

Title of case study	Replenishing water
Name of organization(s)	Pepsico India
Business sector	Food & Beverages
Region(s) relevant to case study	<ul> <li>All regions</li> <li>Africa and the Arab States</li> <li>Asia and the Pacific</li> <li>Caribbean and Central America</li> <li>Europe</li> <li>Least Developed Countries</li> <li>North America</li> <li>Polar regions</li> <li>Small Island Developing States</li> <li>South America</li> </ul>
Country(s) relevant to case study	India
Adaptation sector(s) relevant to case study	<ul> <li>Business</li> <li>Education and training</li> <li>Food security, agriculture, forestry and fisheries</li> <li>Human health</li> <li>Oceans and coastal areas</li> <li>Science, assessment, monitoring and early warning</li> <li>Terrestrial ecosystems</li> <li>Tourism</li> <li>Transport, infrastructure and human settlements</li> <li>Water resources</li> <li>Other (please specify):</li> </ul>
Adaptation activity	PepsiCo entered India in 1989 and has grown to become the country's largest selling food and beverage company. India grows approximately 130 million tons of rice across roughly 108 million acres, making it one of the largest rice producers in the world. Traditionally, rice is cultivated by sowing seeds in a small nursery, where the seeds germinate into seedlings. The seedlings are then transferred manually into the main field and then grown with four to five inches of water at the base of the crop for the first six to eight weeks, mainly to prevent weed growth.

	In India, a region that faces severe water shortages, an agriculture process called direct seeding of rice helps growers avoid three water-intensive steps: puddling, transplanting and standing water. After successful trials with direct seeding in PepsiCo's research and development fields, the company has developed a direct seeding machine for its farmers. In 2010, PepsiCo expanded direct seeding and applied it to approximately 10,000 acres, saving more than 7 billion liters of water. And, because in direct seeding there is no water at the base of the crop, there is also a 70 percent reduction of greenhouse gas emissions.
	In addition, PepsiCo and PAGREXCO (Punjab Agri Export Corporation) partnered in 2002 to start a "Citrus Development Initiative", marking another step towards promotion of crop diversification and helping farmers adapt in a water-constrained climate. In consultation with local government, PepsiCo introduced less water intensive citrus plantations for farmers as an alternative to paddy, and set up two fruit processing plants in the region. The initiative has emerged as one of the most successful models of public-private partnerships in Indian agri-business, promoting crop diversification and creating a localized supply base for citrus juice for PepsiCo's Tropicana business.
	PepsiCo is involved in several water conservation efforts throughout its business operations, including the use of rainwater harvesting initiatives in its manufacturing locations, such as roof-water harvesting and recharge ponds.
	The Pepsico Foundation has also partnered with <u>Water.org</u> to develop WaterCredit, a market-driven model that will provide micro loans to families throughout India. This expansion will help enable approximately 800,000 people to access safe water by March 2016.
Cost-benefit	PepsiCo India's engagement with water management, including agri-sustainability and crop diversification, is centered around protecting its raw material inputs and long-term business sustainability in water scarce regions, especially those where climate change is expected to exacerbate existing water stress.
Case study source(s)	Our Commitment to Sustainable Agriculture Practices (PepsiCo) PepsiCo Corporate Social Responsibility (CSR world)

Disclaimer: These business cases have been cited to raise awareness about the engagement of the private sector in climate change adaptation. The information in the business cases has been provided either directly by the organization or obtained from a public source. The UNFCCC secretariat has not verified the information and takes no responsibility for it. Users are therefore advised to verify the information before they take any action relying on the information provided in the business cases.





Sewing machine used in the direct seeding method Source: <u>http://pepsicoindia.co.in</u>