Bangladesh RMG industry in pursuit for a Sustainable Industry

Water solutions for a sustainable textile industry

Amsterdam, November 03, 2015

Faruque Hassan
Senior Vice-President
Bangladesh Garment Manufacturers and Exporters Association (BGMEA)
Bangladesh RMG Industry aspired to be a $50 billion industry by 2021 Sustainably!
Background

• Bangladesh RMG industry is the life blood of the country’s Economy
• earning around 81% of the overall export
• Employing 4.4 Million workers of whom 80% are women
• Crucial for socio-economic development of Bangladesh
• The sector has set a target of 50 Billion export in 2021
• Environmental sustainability has been identified as a key area of concern for growth of the industry.
Challenges

• Currently, the sector is facing some growing challenge in the area of environmental sustainability with issues like -

• Ground water depletion
• Resource inefficient production processes
• Unavailability of Natural Gas and resources
• Lack of waste management and occupational health and safety measures
Major Sustainability Issues

➤ GROUND WATER DEPLETION

➤ SURFACE WATER POLLUTION

➤ ENERGY EFFICIENCY

➤ HAZARDOUS CHEMICAL MANAGEMENT

➤ SOLID WASTE MANAGEMENT
Water

Bangladesh is a water rich country

Usually Water is not treated as costly resource here..

We are trying to create awareness amongst the members.
Steps taken so far:

- IFC-SEDF - cleaner production.
- Water PaCT
- TREES - Environmental Performance improvement project with German International Co-operation.
- Textile Technology Business Centre (TTBC)
- Textile Sustainability Platform (TSP)
- Zero Discharge of Hazardous Chemicals (ZDHC)
- Zero Liquid Discharge (ZLD)
- Research on sustainability
- Cluster based CETP
- Partnership with world class technology providers
- GREEN Factory building
- Policy revisiting
- Best practice by factories
IFC-SEDF- Cleaner production (CP)

• CP is a preventive, company-specific initiative intended to minimize use of inputs such as energy, water, raw material; reduce waste and emissions.

• Implemented in 18 factories and consist of:
  – Conducting a baseline assessment of water and energy consumption
  – Identifying potential to manage and mitigate environmental pollution (short/medium/long term)
  – Supporting factories to implement Corrective Action Plan
  – Forming User Groups
  – Evaluation
  – Supporting market uptake

• leads to minimizing waste and pollution at source, and increase profit and sustainability.
PaCT- A unique Partnership

is a joint initiative, working with the textile wet processing sector towards the adoption of Cleaner Production (CP) practices.

Builds on four pillars:

- **Brands**
  - Sustainability
  - De-risk
  - Supply chain
  - Design and sourcing decisions

- **Factory**
  - Cleaner production
  - Sustainable growth
  - Water, energy, and chemical

- **Policy**
  - Conducive policy
  - Addressing policy gaps in the regulatory environment

- **Access to Green Finance**

http://www.textilepact.net
**PaCT (Partnership for Cleaner Textile)**

- **75 factories are undergoing Basic CP assessment**

  basic Cleaner production assessment on how a factory can incorporate cleaner processes that lead to a water-footprint reduction by adopting low or no-cost measures. This also includes Operational Health and Safety (OHS) and Water and Sanitation (WASH) improvements.

- **56 factories are undergoing Deep Dives**

  involves hardcore engineering assessments that take into account of dyeing, finishing, laundry processes and utilities. It helps factories to significantly reduce the water, waste water, sludge, carbon footprint and improve environmental performance and production efficiency.
Textile Technology Business Centre

• IFC and BGMEA jointly set up TTBC.
• TTBC is a Knowledge centre act as a platform to collaborate between industry and academy.
• Provide unbiased information to factories on technology.
• Match making between service providers and industry.
• Act as a depository of knowledge on best practice in the area of environmental sustainability.
TREES

• Factories which are challenged in the area of environmental sustainability
• Being implemented in 10 factories, 5 non-wet and 5 wet processing factories.
• Involves, detailed environmental assessment of factories, energy audit and provide action plan to minimize impact and maximize efficiency.
• Provide custom made solutions to improve
  – WaSH (Water Sanitation and Hygiene)
  – Waste management
  – Carbon emission reduction
  – Water footprint
  – Chemical management
  – EMS (Environmental Management System)
  – Other areas as per factory requirements.
Ø ZDHC Zero Discharge of Hazardous Chemicals

- A group of major apparel and footwear brands and retailers made a shared commitment to help lead the industry towards zero discharge of hazardous chemicals by **2020**.

**Working on 7 specific work stream as below:**
- Chemical hazard assessment, prioritization and action
- Training and capacity development
- Right to know
- Assessments and audits
- Chemicals management best practices
- Stakeholder partnering
- Management systems approach, structure and documentation
Bridging Technology and Service Providers

- BGMEA bridging with world best technology providers like CE Environment Group, Novozymes, Alfa laval etc.
- We have organized training on Environmental Compliance, energy efficiency etc with AQM and EHS+ School

Participants of the training program on Environmental Compliance with Sr. Vice President BGMEA
Best Practices by factories

Apart from the legal and buyer compliance factories are implementing a numbers of best practices to improve their efficiency and sustainability;

- Rain Water Harvesting
- Reduce, Reuse, Recycle of water
- Cogeneration
- Condensate recovery boiler
- Use of renewable energy (solar panel)
- Prismatic skylight
- T5 and LED light
- Sustainability reporting and etc.
Awareness raising by Posters

Every drop not misused is every drop of WATER SAVED

- Reduce wastage of water by minimizing system errors and maximizing efficiency. Use water intensive dyes, chemicals, technologies etc.
- Reuse treated water from ETP in toilet flush and other possible places and save fresh water.
- Recycle the extracted ground water as much as possible and maximize the efficiency. Save ground water as much possible.

Ground water level is depleting by three meters every year.

trees Toward Resource Efficiency & Environmental Sustainability. An initiative of.

ভারুন তো পানিবিহীন একটি দিন !

পৃথিবীতে প্রতি সাত জনের মধ্যে একজন বিশুদ্ধ পানির সুবিধা থেকে বন্ধুত্ব।

আসুন পানি বরহার মিতবায়ী হই
Green Factory

• Already **21** factories have achieved LEED certification as green factory from USGBC.

• Around **100** factories have been registered in LEED and are proceeding for green factories.

• We have the highest rated LEED Platinum RMG in the world that got **92** points out of **110**.
Major Policy changes

- Implementing Zero Liquid Discharge has been identified as KPI of Department of Environment.
- A draft sludge management guideline has been made.
- Low cost green finance has been made available for the factories.
- Efficiency of captive power generator has to be increase up to 60%. (Through Cogeneration, EGB, heat recovery etc.)
Limitations

Knowledge
Experience
Awareness
Research and Development
Conclusion

A momentum of positive change has already been created.

BGMEA along with its partners are addressing comprehensively all the areas of sustainability.