

This series showcases success stories of PaCT (Partnership for Cleaner Textile) partner factories in the Bangladesh textile sector that have implemented cleaner production projects.

Factory Status

Jeans Culture Ltd. (JCL), a sister concern of Armana Group, is a ready-made garment (RMG) washing plant. Its total production capacity is 30,000 pieces per day. The factory's water requirements are met by two on-site submersible pumps. Four flow meters are available to measure the water coming from the ground, water consumed in the washing process, and effluent treatment plant (ETP) inlet and outlet volumes.

The Challenge

Water usage in a washing factory is tied to other resource consumption, including electricity, steam, and chemicals. Reducing water usage would in turn reduce other resource use. Major water consumption at JCL is in the process section, and about 90 percent of groundwater is used to meet this need. JCL did not have any specific water management plan. It was observed that the washing process required excess rinsing and this high load of water was sent to the ETP, increasing its load.

Implementation

JCL took the following initiatives to modify their production process and reduce resource use:

- Establishing an effective water use management and reduction program
- Calibration of water flow meters
- Regular monitoring of water consumption and key parameter indicator (KPI) target setting
- Reducing water consumption by avoiding excess rinse
- Reduction of water consumption by using trigger nozzles instead of open pipes
- Water leak detection and proper maintenance of water valves, fittings, and pipes

- Recycling water used in the PP (potassium permanganate) spray section



The total investment for implementing these measures was only \$2,265, which could potentially save \$30,421 annually.

Results

Through modification in the production process, JCL could potentially achieve 18 percent water KPI reduction, i.e., the factory can save 18 percent less water used per kilogram of processed garment.

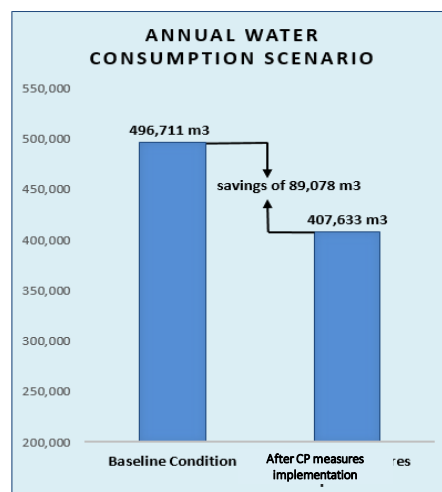


Figure 1: Annual water consumption scenario before and after implementation of CP measures

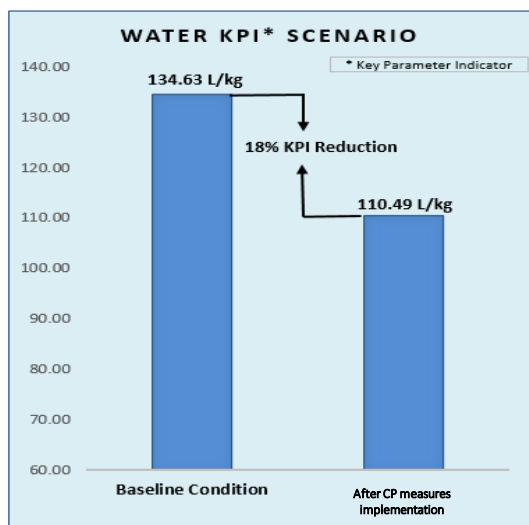


Figure 2: Water key parameter indicator before and after implementation of CP measures

“JCL is firmly committed to the economic development of the country as well as long-term sustainable eco-friendly activities. With PaCT interventions, JCL strives to create a sustainable environment. These interventions continue to reduce environmental costs and resource consumption. We earnestly feel that the program team helped our process improve and will help the sector towards environmental betterment.

Jeans Culture Limited
Factory Management.”

Environmental Benefits

Implementation	Annual Water Savings	Annual Power Savings	Annual GHG Emission Reduction
Optimization and modification of the production process	89,078 m ³	38.3 MWh	21.5 ton of CO ₂ e

IFC-led Advisory Partnership for Cleaner Textile (PaCT) is a holistic program that supports the entire textile value chain – spinning, weaving, wet processing and garment factories – in adopting cleaner production (CP) practices. PaCT engages with brands, technology suppliers, industrial associations, financial institutions, and the government to bring about systemic and positive environmental changes to the Bangladesh textile sector and contribute to its long-term competitiveness and environmental sustainability.

WHAT PaCT DOES:

- Basic Cleaner Production Assessment
- In-Depth Cleaner Production Assessment
- Chemical Management Assessments
- Water and Energy Management
- Energy Efficiency and Productivity Assessment
- Rooftop Solar PV Pre-feasibility Study
- Online Resource Monitoring

DEVELOPMENT PARTNERS



IMPLEMENTING PARTNER



CONTACT:

Nishat S. Chowdhury, Program Manager;
nchowdhury2@ifc.org



Gap Inc.

Jeanologia

BRAND PARTNERS

LEVI STRAUSS & CO.



IMPLEMENTER

