## Jain Irrigation

FROM MICRO-IRRIGATION SYSTEMS TO AN INTEGRATED FARMING SYSTEM

#### APPLY AT MEETANDMULTIPLY.ORG

Jain Irrigation Systems Ltd. (JISL), an integrated agribusiness, is the largest manufacturer of micro irrigation systems (MIS) worldwide and a leading processor of fruits and vegetables—the world's largest in pureed mangos and third-largest in dehydrated onions. JAIN also manufactures solar pumps. In India, JISL has a 55% share of the drip irrigation market and a 35% share of the sprinkler market.

The company has built an integrative contract farming system that provides smallholder customers with improved marketing opportunities. It provides smallholders with additional inputs such as high-quality seeds and fertilisers that increase farm yields, as well as training on good agricultural practices. Furthermore, it offers access to credit to facilitate the

purchase of these inputs. Finally, the fruits and vegetables produced by the contracted farmers are bought directly by the company through its food-pro-cessing unit. As a result, farmers have raised their net incomes by as much as 1,000 USD per acre, depending on the kind of crop harvested. The investment usually pays off in less than one year.

LOCATION: **India** 

SECTOR: Agriculture

FOUNDED: **1989** 

EMPLOYEES:

> 9,000

ANNUAL TURN-OVER:

~ 1 billion USD

PROFIT MARGIN: **10-15%** 

POTENTIAL ADOPTERS:

Agri companies with access to small farmers; Processing or trading companies.



### The Business Model

## Key Partners, Activities and Resources

JISL mainly works with smallholder farmers, providing integrated irrigation solutions that are customized to the farmers' needs. The company is focused on enabling farmers to increase their productivity and ensure sustainability. They also run a non-banking finance company that provides credit to farmers (NBFC).

#### Customer Relationships, Channels and Segments

90% of JISL customers are farmers with less than 2 acres of land. Building strong relationships and providing knowledge to the farmers is crucial. JISL reaches their customers through a dedicated force of over 1,000 extension workers who work directly with farmers to design their MIS system and train them.

#### **Cost Structure**

10-50% of the initial cost is paid by the farmer. 50-70% is covered by a loan from NBFC. The loan is repaid from the government subsidy or from the farmers' own crop proceeds within 6-18 months. JISL has a buy-back programme where they buy certain crops directly from the farmers.

## Additional Revenue Streams

In addition to the MIS, farmers have access to a comprehensive selection of products and services. JISL also offers training and capacity building, high-quality plants and seeds, solar pumps and other solar-powered products. The company's food processing unit makes up 20% of its total sales.

#### **Customer Base**

Jain works with over 4 million farmers in total, with an increase of approximately 200,000 new farmers every year. They have a strong local presence in India with 55% market share in the drip irrigation market. 55% of their revenue from India, and 45% is from the rest of the world.

## Social and Economic Impact

Annual yield increases between 60%–130%, and income increases between \$500-\$6,000 per farm

Drip irrigation reduces water consumption by 50-70%, depending the on local situation, compared to flood irrigation Increased income security for farmers through buy-back programme. 90% of contracts are with small farmers Financed over 13,000 farmers through NBFC Dealer network creates jobs for entrepreneurs, providing them with training and products on credit

## The Growth Opportunity

Jain Irrigation has already established manufacturing plants in Chile and Brazil and just opened a small plant in Mexico manufacturing small irrigation systems. The company is eager to expand in Latin America, based on the market acceptance of the product. The products they wish to focus on are high-efficiency micro- irrigation systems and solar energy pumps. The goal of the company is to enable farmers to improve their efficiency and productivity, even on small farms with limited resources. This could be further supported by encouraging horticulture and high-value crops, such as grapes, bananas, and strawberries.

JISL is seeking local partners that have the advantage of several years in the agricultural industry, who have local knowledge, speak local languages and have good access to smallholder farmers. Potential partners could be large agricultural companies that are interested in inclusive business and providing an integrated solutions for farmers. Food processing or trading companies could also be potential partners. JISL is prepared to provide capacity building and other startup supports, but the companies must subscribe to the Jain philosophy of offering comprehensive assistance to farmers and creating a mutually beneficial relationship with them.

## Requirements for Replication

JISL is interested in several types of partners, which each have distinct requirements for replication.

Agricultural companies must have access to a large network of small farmers, and have the capacity to provide or facilitate access to finance for those farmers.

Processing companies must be interested in developing an integrated system along the lines of Jain's extension workers programme. They should be open to operating under a contract farming model, with guaranteed prices for farmers.

Trading companies must have several years of experience in the agricultural sector and be interested in and willing to develop an integrated system that supports smallholder farmers.

## WHAT WE ARE LOOKING FOR IN POTENTIAL ADOPTERS

- Large agricultural companies with access to small farmers
- Trading or processing companies with several years of experience working in agriculture
- Commitment to an integrated and farmer-focused approach to agribusiness
- Local expertise and network

# Apply to meet the President of Jain's Agri-Food Division meetandmultiply.org





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