

# PRESENT SCENARIOS AND FUTURE PROSPECTS OF WOMEN EDUCATION IN CHEMICAL SCIENCE, ENGINEERING AND TECHNOLOGY IN BANGLADESH-A CASE STUDY

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## ABSTRACT

This paper particularly focuses on the comparison of women in engineering in two educational institutions namely Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh and Shahjalal University of Science and Technology, Sylhet, Bangladesh which are around 245 km apart from each other. Engineering has traditionally been a male dominated profession. While progress is being made in encouraging women in engineering and technical fields, the progress rate has been very slow. Data from surveys indicate that the factors affecting recruitment and retention of women in engineering are very similar in both the educational institutions. The fact that the engineering profession is male dominated, is physically demanding and requires sound mathematical and scientific background are the major hurdles in attracting women in engineering. While workshops, special courses, seminars, congenial academic and workplace environments designed to improve the numbers of women in engineering are essential, attitude changes in society towards women in all countries has to change to encourage women to select chemical science engineering and technology as a profession.

This study with regards to women in engineering points out a significant factor: the lack of incentive to attract women in engineering at an early age specifically during their elementary education. Society typically in both western and eastern countries places undue emphasis on the abilities of girls and boys. Girls are encouraged to play with dolls while boys play with scientific toys containing mechanisms and electronics. The notion that girls are not strong in analytical, problem-solving skills is also rampant in most societies. Girls hardly ever see a female engineer role model on television or a newspaper. Few girls in an elementary or even at a high school can define the work of an engineer. While mediocre male students can think of engineering as a career, most mediocre females shun away from engineering.

Women should be encouraged to bring their vision and leadership, knowledge and skills, views and aspirations into the development agenda from the grassroots to international levels and to make it reachable to all women and others we are taking mobile phones as a medium. Science and technology brings economic growth and well-being to people and it is not only the empowerment of women through science and technology, but also the enrichment of science and technology through women's participation.

This paper focuses on factors that impact attraction and retention of women in the engineering profession both in the two educational institutions namely Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh and Shahjalal University of Science and Technology, Sylhet. A statistical information about the admission of female students in different engineering departments has been highlighted. The paper also discusses factors affecting women in the recruitment and retention of women in engineering in Bangladesh.

**KEYWORDS:** *Women, Engineering, Education, Age and Society.*