

## **GENDER IMBALANCE IN POLICY MAKING LEVEL IN SCIENCE AND ETHICAL ISSUE**

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**ABSTRACT:** When the achievement of women leadership in Science and technology (S&T) is heighten in developed nations in comparison to women in developing countries, it is unfortunate that women are invariably left below, rarely reaching decision-making positions in S&T in Bangladesh. In Bangladesh, Prime Minister and Leader of Opposition are female but when it comes to leadership in science, it is difficult to find a Marie Curie in Bangladesh. Men are twenty times more likely than women to reach the top level positions in research. Women are under-represented in almost in all scientific boards. The scarcity of women in senior positions in such bodies inevitably means that their opinions are less likely to be voiced in policy and decision-making processes, which may lead to bias decision-making and priority setting in scientific research. The causes of lower representation of women in S&T are discussed. All the causes raise ethical questions and violate the Universal Declaration of Human Rights (UDTH). Millennium development goals can never be accomplished without the active participation of women who represent 50 percent of the population, particularly their involvement in science education. Based on this analysis, a change of culture is required to improve gender imbalance in decision-making level in science.

**KEY WORDS:** gender imbalance, policy level, science and ethical issue

**INTRODUCTION:** It is true that women representation in top positions or policy making levels in science are less through out the world. Women hold less than 15% of the full professorships in Europe, even though more than half of the European student population is female. American women earned over 67 percent of Ph.D.s in graduate schools of medicine, dentistry and Engineering. But the percentage of women in decision making levels in science departments are still less then 20%. There have been 513 winners of the Nobel Prize in the science, only about 44 (6%) have been women. A study commissioned by the Organization of Islamic Conference (OIC) Standing Committee on Scientific and Technological Cooperation found that there are only 18 (4%) women scientists among the top 381 OIC scientists. There are also very

few women elected members in Islamic World Academy of Sciences or the Academy of Sciences for Developing World (TWAS). In India, women are increasingly adopting science careers, although their ratio to the total higher position is still in single digit. According to Pakistan Council for Science and Technology, the representation of women in R&D organizations is hardly 2.7 percent of the existing manpower.

When the achievements of women leadership in S&T is heighten in developed nations in comparison to women in developing countries, it is unfortunate that women are invariably left below, rarely reaching decision-making positions in S&T in Bangladesh. In Bangladesh, Prime Minister and Leader of Opposition are female but when it comes to leadership in science, it is difficult to find a Marie Curie in Bangladesh. Although the involvement of women in science education are increasing but it is not impressive. Women are rarely included in the boards of scientific organizations and academic councils of universities. The scarcity of women in senior positions in such bodies inevitably means that their opinions are less likely to be voiced in policy and decision-making processes, which may lead to bias decision-making and priority setting in scientific research in Bangladesh.

This article examines the ethical concern for gender imbalance in top position in science that world needs to overcome violation and ensure Human Rights and achieve Millennium development goals.

**ARE FEMALES INTELLECTUALLY WEAK?** Literature depicted that the first technical name in science was male - Imhotep - the architect of the first pyramid. The second technical name was female - En Hedu'Anna (c.2354 BC). Certainly women were questioners and thinkers long before 4,000 years ago. In most myths and religions preserved that the beginning of agriculture, civilization, mathematics, calendars, time keeping, laws, and medicine were in the hands of women.

Scientifically men and women had the same amount of grey matter in their heads and a nation has to utilize the intellectual capacity of them for its own good as they could contribute to conservation of biodiversity, protection of the environment and ensuring food security.

The majority of women sees and feels reality in a way different from men. Of course, there are exceptions but because of gender and because of historical and social compulsions, women tend to view the world in a more holistic way and more spontaneously see and feel inter-

dependence. Director, Canadian International Development Agency said that women have the capacity to create bridges more easily than empires, hierarchies and walls. More women in all fields of science will probably usher a new scientific era, a new kind of science that recognizes the validity of a different approach.

**CAUSE OF LOWER REPRESENTATION OF WOMEN IN SCIENCE:**

1. Women traditional roles in the home
2. Patriarchal society
3. Lack of family support
4. A heavily male-dominated field
5. Culture of negative bias
6. Socio economic factors
7. Misattribute personal or professional conflicts to sexism.
8. Fear of science
9. Recognition
10. Barriers to Entry
11. Socialization Barriers
12. Professional support
13. Networking
14. Education system
15. Schooling system

**ETHICAL ISSUE:** The above mentioned causes of lower representation of women in science are true for each woman in every corner of the world. If we go in depth clarification for individual cause, we will see that discrimination is the main cause behind this which is not scientific and it raises ethical questions. This discriminations cause large levels of widespread deprivation that make the women more vulnerable, subjecting them to silent suffering.

Article 19 of the Universal Declaration of Human Rights in 1948 stated that “freedom to hold opinions without interference.” Article 21 of Universal Declaration on the Human Genome and Human Rights in 1997 stated “States should also undertake to facilitate on this subject an open international discussion, ensuring the free expression of various socio-cultural, religious and philosophical opinions” and “Freedom to be a scientist from any group of persons with no discrimination”.

From above article, it stands that, science needs a foundation for scientific thought not based on discrimination. Both the men & women scientists should give equal incentives for their hard work.

**DISCUSSION:** Since forty years ago (development decade), it was considered that the poverty, hunger and unemployment are the problem for the development. This concept has proved to be an oversimplification on the context what is happening in the real life in the area of gender, economic equity, environment degradation and jobless economic growth.

From 90s, it is witness of gender, economic equity and environment in ethical point of view. The Millennium Declaration and Millennium Development Goals (MDGs) also identify gender equality and women empowerment as central cross cutting goals. But the current system is that a large percentage of graduate women are not reinvesting their skills in the economy, owing to traditional gender roles that are no longer in accordance with the demands of modern women and men. Employers, policy-makers, scientists and society all need to consider whether we can afford to lose such a large number of trained specialists from the workforce.

**CONCLUSION:** A change of culture is required to improve gender imbalance in research and decision-making level in science. We need to ensure that men and women who want to have families are not prevented from having careers and contributing to society in every way that they can. This can only be achieved by a significant change in the way that the society and individuals think about the roles of men and women and by taking positive action to improve the working conditions and favorable support at all stages of their careers. Millennium development goals can never be accomplished without the active participation of women who represent 50 percent of the population, particularly their involvement in science education.

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