

United Nations Entity for Gender Equality and the Empowerment of Women

UNWOMEN

AGENDA ITEM:

**Addressing Gender Inequality in the Work Force, with Special Emphasis on
the Underrepresentation of Women in Engineering and Male-Dominated
Sectors**

STUDY GUIDE

Under-Secretary General:

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1. Letter from the Secretary General

Most distinguished participants and esteem guest,

It is an extreme honor to welcome everyone of you in this particularly excellent event. I would like to start my letter with the history of this amazing club which made this conference come true.

Yucel Boru Fen Lisesi Model United Nations Club is a formation that has been established in 2019, containing the best ambassadors and greatest brains of its time. I, as the Secretary General of YBFLMUN'26 am proud of being the 7th president of this extraordinary club which has been on my side through these 3 years.

Our journey is not just a travel which is being made continuously in time but an adventure giving everyone the consciousness that they need. As the Secretary General of this exquisite event I, personally, believe this occasion will be one of the best of it's kind. To be more specific I know this conference will change the life of those who attended.

With the immense help of our organization team and fabulous efforts of our academy team we hope you all to have a wonderful experience, have a chance to make new friendships that will last for a long time and ,who knows, maybe have an opportunity to find the true love through this collaboration.

To any delegate, any attendant and any person who considers MUN as a union just about debates or diplomatics, we would like to inform you before your ideas change. MUN is a political atmosphere yes, but every step you take in your life is politic. Thus politics can not be simplified to an ideology, politics is your life, so is MUN. With this opportunity you will have the time and the chance to express your opinions, your views and most importantly yourself.

At YBFLMUN'26 delegates will be able to express themselves without any concern. Even though these three days will pass quick everyone will remember the

memories for a quite while. We assure you, in our conference which will be held between 1st and the 3rd of July, every single person on every single corner of the world is more than welcome to join us in this extreme function.

Let us come together under the name of YBFLMUN'26. Let us be united under the name of UN. And I am pleased to say, welcome, to the home you never knew you had, everyone.

HİLAL YILDIRIM
SECRETARY-GENERAL OF YBFLMUN'26

2. Letter from the Under-Secretary General

Dear Delegates,

It's a pleasure to welcome you all to the UNWOMEN committee of YBFLMUN'26! I'm Ayaz Aras Yavuz, your Under-Secretary General for the UNWOMEN committee. I believe that we will have the best 3 days in this conference all together.

Our agenda item is actually one of the most crucial topics in our days, so I expect everyone to be prepared for the debate. In this study guide, you will find all the important information that you need. I prepared this guide with the goal to make it understandable and meaningful, so I hope that you all have a great study time with this guide.

I would like to encourage you all to participate in the sessions with respect towards other perspectives, and a shared commitment to advancing the rights and dignity of women worldwide. Let this conference serve as a platform not only for discussion but for genuine progress toward a more inclusive and equitable global community.

Now I would like to remind you that this study guide is carefully written and thoroughly reviewed. Still, if you have any concerns, or have any questions regarding the study guide, our agenda item or our procedure, you can reach me through my email (yavuzayazaras@gmail.com).

I'm wishing to see you all physically at the conference and hope that we will have the most meaningful three days all together while also contributing to the debate. See you soon and stay well.

Best Regards,

Ayaz Aras Yavuz,
Under-Secretary General of UNWOMEN

3. Introduction to the Committee: United Nations Entity for Gender Equality and the Empowerment of Women

UN Women, otherwise known as the United Nations Entity for Gender Equality and the Empowerment of Women, is the main agency under the United Nations that promotes gender equality and empowerment of women and girls around the world. It was founded through United Nations General Assembly Resolution 64/289 on 2 July 2010. The UN Women organization brought together the Division for the Advancement of Women (DAW), International Research and Training Institute for the Advancement of Women (INSTRAW), the Office of the Special Adviser on Gender Issues and Advancement of Women (OSAGI), and the United Nations Development Fund for Women (UNIFEM). As an entity under the United Nations, the UN Women operates under the auspices of the United Nations General Assembly and works in close cooperation with the Economic and Social Council (ECOSOC), Member States, civil society groups, and UN agencies. The mandate of UN Women focuses on the elimination of discrimination against women and girls, empowerment of women, and ensuring equality between women and men as partners and beneficiaries of development, human rights, humanitarian action, and peace and security. UN Women functions under the auspices of the United Nations General Assembly and collaborates with ECOSOC, Member States, civil society, and other UN entities. The organization's core mission revolves around promoting women's rights through combating discrimination, empowering women, and achieving equality between women and men as agents of change in development, human rights, humanitarian response, and peace and security processes. UN Women engages in advocacy, policy advice, technical assistance, and research in order to ensure gender equality remains an important issue at the national and international levels. Some of the areas of focus for UN Women include economic empowerment, leadership and political participation, combating violence against women and girls, peace and security, humanitarian response, and good governance. However, one of the top priorities has been economic empowerment of women due to a number of existing obstacles that prevent equal participation of women in the labor market. In spite of a lot of achievements in terms of education and female labor force participation during the past decades, there still exist several problems facing women in the modern economy. UN Women plays a significant part in tackling these issues by assisting in legislation, encouraging the creation of gender-inclusive workplaces, conducting research, and partnering with governmental and private sector entities to create more opportunities for women. In addition to that, UN Women helps implement several international agendas, namely CEDAW, the Beijing Declaration and Platform for Action, as well as Sustainable Development Goal 5 of the 2030 Agenda for Sustainable Development aimed at achieving gender equality and empowering all women and girls. Given that the theme of the



work of this committee is "Addressing Gender Inequality in the Workforce, with Special Emphasis on the Underrepresentation of Women in Engineering and Male-Dominated Sectors", it is important for the delegates to identify various social, economic, cultural, and structural barriers which impede women from entering the fields of engineering and other male-dominated sectors of employment such as construction, manufacturing, and IT.

4. Introduction to the Agenda Item: Addressing Gender Inequality in the Work Force, with Special Emphasis on the Underrepresentation of Women in Engineering and Male-Dominated Sectors

Workplace gender inequality is one of the most persistent problems of our time despite the numerous advancements that have been made in the area of women's rights and empowerment. Worldwide, women have had an unprecedented level of access to education and employment in recent decades, which allows for more and better job opportunities for women. However, despite the numerous improvements in the situation, there is still gender inequality when it comes to participation in the



workforce, wage gap, career advancement, and industry representation. There are several key aspects of gender inequality in the workforce that make the situation problematic for the modern world and society. To begin with, women have higher levels of unemployment and are underrepresented in the area of leadership and management in many industries and areas of business. International labor statistics show that

even today women have lower income levels compared to those of men and spend much more time doing unpaid household work, which limits their chances to participate actively in the economy. Additionally, women face discrimination, bias, insufficient parental leave, and career barriers that limit their professional and economic opportunities. It is widely known that engineering, technology, construction, manufacturing, transportation, mining, and some sciences have traditionally been considered masculine spheres. Although during the last few decades, women's participation in education and professional sphere increased rapidly, their percentage in the mentioned spheres is much lower than that of their male colleagues. Even in developed countries, only few women represent engineers and technicians while performing equally well at university. This inequality indicates the presence of institutional barriers in addition to the problem of limited accessibility of higher education. Gender roles and stereotypes constitute one of the main reasons why there are fewer women among the representatives of the engineering sector. Since childhood, society imposes on children certain norms of behavior and career orientation. STEM professions and studies have traditionally been associated with masculinity, so girls do not choose such professions as theirs. Gender stereotypes affect not only education but also the mentoring and hiring process. In addition, educational hurdles cannot be overlooked. Despite the fact that women have made great strides in academic achievement across the globe, women continue to lag behind in several areas of STEM studies in college settings, including

engineering and technology-related subjects. Furthermore, even where women are accepted into these courses, there is little to no supportive environment in terms of mentorship and encouragement from their institutions. This means that the number of women pursuing careers in engineering fields is relatively



lower compared to that of men around the globe. Apart from educational issues, women face several other challenges at work. It has been found out through various studies that many women working in male-dominated industries find themselves experiencing discrimination, exclusion from various professional circles, lack of promotion opportunities, and working conditions that do not accommodate their different needs. All these problems mean that women are

likely to drop out of engineering and

related careers early on. Therefore, in order to increase the numbers of women in such professions, not only do we need more access, but also retention. However, the problems associated with gender imbalance within engineering and technology go far beyond questions of equity. Workplace diversity is connected to greater creativity, better decision making, and higher productivity in organizations. Fields like engineering are crucial in tackling issues faced by humanity in areas ranging from climate change to infrastructure development, healthcare improvements, and digital technologies. Ignoring half of the planet's talent pool means limiting the scope for the full utilization of human resources. Moreover, the problem is exacerbated by the differences in the situation between developed and less developed nations. Countries which have introduced certain programs to promote women's presence in technical education and career paths in STEM have demonstrated their effectiveness; at the same time, many countries still lag behind because of the lack of proper legislation, culture, economy, and infrastructure development. In light of the constant transformation of employment caused by automation, artificial intelligence, and digitalization, guaranteeing equality of opportunity for women is crucial. Unless action is taken, the current imbalance will persist not only in new industries but even in yet to be created occupations. On the other hand, this revolution can also serve to increase workplace inclusiveness and provide more technical positions for women worldwide.



Under UN Women, the delegates are charged with exploring the underlying causes of gender discrimination in the labor market as well as coming up with practical and sustainable measures that involve cooperation at an international level. Specifically, focus needs to be put on improving the involvement of women not only in engineering but also in other fields dominated by men. As such, it falls to the delegates to find means of fostering a balanced and diverse global labor market.

5. Terminology

5.1 Gender Equality

Gender equality is defined as the equal status and treatment of all people regardless of gender with respect to their equal rights, opportunities, and responsibilities. Equality here does not mean the complete identity of women and men but the absence of differences between them concerning their opportunities and life chances.

5.2 Gender Equity

Gender equity means that some policies, measures, and actions should be applied to compensate for past and present disadvantageous positions in the social sphere of specific genders representatives. Unlike equality, gender equity acknowledges that different approaches might be needed for the same outcome.

5.3 Workplace Gender Inequalities

Workplace gender inequality is the disparity in men and women's employment rates, wages, working conditions, career development, leadership positions, and overall labor force participation. Such inequalities arise due to several factors including legislation, economy, culture, and institutions.

5.4 Gender Segregation in Occupations

Gender occupational segregation concerns differences in men's and women's occupation and industry affiliation. Women tend to represent predominantly female occupations such as health care workers and teachers, whereas men usually dominate male occupations like engineers and construction workers.

5.5 Horizontal Segregation

Horizontal segregation takes place when men and women are segregated into different sectors/professions based on their level of education and skills even though both are equally qualified.

5.6 Vertical Segregation

Vertical segregation occurs when there is an imbalance in the number of men and women in a profession in relation to their level within the hierarchy in the said profession/sector.

5.7 Gender Wage Gap

Gender wage gap refers to the differences in average salaries of men and women. This may be due to occupational segregation, disparities in career progression, disparity in working hours, and many other reasons.

5.8 Glass Ceiling

The glass ceiling is the invisible boundary that stops talented and capable individuals such as women from moving up in organizations and achieving high-level positions.

5.9 STEM Fields (Science, Technology, Engineering, Mathematics)

STEM means Science, Technology, Engineering, and Mathematics fields. More involvement of women in STEM fields has now become a priority for several government agencies, schools, and international bodies to combat gender inequality.

5.10 Engineering Workforce

An engineering workforce comprises workers involved in the creation, innovation, building, maintenance, and advancement of technology-based systems, infrastructure, machines, and manufacturing processes. There still is an underrepresentation of women in many engineering fields across the globe.

5.11 Economic Empowerment

Economic empowerment is the empowerment that provides people with the means to actively engage in economic activities, utilize resources and opportunities, make economic decisions, and reap the benefits of economic development. Economic empowerment of women is one of the targets of UN Women and SDGs.

5.12 Unpaid Care Work

Unpaid care work entails domestic tasks such as caring for children, taking care of elderly people, cooking, cleaning, and maintaining households without financial reward. Women do most of the unpaid care work in the world, which may prevent their active participation in the labor market.

5.13 Workplace Discrimination

Workplace discrimination means unequal treatment of employees or candidates because of certain personal traits such as their gender, race, ethnicity, age, religion, or disabilities. Gender discrimination can be observed during the recruitment process, during promotion decisions, wage negotiation, etc.

5.14 Gender Stereotypes

Gender stereotypes refer to preconceptions concerning people of different genders. Gender stereotypes can shape educational decisions, employment decisions, career paths, and workplace cultures.

5.15 Gap in Leadership

The gap in leadership is described as the inadequate representation of women in top management, executive, and decision-making posts despite increased involvement in the educational sector and employment.

5.16 Gender Mainstreaming

Gender mainstreaming can be defined as a process that integrates the views on gender into the policy-making and program-making processes. It ensures that men and women receive similar benefits from such activities.

5.17 Goal 5 for Sustainable Development (SDG 5)

SDG 5 is among the 17 sustainable development goals formulated by the United Nations in 2015. Its aim is to promote equality between the sexes by providing equal opportunities and full involvement in different spheres of life.

5.18 Male-Dominated Industries

These industries refer to those sectors where men are the dominant group in terms of numbers in the workforce and leadership. Some examples include engineering, construction, transport, mining, manufacturing, and IT.

6. Historical Background

6.1 Gender Discrimination and Early Labor Force Participation

The discrimination against women in the labor market has been present since ancient times. Indeed, social, economic, and political structures have always tended to place women in subordinate positions to men and assign them duties related to domestic life only. Traditionally, the main role of women in society has been associated with childcare, household chores, and unpaid labor. Although women played an important part in the agricultural process and helped sustain family businesses, their contribution remained unappreciated, invisible, or not recorded by economic statistics. The advent of the Industrial Revolution in the late eighteenth century brought about another turning point in history. As a result of technological advances and increased demand for goods and services, factories began to emerge all around Europe and the USA. With time, more and more women started participating in the paid labor market. Female workers could find themselves employed at textile and garment factories, but they had less pay compared to men, inferior working conditions, and little legal protection. Moreover, there were fewer occupational choices for women due to certain social standards.

6.2 The Effects of the World Wars

The two World Wars changed the involvement of women in work activities. As men went out to fight the war, there was a need to fill gaps in various sectors, leading to increased employment of women in industries that they had not been traditionally associated with before. This included work in factory production, transportation, engineering support services, communication, agriculture, and administration. The role of women in industries broke the perception of what women could achieve. Despite being able to work efficiently in these areas, they had to leave these posts at the end of each war and resume their roles in domestic affairs. While women's involvement in the workforce reduced in some places after the two World Wars, it showed that women can undertake jobs similar to those undertaken by men. Women started gaining access to higher education in the aftermath of the two world wars. Women got the chance to pursue degrees in universities, leading to careers in various fields. Engineering, science, and technology were among the professions where it was hard for women to break into.

6.3 The Establishment of Women's Rights Frameworks

The creation of the United Nations in 1945 is an essential point in the history of women's rights recognition and can be considered one of the major achievements regarding international women's rights. Indeed, the United Nations Charter stated that men and women had equal rights. Over the next decades, the connection between women's rights and economic and social development as well as peace became evident. This allowed organizing a number of actions to support the rights of women and promote their participation in different spheres of life. In 1975, the first International Women's Year was announced by the United Nations. At the same time, the First World Conference on Women took place in Mexico City. It was the starting point for organizing further international conferences concerning women's rights. A critical step toward women's rights was made in 1979 when the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) was adopted. The convention can be regarded as an international bill of rights for women and provides comprehensive guidelines concerning women's employment, education, politics, health care, and many other issues.

6.4 Beijing Platform for Action and Global Commitments

One more major milestone was reached at the Fourth World Conference on Women held in Beijing in 1995. The Beijing Declaration and Platform for Action, which resulted from the conference, is considered one of the most comprehensive international commitments related to the empowerment of women. The Platform for Action outlined 12 critical areas of concern: women and the economy, education and training, poverty, power and decision-making, and mechanisms for advancement of women, among others. It pointed out the necessity to ensure the increased involvement of women in various economic activities and overcome all obstacles to their equal employment opportunities. It is important to note that there were discussions at the conference regarding the problem of gender stereotypes and occupational segregation – issues that still have a strong impact on women's involvement in engineering.

6.5 Women in STEM & Engineering in the Twenty-First Century

The explosive growth of the STEM industries witnessed during the last decades of the twentieth century and the first decades of the twenty-first century opened up unprecedented possibilities for development and innovation. Nevertheless, it also brought to light gender inequality. While access to higher education was becoming available for an increasing number of women, their presence in engineering and technological professions was far less than men's. Many reasons were highlighted as possible causes of gender inequality, such as gender stereotypes, lack of role models, workplace discrimination, mentoring, and networking difficulties. Efforts of government, universities, and international organizations were made to create incentives for girls and young women to enter STEM areas. Coding classes, engineering education, scholarships, mentoring, and leadership programs become widely spread across the globe. In spite of all the efforts, female presence in some engineering professions continues to be extremely low. It proves that access to education is not enough to solve the problem – one should also tackle the workplace environment.

6.6 The Creation of UN Women

To strengthen the coordinated efforts towards gender equality within the UN framework, the General Assembly created UN Women in 2010 via Resolution 64/289. This agency brought together various entities of the United Nations, all focused on advocating for gender equality and empowering women. Promoting the economic empowerment of women through access to employment and protection from discrimination in the workplace is one of UN Women's core goals. After its establishment, UN Women has collaborated with governments, private firms, schools, and civil society groups to tackle problems associated with women's representation in the workforce.

6.7 Challenges of the Present and Prospects for the Future

In the present day, gender inequality in the workforce is a widespread phenomenon, even though much has been achieved during the previous decades. The issues related to recruiting women, promoting them, paying the equal salary, including them in decision-making processes, and allowing women to work in technical jobs persist. On the one hand, modern technologies, artificial intelligence, and the digital revolution change labor markets around the globe, opening up new prospects for workers. On the other hand, the absence of appropriate policy frameworks and international cooperation may lead to the consolidation of inequality in the industries of the future. Therefore, it is now possible to design the most inclusive framework to facilitate equality in the industry from the very beginning. In sum, overcoming gender inequalities in the workforce is essential in terms of ensuring sustainability and economic prosperity, as well as implementing innovations effectively. The persistence of inequality in the sphere of engineering and other male-dominated industries confirms this point.

7. Key Issues

7.1 Occupational Segregation

One of the major factors responsible for creating workforce gender discrimination is occupational segregation, where men and women are not equally represented in different occupations or industries. Although women have gained equal rights to education and employment, they are still found in industries like health care, teaching, administrative services, and social work. On the other hand, men occupy dominant positions in industries like engineering, construction, transport, manufacturing, mining, and IT. There are two types of occupational segregation, namely, horizontal segregation and vertical segregation. In horizontal segregation, men and women work in different occupations, whereas, in vertical segregation, different genders are unequally present at different hierarchies in the same industry. This segregation plays an important role in generating economic differences among various genders because industries that employ a majority of men pay better salaries, provide more job promotions, and grant more leadership positions.

7.2 Gender Stereotypes and Social Norms

Gender-based stereotypes persistently shape educational and professional choices made by both males and females throughout their lives. Already since early childhood, children receive various societal messages concerning careers that may or may not be appropriate for certain genders. In particular, the STEM career field is stereotypically perceived as a male industry that requires the characteristics typical for males. This stereotype may prevent girls from studying science due to the equality of academic skills. Moreover, when entering a new profession, female workers may be expected to lack competence and dedication to their careers. Thus, changing stereotypes will be crucial for overcoming the workforce imbalance between different genders.

7.3 Underrepresentation of Women in STEM Education

While the underrepresentation of women in engineering and other technical careers is an issue that starts long before they begin their careers, the problem is prevalent despite the fact that there are equal levels of achievement by girls compared to boys in mathematics and science within many educational systems. Many disciplines within the realm of science, technology, engineering, and mathematics still have fewer numbers of women enrolled in them when compared to men in many parts of the world. There are many reasons that explain this gender gap, which include lack of role models, gender bias during lectures, lack of mentoring, and society's perception of certain professions as more suitable for men.

7.4 Discrimination at Workplaces

For example, when women join engineering fields or male-dominated industries, there is usually some form of discrimination in relation to hiring, promotions, salaries, and the atmosphere within the workplace. Although explicit discrimination has become uncommon in several countries due to legislation, there are still instances of implicit discrimination and institutional discrimination in the working environment. There are studies proving that women often undergo higher levels of scrutiny of their competence, have less career progression, and do not have equal access to powerful professional contacts. At times, women can be marginalized in important decision-making processes which can greatly influence their careers. Furthermore, workplace discrimination could include differential allocation of tasks, reduced opportunities for training, biased appraisals, and sexual harassment among other factors.

7.5 Gender Pay Gap

While there have been some advances in achieving gender equality at the workplace, the pay gap between men and women still remains in effect, in virtually all areas of the world. Various aspects contribute to the gender pay gap, such as occupational segregation, lack of female leadership, the obligation to provide free care, and discrimination. The fact that women can be employed in sectors predominantly dominated by males does not mean that the pay gap will not be seen, particularly when the tasks they do are identical to those performed by their male counterparts. Moreover, women tend to remain underrepresented in high-paying technical jobs and managerial positions.

7.6 Career Advancement and Leadership Barriers for Women

Despite their success in breaking into fields such as engineering and technology, women are often faced with barriers that impede their ability to rise up to take on leadership positions within organizations. This is commonly termed the "glass ceiling." It should be noted that women continue to be under-represented within executive roles, senior management positions, company boards, and decision-making functions in a variety of industries. Some reasons for this include discrimination in promotions, lack of mentorship opportunities, networking barriers, and stereotypes about women's leadership abilities. The importance of addressing the gender leadership gap cannot be overstated. Leadership positions are responsible for setting an organization's culture and making important decisions, including hiring.

7.7 Retention Barriers in Engineering and Technical Fields

While recruitment plays an important role, there are other barriers to participating in the workforce. It can be difficult for companies to retain women once they join the ranks of engineers and technologists. Several barriers to retaining women have been reported by researchers. They typically involve issues such as isolation in the workplace, limited prospects for advancement, a lack of mentoring, discrimination at work, and difficulty juggling career and family life. The issue of high attrition rates is significant since it makes efforts to achieve

diversity counterproductive. Recruiting women only serves to add to losses that will occur further down the line due to poor retention practices.

7.8 Gender Inequalities in Care Responsibilities

An important aspect which acts as a barrier to gender equality in the workplace is the unequal sharing of unpaid care responsibilities between men and women. Women across the world bear a heavier burden in terms of childcare, elderly-care, and household responsibilities compared to their male counterparts. This becomes one of the main reasons why women find it difficult to work full time or engage in overtime activities. Moreover, women's participation in professional activities is greatly hindered by unpaid care responsibilities. The problem becomes more serious when there is no social support provided to women from governments or other organizations.

7.9 Challenges Facing Women in Developing Nations

Though gender discrimination is common worldwide, women in developing nations face some extra challenges. Restricted access to education, poor infrastructures, poverty, discrimination laws, and limited technological access can greatly limit access to the labor market. In some places, women could be restricted from owning land, accessing finances, moving about freely, and even being employed due to certain laws. This makes it hard for women to access engineering education and work in engineering and other fast-developing fields. For this reason, the solution needs to take into account varying circumstances of different nations while still abiding by universal ideals of equality.

7.10 Emerging Technologies and the Future of Work

Innovations in artificial intelligence, automation, robotics, and digital technologies have rapidly changed the nature of labor markets around the world. Although these innovations provide new opportunities for economic growth, they may also pose threats to gender equality. Women are still underrepresented in various emerging fields, such as artificial intelligence, software development, cybersecurity, and high-tech engineering. Without addressing this problem, future industries may replicate current inequalities at an even higher level. On the other hand, innovations in digital technologies can provide new possibilities for expanding access to education, telework, entrepreneurship, and professional growth. Policymakers therefore need to make sure that innovation fosters inclusiveness and does not contribute to existing inequalities.

Absence of Data and Representativeness

Data is essential for successful policy-making because it can help governments understand the extent of wage inequality, workforce participation, education gaps, and career advancement in different industries. Unfortunately, there is a lack of reliable data in many countries. Without accurate information, governments and organizations may fail to recognize problems and assess their effectiveness in addressing them. Inequality in data gathering can be regarded as one of the factors affecting labor market inequality. Additionally, the absence of women role models in fields such as engineering and technology may lead younger generations not to enter these sectors. Representation is thus another essential element of future transformation.

7.11 The Tension between Economic Growth and Gender Equality

Most governments acknowledge that the increased participation of women in the labor force does not simply reflect the issue of human rights but is also economically imperative. There is consistent proof that gender diversity within the workplace leads to better innovation and decision-making, resulting in superior economic performance. Yet, putting such knowledge to good use is no easy task. The government needs to consider economic considerations, educational policies, labor legislation, and social programs while combating entrenched cultural traditions. For this reason, attaining gender equality within engineering and similar industries would necessitate a collective effort between governments, international bodies, businesses, schools, and NGOs.

8. Timeline & Key Developments

8.1 Late 18th Century–19th Century: Industrial Revolution

This period saw an influx of women in factories and other industries. However, while women played a major role in the work force during this time, they enjoyed lower salaries and lesser protection as compared to male counterparts who engaged in more respected jobs.

8.2 1914-1918: First World War

Due to labor shortages, women were allowed into male-dominated fields such as manufacturing and engineering. The entry of women proved their capabilities in terms of performing technical and industrial tasks.

8.3 1939-1945: Second World War

In order to aid war efforts, women took up vital positions in various industries including factories and communication systems. The contributions of women during this time contradicted previous gender-based beliefs about women's involvement in the industry.

8.4 1945: Establishment of the United Nations

The Charter of the United Nations was ratified in San Francisco, California. It was among the earliest international acts that recognized the equality of both men and women.

8.5 1975: International Women's Year

In 1975, the UN proclaimed the year as the year of women's issues and organized the First World Conference of Women in Mexico City.

8.6 1976 - 1985: United Nations Decade for Women

This decade, marked by the United Nations as the Decade for Women, sought to ensure that Member States developed policies promoting women's advancement socially, politically, and economically.

8.7 1979: Adoption of CEDAW

The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) was adopted by the United Nations General Assembly. Known as the "international bill of rights for women," CEDAW set out legal standards for the elimination of discrimination against women, which includes workplace discrimination.

8.8 1985: Nairobi World Conference on Women

The Third World Conference on Women that took place in Nairobi examined achievements made during the Decade for Women while stressing the urgent need for more economic and professional opportunities for women.

8.9 1995: Beijing Declaration and Platform for Action

The Fourth World Conference on Women in Beijing led to the adoption of the Beijing Declaration and Platform for Action, identifying women and the economy as one of the twelve areas of critical concern for women.

8.10 2000: Millennium Development Goals (MDGs)

The United Nations set MDGs as a core element of international development, which involved gender equality and empowerment of women.

8.11 2010: The Creation of UN Women

By passing General Assembly Resolution 64/289, the United Nations established the UN Women organization with the goal of enhancing its gender-equality and women empowerment policies.

8.12 2015: Adoption of the Sustainable Development Goals

The adoption of the 2030 Agenda for Sustainable Development saw the inclusion of SDG #5 (Gender Equality) and SDG #8 (Decent Work and Economic Growth), which were highly relevant to workforce discrimination issues.

8.13 2017: UNESCO Cracking the Code

This UN agency has published the famous report named Cracking the Code: Girls' and Women's Education in STEM, revealing the severe lack of representation of women in science, technology, engineering, and mathematics careers and factors limiting girls' access to STEM education.

8.14 2019: ILO A Quantum Leap for Gender Equality

The International Labour Organization launched a groundbreaking report showing that after decades of advancement in women's rights, huge gaps still exist in their workforce participation, earnings, representation, and career prospects.

8.15 2020-Present: Digital Age and New Technologies

The developments in artificial intelligence, automation, and digitization have brought revolutionary changes in the employment sector across the globe. The international bodies have taken measures to guarantee equal participation of women in new sectors and futuristic technical fields.

8.16 Present Era

Women are still experiencing challenges in engineering, information technology, construction, manufacturing, transportation, and other fields that have been dominated by men since decades. Policymakers, international organizations, educational institutes, and private-sector players have started various programs for women to participate in these sectors.

9. United Nations (UN) Actions

For the last few decades, the UN has been playing a crucial role in fostering the cause of gender equality by improving women's involvement in economic, political, and social affairs. By using conventions, declarations, resolutions, and its specialized agencies, the UN has been trying to create international norms which could help eradicate any form of discrimination against

women. These efforts by the UN serve as an excellent platform for tackling the issue of gender imbalance in the engineering workplace.

9.1 United Nations Charter (1945)

The United Nations Charter, which was established in 1945, emphasized the equal rights of men and women as one of the main aims of the international community. The preamble of the UN Charter reiterates the belief in the equal rights of men and women and makes the promotion of social progress and higher standards of life a key objective of member countries.

9.2 Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) – 1979

The Convention on the Elimination of All Forms of Discrimination Against Women, also known as CEDAW, is considered to be the most complete international instrument devoted to women's rights. Established in 1979 by the UN General Assembly, CEDAW obliges states-parties to eliminate any form of discrimination against women. Article 11 pertains to women's employment rights and demands that governments guarantee equal access to jobs, equal employment opportunities, equal pay, social security protection, and safe working conditions. Furthermore, CEDAW advocates for eliminating gender stereotyping that hampers women's entry into particular occupations.

9.3 World Conferences on Women

9.3.1 First World Conference (1975 – Mexico City)

The first global conference on women held in Mexico City was a start point for international cooperation aimed at gender equality promotion. The main issues were participation of women in the process of economic development and governmental assistance for equal opportunity provision.

9.3.2 Third World Conference (1985 – Nairobi)

During this conference, the achievements made within the United Nations Decade for Women (1976 – 1985) were assessed, and further measures aimed at the improvement of women's employment and educational level as well as their involvement in decision making were considered.

9.3.3 Fourth World Conference and Platform for Action (1995 – Beijing)

During the fourth world conference, the Beijing Declaration and Platform for Action, which is considered one of the key documents on gender equality, was adopted.

The document identifies "Women and the Economy" among the twelve critical areas of concern. Among other requirements, there was a need to eliminate occupational segregation; promote employment opportunities for women; ensure equal remuneration and career development opportunities; and facilitate women's participation in science and technology sectors.

9.4 MDGs (2000-2015)

The United Nations formulated MDGs in 2000, one of which was the empowerment of women and the promotion of gender equality in order to achieve sustainable development.

While the MDGs helped raise awareness about girls' education and women's participation in society, there was uneven progress towards equality for women in employment opportunities and access to technical professions.

9.5 Sustainable Development Goals (2015–2030)

The introduction of the Agenda for Sustainable Development in 2015 was a significant move towards overcoming gender disparities. Some of the Sustainable Development Goals that directly relate to this agenda item include:

9.5.1 Sustainable Development Goal 5: Gender Equality

This goal aims at achieving gender equality and empowering women and girls by ensuring non-discrimination against them, putting an end to practices that harm them, and giving value to unpaid care and domestic work. The targets include equal opportunity for leadership positions.

9.5.2 Sustainable Development Goal 8: Decent Work and Economic Growth

SDG 8 advocates for full and productive employment for everyone. This goal promotes equality in economic participation through equal pay for similar work.

9.5.3 Sustainable Development Goal 10: Reduced Inequalities

This SDG aims at reducing inequalities in income, health, education, social protection, and economic participation across countries and within them. All three of these sustainable development goals offer an extensive way of combating issues that hinder women from getting involved in engineering and similar careers.

9.6 Creation of UN Women (2010)

In recognition of the urgent need for more focused institutional leadership with respect to gender-related matters, UN Women was formed through Resolution 64/289 by the UN General Assembly in 2010. UN Women acts as the focal point within the UN system for gender equality

and empowerment of women. It works towards policy development by governments, research, campaigns, and international collaboration in order to increase the involvement of women in the economy and politics. One of the key focuses for UN Women includes the economic empowerment of women, which entails greater access to jobs, combating work-place discrimination, promoting women's business ventures, and boosting their presence in technical fields such as STEM.

9.7 UN Women Programs on Economic Empowerment of Women

There are many programs developed by UN Women that help to improve the participation of women in the economy. The main points of such programs include providing access to quality employment, ensuring equal pay and workers' rights, developing the role of women in making decisions and acting as leaders, creating corporate commitments towards gender equality.

9.8 Women's Empowerment Principles (WEPs)

Developed together by UN Women and the United Nations Global Compact in 2010, the Women's Empowerment Principles offer guidance to businesses to foster gender equality at work. The principles suggest that businesses should provide equal pay, promote women in leadership roles, encourage their education and skill acquisition, and track efforts towards reaching gender equality objectives. To date, thousands of companies around the globe pledged to adopt the principles.

9.9 Recent UN Initiatives on STEM Education and Digital Inclusion

Recently, UN organizations, among which UN Women, UNESCO, and ITU have become increasingly interested in decreasing gender gaps in STEM education and in digital literacy. Specifically, the goal of such initiatives is to engage girls in pursuing STEM careers by overcoming barriers such as stereotypes about STEM being a male field, lack of role models, and unequal access to necessary resources. With increasing digitalization and use of artificial intelligence in the workforce, women's engagement in technical disciplines is seen as an urgent need.

10. Past International & UNWOMEN Actions

Attempts to deal with gender inequality at work have evolved over a number of decades as a result of the joint endeavors by the United Nations, governments, international organizations, civil society organizations, and business organizations. Among the first coordinated international attempts is the United Nations Decade for Women (1976-1985). This decade began after the First World Conference on Women that took place in Mexico City in 1975. The United Nations Decade for Women inspired Member States to understand the importance of gender equality as a necessary element for social and economic progress and pay more attention to women's role in education, employment, and politics. The first milestone to be achieved was the ratification in 1979 of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). One of the most progressive international agreements on women's rights, CEDAW obligated State Parties to ensure that women were not discriminated against in any spheres of social activity, such as labor market access and education. The convention recommended that countries establish legal frameworks ensuring equality in employment and pay, maternity protection, and preventing discriminatory practices at work. Since that time, CEDAW became the basis for national policy in favor of improving the status of women in the labor market. There was more to the dedication to gender equality by the international community after the Fourth World Conference on Women, which was hosted by Beijing in 1995. Through the Beijing Declaration and Platform for Action, the conference recognized women and the economy as one of the twelve key issues that needed urgent attention. Among the areas that the document focused on was the elimination of occupational segregation, increasing access to education and training for women, and encouraging women's involvement in decision-making processes. In addition, the Platform called for increased participation of women in the fields of science and technology. The creation of UN Women in 2010 was another significant step made in international attempts to enhance the status of women and ensure gender equality. UN Women was formed by UN General Assembly resolution 64/289 and represents a consolidation of several pre-existing organizations within the UN system to work toward women's advancement and empowerment. In particular, since its creation, UN Women has focused on empowering women economically, assisting states in forming policies that would help increase the availability of jobs for women, increase labor rights protection, combat gender discrimination in the workplace, and promote the presence of women in leadership roles. UN Women was created by the United Nations in 2010 as another important achievement aimed at improving the position of women worldwide and promoting gender equality. UN Women was established in accordance with UN resolution No. 64/289 and can be seen as the merger of various organizations within the United Nations to promote women's empowerment. Specifically, since its establishment, UN Women has been paying much attention to economic empowerment of women, providing states with necessary policies to create more opportunities for women in terms of employment and labor rights and preventing discrimination against women. In addition to UN Women, other international institutions have also launched programs to reduce gender gaps in STEM fields. One institution that has taken a proactive approach is UNESCO, which has promoted the involvement of women in STEM through research, awareness campaigns, and policy recommendations. For example, its 2017 report titled "Cracking the Code: Girls' and

Women's Education in STEM" discussed how various barriers limit the participation of girls and women in engineering and technology fields and offered policy recommendations to deal with these barriers. Another example is the International Labor Organization (ILO), which has worked to promote equality in the workplace through its labor standards, policy recommendations, and research on economic empowerment. Recently, there has been more emphasis on empowering women to be ready for new industries that are being created through digitalization, artificial intelligence, and technology. The initiatives from UN Women, UNESCO, ITU, and the World Bank seek to promote digital skills and technology education among women in order to narrow the digital gender gap. This is important since women need to be part of the industries that will define future growth and development in the economy. However, recently, much attention has been put into making women able to join the emerging industries as a result of digitization, artificial intelligence, and technology. This can be seen in the various initiatives by UN Women, UNESCO, ITU, and the World Bank that aim at encouraging women to develop technological and digital skills so as to reduce the existing gender gap in technology. This is crucial because women have to participate in the future growing industries.

11. Parties Involved

Eliminating the problem of gender disparity within the workplace would take coordination by a number of different parties, from international bodies, national governments, educational institutions, private sector firms, to civic organizations. All of these parties contribute uniquely to policy creation and resource allocation that can benefit women in the field of engineering and elsewhere.

11.1 UN Women

UN Women is an organ of the United Nations that deals specifically with gender equality and the empowerment of women. It is one of the major international organizations involved in solving problems associated with women's participation in the workforce and equality in the workplace. This institution, founded in 2010, helps Member States to formulate gender-specific policies, engages in studies of labor discrimination, and initiates global projects designed to boost opportunities available to women. UN Women has been focusing in particular on economic empowerment and participation of women in STEM fields.

11.2 International Labour Organization

The International Labour Organization (ILO) works for the promotion of social justice and observance of internationally recognized labor standards. Its activities consist in establishing conventions, recommendations, and policy guidelines that help to eradicate discrimination, promote equal pay, improve working conditions, and increase female labor participation. This

organization has done a lot of research on occupational segregation, wage inequality, and labor market barriers faced by women.

11.3 United Nations Educational, Scientific and Cultural Organization

In promoting the integration of girls and women in science, technology, engineering, and math (STEM) education, UNESCO has been crucial in exploring issues pertaining to gender inequalities. The agency's activities in research and campaign projects have helped identify factors that act as barriers towards girls pursuing careers in engineering and technologies.

11.4 World Bank

The World Bank is engaged in activities that promote economic development, and undertakes various studies that focus on the issue of gender equality and economic development. Through its projects, funding programs, and policy recommendations, it helps governments find ways to eliminate economic and legislative barriers restricting women's employment. Issues related to labor markets, education, and entrepreneurship are usually the topics explored in the World Bank reports.

11.5 Organisation for Economic Co-operation and Development

As an organization collecting comparative information on labor market conditions and issues, the OECD provides assistance to governments in analyzing various employment strategies.

11.6 National Governments

The national government continues to be at the core of policy implementation affecting workforce participation. The government sets labor laws, education standards, anti-discrimination rules, social policies, and economic development policies. Consequently, gender equality policies followed by the national government affect female employment within engineering and other fields dominated by men. Variations between countries' economies, governance, and cultures make it necessary for national governments to adopt various strategies in combating workforce inequality.

11.7 Educational Institutions

Educational institutions play a significant role in shaping future workforce participation. Educational institutions impact students' careers by providing access to education, technical skills, and creating pathways to becoming an engineer. Various measures aimed at boosting female enrollment in engineering schools heavily rely on the adoption of inclusive policies in educational institutions.

11.8 Private-Sector Companies

Private-sector companies have proven themselves to be key players when it comes to tackling workforce inequality. Private-sector companies determine who gets recruited, how the work

environment is run, promotions and salary policies, and leadership training. Considering that engineering, manufacturing, construction, and technology are dominated by private-sector companies, the problem cannot be solved without the help of the private sector.

11.9 Civil Society Organizations and NGOs

The contributions of civil society organizations involve lobbying, raising awareness, conducting policy research, and providing support services. Some NGOs dedicate their work towards empowering girls and educating them; other NGOs support women in the STEM field, fight against workplace discrimination and encourage women's leadership. Civil society organizations serve as mediators among the government, society, and international community.

11.10 Professional Engineering and STEM Associations

Organizations in engineering, science, and technology are vital for achieving gender equality in technical professions because they can provide mentorships, networking events, scholarship funds, professional development courses, and advocacy activities that will help more women join and stay in technical professions. As these organizations specialize in their specific field, they can help overcome field-specific barriers.

11.11 Trade Unions and Workers' Organizations

The aim of trade unions and workers' organizations lies in advocating for equitable salaries, good working conditions, equal treatment, and the protection of employees' rights. In many countries, trade unions have taken part in tackling pay discrimination, fighting discrimination in workplaces, securing parental leave policies, and career development. They become especially significant when it comes to industries in which inequality prevails.

11.12 Women and Girls in STEM and Engineering Fields

The women and girls who are affected by the issues described above may be the single most important group of stakeholders. They can offer useful knowledge on the challenges that women and girls encounter in educational environments, work environments, and society at large. Strategies for increasing female participation in the engineering field should consider their concerns and needs.

11.13 Sweden

Sweden is well known for being one of the countries that have been pioneers when it comes to gender equality. The country has put in place policies related to parental leave, childcare, and equality at work in order to encourage women to take part in the labor market. Sweden has always advocated for stronger actions by other states in order to promote gender equality and has supported numerous initiatives meant to make more women engineers and entrepreneurs.

11.14 United States

Being a great economy with an advanced technological sector, the United States participates in discussions related to women in engineering and technology actively. Despite the fact that many women are still underrepresented in different STEM fields, various initiatives promoting involvement of women in science and engineering have been initiated. Owing to the scale of the technological sector, the policy pursued in the USA tends to affect global discussions.

11.15 Germany

Germany is the country with one of the biggest engineering industries. Despite the fact that Germany has done a lot in terms of encouraging women to enter the labor market, there are still issues with women's representation in engineering and management positions. Women's involvement in industrial and technological sectors has been promoted by Germany.

11.16 China

China can be seen as one of the largest labor markets and also one that has seen rapid growth in scientific research and technological innovations. In addition, its involvement in manufacturing processes and technological progress makes it an important stakeholder in discussing the issue of women's participation in technical professions. China's experience demonstrates how opportunities and challenges are connected to the development of rapidly growing economies.

11.17 India

With one of the biggest population sizes and the quickly developing sector of technology, India is an important example in analyzing the issues of women participation in technical jobs. As more and more women join universities and study science and mathematics-related disciplines, obstacles in accessing the workforce, holding leadership positions, and overcoming gender stereotypes remain for many women.

11.18 Saudi Arabia

Recently, Saudi Arabia has been actively working on transforming its economy and making changes to its workforce composition. More women have become participants in the labor market while the government has developed initiatives promoting female employment in traditionally male-dominated sectors.

11.19 Rwanda

The case of Rwanda is usually considered one of the best cases of women's political and social representation in the African continent. Rwanda has adopted various policies that have been intended to promote women's involvement in economic activity and decision-making processes. Despite some difficulties, Rwanda's achievements show what targeted policy changes may bring.

11.20 Brazil

Being the largest economy in Latin America, Brazil is actively involved in regional debates on workforce equality issues and economic growth. In particular, this nation faces various problems associated with gender inequality, salary gaps, and lack of representation in technical spheres. In addition to addressing these problems, the country is adopting various policies for women's involvement.

12. Questions to be Addressed

1. How can Member States increase girls' participation and retention in STEM education, particularly in engineering and technology-related disciplines, from primary school through higher education?
2. What measures can governments and employers implement to eliminate discriminatory hiring practices and ensure equal access to employment opportunities in male-dominated sectors?
3. How can workplaces improve the retention of women in engineering, technology, construction, manufacturing, and other traditionally male-dominated industries?
4. What policies can be adopted to reduce the gender pay gap and ensure equal remuneration for work of equal value across all sectors of the workforce?
5. How can Member States address the unequal distribution of unpaid care and domestic responsibilities that often limit women's career advancement and workforce participation?
6. What strategies can be implemented to increase the representation of women in leadership, management, and decision-making positions within engineering firms, technical industries, and related sectors?
7. How can governments, educational institutions, and private-sector actors work together to combat gender stereotypes that discourage women and girls from pursuing careers in engineering and other technical professions?
8. What role should the private sector play in promoting workplace gender equality, and how can businesses be encouraged to adopt inclusive recruitment, promotion, and professional development practices?
9. How can developing countries overcome financial, educational, and infrastructural barriers that hinder women's participation in engineering and other high-growth industries?
10. As artificial intelligence, automation, and digital technologies continue to reshape labor markets, how can Member States ensure that women are equally represented in emerging and future-oriented professions?

11. What mechanisms can be developed to improve the collection, monitoring, and reporting of gender-disaggregated workforce data in order to better evaluate progress toward gender equality goals?
12. How can UN Women, other United Nations bodies, Member States, and regional organizations strengthen international cooperation to promote women's economic empowerment and increase representation in male-dominated sectors worldwide?

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