology (MIT), USA has developed a path-breaking solar PV based water purification technology. This new technology is based on Electro-dialysis-Reversal principle. The environment friendly system is powered by solar PV. It desalinates the brackish water into drinking quality water with least regeneration or wastage. Jain Irrigation and MIT has bagged prestigious Desal prize for this technology. Desal Prize competition was organised by The U.S. Agency for International Development (USAID) and the Bureau of Reclamation (USBR), in partnership with the Swedish International Development Cooperation Agency, the Ministry of Foreign Affairs of the Kingdom of The Netherlands. JISL and MIT stood first and won a prize of USD 140,000. The purpose of the prize is to 'secure water for food' by creating cost efficient and energy efficient technologies for potable water and water for crop. USAID chose five finalists

among 68 projects from 29 countries. Five finalist innovator teams competed for prize funds in head-to-head demonstrations at the Bureau of Reclamation's Brackish Groundwater National Desalination Research Facility in Alamogordo, N.M. After rigorous testing and evaluation by a panel of expert judges, two winning teams were chosen and we were honoured with the first place in it. These two teams, and a team that received an honourable mention, will be eligible to receive grant funds totalling \$400,000 to implement pilot projects in late summer or early fall with small-holder rural farmers in a USAID mission region. We look forward to commercialize the technology in the near future to provide access of drinking water in the world even at remote areas at very cheap rates. At Jains, we are committed to address water challenges being faced by India and other nations and will continue to inspire innovation to bring affordable and sustainable solutions for the benefit of citizens and farmers alike.



# Proud Moment



**FORTUNE**

'Change the World'

**First ever listing of 51 companies that have addressed the world's biggest social & environmental problems**

**Jain Irrigation Systems, the only Company from India, is ranked No.7**

Jain has built its business by improving the livelihoods of 5 million small farmers in India. Based in the country's western Maharashtra state, Jain began selling micro-irrigation systems in 1986, when it recognized that the technology, commonly used in industrial agriculture, could be adapted for local growers, whose tiny land holdings were traditionally watered by rain or blunt flooding techniques. As Jain's "More crop per drop" slogan promised, yield increased dramatically – 50% to 300%, depending on the plant – as did farmers' incomes. And Jain continues to boost

in other ways as well: It has introduced more-viable crop varieties and trained farmers on more productive growing techniques, such as high-density planting for mangoes. The company also branched into solar water pumps (electricity is often scarce on the farm), financing, and food processing – for the likes of Coca-Cola and Unilever – so that there is a ready market for these farmers' wares. The Company, the world's second-largest seller of drip irrigation systems, now does business in 116 countries.

– Fortune.com, August 20, 2015

**An inspiring and humbling moment in our cherished 52 year journey.**

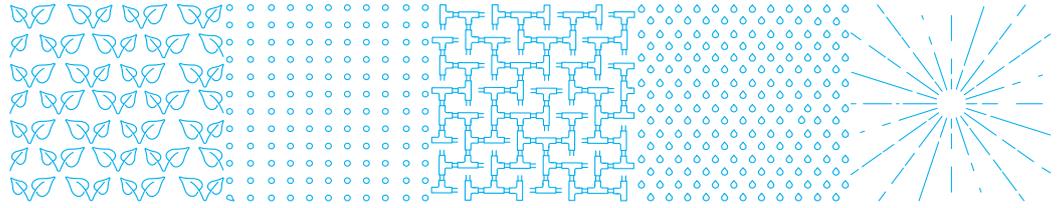
**Doing Well By Doing Good**



# Board of Directors



**Dr. Bhavarlal H. Jain** (1937-2016)  
Founder & Chairman till 25th Feb. 2016



**Ashok Bhavarlal Jain**  
Chairman

He joined the management team in 1982. Over a long period of 34 years he has nurtured all business divisions of the company and is responsible for future direction.



**Anil Bhavarlal Jain**  
Vice Chairman & Managing Director

He joined the management team in 1984. He has extensive experience in Finance, Strategic Planning, M&A, Global operations and is responsible for entire business.



**Ajit Bhavarlal Jain**  
Joint Managing Director

He joined the management team in 1984. He is director in charge of micro irrigation division including guidance for extension service and development of new applications and products.



**Atul Bhavarlal Jain**  
Joint Managing Director

He joined the management team in 1990. He is director in charge of fast growing plastic product division and has extensively done global and institutional sales and marketing for all business divisions of the company.



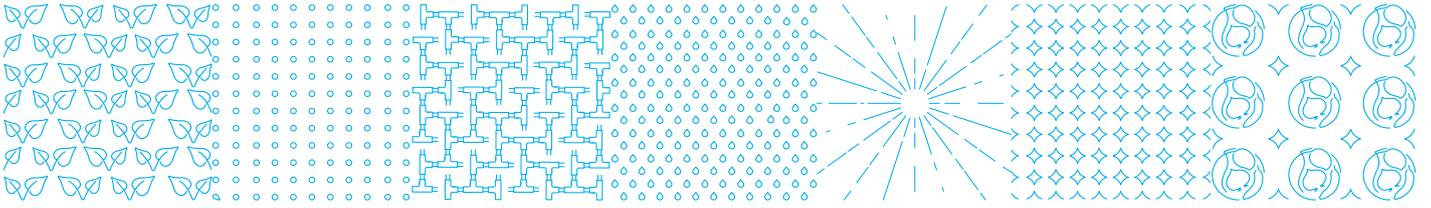
**R. Swaminathan**  
Executive Director

He joined the Jain Group in 1982 and was appointed a whole-time Director in 1996. Looking after plastic manufacturing operations and is responsible for major innovations & breakthroughs.



**Devendra Raj Mehta**  
Independent Director

He was appointed as Independent Director in 2007. He was the Chairman of Securities and Exchange Board of India (SEBI), Deputy Governor of RBI, Director General of Foreign Trade, Ministry of Commerce. He has received Padma Bhushan & is founder of 'Jaipur Foot'.



**Vasant V. Warty**  
Independent Director

He was appointed as Independent Director (Additional Director) in 2004. Has held various senior positions in domestic and international Banking in State Bank of India.



**Ghanshyam Dass**  
Independent Director

He was appointed as Independent Director in 2009. He has had an outstanding career in domestic, international banking and Capital Markets for over 34 years.



**Radhika Pereira**  
Independent Director

She was appointed as Independent Director in 2005. Currently, she is a Partner in Amarchand Mangaldas & has strong practice in corporate and contract laws



**Harishchandra Prasad Singh**  
Independent Director

He was appointed as Independent Director in 2014. He is a prime mover for horticulture research and development in India and is an architect of the Golden Revolution (Horticulture). Has held senior government & academic positions.



**Manoj Lodha**  
Chief Financial Officer

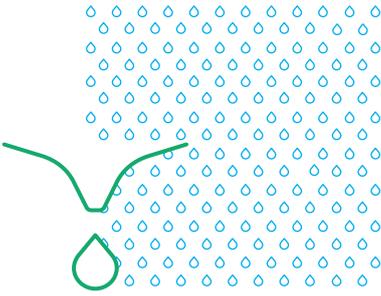
He joined the management team in 1998. A chartered accountant by qualification, he has extensive expertise in raising of funds, corporate structuring, accounts, audit & taxation in India and at a global level.



**Avdhut V. Ghodgaonkar**  
Company Secretary &  
Chief Compliance Officer

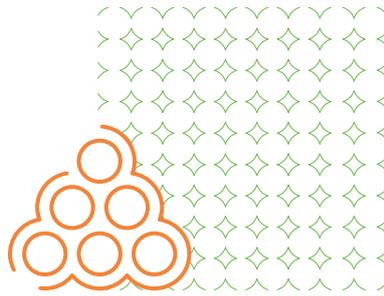
He joined the management team in 1992. A company secretary by qualification, he has extensive expertise in compliance issue, SEBI & Stock exchange matters and general legal and company law.

# Our Offerings



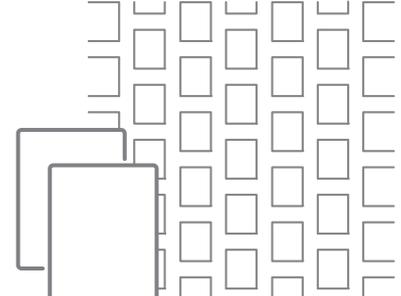
## Drip Irrigation Systems

We offer bespoke, efficient and long-life drip irrigation systems, which ensure water saving, early maturity and a bountiful harvest, season after season, year after year. Besides, this system saves labour and fertiliser costs.



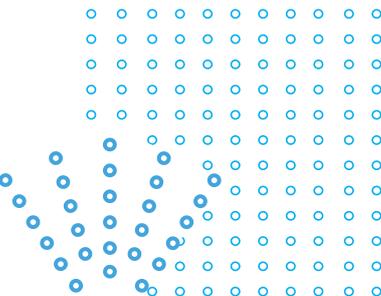
## PVC Pipes & Fittings

We offer a wide range of PVC pipes and fittings in various materials, catering to multiple requirements.



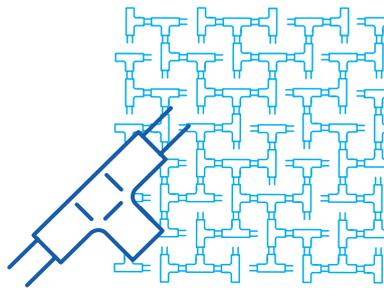
## Plastic Products

We are one of the largest polymer processors in India. We offer uPVC, PE and PC, along with engineering polymers like polypropylene, polystyrene, polyacetal and nylon, among others.



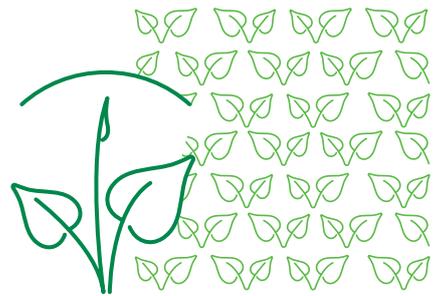
## Sprinkler Irrigation Systems

We offer unique sprinkler irrigation systems, designed to ensure maximum water saving, combining high quality, affordability and ease of installation.



## Plumbing Systems

Our plumbing pipes and fitting systems offer multiple solutions to plumbing requirements. The products are manufactured from 100% virgin raw material – they are durable and reasonable in price with unmatched quality standards.



## Protected Cultivation

We offer a suitably designed and economically-viable system to growers, which protects their crop at certain limits. It distributes a measured quantity of water at the root zone of each plant at regular intervals. This ensures that the plants do not suffer from stress or strain of less or over watering and different climatic conditions.

## Our products meet exacting global quality standards

### ISO 9001: 2008 (Quality Management System)

- Sheet Division
- MIS Division
- Pipe Division
- Solar Division
- Tissue Culture Division
- Plastic Pipe & Fittings
- Precision Farming System



Quality is way of Life  
Jalgaon, Gandhinagar-392021,  
ISO 14001 & ISO 22000:2005 Certified Company

### ISO 14001:2004 (Environment Management System) OHSAS 18001:2007 (Occupational Health & Safety Management System)

- Onion & Vegetable Dehydration Division
- Fruit Processing Division
- MIS Division
- Pipe Division
- Sheet Division



Quality is way of Life  
Jalgaon, Gandhinagar-392021,  
ISO 14001 & ISO 22000:2005 Certified Company

### ISO 22000:2005 (Food Safety Management System) & Kosher

- Onion & Vegetable Dehydration Division
- Fruit Processing Division

### GLOBALGAP

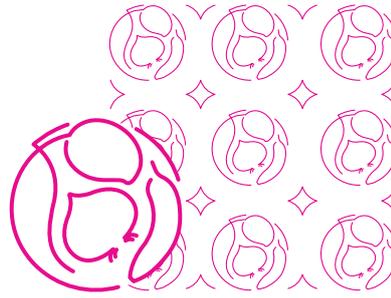
- Agriculture Division

**GLOBALG.A.P.**



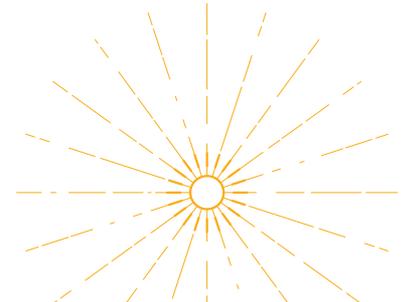
### Tissue Culture

We supply 'tissue culture planting material' in India; and we have one of the world's biggest laboratories for bananas, pomegranates and strawberries.



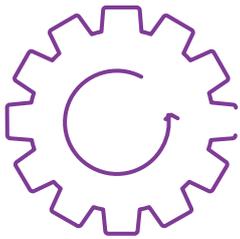
### Food Processing

Under our brand, Jain Farm Fresh, we offer dehydrated onion and vegetable products, aseptic fruit purees, concentrates, clarified juices, individually quick frozen (IQF) and frozen products of finest quality. We also provide retail FMCG food products.



### Renewable Energy

We offer solar and bio-energy related products, and are also developing specialised applications.



### Turnkey Solutions and Project Execution

We offer complete services for Polyethylene (PE) and PVC piping systems on a turnkey basis, which include site survey, design, selection of material, supply, installation, testing, commissioning and training.



### Services

We offer services for our entire product range in the most economical way, adhering to time schedules. We are supported by a large pool of experienced engineers and agronomists, who help meet customer needs.

#### SGF (SURE-GLOBAL-FAIR)

- Fruit Processing Division



#### GMA SAFE (Grocery Manufacturers' Association - Supplier Assessments for Food Excellence)

- Onion & Vegetable Dehydration Division



#### NABL (National Accreditation Board for Testing and Calibration Laboratories)

- Jain R&D



#### BRC (British Retail Consortium)

- Onion & Vegetable Dehydration Division



#### HALAL (Majelis Ulama Indonesia LPPOM MUI)

- Onion & Vegetable Dehydration Division
- Fruit Processing Division



# Jain Unive

Sun never sets on our efforts



### India Operations

Corporate Offices  
 Plants  
 Offices  
 Depots

Plants	12
Offices	81
Depots	39
Dealers	6,526+

**30**

Manufacturing plants across the globe

**120+**

Countries reached through our products

# rse for farmers

Cascade Specialties Inc., USA  
 Jain Irrigation Holding, Inc., USA  
 Jain America Foods Inc., USA  
 Jain Agricultural Services, USA  
 Jain Irrigation Inc., Delaware  
 Jain America Holdings Inc., Delaware  
 JIIO, California, USA  
 NaanDan Jain Mexico, S. A. De C. V. Mexico  
 Point Source Irrigation Inc, USA

Arnolds Quick Dried Foods Ltd., UK  
 Ex-cel Plastics Ltd, Ireland  
 Jain (Europe) Ltd, UK  
 Jain International Foods Limited (Erstwhile SQF 2009 Ltd), UK  
 JISL Global SA, Switzerland  
 Jain Sulama Sistemleri Sanayi Ve Ticaret Anonim Sirkti, Turkey  
 JISL Systems SA  
 Jain International Trading BV, Netherland  
 Jain (Israel) BV, Netherland  
 Jain Overseas B. V., Netherland  
 NaanDan Jain France Sarl, France  
 NaanDan Jain S. R. L., Italy  
 NaanDan Jain Iberica S. C., Spain  
 NaanDan Jain Irrigation Projects S. R. L., Romania  
 Pro Tool AG, Switzerland  
 Sleaford Food Group Ltd., UK  
 Sleaford Quality Foods Ltd., UK  
 THE Machines SA



## Global Operations

Corporate Offices Plants Warehouses & Sales Offices

Plants	18
Warehouses	23
Distributors	2,100+

Note: Map not to the scale.

# New Initiatives

## Global Acclamation

JISL partnered with MIT USA to develop groundbreaking solar PV-based water purification technology. JISL and MIT participated in a prestigious global competition, Desal Prize, winning the first prize (US\$ 140,000). The competition was organised by the U.S. Agency for International Development (USAID) and the Bureau of Reclamation (USBR), in partnership with the Swedish International Development Cooperation Agency, the Ministry of Foreign Affairs of the Kingdom of the Netherlands. The award aims to 'secure water for food' by creating cost-efficient and energy-efficient technologies for potable water and water for crop.

## Model for Rural Upliftment

Individual Quick Frozen (IQF) and Block Frozen Food (BQF) Plant was inaugurated by the Chief Minister of Maharashtra, Mr. Devendra Fadnavis. While inaugurating the new IQF Plant of fruits and vegetables in the Food Division of JISL, the CM praised the contributions of our Founder Chairman, Mr. Bhavarlal Jain, towards strengthening India's agriculture and rural wellbeing.

## Wide-ranging Collaborations

JISL and the Robert B. Daugherty Water for Food Institute at the University of Nebraska announced a joint international research and education partnership. The cooperation will provide new funding for the faculty, graduate students and post-doctoral research scholars of the University of Nebraska to collaborate closely with JISL's scientists on critical water and food security issues.

JISL and Tata Trusts signed an MoU to develop end-to-end value chains for agricultural products, converge best agricultural technologies to scale-up precision farming systems, improve and enhance irrigation efficiencies through micro-irrigation, improve the availability of water through collective irrigation systems and promote ecologically and economically sustainable farming.

## Make in India

Indigenous 'Crazy Mantra Group' felicitated JISL by bestowing the 'Make in India' award for adopting indigenous technology in the field of agriculture and biotechnology.

## Distinguished Projects

JISL bagged the Maharashtra State Electricity Distribution Co. Ltd's (MSEDCL) most awaited tender for the supply and installation of 8,959 solar agri-pumps. This was the first pilot phase of the world's biggest solar agri-pump project for 500,000 pumps launched by the Government of Maharashtra.

JISL was also awarded the US\$ 32.98 million contract by DAR ES SALAAM Water and Sewerage Authority (DAWASA), Tanzania for the installation of water distribution network in DAR ES SALAAM, Tanzania. A project agreement was signed between Hindustan Coca-Cola Beverages Pvt. Ltd., a subsidiary of The Coca-Cola Company in India, the state government and JISL to set up a juice manufacturing facility in Morshi. This orange 'Unnati' project aims to uplift farmers and support them in the cultivation of Indian orange with the adoption of Ultra High Density Plantation (UHDP) technique to increase yield.

## Strengthening Balance Sheet

JISL along with Jain Farm Fresh Foods Limited (JFFFL), the newly-formed, wholly-owned subsidiary of JISL, raised an equity of approximately US\$ 120 million. The primary purpose is to strengthen JISL's balance sheet, while providing growth capital to JFFFL.



R&D, Demonstration and Training Centre, Tissue Culture Lab and Agri Bio-Tech Lab : Jain Agri Park, Jain Hills, Jalgaon, Maharashtra (India) (2013)

## International Recognition

The University of Nebraska and the Robert B. Daugherty Water for Food Institute honoured our beloved Bhau for his lifetime achievements. The University has named their research project, 'Bhavarlal Hiralal Jain- University of Nebraska Water for Food

Collaborative Programme' to honour Bhau's pioneering efforts to start a new green revolution through effective research and sustainable use of natural resources.



A micro climate is created with modern drip technique to nurture TC plants (2013)

A mandate to help create a better world

# Touching Farmers, Transforming Lives

At JISL, we provide farmers with holistic farming solutions. These solutions comprise water, micro irrigation systems, pipes, tissue culture, renewable energy-based products and appliances, food processing and other agro-technologies and technical advice for sustainable agriculture and food chain development.

We are a leading agri-business Company, present in the entire value chain. Our comprehensive solutions bring farmers additional yields and returns, so that they can invest in quality extension services.

Prior to any sale of asset or input, our in-house field experts assess soil quality and climatic conditions to guide their purchases. Subsequently, we provide farmers with continuous support and training. We also provide financing solutions through partner banks and an in-house financial institution.

Finally, we have developed a contract farming model, offering a minimum price guarantee to farmers, so that it creates significant markets for the additional crops they produce. This approach creates more value for farmers, while at the same time we reduce operational costs by bundling offerings (inputs, equipment, financing, sourcing), and generate multiple revenue streams from the same farmers.

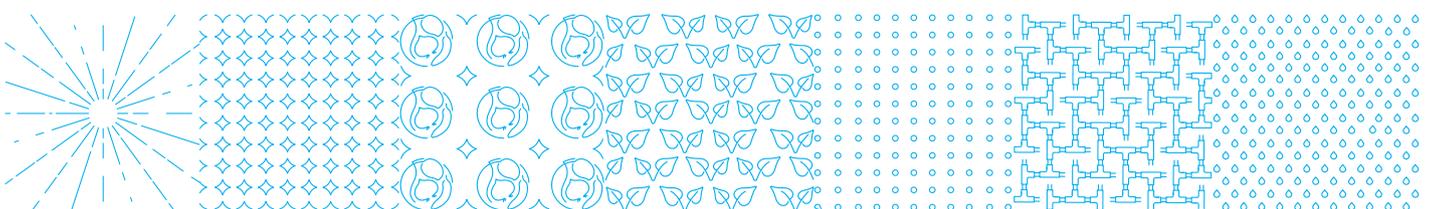
We have 500+ agronomists and 500+ irrigation engineers in the field to answer any queries from our 200,000 yearly clients, as well as from the over 4 million farmers we have served since 1988.

We advocate following a self sustaining agricultural

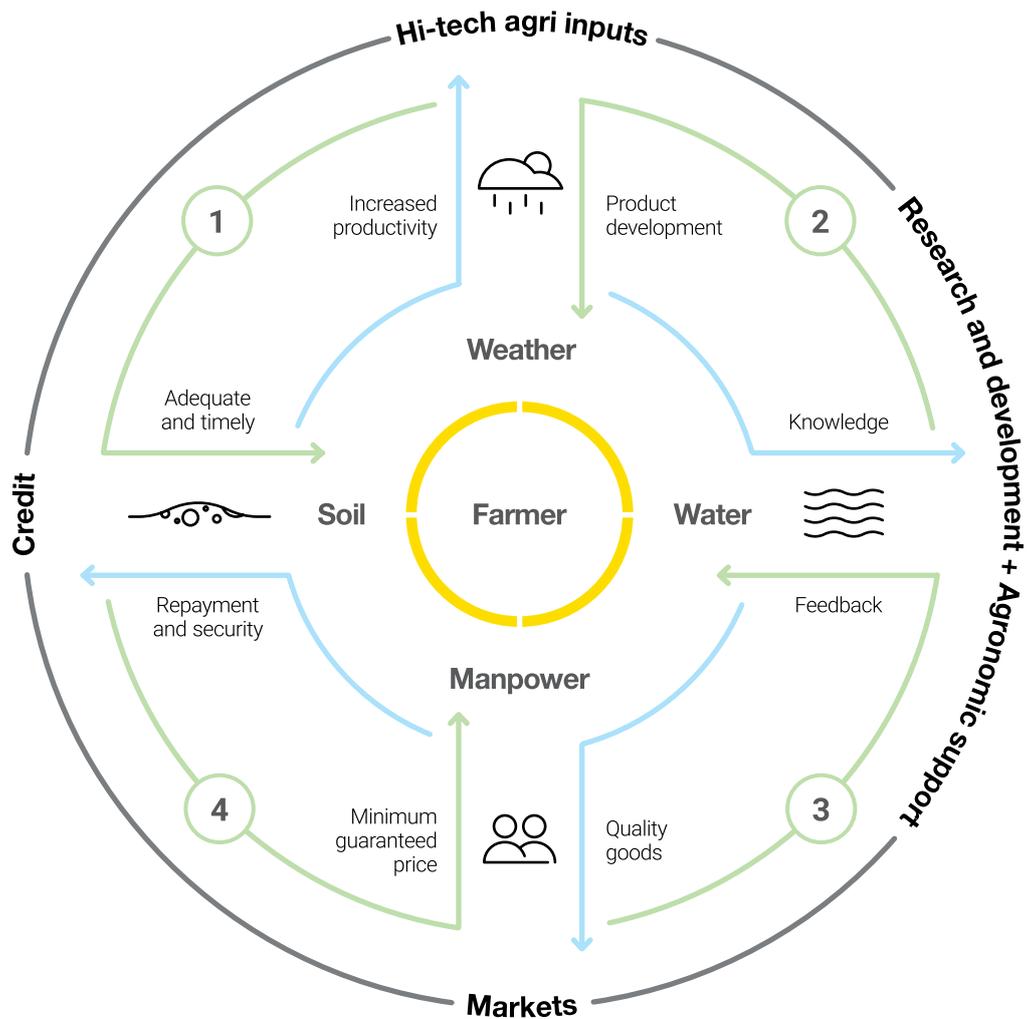
cycle. Such a virtuous cycle increases farm production and productivity, enhances farmer income, reduces cost of cultivation, protects the environment and biodiversity and develops sustainable natural resources. The outcome is a replicable, scalable and sustainable model of agriculture and socio-economic wellbeing.

Moreover, we have developed with International Finance Corporation (IFC), the Jain GAP standards for our farmer suppliers, who supply fruits for processing. It helps the Company meet its buyers' concerns without significantly increasing costs for low-income farmers. GLOBALGAP is an internationally recognised set of farm standards dedicated to good agricultural practices or GAP. Under GLOBALGAP, farmers adopt safe and sustainable farm practices and use the prescribed quantity of water, fertilisers, pesticides and other inputs for their produce.

At JISL, we train farmers and help them adapt to these norms and get the certification, which helps them sell their produce to global buyers. Currently, farms of around 3,000 farmers who are providing mangoes, bananas and onions to us are GLOBALGAP certified.



## Value Creation Model



1

### Conservation of resources.

#### Sustainable environment.

- Watershed planning
- Water harvesting
- Water/Energy saving
- Water resource design
- Waste land reclamation

2

### Enhanced productivity.

#### Cost savings.

- Drip and Sprinkler Irrigation
- Tissue culture plants
- Green houses
- PVC piping systems
- HDPE piping systems
- Solar pumps

3

### Improved product quality.

#### Value added.

- Turnkey Projects
- Agro-consulting
- Agronomy services
- Surveys and analysis
- Irrigation scheduling
- Fertigation scheduling
- Training and capacity building

4

### More investments.

#### More profits.

- Contract farming
- Dehydrated onions and vegetables
- Processed fruits

# Micro-Irrigation Systems (MIS)

Micro-irrigation is defined as the frequent application of small quantities of water directly above and below the soil surface; usually as discrete drops, continuous drops or tiny streams through emitters placed along a water delivery line. We are the largest manufacturers of MIS in India and second largest globally.

Drip irrigation is a method that allows water to emit slowly and directly to the roots of plants through a network of filters, piping, valves, tubing and emitters/drippers. This method saves water and fertilisers. At Jain Irrigation, our totally customised, efficient and enduring system ensures significant saving in water, early maturity and a bountiful harvest, season after season, year after year.

Sprinkler irrigation is a method of applying irrigation water, which is similar to rainfall. Water is distributed through a network of pipes usually by pumping. It is then sprayed into the air and the entire soil surface is irrigated through spray heads, so that it breaks up into small water drops, which fall to the ground. Sprinklers provide efficient coverage for small to large areas, and this system is suitable for all types of properties. It is also adaptable to nearly all irrigable soils since sprinklers are available in a wide range of discharge capacity. At Jain Irrigation, our sprinkler system is uniquely designed to ensure maximum water saving, combining high quality, affordability and ease of

installation. All products are made out of high strength and chemical resistance engineering plastics to achieve functional satisfaction and maintain cost economics. We also offer Greenhouse solutions, which are crafted after a detailed study of the inter-relationship among soil, water, crop, land terrain and related agro-climatic conditions. We design a suitable and economically viable system to the grower, which protects the crop at certain limits and deliver a measured quantity of water at the root zone of each plant at regular intervals. This is to ensure that the plants do not suffer from stress or strain of less and over-watering and different climatic conditions.

## Products and Services

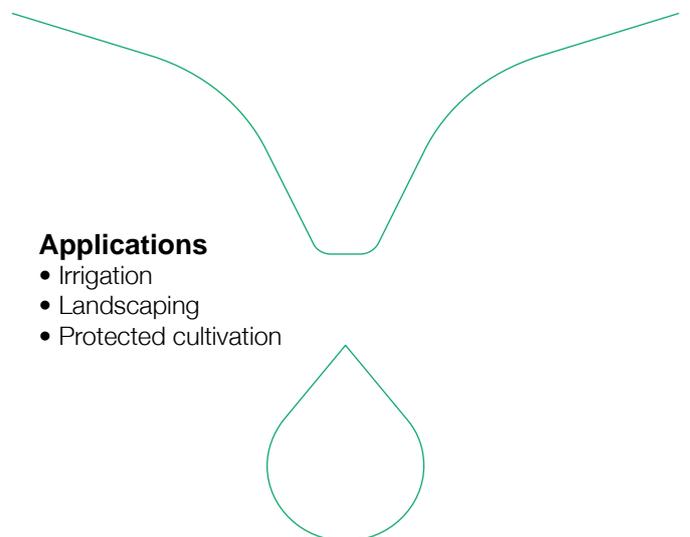
- Drip irrigation systems
- Sprinkler irrigation systems
- Greenhouses and poly-houses
- Precision farming technologies
- Advisory
- Turnkey projects

## Customers

- Farmers
- Residential users
- Commercial enterprise

## Applications

- Irrigation
- Landscaping
- Protected cultivation



## Division strengths

**Scale:** We have a 50%+ share of India's MIS sector.

**Loyalty:** Our business is woven around customer (farmer) loyalty; almost one-third of the turnover is derived from referrals and word-of-mouth publicity.

**Quality:** Our micro-irrigation system is made from high-quality virgin raw materials, using advanced machinery, enabling durability, reliability and meets international quality standards.

**Leading:** We pioneered in popularising drip and mini-sprinkler irrigation in India.

**Support:** We provide agronomic and extension support, after sales services, besides offering technical support for getting better crop returns. We have over 300 technocrats, engineers, agronomists, horticulturists and regional offices, as well as trained dealers, distributors in India and all over the world.

**Global reach:** We are exporting various MIS components to countries in Europe, the US, Africa, South East, the Middle East and Far East Asia.

## Opportunity landscape

# Headroom for growth

According to a study, only 7.73 million hectares of land in India, compared to a potential 69.5 million hectares, were covered under micro-irrigation as on March 2015 (Source: Grant Thornton).

## Government impetus

Our Hon'ble Prime Minister's slogan 'Per Drop More Crop' along with the launch of his flagship scheme 'Pradhan Mantri Krishi Sinchai Yojna' (PMKSY) with the stated intent of 'Her Khet Ko Pani' promotes more usage of micro-irrigation systems.

# US\$ 6.81bn

The global micro-irrigation systems market is projected to grow at a CAGR of 18.3% from 2016 to 2021, to reach 6.81 billion by 2021 (Source: Markets and Markets).

## Low penetration

The penetration of micro-irrigation in the states of India is uneven. The average pan-India penetration is 5.5%, which is less than countries like Israel (90%), the US (55%) and even China (10%) (Source: Grant Thornton).

## Benefits of MIS

- Saving in water, fertiliser and energy (~50%)
- High income generation
- Decrease in labour cost
- Increase in productivity (30-200%)
- Improvement in quality

## Cash & Carry

We implemented the 'Cash & Carry' business model in our domestic business. Today, nearly 45% of retail domestic business in MIS is being done under the new model. Post implementation of the 'Cash & Carry' business model, receivables of MIS has been reduced substantially from ₹ 17,720 million on 31<sup>st</sup> March, 2012 to ₹ 10,309 million on 31<sup>st</sup> March, 2016.



The concept of Micro Irrigation (Drip + Sprinkler) pioneered by Jains in India is already addressing part of water woes faced by country through saving more than 50% water applied on farm thus improving 'on farm water management significantly. However this does not address water conveyance and distribution efficiency in canal system. **Therefore a unique and revolutionary approach has been pioneered again by Jains called "Jain Integrated Irrigation Solution" (JIIS).**

# Plastic Division

We are one of India's largest producers of pipes, having a wide range of PVC plastic pipes & pipe fittings and PE pipes & fittings. Our products are used in fluid transport including lifting, conveying, distributing and disposing or tapping of water, waste-water (drainage and sewage), compressed gases/air, odorous and corrosive gases, chemicals and hazardous wastes/effluents. Solids conveyed include coal ash, slurries, sand and cables. All our products are aligned with resource conservation policy, ensuring zero wastage of resources.

**Our plumbing pipes and fittings systems offer multiple solutions to plumbing requirements. Our plumbing pipes and fittings systems are manufactured from 100% virgin raw materials, which are durable and reasonable in price with unmatched quality standards. Prompt delivery is assured with the help of a dedicated dealer network.**

## Pipes

### Products and Services

- PVC pipes and fittings
- PE pipes and fittings
- Turnkey projects

### Customers

- Farmers
- Government bodies for rural water infrastructure
- Contractors for infrastructure projects
- Telecom companies
- Gas distribution companies

### Applications

- Irrigation/water transport
- Water and sewerage transmission
- Cable ducting
- Gas distribution

## PVC Sheets

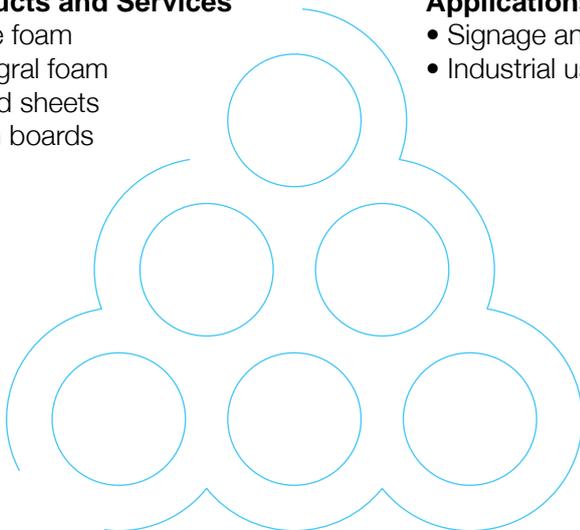
We are one of the largest polymer processors in India. We have 100% Export Oriented Unit (EOU) for PVC Sheets.

### Products and Services

- Free foam
- Integral foam
- Rigid sheets
- Trim boards

### Applications

- Signage and building material
- Industrial usage



## Leading manufacturer

We are the largest manufacturer of thermoplastic piping in India with a 17% market share in PVC and ~20% in PE piping. We enjoy a 35% share in the gas distribution business due to our ability to deliver large volumes for complex government projects.



1600 mm PE Pipes used for safely conveying water over long distances (2009)

## Division strengths

### Pipes

**Integration:** Our MIS business is one of the biggest customers of our pipes.

**Wide range:** We offer a wide product range, spanning 3 mm to 1600 mm OD with all requisite fittings.

**Multiple usage:** Our piping systems are well equipped for water & gas distribution, chemical & cable conveyance, groundwater tapping, waste disposal, micro-irrigation & lift irrigation and hand pumps as well as house service connections.

**Distribution network:** We have a robust dealer network, ensuring deeper and wider reach in India and across the world.

### PVC Sheets

**Strong portfolio:** We are one of the largest polymer processors in India, offering PVC, PE, PP and PS, along with engineering polymers like Polycarbonate, Polyacetal, Polyamide, PBT and ABS, among others. We are the only manufacturer of PVC and Polycarbonate Sheets under one roof in South East Asia.

**Extensive variation:** Our products are available in various widths (1220, 1560, 2050 mm) and lengths 2440 mm in thickness between 2 mm and 30 mm. These products are offered in plain colour and with embossed finish in standard grades.

**Service and quality:** Our unique range of products is perfectly complemented by excellent quality and service. This has enabled us to achieve a significant turnover over the last 15 years.



A view of the pipe line (1600 mm) used in the desalination project at Chennai (2008)

## 24x7 Drinking Water - Smart City Solutions

The 24 x 7 scheme can ensure better quality of water for public health, un-interrupted water supply at desired pressure, reduction of water consumption by 30 to 50%, and the success of 24 x 7 scheme lies in choosing the right pipe-material. The water distribution network requiring leak-proof joints with 100 years of maintenance free pipelife can only be achieved using pipes made of Polyethylene (PE) material. Jain is the largest manufacturer of PE pipes and a total solution provider (concept to commissioning) in the field of water supply and distribution.



## Opportunity landscape

### 15% CAGR

PVC pipes and fittings market in India is projected to register a strong growth of 15% CAGR in FY 2015-19 (E) and is expected to reach ₹ 391 billion in FY 2019 (E) vis-à-vis ₹ 225 billion in FY 2015.

### Infrastructure growth

Globally, growing infrastructure investments (SEZ, airports, building, construction and port, among others) will drive the demand for PVC pipes and fittings.

### Telecom penetration

Consistent investment by telecom service providers to enhance connectivity globally is pushing the demand for pipes.

### Oil and gas network

The expansion in global oil and gas distribution network will enhance the demand for pipes.

# Food Processing

We are a leading manufacturer of dehydrated onions, vegetable products, aseptic fruit purees, concentrates, clarified juices, IQF, and frozen products of finest quality. We market these products under our brand name Jain Farm Fresh.

We recently forayed into the retail space with the launch of our first branded retail product 'AamRus' under the umbrella brand name, 'Jain Farm Fresh'. AamRus is frozen mango pulp (Alphonso and Kesar varieties), 100% natural without any preservatives. We have a processing capacity of 2200 MT per day (of mangoes) or 1,76,000 MT per season.

Our product is already present in over 20 cities, and we are expanding rapidly. We have plans to introduce many more products in the food retail space under 'Jain Farm Fresh' brand name; focusing on our

strength of processing fruits and vegetables. The brand emphasis is on natural products, which are sustainable, healthy and tasty in line with the trend for health consciousness. Therefore, we are further adding value to farmers by packaging their produce for the retail market.

Our esteemed customers comprise Coca-Cola (Maaza), Nestle, Unilever, Minute-Maid, Frito-Lay, Kerry and many more.

## Products and Services

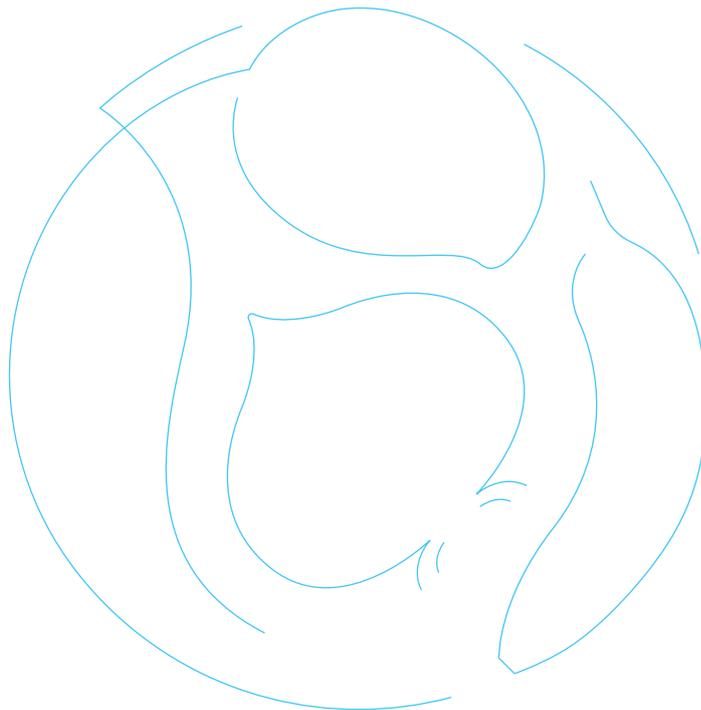
- Standard dehydrated onion & Vegetable products
- Standard dehydrated onion powder
- Frozen fruits - IQF & Chilled Onion
- Frozen Fruit Purees
- Fruit purees, pulp and concentrate
- Blended Fruit Snack
- Spices & Seasoning

## Customers

- Multinational food companies and distributors
- Beverage companies

## Applications

- Soup, pizza toppings and sauces (vegetables)
- Ice cream, juice and baby food (fruits)



## Division strengths

**Wide variety:** We offer a wide variety of food processing products including finest quality dehydrated onions, vegetable products, aseptic fruit purees and pulps, among others.

**Extensive reach:** We have an extensive reach to various geographies. Our plants are located in India and the US; and we export our products to customers across the world.

**Quality:** Our commitment to quality and R&D product innovation is deep rooted. GMP, QA, SPC, strict sanitation, hygiene, HACCP, food safety and ISO 9001:2000 quality management systems are applied throughout the manufacturing process.

**Favourable macro scenario:** Dry climate, fertile soil and sanitary plant design enable the consistent production of Farm Fresh products of finest quality.

## Opportunity landscape

# 10%

Agricultural export constitutes 10% of India's total exports; and is the fourth-largest exported principal commodity.

# 2nd

India's fruit production has grown faster than vegetables, making it the world's second-largest fruit producer.

## Growing demand

There is a huge demand for the export of mango, pomegranate and other fruit juices in the global market. Similarly, the demand for dehydrated onions and garlic is growing rapidly in Europe and USA.

## Opportunity to scale-up

The processing of fruits and vegetables is less than 2% in India, leaving plenty of headroom for growth.

**Internationally certified:** The food divisions are accredited by FoodCert, Netherlands; for ISO 22000:2005 FSMS, the latest International Food Safety Standard. In addition, the 'Onion and Vegetable Dehydration' Division is accredited by FoodCert, Netherlands; to 'BRC' [British Retail Consortium] Global Standard â€ Food.

**Strong infrastructure and team:** We have modern laboratories, well equipped with a team of highly-qualified and experienced scientists and staff.

**Efficient sales and service network:** We have established a sales and service network to cater to our customers throughout the world.



# Tissue Culture

Tissue culture cultivation facilitates an increase in yield up to eight times. It involves negligible use of pesticides and saves water up to 50%, compared to open field flood irrigation. Besides, it improves fertiliser efficiency by about 30%.

We are the largest tissue culture provider in India's banana segment (more than 66 million plantlets a year). We helped drive the banana revolution in India; and are the first in the world to engage in pomegranate tissue culture. We are the only solutions provider in India to provide tissue variation of less than 1% (permissible limit is 5%).



## Opportunity landscape

# 37%

**Banana contributes 37% to the total fruit production in India and accounts for around 2.8% of the country's agricultural GDP.**

### Products and Services

- Tissue culture banana
- Tissue culture pomegranate
- Tissue culture strawberry

### Customers

- Farmers



## Division strengths

**Chosen method:** It is preferred over traditional methods, because there is no diseased tissue; besides, it is a quicker method, which ensures faster yield.

**Profitable method:** It is one of the most profitable systems; only 10% is the expense and the rest is profit.

**Efficient system:** Tissue culture ensures the minimum use of pesticides, saves the water up to 50% as against open field flood irrigation, improves fertiliser efficiency and facilitates higher yield.

**Tissue variation:** We are the only company in India to provide tissue variation of less than 1%.

**Strong technology:** We offer 'Minimum Resources,

Maximum Produce Technology' for banana, pomegranate and strawberry. We are also equipped with the oldest and biggest laboratory in India.

**Best-in-class quality:** The tissue culture unit is accredited to ISO 9001-2008 for quality management systems by TUVNORD, Germany and 'Certified Tissue Culture Production Facility' by the Department of Bio-technology. Besides, the Government of India under NCS-TCP, supplies 'Certified Banana Planting Material'.

## Revolutionised Jalgaon : An international case study of the 7th largest Banana producing country

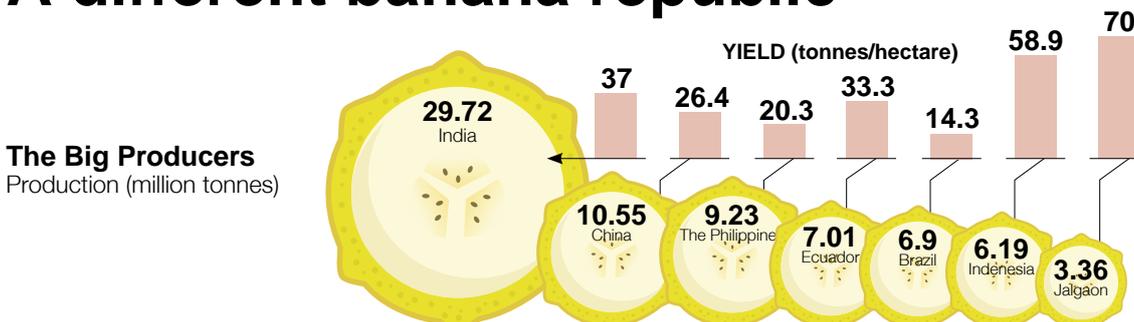
We are driving bio-technology initiatives, with a tissue culture capacity of 100 million TC plantlets annually. Our continuous innovations and research are meeting the needs of farmers in all major banana producing states, including Maharashtra, Gujarat, Karnataka, Andhra Pradesh and Tamil Nadu. We have established primary and secondary hardening facilities for these banana plantlets, as also virology labs for pre-and post-production quality control. Our tissue culture technique, coupled with our drip irrigation systems, has revolutionised the entire Jalgaon region of Maharashtra.

The arid region has been transformed into the largest banana producing belt in Maharashtra, which also happens to be the number one in the country. Today, Jalgaon meets almost 16% of the country's banana requirement, engaging around 40,000 farmers across 45,000 hectares. The average banana yield in the region is currently 70 tonnes per hectare vis-à-vis the average national yield of 36 tonnes. There are select farmers who are even enjoying a yield of 100 tonnes.

We have successfully introduced high-yielding global variety – Grand Nain in India. This globally-accepted variety is highly stress-tolerant and possesses improved shelf life, compared to traditional Indian varieties.

The favourable acceptance of such a new variety through tissue culture has enabled farmers to cultivate one crop in 12 months, as against earlier 18 months. Since the plants now possess uniformity in age and size as also genetic purity/disease-free features on account of tissue culture, the harvesting percentage has gone up as high as 95%, compared to 60% in the case of traditional cultivation. The average bunch weight has also improved to 25 kg from 15 kg. In fact, at a cost of production of ₹ 1 lakh per acre, farmers are reaping a total production worth ₹ 2.50- ₹ 3 lakh.

## A different banana republic



# Renewable Energy

Jain Irrigation Systems Ltd., Pioneered Solar water pumping systems in the country. Jain Solar water pumping system is a standalone system operating on power generated by Solar Photovoltaic panels which are also manufactured in house in a state-of-the-art facility. JISL has installed more than 20,000 Solar Pumps. All these products are in harmony with the group's mission, "Leave This World Better Than You Found It".

Jain Green Energy division also offers Solar Thermal Water Heating Systems, Solar Photovoltaic System, Bio-Gas and Bio-Energy alternate energy solutions.

## Products and Services

- Solar water heater
- Solar pumping systems
- Solar photovoltaic module
- Solar lighting & appliances
- Solar power generation
- Biogas power plant on turnkey basis

We offer a boutique of renewable energy products in the space of solar and bio-energy. Our solar powered pumping systems are empanelled with the Ministry of New and Renewable Energy (MNRE). We manufacture and supply complete pumping systems and accessories required in solar pumping systems, with our warranty.

## Jain Solar Agri Pump

The power generated by solar panels is used for operating DC centrifugal pump set for lifting water. The system requires a shadow-free area for installation of the solar panels. Solar panels produce DC power, which is fed to the controllers. The controllers regulate it and subsequently feeds it to the motor. The motor is Brush-Less Direct Current (BLDC) type upto 5 hp. Besides, the pump works in diffused radiation, even in pouring rains !

## Jain Surface Solar Pump Models

Our surface pumps are available from 0.1 Hp to 2 Hp. While the maximum suction head is 6 meters, the maximum vertical lift is 70 meters. The maximum flow rate of 3,60,000 litre per day can be achieved at minimum head.

## Applications

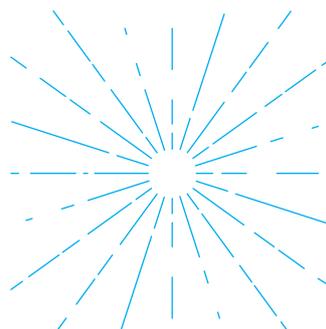
- Residential
- Commercial
- Industrial
- Agriculture
- Drinking water

## Jain Submersible Solar Pump Models

These solar pump models are available in centrifugal type models from 0.5 Hp to 100 Hp. In this case, the maximum total head available is 350 meters. A maximum flow rate of 4,80,000 litre per day can be achieved at minimum head.

## Jain Photovoltaic Modules

Jain Photovoltaic Modules are made from high efficiency Multi Crystalline solar cells. Suitable number of cells are interconnected in series and then encapsulated in low iron content, high transmissivity tempered glass using UV stable Ethylene Vinyl Acetate (EVA) sheets and premium quality back sheet. These encapsulating materials protect the cells from the harsh environmental conditions ensuring long life. The laminates are then framed with anodized aluminium frame. PV module are fitted with terminal box.



## Division strengths

**Ensuring efficiency:** Our photovoltaic modules are made from high-efficiency mono/multi crystalline solar cells, ensuring upto 18.5% efficiency.

**Competent product:** Our solar products have no recurring cost of electricity, ensure years of trouble-free use and provide the assurance of a great service back-up from the Jain Group.

**Energy conservation:** Our solar pump solution perfectly complements our micro-irrigation system, making cultivation possible in the remotest parts of the world, thus, conserving energy.

**Strong R&D:** We have a strong R&D base for solar and related electronics.

## Pioneer in Solar Pumping System

Jain Irrigation Systems Ltd., is a pioneer in providing end to end solar pumping solutions to various applications. It is the only company which manufactures (Modules, Motor, Pump, Controllers, various Mounting Structure) complete solar pumping system in the world.



Aerial view of 8.5 MW Solar Power Project; also seen is the rainwater harvesting ponds.

## Opportunity landscape

### Top 3

India is projected to become one of the world's top 3 solar markets by 2022.

### 25%

The share of solar power in India's total installed power generation capacity is projected to rise from the present 1% to 25% by 2022.

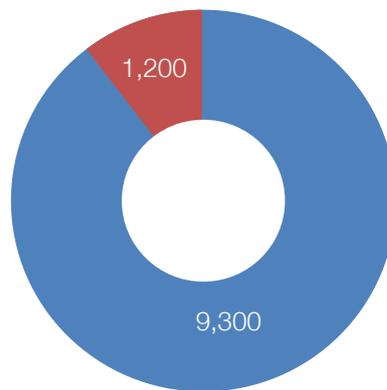


# Owners of the Work, Owners of the Company

## A Safe and Gender Friendly Workplace

We are fortunate to have extraordinary women and men who take pride in passionately taking forward the company's vision and mission to 'Leave this world better than you found it.'

An amalgam of these diverse 10,500+ associates from 25 different nationalities provides kinetic energy to achieve audacious goals and create path breaking initiatives in every aspect of our business for sustainable benefits to all stake holders.



■ No. of Associates (India)  
■ No. of Associates (Overseas)

"We believe that associates are our real assets and thus always endeavour to ensure holistic development of each and every associate."



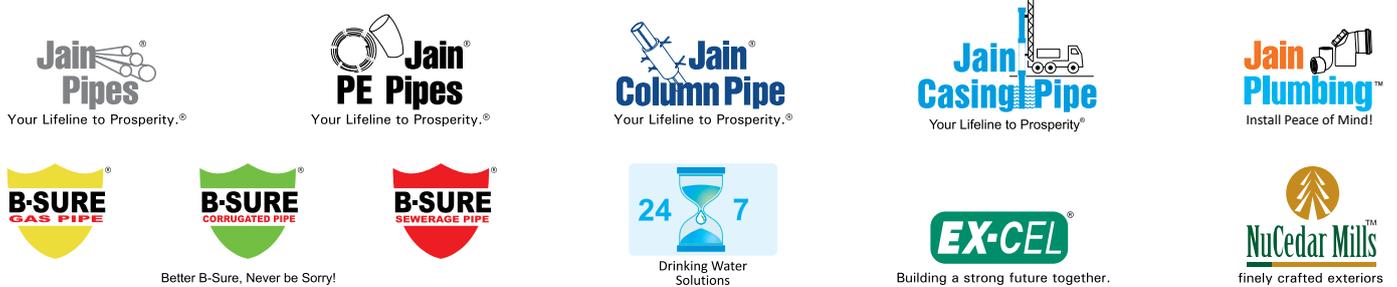
A show of solidarity-an assembly of Jain Indian team with our Founder Chairman, senior associates and directors of the board at Jain Plastic Park, Jalgaon, India (2014)

# Brand Universe

## MICRO IRRIGATION SYSTEMS, EQUIPMENT & AGRI INPUTS



## PLASTIC PRODUCTS



## GREEN ENERGY PRODUCTS



## FOOD PRODUCTS



## SOCIAL PROFILE



# A Mandate for Community Uplift

At JISL, community is not an external entity, but an integral part of our growth strategy. We undertake significant initiatives to ensure the wellbeing of communities we work with. Our initiatives are helping accelerate rural development, watershed program, environment protection, education, health and sports among others.

We conduct our CSR initiatives through Bhavarlal and Kantabai Jain Foundation, Gandhi Research Foundation, Anubhuti Schools, Jain Sports Academy and 'PBMA's Kantai Netralaya', Jalgaon.



**BHAVARLAL AND KANTABAI JAIN  
FOUNDATION**  
Compassion.. Imagination.. Endeavour



A birds eye view of Gandhi Teerth at Jain Hills, Jalgaon, M.S., India (2013)



A birds eye view of Kantai Bandhara (Nagziri, India) conserving water and benefiting thousands of small farmers (2013)



Gandhi Research Foundation assisted the villagers of Jalke in water conservation by upgrading the storage facilities of a small dam multifold i.e., 4.5 crore litres

## Gandhi Research Foundation

Gandhi Research

Foundation was established

to preserve for posterity the profound legacy of Gandhiji's life, thought and work. The world is in the midst of a multifaceted crisis. People are looking for solutions. It is therefore important to draw the attention of serious minded and earnest people to the solutions offered by Gandhiji because he was basically a man of action who tried to evolve solutions to problems faced by humanity on the basis of ethical principles. Thus Gandhi's life and principles become relevant as solutions to the contemporary issues.

The Foundation attracts the younger generation to learn the culture of nonviolence through its multimedia digital interactive Museum on Gandhi, and the nationally conducted exam 'Gandhi Vichar Sanskar Pariksha'; it preserves in its state-of-the-art Archives Gandhiji's original writings, journals, rare photos, audio and animation recordings of his speeches and programs and artifacts from his life. Further, the Foundation organizes World Lecture Series on Nonviolence, conducts International training programme on Peace Leadership, offers One year 'PG Diploma in Gandhian Social Work'.

### Promoting Rural Development and Watershed Management

The empowerment of rural India, especially the farming community, has always been our primary focus area. We have introduced cutting edge technology and enhanced our reach to small farmers through creating shared value or undertaking relevant programmes. Our rural development programmes comprise driving village



An internal road of village Wakod adopted by Bhavarlal & Kantabai Jain Foundation. BKJF built a number of roads, drainage system, established a school and a agricultural college for students from nearby villages



GANDHI RESEARCH FOUNDATION

sanitation, preventive healthcare, making available safe drinking water and increasing the availability of water for irrigation.

The projects involve micro-level intervention of teams from BKJF and GRF. During the year, we started, 'community toilet project', '100% village sanitation project' and 'people initiative for rural development through Joint Liability Groups (JLGs)'. Six villages will be covered under sanitation projects and 16 villages will be covered under watershed management project during FY 2016-17.

Last year, we worked with 'Gramya Jal and Swachhata Samiti of Dhobikuan village near our operations in Vadodara. There,



A happy villager near dug well in drought prone Marathwada region in Maharashtra. JISL supported 14 villages with PVC pipes to carry water for drinking purpose (2013)

we contributed to the construction of a water tank to make drinking water available for villagers under the National Rural Water Drinking Programme.

### Ensuring Environmental Sustainability

We are driven by our mission 'leave this world better than you found it' for the protection of environment and conservation of natural resources. Being the pioneers of sustainable agriculture, all our business initiatives have been carried out while safeguarding our environment and biodiversity. Moreover, our watershed and agroforestry projects have been instrumental in converting non-arable land into productive land, reducing soil erosion and increasing the ground water table. The same approach is reflected in our CSR projects on environment.

### Encouraging Education

Anubhuti residential school, promoted by JISL, is



based around Indian culture, interdependence and entrepreneurship. The school is affiliated to the Council for Indian School Certificate Examination, New Delhi, which conducts ICSE (Class X) and ISC (Class XII) examinations.



Anubhuti Residential School - A school based on Indian cultural heritage, the principles of inter dependence and enlightened entrepreneurship. The sprawling green campus (2011)

According to the founder, Anubhuti's mission is to create a learning environment conducive to nurturing the learners and the educators to be creative, capable and compassionate citizens of character. Anubhuti shall achieve this mission with a rational commitment to the time-tested, multifaceted Indian culture, the spirit of mutual dependence, enlightened entrepreneurship and global outlook, leading them to be socially aligned, environmentally conscious and sensitive human beings. We firmly believe that economic conditions should not prevent deserving children from getting a good education. Therefore, we endeavour to provide globally benchmarked education for students from all walks of life. For this purpose, we established the Anubhuti English Medium School in Jalgaon, to enable quality English medium education to underprivileged students. It is a free primary day school (affiliated to the ICSE Council) that integrates education with various activities to stimulate students' imagination and encourage exploration through observation, leading to holistic development. The curriculum comprises sports, arts, craft, dance, music and excursions. Besides, BKJF identifies economically-marginalised students in the community and helps them in getting/completing their education.



Anubhuti English Medium School, Jalgaon for students whose parents are economically challenged (2014)



Addressing life's larger questions : Sunday meetings with Bhau - Striving to make the school their home

### PBMA's Kantai Netralaya

PBMA's HV Desai Eye Hospital with the support of Bhavarlal and Kantabai Jain Foundation has started a first of its kind facility 'PBMA's Kantai Netralaya' in Jalgaon in the State of Maharashtra. It provides comprehensive quality eye care without discrimination, between free and paid cases. It also provides comprehensive and quality eye care for all who need it. This is provided with commitment, compassion, and innovation leading to excellence.

This institution is run "On not for profit basis", at an affordable cost or free of charges to the needy and deserving. The objective of this institution is to manage operations on a sustainable basis making use of top of the class technology, equipment and personnel.



Kantai Netralaya campus



Dr. Bhavana Atul Jain examining a patient at Kantai Netralaya, a charitable eye hospital set up by Bhavarlal & Kantabai Jain Foundation (2016)

## Supporting Health and Happiness

Jain Sports Academy, which functions under BKJ Foundation, works towards promoting sports in the local area. It conducts coaching and courses on sports and health education. The Academy also organises competitions in most traditional Indian games like kho-kho, as well as mainstream games like volleyball, table tennis, badminton, swimming, cricket, trekking, cycle racing, skating, marathon, carom, basketball and football, among others. The training camps are sponsored for boys and girls under the age of 15, making it possible for them to participate at the district, state and national-level tournaments.



World Chess Champion Vishwanathan Anand felicitated by Mr. Ashok Jain, our Chairman (2013)



The winners team of Jains - Jalgaon Battlers at the Maharashtra Chess League held in Pune. From L to R: Woman Grandmaster Kiran Manisha Mohanty, Pratik Patil, Grandmaster Vidit Gujarathi, Grandmaster B. Adhiban, Shashikant Kutwal, International Master Narayan Shrinath, Woman Fide Master Rucha Pujari (2014)



A mixed double Jains team at the Maharashtra Badminton League in Pune and Thane were sponsored by Jain Sports Academy (2011)



Singhgad Supremos sponsored by Jain Irrigation & Jain Sports Academy, winners of Maharashtra Premier League - 2010, celebrating with our MD and CEO Anil Jain (2010)

# The way the World sees us

- “Crawford Reid Memorial Award” : Irrigation Association, USA
- “Water Conserver of India” : UNESCO & West-Net
- “Challengers to the world’s leading blue-chip companies” : Standard & Poor’s
- “Asia’s 200 Best Under a Billion companies” : Forbes Asia
- “100 most promising clean technology companies on the planet” : Global Cleantech & The Guardian
- “Client Leadership Award” (World Bank Group) : International Finance Corporation
- “We owe you a great deal for the help you give the small farmer” : Harvard Business School
- “Best Water Company Award” : Ministry of Water Resources & Water Digest, UNESCO
- “Boldness in Business Award” –Environment : Financial Times & Arcelor Mittal, London
- “New Sustainability Champion” –One of the 16 from 1000 companies : World Economic Forum
- “Inclusive Agri Business Leadership Award” : International Finance Corporation (World Bank Group) Washington, D.C.
- “Heroes of Philanthropy” –One of the 48 Global recipient : Forbes Asia
- “R & D Efforts in Agro Industries” : Ministry of Science & Technology, Government of India
- “Outstanding contribution in the field of Agri Sector” : G20 Development Working Group
- “FT/IFC Transformational Business Award” : Financial Times, London & International Finance Corporation (World Bank Group)
- “Porter Prize” : Institute for Competitiveness Porter Prize

## Total Awards to Jain Irrigation and Bhau (1978-2016)

Institution	JISL	BHJ	Total
By International Institutes	10	3	13
By Central Governments	131	4	135
By State Governments	36	7	43
By Nationally Acclaimed Institutions	40	32	72
Felicitations by National Dignitaries	-	3	3
Ranking by Globally & National Acclaimed Institutions	14	2	16
<b>Total</b>	<b>231</b>	<b>51</b>	<b>282</b>



Mrs. Aane Mbuvi, a school teacher and a successful farmer growing pigeon peas, pumpkin and water melon under our drip irrigation program at Kibwezi project site, Kenya

# Recognitions 2015-16



Award for pioneering contribution to concept of 'Water for Food' recognition at Water for Food Global Conference - 2016 in USA (This award given to Mr. Bhavarlal Jain was received post humously by Mr. Anil Jain)



IAA Olive Crown Green Crusader Award - 2016 (This award given to Mr. Bhavarlal Jain was received post humously by Mr. Abhedya Jain)



Dharti Aba Birsa Munda Award - 2016



Porter Prize - 2015



FIIB Leadership in Sustainability Award - 2015



Agriculture Leadership Award - 2015



Sahyadri Navratna Sanman Sohala-Vaibhav Ratna - 2016



TEMA-CMAI National Telecom Manufacturing Award - 2015



Best Innovation Award - 2015



Plexconcil Award - 2014



Make in India Awards for Excellence - 2015



COSIDICI National Award for Outstanding Entrepreneurs - 2016



Akhil Bhartiya Khandesh Kohinoor Purskar - 2016



Safety Award - 2015



Bhau discussed 'Peace through Development' with participants who attended the EmPeace Labs - an International Training Workshop for Community Leaders from 29 Developing Countries (2012) at Gandhi Teerth, Jalgaon

A man, no matter how busy or big, is merely one amongst millions in society.

— Bhavarlal H. Jain, Founder (1937-2016)



Creating a Better World