



Hindustan Coca-Cola Beverages Pvt. Ltd



Water Stewardship

CASE STUDY



Summary

Water conservation: Inside every bottle of a Coca-Cola beverage is the story of a company that understands the value of water, respects it as the most precious of shared global resources and works vigorously to conserve water worldwide. Management of water at HCCBPL is governed by the following philosophy: Reduce the quantity of water used in our manufacturing operations and become progressively water efficient. Recycle and Reuse as much water as possible, and treat waste water in all plants to standard that supports aquatic life prior to discharge. Replenish support water replenishment activities and sustainable community water projects. The philosophy of water conservation has been integrated into our business, and we continuously identify and implement conservation measures at our plants. We constantly strive to reduce the amount of water consumed in our operations. Our water consumption reduction measures are focused in the following areas:



Objective of Intervention

The efficient use of water, the primary ingredient in our beverages, and also used in our manufacturing processes is a major focus for sustainable practices throughout HCCBPL operations. Globally, The Coca-Cola Company targets to replenish as much water, as will be used in beverages and their productions by the year 2020. In line with this global objective, we have undertaken water replenishment activities, focussing on water conservation, increasing water use efficiency and reuse, harvesting rainwater, restoring natural water bodies as well as supporting agricultural water-use efficiency improvements.

Type of Intervention and Location

Rainmaker–Water for Future

Goblej, Ahmedabad

Description of Intervention

Rainmaker is an innovative and rigorously tested beverage process water recovery system that uses proven, state-of-the-art technologies to provide water for reuse in approved operational processes, such as clean-in-place and bottle washing activities. The system takes process water which is normally used once, treated, and discharged and further purifies it to high standards, using technologies such as chemical treatment, biological treatment in a membrane bioreactor, ultra-filtration, reverse osmosis, ozonation, and ultraviolet sterilization. The result is a new source of extremely high-quality water that meets and/ or exceeds even the most stringent drinking water standards and sets a new standard for the industry. Technologies used in the Rainmaker water recovery process may include a combination of several proven approaches. Membrane Bioreactor combines ultrafiltration with biological treatment for excellent solids removal with low residuals in a small footprint. Ultrafiltration uses a pressure-driven barrier to remove suspended solids and pathogens Reverse Osmosis forces water through membranes under high pressure, removing dissolved chemicals and many other compounds to produce water with very high purity and low silt density Ozonation destroys microorganisms through an infusion of ozone Ultraviolet Light disinfects water by rendering microbes inactive.



Intangible or Tangible Benefit

Environmental Aspect Action Environmental Impact/Improvement Water -Consumption per litre of beverage production(WUR/Water Usage Ratio) Installation of recovery scheme - Rainmaker plan Water consumption reduced from 1.85 per litre of beverage to 1.7 litre (Current Status 2014 with/without Rainmaker Production Volume 865 m³/day 1691 m³/day 1691 m³/day).

About Hindustan Coca Cola Beverages

The Goblej plant commenced operations in 1998 and is currently the largest plant in the country operated by HCCB. Nine manufacturing Lines – Capacity of 4115 BPM the products are sparkling carbonated & non-carbonated beverages, juices, water. The unit has been leading the way with pioneering initiatives focused on community well-being and environmental preservation. The plant has been recognized for its good work at external forums and most importantly, by the local communities in vicinity. Goblej Unit has over 50 per cent reduction in Water Use Ratio (litres of water consumed per litre of beverage produced) energy used per litre of beverage produced) over the last five years. Water Replenishment Ratio (amount of water returned to nature and communities as a percentage of water used at our facility) of 67 per cent in 2014 Project Rainmaker (a project that substantially increased water reuse) was recognized as 'Best project of the year' by International Water Association under the Asia Pacific Regional Innovations Award.