

Only fools or warriors step into the battlefield

I. Introduction:

Knowing the capability and strength for achieving one's aim, either a fool or warrior steps into the battlefield. To qualify for stepping into the battlefield requires warriors-like traits instead of foolish ones. Historical, geo-political, gendered, economic perspective categorize their division upon its own terms. However, beyond fools or warriors, civilian, Medics, journalists and peacekeepers maybe labelled as "Heroes" or "victims" instead of fools or warriors.

II. Essence of terms - understanding "fools, Warriors and the concept of battlefield":

III. Why fools are labelled as such on stepping into the battlefield:

- A. Lack of preparation and strategy
- B. Misguided motivation and impulsiveness
- C. Selfishness or lack of Altruism
- D. Disregard for rules

IV. What makes fools to step into the battlefield despite knowing their weaknesses;

- A. Desperation (economic, political compulsions)
- B. Emotional factor (religious, social, personal)
- C. Lack of information; misguided ones
- D. Reward-gaining claims

V. What makes a "warrior" a warrior on stepping into the battlefield:

- A. Purpose and Intention
- B. Preparation and forecasting winning strategy
- C. Decision-making and judgement

D. Respect for life and ethics

VI. Dichotomy of fools or warriors by complex interplays;

A. In the realm of geopolitics:

- i. Alignment with International norms and Alliances (Ukraine-warrior vs. Gaza defence-fools)
- ii. Media portrayals and public opinion (Western media vs. Gaza)
- iii. Success and failure in achieving objectives (Iraq Invasion of Iraq-fool)
- iv. International legal and humanitarian consideration (Genghis Khan (fool)'s siege of Samarkand, Hitler's invasion of the Soviet Union (fool))

B. In the realm of Gender;

- i. Women stereotyped as fool vs. Men as warrior in combat roles
- ii. Geo-economic and political leadership and women gendered role

C. Economic competitiveness labelling nations fools or "warriors" in economic race:

- i. Open for fair trade policies - warrior
- ii. Investing in technology and infrastructure - re-warrior
- iii. Boosting Human development - warrior
- iv. Adaptable to market change (warrior)

D. How environmentalist segment fool and warriors; nations - warrior:

- Ai. Considering long term consequences on environment

~~revolutionize the world.~~

ii. Promoting sustainable practices

iii. Collaborating with environmental organizations

VII. Renewed Warriors; Individual level:

Education: Mala Yousafzai

Environment: Wangari Maathai (founding Green Belt Movement in Kenya, combating deforestation and poverty through reforestation, demonstrating the power of non-violent resistance for societal change.)

Social Work: Nyle Hayes

(A US Navy SEAL, risking his life to save fellow soldiers.)

VIII. Beyond the categorization of fools and warriors;

A. Civilian caught in the crossfire
i.e. Gaza case

B. Medics and healthcare in wars
(The Emergency Medical Teams (EMTs) of Aleppo: operating under constant bombardment during the Syrian Civil War)

C. Media; journalists and photographers reporting during conflicts
(Marie Colvin - lost her one eye during the Syrian Civil War) backed by British Newspaper "The Sunday Times"

D. Humanitarian workers and peacekeepers saving humans
(World Food Programme (WFP) provided food in Yemen and South Sudan)

IX. Conclusion

Women and STEM Education

I. Introduction:

Thesis statement:

Although there is growing demand for STEM Education, still fifty percent of the human population are suppressed to pursue their aim in STEM. Women participation guarantees the growth and success of a nation. Such prosperity at a global level can be achieved through effective, immediate, collaborative, supportive measures in encouraging women participation in STEM.

II. An overview of STEM Education

III. Importance of Women participation in STEM:

- A. Creation of jobs
- B. Increase in trade
- C. Empowerment of women

IV. Huge potential in women for STEM education

V. Challenges faced by women in joining STEM Education:

- A. Patriarchal mindset impeding women participation in STEM
- B. Discrimination faced at workplace
- C. Stereotyping career in STEM as masculine
- D. Family pressure to abandon their careers in STEM
- E. No awareness of benefits of career in STEM

VI. Case study of Pakistan and India - A Comparison

VII. Ways to improve women participation in STEM education:

A. Effective policy measures

B. Awareness campaign

C. Special incentive for women

D. Promotion of Gender equality in Societal norms

VIII. Conclusion:

Women participation in STEM education guarantees prosperity of a nation. But such prosperity only be achieved if corrective, collaborative measures are to be taken to tackle the challenges women are facing in STEM participation.

"Women and STEM Education"

Woman - the soul which depicts the beauty of nature through her innocence, caring nature, motheristic characteristics, nurturing and shaping the humanity - is herself lagged behind in the growth. The growth of society is facilitated by woman, but she faces difficulty in her own growth. It is a paradox, is not it? Women low participation in STEM education is not a different case. Education in Science, Technology, Engineering and Medicine - STEM - is the demand of contemporary world. Artificial Intelligence is the new arena to excel into, but still the fifty percent population of today's world is grappled with challenges that impede her true participation and a sound career in STEM. It is not the potential that impedes her participation. As history has shown prominent figures who not only excelled in STEM field but also were the pioneer in that field. Marie Curie, the renowned French Polish Scientist, discovered radioactive elements and her devoted potential and excellence in science is appreciated by the world by rewarding her with two Nobel Prize in the field of Chemistry and Physics on her discovery of Radium and Polonium. Rosalind Franklin is another example who revealed the double helical structure of DNA. Arfa Kureem, the youngest software is among many other

renowned women. Still stereotyping scientific, technical, mathematical world purely a man's field does not make a sound argument. Patriarchal mindset, pressure from family on abandoning her career in STEM are few challenges that impede women in realising her actual potential in the field of STEM. However, effective women participation guarantees the growth and success of a nation. Such prosperity at a global level can be achieved through effective policy framework making, for encouraging and appreciating her achievements, empowering her in taking her own decisions are some of many effective measures that can mitigate the challenges faced by women very effectively and will ultimately promote her representation in prospering the world.

The term STEM - Science, Technology, Engineering and Mathematics is coined by Dr. Peter Falehra, the Director of workforce development for Teachers and Scientists. It was just after the ^{few years} introduction of term that the term gained widespread attention, coupled with growing emphasis on the fields. In 2019, the US added Arts to it as well further evaluating the term "STEAM". According to the US State Department, the children are currently enrolled in those programs

in ^{the} US. for jobs that are not yet created, while many of the jobs today would not exist in the near future. So, STEM education is the new reality that is set to revolutionize the world.

STEM education - the new reality - needs equal participation of male and female. As only fifty percent contribution of ~~male~~ ^{global} population, male to STEM will not prosper the world ~~as~~ ^{while} remaining fifty percent of the population struggling with their own basic rights: such as discrimination in ~~the~~ developmental sector has already shown the world the 'worst impacts' in the form of ^{imbalance} economic conditions, poor political structure, health concerns, materialist mindset, poverty, destruction of the world with its own hand - climate change, food shortage, imbalance in resource allocation and how can we forget the nuclear weapon race, politicizing human rights, global tensions. All such issues if handled by motheristic figure "the woman" would not have even initiated or could have been resolved. The forecasting characteristic of woman is the asset helping her to foresee the effects of each invention or each step taken. Thus, women participation is necessary in all fields, hence, the STEM,

Moreover, if women are encouraged to participate in STEM, it would boost a new leadership and entrepreneurship era. Such participation would ultimately lead to creation of more jobs resolving the most pressing issue of the time - the unemployment. More employment means more revenue generation, more improvement in living standard of people. Thus, women participation in STEM would ensure more prosperity through building a new entrepreneurship era.

In addition ^{to this,} we are in trade to make trade surplus figure can be done through ^{of} participation of 50% more population ^{in STEM} as ^{at} majority of the nations are struggling with trade deficit today, the incorporation of women in STEM would open new doors towards service, goods manufacturing and delivery. Vast production and huge well-trained labor force would obviously boost the country's trade and recover the nation from trade deficit. As India is utilizing its educated moms in providing services while staying at home.

Furthermore, Empowerment of women is another ^{key} aspect that can ^{be} important indicator ^{can} achieved through women's participation in STEM. According to a leading study of Harvard Business Review, women in key posts inspire other ladies to

pursue their goals and to perform work effectively. Therefore, more women participation in STEM field, more women would be on top key positions, encouraging, inspiring other women to actualize their dream and hence, uplifting the entire deprived strata of the society. Thus, women participation in STEM would encourage women's empowerment.

1. There is huge potential in women for STEM fields as history is evident in this regard. How can we forget Ms Rosalind Franklin, the British Chemist who unraveled the structure of DNA. Marie Curie's, another renowned Polish Scientist, discovery of Polonium and Radium and her true dedication towards her field, rewarded her with two Nobel prizes in the field of Chemistry and physics. Beatrice Shilling, Dorothy Hodgkin are a few among the many renowned and dedicated women in the field of STEM. Thus women have huge potential to boost STEM to another level.

Despite having such a great potential there is a huge gap in STEM education for women and girls. There are only thirty percent women at key positions in Big MNCs. According to UNESCO report, women graduates in

in engineering accounts for twenty two percent, while only one in five are women in Artificial Intelligence. In U.K, the developed nation, has only 33% women who opt the STEM education. So, there is evident figures that show the gap in expected ^{and real} women participation in the STEM field.

These gaps highlight the challenges that are faced by women in joining the STEM education. The challenges faced by women includes the patriarchal mindset prevalent in society, fear of discrimination faced at workplace, stereotyping career in STEM as masculine are most prominent ones.

Patriarchal mindset - the approach of male superiority over female - is the main challenge posed towards gender equality in STEM's participation. Considering the female as delicate, timid, lacking intellectual capacity to make ~~wise~~ important decision make the simple or easy jobs as the only options ^{left for women} to opt. Thus patriarchal mindset limited the women's option in selecting the career.

The Fear of Discrimination at workplace is another factor that challenges women's equal participation in STEM education and career. Lower salary, less

probability of women's promotion, in STEM fields impedes her as well. Women in AI, Maths and engineering fields are somewhat posted to lower rank jobs. Thus, promoting ^{attracting} little women in joining STEM as a career.

Stereotyping the career in STEM as masculine posed another hurdle in making women to join STEM fields. It is stereotyped that the only male possess the natural capabilities to understand the concepts of STEM and women are not wise and competent to understand them. There is more stamina needed which only men have for grasping the technical field, thus, stereotyping the STEM fields as a masculine field has also diminished the women's role in the field.

Family pressure to abandon the STEM fields as they are tough and women have to take care of their family and perform the household chores. Thus, they have to select the most ^{manageable} 'job' that they can do along with their ^{performing} family's responsibilities and household chores. A study published in Journal of Gender studies revealed that in Pakistan more than fifty percent of female doctors have to leave their career after marriage. Thus, family pressure is challenging women in pursuing their career in STEM.

^{to women about}
pursuing Lack of awareness of benefits of
Career in STEM is also another impediment
in women's participation in STEM Career.

Women are not aware of how professionals
in STEM fields contribute to solving
global challenges, creating innovative
technologies and making positive difference
in society. This lack of awareness may
contribute perpetuating gender disparities. Thus,
lack of awareness of potential aspects of
careers in STEM is also contributing to low women's
participation in STEM Career.

A Comparative study of Pakistan and
India can evidently show how approach
towards women incorporation in technical
sector is creating huge economic gain. The
Indian government has initiated projects
like Gender Advancement for Transforming
Institutions and SERB - power for promotion
of opportunities for women in STEM
fields. ~~has~~ ^{has} increased women graduate
in STEM fields to 43%. Whereas Pakistan
has only 4% women contribution in
engineering job out of 20% ^{engineering} graduate
everywhere. This job discrimination of women
is also creating huge gender gap that
is shown as 145/146 in Gender Index. Pakistan
position or standing in the lowest strata
is an alarming situation.

These challenging situation for women participation in STEM needs to be resolved as the prosperity of the nations lies on skilled labor work-force.

Hence, For improving women participation in STEM education, effective policy measure needs to be taken. Governments should introduce criteria for ensuring equal enrolments of male and female in STEM education. and also ensuring seats in technical fields for women. Those institutions not complying with the gender equality policy needs to be penalized so corrective effective measures at the departmental level is insured for equalizing the opportunity for both gender.

Moreover, ~~there~~ Continuous advocacy and public engagement through showcasing successful women stories to public is another way to promote gender equality women participation in STEM fields.

Reshama Sanjani, the founder of Girl who code, an organization providing computer science education and opportunities for girls, emphasizing the closing the gender gap in tech.

In addition to, Granting scholarships and internship opportunities to women joining STEM as careers, can improve women's participation in technical field, E.g,

Mae Jemison, the first African-American woman in space co-founded the Dorothy Jemison Foundation, providing STEM education programs. Still, more grants and scholarships are required to promote and facilitate more girls.

Furthermore, Addressing stereotype and bias through inculcating gender-neutral language and diversity training's for educators can also resolve the low women's participation in STEM. Companies committed to gender equality using gender-neutral language in job descriptions and workplace communication attract more diverse talents, preventing female talent from leaving due to unwelcoming atmosphere.

Hence, women participation in STEM education guarantees prosperity of a nation. But such prosperity only be achieved if corrective, collaborative measures are to be taken to tackle the challenges women are facing in STEM participation. When half the sky is held back, the whole world suffers. Unleashing the brilliance of women in STEM is not just about equity, it is the rocket fuel for national progress. It is the building bridges to cleaner skies, healthier lives, and brighter future for all. Innovation thrives on diversity, and nations that nurture women's talent in STEM unlock a treasure of creativity, fueling progress and leaving no brilliant mind behind. Thus, in STEM, women's participation aims to solving global challenges and building a positive future.

Is Climate change a result of anthropogenic activities or a natural phenomenon?

I. Introduction

II. Climate change - an overview

III. Climate change is a result of natural phenomenon - the wrong notion:

A. Cyclical Nature of climate

(Period of cooling and warming)

B. Increased solar activity

C. Volcanic eruptions and Natural aerosols

D. Increased urban heat Islands

E. Change in ocean currents

(Pacific Decadal Oscillation (PDO) and Atlantic Multidecadal Oscillation (AMO))

IV. Climate change is a result of anthropogenic activities instead of natural phenomenon - the right notion:

A. Unnatural speed exceeds natural cycles (unprecedented warming rates)

B. Minimal influence of solar activity in accelerating global warming

C. Massive green-house gas emission contributes more in global warming than volcanic eruptions - paleoclimate data

D. Increased fossil fuel usage accelerates CO_2 emission than increased urban heat islands

E. Increased acidification of ocean due to high atmospheric CO_2 contributes more in climate change than ocean current shift.

F. Isotopic signature of Carbon dioxide analysis provides clear evidence of human influence.

G. Industrial Processes and Non-CO₂ Greenhouse Gases have higher warming potential than CO₂.

H. International Scientific Consensus on human activities as the dominant cause of recent climate change.

V. Politicisation of Climate change due to natural phenomenon vs. Anthropogenic causes activities debate:

A. Partisan ideologies battleground (Economic power domination ^{of} stance, US - against climate resilience policies)

B. Economic prioritization calling climate change a natural phenomenon

C. Divergent Media outlets framing unshared understanding of climate issues

D. Environment protection organization unfunctionality in achieving any set agendas yet (Kyoto protocol, SDGs, MDG etc.)

VI. Solutions aimed at accepting climate change as a man made disaster:

A. Mitigation through energy transition (Germany's Energiewende program, aiming for 100% renewable energy by 2030)

B. Conservation and restoration by protecting forests and degraded lands

(Great Green Wall of Africa, aiming

to restore millions of hectares of degraded land across the continent).

e. Building sustainable agriculture and infrastructure resilience for Adaptation to climate change (The International Rice Research Institute's efforts to develop flood-resistant rice varieties).

VII. Conclusion