Where is the Gap?

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Partnering to transform global cancer care

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ROLE OF STEM & INNOVATION

- Access to and control over **science and technology (STEM)** play a role in determining which countries, and which people within these countries, are rich and powerful.
- STI are key drivers in today's economies as twin pillars of **progress in knowledge** and **quality of life** to which all women/men need to have equal access and benefit.
- Means to **improve productivity and competitiveness.** improve education, eradicate poverty, prevent exodus from rural communities, fight diseases, and respond to challenges


Earth seen at night

Where is the Gap, how wide and how deep is the gap?

SDG GOAL 5: ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

Globally end all forms of discrimination against all women and girls

ACTIONS

- **5.a** Undertake reforms to give women **equal rights to economic resources**, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws
- **5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women**
- **5.c** Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels

WOMEN AND CLIMATE DISRUPTION

Why the impacts of climate disruption are not gender-neutral

Women account for

70%

of those living below the poverty line[1]

Poverty compromises one's ability to recover from natural disasters, compensate for agricultural losses due to climate disruption, and take care of one's family needs.

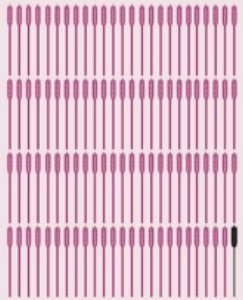
Women and children are 14 times more likely to die than men during natural disasters[4] which intensify due to climate disruption.

Worldwide,

62 million girls aren't in school[2]

Disparities in education limit women's access to information and vocational options, constraining their ability to adapt. With education, girls are better able to engage in environmental decision-making in households and beyond.

Women own just 1% of the world's LAND[3]



When women secure rights to land, efforts to tackle climate change are more successful, and climate response is more equitable. Without legal ownership, women often cannot make decisions about ways to conserve land, ensure agricultural productivity, or prepare their home for disaster.

1 http://www.iwpr.org/initiatives/poverty 2 https://www.usaid.gov/sites/default/files/documents/1869/USAID_LGL_FactSheet.pdf 3 http://womendeliver.org/wp-content/uploads/2016/04/Deliver_for_Good_Campaign_Brief_10.pdf
4 http://www.unisdr.org/files/48152_disasterandgenderstatistics.pdf

NECESSITY: USING ALL THE RESOURCES

- Gender Equality & Women's Empowerment are pre-conditions for **sustainable development for our planet and our future:**
- Can we meet our global challenges when we leave out **50% of the work force**, brains, potential, creativity, multifaceted vision, and outlooks?
- Successfully harnessing and mobilising **all of the world's total talent pool** will have a huge impact on the growth, competitiveness, future-readiness and economies across the globe
- **Delivering through Diversity** Report showed teams where there are men and women (as well as **multicultural**) in company boards they outperform 15-20% with men only!
- We have to **use everybody** and **all our resources** to meet the global challenges

World Economic Forum 2022 and UNESCO 2021 Report

- Both the WEF and UNESCO reports found that women are still under-represented in fields such as computing, digital information technology, engineering, mathematics and physics.
- A workforce highly qualified in science and tech disciplines is vital to filling the skills shortage as the Fourth Industrial Digital Revolution gathers pace.
- However, women remain a significant minority in the scientific fields driving this digital driven revolution
- Multifaceted efforts are needed to be made to address the gender gap at all levels of academia and the workplace.

WORLD ECONOMIC FORUM

UNESCO

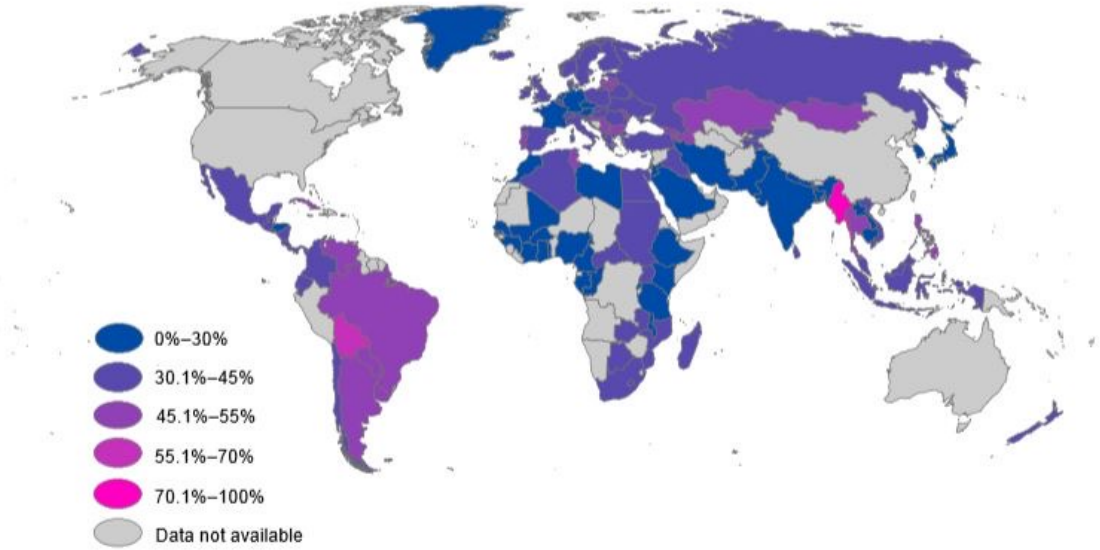
Good news is that there is progress: More girls are going to school, fewer girls are forced into early marriage, more women are serving in parliament and positions of leadership, and laws are being reformed to advance gender equality.

Women in Science (UNESCO UIS Dec 2012)

Under-represented and under-measured

FIGURE 1. THE GENDER GAP IN SCIENCE

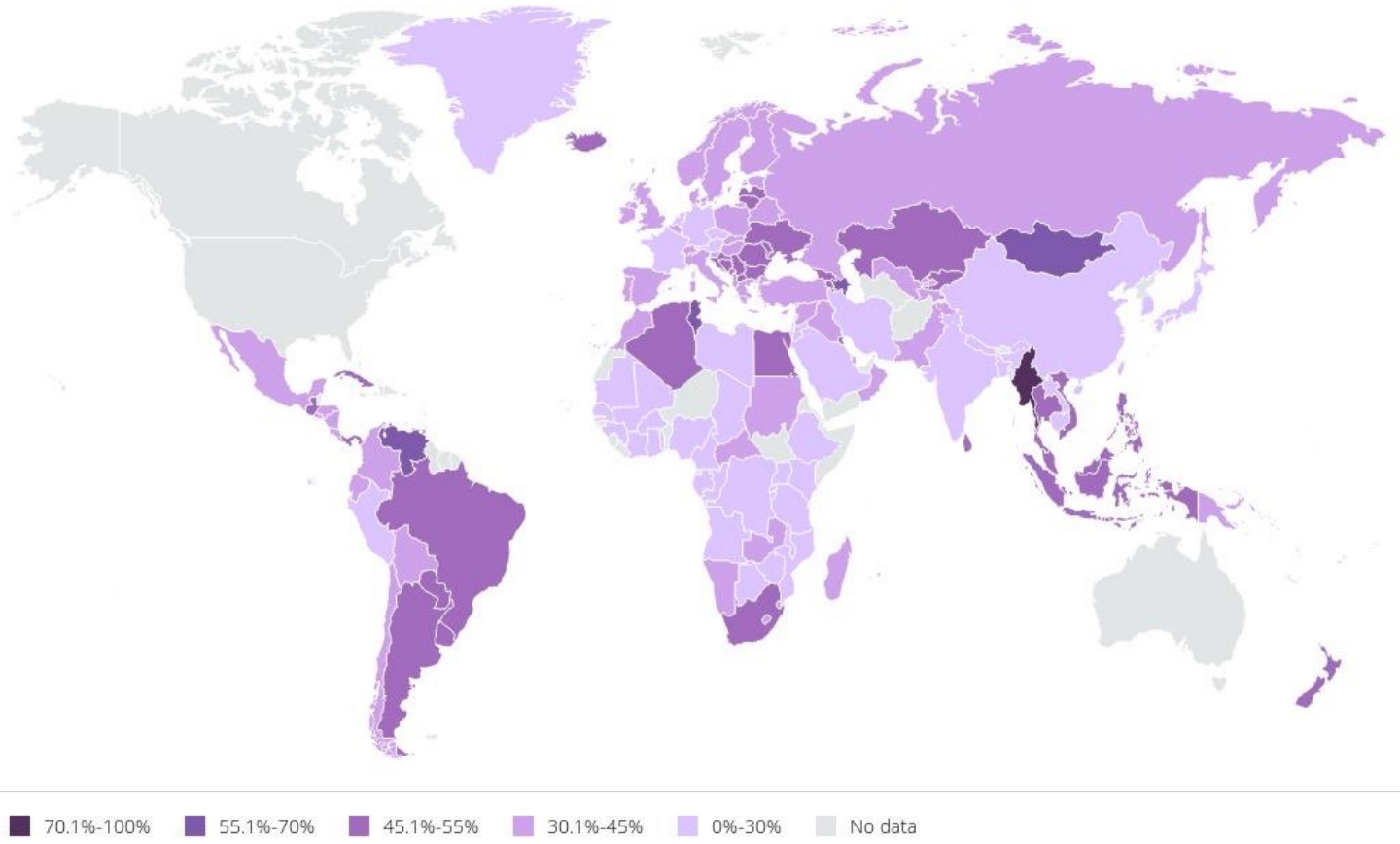
WOMEN AS A SHARE OF TOTAL RESEARCHERS, 2010 OR LATEST AVAILABLE YEAR



Note: Data in this map are based on HC, except for Congo and India (based on FTE).

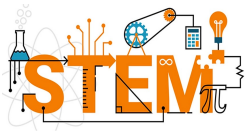
Source: *UNESCO Institute for Statistics, October 2012.*

The gender gap in science (UNESCO 2017)



At a first glance

- Globally, **women have achieved parity (45–55%)** at the bachelor's and master's levels and are almost there at **PhD level (44%)** but the gap tends to widen as they pursue their career.
- Women represented 33.3% of all researchers in 2018, up from 28.4% in 2013.
- In academia, female researchers tend to have shorter, less well-paid careers. Their work is underrepresented in high-profile journals. An analysis of nearly 3 million computer science papers published in the USA between 1970 and 2018 concluded that gender parity would not be reached in this field until the year 2100.
- Women also remain under-represented in company leadership and technical roles. Even though studies show greater productivity and profit margins with having a diverse workforce.
- There is a risk that the **Fourth Industrial Revolution could perpetuate the gender imbalance**, since women remain a minority in digital information technology, computing, physics, mathematics and engineering.



1. There's a STEM gender gap

When it comes to the world of science, women are in the minority. Less than 30% of the world's researchers are women and this under-representation occurs in every region in the world.

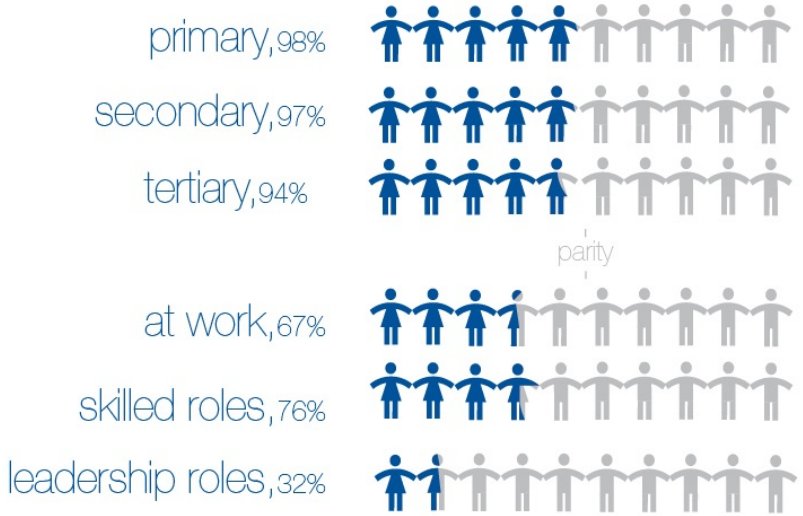
2. Only a fraction of female students select STEM-related fields in higher education

Global female enrollment is particularly low in certain fields. Just 3% of students joining information and communication technology (ICT) courses across the globe are women. That improves slightly to 5% for mathematics and statistics courses. And it increases to 8% for engineering, manufacturing and construction courses.

3. Bias and gender stereotypes can drive away women in STEM Entrenched Gender stereotypes and gender bias are driving girls and women away from pursuing careers in science-related fields.

REALITY IN NUMBERS GLOBALLY

Equally skilled, where's the progress?

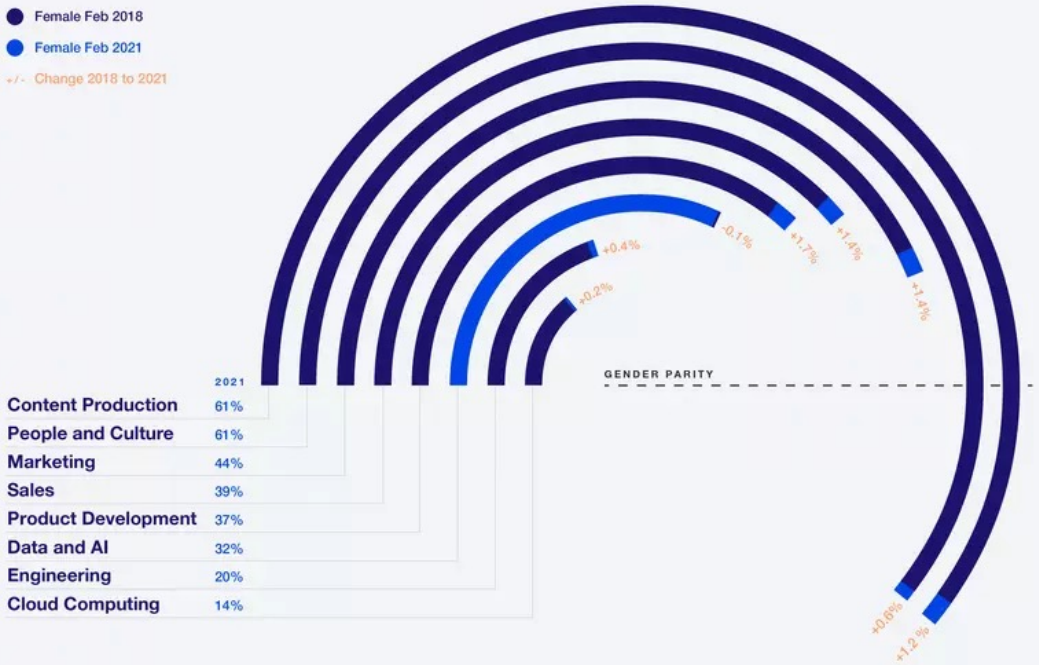


WORLD ECONOMIC FORUM
COMMITTED TO IMPROVING THE STATE OF THE WORLD

Source: Global Gender Gap Index 2017, World Economic Forum

WORLD ECONOMIC FORUM

Gender gaps in emerging jobs



SOURCE LINKEDIN ECONOMIC GRAPH DATA

EMPOWERMENT & SHARING THE POWER

How can you share something which you don't have ?

- Troubling results regarding the progress on gender parity - as shown by the **Global Gender Gap Report** (World Economic Forum) in 2020
- As result of Covid consequences 99.5 years to 135.6 years
- Women but not only women but **society** at large has to fight, since **gender parity** is an urgent need for successfully harnessing and mobilising **half of the world's total talent and capacity**
- A **key** for meeting our global basic needs – in terms of environment, energy, food, economic needs and beyond.

Now 135.6 years

99.5 years to reach gender parity

The Global Gender Gap Report 2020
https://www.weforum.org/reports/the-global-gender-gap-report-2020/

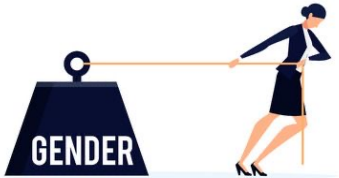
Action is needed

The gap must be bridged if women are to **contribute** and **profit equally** from the potential of science and technology and participate meaningfully in a global knowledge society, to maintain families out of poverty and provide educational and technology benefits for the next generation.

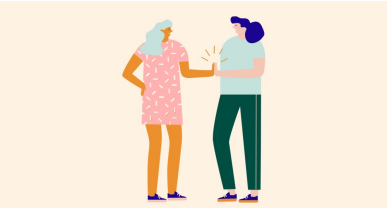
OVERCOMING THE GENDER BIAS

Gender inequality found in the daily life across the globe:

- Education
- Politics - Representation in Government
- Family (husband/wife, brother/sister, daughters)
- Countries
- Pay equality
- Promotion
- Hiring
- Opportunities
- Career path



HOW DO WE DO IT?



- Sharing knowledge and empowering.
- Teaching
- Mentoring
- “In the long history of humankind (and animal kind too) those who learned to **collaborate** and improvise most effectively have prevailed.” Charles Darwin
- Putting up ladders, leaving them there
- Giving a helping hand
- How to stay up the ladder ……

IS THIS THE ONLY WAY?