

Climate Change

Stories of Impact

This series provides examples of our impact, expertise and lessons learned working with clients and partners.



Addressing Water Security in the Agricultural Sector in India

IFC worked with Jain Irrigation Systems Ltd., an IFC investment and advisory client, to conduct a Water Footprint Assessment which helps companies reduce water-related risks, improve water efficiency, and mitigate social and environmental impact. This was the first time that a business conducted such an assessment in a developing country and it paved the way for similar assessments for IFC clients in countries that face water scarcity.

“This water footprint assessment has exceeded our expectations. At a local level, the strategy validates our efforts to make a profound difference in farmers’ lives by providing extra income and sustaining rural livelihoods. At a regional level, the strategy will help increase water supply and decrease demand for water. The water footprint assessment attests to the leadership that both IFC and Jain Irrigation Systems are taking in the area of sustainable management and consumption of water resources.”

— Anil Jain, Managing Director, Jain Irrigation Systems Ltd.

RESULTS & IMPACT*

FIRM LEVEL

- IFC has invested \$133 million in Jain Irrigation Systems Ltd. since 2007.
- Increased its water savings through a solid understanding of the water footprint of its operations.
- Increased uptake of its sustainable drip irrigation system by farmers in both its supply chain and in the broader region, replacing traditional flood irrigation systems.

CLIMATE CHANGE

- Formulated strategies for alleviating water scarcity and improving the sustainability of water use in the surrounding onion-growing region.
- Encouraged local onion farmers to use drip irrigation to reduce water consumption and pollution.
- Established a forum for local water stakeholders to work together toward sustainable water resource management.

*As of December 2012

The Opportunity

Water scarcity is an alarming 21st century issue. It is estimated that by 2025, two-thirds of the world's population will be living in water-stressed conditions. Businesses around the world recognize this challenge as a threat to their reputations as well as their bottom lines.

IFC views water footprinting as an integral part of its climate change strategy given that it can help its clients reduce water-related risks, improve water efficiency, and limit their water-related social and environmental impact.

Water footprinting is a method similar to carbon footprinting that determines how much water a company uses in its operations as well as in its supply chain. It can also identify the social and environmental impact associated with that consumption. It is particularly useful for agribusiness, which consumes 70 percent to 85 percent of total fresh water.

India is one of the world's most water-affected countries. India-based IFC client Jain Irrigation Systems Ltd. is the world's largest manufacturer of drip irrigation systems and operates in an area where water scarcity is an imminent issue. It is also the world's largest producer of mango pulp, puree, and concentrate, and the second largest producer of dehydrated onions. It was the first business in a developing country to conduct a Water Footprint Assessment, which led to a reduction in its water consumption as well as a strategy to increase local water availability.



*Jain Irrigation's farmers and staff talk about new, more sustainable approaches and practices.
(Photo by Bradford Roberts, IFC)*

Our Approach

IFC worked with Jain Irrigation Systems Ltd. to produce a Water Footprint Assessment which assessed the production of its dehydrated onions and the manufacturing of its micro-irrigation system (MIS). Among the most important findings was that onions grown under drip irrigation have a 42 percent smaller water footprint than those grown using traditional irrigation methods.

Overall, this Water Footprint Assessment serves as an example of an effective tool for managing water-related risks and paves the way for similar assessments for IFC clients in countries that face water scarcity.

More broadly, IFC has been engaged in addressing water scarcity issues as a founding partner of the Water Footprint Network, a platform for private sector, academics, research institutions, international organizations and NGOs interested in furthering research in this field.

Since 2007, IFC has also invested \$133 million in Jain Irrigation Systems Ltd.

IFC, a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector in developing countries.

REGION: SOUTH ASIA | COUNTRY: INDIA | STRATEGIC PRIORITY: AGRIBUSINESS | BUSINESS LINE: SUSTAINABLE BUSINESS ADVISORY | CLIENT: JAIN IRRIGATION SYSTEMS LTD.

CONTACT

Minakshi Seth | New Delhi, India
5741+1058 / 91-11-4111-1058 | MSeth@ifc.org
ifc.org/sustainablebusiness

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