Save water to save our next generation

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Abstract

Although 70% of the earth's surface is covered with water, in many areas, water scarcity appeared as a big challenge. It is essential to use water efficiently, rationally, and judiciously in every sector. Comfit Composite Knit Limited (CCKL), a large-scale export oriented knit garments group of companies in Bangladesh, uses huge water in its production and process chain. This group meets most of its water demand which are treated and uplifted from WTP (wastewater treatment plant). Taking water scarcity issue into its account, this group intends to use water perfectly, fruitfully and religiously. To find an optimal and efficient solution for its water consumption, this group initiated several measures and tested their merits and bottlenecks in its labs and in nearby factories. The group finally has come to a solution. Accordingly it implemented modifications in the production lines by incorporating the expert's opinions, keeping all the machineries and equipment as they were before. As a result, the group had been successful to hugely reduce its water consumption rate from 130 L/kg to 50 L/kg. We presented the technical details of the applied method and also showed the main achieved results on cost effectiveness in chemicals and auxiliaries, WTP, and utilities.

Keywords
Water scarcity, garments, production

Biography

Md. Kawsar Ali is a well-known expert and mentor in the garment industries of Bangladesh. He has twenty one years of professional experiences in RMG sector. He has worked in different capacities in leading companies like Beximco, Square, Orion and DBL. He has got strong communication, interpersonal relations, mentoring, negotiation and cross-cultural organizational skills, and has demonstrated such over the years with utmost productivity and reputation. He is also expert in Total Quality Management, Lean manufacturing, Kaizen, Leadership and self-development courses like Meditation and Yoga. Mr. Kawsar has completed his graduation from Khulna University of Engineering and Technology (KUET) also obtained an MBA degree from Dhaka University. He has participated in many workshops, seminars and training sessions in Bangladesh and abroad.

Md. Mizanur Rahman is currently a Senior Lecturer at Department of Thermo-Fluids, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia UTM, Johor Bahru, Malaysia. Before joining at UTM, he has served as

a Postdoctoral Researcher at Aalto University School of Engineering, Finland. Rahman also has more than 12-year working experience in a government statutory body namely Rural Electrification Board (REB), Bangladesh. During his tenure in REB, Dr. Rahman has gathered practical experience in dealing with techno-economic and sociocultural challenges faced by rural electrification programme. He has accumulated deep insights towards the solution pathways for the Global Mega-challenge of having 1.2 billion people without access to electricity yet. Mr. Rahman received his Ph.D. in Energy Economics and Power plant Engineering from Aalto University, Finland, M.Sc. in Sustainable Energy Engineering from Royal Institute of Technology KTH, Sweden, and B.Sc. in Mechanical Engineering from Khulna University of Engineering and Technology, Bangladesh. His research interests include rural electrification, energy economics, energy management, energy efficiency and system, sustainable and renewable energy, energy system modelling, Life-Cycle Analysis, distributed power generation, multicriteria evaluation etc. Dr. Rahman has several publications in International referred journals in energy engineering domain.