



**Jain Irrigation Systems Ltd.**

Small Ideas. Big Revolutions.®

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## 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, three uncles and other cousins.

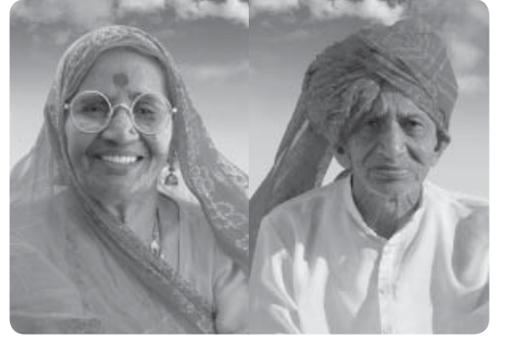
In 1978, Bhau acquired a sick Banana Powder factory. By modifying the machinery, this plant was converted to process spray-dried Papain from papaya latex. Bhau offered farmers a guaranteed price for their latex, to encourage papaya cultivation. This provided the required quantity of latex. This also 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 performances, 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 extraordinary 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 meagre 600 Ha in 1987, Drip installations covered 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 these 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 farmer's 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 to 1.6 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.

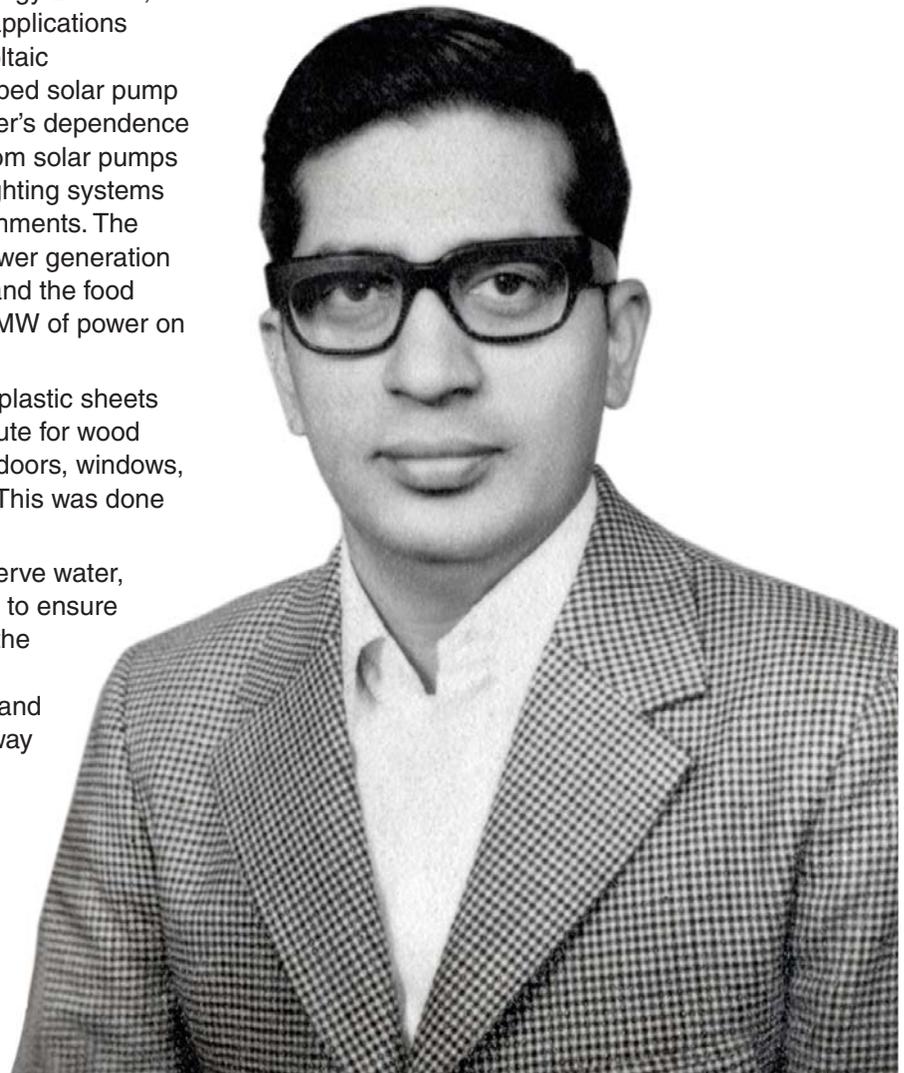
A lifetime of commitment to conserve water, enhance productivity of the farmlands to ensure food security for all and prosperity to the farmer, by constant innovations and introduction of modern yet affordable and viable technologies, is core to Jain's way of life. The untiring efforts in pursuit of 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 extraordinary 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 out to all 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 abode. 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.

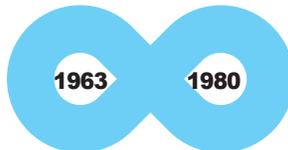
Sincerely yours,

Ashok, Anil, Ajit and Atul Jain.

# HISTORY AND KEY MILESTONES

## Commenced:

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

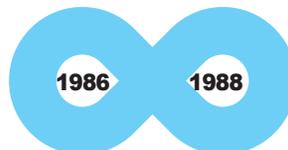


## Commenced:

PVC pipe manufacturing



Jain Irrigation Systems Ltd. Incorporated as a public limited Company

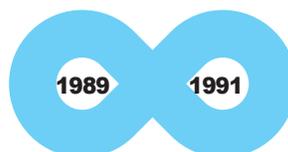


Drip Irrigation systems pioneered for small holders in India



## Commenced:

R&D cum Demonstration and Training Centre



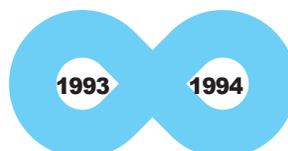
## Commenced:

- Casing Pipe Manufacturing
- Plastic Sheet manufacturing plant



## Commenced:

PE Pipes Manufacturing



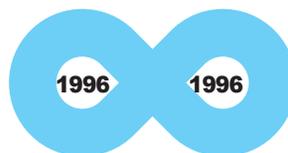
## Commenced:

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



## Commenced:

Green field fruit processing plant



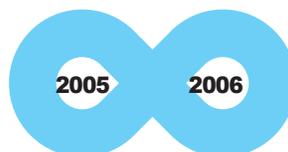
## Commenced:

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



## Commenced:

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



## 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

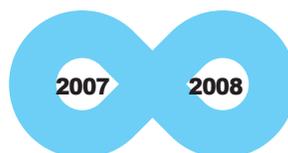


## Commenced:

- SWR PVC Pipe Manufacturing

## Acquired

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



## Acquired

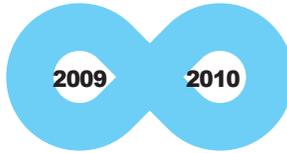
THE Machine, Equipment Manufacturing Company, Switzerland



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

**Commenced:**

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



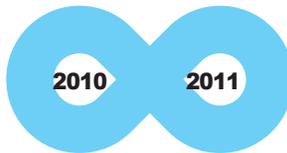
**Commenced:**

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



**Acquired**

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



**Acquired**

- Protool, Equipment Manufacturing Company, Switzerland



**Commenced:**

8.5 MW Solar Power Plant, India

**Acquired**

White Oak, Frozen Food Company, USA



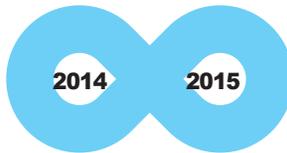
**Commenced:**

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



**Acquired**

Gavish Control System Ltd. Micro Irrigation Company, Israel



**Commenced:**

Jain Plumbing Piping System Manufacturing

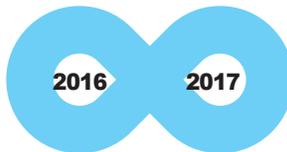
**Acquired**

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



**Commenced:**

- AAMRUS 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



**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



**Commenced:**

- Frussh, product of Jain Farm Fresh Foods Ltd.
- Fruzen, product of Jain Farm Fresh Foods Ltd.

**Acquired**

- Briggs Irrigation, Corby, UK



# COMPANY SNAPSHOT

#1

Micro-irrigation  
company in India

#1

Micro-irrigation  
company in USA

#1

Manufacturer of Plastic  
Pipes in India

#1

In Mango Processing  
globally

#1

In Solar Agriculture Pump  
globally

#1

In Tissue Culture  
Production of Banana and  
Pomegranate globally

#2

In Onion and Vegetable  
Dehydration globally

#2

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+<sub>USD</sub>

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

# 11,782

Associates globally

# 831 MN+<sub>USD</sub>

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 Solutions

### 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



### Renewable Energy

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



### 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.



### Tissue Culture

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



### 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.



### 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

**GLOBALG.A.P.**

# 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 GLOBALLY**

Corporate HQ  
 Plants  
 Offices  
 Depots

\*Map not to scale.

# A FAMILY OF GLOCAL BRANDS ∞

## MICRO IRRIGATION SYSTEMS & EQUIPMENTS - MORE CROP PER DROP®



## PLASTIC PRODUCTS - YOUR LIFELINE TO PROSPERITY®



Better B-Sure, Never be Sorry!



Building a strong future together.



## GREEN ENERGY PRODUCTS - JOINT VENTURE WITH NATURE



Joint Venture with Nature



## FOOD PRODUCTS - YOUR RECIPE FOR GREAT TASTE



## SOCIAL PROFILE - COMPASSION.. IMAGINATION.. ENDEAVOUR



Small Ideas.  
Big Revolutions.®

# JISL 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.



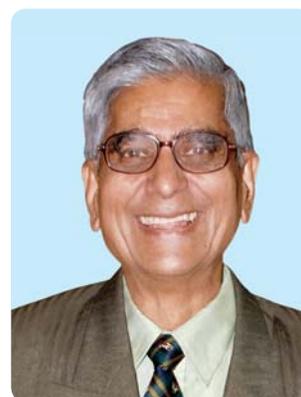
**Atul Bhavarlal Jain**  
Joint Managing Director & CFO

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.

**“IT IS IMPERATIVE TO RESPECT AND GIVE DIGNITY TO FARMERS – IF OUR DREAM OF A POWERFUL INDIA IS TO BE FULFILLED.”**

***- BHAVARLAL JAIN***

# JFFFL BOARD OF DIRECTORS



**Anil Bhavarlal Jain**  
Chairman



**Atul Bhavarlal Jain**  
Vice Chairman



**Sunil S. Deshpande**  
Managing Director

'He joined the Jain Group in 2004 and was appointed as MD in 2016 when Jain Farm Fresh Foods Ltd was formed. He has over 3 decades of experience in Food Processing and looks after the India operations of Jain Farm Fresh Foods.'



**Athang Jain**  
Director

He joined as a Management Trainee in 2013 and now is Director, Jain Farm Fresh Foods Ltd. Masters in Management and Strategy from London School of Economics. Launched innovative consumer food branded products to help small farmers get better value for their produce.



**Ghanshyam Dass**  
Director



**Uday R. Garg**  
Director

He was appointed as Investor Director for Mandala Capital in 2016. He is a graduate from the Wharton School of the University of Pennsylvania with a B.S. in Economics and has extensive expertise in Food and Agribusiness sector. He is the Founder and Managing Partner of Mandala Capital, focusing on private investments in emerging markets exclusively in the Food and Agribusiness sectors.



**Suvan Sharma**  
Director

He joined company in 1995 and has worked in various divisions of the group in different countries. He has been involved in international sales, marketing, business development, strategic planning and growth of its food division.

# 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



# PEACE WITH WATER – THE WAY FORWARD ∞

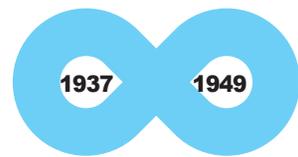
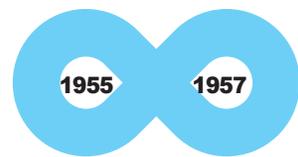
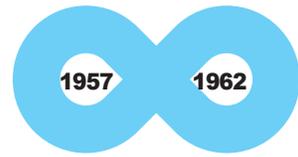
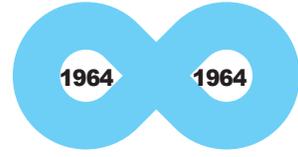
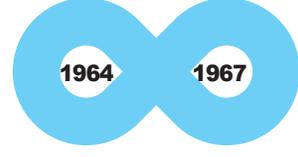
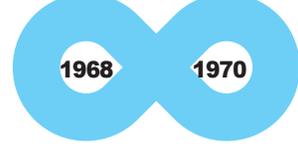
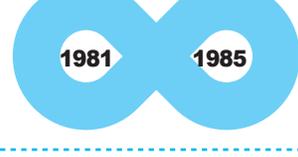
Today, NaanDanJain offers its technology to more than 100 countries across the world to small and large farmers. Since 2007, the merger of NaanDan and Jain Irrigation Systems Ltd. has created enriching, multi-cultural business synergy alongside significant product portfolio expansion and R&D activities.

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'.

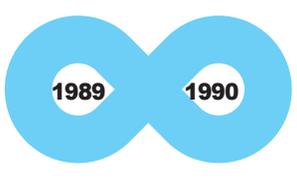
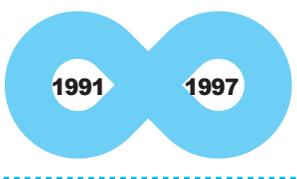
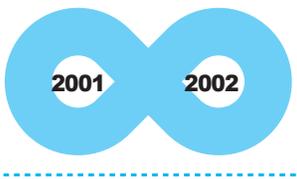
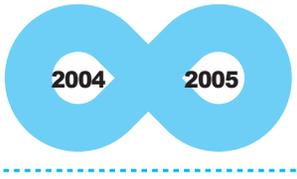
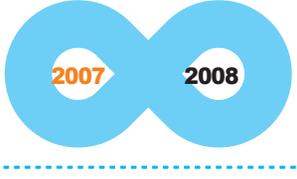
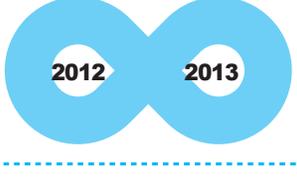
The company is creating innovative solutions for judicious use and equitable distribution of water to achieve peace within and across boundaries.



# THE 80 YEAR HISTORY OF NAANDANJAIN

<p>The first Israeli sprinkler sees the light of day with the development and manufacture of two-arm ¾” rotary sprinklers</p>		<p>323 ¾” and 344 1” metal impact sprinklers for field irrigation created</p>
<p>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</p>		<p>223, 323, 333, 344 - ½” and ¾” metal sprinklers. A major milestone because plastic parts are integrated for the first time</p>
<p>The 268 – the first 2” giant metal sprinkler created</p>		<p>A quality control system is established – Naan is one of the first industries in Israel to do so</p>
<p>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</p>		<p>Chapin—The world’s first thin walled drip tape. Manufactured from high-quality polyethylene with unique turboline flow path</p>
<p>The world’s first turboline flow path dripper was patented and launched</p>		<p>MiniKat – a moving irrigation system for sports fields – is introduced. Kat-Naan is introduced for field irrigation</p>
<p>Sprinkler 501 – a turbo plastic impact sprinkler for stationary and movable irrigation in orchards and fields</p>		<p>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</p>
<p>Pop-up sprinklers are manufactured for gardens</p>		<p>Pop-up sprinklers are manufactured for gardens</p>
<p>NaanTif - First Turbulent FlowCylindrical Inline dripper with patented manufacturing process for inserting drippers into the drip pipes during extrusion</p>		<p>The 255 and 268 part-circle sprinklers join the family of giant metal sprinklers for full and particle irrigation</p>
<p>NaanPC—A dripline with integral regulated drippers is introduced – a market first</p>		<p>The 805, 809 line of innovative pop-up sprinklers is developed for gardens</p>

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

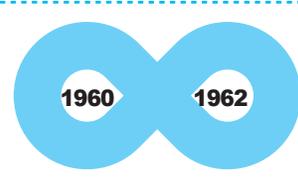
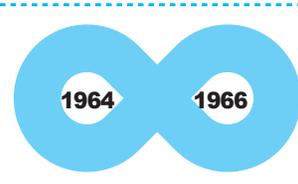
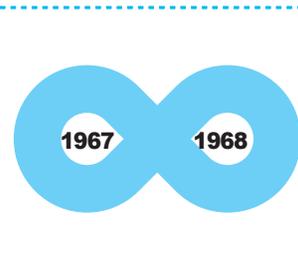
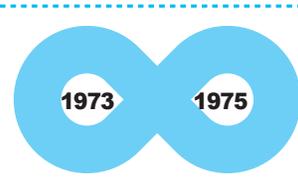
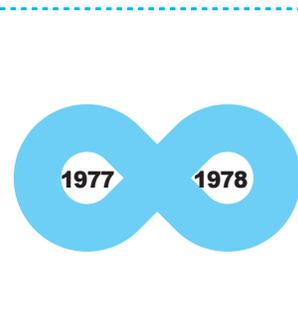
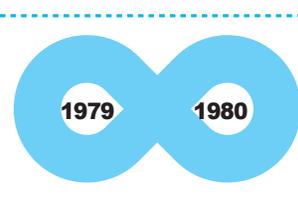
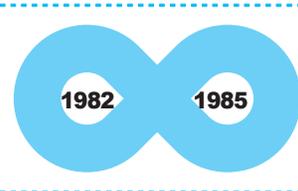
<p>Paz – an innovative flat dripper for thin-wall pipes created</p>		<p>The 5022 sprinkler for efficient field irrigation, contributing greatly to crop quality and having a great impact on the irrigation industry</p>
<p>The 5024 sprinkler is added for efficient orchard irrigation</p>		<p>Pop star – an innovative gear-driven, pop-up sprinkler with an arc memory of 40° - 360°</p>
<p>Naan Irrigation merges with Dan Sprinklers, broadening the product range and knowledge in micro-irrigation</p>		<p>The Super-Fogger is introduced – the ideal solution for climate control and greenhouse fogging systems</p>
<p>Opal–A silicone motion-controller plastic sprinkler for fields and orchards</p>		<p>Amnon Drip – a pressure-compensating (PC) dripper with non-leaking &amp; anti-syphon mechanisms</p>
<p>NaanDan Irrigation merges with Jain, India</p>		<p>Proprietary SD (Super Diffuser) hammer is introduced for impact sprinklers 5022, 5024, 6025,6024, 6004 and 5035 (patented) to improve water diffusion</p>
<p>The Jain Corporation becomes the sole owners of NaanDanJain Irrigation</p>		<p>Magic Drive – plastic sprinkler with silicone motion controller combined magnets, vibration free</p>
<p>A unique spraying system (CCS) is developed for foliar treatment of orchards</p>		<p>A new family of products for LandScape (public, municipal and private) is added to NaanDanJain's arsenal of solutions</p>
<p>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.</p>		



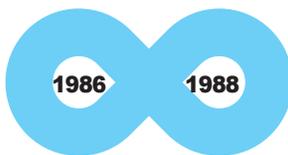
**NAANDANJAIN**<sup>®</sup>  
A JAIN IRRIGATION COMPANY



# THE 59 YEAR HISTORY OF CHAPIN WATERMATICS INC.

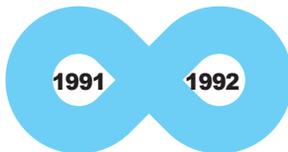
<ul style="list-style-type: none"> <li>• In 1960 Mr. Richard Chapin Develops a watering system for pot plants for irrigation his flowering business.</li> <li>• Chapin Watermatics Inc., incorporated Oct. 1, 1962</li> </ul>		<p>Early show in Lansing, Michigan with Bill and Bob Chapin. Shows pot water system information and an actual Moist Scale is pictured</p>
<p>Photo of Norm Smith, Agricultural Agent at Old Westbury Gardens, Long Island, NY – First installation of row crop drip irrigation system with plastic mulch</p>		<p>June 18, 1966 – Chapin Watermatics offers variety of automatic water devices including new Water Rings with ooze watering action</p>
<p>Jan. 1967 – Chapin anticipated sharp increase of its product, Dew Hose</p>		<ul style="list-style-type: none"> <li>• Jan. 1968 – article about Lead Weights being cast for Leader Tubes – pot watering system.</li> <li>• Early trade show display for the Greenhouse / Nursery products; Tube Weights, Spray Stakes &amp; Water Loops. Date unknown.</li> <li>• Later picture of trade show display showing Twin-Wall products.</li> </ul>
<p>1973 – 1974 Picture of Richard Chapin on early trip to Africa demonstrating 50 gallon drum and simple irrigation system</p>		<p>August 1975 – overview picture of Chapin Watermatics plant and greenhouse and flower shop at 368 N. Colorado Ave</p>
<p>Jan. 8, 1977 – Chapin Watermatics plans to relocate from 368 N. Colorado Ave. to 740 Water St.</p>		<ul style="list-style-type: none"> <li>• March 1978 – Watermatics firm moves to 740 Water St., Watertown.</li> <li>• March 2, 1978 – Bill Chapin holding roll of Twin Wall hose used to irrigate thousands of acres of crops.</li> <li>• 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.</li> <li>• Sept. 27, 1978 – Letter of Commendation from New York State Dept. of Commerce for expansion.</li> </ul>
<ul style="list-style-type: none"> <li>• March 7, 1979 – Article – Chapin sets production records in 1978.</li> <li>• Oct. 11, 1979 – NYS listing of companies getting business loans for expansion</li> </ul>		<ul style="list-style-type: none"> <li>• Jan. 2, 1980 – Firm refuses to ship to Iran</li> <li>• April 3, 1980 – Goods slip into Iran anyway.</li> <li>• Early 1980's – trade show with our reps. Probably during the 1980's</li> </ul>
<ul style="list-style-type: none"> <li>• March 1982 – Chapin Watermatics Inc. gets its first Apple personal computer.</li> <li>• Chapin Watermatics develops new products. More than 20 items for greenhouse, nursery &amp; rows crops. Date of article unknown</li> </ul>		<p>Oct. 9, 1985 – Watertown Daily Times article about the Hawaiian Pineapple Industry thriving with a picture of machinery that installs Twin-Wall Hose</p>

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



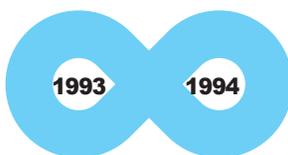
Oct. 1988 – Australia Trade Show display with Bill Chapin

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



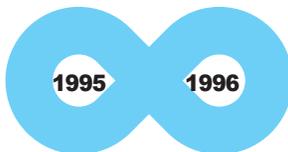
July 1, 1992 – State loan guarantees Chapin expansion and adds jobs

- 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” programme.
- Sept. 1993 – William Chapin elected director of American Society of Plasticsulture.
- 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.



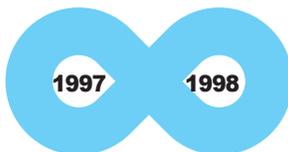
- Jan. 30, 1994 – Article in “Watertown Daily Times” – on “The Father of Drip Irrigation”, Richard Chapin.
- 1994 – Outstanding Entrepreneurs in Upstate New York award to Richard Chapin and Chapin Watermatics.
- Sept. 1994 – Richard Chapin presented video of introduction of small-plot drip irrigation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

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



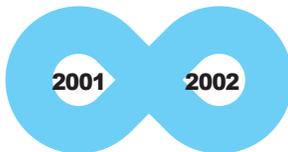
- Feb. 22, 1996 – Chapin Watermatics seeks 4.15 million funding for expansion from JCIDA.
- April 1, 1996 (Post Standard article) Chapin irrigation system helps gardens in drought-prone nations.
- April 1, 1996 – (Post Standard article) Richard Chapin doesn't look all wet anymore. Invention of first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

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



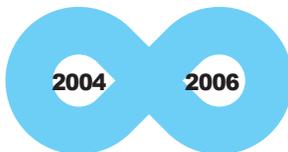
June 12, 1998 – JCIDA agrees to 1.1 million line of credit for Chapin Watermatics

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



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

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



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



# AGRI VALUE CHAIN

**GOODNESS LINKS TO GOODNESS**



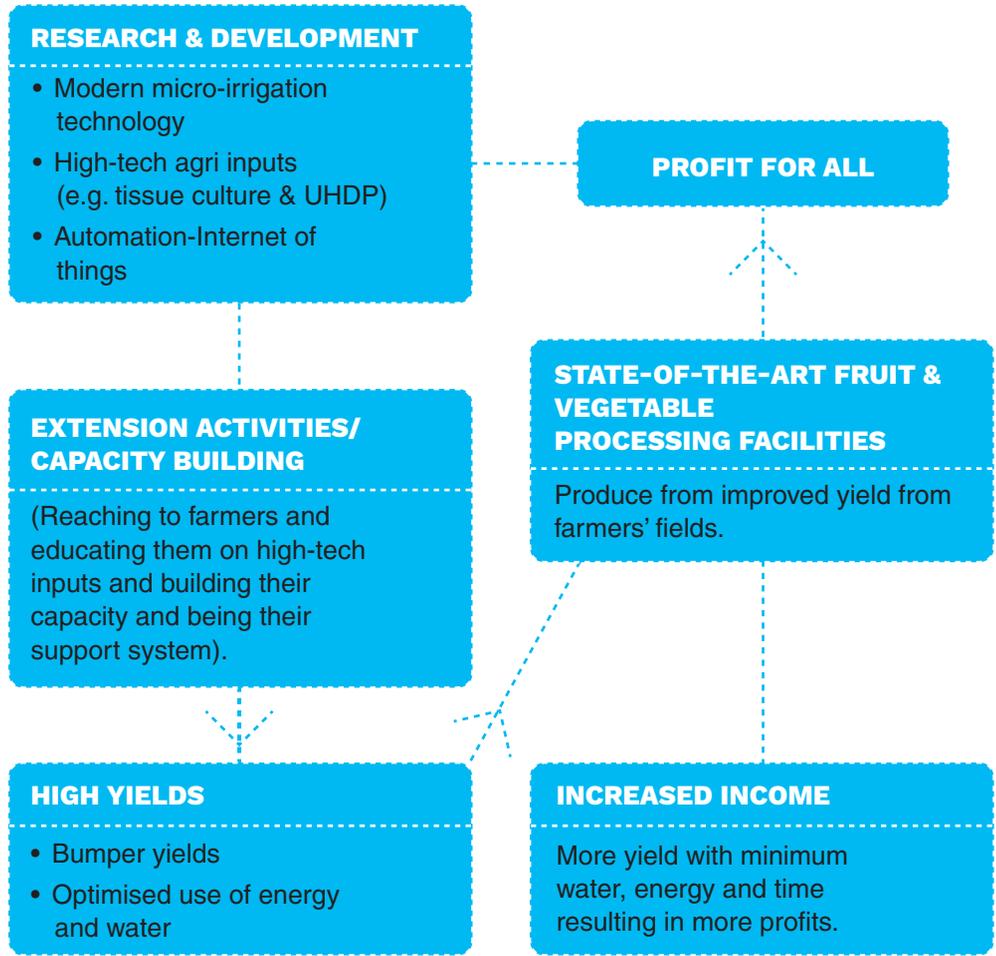


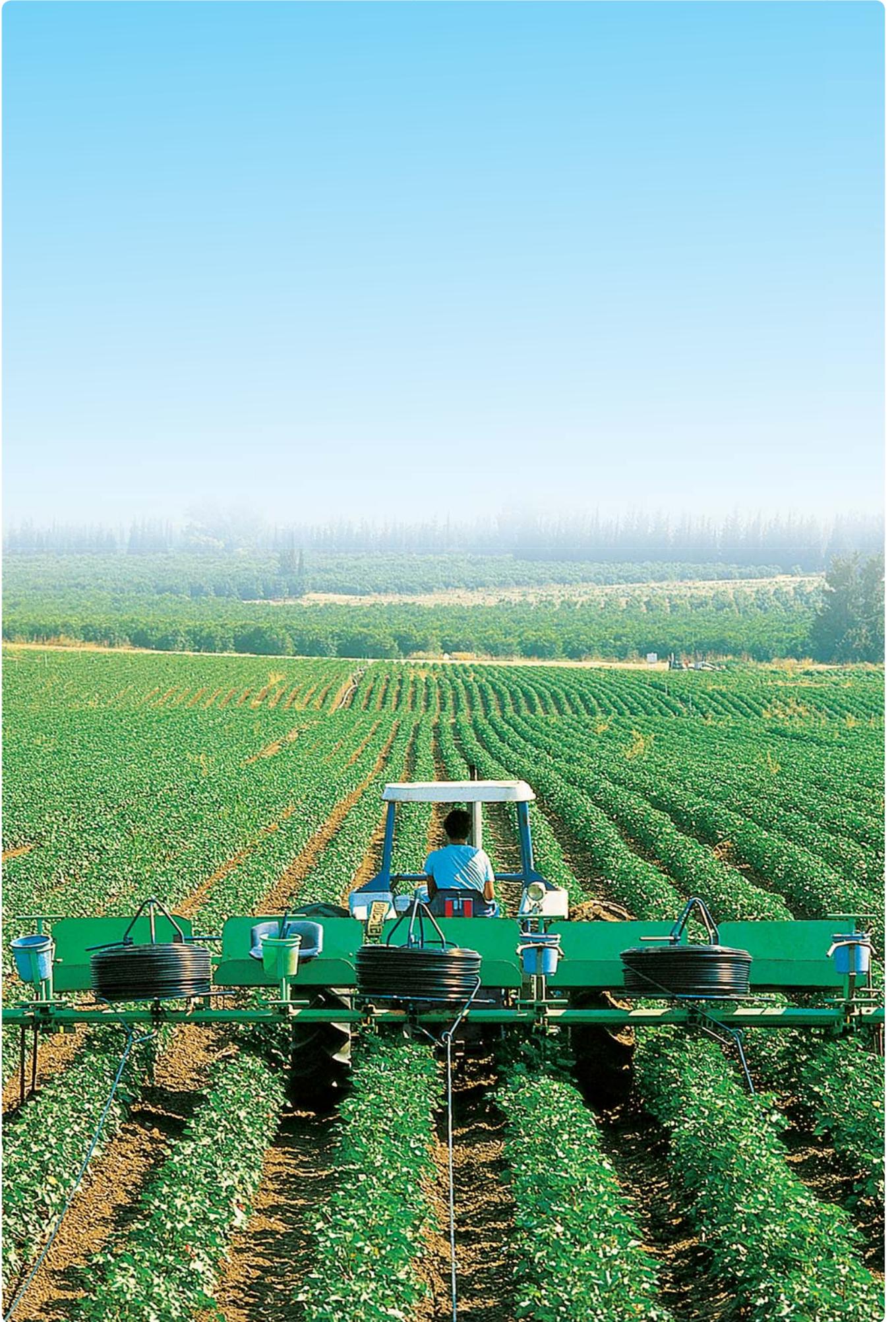
# GOOD VALUE IN EVERY STEP

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 cultivating crops and turning 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.





**Legend**



**JIIS** Jain Integrated Irrigation Solution

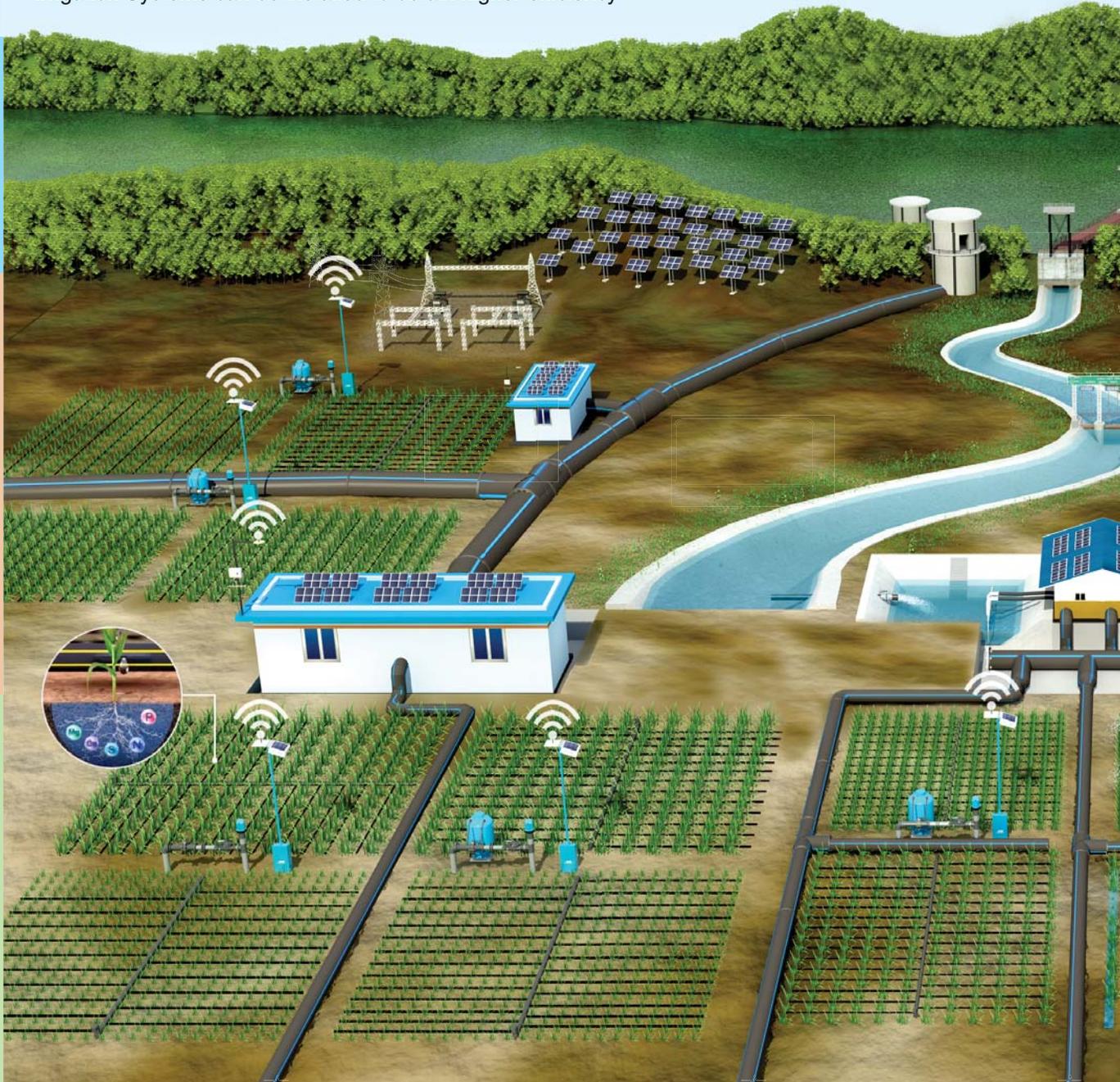


Drip & Sprinkler are pressurised network and flow irrigation is designed with pressure of 2kg/cm<sup>2</sup> at outlet. So that whenever required Micro Irrigation Systems can be installed to obtain higher efficiency

**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™**

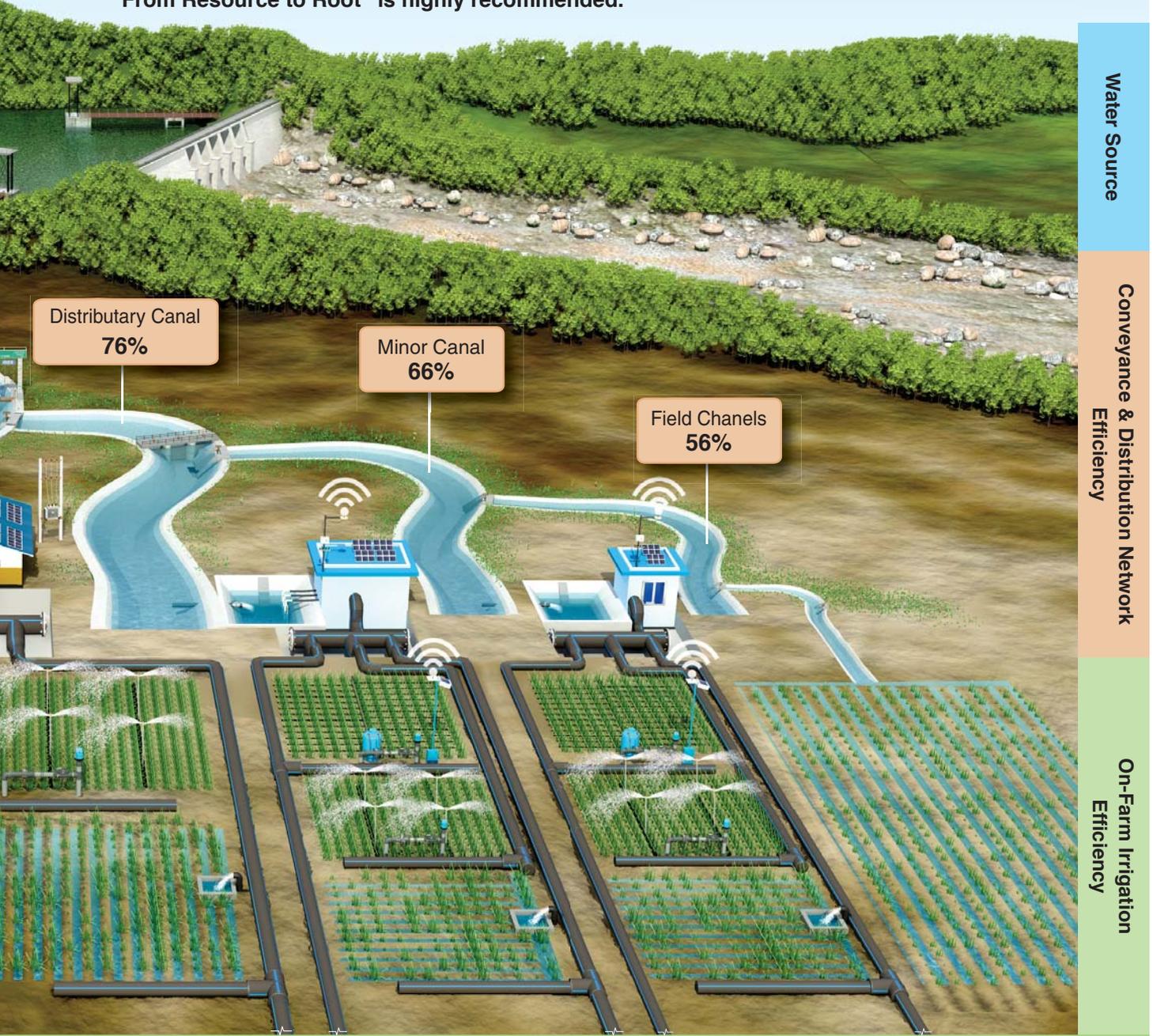
**Open Canal**

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

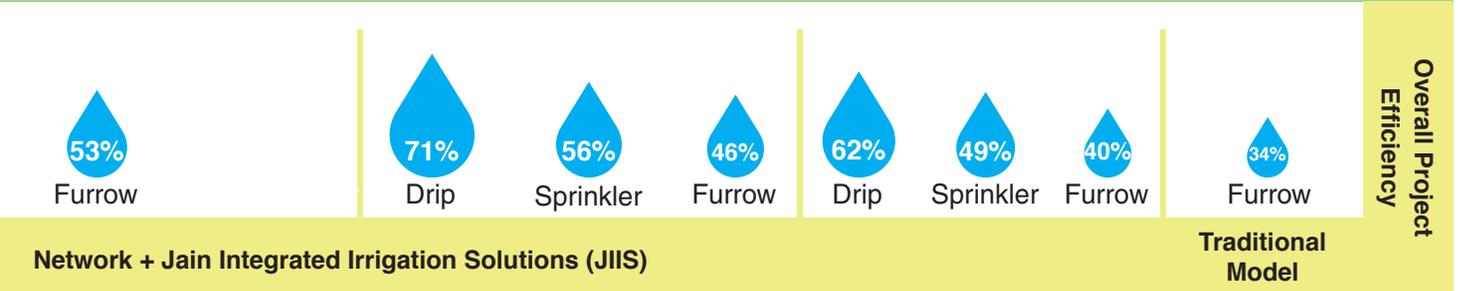
**More Crop**

**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 canals 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.



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



Network + Jain Integrated Irrigation Solutions (JIIS)

Traditional Model

Overall Project Efficiency

# WORLD'S LARGEST COMMUNITY BASED FULLY AUTOMATIC

## INTEGRATED DRIP IRRIGATION PROJECT



Ramthal, Karnataka, India

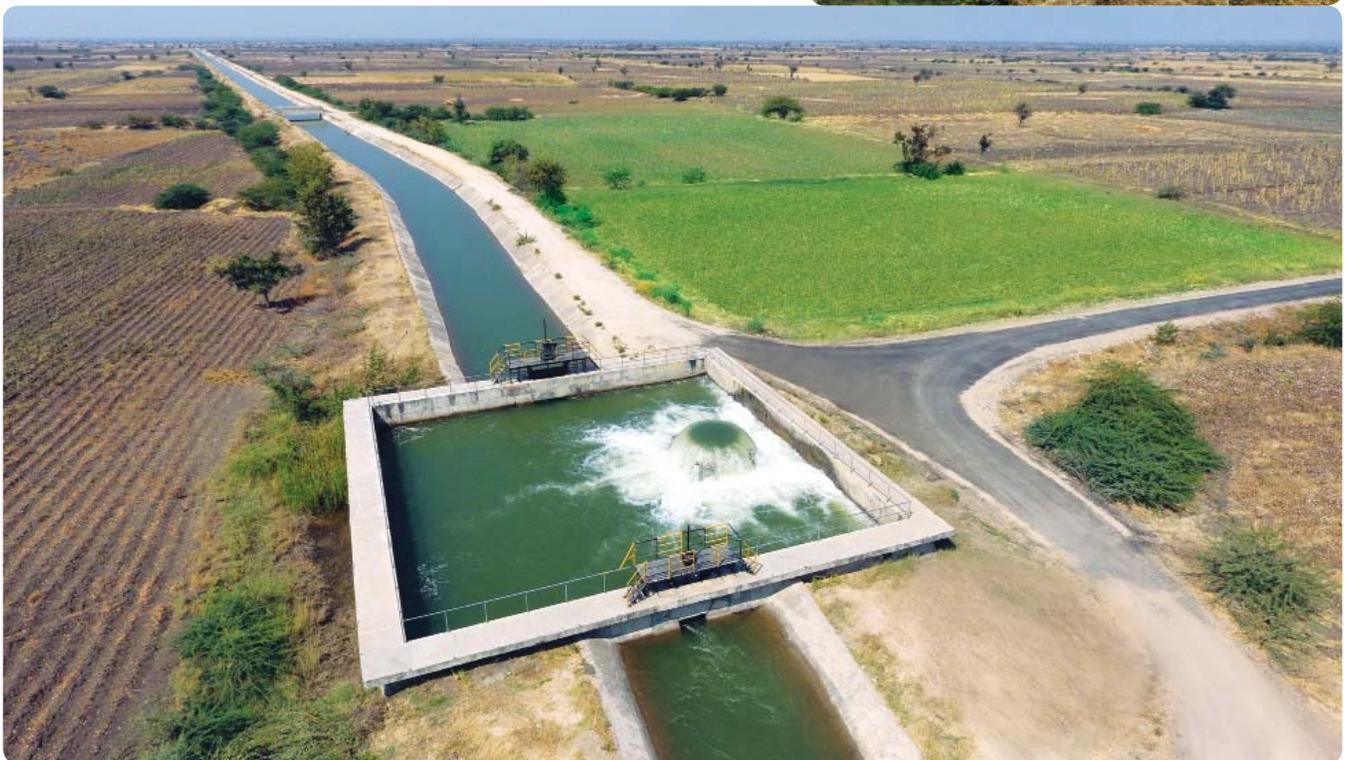
The largest IOT based Micro Irrigation Project in India that irrigates more than 30,000 acres of dry lands located on the right bank of the Malaprabha River. The project provides pressurised and fully automatic drip irrigation system which is controlled by web-based software.

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 the 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 <sup>3</sup>	78.51	38.89
Water Productivity, kg/m <sup>3</sup>	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 <sup>3</sup> *	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 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/m <sup>3</sup>	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 Stand-alone 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 in reduced input cost to the farmers
- 1.1 MW solar power generation
- Training of farmers for advanced 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 province in 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 greenhouses 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 delivered to the Plants through a 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 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 3,10,000 direct employments.

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

- To restore the forest and plants after mining.
- 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 farmer's 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 means of a revolutionary customised field 'prescription map'.

## IMPACT

- The system reduced the management zones as small as 4x4 feet resulting in 3,48,480 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

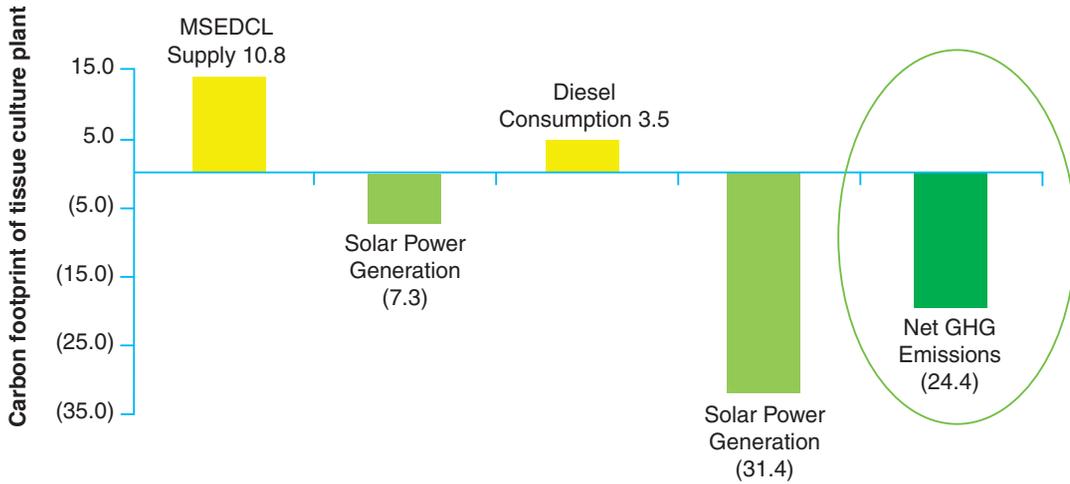
Jain Tissue Culture (TC) Park is a unique example of a farm contributing positively to water and carbon cycles, without generating any auxiliary waste stream. It is the world's largest tissue culture facility spread over close to 90 hectares near Takarkheda village in Jalgaon. It has an annual production 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

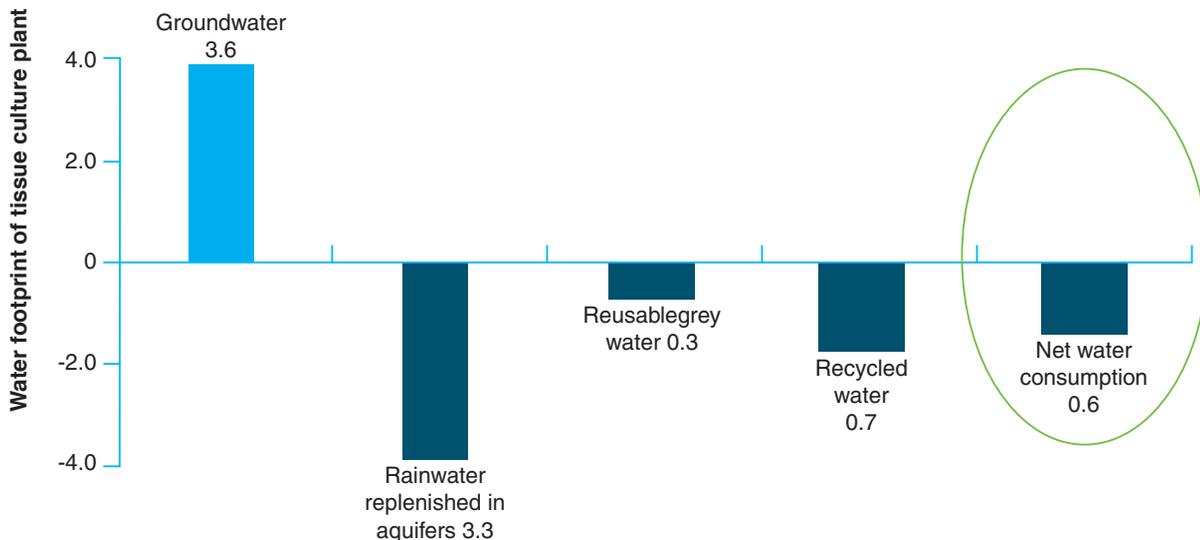
## GHG Emissions per Plantlet (gram CO<sub>2</sub>-eq)



# 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)



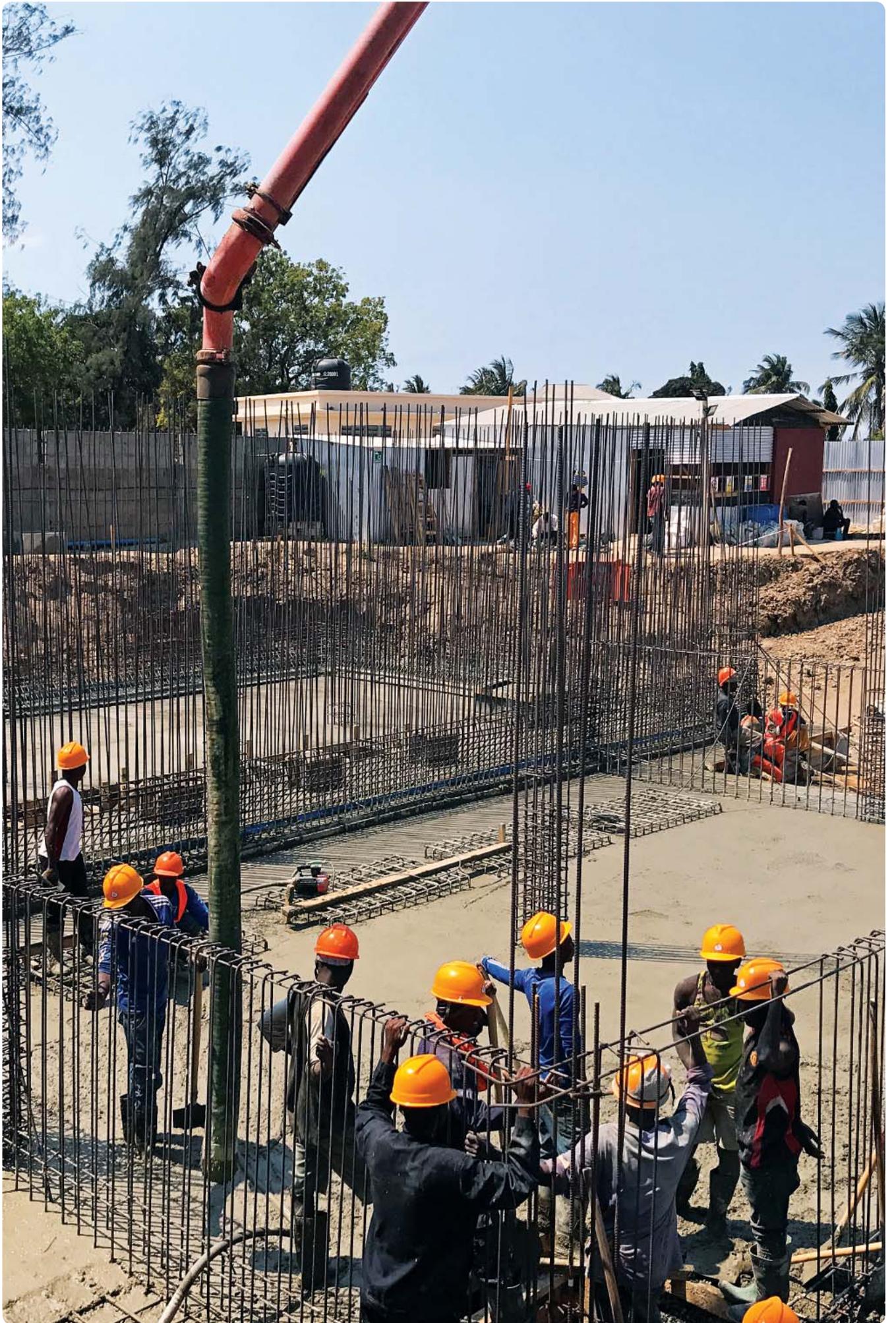
Through rainwater harvesting, 24% more water than the consumption was replenished into ground in 2017. Moreover the water used for irrigation of plants in polyhouses is recycled through a channel of pipes and filters. Thus, each plantlet produced in TC Park its net water positive.

# GOOD INFRASTRUCTURE COUNTS



# URE





# 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 km of pipes. It also involved the construction of 6 ground storage reservoirs of 5,000 to 8,000 cubic metre capacity, pump houses and sub-stations.

## IMPACT

- Substantial reduction in water losses
- Major milestone in meaningful work in water supply
- 24/7 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 a 2355 Ha command area. Delivery Chambers have been provided on the topmost 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 the canal's right bank.



## IMPACT

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

## 24/7 “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 a 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 they 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 large 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 by an 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 the national as well as international market. A city gas distribution (CDG) 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 used 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 metre 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 kilometres 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, the 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 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



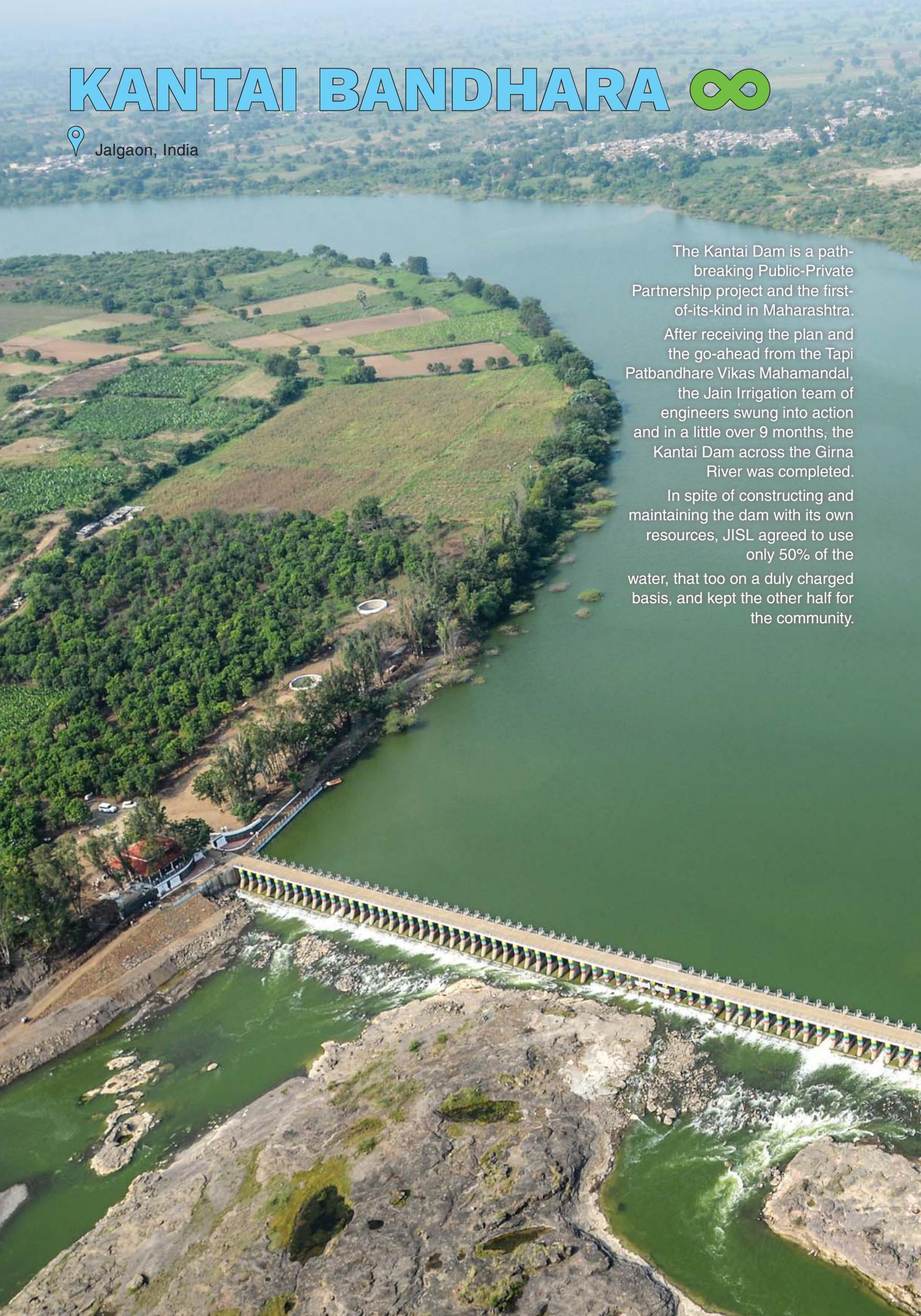
# KANTAI BANDHARA ∞

 Jalgaon, India

The Kantai Dam is a path-breaking Public-Private Partnership project and the 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.

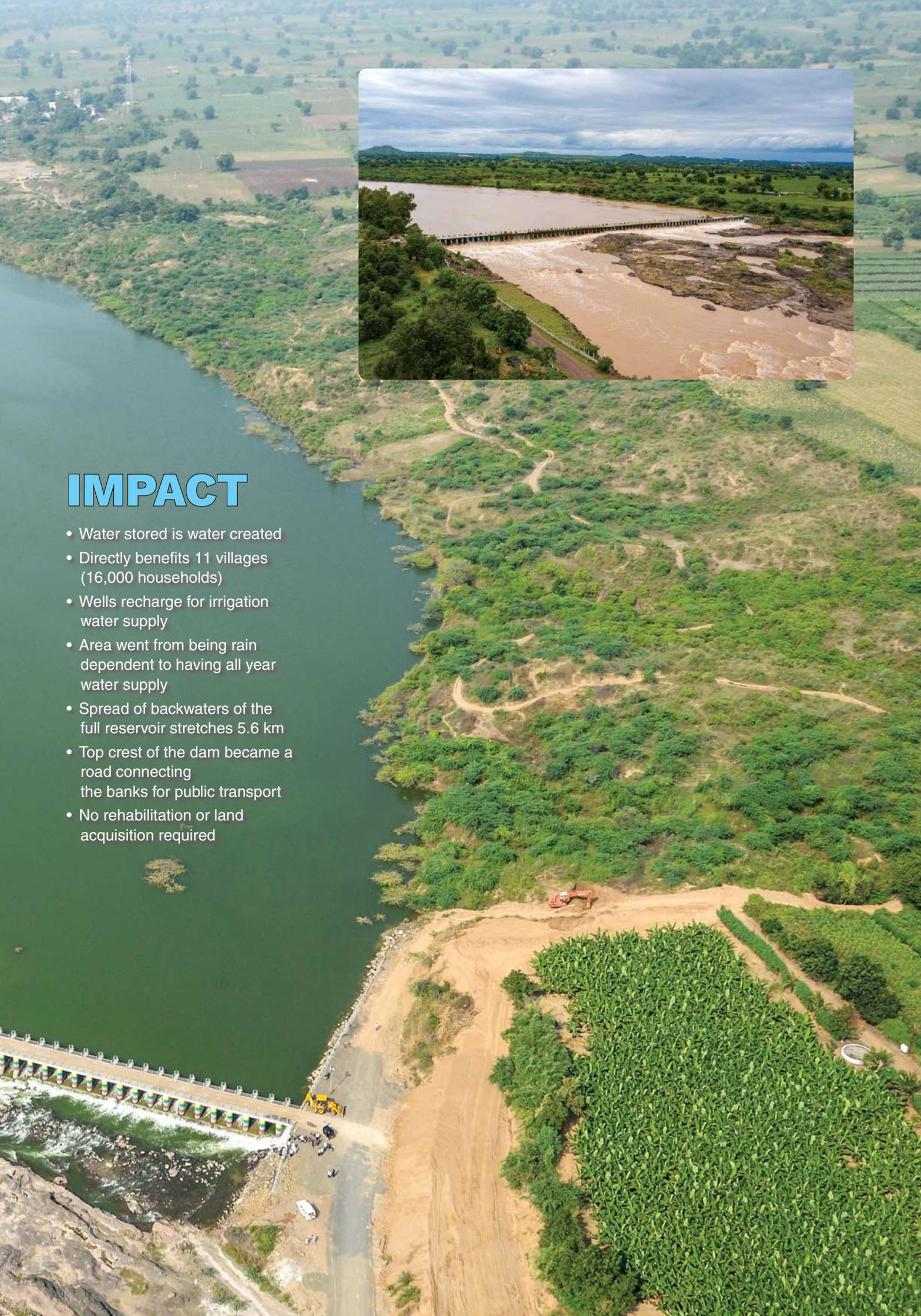
In spite of constructing and maintaining the dam with its own resources, JISL agreed to use only 50% of the water, that too on a duly charged basis, and kept the other half for the community.





## IMPACT

- Water stored is water created
- Directly benefits 11 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 km
- Top crest of the dam became a road connecting the banks for public transport
- No rehabilitation or land acquisition required



# 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 snowfall, 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 temperatures



# 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 an 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 ( <i>Threskiornis melanocephalus</i> ) migratory birds in India	Near Threatened
Common pochard ( <i>Aythya ferina</i> ) migratory bird in India	Vulnerable



# GOODNESS FROM CIRCULAR ECONOMY



# OM FOOD



# ONION CONTRACT FARMING AND JAIN GAP

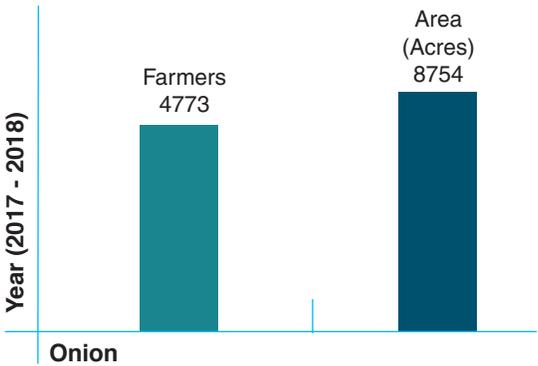
 Maharashtra & Madhya Pradesh, India

Jain Farm Fresh Foods Ltd. is one of the largest processors of vegetables in the world, processing 1,40,000 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 smallholder farmers, with an average farm size of less than two 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 by more than 30%
- On an average 30% increase in yield 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 over 1,70,000 metric tons of mangoes per year. The major processing variety is Totapuri mango which accounts to about 1,00,000 metric tons. We procure about 35% of the total Totapuri mango 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 three times increase in the income of farmers - INR 24,000/acre to INR 96,000 per acre
- Mango farmers across the three southern states have shown a 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 of UHDP have been completed across three states involving 600 farmers
- 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 acres 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 2,00,000 farmers will be benefited 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 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 the 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 three 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 round
- The frozen range elongates life of fruits and vegetable



# OUR PURE AND AUTHENTIC 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:

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

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

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



## VALLEY<sup>®</sup> SPICE



# 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. Our range of Onion Flakes doesn't have any preservatives, artificial colours or flavours.



# FRESH BANANA EXPORT

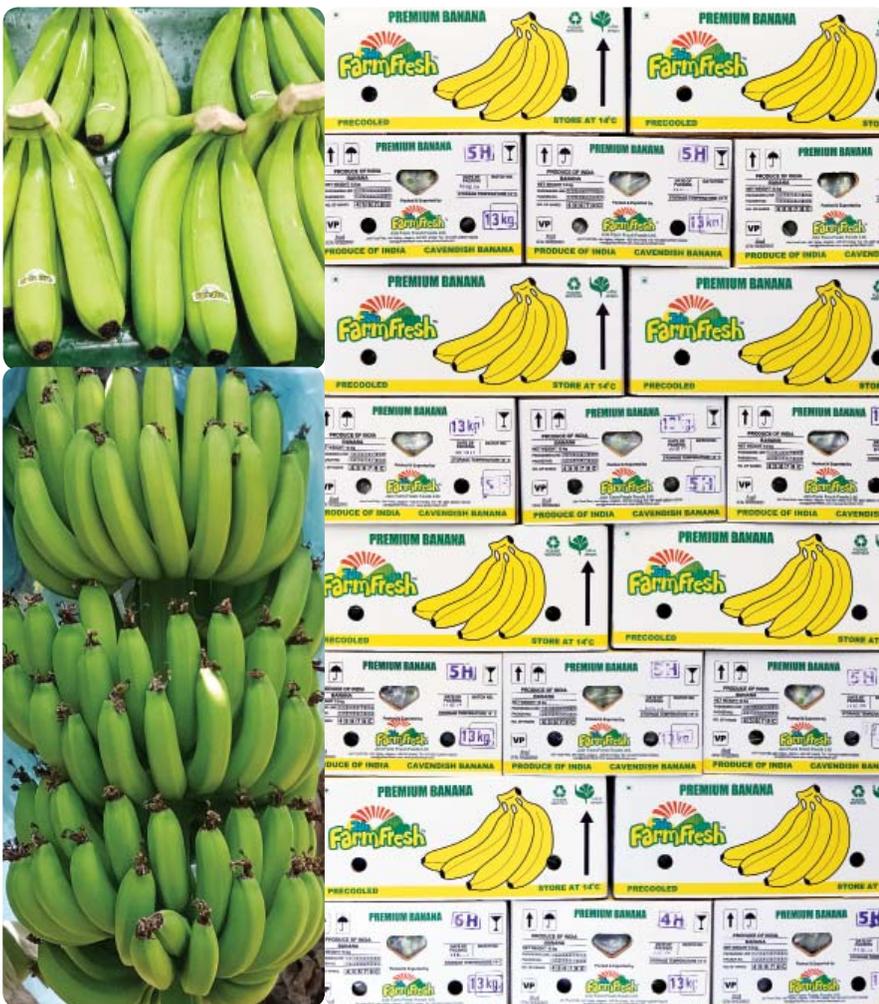
📍 Jalgaon, India

India is the largest banana producer in the world. Jalgaon district alone contributes to about 10% of the country's banana production, which is the 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 four 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 Reduce 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 the Jain the Group is engaged in the business of food ingredients. It started in 1968 and it became part of the Jain family in 2010. Sleaford Quality Foods Limited is based at the heart of the agricultural and farming area in England.

Sleaford Quality Foods covers a large spectrum of the 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 a 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, bioproducts, 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).

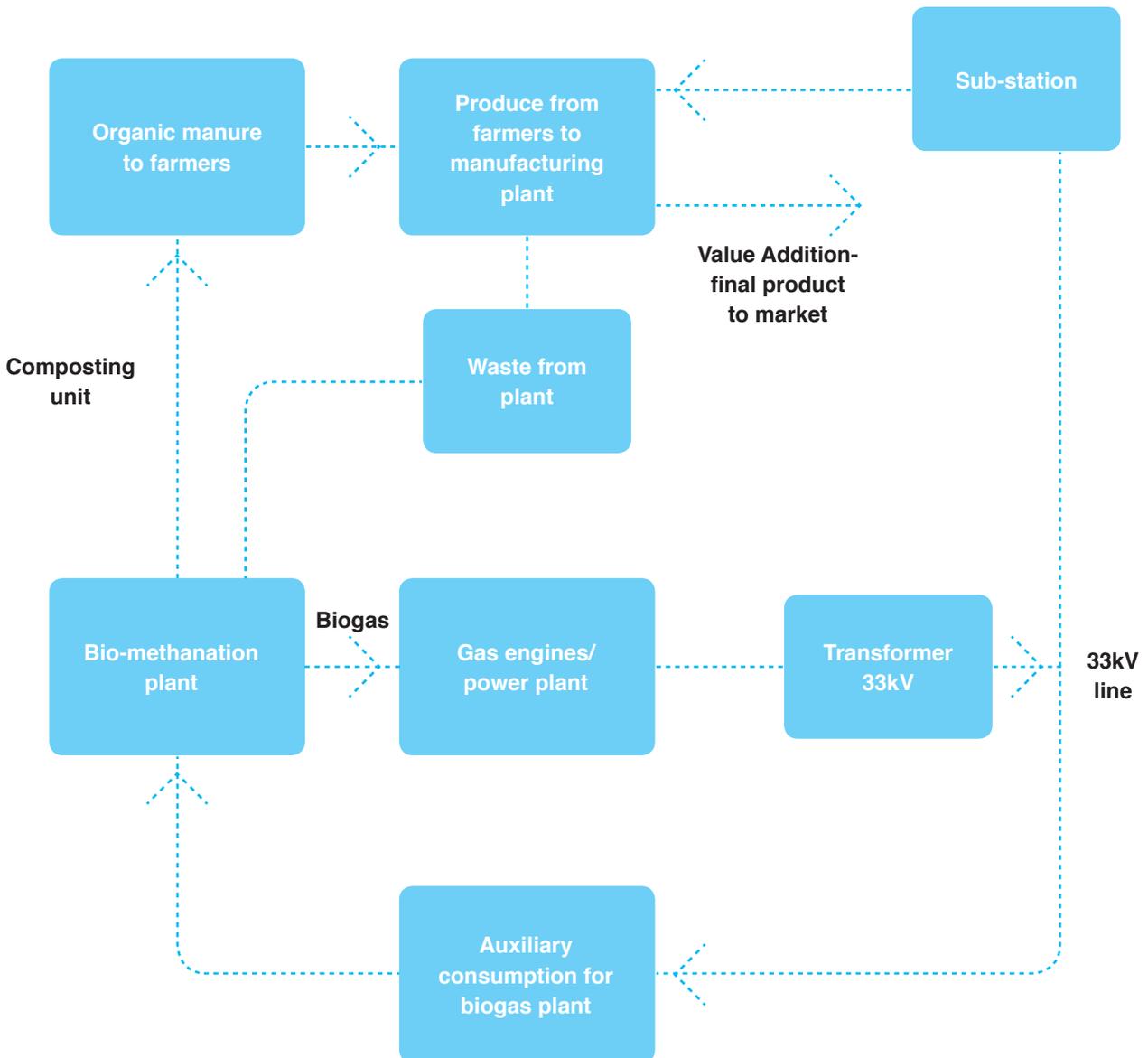
The fruit plants handle more than 800 MT/day during the peak season of May to July and 200 MT/day during the other months. This generates a significant amount of waste with a yield-to-waste ratio of 60:40 on an average. The conventional method followed by most fruit processors for their solid waste is 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 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 the bio-methanation plant and treated anaerobically in the bio-digester. The second part of the 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 Union Ministry of New and Renewable Energy (MNRE).

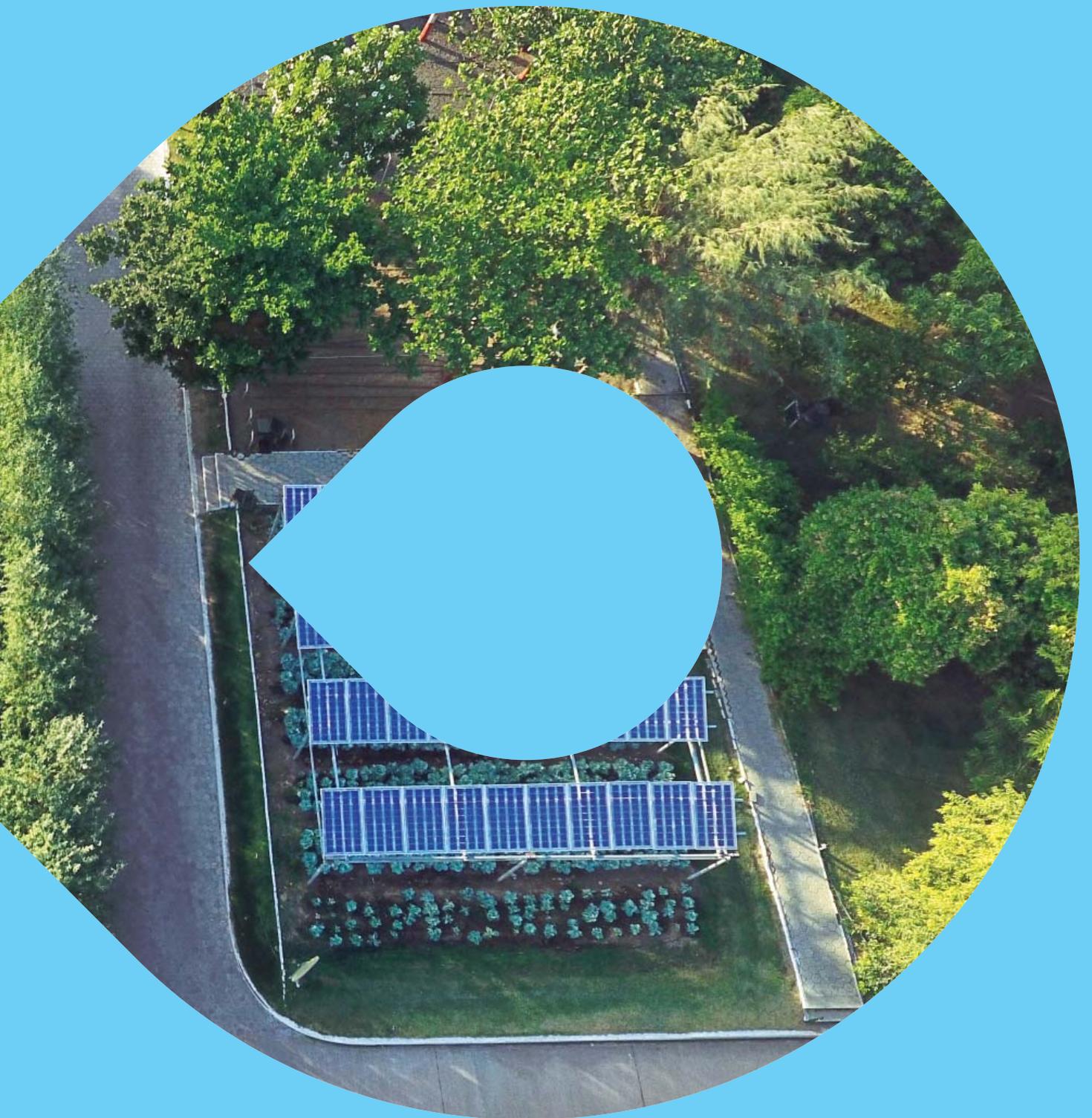
## **IMPACT**

- Total Green Electricity Generation: 2789 MWh/year
- Total CO<sub>2</sub> mitigation: 2700 tons CO<sub>2</sub> equivalent/year
- Total Green Manure Generation: 5100 metric tons/year (Including waste from nearby agro-industries)



# GREEN ENERGY IS GOOD ENERGY





# AGROVOLTAIC PRECISION FARMING ∞

 Jalgaon, India

Jain Irrigation has innovated the 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. The 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 the AgroVoltaic concept together can achieve 99% water usage efficiency
- Green electricity generated to the tune of 2,64,431 kWh/acre



# SOLAR POWERED INTEGRATED MICRO IRRIGATION PROJECT

 Ladakh, India

Sher-e-Kashmir University of Agricultural Sciences and Technology (SKUAST) has a 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 the river flowing in the valley. JISL had provided the solar powered micro-irrigation system 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 scientists 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, it 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 farmer economic conditions
- Cost-saving with durable and efficient solar panels having lifespan of 25 years
- Operate the Pumping System even 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 the few 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<sub>2</sub> 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
- In built 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 litres/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 24/7 water



# GRATITUDE LEADS TO 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 (GRF), a social arm of JISL, endeavours to groom a 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 1,50,000 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 a 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



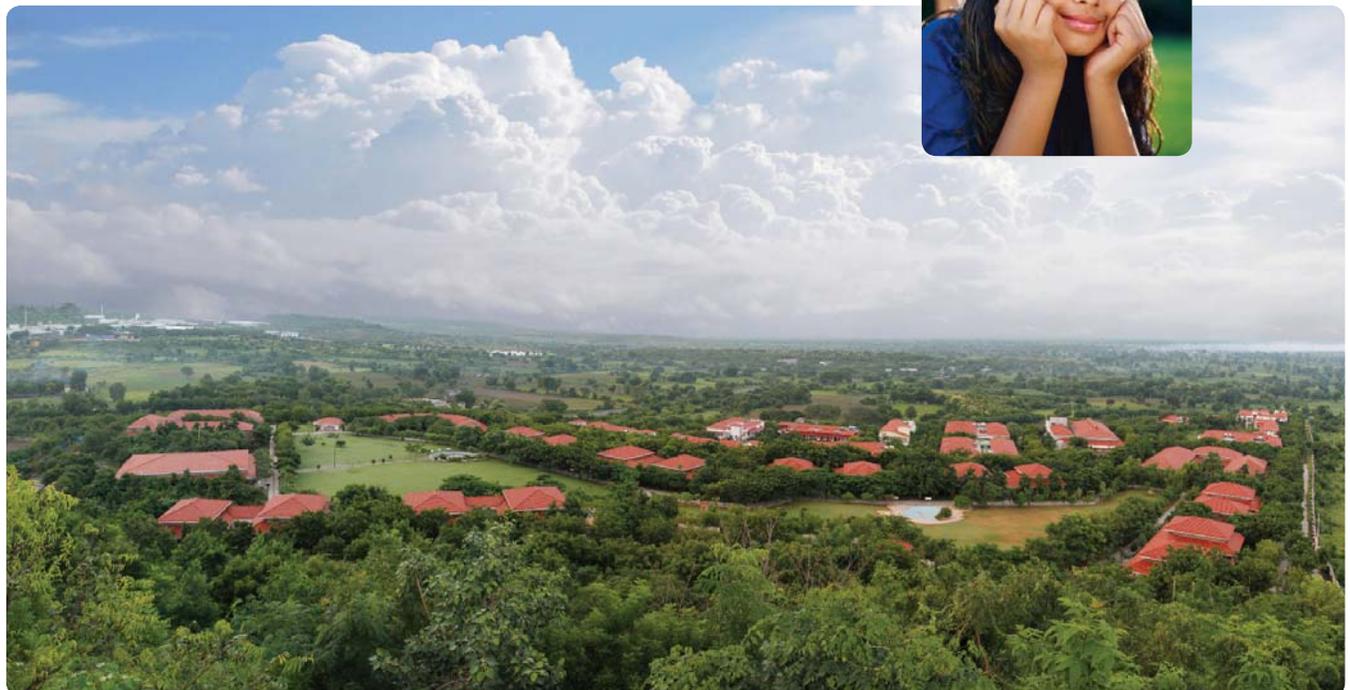
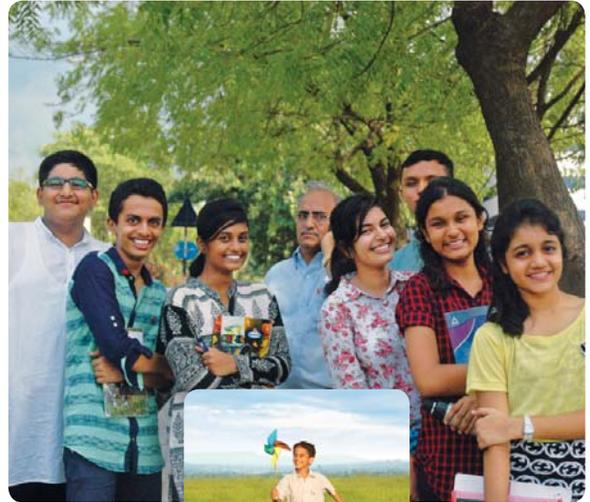
# ANUBHUTI RESIDENTIAL SCHOOL ∞

 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 classes 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 programmes 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
- Area Covered: Jalgaon and adjoining districts; Buldhana, Aurangabad, Dhule and Nandurbar
- No. of Paid Surgeries: 3,025
- Camps Organized: 480
- Paediatric Surgeries: 77



# 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

consists of national players - Pankaj Pawar, Yogesh Dhongade, Anil Mundhe, Sayyed Mohsin, Rahim Khan in men's team, Aiesha Mohamad, Nilam Ghodake, Farin Shaikh, Mitali Pimple & Radhika Joshi in women's 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 South Korea, beating Sri Lanka Women Carrom Team in the finals
- Faiz Fazal, Captain of the Vidarbha Cricket team 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 purification units have been installed in two 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 aim to reach a total of 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 eight

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 Samridhhi (prosperity) and Shanti (peace) for all. Priority sectors are Rural Health, Primary Education, Sanitation, De-addiction, Watershed Management, Future Agri Leaders of India (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 methods correctly
- Assure the success of technology as well as farmer
- Spread awareness and transfer modern irrigation and precision farming technology



## IMPACT

Besides training and onion contract farming, our agri extension team has also converted significant area as cultivating 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 programme of interactive learning promoting modern agriculture and agro-enterprise, engaging about 8000 students from 8th and 9th standards 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 two 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





# RECOGNITION AND AWARDS ∞



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



Lifetime 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	<b>Maharashtra Corporate Excellence Award (Maxell Award)-2017</b>	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	<b>Star Performer-2014-2015 (Western Region)</b>	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	<b>APEDA Export Award-2014</b>	Agricultural & Processed Food Products Export Development Authority, Government of India	Significant Contributions in Quality & Exports of Agriculture & Processed Food Products
2017	<b>APEDA Export Award-2015</b>	Agricultural & Processed Food Products Export Development Authority, Government of India	Significant Contributions in Quality & Exports of Agriculture & Processed Food Products
2017	<b>Yes Bank Natural Capital Award</b>	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	<b>Felicitation - 10th Global Agriculture Leadership Summit</b>	Indian Council of Food and Agriculture	Agriculture to Agribusiness
2017	<b>Parmarth Ratna</b>	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	<b>Aqua Excellence Award</b>	Aqua Foundation, New Delhi	"Aqua Excellence Award 2017 for outstanding contribution towards cause of sustainability under the special category 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	<b>Inclusive Business List 2017</b>	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	<b>CBIP Award (Optimum and Efficient Utilisation of Water Resources)</b>	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	<b>Lifetime Achievement Award</b>	Akhil Maharashtra Dalimb Utapadak Sanshodhan Sangh, Pune	For his invaluable contribution to Pomegranate
2018	<b>Lifetime Achievement Award - Corporate Excellence</b>	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	<b>PLEXCONCIL Award 2015-2016</b>	Ministry of Commerce and Industry, Government of India	Outstanding Export Performance in Plastic & PVC Foam Sheet
2018	<b>PLEXCONCIL Award 2015-2016</b>		Top Exporter of Pipes & Hoses
2018	<b>PLEXCONCIL Award 2015-2016</b>		Top Exporter of Drip Irrigation Systems
2018	<b>PLEXCONCIL Award 2016-2017</b>	Ministry of Commerce and Industry, Government of India	Outstanding Export Performance in Plastic & PVC Foam Sheet
2018	<b>PLEXCONCIL Award 2016-2017</b>		Top Exporter of Pipes & Hoses
2018	<b>PLEXCONCIL Award 2016-2017</b>		Top Exporter of Drip Irrigation Systems
2018	<b>Dr. M. S. Swaminathan Award for Environment Protection</b>	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	<b>Indian Agribusiness Excellence Award</b>	Media Today Group	Innovations in Irrigation Technologies
2018	<b>Inclusive Business List 2018</b>	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	15
By Central Governments	143	6	149
By State Governments	37	8	45
By Nationally Acclaimed Institutions	46	34	80
Felicitation by National Dignitaries	-	4	4
Ranking by Globally & National Acclaimed Institutions	15	2	17
<b>Total</b>	<b>253</b>	<b>57</b>	<b>310</b>



# 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 recipients : 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 schoolteacher and a successful farmer grows pigeon peas, pumpkin and water-melon under our drip irrigation programme at Kibwezi project site, Kenya

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

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

**Bhavarlal H. Jain**  
Founder  
1937-2016

A promise he kept and legacy he left  
for the organisation and future generations.





**When Farmers Progress, Nation Prospers!**

