Jain Irrigation Systems Ltd.

Small Ideas. Big Revolutions.®

CONTENT

Infinity

Jain’s quest for excellence, better tomorrow, prosperity of smallest farmer and conservation of environment is goodness all the way marching into infinity.

One good intention is all that it takes to set off a chain reaction of good deeds. JISL believes that an eco-system has the potential to make a greater impact on industry, society and economy when its every initiative works for a genuine cause. And in turn, the success of these initiatives elevate you to create something even better for the world the next time around.

“LEAVE THIS WORLD BETTER THAN YOU FOUND IT.”

— Bhavarlal H. Jain
Founder

“My biggest award is the smiling face of a farmer.”

— Bhavarlal H. Jain
Founder

CORPORATE PHILOSOPHY

Mission: Leave this world better than you found it.

Vision: Establish leadership in whatever we do at home and abroad.

Credo: Serve and strive through strain and stress; Do our noblest, that's success.

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.

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.

Quality Perspective: Make quality a way of life.

Work Culture: *Experience:* 'Work is life, life is work.'

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 the environment

• Cherish the symbiosis and nurture creative partnership between society and environment

Development of Stakeholders

• Adopt transparency and fair practices for continuous sustainable growth

Anil B. Jain, *Vice Chairman and Managing Director congratulating the happy farmer on the good yield due to UHDP practice under 'Unnati' initiative.*

THE FOUNDER

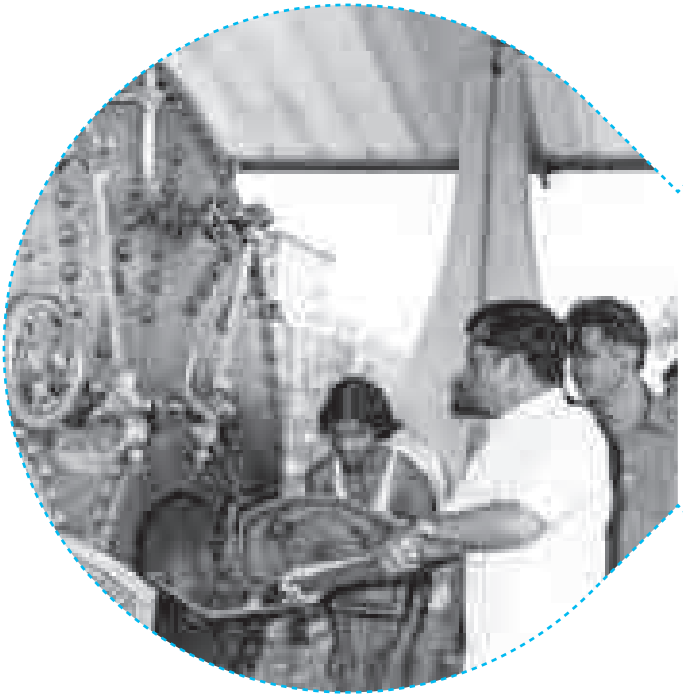
Bhau's life is a 'rags to riches' story. He was born to a family of a small farmer-cum-trader. After acquiring an University degrees of B.Com., and LL.B. he was selected as a Gazetted Officer. A position which he turned down, choosing to start a business career in 1962, on advise of his mother.

As a prolific worker, he identified himself and his business with the farm and the farmer. He built his dream around the vision, 'agriculture is a profession with a future'. Under his leadership, Jain Brothers became the first choice of the farming community for all agricultural inputs. He also earned, for Jain Brothers, the reputation for integrity, reliability and a high degree of respect and credibility from customers, manufacturers and suppliers alike. In his vision and efforts he was supported by his brother, 3 uncles and other cousins.

In 1978, Bhau acquired a sick Banana Powder factory. By modifying the machinery, this plant was converted to process spray-dried Papain from papaya latex. Bhau offered farmers a guaranteed price for their latex, to encourage Papaya cultivation. This provided the required quantity of latex. This also established a synergy of interest with farmers. Sustained in-house R&D resulted in production of high quality refined Papain, which in turn led to export of Refined Papain from India for the first time. These sustained innovations and resultant export performance, have been recognised by the State and Central Governments, through 20 awards till date.

In 1980, Bhau diversified into the manufacture of PVC pipes required for farm irrigation. His will to advance and expand rapidly took the production from 2000 MT to 25000 MT per annum in just seven years of operations. A 'High turnover and low profit' philosophy filled this period with intense activity and high risks. He motivated ordinary people to extra-ordinary performance. Leading by example, through continuous work. With concentration, persistence and enthusiasm, he built a team which was unique in every sense of the word.

JAIN BROTHERS



It was Drip Irrigation, however, which catapulted Bhau into prominence. He pioneered an integrated approach to the subject and succeeded where many others including foreign manufacturers and their distributors, had failed. From a meager 600 Ha in 1987, Drip installations cover about 4,00,000 Ha in 2001 – a phenomenal growth indeed!

Next, he directed his attention to 'Tissue Culture' of banana plants. Today, over 25,00,000 Tissue Cultured Banana plants are made available to the farmers who have benefited from a higher yield, better quality and higher prices in the market.

In an effort to generate added value to the agri-produce, Bhau created modern 'Food Processing' facilities for vegetable dehydration and fruit pulp extraction.

Bhau then worked on Watershed Development and Wasteland Reclamation. He has created a replicable model in about 300 Ha of hilly area and has successfully transformed different types of wastelands using traditional wisdom and modern techniques.

Bhau also focused on Organic Farming and Organic Manure. As always, all this activities were related to farming and to the upliftment of the farming community.

Bhau created a young Green Energy Division, which manufactures appliances and applications using solar thermal and solar photovoltaic technologies. The division has developed solar pump for use on the farm reducing the farmers dependence on the unreliable grid supply. Apart from solar pumps the company produces hot water & lighting systems for small households to large establishments. The division also runs a bio-gas based power generation plant, using the waste from the farm and the food division plants and supplies up to1.6 MW of power on a continuous basis.

Bhau started in 1992 to produce plastic sheets of up to 30 mm thickness as a substitute for wood panels for use in making of furniture, doors, windows, partition blocks, roofing, signage etc. This was done to earn foreign exchange.

A life time of commitment to conserve water, enhance productivity of the farmlands to ensure food security for all and prosperity to the farmer by constant innovations and introduction of modern yet affordable and viable technologies is core to Jain's way of life. The untiring efforts in pursuit of excellence, innovations and initiatives have earned the Company and our Chairman numerous awards and accolades totalling to more than 160 from national and international organizations and governments. Bhau's significant contribution in the field of Agricultural Science and Water Conservation Technologies has been recognised by the academic world, who have honoured him with four honorary Doctorates. Government of India, honoured him with its highest civilian award 'Padma Shri'. He could achieve all this due to steadfast support by my mother. He wrote a book about her called 'She & Me' explaining how a great marriage became key to their extra ordinary successful life partnership.

Bhau, a self-made person, was a deep thinker, a master creator, earnest worker and conscientious businessman. He believed in the creation of wealth and surpluses as an effective means of contribution to human progress and did not consider creation of surpluses as an end in itself. For him, work was the central value around which a hierarchy of other values evolve. He wanted to reach mankind through his work. He held that "work worthily attempted and well done is its own reward."

On February 25, 2016 he left for his heavenly ebode. We are committed to continue his legacy.

— Ashok B. Jain
Chairman

FROM THE MANAGEMENT

The ideology set by our Founder Bhavarlal H. Jain has created enormous growth for all the stakeholders of our company, resulting in the prosperity of our nation and protection of our environment.

Our mission has revolved around an epicentre, that is farmer's well-being, and has evolved to serve sustainability sustenance of the world. We want to give back more than what we take. With this vision,

we continue our journey of three decades to create innovative solutions for the emerging future.

Traditional agricultural methods have led to irreparable depletion of natural resources and created a destructive water, food and energy nexus. With the soaring demand of food and energy, we at JISL, are building complete value chains that meet the demand by conserving water and harnessing natural resources.

We are stepping into the next decade with pioneering technology in agriculture, food security and the larger water infrastructure. Jain logic delivers real-time data from sensors in the field in an intuitive interface.

It is the only water management software farmers need to achieve 'More Crop Per Drop'. We are developing new high-yield crop varieties like coffee and mango using bio-technology. Another ground-breaking innovation we have launched is the use of drip irrigation for paddy cultivation, that will drastically change water usage and will help reduce methane gas emission.

Our revolutionary micro irrigation systems and high-tech agricultural inputs are enabling farmers to switch from traditional wasteland irrigation to efficient systems such as drip and sprinkler systems that yield water savings of over 30-85% over traditional surface irrigation systems. Since most of the agricultural land in India is irrigated

through canals, JISL has ushered in the concept of Integrated Irrigation Solutions (IIS) to enable the 'Resource to Root' process, leading to tripling farmers' productivity without creating pressure on water use or using toxic fertilisers. Millions of farmers are already benefitting from our transformative productive services.

We have registered consolidated revenue growth of 17.4% on YoY basis i.e. INR 79,468 million as against, adjusted with the excise duty, INR 67,698 million in the earlier year. Consolidated EBIDTA has increased by 14.9% on YoY basis from INR 10,029 million in FY17 to INR 11,528 million in FY18. Consolidated reported cash PAT has been increased by 29.4% from INR 4,708 million in FY17 to INR 5,579 million in FY18.

Consolidated revenue of high-tech Agri Input Products Division recorded a strong growth of 28.3%.

The growth has stemmed from India as well as overseas, specially from India's retail and project segment. In overseas operations, acquisition entities in USA have done exceptionally well. Plastic division registered growth of 19.7% on account of a very robust order execution on larger water supply projects in the smart cities. Agro Processing Division reported growth of 1.2%, despite deflation in commodities such as mango, garlic and pepper.

We have secured large IIS project orders from various states, one of which is the Mohanpura Project in Madhya Pradesh. With a scope of over 228,475 acres of land, it is the largest ever integrated irrigation project awarded by a state. In Karnataka, we are doing a project worth INR 5,690 million in Poorigali where we will achieve 85% water use efficiency.

Our subsidiary, NaanDanJain, Mexico has been awarded two projects in Honduras worth USD 23.77 million. These projects will encourage business while securing sustained growth and push JISL's growth percentage into the high-teens.

Our piping systems are apt for water to gas distribution, chemical to cable conveyance, groundwater tapping to waste disposal, hand pumps to house service connections. Through our services we have established a comprehensive, one-stop shop for the water infrastructure for smart cities of future. We have received an order worth INR 3,750 million by Pune Municipal Corporation, allowing us to study, survey, investigate, assess, validate design and revamp the entire water supply system on a turnkey basis. Another water supply project in Jalgaon city under Amrut Scheme will benefit 75,000 households. Our HDPE piping system provides 24x7 equitable water distribution systems with adequate pressure, considerable reduction in leakages, huge savings in non-revenue water and improved standard of living for consumers.

From increased productivity to market linkages for assured returns, we work hand-in-hand with farmers. Jain Farm Fresh Foods Ltd. (JFFFL) procures fruits and vegetables from over 25,000 contract farmer suppliers. Our 'Farm to Home' model, has been efficiently used to produce quality retail products like Fru2Go, Aamrus which shall provide healthy choices for our consumers. With this success, we are extending the model to our recently launched Spices division. JFFFL has acquired Belgium-based Innovafood N V and its affiliated firm. With Innovafood, the additional sales of USD 21 million with a higher EBIDTA will contribute to the revenues and profitability in all of FY 2019 and provide an outlet to the company for exports of its dehydrated onions.

The new Spices division will also use the new export channels created by the Innovafoods. Further it will provide higher opportunities in key growth markets of EU.

The acquisition of two US distribution businesses (Agri-Valley Irrigation, LLC and Irrigation Design and Construction) in May 2017, has added to our global portfolio. The businesses have added their potential revenues and EBIDTA during the year, increasing the scale of our impact. Our business in US has become an unparalleled leader in design, construction, service and innovative agri-technology providing a unique platform to help growers implement state-of-the-art irrigation technology and achieve 'More Crop Per Drop'. JISL is now the largest Micro Irrigation Company in the United States of America.

We are set to transform the symbiotic relationship between water, food and energy through zero-waste cycles in agri-value chains and generation of clean energy through Jain Solar and 24x7 supply of clean water by the Jain Pipe division. Thus, building a company catering to the global ecosystem that will redefine quality and green living while creating extensive shared value.

We are here for a long long time and we want to continue to create and innovate while ensuring holistic progress through Goodness All The Way.

This Corporate Profile is a tribute to our impact and our commitment to millions of farmers and consumers. As we toil to further our mission, we trust that with your support, we shall make an infinite impact.

Sincerely yours,

Ashok, Anil, Ajit and Atul Jain.

HISTORY AND KEY MILESTONES

1963

Commenced:
Bhavarlal Jain establishes a trading firm, dealing in agricultural inputs and equipments, laying the foundation of the JAIN conglomerate

1980

Commenced:
PVC Pipe Manufacturing

1986

Jain Irrigation Systems Ltd. Incorporated as a public limited Company

1988

Drip Irrigation systems pioneered for small holders in India

1989

Commenced:
R&D cum Demonstration and Training Centre

1991

Commenced:
- Casing Pipe Manufacturing
- Plastic Sheet manufacturing plant

1993

Commenced:
PE Pipes Manufacturing

1994

Commenced:
- Tissue Culture Plantlets
- Solar Water Heater Manufacturing
- Vegetable Dehydration Manufacturing

1996

Commenced:
Green field fruit processing plant

1996

Commenced:
- Column Pipe Manufacturing
- Gas Pipe Manufacturing
- PE- Duct (PLB) Manufacturing
- Sprinkler Irrigation System

2005

Commenced:
- Manufacturing facility in Tamil Nadu (MIS & pipe production)
- Manufacturing facility in Hyderabad, Andhra Pradesh (MIS & Pipe Production)

2006

Acquired
- Fruit processing facility in Chittoor, AP
- Dehydration facility in Baroda, Gujarat
- Chapin Tape, Irrigation Company, USA
- Cascade, Dehydration Company, USA
- Nucedar Mills Inc., Chicope, USA

2007

Commenced:
- SWR PVC Pipe Manufacturing

Acquired
- Aquarius, Irrigation Company, USA
- NaanDan, Irrigation Company, Israel

2008

Acquired
THE Machine, Equipment Manufacturing Company, Switzerland

Over the years, JISL has demonstrated a sound growth strategy by constantly acquiring and developing innovative technology, gaining new markets and creating breakthrough products.

2009 – 2010

Commenced:
- Double Wall Corrugated PE Pipe Production
- UDS Pipe Production
- Green field manufacturing facility in Turkey, (Jain Sulama)

Commenced:
- Bio-gas based 1.7 MW captive power plant
- Photovoltaic panel assembly line
- Manufacturing facility set up at Alwar
- Micro Duct

2010 – 2011

Acquired
- Sleaford, Food Processing Company, UK
- Point Source, Irrigation Company, USA

Acquired
Protool, Equipment Manufacturing Company, Switzerland

2012 – 2013

Commenced:
8.5 MW Solar Power Plant, India

Acquired
White Oak, Frozen Food Company, USA

Commenced:
- Jain Solar Pumping System Manufacturing Facility
- Ex-cel Plastics, Ireland

2014 – 2015

Acquired
Gavish Control System Ltd. Micro Irrigation Company, Israel

Commenced:
Jain Plumbing Piping System Manufacturing

Acquired
- DripTech, Irrigation Company, India
- Puresense, (irrigation environmental control system), USA

2016 – 2017

Commenced:
- [redacted] retail business of Jain FarmFresh Foods Ltd.
- Smart Clean Automatic Screen Filter Production
- IrriCare Smart Irrigation Controller Production.
- NutriCare - Fertigation Machine production

Commenced:
Fru2go, product of Jain Farm Fresh Foods Ltd.

Acquired
- Observant, Irrigation Company, (USA and Australia based)
- Acquired 80% stake in USA's 2 of the largest MIS dealers - Agri Valley and Irrigation Design and Construction

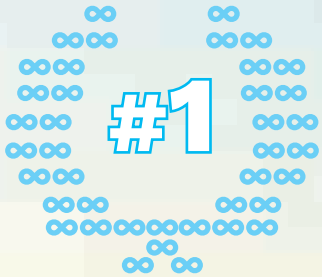
2018

Commenced:
- Spice Processing Plant in India.
- Jain Logic™ - software & analytical platform for Micro Irrigation System.

Acquired
- InnovaFood N.V., Belgium (Food Processing)
- ET Water, Novato, USA
- Northern Ireland Plastics CS., Northern Ireland

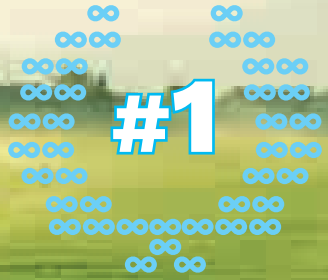
COMPANY SNAPSHOT

Micro-irrigation company in India



Micro-irrigation company in USA

Manufacturer of Plastic Pipes in India

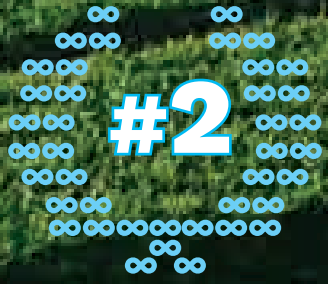


In Mango Processing globally

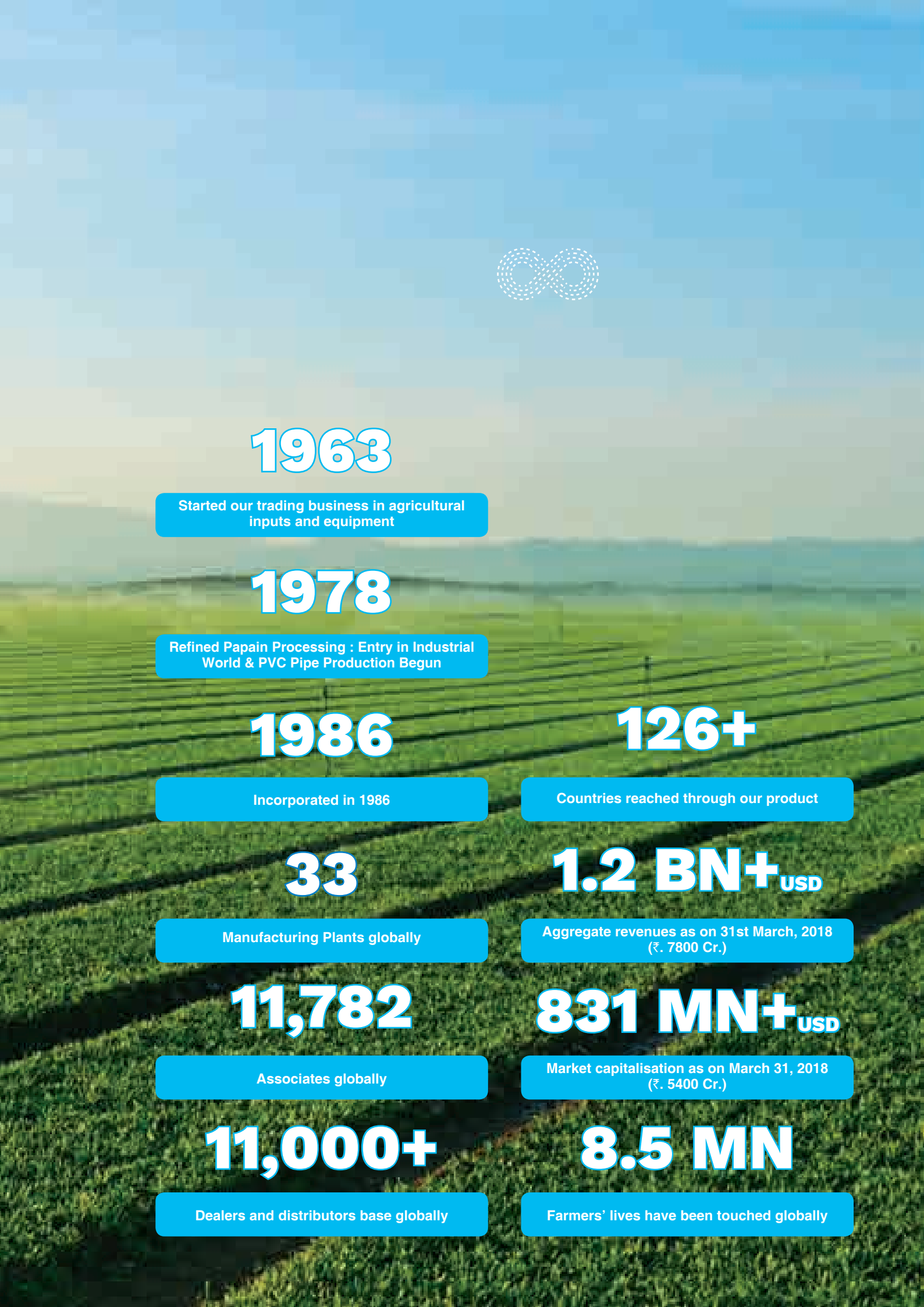
In Solar Agriculture Pump globally

In Tissue Culture Production of Banana and Pomegranate globally

In Onion and Vegetable Dehydration globally



Micro-irrigation company globally



1963

Started our trading business in agricultural inputs and equipment

1978

Refined Papain Processing : Entry in Industrial World & PVC Pipe Production Begun

1986

Incorporated in 1986

126+

Countries reached through our product

33

Manufacturing Plants globally

1.2 BN+ USD

Aggregate revenues as on 31st March, 2018 (₹. 7800 Cr.)

11,782

Associates globally

831 MN+ USD

Market capitalisation as on March 31, 2018 (₹. 5400 Cr.)

11,000+

Dealers and distributors base globally

8.5 MN

Farmers' lives have been touched globally

CREATING VALUE IN MANY WAYS

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.

Sprinkler Irrigation Systems

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

Resource to Root

As the prevailing irrigation set-up in India is not a very encouraging scenario, Jain Irrigation has yet again innovated and introduced the revolutionary concept - Jain Integrated Irrigation Solution (JIIS)

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.

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.

ISO 9001 (Quality Management System)
- Sheet Division
- MIS Division
- Pipe Division
- Solar Division
- Tissue Culture Division
- Plastic Pipe & Fittings
- Precision Farming System
- Jain Research & Dev. Lab-Jalgaon
- Gandhi Research Foundation

ISO 14001:2015 (Environment Management System)
- Onion & Vegetable Dehydration Unit-Jalgaon, Vadodara
- Fruit Processing Unit-Jalgaon, Chittoor 1&2
- Spice Processing Unit-Jalgaon
- Green Energy Park, Jalgaon
- Jain Plastic Park-Jalgaon, Hyderabad
- Jain Plastic Park-Jalgaon, Alwar
- Jain Tissue Culture Park-Jalgaon
- Jain Research & Dev. Lab-Jalgaon
- Gandhi Research Foundation-Jalgaon

OHSAS 18001:2007 (British Standard Occupational Health and Safety Management Systems)
- Onion & Vegetable Dehydration Unit-Jalgaon, Vadodara
- Fruit Processing Unit-Jalgaon, Chittoor 1&2
- Spice Processing Unit-Jalgaon
- Green Energy Park-Jalgaon
- Jain Plastic Park-Jalgaon, Hyderabad
- Jain Plastic Park-Jalgaon, Alwar
- Jain Tissue Culture Park-Jalgaon

Kosher
- Onion & Vegetable Dehydration Unit-Jalgaon, Vadodara
- Fruit Processing Unit-Jalgaon, Chittoor 1&2
- Spice Processing Unit-Jalgaon

Drinking Water Solution

Continuous Water Supply with Constant Positive Pressure so that user may draw the water 24 hours a day & 7 days a week

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.

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.

Renewable Energy

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

Tissue Culture

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

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.

Halal
- Onion & Vegetable Dehydration Unit-Jalgaon, Vadodara
- Fruit Processing Unit-Jalgaon, Chittoor 1&2
- Spice Processing Unit-Jalgaon

LPPOM MUI Halal
- Onion & Vegetable Dehydration Unit-Jalgaon
- Fruit Processing Unit-Jalgaon,
- Spice Processing Unit-Jalgaon

ISO 50001:2011
- Onion & Vegetable Dehydration Unit
- Fruit Processing Unit
- Jain Plastic Park-Jalgaon

SGF (Sure-Global-Fair)
- Fruit Processing Unit-Jalgaon & Chittoor 2

GMA SAFE (Grocery Manufacturer's Association-Supplier Assessment for Food Excellence
- Onion & Vegetable Dehydration Unit-Jalgaon

RSPO (Round Table on Sustainable Palm Oil)
- Onion & Vegetable Dehydration Unit-Jalgaon, Vadodara

BRC (British Retail Consortium Global Standard for Food Safety)
- Onion & Vegetable Dehydration Unit-Jalgaon, Vadodara
- Fruit Processing Unit-Jalgaon, Chittoor 1&2
- Spice Processing Unit-Jalgaon

GLOBALGAP
- Agriculture Division

JAIN UNIVERSE

Sun never sets on our efforts for farmers

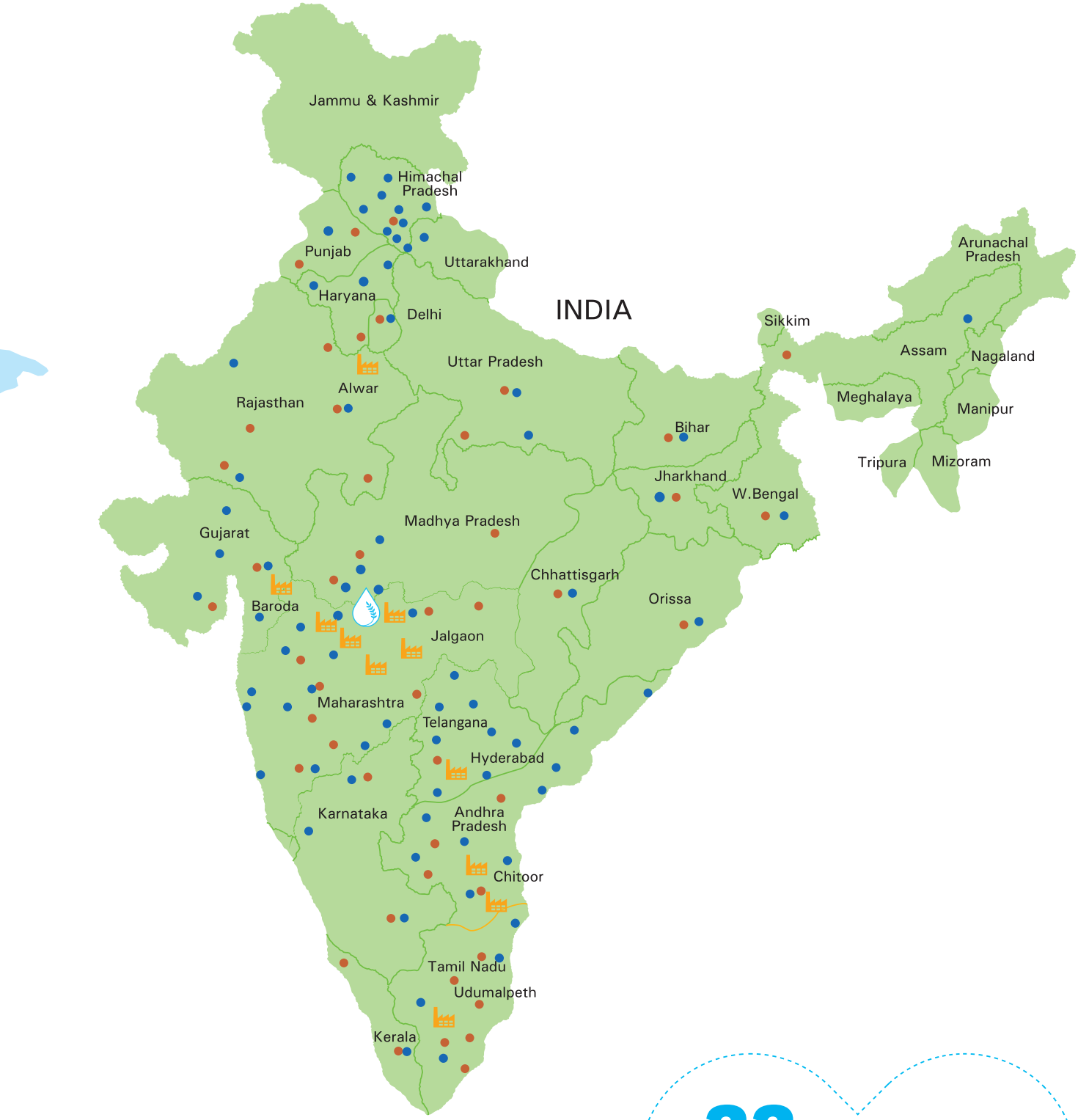
GLOBAL OPERATIONS

Plants	19
Warehouses	26
Distributors	2700+

126+

COUNTRIES REACHED THROUGH OUR PRODUCTS

Corporate HQ Plants Warehouses & Sales Offices



INDIA OPERATIONS

Plants	14
Offices	84
Depots	39
Dealers	7500+

33
MANUFACTURING PLANTS ACROSS THE GLOBLLY

Corporate HQ Plants Offices Depots

*Map not to scale.

A FAMILY OF GLOCAL BRANDS

MICRO-IRRIGATION SYSTEMS AND EQUIPMENT

Jain Drip — More Crop Per Drop®

Jain Sprinklers — More Crop Per Drop®

Jain Rainport — More Crop Per Drop®

Acurain Sprinklers Since 1936

SmartClean — Automatic Screen Filter

JainDripkit — More Crop Per Drop®

Chapin — More Crop Per Drop®

drip TECH — A JAIN IRRIGATION COMPANY

THE MACHINES — THE Machines Yvonand SA, Switzerland — A JAIN IRRIGATION COMPANY

Jain Greenhouse — Better Yield - Greater Profits.

RESOURCE TO ROOT — Integrated Irrigation Solutions

Jain Tissue-Culture — Better Yield - Greater Profits.

Jain Sprinkler Pipes — More Crop Per Drop®

NAANDANJAIN — A JAIN IRRIGATION COMPANY

OBSERVANT

S4C — SOLUTIONS FOR CROPS

IDC LLC — IRRIGATION DESIGN & CONSTRUCTION

Agri-Valley Irrigation, LLC

NUTRICARE

IRRICARE

IRRISMART

GAVISH control systems — A JAIN IRRIGATION COMPANY

Jain Logic™

ETwater

PIPES PIPES AND SHEETS

Jain Pipes — Your Lifeline to Prosperity.®

Jain PE Pipes — Your Lifeline to Prosperity.®

Jain Column Pipe — Your Lifeline to Prosperity.®

Jain Casing Pipe — Your Lifeline to Prosperity®

B-SURE GAS PIPE

B-SURE CORRUGATED PIPE — Better B-Sure, Never be Sorry!

B-SURE SEWERAGE PIPE

24 7 — Drinking Water Solutions

EX-CEL — Building a strong future together.

Jain Plumbing — Install Peace of Mind!

NuCedar Mills — finely crafted exteriors

EXCEL PLASTIC PIPING SYSTEMS — A JAIN IRRIGATION COMPANY

Niplastics

GREEN ENERGY PRODUCTS

Jain Green Energy
Our joint venture with Nature

Jain Solar

Jain Jyot

Jain Solar Pump

Jain PV Panels

AGROVOLTAIC

JAIN FARM FRESH FOODS LTD.

Jain FarmFresh
Your recipe for great taste.

FRU2go
Pure Fruit Energy

chef william

SLEAFORD Quality Foods
A JAIN COMPANY

FRUZEN

iNNOVAfOOD
A JAIN COMPANY

VALLEY SPICE

White Oak FROZEN FOODS
A JAIN COMPANY

CASCADE SPECIALTIES
A JAIN COMPANY

Bio Samruddhi

SOCIAL PROFILE

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

GANDHI RESEARCH FOUNDATION

JAIN SPORTS ACADEMY
Mind • Body • Soul

BAHINABAI CHAUDHARI MEMORIAL TRUST

GAURAI KRISHI-TANTRA NIKETAN

KNOW THYSELF
BHAISAHEB SUNDARLAL MALHARA POTENTIAL DEVELOPMENT ACADEMY

PBMA's
KANTAI NETRALAYA
Eye care for you

ANUBHŪTI SCHOOL

JAIN
Jain Irrigation Systems Ltd.

Small Ideas.
Big Revolutions.®

BOARD OF DIRECTORS

Bhavarlal H. Jain (1937-2016)
Founder

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 & CFO

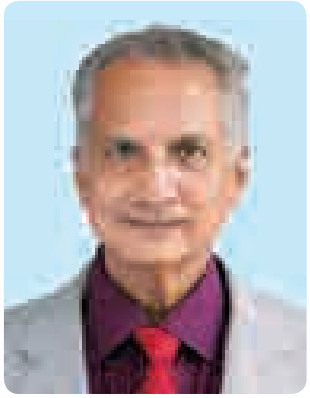
He joined the management team in 1990. He is director in charge of the fast growing plastic product division and has extensively done global and institutional sales and marketing for all business divisions of the company.

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 and is the 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 and 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.

Avdhut V. Ghodgaonkar
Company Secretary &
Chief Compliance Officer

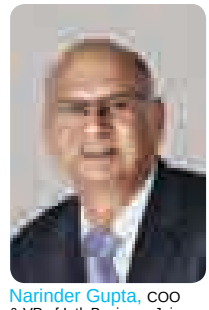
He joined the management team in 1992. A company secretary by qualification, he has extensive expertise in compliance issue, SEBI & Stock exchange matters and general legal and company law.

MANAGEMENT AROUND TH

Aric Olsen
President, Jain Irrigation, USA

James Arnold
M.D. Sleaford Quality Foods, UK

Suvan Sharma,
CEO, Cascade Specialities, USA



Narinder Gupta, COO & VP of Intl. Business Jain Irrigation, USA

Ashish Gadi
CEO, Excel Plastics, Ireland

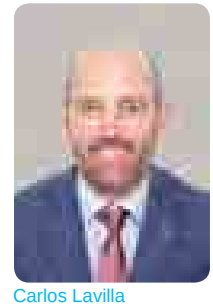
Kris Nightengale,
VP-Sales & Marketing, Jain Irrigation, USA

Anthony
General Manager, NDJ, France

Richard Restuccia
VP-Sales & Marketing, Jain Irrigation, USA

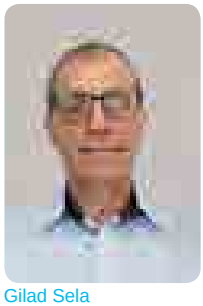
Carson Lennox, General Manager, Jain Irrigation, USA

Alvaro Rocca
General Manager, NDJ, Italy



Carlos Lavilla
G.M., NaanDanJain, Ibérica S.L.U.

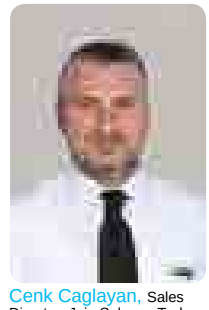
Antonio Alfredo Teixeira Mendes, General Manager, NaanDanJain, Brazil



Gilad Sela
General Manager, NDJ, Australia

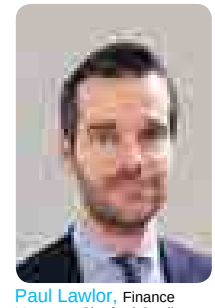
Hennie Needham
General Manager, NDJ, South Africa

Neeraj Bhandari
CEO, Jain MENA



Cenk Caglayan, Sales Director, Jain Sulama, Turkey

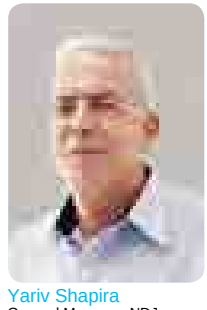
Silas Tan



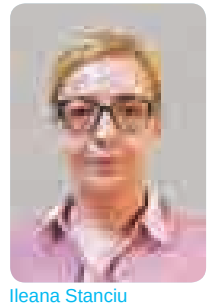
Paul Lawlor, Finance Manager, Sleaford Quality Foods, UK

Raul Urteaga
General Manager, NDJ, Peru

Sudhakar Maddila
CEO, NaanDanJain



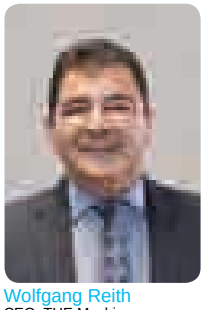
Yariv Shapira
General Manager, NDJ, Mexico



Ileana Stanciu
General Manager, NDJ, Romania

Nir_Vaiman
NDJ_Israel CFO

Amnen Ofen, Director, NaanDanJain Irrigation, Israel



Wolfgang Reith
CEO, THE Machines, Switzerland

John Donnovan
CFO, Jain Irrigation, USA

Mike Jacobsen, VP-Operations, White Oak Frozen Foods, USA

E WORLD

Atin Kumar Tyagi,
Manager-Systems (Management Systems)

Abhijeet B. Joshi, Sr. VP, Irrigation R&D

Sunil D. Gupta, Executive VP, QA Food Processing

Dr. Bal Krishna Yadav,
Associate Sr. Manager, Agriculture R&D

Abhay K. Jain, President, Marketing (MIS) - Maharashtra

Dongarmal I. Desarda,
Sr. VP, Indirect Taxation

Shravan V. Patil,
Sr. President - SCM (Fruits & Vegetables)

Neeraj Gupta,
CEO, JFFFL

Roshan R. Shah, VP - Export Marketing, Food Products

Jitendra S. Jain, VP-Production, Piping Systems

Vilas P. Patil, Sr. VP, Food R&D

Dr. Dilip N. Kulkarni,
President - Technical Support, (Food Processing)

Anilkumar Kataria,
President, Marketing (MIS) Southern India

Somnath P. Jadhav,
Sr. VP - Projects, Irrigation Systems

Rajiv B. Deshmukh,
Sr. VP - Banking

Kalyansing B. Patil,
VP - Marketing, Tissue Culture

Satishchand. K. Mangal, Sr. Manager, Corporate Affairs

Ashish P. Bhirud,
Sr. Manager, Construction Services

Anil B. Patil, Sr. VP-Production (Tissue Culture)

Sameer R. Sharma,
Associate VP-Administration (Food Processing)

Nemichand Meghraj Jain,
VP-Marketing (Piping)

Shashikant N. More,
VP-Marketing

Mohinder Kumar Batra,
VP-Sales and Marketing, JFFFL

Narayan G. Lalwani,
VP-Purchases

G. S. Oswal,
Sr. Manager-Production, (Injection Moulding)

Mahesh B. Patil,
Executive Sr. Manager-Production, (Tubings)

Pradeep S. Naik, Executive Sr. Manager, Human Resources

Kalyani K. Moharir,
Manager - Production (Tissue Culture)

Dr. P. Soman,
Sr. Scientist, Agri Extension Services

Dr Sangita Ladha,
VP-Marketing and Business Dev

NAANDANJAIN 80-YEARS

Israel

The first sprinkler saw the light of the day in NaanDanJain (then Naan) in year 1937. Since then NaanDanJain has been the harbinger of change and innovation in irrigation technology. For over eight decades the company has been designing high-quality micro-irrigation systems, automation solutions, decision support system and tailor-made integrated crop irrigation solutions that deliver increased water factor productivity.

THE PROUD LEGACY

Our Founder Bhavarlal H. Jain had said, **'Water is the origin and the essence of life'**. Hence, we all have responsibility and role to play to 'value the water'. His guidance is very well reflected in the rich and proud legacy of NaanDanJain:

"Enterprise instead of Money, Hard Work instead of Wealth and Responsibility instead of Glory"

— Bhavarlal H. Jain
Founder

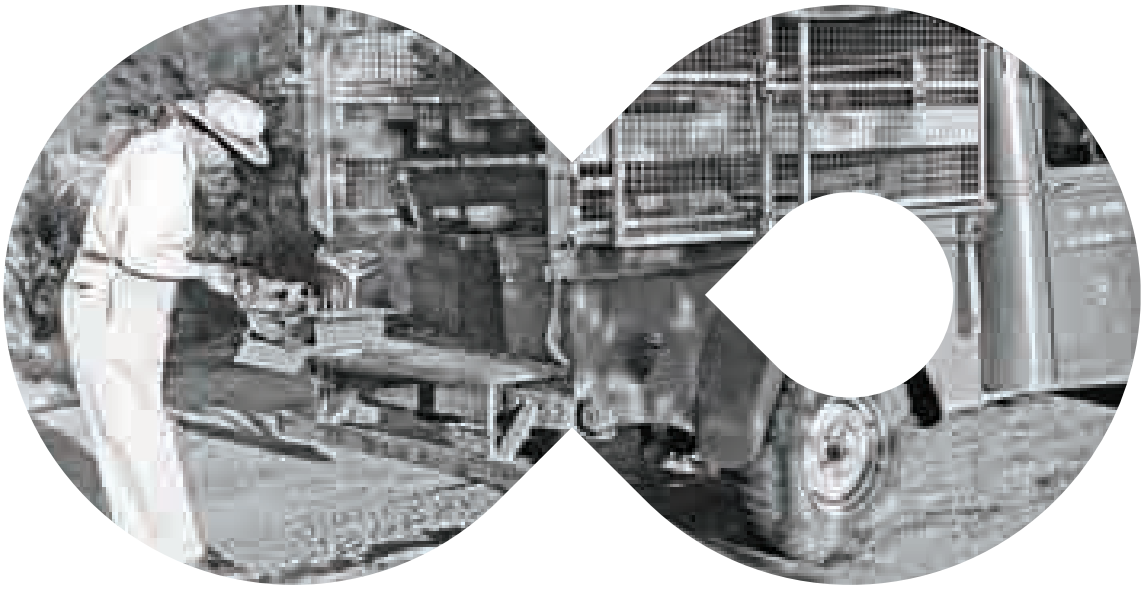
Water savings up to 50%

PEACE WITH WATER – THE WAY FORWARD

Today, NaanDanJain offers its technology to more than 100 countries across the world to small and large farmers. Since 2007, the merger of NaanDan and Jain Irrigation Systems Ltd. has created enriching, multi-cultural business synergy alongside significant product portfolio expansion and R&D activities.

Facing today's challenges of growing needs for food and water resources for the ever-expanding world population, NaanDanJain plays an important role by leading 'each drop to its crop'.

The company is creating innovative solutions for judicious use and equitable distribution of water to achieve peace within and across boundaries.



THE 80 YEAR HISTORY OF NAANDANJAIN

1937

The first Israeli sprinkler sees the light of day with the development and manufacture of two-arm 3/4" rotary sprinklers

1949

323 3/4" and 344 1" metal impact sprinklers for field irrigation created

1955

Field service is established, headed by Jacob Shapir, with the aim of training farmers in Israel and abroad in the proper use of sprinklers for irrigation

1957

223, 323, 333, 344 - ½" and ¾" metal sprinklers. A major milestone because plastic parts are integrated for the first time

1957

The 268 – the first 2" giant metal sprinkler created

1962

A quality control system is established – Naan is one of the first industries in Israel to do so

1964

The first Israeli dripper is developed and manufactured by screwing Blue Heart and Red Heart drippers into a metal or plastic pipe. Irrigation solution for greenhouses, hothouse tunnels and orchards

1964

Chapin - The world's first thin walled drip tape. Manufactured from high-quality polyethylene with unique turboline flow path

1964

The world's first Turbulent Flow Path dripper was patented and launched

1967

MiniKat – a moving irrigation system for sports fields – is introduced. Kat-Naan is introduced for field irrigation

1968

Sprinkler 501 – a turbo plastic impact sprinkler for stationary and movable irrigation in orchards and fields

1970

The 710 mini-sprinkler, sprayer and fogger are a multi-purpose micro-irrigation station for greenhouses, tunnels, orchards and gardens. The base of Hadar 7110, a transition from mobile irrigation to fixed irrigation

1973

Pop-up sprinklers are manufactured for gardens

1975

Pop-up sprinklers are manufactured for gardens

1977

NaanTif - First Turbulent FlowCylindrical Inline dripper with patented manufacturing process for inserting drippers into the drip pipes during extrusion

1977

The 255 and 268 part-circle sprinklers join the family of giant metal sprinklers for full and particle irrigation

NAANDANJAIN®

A JAIN IRRIGATION COMPANY

1981

NaanPC - A dripline with integral regulated drippers is introduced – a market first

1985

The 805, 809 line of innovative pop-up sprinklers is developed for gardens

1989

Paz – an innovative flat dripper for thin-wall pipes created

1990

The 5022 sprinkler for efficient field irrigation, contributing greatly to crop quality and having a great impact on the irrigation industry

1991

The 5024 sprinkler is added for efficient orchard irrigation

1997

Pop star – an innovative gear-driven, pop-up sprinkler with an arc memory of 40˚ - 360˚

2001

Naan Irrigation merges with Dan Sprinklers, broadening the product range and knowledge in micro-irrigation

2002

The Super-Fogger is introduced – the ideal solution for climate control and greenhouse fogging systems

2004

Opal – A silicone motion-controller plastic sprinkler for fields and orchards

2005

Amnon Drip – a pressure- compensating (PC) dripper with non-leaking & anti-syphon mechanisms

2007

NaanDan Irrigation merges with Jain, India

2008

Proprietary SD (Super Diffuser) hammer is introduced for impact sprinklers 5022, 5024, 6025,6024, 6004 and 5035 (patented) to improve water diffusion

2012

The Jain Corporation becomes the sole owners of NaanDanJain Irrigation

2013

Magic Drive – plastic sprinkler with silicone motion controller combined magnets, vibration free

2016

A unique spraying system (CCS) is developed for foliar treatment of orchards

2017

A new family of products for LandScape (public, municipal and private) is added to NaanDanJain's arsenal of solutions

2018

Jain Logic™ - Precision agriculture, from soil moisture monitoring to evapotranspiration forecasting and irrigation and fertigation scheduling, the only software farmers need to achieve higher crop yields.

THE 59 YEAR HISTORY OF CHAPIN WATERMATICS INC.

1960

- In 1960 Mr. Richard Chapin Develops a watering system for pot plants for irrigation his flowering business.
- Chapin Watermatics Inc., incorporated Oct. 1, 1962

1962

Early show in Lansing, Michigan with Bill and Bob Chapin. Shows pot water system information and an actual Moist Scale is pictured.

1964

Photo of Norm Smith, Agricultural Agent at Old Westbury Gardens, Long Island, NY – First installation of row crop drip irrigation system with plastic mulch.

1966

June 18, 1966 – Chapin Watermatics offers variety of automatic water devices including new Water Rings with ooze watering action.

1967

Jan. 1967 – Chapin anticipated sharp increase of its product, Dew Hose

1968

- Jan. 1968 – article about Lead Weights being cast for Leader Tubes – pot watering system.
- Early trade show display for the Greenhouse / Nursery products; Tube Weights, Spray Stakes & Water Loops. Date unknown.
- Later picture of trade show display showing Twin-Wall products.

1973

1973 – 1974 Picture of Richard Chapin on early trip to Africa demonstrating 50 gallon drum and simple irrigation system.

1975

August 1975 – overview picture of Chapin Watermatics plant and greenhouse and flower shop at 368 N. Colorado Ave.

1977

Jan. 8, 1977 – Chapin Watermatics plans to relocate from 368 N. Colorado Ave. to 740 Water St.

1978

- March 1978 – Watermatics firm moves to 740 Water St., Watertown.
- March 2, 1978 – Bill Chapin holding roll of Twin Wall hose used to irrigate thousands of acres of crops.
- April 29, 1978 – picture of Bill Chapin with Twin-Wall Hose, pipe dream that really paid off. Pictures of Tube-Weights, Engineers who draft design for new equipment and machines and recycled scrap.
- Sept. 27, 1978 – Letter of Commendation from New York State Dept. of Commerce for expansion.

1979

- March 7, 1979 – Article – Chapin sets production records in 1978.
- Oct. 11, 1979 – NYS listing of companies getting business loans for expansion.

1980

- Jan. 2, 1980 – Firm refuses to ship to Iran
- April 3, 1980 – Goods slip into Iran anyway.
- Early 1980's – trade show with our reps. Probably during the 1980's.

1982

- March 1982 – Chapin Watermatics Inc. gets its first Apple personal computer.
- Chapin Watermatics develops new products. More than 20 items for greenhouse, nursery & rows crops. Date of article unknown.

1985

Oct. 9, 1985 – Watertown Daily Times article about the Hawaiian Pineapple Industry thriving with a picture of machinery that installs Twin-Wall Hose.

1986

Oct. 1986 – Watertown Daily Richard Chapin inducted into Society of American Florists' Hall of Fame.

1988

Oct. 1988 – Australia Trade Show display with Bill Chapin.

1991

Oct. 1991 – Richard Chapin awarded the Annual Pioneer Award at the American Society of Plasticulture.

1992

July 1, 1992 – State loan guarantees Chapin expansion and adds jobs.

1993

- Jan-Feb. 1993 – Training trip of 2 Jain technicians to Chapin Watermatics
- Feb. 1993 – "Irrigation News" article on drip irrigation for famine relief and the Chapin "Bucket Kit" program.
- Sept. 1993 – William Chapin elected director of American Society of Plasticulture.
- Sept. 22, 1993 – Presentation of New York State Governor's Award for Achievement in Export by Gov. Cuomo.
- November 1993 – "Irrigation News" article. Richard Chapin receives Industry Achievement Award from the Irrigation Society.
- November 1993 – Commemorative Plaque installed at Old Westbury Gardens.

1994

- Jan. 30, 1994 – Article in Watertown Daily Times – on "The Father of Drip Irrigation", Richard Chapin.
- 1994 – Outstanding Entrepreneurs in Upstate New York award to Richard Chapin and Chapin Watermatics.
- Sept. 1994 – Richard Chapin presented video of introduction of small-plot drip irrigation to third-world countries at the American Society of Plasticulture.

1995

1995 – Presentation of Recognition at Agro '95 in Guadalajara, JAL, Mexico.

1996

- Feb. 22, 1996 – Chapin Watermatics seeks 4.15 million funding for expansion from JCIDA.
- April 1, 1996 (Post Standard article) Chapin irrigation system helps gardens in drought-prone nations.
- April 1, 1996 – (Post Standard article) Richard Chapin doesn't look all wet anymore. Invention of first drip irrigation system created more questions than buyers. Today, systems are bringing water to crops around the world.

1997

Jan. 30, 1997 – (Watertown Daily Tmes) Chapin Watermatics product helps feed starving nations.

1998

June 12, 1998 – JCIDA agrees to 1.1 million line of credit for Chapin Watermatics.

2001

Aug. 1, 2001 – Watertown City School District awards Richard D. Chapin with Distinguished Alumni Wall of Achievement.

2002

Aug. 10, 2002 – Chapin group to introduce irrigation system in Malawi.

2004

Feb. 7, 2004 – Chapin works 7 days week because of flood of orders. Never done before in 40 year history of company.

2006

May 3, 2006 – Chapin Watermatics gets new owner. Jain Inc. takes over operation.

Chapin®

More Crop Per Drop®

AGRI VALUE CHAIN

GOODNESS LINKS TO GOODNESS

GOOD VALUE IN EVERY STEP

Jain Irrigation is striving to add value to the entire agricultural chain with the commitment to grow and attain water, food and energy security through optimum and improved usage of resources. Be it educating the farmers on updated techniques to cultivate crops and turn barren fields into fertile lands, JISL has been adding value to every step in agriculture along with meaningful contribution to society.

With a complete range of agri-products for the world market and growing domestic clientele, JISL believes in adopting eco-friendly technologies, initiating good agricultural practices and location specific cropping patterns in different agri-ecological systems.

RESEARCH & DEVELOPMENT

- Modern micro-irrigation technology
- High-tech agri inputs (e.g. tissue culture & UHDP)
- Automation-Internet of things

PROFIT FOR ALL

STATE-OF-THE-ART FRUIT & VEGETABLE PROCESSING FACILITIES

Produce from improved yield from farmers' fields.

EXTENSION ACTIVITIES/ CAPACITY BUILDING

(Reaching to farmers and educating them on high-tech inputs and building their capacity and being their support system).

HIGH YIELDS

- Bumper yields
- Optimised used of energy and water

INCREASED INCOME

More yield with minimum water, energy and time resulting into more profits.

Legend

JIIS Jain Integrated Irrigation Solution

Drip & Sprinkler are pressurised network and flow irrigation is designed with pressure of 2kg/cm² at outlet. So that whenever required Micro Irrigation Systems can be installed to obtain higher efficiency

RESOURCE TO ROOT

Water Source

Conveyance & Distribution Network Efficiency

On-Farm Irrigation Efficiency

The on-Farm Irrigation efficiency (field application) assumed as

Overall Project Efficiency

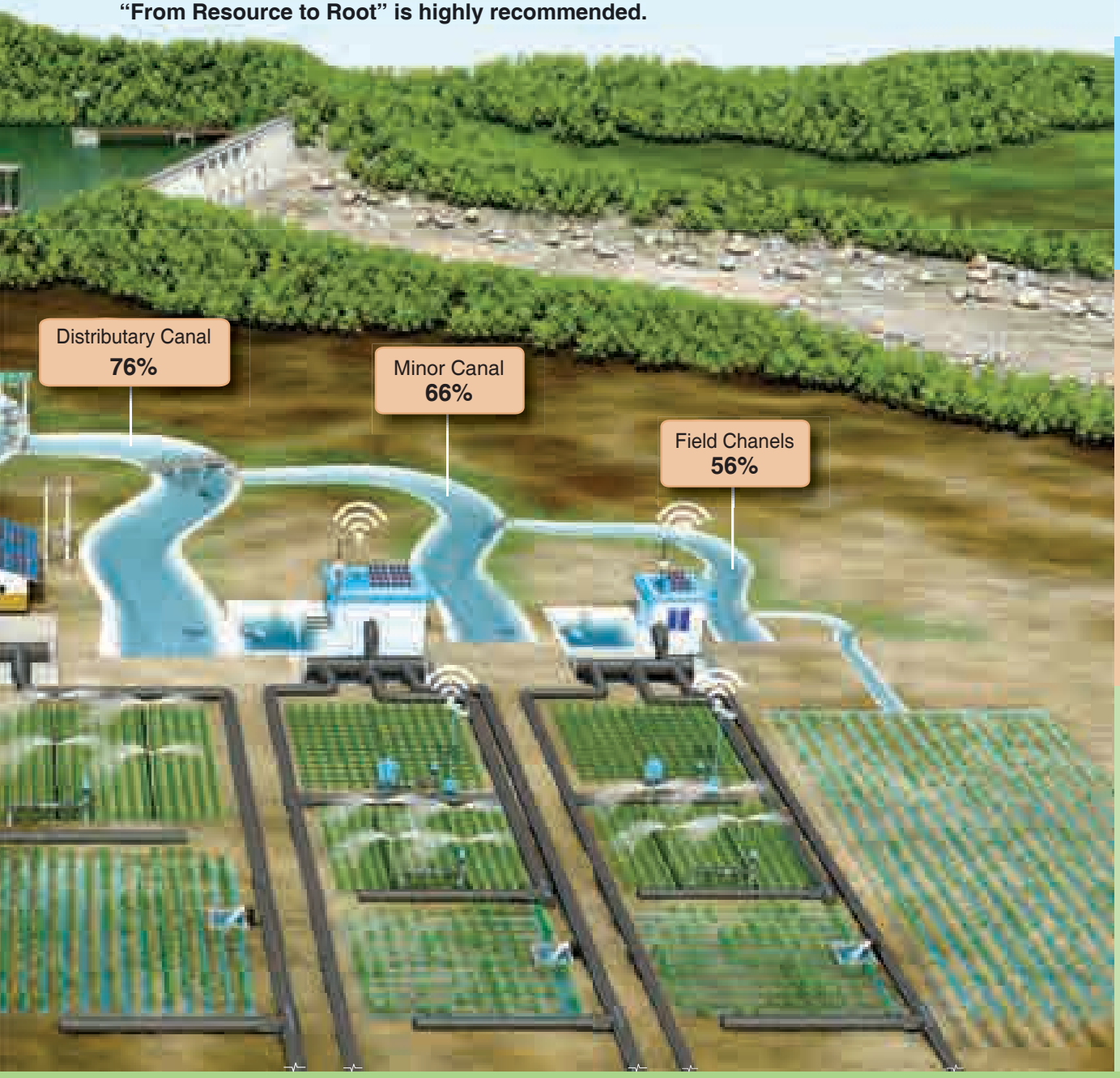
Concept - Resource to Root™		Open Canal	
90% Drip		80% Drip	65% Sprinkler

Note : Considering overall minor hydraulic losses across large irrigation network, the onfarm irrigation efficiency for drip is considered as 90% for the sake of calculation.

More Crop

Conclusion :

- If the water conveyance is through only open canals and on farm application through flow, then the maximum achievable efficiency of **Traditional Model** would be only 34%.
- In case open canal are partially converted into piped network the overall efficiencies would be between 40% to 81% depending on the on-field Irrigation method chosen.
- If the pipes are chosen for water conveyance & Drip Irrigation is chosen as on-farm irrigation system, the overall irrigation efficiency will be the highest at 89%, hence this model - **Jain Integrated Irrigation Solution "From Resource to Root" is highly recommended.**



Water Source

Conveyance & Distribution Network Efficiency

On-Farm Irrigation Efficiency

up to 95% for Drip, 75% for Sprinkler & 60% for Furrow Irrigation

Overall Project Efficiency

Network + Jain Integrated Irrigation Solutions (JIIS)							Traditional Model
53% Furrow	71% Drip	56% Sprinkler	46% Furrow	62% Drip	49% Sprinkler	40% Furrow	34% Furrow

Per Drop®

Source : FAO, WB and Jain Irrigaiton internal study.

WORLD'S LARGEST COMMUNITY BASED FULLY AUTOMATIC

INTEGRATED DRIP IRRIGATION PROJECT

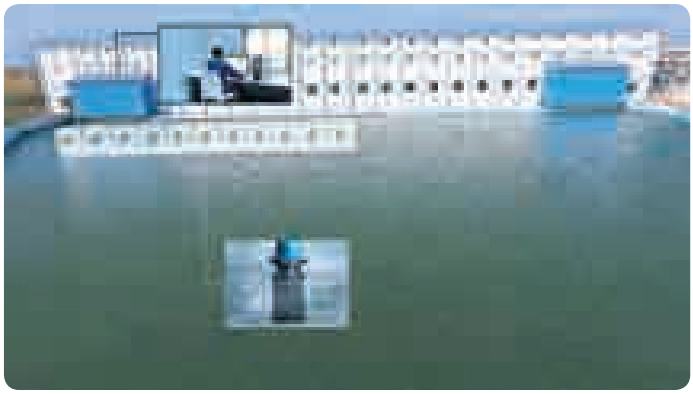
Ramthal, Karnataka, India

The largest IOT based Micro Irrigation Project in India that irrigates more than 30,000 acres of dry lands located on the right bank of the Malaprabha River. The project provides pressurised and fully automatic drip irrigation system which is controlled by web-based software.

A unique IOT based software and analytical platform has been designed to operate Ramthal irrigation project. It helps to control and monitor right from SCADA system in pump house to irrigation valves in farmers' fields through internet. It can take inputs from different types of sensors like pressure, flow, level, soil moisture, rain, etc.

IMPACT

Parameter	Traditional Canal System	Jain Integrated Irrigation Solution System (Piping Network + on Farm Drip Irrigation)
Farmers Benefitted		7382
Irrigation Efficiency •	34%	89%
Water Required, Mm^3	78.51	38.89
Water Productivity, kg/m^3	0.28	1.39
Expected Net Income, INR Million	360	888.9
Net Income, INR/Acre	11,850	29,259
Value Creation Efficiency, INR/m^3 *	4.59	35.06



IGNP

Bikaner, Rajasthan

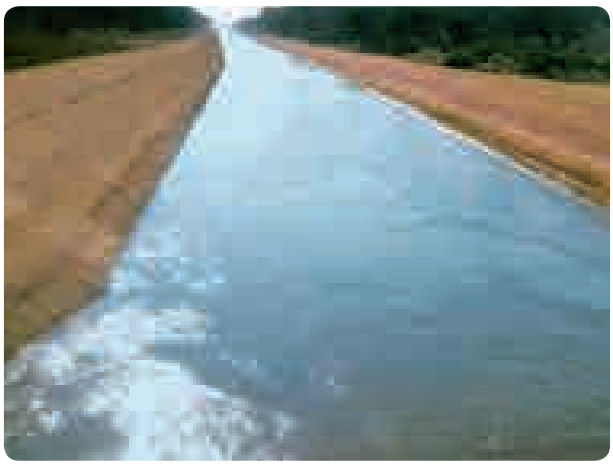
Pressure Piped Sprinkler Irrigation Project in Bikaner, Rajasthan

Indira Gandhi Nahar Project is a unique Canal Command Project aimed towards uniform water distribution to community of farmers

- It is a Community Sprinkler Irrigation Project with storages integrated with canals irrigating 15,090 hectares
- The project's objective is to replace conventional water course system with sprinkler irrigation
- The distribution system is equipped with HDPE Pipelines which was laid for 450 Km
- The project was aimed at capacity building of water users and departmental staff along with 2 years maintenance after commissioning on a turnkey basis

IMPACT

- Irrigated 15,090 Ha area
- Over 3,000 farmers are benefitted
- Water Conveyance Efficiency increased up to 76%
- Field Application Efficiency increased up to 75%
- Overall Project Efficiency increased up to 56%



Description	Open Canal	Sprinklers
Possible area coverage under irrigation, Ha	5250	10500
Water Use Efficiency, kg/m³	0.24	0.8
Net Income, INR/Ha	24,888	56,398
Value Creation Efficiency	6.42	28.14

KANDI COMMUNITY MICRO IRRIGATION

Hoshiarpur, Punjab

World's Largest Standalone Integrated Solar Powered Micro Irrigation Project in Kandi Belt of Talwara and Hajipur Blocks, Hoshiarpur, Punjab.

The primary intention of this project is to make farmers independent of grid electricity and aid them with affordable resources. Kandi Community Micro Irrigation (CMI) project is a unique irrigation project implemented by Department of Soil and Water Conservation, Punjab with Jain Irrigation Systems Ltd., where solar PV energy is being used to pump water from a canal to irrigate area under command with micro irrigation either by sprinkler or drip irrigation.

IMPACT

- A total of 1,642 acres have been covered
- 1,200 farmers have been benefitted
- Increase in yields and income of the farmers
- Minimal usage of water because of drip and sprinkler irrigation
- Reliable energy at zero costs have resulted into reduced input cost to the farmers
- 1.1 MW solar power generation
- Training of farmers for advance farming and cropping pattern
- Network is made up of HDPE/PVC Pipes, where the designed life is 100 plus years

Water Conveyance Efficiency 99% x Field Application Efficiency Up To 90% = Overall Project Efficiency

89%

BENGBU GREENHOUSE PROJECT

China

This project provides for farmland irrigation facilities and is commissioned in 7 counties in Qinghai provincein China. The major components of this project include installation, maintenance, filtration, driplines, sprinklers and fertigation facility with an automated control system.

IMPACT

- Training of water users is an integral part of the project
- A total of 5,100 hectares of land will be benefitted
- End user to get a 60 million dollar project turnkey
- A total of 4,782 green houses will be built with automation facility

MICRO & SPRINKLER IRRIGATION PROJECT

Minagri, Rwanda

It is a rehabilitation project, wherein 1 ha. land is allocated to each farmer to become self sufficient. In this project water is lifted from Muwvamba River and deliver to the Plants through network of PVC Pipes, Drip & Sprinkler Irrigation Systems for 20 different types of crops. The project also involves training and capacity building of the farmers.

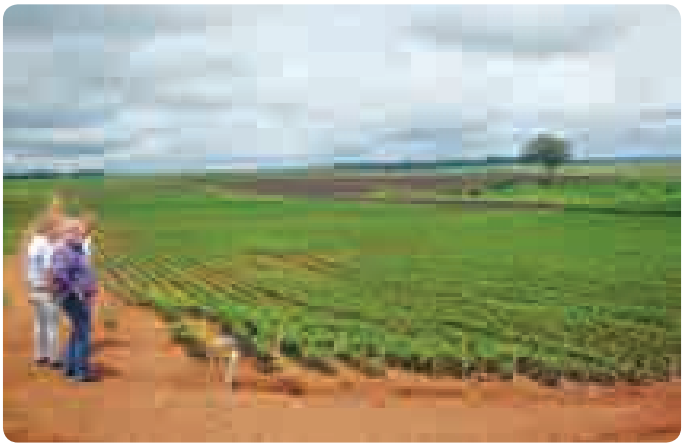
IMPACT

- A total of 200 hectares land has been utilised
- 500 farmers have been benefitted
- Water conservation up to 60%
- Farmers can now grow year-round crops followed by a steady income every month

DRIP IRRIGATION FOR RUBBER & BUD WOOD NURSERY

Prikro (Ivory Coast)

The project was conceived for SIAT Group, Belgium, to distribute water to nursery plants of rubber & bud wood via sand and screen filters and network of PVC mains and submain pipes and drippers. Water is being pumped out from water tank and supplied to each plant.



IMPACT

- Nursery management by utilising resources
- Controlled water usage
- Uniform growth of plants

SPRINKLERS FOR RECLAMATION OF MINES

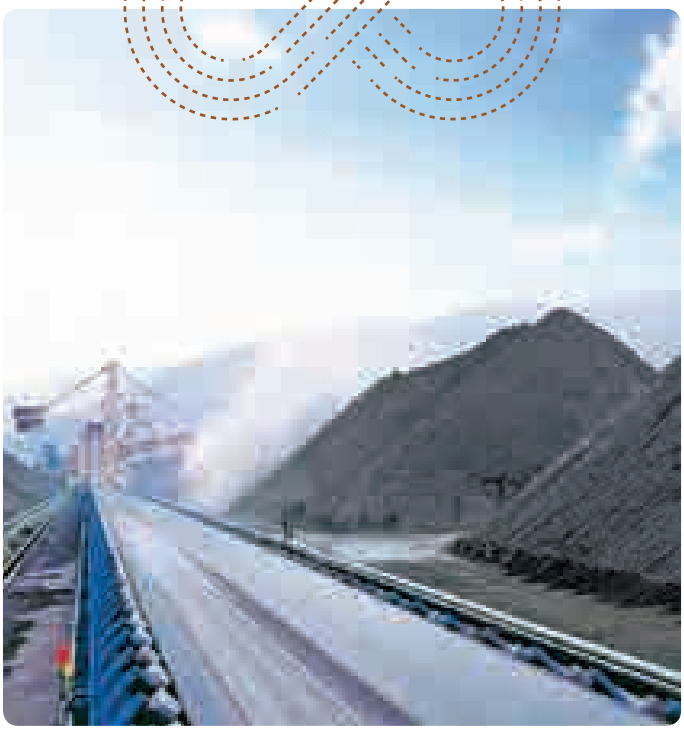
Mexico

La Caridad is the 3rd biggest mine in the world, located in Sonora (Sierra Madre Occidental) in Mexico. The mining industry of Mexico comprises of 60% domestic companies and 40% foreign companies with 310,000 direct employments.

There is a need to install sprinkler system for two reasons:

i) To restore the forest and plants after mining.

ii) To control dust during excavations.



IMPACT

- Los Filos and Penasquito, mines were facilitated with sprinkler system
- The automated sprinkler system reduced man power involvement
- It also helped to reduce water wastage
- Forest restoration became faster and more economical

RICE WITH DRIP

India, USA, Israel

JISL proudly introduced a unique and innovative method of paddy cultivation with precision farming ensuring prosperity and optimised use of water, fertilizer and energy for food security.

IMPACT

- Once adopted, the technology would benefit several million farmers globally
- Rice yield increased up to 40%
- Water saved up to 70%
- Energy conservation up to 60%
- Increased efficiency of water and fertiliser usage up to 80%
- Reduced skin, respiratory and mosquito related diseases
- No or low methane emission
- Better preservation of ozone layer
- Reducing global warming
- Reduced amount of nitrate leaching into water bodies
- Soil health protection leading to consistent crop production

PRECISION VARIABLE RATE SPRINKLER IRRIGATION

India, USA, Israel

This project is aimed towards providing facilitated access to modern irrigation technology to produce remunerative crops with high yields and better returns for farmers aided by the introduction of Jain GeneSys self powered wireless flow control sprinkler and system which optimises the application of water and nutrients to match the plant requirements within a terrain and time by the means of a revolutionary customised field ‘prescription map’.

IMPACT

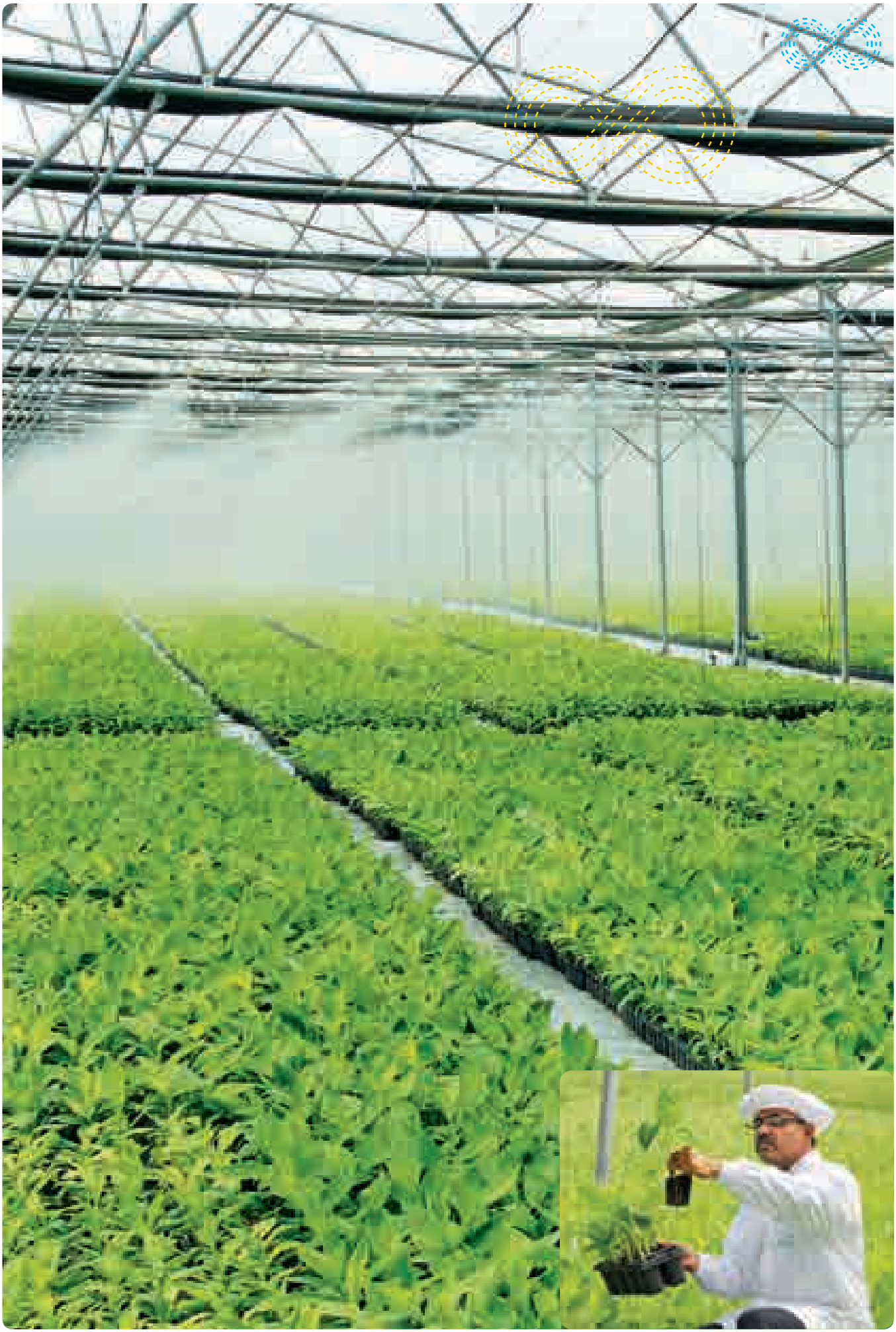
- The system reduced the management zones as small as 4x4 feet resulting 348,480 management zones in circle of 128 acres (2,723 zones per acre)
- A path-breaking technology that will benefit thousands of farmers in the near future

JAIN TC PARK

Jalgaon, India

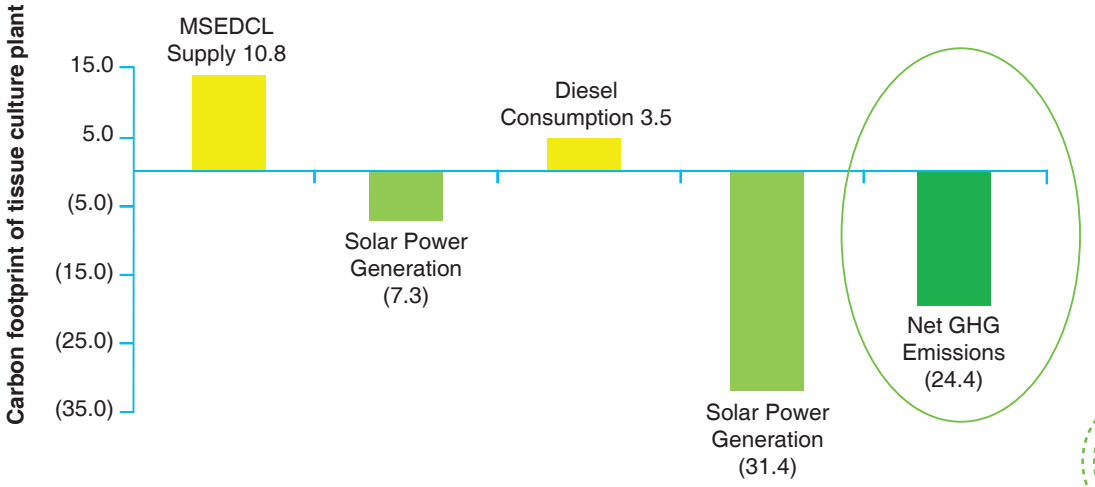
Net Water and Carbon Positive Facility with 100% Wastewater Reuse

Jain Tissue Culture (TC) Park is a unique example of a farm contributing positively to water and carbon cycles, without generating any auxiliary waste stream. It is the world's largest tissue culture facility spread over close to 90 hectares near Takarkheda village in Jalgaon. It has an annual production capacity of 100 million tissue culture plants. A significant amount of energy demand is met by off-grid and on-grid solar installations totalling to 500 kW. During 2017, solar power met 40% of the energy demand for tissue culture production.



CARBON POSITIVE

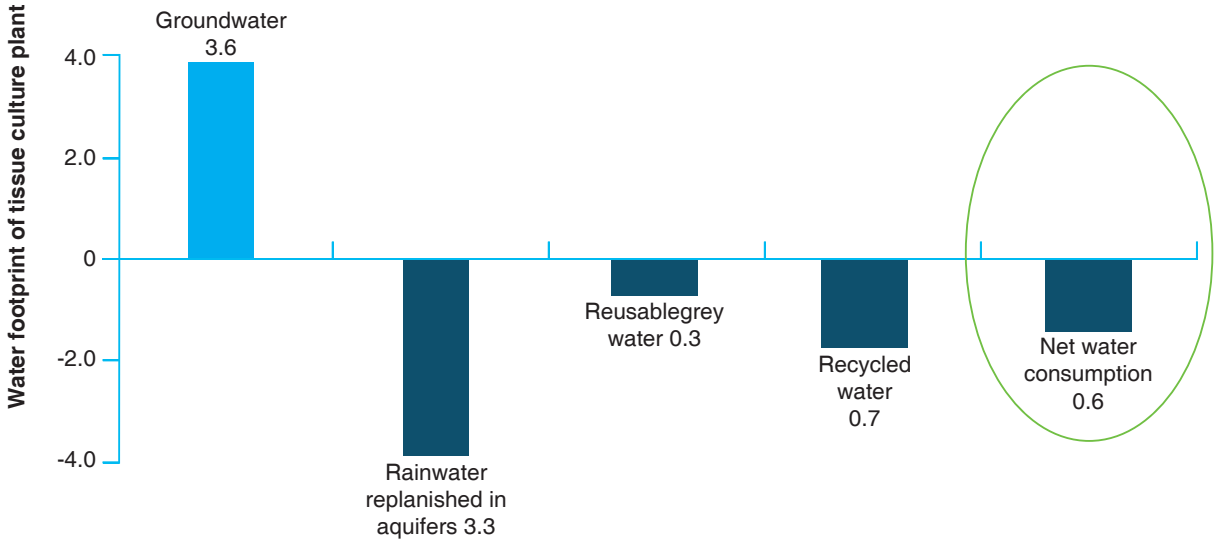
GHG Emissions per Plantlet (gram CO2-eq)



SMART WATER USE

Groundwater recharge through rainwater harvesting is the main feature at TC Park. 5% of the total area in TC Park is occupied with constructed percolation ponds. In addition, water is also replenished to aquifers through out of boundary percolation check dam. Water withdrawal for irrigation of TC plants is done through solar water pumps equipped with solar tracking panels.

Water Consumption per Plantlet (litre)



Through rainwater harvesting, 24% more water than the consumption was replenished into ground in 2017. Moreover the water used for irrigation of plants in polyhouses is recycled through a channel of pipes and filters. Thus, each plantlet produced in TC Park its net water positive.

GOOD INFRA-STRUCTURE COUNTS

DAR ES SALAAM

Tanzania

Water and Sewerage Authority Project, Tanzania

JISL has executed an integrated water supply project with a unique design that reduces water supply losses in the entire water network of Dar es Salaam city.

The $32.98 Million project involved supply, lowering and installation of about 460 kms of pipes. It also involved the construction of 6 ground storage reservoirs of 5,000 to 8,000 cubic meter capacity, pump houses and sub-stations.

IMPACT

- Substantial reduction in water losses
- Major milestone in meaningful work in water supply
- 24x7 access to quality drinking water

BALH VALLEY - COMPOSITE IRRIGATION PROJECT

Sundarnagar, Himachal Pradesh

In this project, water is brought to the desilting unit through siphon and then pumped from the sump to the Main Conveyance Line to irrigate 2355 Ha command area. Delivery Chambers have been provided on the top most elevation in the command area for each lift scheme. Water is then distributed by gravity to the fields. The scheme has a provision of installation of sprinkler irrigation systems through gravity. It is a fully automatic scheme having SCADA control and latest instrumentation. There is also a provision of about 17 tube wells along with pump sets to irrigate some 600 ha land on right bank canal.

IMPACT

- More than 7,500 farmers are benefited
- Project has been designed for 100% leak proof and theft proof and hence it has resulted into substantial water savings.
- This project serves as an ideal model for hilly areas and undulating topographies.

HALIYAL

Uttara Kannada

24x7 “Source to Tap” water supply project, Karnataka

The condition assessment tests revealed that the old distribution network was in very poor condition and could not cater to water demand of projected population of 30 years. It was decided to replace the entire network with JISL’s HDPE piping system, which has service life of more than 100 years.

The operation and management of water supply scheme put into place included pumping of raw water from jack-well located at the bank of river Kali, transportation of raw water, treatment of water at treatment plant, pumping of water to clear water reservoirs, taking meter readings, generation and distribution of water bills and ensuring a 24-hour quality water supply using the same available quantity of water within the city.

IMPACT

- 58 Km of distribution of HDPE piping system
- 6,000 House Service Connections were provided with AMR compatible water meters
- Dedicated billing & collection software developed
- SCADA system for online monitoring of water quality and water management was installed
- Non-Revenue Water (NRW) reduced from 56% to 16%
- Equipped with round the clock service centre.

USE OF TREATED SEWERAGE WATER FOR AGRICULTURE

Fatehabad & Tohana, Haryana

The first priority of most of the water in the dams, reservoirs, rivers is allocated for meeting urban drinking water needs and demand for agricultural water goes on the last priority. So, for rapid development in agriculture we needed to look at an alternative water source - treated sewage water.

In 2016, Haryana became one of the few states in India to use treated water for irrigation purposes.

Jain Irrigation is executing this wastewater reuse project in Haryana. The project reduced the demand on groundwater resources.

In this project the treated waste water from STP (Sewerage Treatment Plant) has been conveyed through network of underground high diameter HDPE pipelines up to agricultural fields.

IMPACT 100% WASTEWATER REUSE

REPLACEMENT OF CANALS

Hoshiarpur, Punjab

Using Large Diameter HDPE Pipes

As the open canals are either earthen and or cement mortar lined and are susceptible to several water losses like evaporation, percolation and breakages of canal bunds either natural or manmade. Increase in water loss is more in a canal than in a piped conveyance system.

The above mentioned wastages have been effectively stopped by conveying water with JAIN HDPE larger diameter pipes installed underground. Below the farms piping system in many parts of India proved to be one of the best solutions for the conservation of water.

Also, as the canal is replaced into underground network of HDPE pipelines there is no requirement of farm-land acquisition from marginal farmers for construction of open canals. That is why farmers are very happy and welcoming such canal replacement projects in India.

In Punjab, more than 13 km length of Kandi canal (Stage II) has been replaced using underground gravity HDPE pipes and fittings.

IMPACT

- Conservation of water and equitable distribution of water
- Water conveyance efficiency increased from 35% in canal system to 95% with the piped distribution network.
- Ensures year round availability of water
- Considerable reduction in maintenance cost
- Higher agri crop productivity

CITY GAS DISTRIBUTION BY JAIN'S HDPE/MDPE PIPING SYSTEMS

India

The use of natural gas has been consistently growing in national as well as international market. A city gas distribution comprises the following segments:

- PNG or Piped Natural Gas for households, hotels, hospitals, restaurants , laundries and in industries
- CNG or Compressed Natural Gas Transport sector use in three wheelers, buses, trucks and cars etc.

It is also used by small scale industries for power generation.

The total number of new PNG house connections in India is targeted to be 153.06 millions in the next 8 years until 2026 (Approx. 30 meter pipes are required for each new connection).

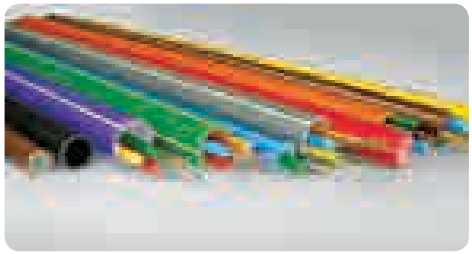
JISL, being the largest manufacturer and supplier of Premium Quality HD/MDPE Gas Pipes, is the preferred supplier of Polyethylene piping to all the CGD entities in the country since start of the CGD business in 1999 by MGL Mumbai. JISL has till date supplied over 40,000 kilometers of polyethylene piping to various CGD entities.

IMPACT

- Conservation of water and equitable distribution of water
- The seamless supply ability of our system ensures uninterrupted availability of gas to households
- Guarantees safe use of gas
- The supply chain avoids the drudgery, facilitating a trouble-free piping network
- The distribution system is an enabler for Smart City

MEGA FIBRE ROLL OUTS IN INDIA

India



As high-speed data connectivity becomes an integral part of our existence, number of users, devices per user and data per device are increasing exponentially. To serve these needs, significant fiberization in back-haul and last mile connectivity is an imperative now and the Government and leading telecom operators are committed to investing in fibre.

Having an enviable track record of over 20 years of timely supplies of quality Silicoat HDPE ducts, micro ducts and bundled (multi) micro ducts, double walled corrugated ducts, JISL is catering the intensifying demand for silicoat HDPE cable ducts and accessories as per demanding delivery schedules from its 3 strategically located production units in India, viz. mother plant at Jalgaon (Maharashtra), Hyderabad (Telangana) and Alwar (Rajasthan). It has till date supplied around 5,00,000 km of HDPE ducts to various telecom operators and has the plans for further expansion of its production capacity in all the locations.

IMPACT

- Data access in rural hinterlands
- Safe conveyance of data
- Enabling Information Superhighway

KANTAI BANDHARA

Jalgaon, India

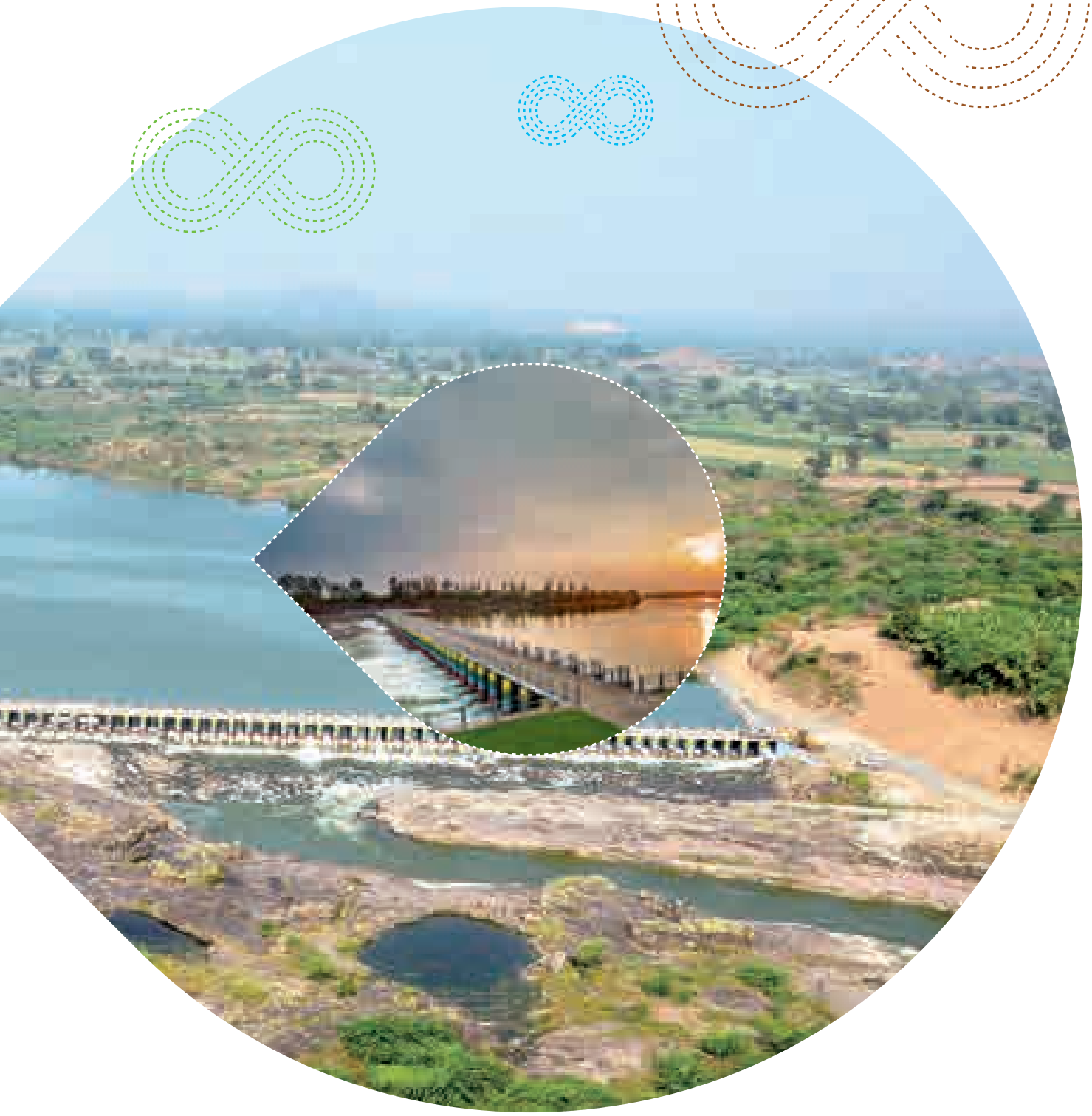
The Kantai Dam is a path-breaking project of a Public-Private Partnership and first-of-its-kind in Maharashtra.

After receiving the plan and the go-ahead from the Tapi Patbandhare Vikas Mahamandal, the Jain Irrigation team of engineers swung into action and in a little over 9 months, the Kantai Dam across the Girna River was completed.

In spite of constructing and maintaining the dam with its own resources, JISL agreed to use only 50% of the water, that too on a duly charged basis, and kept the other half for the community.

IMPACT

- Water stored is water created
- Directly benefits 8 villages (16,000 households)
- Wells recharge for irrigation water supply
- Area went from being rain dependent to having all year water supply
- Spread of backwaters of the full reservoir stretches 5.6 kms
- Top crest of the dam became a road connecting the banks for public transport
- No rehabilitation or land acquisition requried



ICE STUPA ARTIFICIAL GLACIER PROJECT

Ladakh, India

Under the initiative of Mr. Sonam Wangchuk (winner of 2018 Ramon Magsaysay Award) Ice Stupas are formed using glacial stream water transferring to higher ground through buried HDPE pipes. In the dry cold desert of Ladakh, Jammu & Kashmir, farmers depend on water from melting snow and glaciers. But due to global warming which has affected snow falls, farmers are facing water shortage.

Due to the difference in height the water flows up and out of the HDPE pipe into sub-zero air temperatures. The water then freezes as it falls to gradually form an ice cone or stupa. In late spring the melted water is collected in large tanks and then used for drinking or fed onto planted land using a drip-irrigation system with the aid of Jain Irrigation's HDPE pipes.

IMPACT

- The ice stupa became the source of water to 5,000 saplings
- It acts as a sole support for the farmers to cultivate their lands
- During dry summer the ice stupa water delivers drinking water
- Helps to recharge water table by utilising water seepage
- HDPE pipes are the only functional material at sub-zero temperature

BIODIVERSITY AT JAIN HILLS

Jain Hills and Jain Valley, Jalgaon, India

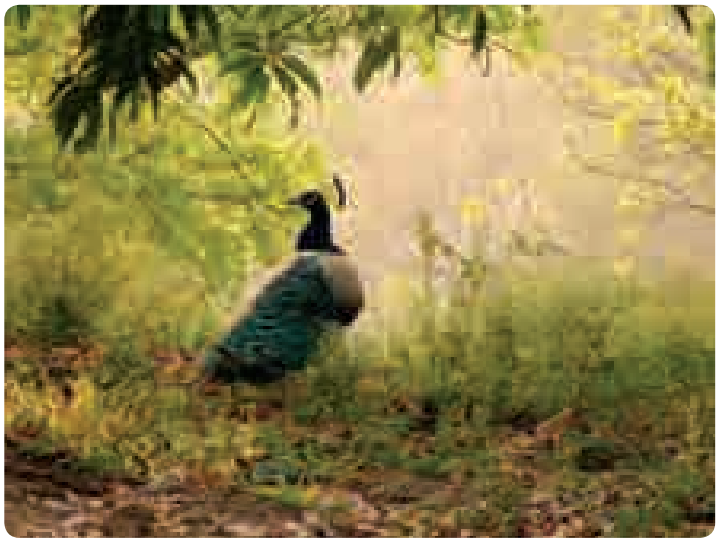
We are driven by our mission to invest in watershed creation and biodiversity enhancement. We are keen to create and conserve the natural habitats for the native flora and fauna at our business locations. Spanning across 1,200 acres and comprising three major establishments namely; Jain Agri Park, Jain Food Park and Jain Energy Park, this project is allied with watershed development, soil conservation and guided with systematic biodiversity action plan. The premises also have FAO certified training and demonstration centre where 50,000 farmers are trained annually on high-tech agriculture.

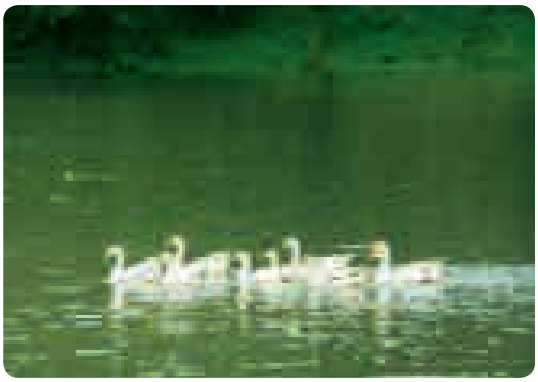
This project aligns Jain Irrigation's activities to contribute directly to India's National Biodiversity Targets (NBTs) and the Global Aichi Biodiversity Targets.

IMPACT

Conservation of iucn listed threatened species

Species	IUCN Status
Black-headed ibis and oriental white ibis (Threskiornis melanocephalus) migratory birds in India	Near Threatened
Common pochard (Aytha ferina) migratory birds in India	Vulnerable





GOODNESS FROM FOOD CIRCULAR ECONOMY

ONION CONTRACT FARMING AND JAIN GAP

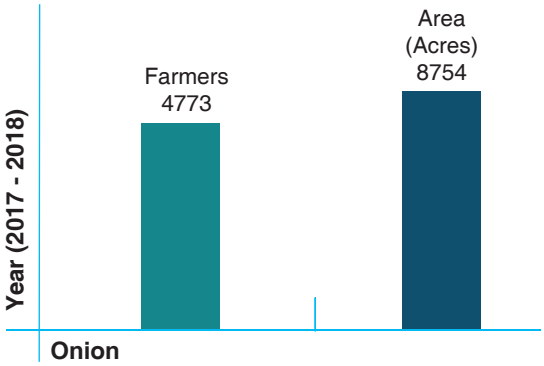
Maharashtra & Madhya Pradesh, India

Jain Farm Fresh Foods Ltd. is one of the largest processors of vegetables in the world, processing 140,000 metric tons of onion and other vegetables per annum. The company procures onions for its onion dehydration facility directly from over 6,000 contract farmer suppliers.

Approximately 90% of JFFFL's onion contract farming is through small holder farmers, with an average farm size of less than 2 hectares. A team of 70 "gram sevaks" (agronomy support team) stay in villages and support onion cultivators on seed sowing, fertigation, good agriculture practices (GAP) implementation and harvesting practices. JAIN GAP farm-level quality standard has also been implemented for contract farmers in different states of India from whom JFFFL procures for processing purpose.

IMPACT

- Water consumption reduced to 40% per hectare
- Farmers' income increased to more than 30%
- On an average 30% increase in yield in was recorded
- Complete traceability of batches of onions in case of any issue
- Reduction in risks associated with the use of agrochemicals
- Provides safety, hygiene and sanitation



PROJECT UNNATI – MANGO

Tamil Nadu, Andhra Pradesh & Karnataka, India

Jain Farm Fresh Foods Ltd. is the world's largest processors of mangoes, processing of over 170,000 metric tons of mangoes per year. The major processing variety is Totapuri mango which accounts to about 100,000 metric tons. We procure about 35% of total Totapuri directly from farmers.

JFFFL and Hindustan Coca Cola Beverages Pvt. Ltd. has launched Project 'Unnati', - a unique partnership with farmers to demonstrate and enable adoption of Ultra-High Density Plantation (UHDP) practice for mangoes. UHDP is a farming practice that leads to mango orchards attaining their full potential in 3-4 years (versus 7 years) and also allows nearly 500 trees to be planted in an acre instead of the conventional method of planting 60 trees.

IMPACT

- Almost 3 times increase in the income of farmers - INR 24,000/acre to INR 96,000 per acre
- Mango farmers across the 3 southern states have shown lot of interest in adopting UHDP technology which increases mango yields from 4 tons per acre to 10 tons per acre
- Around 1,500 acres and 600 farmers of UHDP plantation have been completed across 3 states
- Till now around 35,000 mango farmers have been trained with the help of Unnati training bus

PROJECT UNNATI – ORANGE

Vidarbha, Maharashtra, India

A project in association with Coca Cola India to help farmers grow new and profitable varieties of sweet orange and giving them assured marketability with the help of buy back of fruits.

IMPACT

- 10,000 acre UHD orange plantation for new sweet orange varieties over a period of 10 years
- New orange nursery to provide planting material to the farmers
- Demonstration orchard of all citrus varieties for the farmers
- Around 200,000 farmers will be benefitted from this project through Jain GAP
- Free audio-visual training about citrus cultivation to be provided to local farmers
- Free agronomical support to be provided to farmers by Unnati extension team
- Assured buy back of fruits from farmers by JFFFL

OUR 100% NATURAL FRUIT SNACKS - FRU2GO

Jalgaon, India

Our founder, Bhavarlal H. Jain, had a vision to create natural food products for the consumers which retain the characteristics of how they exist in nature.

This vision laid the foundation for innovation and introduction of all-natural food products - Fru2Go. It's made without any preservatives, added sugar or artificial flavours and colours and manufactured under stringent quality measures as per global standards with the implementation of Quality Management Systems (QMS) and Food Safety Management Systems (FSMS).

Fru2Go is created with the core proposition to give every individual complete fruit nutrition, health and energy. It is a 100% natural blend of fruit pulps. The product range aims to enable a daily fruit intake and nutrition in children for their overall development.

IMPACT

- Provision of healthy and nutritious products for consumers
- Our process allows for transparency and traceability
- The value created through processing is transferred to entire ecosystem
- Increase in productivity and income for supply chain farmers

OUR FROZEN RANGE OF PRODUCTS : FRUZEN

Jalgaon, India

Jain Farm Fresh launched 100% natural frozen fruit pulps in 3 variants viz. Mango, Strawberry and Jamun. Keeping in mind the health aspect, Strawberry and Jamun pulp have no added sugar. Jamun is an offering that even a diabetic person can enjoy as it helps in controlling diabetes.

IMPACT

All these products are:

- Without any preservatives
- Without artificial flavours and colours
- In line with Quality Management Systems (QMS) & Food Safety Management Systems (FSMS)
- They let people enjoy their favourite flavours all year
- The frozen range elongates life of fruits and vegetable

OUR PURE AND AUTHETIC SPICE RANGE

Jalgaon, India

Jain Farm Fresh Foods' latest foray is in the spice category. It shares the organisation's core propositions of being healthy, natural and adding value towards a healthy lifestyle.

Valley Spice has been created to give consumers the real taste of spice in its most pure and authentic form as:

Without

- whole spice
- grounded spice (straight and blended)
- paste
- herbs and seasoning

The product goes through stringent sourcing and processing process before getting packed in one of very innovative packagings. To make the product healthier, our spices go through a process called steam sterilisation.

Also, because of the process that we do, all the spices' active bio-components remain intact, so the products provide more health benefits.

OUR RANGE OF DEHYDRATED ONIONS

Jalgaon, India

This offering is made as a solution for millennials and housewives who are constantly looking for healthy alternatives that suit their busy lifestyles. It removes the hassles of cutting, peeling and storing. The product can be used as an ingredient in all types of cooking applications.

It's 100% natural and comes in red & white onion variants. Onion Flakes doesn't have any preservatives, artificial colours and flavours.

FRESH BANANA EXPORT

Jalgaon, India

India is the largest banana producer in the world. Jalgaon district alone contributes to about 10% of the country's banana production, which is 7th largest in the world. So far, India produces about 25% of the world's bananas but India's share in world fresh banana export is less than 0.2%.

JISL has decided to start exporting fresh banana and for that we need the banana cultivators to adapt to the practices that would yield quality produce like good agricultural and precision farming techniques in soil, water, plant management, irrigation & fertigation scheduling, plant and fruit care, best harvest and handling practice to maintain quality and finally packing in the pack house to maintain international standards.

IMPACT

Even though we have worked with 55 farmers in 28 villages till now the project has a lot of potential as one such farmer has earned a profit of INR 1 million from his 4 acres banana plantation.

WHITE OAK FROZEN FOODS

Merced, California, USA

The Jain Farm Fresh Foods, Inc. Frozen Ingredients Division (FID), formerly known as White Oak Frozen Foods, is a manufacturer and supplier of conventional and organic natural and fire roasted Recued Moisture™ (RM) ready to eat IQF vegetables. Its unique process removes the excess moisture of freshly prepared vegetables by 30-50% to control syneresis (water loss when thawed or heated).

FID is in the heart of California's Central Valley. The area is the most productive and diverse agricultural region in America. It is also known as the "agricultural hub of California" which drives the agricultural economy. This location allows for sourcing from local farmers. Most farmers are in a 50-mile radius from our plant location and by sourcing locally, it receives the highest quality raw material produced at the peak of its maturity.

IMPACT

All FID's products are 100% ready to eat and are safe to consume without further cooking. Our ready to eat process guarantees our customers receive premium vegetables with the highest level of food safety.

The Reduced Moisture™ process is also beneficial to the nutritional factor of the vegetables. Less water gives RM vegetables more nutrition pound for pound and when comparing a cup of RM vegetables versus a cup of fresh vegetables, 33% fewer vegetables are needed to make a full serving with RM vegetables. It produces premium quality custom vegetable blends for our customers' needs.

SLEAFORD QUALITY FOODS LIMITED

United Kingdom

Sleaford Quality Foods Limited, a UK based subsidiary of Jain Group is engaged in the business of food ingredients. It started in 1968 and it became part of Jain family in 2010. Sleaford Quality Foods Limited is based at the heart of agricultural and farming area in England.

Sleaford Quality Foods covers large spectrum of food ingredients market.

The primary nature of the company business is blending, repackaging, trading distribution of food ingredients. It sources its raw materials from very reliable, carefully selected long-term and continuously audited suppliers. It is market leader in dehydrated vegetables in British Isles. In spices, it is a significant player as well.

Sleaford Quality Foods sells most of the retail items under their brand name Chef Williams. It has a vibrant UK-based workforce of about 100 full-time associates and runs its own fleet of trucks that cover the entire of Great Britain.

INNOVA FOODS

Belgium

Since February 2018, Innovafood has been part of the Jain Farm Fresh Foods Ltd.

Founded in 2000, Innovafood is a leading importer, stockist and distributor of food ingredients and has become one of the leading players in the dehydrated vegetables, spices and other food ingredients in Belgium, The Netherlands, France and other neighbouring countries. Innovafood has developed an unparalleled, high quality and long-term supply chain and supplier relationships in India, China, USA, EU, Morocco, Indonesia and Uzbekistan.

It offers a large basket of key food ingredients of dehydrated vegetables, herbs, spices and spice extracts, freeze dried products, natural food colours, bio products, etc.

IMPACT

- Engage in contract farming to aid farmers
- Have full traceability on all our products back to the fields
- Follow quality regulations: ISO, HACCP & BRC
- Ethical way of working introduced

WASTE TO ENERGY: A UNIQUE TECHNOLOGY TOWARDS ZERO WASTE

Jalgaon, India

Bio-methanation of organic waste and utilisation of biogas for power production:

JFFFL is India's largest fruit and vegetable processor and the world's largest mango processor with manufacturing plants in Jalgaon, Vadodara (Gujarat) and Chittoor (Andhra Pradesh).

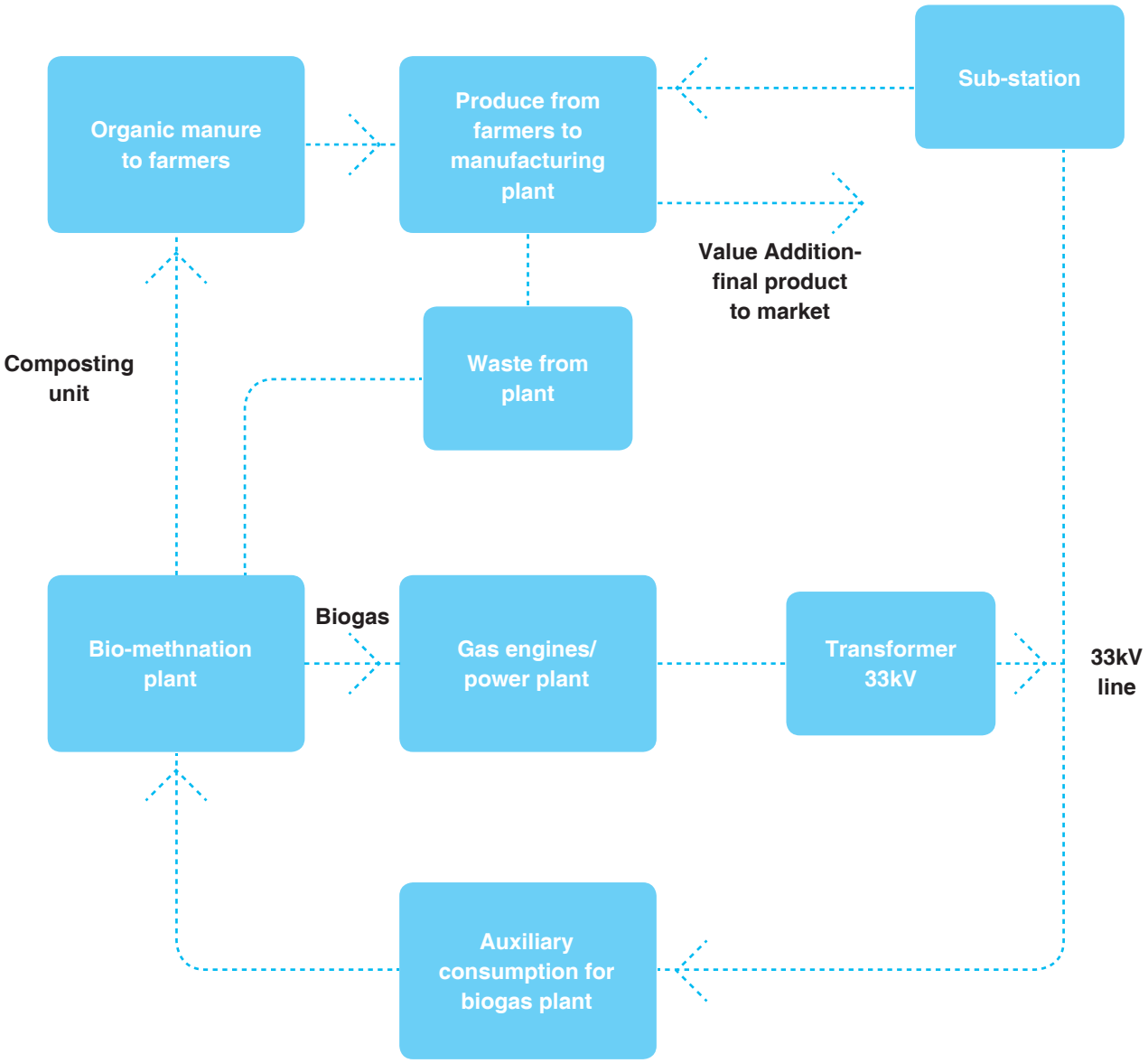
The fruit plants handle up to more than 800 MT/day during the peak season of May to July and 200 MT/day during the other months. This generates a significant amount of waste with a yield to waste ratio of 60:40 on an average. The conventional method followed by most of the fruit processors for their solid waste is to accumulate the wastes in pits allowing for gradual decomposition. However, this creates environmental nuisance such as bad odour near the dump yard and the risk of leachate seeping into the groundwater etc.

JISL has adopted a uniquely sustainable method to handle this huge waste through state-of-the-art bio-methanation technology. Also, the agricultural waste from nearby industries is brought to bio-methanation plant and treated anaerobically in bio-digester. The second part of project is electricity generation from biogas produced from bio-methanation. The biogas generated by organic waste processing is utilised as fuel in gas-based engines installed in the premises, generating 1.668 MW of gross power.

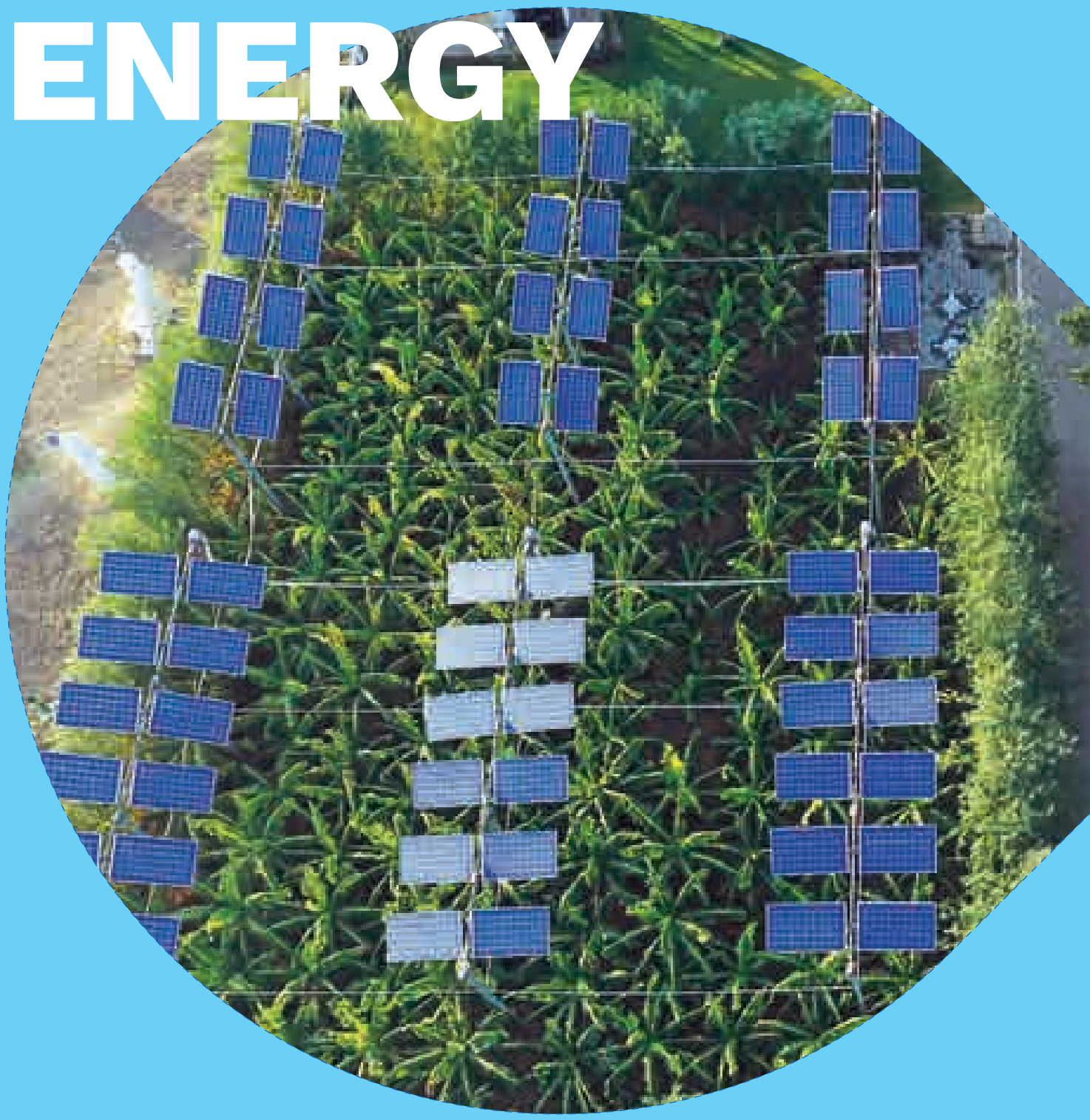
This unique design and method of organic waste treatment and electricity generation has been certified as first-of-its-kind project in India by the Ministry of New and Renewable Energy (MNRE).

IMPACT

- Total Green Electricity Generation: 2789 MWh/year
- Total CO_2 mitigation: 2700 tons CO_2 equivalent/year
- Total Green Manure Generation: 5100 metric ton/year (Including waste from nearby agro-industries)


Organic manure to farmers
Produce from farmers to manufacturing plant
Sub-station
Value Addition- final product to market
Waste from plant
Composting unit
Bio-methnation plant
Biogas
Gas engines/ power plant
Transformer 33kV
33kV line
Auxiliary consumption for biogas plant

GREEN ENERGY IS GOOD ENERGY



AGROVOLTAIC PRECISION FARMING

Jalgaon, India

Jain Irrigation has innovated AgroVoltaic concept for crop cultivation and generation of solar power within limited space using special structures with optimal use of natural resources such as land, water and sunlight. Company, being an expert in agriculture, irrigation, water management and solar pumping, provides solutions for customised sustainable AgroVoltaic farming with holistic approach to farming that includes Jain TC plants / superior planting material, solar energy use and production from same land sub-surface drip irrigation, mulching, fertigation, sub-soil drainage and high-tech horticulture practices. AgroVoltaic farming system was designed to produce solar power using PV Panels and crop from the same land without affecting crop production.

IMPACT

- All components of AgroVoltaic together can achieve 99% water usage efficiency
- Green electricity generated to the tune of 264,431 kWh/acre

SOLAR POWERED INTEGRATED MICRO IRRIGATION PROJECT

Ladakh, India

Sher-e-Kashmir University of Agricultural Sciences and Technology (SKUAST) has High Mountain Arid Agriculture Research Institute in Leh for conducting research on agriculture. This institute is situated more than 14,760 feet above sea level. It was challenging to irrigate research farms as there is no electricity distribution infrastructure and source of water is river flowing in valley. JISL had provided the solar powered micro irrigation systems to research farms. The challenge was to lift water from the river and irrigate research farms, keeping it economical.

IMPACT

- Scope of large scale farming made feasible
- Optimised utilisation of solar and water resources with the help of solar powered micro irrigation
- Aided scientist to perform agricultural experiments on temperature crops
- Energy saved = Energy Generated (units / year) = 78,840 kWh
- Saves cost of electricity distribution infrastructure

SOLARISATION OF LIFT IRRIGATION PUMPING STATION

Kangra, Himachal Pradesh, India

In Himachal Pradesh, agriculture land is distributed over hilly terrains. In most of the cases, irrigation is being done through lifting water from canal or reservoir. Irrigation and public health department in Himachal Pradesh operates & maintains lift irrigation pumping stations across the state. All these pumping stations are situated in lower level than the farms. JISL solarised the pumping station without changing or disturbing existing infrastructure. There were no space available for installation of a solar plant, so instead, was installed on the canal top.

IMPACT

- Pumps can be operated during power cuts and in grid sharing mode
- Dual purpose system - drinking water-cum-irrigation
- Socioeconomic benefits felt on farmers economic conditions
- Cost-saving with durable and efficient solar panels having lifespan of 25 years
- Operate Pumping System in case of grid failure and load shedding

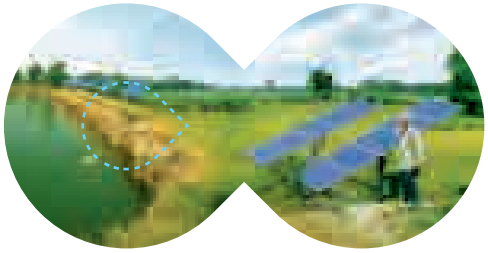
SOLAR PUMPS ENERGIZING IRRIGATION

Jalgaon, India

Solar pumps offer a powerful solution to the prevailing problem of erratic power supply in the agriculture sector in the country. Jain Irrigation has pioneered the development of complete DC Solar agri pumping systems in India. It is one of thefew manufacturers of such pumping systems in the world. Perfectly matched components such as solar panels, controllers, pumps, screen pipes, casing pipes, filters are all designed and manufactured in-house by JISL, leading to superlative performance with a long life. With more than 50% of total agri-pumps installed, JISL is the largest solar agri pumping system providers of the country.

IMPACT

- Provide irrigation access to small and marginal farmers located in drought hit areas and traditional farmers not having access to electricity
- 25,000 plus solar agri pump sets installed in 16 states of the country
- In Maharashtra and Rajasthan 6,000 plus pumps are connected with online real time monitoring portal
- Total green electricity generated approximately 44,000 MWh per year
- Total emissions reduced to the tune of 42,500 tons CO_2 per annum



SOLAR POWER BASED RURAL DRINKING WATER SUPPLY

Jalgaon, India

Clean drinking water is the basic right for all and in order to make it possible, JISL initiated a project to provide clean drinking water to remote villages of Odissa where 10,000 liters of water per day was pumped with the help of solar energy. The project was to integrate solar pumping system in a hand pump that would last for at least 25 years and be easy to operate.

IMPACT

- Independent of grid availability
- Inbuilt protections ensure longer pump life
- Highly durable systems
- System can be operated during off-sun hours using battery, if required
- Less or no maintenance

JAIN SOLAR HAND PUMP

Due to non-availability of electricity, pumping groundwater has become difficult.

One of the solutions to this was the hand pump. But still, people must exert, to get water. Therefore, JISL has come up with an idea of integrating Jain solar pump along with conventional hand pumps.

Jain hand and solar pump is useful to provide piped water supply in remote villages where grid power is not available. This submersible pump is operated on energy generated by the solar PV modules. The Jain solar powered submersible pump is installed in the same hand pump bore well and water is directly transported to an overhead tank for storage and distribution at no operational cost with low maintenance.

IMPACT

- The system can deliver water up to 20,000 liters/day
- Clean drinking water supply for schools
- Drinking water supply for communities and villages
- Reducing drudgery of women in remote areas suffering water scarcity
- Provides 24x7 water

GRATITUDE LEADS TO MORE GOODNESS

“If life is a gift from God, then, a successful business is a gift from society. It is our firm belief that no successful business can ever remain vibrant for long if it ignores the needs of society and the environment.”

— Bhavarlal H. Jain,
Founder

GANDHI RESEARCH FOUNDATION

Jalgaon, India

Gandhi Research Foundation, a social arm of JISL, endeavours to groom young generation on non-violence for peace and co-existence, through its academics, field trainings, development interventions, multimedia interactive museum, archives, exhibitions, Khadi training and other outreach actions across the world.

IMPACT

- With the annual footfall of 45,000, mostly students, the museum is effective in disseminating the spirit of truth and non-violence
- Gandhi Values for Sustainable Peace (GVSP), a learning network, reaching out to over 150,000 students in ten years across India, helping them understand righteous living
- GVSP for prison inmates in Maharashtra prisons
- State-of-the-art archives preserving 0.52 million pages of writings of Gandhiji and his associates
- Twelve month field-based PG-Diploma in Gandhian Social Work
- Organizing marginal farmers into producer organization for value addition and marketing; 120 farmers making a net profit of INR 3.56 million annually
- Microfinance support, a sum of INR 10.1 million to 1,050 families so far
- Developed an economically viable solar powered spinning wheel
- Campus' self-reliance on rainwater and power from its solar unit adds to the learning of the visitors
- Quarterly Magazine 'Khoj Gandhiji Ki' reaching out to 20,000 readers with Gandhian perspectives

ANUBHUTI RESIDENTIAL SCHOOL

Jalgaon, India

Our thrust on education, particularly rural and agriculture-oriented education, finds an expression in various educational institutions.

This unique co-educational 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. The school won the prestigious Wipro Earthian Award for two consecutive years.

ANUBHUTI ENGLISH MEDIUM SCHOOL

Jalgaon, India

Anubhuti English Medium School was conceived by Bhavarlal H. Jain and instituted in Jalgaon to provide quality English Medium Education to underprivileged children. The school was opened on 11th July, 2011. It started with 180 students in Classes I and II. Today the school has 415 students in class I to IX.

Co-curricular activities of music, dance and fine arts are a regular part of schooling. The school provides nutritious food three times a day. Students are also provided with all clothes, books, educational material and medical attention. Anubhuti Residential School's senior students visit Anubhuti English Medium School to interact with the children. The two groups of children put up entertainment and demos for each other.

This integration of children from different social strata in an educational set-up are mutually beneficial – the positive social and economic ramifications of this would be unfolded years later, as these children grow.

Anubhuti English Medium School provides quality education with facilities comparable to the best schools. The school is about experimental learning, i.e. learning by doing. The concepts are taught, revised, tested and

reinforced through activities, educational games, projects, group discussions & field visits. Classrooms have specially designed children friendly furniture. An excellent library stocked with children's books and

magazines, a well-equipped computer and science lab are also provided. Co-curricular activities such as music, dance, art, craft and fine arts are a regular part of schooling.

The Anubhuti English Medium School experiment is to investigate whether removal of illiteracy by imparting quality education will remove the greatest obstacle in upward social mobility. We have initiated an educational fair which provides a platform for every aspect of holistic education, academics, arts & crafts, performing arts, sports and most importantly nurtures the young minds to be entrepreneurs i.e. job-creators rather than job-seekers.

KANTAI NETRALAYA

Jalgaon, India

Kantai Netralaya established in January 2016, is an eye hospital supported by Company Foundation - Bhavarlal Kantaibai Jain Multipurpose Foundation (BKJMF) and run by PBMA's H. V. Desai Eye Hospital Pune with a common goal to eradicate preventive blindness and make Jalgaon a cataract-free district by 2020.

Kantai Netralaya aims at providing comprehensive quality eye care without discriminating between free and paid patients. We conduct regular outreach program in nearby rural areas to create awareness and provide free eye care treatment to the poor and needy.

Spreading Awareness:

- Asha workers (Anganwadi workers) trained for early identification of refractive error: 311
- Medical officers trained on preventive eye care: 167
- Zila Parishad teachers trained to create awareness and provide eye care for school going children: 72

IMPACT

- Walk-in OPDs: 40,111
- Camp OPDs: 33,749
- Free Surgeries: 5,037
- No. of Paid Surgeries: 3,025
- Camps Organized: 480
- Pediatric Surgeries: 77
- Area Covered: Jalgaon and adjoining districts; Buldhana, Aurangabad, Dhule and Nandurbar

JAIN SPORTS ACADEMY

Jalgaon, India

Housing over 400 players (boys and girls) seeking sports training at our Jain Sports Academy (JSA), we have achieved National and International medals. The academy provides training in chess, carrom, football, hockey, cricket, Tae Kwon Do, table tennis and badminton.

The academy also hosts inter-school/inter-district sports events with around 750 students.

IMPACT

- Winner of Maharashtra Chess League conducted by Maharashtra Chess Association
- Champions of Maharashtra Premier T/20 League Cricket Tournament conducted by Maharashtra Cricket Association
- JSA has a Corporate Cricket Team where our associates are participating in various cricket tournaments. We are the champions of 'A' Division of Times Shield Cricket Tournament which is prestigious in the world of cricket in India
- It also has a Corporate Carrom Team, which consist of national players - Pankaj Pawar, Yogesh Dhongade, Anil Mundhe, Sayyed Mohsin, Rahim Khan in mens team, Aiesha Mohamad, Nilam Ghodake, Farin Shaikh, Mitali Pimple & Radhika Joshi in women team. Saleem Ansari and Manu Bariya are our National Veteran Carrom Players
- JSA's national carrom player Aiesha Mohamad is representing Indian National Carrom Team in the Carrom World Cup being played in South Korea during 24th to 28th August, 2018
- Aiesha Mohamad is also a part of the Indian National Women Carrom Team which won the World Cup Championship at Sourth Korea, beating Sri Lanka Women Carrom Team in the finals
- Faiz Fazal the Captain of Vidarbha Cricket which won the Ranji Trophy Championship 2017-18 was trained here. Similarly Samad Fallah, Shrikant Mundhe, Shashank Attarde, Jay Bista the Ranji players from Maharashtra, Mumbai and Vidarbha are our associates
- Eshan Naqvi, Aksshay Devalkar badminton players also belong to JSA

RURAL DEVELOPMENT AND WATERSHED MANAGEMENT

Jalgaon, India

Way before the legal requirement of 2% CSR expenditure came into force as part of the new regulations, our company amended article of association and committed that 5% of total profits will be spent for rural development activities.

Safe and Clean Drinking Water

In order to provide clean drinking water to rural areas water purificaiton units have been installed in 2 villages with an aim to do the same for about 40 more villages near our facilities.

Improved Drainage System

During recent years major work carried out for rural development included drainage deepening and widening to enable groundwater recharge in nearby villages and semi-urban locations.

Sanitation

Water sanitation and hygiene work was carried out under 'community toilet project', '100% village sanitation project'. Sanitation started with 6 villages in the last financial year and extended to total 20 villages at present with a further aimto reach total 150 villages.

Ba-Bapu 150

In commemoration of Mahatma Gandhi's 150th birth anniversary, JISL and Gandhi Research Foundation (GRF) have identified 150 villages across 8 states of India and facilitates participatory initiatives to transform these villages into independent communities with the spirit of Sarvodaya (Welfare of All). By this we mean, to turn these villages into knowledge centres and centres of development with Samriddhi (prosperity) and Shanti (peace) for all. Priority sectors are Rural Health, Primary Education, Sanitation, De-addiction, Watershed Management, Future Agri Leadership (FALI) training, People institution building (Farmer Produce Organization; JLG / SHG Clusters for rural entrepreneurship) with special attention to 'Youth Entrepreneurship, Precision and Digital Agriculture, Renewable Energy, and Integrated Landscape Management.'

JAIN AGRI EXTENSION

Jalgaon, India

JISL started a high-tech training and real time demonstration centre. Till date 26.22 million farmers have been trained in this facility. In FY 17-18, a total of 25,370 farmers and 15,000 dealers were successfully trained by our agri extension experts.

Jain agri extension team is formed to:

- Educate farmers to use high-tech method correctly
- Assure the success of technology as well as farmer
- Spread awareness and transfer the modern irrigation and precision farming technology

IMPACT

Besides training and onion contract farming our agri extension team has also converted significant area under Banana, Mango and Strawberry into Jain GAP certified fields.

Year	Banana		Mango		Strawberry	
	Farmers	Area (Acres)	Farmers	Area (Acres)	Farmers	Area (Acres)
2017-18	476	2599		3668	5000	100

FUTURE AGRICULTURE LEADERS OF INDIA (FALI)

Maharashtra & Gujarat, India

Jain Irrigation and Enterprise Solution to Poverty (ESP), USA, with other corporate leaders initiated programme FALI with the primary aim of sowing the seeds of agriculture leadership in students during their primary education. FALI is an innovative, high impact program of interactive learning promoting modern agriculture and agro-enterprise, engaging about 8000 students from 8th and 9th standard in Maharashtra and Gujarat. It includes interactive classroom sessions, field visits, business plan, innovation contests and exposure to industry leaders, leadership, problem solving and parental engagement.

IMPACT

In its 5th year FALI operates in 100 government-aided rural schools in 15 districts of Maharashtra and 2 districts of Gujarat.

Feats for FALI Phase 4:

- 910 field visits were held
- 350 sessions with leading local practitioners and experts
- National level IGNITE competition organised by National Innovative Foundation
- Record breaking 700 entries (innovations) were presented by students
- 4 FALI Convention organised with 1300 students participating
- FALI innovation contest organised with 1045 FALI students who prepared over 478 working models in school level innovation day contests and 4200 students who prepared business plans\
- 14 innovations and a business plan have been selected for the Rural Innovators Start-up Conclave (RISC) 2018 organised by Ministry of Rural Development


Future Agriculture

GREAT RECOGNITIONS

Plex Council Award - 2015-2016

50 Most Impactful Leaders In Water & Water Management Award - 2017

Parmartha Ratna Award - 2017

Yes Bank Natural Capital Award - 2017

Aqua Excellence Award - 2017

Llifetime Achievement Award - 2018

Dr. M. S. Swaminathan Award for Environment Protection - 2018

Lifetime Achievement Award - Corporate Excellence - 2018

CBIP Award (Optimum and Efficient Utilisation of Water Resources) - 2018

Indian Agribusiness Excellence Award - 2018

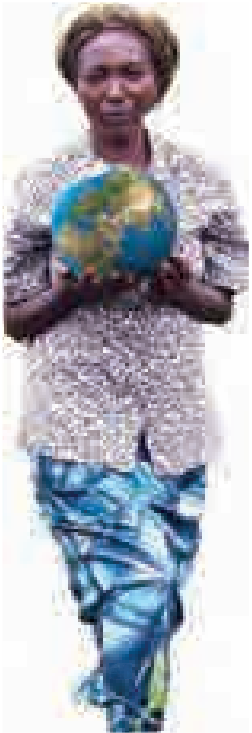
Year	Name & Nature of Award/ Recognition / Ranking/Felicitation	Instituted By	Citation
2017	**Maharashtra Corporate Excellence Award (Maxell Award)-2017**	Maxell Foundation	'Excellence in Entrepreneurship Award' for his significant contribution in several fields such as micro and drip irrigation, pipes, processed agricultural products, tissue culture and solar pump.
2017	**Star Performer-2014-2015 (Western Region)**	EEPC India (Formerly Engineering Export Promotion Council)	Star Performer award 2014-15 in the product group of other agricultural, forestry machinery and parts large enterprise
2017	**APEDA Export Award-2014**	Agricultural & Processed Food Products Export Development Authority, Government of India	Significant Contributions in Quality & Exports of Agriculture & Processed Food Products
2017	**APEDA Export Award-2015**	Agricultural & Processed Food Products Export Development Authority, Government of India	Significant Contributions in Quality & Exports of Agriculture & Processed Food Products
2017	**Yes Bank Natural Capital Award**	Yes Bank	"First runner up for the Eco-Corporate manufacturing category 2017. or (Recognize a corporate's commitment to driving environmental sustainability practices and initiatives in its value chain and integrating natural capital in its business practices.)"
2017	**Felicitation - 10th Global Agriculture Leadership Summit**	Indian Council of Food and Agriculture	Agriculture to Agribusiness
2017	**Parmarth Ratna**	Parmarth Seva Samitee	Parmarth Ratna' Award is given to late Jain Irrigation Founder Chairman Bhavarlal Jain for helping lakhs of farmers to increase their production and income by using high agricultural technology and micro irrigation.
2017	**Aqua Excellence Award**	Aqua Foundation, New Delhi	"Aqua Excellence Award 2017 for outstanding contribution towards cause of sustainability under the special categary Excellence Award for Sustainable Development in Food and Agriculture" for outstanding achievement in the field of water, environment, energy, earth sciences, pollution control and sustainability solutions.
2017	**Inclusive Business List 2017**	The shared Value Initiative India	Jain Irrigation was listed in the top 50 companies in the Inclusive Business List 2017 and it's business in creating the social shared participation in the total value addition chain.
2018	**CBIP Award (Optimum and Efficient Utilisation of Water Resources)**	Central Board of Irrigation And Power (CBIP)	For innovations & pioneering work done to promote the concept of drip and sprinkler irrigation systems in India with an effort to conserve nature's precious resources and increase productivity of small farmers.
2018	**Lifetime Achievement Award**	Akhil Maharashtra Dalimb Utapadak Sanshodhan Sangh, Pune	For his invaluable contribution to Pomegranate
2018	**Lifetime Achievement Award - Corporate Excellence**	Make in India Foundation, Govt. of India	For changing millions of lives through water conservation route. Over the years, more work in the field of micro-field and innovative production And it is a great honor to build the project.
2018	**PLEXCONCIL Award 2015-2016** **PLEXCONCIL Award 2015-2016** **PLEXCONCIL Award 2015-2016**	Ministry of Commerce and Industry, Government of India	Outstanding Export Performance in Plastic & PVC Foam Sheet Top Exporter of Pipes & Hoses Top Exporter of Drip Irrigationn Systems
2018	**PLEXCONCIL Award 2016-2017** **PLEXCONCIL Award 2016-2017** **PLEXCONCIL Award 2016-2017**	Ministry of Commerce and Industry, Government of India	Outstanding Export Performance in Plastic & PVC Foam Sheet Top Exporter of Pipes & Hoses Top Exporter of Drip Irrigationn Systems
2018	**Dr. M. S. Swaminathan Award for Environment Protection**	Rotary Club of Madras East	The company was selected for the pioneering effort of a productivity revolution with modern irrigation systems and innovative technologies to conserve water and significantly increase the crop yields.
2018	**Indian Agribusiness Excellence Award**	Media Today Group	Innovations in Irrigation Technologies
2018	**Inclusive Business List 2018**	Harvard Business School	The inclusive business list identifies, assesses and recognises enterprises that are redefining the role of businesses in society. It includes companies that are imbibing inclusivity into their business models by addressing social and environmental problems which interest with their businesses.

TOTAL AWARDS TO JAIN IRRIGATION AND BHAVARLAL H. JAIN (1978-2018)

Institution	JISL	BHJ	Total
By International Institutes	12	3	14
By Central Governments	141	5	146
By State Governments	37	8	45
By Nationally Acclaimed Institutions	46	34	79
Felicitation by National Dignitaries	-	4	4
Ranking by Globally & National Acclaimed Institutions	15	2	17
Total	**251**	**56**	**307**

THE WAY THE WORLD SEES OUR GOODNESS

•	"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
•	"100 Fasted-Growing Companies 2015 (Change The World) The Only Company from India, is ranked No. 7"	: Fortune



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

“LEAVE THIS WORLD, BETTER THAN YOU FOUND IT.”

A promise he kept and legacy he left

for the organisation and future generations.

“Enterprise instead of Money,

Hard work instead of Wealth

and Responsibility instead of Glory.”

Bhavarlal H. Jain
Founder
1937-2016

JAIN®
Jain Irrigation Systems Ltd.
Small Ideas. Big Revolutions.®

SMALL IDEAS. BIG REVOLUTIONS.

JAIN®

Jain Irrigation Systems Ltd.

Small Ideas. Big Revolutions.®