



वसुधैव कुटुम्बकम्

ONE EARTH • ONE FAMILY • ONE FUTURE

Women Led Development Transform, Thrive, and Transcend



FROM THE EDITOR'S DESK

The Women 20 (W20) is the official G20 engagement group, created in 2015 under Turkey's Presidency of G20, with the objective of addressing gender equity on a global scale. The primary objective of W20 is women's empowerment and advocating for the rights of women. It aims to ensure that the G20 Leaders' Declaration includes commitments and measures that support gender equality and women's economic empowerment.

Under the Indian presidency of G20, W20 intends to build upon the progress made by Turkey, China, Germany, Argentina, Japan, Saudi Arabia, Italy, and Indonesia under their Presidency. W20 India is committed towards the vision of our Honourable Prime Minister Shri Narendra Modi of ensuring that "India's G20 Presidency is inclusive, ambitious, decisive, and action-oriented." W20 is committed to its vision "to create a world of equality & equity where every woman lives with dignity". It is dedicated to its mission of "removing all barriers to women-led development and ensuring an enabling environment and ecosystem for women to thrive, transcend and transform their lives as well as others." To achieve its vision and mission, under India's presidency, W20 is focusing on five key priority areas; Women Entrepreneurship, Grassroot Women Leadership, Bridging the Gender Digital Divide, Education and Skill Development, and Climate Change.

The compendium is a collection of research-oriented articles written by the W20 delegates and knowledge partners on the five key priority areas of W20. It is a beacon of inspiration that encompasses best practices, academic research and experiences of global policymakers and women leaders in the field of the key priority areas of Women 20 India.

The compendium sheds light on the pressing issue of the Gender Digital Divide, where women still face disparities in accessing and utilizing digital technologies. It explores initiatives and endeavours that are bridging this divide, equipping women with the digital skills and knowledge needed to thrive in an increasingly interconnected world.

Climate change is one of the most critical challenges of our time, and women are at the forefront of driving solutions and advocating for sustainable practices. This compendium showcases the remarkable contributions of women in climate action, highlighting their efforts to protect the environment, build resilient communities, and advocate for policies that prioritize sustainability.

Grassroots leadership has the power to ignite profound change from the ground up, transforming communities and societies.

This compendium honours the tireless work of women grassroots leaders who have rallied their communities, amplified marginalized voices, and spearheaded movements for social justice and equality.

Education and skill development are the pillars upon which the future of any society rests. This compendium explores best practices and initiatives that are breaking down barriers to education, equipping women and girls with the tools they need to unlock their potential and shape their destinies.

By embracing the principles of equality, empowerment, and collaboration, we can collectively create a future where every woman has the opportunity to thrive, and where her contributions are valued, celebrated, and recognized as integral to our shared progress.

We hope that this compendium serves as a catalyst for action, fostering dialogue, encouraging partnerships, and inspiring initiatives that empower women, transform communities, and propel us towards a more inclusive and sustainable future for all.



Ms. Dharitri Patnaik
Chief Coordinator, Women20

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THE ROLE OF WOMEN-LED DEVELOPMENT AND GENDER INCLUSION IN ACTUALISING CORE PRIORITIES OF INDIA'S G20 PRESIDENCY

India's G20 presidency provides a significant platform to actualise a world where women are equal partners in creating sustainable development and this vision is well encapsulated in our Hon'ble Prime Minister Narendra Modi's remark at the G20 Summit in Bali, "global development is not possible without women's participation." Our Hon'ble Prime Minister recognises the importance of the better half of the population and thus, has included 'Women-Led Development', and not merely women development, to be a key priority area for India's G20 presidency, implying that all other priority areas will be achieved on the foundation of inclusive growth and development. To ensure rapid progress in achieving Sustainable Development Goals, and to secure a better future for generations to come, women must be equal partners and contributors to this wave of change.

The importance of the role of women in shaping our world is undisputed. Women are not only essential for the social fabric of our society, but they are also integral to the economic and political landscape. In present times, not only are women progressing rapidly but they are also making significant contributions in a multitude of male-dominated fields like entrepreneurship, healthcare, education, technology etc. and are paving the way for more and more women to be included in pivotal decision-making roles.

There is substantial evidence to support that with increased internet and mobile penetration, female entrepreneurship has scaled substantially in India. With an estimated 13.5 million to 15.7 million MSMEs and agribusinesses, India has more women-owned enterprises compared to many other countries. By creating jobs, fuelling innovation and advancing investments in health and education, entrepreneurship among women can help transform India's journey towards social and economic growth. Women 20, the official women's engagement group of the G20 is focused on promoting gender equality and women's empowerment to shaping a more inclusive and equitable agenda within the G20, while also highlighting the importance of women's issues on the global stage.

Under India's Presidency, W20 intends to build upon the tremendous efforts and progress made by Turkey, China, Germany, Argentina, Japan, Saudi Arabia, Italy and Indonesia under their Presidency. Our W20 meetings are envisaged to play a pivotal role in driving international collaboration and providing further impetus to gender equity, by formulating a strong Communique that will translate into the G20 Leader's Declaration.

Now, let us confer upon each of India's core priority areas and recognise how gender inclusion can facilitate their realization:

1. Green Development, Climate Finance and Lifestyle for Environment (LiFE)

Women play a crucial role in mitigating climate change and building resilience to its impacts. In many societies, it is the women that are primarily responsible for household energy, food, water and care for the young and elderly. While climate change affects everyone, it does not affect everyone equally and it is vital that we recognise the role women play in tackling climate change. Women make up nearly half of the agricultural labour force in developing countries and outside of the agricultural sector, it is women who are self-employed in informal home-based work. Women are a reservoir of knowledge when it comes to environmental conservation. By empowering women, we can bring more responsible climate solutions, build climate resilience in communities, and create a more sustainable and equitable world for all by using their expertise and experiences. The UN reports that communities are more successful in resilience and capacity-building strategies when women are part of the planning process. Women should align to be the first responders in community responses to natural calamities, as leaders in disaster risk-reduction, and contribute to post recovery by addressing the early recovery needs of their families and strengthening community building.

By involving women in community planning and disaster response efforts, we can build stronger, more resilient communities that are better equipped to face the challenges of climate change. The W20 agenda actively discusses the role of Women as First Responders to Climate Change to accomplish India's G20 presidency theme of LiFE (Lifestyle for Environment), which highlights the importance of environmentally sustainable and responsible lifestyle choices, both at the individual and national level, in creating a cleaner, greener, and bluer future. The draft communique urges the G20 Leaders to leverage the Green Climate Fund to commit direct funding to women-led projects such as investing in climate entrepreneurship and technologies supporting net zero goals, among many other recommendations.

2. Accelerated, Inclusive & Resilient Growth with focus on areas that have the potential to bring structural transformation.

Promoting women's participation in MSMEs is vital for economic empowerment, job creation, and inclusive growth in India. By addressing the unique challenges faced by women entrepreneurs, providing access to finance, fostering skill development, and building a supportive ecosystem, India can unlock the full potential of women-led MSMEs and drive economic progress.

MSMEs make up the majority of businesses in India and are the largest job creator after the agriculture sector. Women entrepreneurs are involved in diverse industries, including manufacturing, services, handicrafts, textiles, and information technology. While India seeks to accelerate integration of MSMEs in global trade and bringing in the spirit of trade for growth, in order to facilitate this, the W20 recommends incentivizing access to markets (domestic and international) and access to finance for women entrepreneurs to ensure accelerated and inclusive growth for sustainable development.

3. Accelerating progress on SDGs to achieving the targets laid out in the 2030 Agenda for Sustainable Development

Women-led development is essential for achieving the SDGs. By empowering women, promoting gender equality, and addressing gender-specific challenges, we can unlock the full potential of women as agents of change and drive sustainable development in an inclusive and equitable manner.

W20 is aligned with the SDGs. The first one being 'No Poverty', women-led development can help alleviate poverty by empowering women economically. When women have access to resources, opportunities, and entrepreneurship support, they can generate income, create jobs, and contribute to poverty reduction.

Women's economic empowerment also leads to improved household well-being and economic stability. Empowering women in healthcare professions and promoting their leadership in health-related decision-making leads to better healthcare access, maternal and child health, and the prevention and treatment of diseases. Women's health and well-being are central to achieving SDG 3. Next is Quality Education to promote gender equality in education. It involves addressing barriers to girls' education, promoting equal access to quality education, and supporting women's lifelong learning. When women and girls have access to education, they can improve their socio-economic status, participate in decision-making processes, and contribute effectively to sustainable development. Yet another SDG that is directly impacted by women-led development is SDG 8 on Decent Work and Economic Growth. Women-led development fosters inclusive economic growth and decent work opportunities. It involves promoting gender-responsive labor policies, reducing the gender pay gap, supporting women's entrepreneurship, and improving access to finance and markets for women.

4. Technological Transformation & Digital Public Infrastructure

The digital transformation provides new avenues for the economic empowerment of women and can contribute to greater gender equality.

The Internet, digital platforms, mobile phones and digital financial services offer ample opportunities for women and girls and can help bridge the divide by giving them the possibility to earn additional income, increase their employment opportunities, and enhance their network through social media. Women are driving digital technologies in a variety of ways, from developing new products and technologies to leading digital innovation in their respective fields. According to a report by Pitchbook, investments in female-founded startups have been steadily increasing over the past few years. The rise of internet access and use among rural women in India is evidence of a deep transformation. The expansion of developmental and digital infrastructure is giving women much-needed time, space, and leisure – which often translates to more time spent on the internet. Fundamentally, this infrastructural change is having a major social impact on the lives of women in the villages in India, and thence on the country as a whole. The W20 launched a unique initiative called 'MISSION DIGITAL WOMEN' a program to provide women Financial and Digital Literacy and skilling. This is an Artificial Intelligence based program that empowers women to be digitally and financially independent. And with the launch of few more such programs, we are hopeful that within the next three years we will achieve digital literacy among one million women.

W20 proposes in its communique that by 2030, halve the digital gender gap by addressing barriers around accessibility, affordability, adoption, safety and usage of digital technologies.

5. Multilateral Institutions for the 21st century that are accountable, inclusive, just, equitable and representative

To understand and overcome the challenges of the 21st century, one of the prime steps is to build a society that is peaceful, equitable and prosperous. And education and skill development of girls and women will contribute largely to make an inclusive, just and representative society. The multilateral institutions need adequate gendered representation in order to discuss impediments like gender pay gap, the need to formalise the care economy, ensuring workplace safety and adequate health and hygiene to alleviate the economic contributions of women that will, in turn, positively impact the global economy and development. W20 in its communique recommends measures across all the above areas for growth.

6. Women-Led Development

India hopes to use the G20 forum to highlight inclusive growth and development, with women empowerment and representation being at the core of India's G20 deliberations.

This includes a focus on bringing women to the fore, and in leading positions, in order to boost socio-economic development and achievement of SDGs.

India has recognized the crucial role of women in economic growth and social progress, and has posed an opportunity to prioritize these issues and advocate for policies that promote gender equality and empower women in various sectors, bringing women to the forefront as first responders and leaders prompting the change. And I am hopeful that with this fresh perspective that acknowledges the socio-economic and political contributions of women, while enabling them with the ecosystem to steer forth will definitely contribute hugely towards achieving not only India's G20 presidency core priorities, but in also doing justice to the theme - **“Vasudhaiva Kutumbakam”** or “One Earth · One Family · One Future” – that affirms the value of all life, by creating an equal and equitable society where everyone lives with dignity.



Dr. Sandhya Purecha
Chair, Women20

GRASSROOT WOMEN LEADERSHIP

Women led development through Cooperatives

Grassroot women leadership plays a vital role in advancing gender equality and driving inclusive and sustainable development. It's a key driver of rural development, economic empowerment, and social change. Not just this, Grassroot women leadership has paved the way for self-help groups (SHGs) and women's cooperatives, enabling women to access financial resources, build collective savings, and engage in income-generating activities. As per the Economic Survey 2022-23, there are around 12 million SHGs in India, comprising of 88 percent all women SHGs, catering to 142 million households.

The status of women in society is closely linked to their opportunities for participating in economic activities, and this connection is influenced by various socioeconomic factors. The intersectionality of these variables can further exacerbate the gender disparity experienced by women. Particularly, women residing in rural and remote areas face additional disadvantages due to low literacy rates and socio-cultural norms that restrict their access to resources. These barriers hinder their involvement in the labor force and their ability to engage in local governance. It is seen that through their active participation in Panchayati Raj Institutions (PRI) and other local governance bodies, women grassroots leaders bring diverse perspectives, prioritize women's issues, and drive positive change in their communities.

Grassroots women leaders in political empowerment inspire and mobilize fellow community members, fostering a sense of agency, representation, and accountability in decision-making processes.

As of 2020, more than 1.4 million women hold elected positions in PRIs, showcasing the increasing political participation and leadership of women at the grassroots level.

Women in leadership positions can bring immense value to their communities and empower other women to follow suit. However, attaining leadership roles requires more than simply being assigned such positions, whether it be in corporate settings or at the grassroot level. Without employment opportunities and access to financial resources, women's circumstances are unlikely to undergo significant changes. Cooperatives such as Amul have silently created a revolution by empowering women at grassroot.

Amul, India's largest food brand with USD 9 billion sales turnover and a dairy cooperative consisting of 3.6 million farmers, over a million of whom are women, offers a compelling example [2]. These women farmers, residing in rural parts of Gujarat, have achieved economic independence through dairy farming. They receive payment in their bank account every day for the milk poured at village cooperative society.

The price paid to women farmers for milk depends only on the composition of the milk and has nothing to do with their existing socio-economic status. This takes care of the entry barriers posed by socio-economic variables and leaves no room for gender pay gap. With the improved financial condition, the status of these women farmers has improved within their families, villages, and communities. They can provide financial support to their families, leading to better educational and career opportunities for their children compared to previous generations. Sudhaben Patel's story serves as an example of this transformation. Sudhaben, a milk producer leader, was born in a tribal-dominated village in India and has become an inspirational figure for women at grassroot. She started her journey with Amul after her marriage to support her family. Starting with just one cow, she used artificial insemination to breed her cows and raised the calves with the assistance of Amul's calf-rearing program.

Through her earnings from dairying, Sudhaben achieved economic independence, provided education for her children, and purchased assets for her home and a tractor for her husband. She supported her son's STEM education as well.

Sudhaben's efforts led her to become a prominent figure among women farmers in her village. She collaborated with them to establish a village cooperative society and was unanimously elected as its chairperson.

Under her leadership, their cooperative society now procures 1100 liters of milk daily. Sudhaben has also extended her guidance to women from other villages, assisting them in forming their own dairy cooperatives. She has served as the Chairman of the Women's Dairy Cooperative Society of Sarodhi Village for the past 24 years. Additionally, she holds position of Board of Director and Vice Chairman of the Valsad District Cooperative Milk Producers Union Limited, which has a turnover of USD 248.6 million. More than 4000 women leaders such as Sudhaben are leading the village cooperative societies as their chairperson and more than 70 women leaders serve on the Board of Director at district level.

Based on the experiences of successful milk cooperatives, several best practices and policy recommendations emerge. These include:

- Providing comprehensive training and capacity-building programs specifically designed for women farmers
- Facilitating access to financial resources, credit, and markets
- Establishing supportive networks and platforms for knowledge sharing and collaboration
- Promoting gender-responsive policies and legal frameworks that recognize and protect the rights of women farmers

- Strengthening the representation of women in leadership positions within cooperatives and outside as well

Grassroots women leadership in India has proven to be a catalyst for change, driving economic empowerment, political participation, and social transformation. The data and references presented in this abstract reflect the substantial progress made in the realm of grassroots women leadership in India. These efforts need to be further strengthened and sustained and can be implemented in other G20 nations as well.

Cooperatives such as Amul have been able to provide the opportunities to women farmers to find their financial freedom and lead from front. India has almost 190,000 village dairy cooperative societies in the 700,000 villages of the country. Under the guidance of the newly formed Ministry of Cooperation, 200,000 new village dairy cooperative societies will be formed in the next 5-7 years and thus more women will get to join the labour force and leadership positions.

1. [https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1658145#:~:text=Clause%20\(3\)%20of%20Article%20243D,offices%20of%20chairpersons%20of%20Panchayats](https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1658145#:~:text=Clause%20(3)%20of%20Article%20243D,offices%20of%20chairpersons%20of%20Panchayats)
2. Amul internal data
3. <https://pib.gov.in/PressReleasePage.aspx?PRID=190834>



Ms. Shefali Vijayvargiya
Amul Cooperatives

THE IMPACT OF ACCESS TO SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS FOR THE EMPOWERMENT OF WOMEN AND GIRLS

Gender equity is fundamental to achieve a more egalitarian, peaceful, just and equitable society and to ensure the empowerment of women and girls in all their diversity. In their daily lives, women and girls face many inequalities and violations of their rights that negatively affect their life and their personal and professional development and limit their capacity for social and labor incorporation, affecting their economic power and increasing their dependency.

Health is an area where these inequalities for women and girls in all their diversity, are observed. They face greater obstacles to access health services and consequently quality of health care. As mentioned by UNWomen (2022) this is reflected in the fact that, although men and women have different health needs, both have the right to live a healthy life, but in the case of women, girls and non-binary people, access to quality health is limited by systematic gender discrimination.

A central aspect of women's and girls' health is sexual and reproductive health, which is vital to achieving comprehensive health and is a basic human right.

In addition, "Women's empowerment depends on the protection of their sexual and reproductive health and rights, including access to health care and education and the right to make their own informed decisions about their bodies."

UNWomen, 2022. Access to sexual and reproductive health and rights is a basic tool for reducing gender inequalities and empowering girls and women in the economic sphere.

Knowing their rights, empowers and gives the possibility to women and girls in all their diversity to be able to claim and defend them, to recognize violations of their human rights that they may be experienced and contributes to enable the enjoyment of these rights. Access to sexual and reproductive health care is an important vehicle to allow women and girls to decide on their future and fully exercise their sexual and reproductive rights.

Lack of access to menstrual hygiene products, prevention of unplanned pregnancies, child marriage and early unions are factors that limit the incorporation into the labor market and thus the possibility of economic independence.

"Limited access to SRHR impacts women's economic opportunities in both formal and informal sector. Multiple and unwanted pregnancies [...] increase the time women spend on unpaid care and domestic work" (UNFPA and CARE, 2020). The economic empowerment of women and girls requires addressing the care economy, as they are the main caregivers in all countries and societies.

Child care is directly linked to the possibility of deciding whether or not to have children, when, how many, with whom and how to exercise these rights according to access to sexual and reproductive health services.

Countries must to adopt child care policies starting with parental/maternal leave after childbirth and then continue with the promotion of indiscriminate care by both parents, not only by mothers.

These egalitarian policies for mothers and fathers are fundamental to achieving more equitable societies. Governments and the private sector should not be left out of this, since they ought to provide support for the child care in their first years of life through day care centers that allow mothers and fathers to be able to work and develop in the different fields of their lives.

Care policies must also address other needs such as care for the ill, the disabled and the elderly, which fall mainly in the family and on women.

These should be assumed in a more equitable way between women and men, but it is also essential to have public policies that recognize the need of public/private services so that families are helped in this care, allowing the development of other family members, especially women and girls, by freeing up time to work, study and/or develop.

Last year, Latin America and the Caribbean countries, in the Regional Conference on Women held in Argentina, approved a document in which governments,

UN agencies, civil society and the private sector have defined their responsibilities and which will allow the countries of the region to advance in these benefits (ECLAC, 2022, available at (<https://conferenciamujer.cepal.org/15/en/documents/buenos-aires-commitment>)). It is imperative that the member countries of the G20 commit to adopt, not only within each of their territories, but also at the international level, care policies that address and provide solutions to existing gender inequalities in this area in order to guarantee the economic empowerment of women and girls. Within this framework, the most developed countries must assume the commitment to allocate 0.7% of their GDP to cooperation with less developed states.

It is essential to create, within the states but also at the international level, an appropriate legal framework to ensure access to sexual and reproductive health and rights for women and girls in all their diversity, since, according to the G7 document (2023), this will make it possible to build more equitable health systems that leave no one behind. These laws should position care as a human right and recognize the social and economic value of care work performed by women and girls in their families.

Another important point is that, as mentioned by the G7 (2023), in order to guarantee access to comprehensive quality health, including access to sexual and reproductive health, governments need to increase investment in this area, improving equipment and facilities,

training personnel (especially taking into account the gender perspective), increasing the availability of supplies and even regulating health research to include women and girls in order to be more effective. This will make it possible to reach a larger part of the population, especially those in vulnerable situations. In this regard, with respect to sexual and reproductive health, "Impoverished women suffer disproportionately from unintended pregnancies, unsafe abortion, maternal death and disability, sexually transmitted infections (STIs), and related problems. Young people are also extremely vulnerable" (UNFPA, 2022, Available at <https://www.unfpa.org/sdg>).

In the case of young people according to UNESCO (2018), they are more vulnerable to misinformation and risky sexual behaviors, so comprehensive sexuality education in all level of schooling is necessary as well as access to health care services by free.

Investment as well as health policy should also be aimed at improving the employment status of women health workers, as they represent about 70% of the health workforce in all countries , but they are concentrated in the lower levels, receive lower salaries than their male colleagues and lack in many cases basic social protection as demonstrated during the pandemic.

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W20 HoD, Argentina

WOMEN IN INNOVATION

A Project by Women and Democracy Association

Entrepreneurship not only paves the way for global economic success but also helps women become more effective in society. The rapidly evolving economic landscape of today has made it possible for women to play a key role in economic life and has increased the number of women entrepreneurs who launch their own businesses. Women's ability to participate in economic life with their own various traits is a significant concern.

Nevertheless, for a variety of reasons, it might be difficult for women to secure enough market share and are unable to showcase their entrepreneurship skills. The effectiveness, simplicity, and speed of entrepreneurial activities as well as the sustainability of their businesses serve as key indicators of women's economic power. The socio-cultural contribution of women is also valuable since they are more likely to contribute a gender-sensitive perspective to the fields of innovation and business.

However, women frequently fall short of men in terms of business ownership, firm size, and access to financial resources. In comparison to male-owned firms, female-owned enterprises tend to be smaller and have more difficulty obtaining loans, resources, and assets. In this regard, The Women in Innovation 1 initiative by KADEM, has been implemented seven times since 2015, with the goal of combining economic growth and inclusive representation of women within local and global economy.

The Women in Innovation project has demonstrated that women have a wide range of talents and views on which they may contribute to the socio-cultural and economic well-being of the world.

The Women in Innovation Project at KADEM aims to develop women's entrepreneurial skills and create chances for them to obtain credible employment based on their contexts.

Türkiye's 11th national development plan involved providing women entrepreneurs with consultancy and guidance services in their business development processes. It also involved giving priority of support to women.

As an organization that works primarily for the wellbeing of women, KADEM situates itself within the support mechanisms that are required for such action. We support state policies that aim to strengthen women entrepreneurship at the micro-level as a step towards enabling macro-level inclusivity in world economy. The Women in Innovation Project has been organized with the collaboration of municipalities and investment firms in addition to the Turkish Council for Scientific and Technological Research (TÜBİTAK).

We encourage women who declare, "I have an idea" and support them turn those ideas into successful businesses by taking a developmental-sensitive approach.

Every year, we develop our project gradually. In this abstract, this initiative is provided as an example of best practice, and KADEM would like to see it spread into bigger national and international innovation ecosystems. Candidates were divided into three groups during the election processes, based on the stage at which their ideas were in, namely the idea stage, pre-incubation stage, and incubation stage. The candidates then participated in a five-day entrepreneurship camp. They got professional entrepreneurship training throughout the camp to assist them in developing and implementing business plans for their ideas. Support for the educational material—which was created to address the various needs of candidates came from industry managers, stakeholders, and private-sector businesses. Lean entrepreneurship, market research, competitive analysis, pricing, prototype creation, incorporation and financial management, intellectual property, business plan writing, and presentation skills were some of the subjects addressed in the curriculum. After the training sessions, a jury made up of academics and project managers reviewed the presentations. As a result of the review, five candidates were chosen to receive awards through KADEM with the financial assistance of sponsors.

An Open Office, a physical location for teamwork, was developed at the KADEM Istanbul Headquarters as part of the project.

Women in various levels given access to a workspace as well as professional and mentoring guidance. In addition, an online platform was created as part of the project which served as a gathering place for entrepreneurs, successful foreign start-ups, and sectoral meetings.

By this way, candidates were able to exchange information and make improvements. Additionally, The Demo Days created a forum for investor-entrepreneurs by giving investors the chance to invest in their areas of interest. The candidates were brought together with investors in addition to receiving public grants which offers them a better good opportunity of proposing their enterprise ideas and getting funding.

The project's last phase is a workshop on the state of innovation-driven women's entrepreneurship in Turkey. Academics, people from business, investors, and successful women entrepreneurs all take part in organizing it.

Since 2015, a total of 2030 women applied, and 204 people in total were chosen to participate. 36 of them reached the finals, and 13 of them launched their own businesses.

We became the proud witnesses of many success stories throughout the course of the seven years that we immersed ourselves with innovative women.

Invamar was created by Merve Aydın, who won an award in the Incubation Category in the seventh round. Aydın created a smart wearable fabric with a textile-based electrode that captures skin data and promotes physical wellness. Her invention traveled to the poles with the TÜBİTAK National Antarctic Expedition Team on January 30, 2023.

Aleyna Yıldız, a fantastic fifth-round contestant, created AGON Biotechnology LLC. It is a biotechnology company that creates biosensors for detecting certain microorganisms in hospital intensive care units. With the support of TÜBİTAK 1512, Yıldız's startup turned into company. It also obtained funding from KOSGEB (Small and Medium Enterprise Development Organization) under the Advanced Entrepreneurship category.

Duygu Yılmaz, one of the second-round finalists, created Biolive, which is a biotechnology firm with the goal of filling gaps in the bioplastics industry. It turns olive waste into all-natural bioplastic granules. Yılmaz received 17 international and national prizes as a result of her accomplishment. Yılmaz received the worldwide Advanced Materials first award at the Clean Tech Open Forum in Los Angeles in 2018. She also advanced to the finals of the United Nations Development Program's (UNDP) Accelerate 2030 program. Vestel Ventures provided her with a \$30 million investment.

In 2020, she was named the first prize winner in the Fortune 40 under 40 business awards 9, the first prize winner in UNDP's worldwide category in 2019, and Turkey's most successful young businesswoman by JCI in 2018 10. Only a few of our outstanding alumni are listed here.

Innovative ideas that benefited society are how they made their mark on the local and global entrepreneurial scene. They furthered the status of women and highlighted their contribution to innovation, leaving their mark in both of these areas.

Empowering women entrepreneurs on a micro, small, and medium size is a necessity for countries to achieve sustainable development. Women's economic empowerment is about more than merely meeting global targets.

It is a critical tool of raising women and their families out of hard socio-economic conditions and strengthening the economy and society. Projects like Women in Innovation may be carried out in accordance with the context of countries in an inclusive way for women at all levels in order to generate diverse types of entrepreneurship throughout the world.

The Women in Innovation was nominated for The Startup Centrum Turkish Entrepreneurship Ecosystem Awards in 2022.

The Women in Innovation was nominated for The Startup Centrum Turkish Entrepreneurship Ecosystem Awards in 2022. Looking back on our achievements, we are glad to see that KADEM has successfully met a crucial gap in the Turkish entrepreneurial ecosystem by including the representations women entrepreneurs.

Our studies have proven that women may contribute to the sociocultural and economic well-being of our nation and the wider world in a variety of ways and with a broad spectrum of opinions.

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DIGITAL EQUITY FOR WOMEN'S ECONOMIC AGENCY

A Key Pathway to Women-led Development for the Net-Zero Economy

This paper explores the intersection of digital equity, women's economic agency, and sustainable development within the context of the gender digital divide (GDD).

I. A clear verdict

Women worldwide face significant challenges in terms of digital inclusion and economic empowerment. They have limited access to online platforms, possess low digital skills, and are underrepresented in IT and technology startups. The COVID-19 pandemic has exacerbated these disparities and poses risks to women's economic empowerment and sustainable development.

The gender digital divide is a pervasive issue that highlights the lower likelihood of women being online compared to men. This gap is prevalent across different regions and socioeconomic conditions, resulting in 195 million fewer women online globally. Despite an overall surge in online participation during the pandemic, the gender gap has actually widened. This persistent trend not only compounds the digital divide but also contributes to further inequalities. Even in countries with advanced digitalization, women face barriers such as limited digital skills, fewer opportunities to pursue computer science and STEM studies, and underrepresentation in technical and leadership roles within the IT sector.

II. Rational interest for changes

Research shows that the gender imbalance in technology-driven enterprises is a significant loss for the global economy and hinders women from fully realizing their potential as economic agents in the digital society.

Bringing 600 million women and girls online has the potential to boost the global GDP by up to \$18 billion. In Europe alone, greater participation of women in the ICT sector could contribute as much €16 billion annually to the economy.

The COVID-19 pandemic has underscored the critical need to prioritize women's economic empowerment (WEE) and bridge the gender digital gap (GDD) for sustainable development.

The COVID-induced "She-cession" has further highlighted the importance of action to tackle the gender digital divide as a means to improve women's economic agency, bridge the digital skills and job gap, and promote sustainable development.

III. Roadmap for changes

Entrepreneurship plays a crucial role in women's financial independence and supporting economic development, particularly in challenging times. However, economic participation in the digital society relies increasingly on digital skills.

Unfortunately, women face disadvantages in both digitally-enabled and digitally-driven entrepreneurship due to a lack of digital skills and limited specialized expertise. The adoption of artificial intelligence poses additional risks of amplifying these challenges and deepening social inequities.

The Digital Decade for Europe 2030 policy recognizes the importance of closing the gender gap in IT specialists to drive the digital and green transitions. Women's participation in digital fields is prioritized to support the European Green Deal's goal of achieving net-zero greenhouse gas emissions by 2050. This vision has sparked various programming and policy actions, including funding through Horizon Europe, to address inequalities and promote women's economic agency in the digital society.

IV. To support this position, several questions are considered:

1. What are the key facets of women-led development and its contribution to sustainable growth, green and digital transitions, and the net-zero economy?
2. What are the drivers of the green and digital transitions and the net-zero economy, and what is the role of digital equity for women's economic agency in this context?
3. What is the economic impact of gender digital divide, including on women's economic agency, and how does closing it support women-led, sustainable development, the green and digital transitions, and the net-zero economy?

4. What is the current state-of-play regarding development actions that focus on women-led development by addressing the gender digital divide and promoting women's economic empowerment?

5. What indicators and best practices can be employed to support digital equity for women's economic agency as a pathway to the green and digital transitions, net-zero economy, and sustainable women-led development?

V. Closing the gender digital divide is efficient in inducing a net-zero economy and promoting sustainable, green, and digital transitions through several arguments:

1. Reducing the risk of marginalization: Prioritizing digital equity for women ensures their active participation and inclusion in the digital society, reducing the risk of marginalization caused by the digital disruption.
2. Addressing digital skills and job gaps: By prioritizing digital equity, we can bridge the digital skills gap, create opportunities for women in technical and leadership roles within the IT sector, and address the global digital skills and job gaps. This fosters economic growth and innovation.
3. Supporting workforce participation and entrepreneurship: Digital equity enables women to fully participate in the workforce and entrepreneurship. By providing them with digital skills and access to online platforms, we empower women to establish and grow their businesses, leading to increased economic independence and development.

4. Harnessing women's creative capacity for sustainable economic development: Women-led enterprises have been identified as dynamic facets of the global economy. Promoting digital equity allows women to leverage their creativity, innovation, and entrepreneurial spirit, leading to sustainable economic development.

5. Promoting women's full economic, social, and political agency: Policies focusing on digital equity enable women to have full agency in economic, social, and political spheres. By ensuring equal opportunities in the digital society, women can actively participate, make informed decisions, and contribute to shaping the future.

VI. Conclusion

To achieve these outcomes, it is essential to prioritize and allocate budgets for closing the gender digital divide and promoting digital equity for women's economic agency. Investment in women-led, tech-driven enterprises that support the transition to a net-zero economy becomes crucial. Tracking the amount of investment flowing towards these enterprises serves as an indicator of progress and the effectiveness of programming efforts.

Several major world powers, including the United States, the European Union, and the G20 Group of Nations, have already taken actions towards these goals.

The United States has established the White House Gender Policy Council and the Women's Global Development and Prosperity (W-GDP) Initiative. The European Union focuses on digital inclusion for women and women's digital entrepreneurship, while the G20 emphasizes bridging the digital gender divide and increasing women's participation in the digital economy. Closing the gender digital divide is thus not only a matter of equality and social justice, but also a crucial step towards achieving a net-zero economy and sustainable development. By empowering women, bridging the digital gap, and supporting women-led entrepreneurship, we can unleash the full potential of women as drivers of economic growth, innovation, and positive change.



Ms. Cheryl Miller

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Head of EU Delegation ex officio, G20 Women20

GRASSROOTS GOVERNANCE AND ROLE OF WOMEN

E-Waste Management Advocacy in Indonesia

Electronic waste, often known as e-waste, is the term used to describe discarded consumer electronic products such as computers, mobile phones, televisions, and others. E-waste occurs due to the accelerated growth of the electronics industry with products that decay quickly and are short-lived. The rapid advancement and use of technology has led to a significant increase in e-waste generation, posing numerous environmental and health risks. In this paper, we examine the question of how grassroots governance shifted the e-waste management in Indonesia through advocacy and show a picture of how women leadership played an important part in the movement of waste management. The writer focuses on one grassroot movement as a best practice in the field.

Indonesia, with its growing middle class and increasing consumption of electronic devices, is struggling with a significant e-waste problem. According to The Global E-waste Monitor 2020 report 3 Asia generated the greatest volume of e-waste in 2019, 24.9 Mt in number. Indonesia on itself contributed 1.618 kt, the highest number in Southeast Asia. The management and disposal of this waste, however, present considerable challenges. The absence of adequate infrastructure and facilities for the collection, recycling, and disposal of e-waste is one of the main problems. Most Indonesians discard their electronic devices

with typical household waste, which goes to landfills or is burned, posing health risks and environmental degradation. In addition, the informal sector contributes significantly to the management of e-waste since scavengers frequently remove valuable components while ignoring the correct treatment of hazardous materials.

According to a study done by Solving the E-waste Problem Initiative, E-waste will double by 2050. It's critical to address the problem, especially knowing the technological world is growing day by day. Compared to neighbouring countries like Thailand who have national e-waste regulations in place since 1992, Indonesia did not have them. Most of the e-waste is informally taken care of, which poses a higher hazard risk. It wasn't until a grassroots movement who started the advocacy on e-waste management that the government of Indonesia started to put more attention on the issue.

Grassroots governance is a type of governance that is initiated and led by people at the local level. It is often characterized by a high degree of participation and decision-making by ordinary people. There are many benefits to grassroots governance. First, it can help to build trust and cooperation between people at the local level. Second, it can help to ensure that decisions are made that reflect the needs and priorities of the community.

Third, it can help to empower people and give them a sense of ownership over their community.

EwasteRJ is Indonesia's leading grassroots organization led and initiated by youth, Rafa Jafar who addresses e-waste management problems. They uphold the principle of campaigning, collecting, and circulating. Established in 2014, EwasteRJ started by providing drop boxes for e-waste disposal. After the collection process, the team distributed the waste to the recycling company. Initially, they partnered with Teknotama Lingkungan Internusa 8, a recycling company that is certified for e-waste recycling and material recovery. Now, they are partnering with Eco Beringin. The partner will then disassemble and do material recovery for recycling. By 2021, EwasteRJ has collected 7 tons of e-waste since 2016 alongside awareness-raising campaigns and advocacy. The work ecosystem of EwasteRJ shows a comprehensive grassroots initiative to collaborate with relevant stakeholders to ensure the root cause is addressed. Upon further engagement with EwasteRJ, another interesting factor came across the surface, 70% of their team is women. Despite several turnovers in the team leaders, the majority are always women. Having women leadership in waste management grassroots is common, as we've seen in Bye Bye Plastic Bags, was founded by the Wisjen sisters in Indonesia.

The efficiency, efficacy, and sustainability of waste management operations can all be enhanced by women in leadership positions. Women's knowledge, experience, and leadership can be used to create and

implement waste management plans that are more efficient, and they can ensure that waste management services are adaptable to the demands of all users.

It's interesting knowing that in a study done by Resilience Development Initiative, in Semarang, 95% of waste bank members are dominated by women. This is also backed by Takehiro Nahamura, Head of International Environmental Technology Centre UNEP, who stated that women are traditionally responsible for managing household waste in many traditions, which means they have greater engagement with domestic waste management and waste management services. It is apparent that women do have an active leadership role which shows a specific target group for the advancement of e-waste management advocacy in the long run.

It is also worth noting that in many countries women are the primary collectors and recyclers in the informal sector. As we know, recycling e-waste informally poses serious dangers. However, the economic advantages of adopting the circular economic model in the electronics industry are substantial given that the value of e-waste is at least \$62.5 billion annually.

It's also proven that many countries around the world have successfully transitioned waste pickers into formal recycling jobs, providing models on how to ensure occupational protection. This shows another opportunity for stakeholders to consider the aspect of gender dynamics upon addressing the problem of e-waste management.

The progress made by EwasteRJ didn't go unnoticed by the government of Indonesia. Joko Widodo signed the legislation, Presidential Decree 27 in 2020, on June 8th, 2020.

During the advocacy process they went through, the Ministry of Environment and Forestry responded openly and appreciated the initiative. October 14 2021, they officially named it National E-Waste Day.

Grassroots movement can be an efficient bottom-up solution to the regulatory gap that existed prior, as proven in e-waste management advocacy in Indonesia and integrating women in leadership roles might be the best way to proceed.

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CLIMATE AND DEFORESTATION

Its impact on Gender Equality

This writing aims to remind us about the gender dimensions in the context of climate change, deforestation, and the importance to mainstream gender sensitivity into climate change programs at the local level. Specifically, to take into account: the difference in adaptive capacity between men and women in the face of climate change impacts, both in the rural and urban areas; the share roles and responsibilities in response to those impacts; gender equality in climate change adaptation at the local level. This writing uses data from Siak Regency, Indonesia to illustrate the link between climate change and deforestation in Riau Province.

The forest is an ecosystem that holds an important role in maintaining the climate's stability while serving as a habitat for a majority of the world's biodiversity. Indonesia has one of the world's largest tropical peatlands with a total area of approximately 21-22 million hectares (1.6 times larger than Java Island). Tropical peatlands are capable of saving carbon 20 times more compared to normal tropical forests. This is why Indonesian forests greatly influence the world's climate.

In 2000, Indonesia had 161 million hectares of forest cover, and approximately 50 to 60 million Indonesians were directly dependent on the forest. Data records that the forestry sector contributes USD 14 million or 1.7% of Indonesia's Gross Domestic Product (GDP).

How the forest situation does looks like more than 20 years later? It said that Indonesia lost 115,459 hectares (285,300 acres) of forest cover, an area the size of Los Angeles. A situation that we should cautious on the real size of deforestation. As an illustration, in 2015, Women Research Institute and World Resource Institute through a program call Global Forest Watch, tracks the changes to forest covers and fire locations in Riau province. In one of the regency, Siak Regency has shown that this regency loses a minimum of 25,957 hectares of forest covers each year. In total, during the period of 1 January 2013 -1 December 2015, a number of 519 fire alerts recorded in Siak Regency. Siak is one of the top five regencies with the largest numbers of fire alerts in Riau Province. Climate change is the greatest threat faced by humans because its impact endangers global ecological safety, survival, and development of human society. Climate change is having already unprecedented impacts on people's lives and livelihoods in many countries in general and in Indonesia in particular, notwithstanding the country's targeted efforts to mitigate climate change. Weather extremes and their unpredictability, are already severely affecting rural and urban communities in many countries, including Indonesia. Climate variability adds further pressure, with the combination of forest cover loss and forest fire will reduced water storage, the intensity of extreme climate events will more frequently (such as drought or floods)

happen, and declining agricultural productivity. The individual's vulnerability to climate change will depend on their adaptive capacity. Compared to men, women are becoming more vulnerable because they have more difficulties to access and control resources. This condition shows that climate change tends to aggravate women's already precarious situation. Gender inequality, in fact, would be a new problem for women who have become the victims of climate change and forest fire. Gender equality has become a global issue in the face of environmental change including those caused by climate change impact. Many studies conducted on gender and climate change with results that show women are more sensitive to climate change impacts in certain conditions. Most women in developing countries live in poverty, have no ownership of land and resources, as well as have less control over production and income. Chant argued that mostly female-headed households are living in poverty and this condition affects their differences of susceptibility from women with the male-headed household. The female-headed household has to endure family living costs while they have a problem of financial and assets limitations; on the other hand, women with male-headed household have less access to and control over resources or assets in the household. Incorporating gender issues into climate change vulnerability and adaptive capacity assessment is palpable to understand the impacts of climate change on different genders because it needs to take into account in the formulation of climate change adaptation (Perez et al., 2015).

The gender-specific differences in adaptive capacity must be acknowledged and considered in the design and implementation of climate change program..

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TIKAD WOMEN'S INVESTMENT PROJECT

Turkish Businesswomen's Association (TIKAD) was founded in 2004 by a group of influential businesswomen managing vast capital. It implemented many projects aimed at strengthening women's entrepreneurship. One of them is named the women's investment project "TIKAD Investment" described below as a good practice. Women's economic participation and their ownership and control of productive assets speed up development, helps overcome poverty, reduce inequalities, improve children's school attendance and break the cycle of poverty. However, they need access to the full range of credit, banking and financial services and facilities essential to more fully develop their assets and their businesses.

Taking this fact into account, TIKAD established a women-oriented investment platform to give women entrepreneurs the support they need. "TIKAD Investment" is a social enterprise established in 2019, in order to support women entrepreneurs, strengthen women's enterprises that have growth potential, and increase the participation of women in the economy and the added value they provide to the country's economy.

Members of The Turkish Businesswomen Association, of each whom has been successful in their field and achieved big capital already in their own businesses, created an investment fund, which has the target of creating a leverage effect for women entrepreneurs.

These entrepreneurs have established their enterprises in the fields of technology and various other sectors.

They have grown their enterprises to a certain level and are in need of support for growth, and enlarging their volumes. Members of TIKAD share their experience, knowledge and their own networks with them. So, these women entrepreneurs funded by "TIKAD Investment" have a stable environment within the market place. TIKAD Investment create a better market for their products.

The summary of our investment model is as follows : 2 percent of the shares will be purchased in the enterprise to be invested in. All opportunities are aimed at stimulating the growth of the business and increase its profits over a period of five years. After that, the shares of the company will be sold or transferred to the new owner. Funds will be provided to the new female entrepreneurs out of the income from that sale. It could be described as a self-growth structure that increases its own value and a powerful platform for the future growth potential of women's companies.

Application criteria in order to qualify to TIKAD Investment are as follows:

- Enterprises whose majority shares should be represented by a woman
- Enterprises whose turnover has exceeded 5 million TL (Turkish Lira)

- Enterprises whose track record show invoiced sales as well as traceable proof of money received for sales made:
- Enterprises that operate in any sector with highlighted characteristics such as high-quality products that offer added value, sustainable, eco-friendly production, methods and exhibit growth potential.

I would like to introduce two of the women entrepreneurs invested in.

Two Companies Invested:

1-) SBS Ink: It produces and presents to the consumer innovative value-added food, food supplement, and cosmetic products that involve propolis and natural bee products. Ms. Asli Samanci currently serves as General Manager and Co-Founder of SBS Ink. and sells her products worldwide under the brand BEE&YOU. It introduced a unique business model called “Contracted Beekeeping” to secure a sustainable supply of high-quality bee products, while working with exclusively contracted beekeepers who only produce for BEE&YOU with good beekeeping practices.

This model allows the brand to care for the society of its beekeepers and their families, as well as trace the quality and origin of its products from the hive to the table while helping to keep the planet green. The formulas of all products are developed in BEE&YOU's Research and Development (R&D) center and are 100% natural and protected under patents.

With the investment support from “TIKAD Investment” in 2019, production and storage area of BEE&YOU has expanded from 1000

storage area of BEE&YOU has expanded from 1000 m² to 4000 m² and staff has increased from 90 to 190 people, taking confident steps towards branding domestically. The initiative to enhance sales channels and marketing activities were taken both domestically and in the United States to increase BEE&YOU's market share. BEE&YOU is taking confident steps towards making Anatolian propolis a global brand by exporting its products to 30 different countries.

Today, BEE&YOU is a "global" company with 5,000 beekeepers and 550,000 beehives, exporting to 30 countries. BEE&YOU also boasts a 115,000-square-meter facility, making it the only patented and award-winning propolis producer in the United States and the largest propolis production and R&D center in Europe.

2-) OPTIYOL Ink: Optiyol Ink. is a logistics technology firm founded by Ms Tuba Gozbası with a team of operations researchers to tackle real-life planning challenges. Optiyol's route optimization software reduces transportation costs and improves visibility for logistics, e-commerce, CPG, F&B, manufacturing and retail companies in their last-mile and long-haul operations. Compared to traditional methods, Optiyol reduces fuel costs by 15-25% and fleet size by 5-10%, while also improving on-time delivery rates by 20-30%.

Optiyol solutions are used to optimize and track over 160 distribution operations in different geographies with unique challenges.

TIKAD Investment has backed Optiyol Ink. With the investment support from “TIKAD Investment” the company has customers and proof-of-concept studies in more than 10 countries. Some of Optiyol's customers are MediaMarkt, Kraft Heinz, Barilla, Ferrero, Metro Cash&Carry, Diageo, and Unilever. It also work on proof-of concept studies with ArcBest, APL Logistics, FedEx in the US and DHL in Poland. Now, It has an ARR of \$1.3M and a potential of \$5.3M including our pipeline. It will reach 1000 operations by the end of this year and exceed 10,000 operations by 2025. Optiyol Ink.

It was selected to 2022 Cohort of 1871 Supply Chain Innovation Lab and Fuel Accelerator which was funded by Walton Foundation for AI/ML startups. It won the MediaMarkt Startup Challenge in 2021 and now working with them in Turkey operations for omnichannel pickup & delivery route optimization. Optiyol Ink. was selected as one of top 50 out of 600 clean mobility startups in European Startup Prize for Mobility. TIKAD Investment continues its activities to support women entrepreneurs and to create sources for the women.



Ms. Nilufer Bulut
President of TIKAD & W20 Delegate -Turkey

SKILL DEVELOPMENT & EDUCATION

GLOBAL & INDIA SCENARIO

Background:

Global megatrends such as the rising role of technology, climate change, demographic shifts, urbanization, and the globalization of value chains are changing the nature of work and skills demands. To succeed in the 21st-century labor market, one needs a comprehensive skill set composed of:

Cognitive skills, which encompass the ability to understand complex ideas, adapt effectively to the environment, learn from experience, and reason. Foundational literacy and numeracy as well as creativity, critical thinking, and problem-solving are cognitive skills. Socio-emotional skills, describe the ability to navigate interpersonal and social situations effectively and include leadership, teamwork, self-control, and grit. Technical skills, which refer to the acquired knowledge, expertise, and interactions needed to perform a specific task, including the mastery of required materials, tools, or technologies.

Digital skills, which are cross-cutting and draw on all of the above skills, describe the ability to access, manage, understand, integrate, communicate, evaluate, and create information safely and appropriately. The development of skills can contribute to structural transformation and economic growth by enhancing employability and labor productivity and helping countries to become more competitive.

Investment in a high-quality workforce can create a virtuous cycle, where relevant and quality skills enable productivity growth and foreign direct investment, which result in more and better jobs for the current workforce and more public and private investment in the education and training system. This, in turn, increases the employability and productivity for both the current and future workforce. Yet, most countries continue to struggle in delivering on the promise of skills development. There are huge gaps in basic literacy and numeracy of working-age populations, as 750 million people aged 15+ (or 18 percent of the global population) report being unable to read and write, with estimates being nearly twice as large if literacy is measured through direct assessments. Large-scale international assessments of adult skills generally point to skills mismatches as well as large variation in the returns to education across fields of study, institutions, and population groups. Employers in many developing countries report that a lack of skilled workers is a major and increasing bottleneck for their operations, affecting their capacity to innovate.

Skill Development Scenario and Global Level:

The gulf between the world of learning and the world of work can be wide. The former is often classroom-based and academic, while the latter is dominated by the practical demands of production processes, deadlines and workplace organization.

Change happens fast in the world of work, driven by innovation and by developments in technology and markets. Keeping up with this pace of change is a continuing challenge for learning institutions. The active participation of employers' and workers' representatives in vocational education and training institutions is essential to bridging this gulf. Crossing the gulf can be particularly challenging for women, people with disabilities, communities in remote rural areas and others without access to good-quality education.

While most countries have seen an unprecedented expansion of their education and skill base over the past decades, there is a persistent gap between the kind of knowledge and skills that are most in demand in the workplace and those that education and training systems continue to provide.

The ease with which young women and men enter the labour market is a good indication of how relevant their skills training has been. Assessing the continued relevance and quality of training institutions and programmes, relative to their cost, is a challenge. Tools and methods, including international comparisons, require further development. Most importantly, skills by themselves do not automatically lead to more and better jobs.

Skills policies must be part of a broad set of policies that are conducive to high rates of growth and investment, including investment in basic education, health care

and physical infrastructure, strong growth in good-quality employment, and respect for workers' rights.

Skill Development Scenario in India

India is fast developing country. From primary sector of agriculture, we are moving to secondary sector of manufacturing, construction and also tertiary sector of trade, transport and finance. India's workforce is second largest in the world after China. Over 65% of India's large population is below 35 years of age. Working age group of 15-59 years is increasing steadily. India has the advantage of productive workforce over the world. Increasing population was earlier drawback but now the same has turned to be an asset of the nation. Government has realized that labour workforce is not skilled.

To contribute to the growth of economy, we need to have skilled workforce which can be available by vocational education and training system. Skilled workers increase the efficiency and flexibility of the labor market and can be more easily absorbed into the economy. Such skills capital can help to remain competitive and achieve sustainable growth.

Coordinated Action On Skill Development

In 2008 Government created three-tier institutional structure consisting of

- (i) PM's National Council
- (ii) National Skill Development Coordination Board (NSDCB),

(iii) National Skill Development Corporation (NSDC). PM's National Council makes policies gives advice and direction, NSDCB coordinates the skill development efforts of various Central Ministries/Departments and States. Whereas NSDC prepares the National Skill Development Policy (NSDP).

Skill Development Initiatives

This provides trained workers who can be adjusted dynamically to the changing demands of employment and technologies.

A. National Council for Vocational Training:

(NCVT) It will be strengthened and re-engineered with a broader mandate and representation. The main functions include:

a) Design, development and maintenance of National Vocational Qualification Framework (NVQF) for Quality control mechanism.

b) Labour market information system and dissemination of information.

c) Monitoring and evaluation on the effectiveness and efficiency of national skill development efforts through appropriate reporting and communication mechanism.

B. Initiatives of Ministry of Rural Development

The Ministry of Rural Development has launched schemes that aims at empowering young people from the poor and weaker sections of the society through schemes like "Special Projects for Placement Linked Skill Development of Rural BPL youth under SwarnaJayanti Gram Swarozgar Yojana (SGSY-SP) with an

objective of ensuring time bound training aimed of BPL families above the poverty line through placement services. Also Rural Development and Self Employment Training Institutes (RUDSETI) were launched with an objective of setting up a dedicated Skills development infrastructure in each district in the country aimed.

C. Ministry of Urban Development and Poverty Alleviation

The Ministry of Urban Development and Poverty Alleviation had launched the Swarna Jayanti Shahari ROZGAR Yojana (SJSRY) in 1997 to address the Skill development issues of the urban poor.

It had been comprehensively revamped in view of addressing the drawbacks observed in implementation.

The revised guidelines had come into effect from 1.4.2009 with three key objectives as under: Gainful employment to the urban unemployed or underemployed poor; Supporting skill development and training to urban poor to undertake self-employment; Empowering the community to tackle the issues of urban poverty.

D. Social Partners in Skill Development:

Partnerships will be consciously promoted between Government, industry, trade unions, local governments, civil society institutions and all skill providers. It includes training providers, professional societies, Self Help Groups, Cooperatives and NGOs/civil society institutions.

Creation of an institutional mechanism and regular consultation with stake holders will form the corner stone of Skill Development Initiative.

E. Industry Initiatives

The private sector has been taking various initiatives on its own and in collaboration with the government and international entities, to upgrade in-house training facilities and also to provide training to potential employees to make them job ready. Many large corporations like Larsen & Toubro, Bharti Group, Hero Group, Maruti, ITC, Infrastructure Leasing & Finance Services Ltd. Etc. have established world class training programs.

F. National Skill Development Policy

The policy is aimed at empowering workers to get employment, to promote inclusive national growth and to increase competitiveness. The policy covers following:

- a. Institution-based skill development.
 - b. Learning initiatives of sectoral skill development.
 - c. Formal and informal apprenticeships and other types of training by enterprises.
 - d. Training for self employment/entrepreneurial development and adult learning,
 - f. E-learning, web-based learning and distance learning
- G. Modular Employable Skills (MES) Scheme

The Ministry of Labour and Employment undertook the development of a new strategic framework for skill development for early school leavers and existing

workers, especially in the unorganised sector. Skill levels of persons already employed can also be tested and certified under this scheme, i.e., certification of prior/experiential learning. Eg. Vocational Training Providers (VTP).

G. Upgradation of Existing Institutions

Upgradation of 500 Government it is. Of which, 2100 domestically funded and 400 World Bank assisted initiatives.

- Upgradation of 1,396 Government ITIs through Public Partnership (PPP).
- Establishment of 1,500 new ITIs through the DGET.
- Establishment of 50,000 Skill Development Centres through the DGET.

H. Other Ministeries/Departments

Apart from the initiatives mentioned earlier and initiatives of the Ministry of Labour and Employment and DGET, about 17 Ministries of the Government of India are also engaged in skill development activities. These include the following ministries/department:

Ministry of Textiles, Ministry of Rural Development, Ministry of Human Resource Development, Ministry of Urban Development and Poverty Alleviation.

Key issues and strategies for skill development in post covid world:

The COVID-19 pandemic has brought the pre-crisis vision of equitable, relevant, and quality skills development into sharper relief, adding unforeseen urgency to the calls for reform and highlighting the huge costs of inaction. The key issues countries need to tackle for skills development are:

1. Access and completion:

Across the world, investments in education and skills development - from preschool through post-secondary education to vocational training - have high returns. The wage penalty for low literacy is nine percentage points in Colombia, Georgia and Ukraine, and 19 percentage points in Ghana. And the opposite is also true: in Brazil, graduates of vocational programs earn wages about 10 percent higher than those with a general secondary school education. Still, provision of equitable access is a challenge in many low-income and middle-income countries.

Furthermore, many students who manage to enroll in education or training programs do not complete their studies and miss out on obtaining formal qualifications, which can dramatically reduce the return on the educational investments in terms of lifetime earning potential.

2. Quality:

Many young people attend schools without acquiring basic literacy skills, leaving them unable to compete in the job market. For those who access technical and vocational training at secondary and post-secondary levels, returns can vary substantially by specialization and institution.

In particular, technical and vocational training (TVET) systems in many countries face challenges related to quality assurance, resulting in perceptions of the vocational track being a second-best option compared to general secondary or tertiary education.

3. Relevance:

Technical and vocational education and training —which can last anywhere from six months to three years— can give young people, especially women, the skills to compete for better paying jobs. Nevertheless, more needs to be done in terms of engaging local employers to ensure that the curriculum and delivery of these programs responds to labor market needs.

4. Efficiency:

Challenges related to governance, financing, and quality assurance also impact the efficiency of skills development programs.

The resulting unnecessarily high costs can limit opportunities for disadvantaged youth and adults to access these programs.

Proposed priorities and expected outcomes:

The G20 Presidency provides India the right platform to showcase the initiatives taken towards skilling India. India has become an example for other countries for its proactive initiative towards skill development of youths in addition to regular curriculum to bridge the gap of unemployment.

This initiative will empower the youths of the country with adequate skill sets, that will enable their employment in relevant sectors and also improve productivity.

Way forward under India's G20 Presidency

Under India's G20 Presidency, Sri Sri University will host one G20 EMPOWER meeting:

Roundtable with Industry experts and academia on "Tools and methods essentials for skill development among youths" in April 2023.

The policy recommendation will cover the key areas such as;

- a. Strategies to improve active participation of employers'/industries' representatives in vocational education and training institutions.
- b. Design, development and maintenance of National Vocational Qualification Framework (NVQF) for Quality control mechanism.
- c. Gaps between knowledge and skills that are most in demand in the workplace and those that education and training systems continue to provide.

- <https://www.worldbank.org/en/topic/skillsdevelopment>
- <http://oldtm.lbp.world/SeminarPdf/181.pdf>
- <https://www.oecd.org/g20/summits/toronto/G20-Skills-Strategy.pdf>
- https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_534328.pdf



Sri Sri University

ENTREPRENEURSHIP FOCUSED ON WOMEN

SMES AND STARTUPS

GLOBAL & INDIA SCENARIO

Background:

The increasing presence of women as entrepreneurs has led to significant business and economic growth in the country. Women-owned business enterprises are playing a prominent role in society by generating employment opportunities in the country, bringing in demographic shifts and inspiring the next generation of women founders. Entrepreneurship is a challenge, and even more so if you are a woman. Despite their efforts and expertise, female entrepreneurs often struggle a lot more than their male counterparts to make it big and get recognized within the business community. Out of 100 entrepreneurs in India, only 7 are female, says the Mastercard Index of Women Entrepreneurs. As per the Google-Bain report, only 20% of businesses in the country are owned by women, while the 2021 report by the World Economic Forum also shows a massive gender gap of 72% in India's labor market. Some of the common challenges and problems faced by women entrepreneur are fewer sectors are Women friendly, Lack of Social and Institutional Support, Poor Funding Prospects, Lack of Access to Professional Networks, Pressure to Stick to Traditional Gender Roles, Lack of an Entrepreneurial Environment, Limited Mobility, Lack of Education, Low Risk-Bearing Ability, Balancing Responsibilities between Family & Business, Stiff Competition, Limited Industry Knowledge, Missing Role Models, Social Construct and Safety Concerns.

Trends in women led enterprises at global level:

Women tend to be somewhat less active globally than men when it comes to startup activity (on average, 10.4% of women surveyed versus 13.6% of men).

In other words, women represent two out of every five early-stage entrepreneurs that are active globally. Also noteworthy are some other sometimes counter-intuitive findings:

- Globally, women represent about one in three high-growth entrepreneurs and one in three innovation entrepreneurs that are focused on national and international markets.
- Women entrepreneurs in upper–middle-income countries represent some of the most innovative, high-growth entrepreneurs globally, and are at parity with men with regard to international market focus.
- As a result of the COVID-19 pandemic, women experienced similar declines to men in entrepreneurial intentions (to start a business) but sharper declines in startup rates in 2020. However, this was not the case in upper–middle-income countries, where both startup intentions and rates for women actually rose, by 4% and 11%, respectively, from 2019 to 2021.
- Overall, business exit rates for women rose from 2.9% to 3.6% over the two-year pandemic period, in contrast to the higher rates for men (3.5% to 4.4%).

- Overall, business exit rates for women rose from 2.9% to 3.6% over the two-year pandemic period, in contrast to the higher rates for men (3.5% to 4.4%). Women in upper–middle-income countries showed the largest pandemic impact on business exit with a 74% increase from 2019 to 2021, compared to only 34% for men.

Women entrepreneurs in Indian perspectives:

India has 13.5–15.7 million women-owned enterprises, representing 20% of all enterprises. While large in absolute numbers, these are overwhelmingly comprised of single person enterprises, which provide direct employment for an estimated 22 to 27 million people. Further, a number of enterprises reported as women-owned are not in fact controlled or run by women. A combination of financial and administrative reasons leads to women being “on paper” owners with little role to play. Benchmarks from high performing countries and Indian states provide a good yardstick for India to accelerate overall female entrepreneurship.

Accelerating quantity and quality of entrepreneurship towards such benchmarks can create over 30 million women-owned enterprises, of which 40% can be more than self-employment. This can generate potentially transformational employment in India, of 150–170 million jobs, which is more than 25% of the new jobs required for the entire working age population until 2030.

Achieving this visionary but realistic goal requires understanding the barriers facing the various types of women entrepreneurs across the landscape in India. Specifically, we see six distinct segments of entrepreneurs, which exhibit differing characteristics based on whether they are scaled, small or solo; urban or rural; engaged in agriculture or outside.

An in-depth understanding of these segments has been crucial for us to gain true insight in to motivations, advocacy, constraints, and most importantly, the solutions to accelerate entrepreneurship for women in India. For instance, while access to finance impacts nearly every entrepreneur, it manifests in the form of disparity in the investor ecosystem for the scalers, but lack of information and absence of tailored products, for rural and urban solopreneurs.

Similarly, scalers face an unfair disadvantage due to exclusion from networks, especially informal ones, but for urban solopreneurs, it is about not having had the opportunity to be part of a network of any sort. Rural agri-preneurs is a distinct segment, which is here to stay, and can be a critical catalyst of the modernisation of agriculture and the rural ecosystem. All segments of entrepreneurs, as well as non-entrepreneurs, face severely inhibiting cultural constraints. These manifest in the form of denial of the social permission to work and gender biases that persists widely.

Opportunity areas to unlock the potential of Women and Entrepreneurship:

There are four opportunity areas to unlock the potential of women and entrepreneurship:

1. Level the playing field for the high-impact, employment-creating entrepreneurs.
2. Enable the willing middle—the ambitious solopreneurs and small business owners—to scale and become high-impact entrepreneurs.
3. Expand the funnel to get more women to start enterprises.
4. Build, strengthen and scale productive rural agripreneurs.

Categories of Women Entrepreneurs:

Women entrepreneurs can be broadly categorized into five categories:

- 1) Affluent entrepreneurs – These are daughters and wives of wealthy businessmen. These women have the financial aid and the necessary resources to start a new enterprise and take business risks.
- 2) Pull factors – These are educated women living in urban areas with or without work experience who take the risk of a new enterprise with the help of financial institutions and commercial banks. These women take up a new business as a challenge in order to be financially independent.
- 3) Push factors – These women take up some business activity in order to overcome financial difficulties. Generally widows and

single women manage an existing family business or develop a new business due to difficult family situations.

4) Rural entrepreneurs – These women belong to rural areas and choose a business suiting their resources and knowledge. Business carried out involves low investment, minimum risk and does not require any special skills.

5) Self-employed entrepreneurs – They are uneducated women who fall below the poverty line. They choose tiny and small enterprise which are convenient to manage and adequate for the sustenance of her family.

Challenges faced by women entrepreneurs:

Female entrepreneurs face many barriers especially when starting a new venture or aiming for further growth. Raising capital is the primary barrier that female entrepreneurs face since age factor. Start up financing; credit and cash flow management in the early stages of business are the biggest obstacles. Most funding is usually through family loans, personal savings, credit cards and home equity loans. Lack of support network is another well-known barrier that female entrepreneurs must overcome.

Their firms struggle against a male-dominated working environment. It becomes very vital for women to create their own sub-networks that will be advantageous in a gender based community.

Their capability to build strong and hard-wearing relationships will help grow and maintain these networks.

Lack of access to professional networks, pressure to stick to traditional gender roles, lack of women-entrepreneurial ecosystem, limited mobility, lack of education, low risk-bearing ability, balancing responsibilities between family & business, stiff competition, limited industry knowledge, missing role models, social construct and safety concerns.

Proposed priorities and expected outcomes:

The G20 Presidency provides India the right platform to showcase its efforts towards the social upliftment of women.

However, it is the most opportune time to also bring to the centre stage some recent measures to empower women entrepreneurs, which have been undertaken in silos and not received the deserved attention.

These measures, taken in line with global best practices, have the power to change the enabling ecosystem for women-led development.

Way forward towards India's Presidency:

Under India's G20 Presidency, Sri Sri University will host two G20 EMPOWER meetings:

Roundtable with women entrepreneurs on "How to make the India startup ecosystem equitable for women" in March 2023
Mentorship sessions for women founders of startups in April 2023. The policy recommendation will cover the key areas such as;

- a. How to ease the access of mentoring support for women entrepreneurs
- b. Investor readiness and proactive investment linkage for women entrepreneurs
- c. Additional inputs towards existing Govt. policy, to become more friendly towards women entrepreneurs in the Post-Covid era.
- d. Innovative networking platform for female entrepreneurs.

- Powering the economy with Her, Women Entrepreneurship in India, A report by Google, Bain & Company
- Global Entrepreneurship Monitor 2021/22 Women's Entrepreneurship Report – From Crisis to Opportunity
- Business News Daily article on Challenges Faced by Women Entrepreneurs and Some of the Most Successful Women to Follow on 23rd Jan 2023
- Indian Brand Equity Foundation Report on Women Entrepreneurs Shaping the Future of India



Sri Sri University

WOMEN AS PIVOTAL ACTORS IN ACHIEVING THE SUSTAINABLE DEVELOPMENT GOALS

The United Nations interconnected Sustainable Development Goals (SDGs) were created with the intent of ensuring a better, more sustainable future for everybody by 2030. The active involvement of women is a crucial component of achieving these goals. Women's participation, empowerment, and gender equality are not simply important for SDG 5; they are also integral to the achievement of the other 16 SDGs and help society advance toward a more sustainable future. The economic contribution of women supports the goal of ending poverty (SDG 1). Women's work in the informal sector and unpaid care work is essential to economies all around the world but is frequently ignored. Accelerating the reduction of poverty can be done through encouraging and recognising women's economic empowerment. Women are crucial to attaining the SDG 2 goal of ending hunger. Food security depends on the role that women play in food production, yet their productivity is sometimes hampered by the fact that they frequently do not have equal access to resources. It is possible to lessen hunger by addressing these imbalances.

Women play equally important responsibilities in promoting health and well-being (SDGs 3 and 4) and high-quality education. Women have a big part in improving health and wellbeing within families and communities since they are mothers and primary caretakers in many countries.

Health outcomes in areas like diet, hygiene, and disease prevention are influenced by their practises and understanding. They make up a large component of the healthcare workforce as healthcare providers, especially in professions like nursing and midwifery. Their abilities and commitment are essential for delivering healthcare and caring for patients.

Additionally, women's education has a multiplicative effect. A well-educated woman is more likely to educate her children, resulting in generational gains in literacy, practical knowledge, and general quality of life. To accomplish this goal, women are essential. Women have a tremendous impact on learning outcomes and the development of values and skills in both children and adults as educators, whether formally or informally. Girls' education as students is crucial for advancing a number of other SDGs, such as those pertaining to health, poverty, and gender equality, as well as for their empowerment and economic independence.

Ending all forms of violence, discrimination, and harmful practises against women and girls is the goal of SDG 5, or gender equality. In all aspects of life, including leadership, economic empowerment, and access to health and education, it works to ensure that women have full involvement and equal opportunity.

Women contributions to ensuring access to water and sanitation (SDG 6) are frequently overlooked. Since they are typically in charge of collecting water, their participation in the administration of water and sanitation results in better infrastructure and services. (SDG) 7 is all about ensuring access to affordable, reliable, sustainable, and modern energy.

Women play a variety of responsibilities in the community, including those of consumers, decision-makers, entrepreneurs, community educators, and policymakers. They also participate in the energy sector. It is crucial to remember that women continue to encounter numerous obstacles in these areas, hence SDG 7 achievement and SDG 5 promotion activities must coexist.

Women's participation in economic growth and decent labour (SDG 8) helps to create sustainable economies, and their involvement in industry and innovation (SDG 9) can help create resilient infrastructure. SDG 8 cannot be achieved without more women participating in the workforce, especially in leadership positions.

Societies can support economic growth and guarantee equitable and advantageous working conditions by addressing gender inequities in the workforce. SDG 9 can be achieved by encouraging the participation of women in STEM fields (science, technology, engineering, and mathematics).

Women opinions are essential to decreasing inequality (SDG 10) and creating sustainable cities and communities (SDG 11). Reduced Inequalities seeks to eliminate income gaps and advance social, economic, and political equality for all people, regardless of their age, gender, capacity to work, race, ethnicity, or any other status. To accomplish this inclusivity and equality, women must actively participate in decision-making. Women participation in decision-making processes fosters inclusion and guarantees that societies meet the demands of all its constituents.

Their involvement in community management and urban planning helps to create inclusive, secure, resilient, and sustainable cities. SDG 12 promotes ethical production and consumption. Women have a critical role in promoting sustainable practises, decreasing waste, and changing patterns of consumption and production towards more environmentally friendly options because they are important consumers and household influences.

SDG 13's climate action demands that women participate. Women frequently manage family resources, act as primary carers, and make decisions that have an impact on the carbon footprints of their families. Women are typically in charge of gathering food and water, they are frequently the ones most impacted by climate change, particularly in poor nations.

As a result, their knowledge and expertise are crucial for developing inclusive and successful climate change adaptation plans. Women frequently play a big part in agriculture in many communities and are the guardians of seed diversity, which is important for climate resilience. They may greatly aid in attempts to mitigate climate change by choosing more environmentally friendly options about things like energy use, food preparation, and trash disposal. Given their responsibilities in fisheries and forest management, women significantly contribute to conservation efforts and sustainable land use to protect life below the water (SDG 14) and on land (SDG 15).

The emphasis of SDG 14—Life Below Water—is on protecting and managing marine resources sustainably. Women are crucial to fisheries management and sustainable marine management because of their significant responsibilities in marine conservation. Terrestrial ecosystems are intended to be preserved, restored, and used sustainably according to SDG 15: Life on Land. Since they are frequently in charge of gathering resources like food and wood, women are in a unique position to understand biodiversity and sustainable land management techniques.

SDG 16 must be achieved with the active engagement of women. Their involvement in peacekeeping and peacebuilding activities contributes to the creation of more comprehensive and durable conflict resolution techniques.

During talks and dispute resolution, women typically give social and humanitarian issues top priority, which can lead to a more durable peace. Women can contribute a range of perspectives and concepts to these processes.

In terms of justice, expanding women's access to legal protections and services is essential to furthering gender equality and human rights. Additionally, their representation in judicial bodies can enhance both the appearance and the reality of justice that is administered fairly.

Women involvement in peace processes and justice institutions benefits peace, justice, and strong institutions (SDG 16), resulting in the development of more peaceful, inclusive communities. Women may drive cooperation across sectors and borders to realise the SDGs (SDG 17), ensuring that development efforts are inclusive and equitable.

The ability of women to create and maintain collaborations across diverse sectors is crucial to attaining SDG 17 in the context of women's involvement.

Women can play a crucial role in encouraging collaborations between the public and commercial sectors, as well as between individuals and civil society, which could result in more inclusive and all-encompassing solutions to the problems the SDGs aim to address.

In conclusion, women are crucial to achieving the SDGs. They offer unique insights and solutions regardless of whether they are acting in the roles of leaders, decision-makers, carers, educators, or entrepreneurs. Because of this, the sustainability agenda as a whole and beyond the problem of gender equality depend on their empowerment (SDG 5). Women may also contribute to promoting sustainable behaviours, changing attitudes, and raising knowledge about climate change through their responsibilities as educators in their homes and communities.

Women can advocate for and help develop effective climate policies when they are involved in leadership positions and decision-making processes at all levels.

Structural barriers that impede women from fully engaging in all facets of life must be removed to reach 2030. By doing this, we can build a more sustainable, just, and inclusive world.



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Participatory Research

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CLIMATE CHANGE AND THE BLUE ECONOMY: WOMEN IN COASTAL COMMUNITIES

Introduction:

As gender equality is both a fundamental principle of democracy and essential to the process of sustainable development there can be no genuine sustainable human development without gender equality, This holds true for the role of women in the blue economy and for the purposes of this brief, particularly those who live in rural coastal areas affected by climate change (UN Women, 2018).

The idea of the 'blue economy' was conceived at the UN Conference on Sustainable Development held in Rio de Janeiro in June 2012 (Rio+20). It may be defined as ocean-based economic development that leads to improved human well-being and social equity, while significantly reducing risks to ecosystems and the environment.

The success of the blue economy paradigm in promoting equitable and inclusive economic growth is inextricably linked to the inclusion and participation of women in this expanding area.

A significant part of the ocean's economic value is provided by living ecosystems and depends on a clean environment and healthy ecology. Fisheries and other sectors of the blue economy dependent on living ecosystems are fundamental to food security, and support livelihoods and cultures in coastal regions.

Global changes, in the environment and climate due to human activities, and unsustainable economic and trade practices, may fundamentally undermine ocean health and jeopardise the development potential of countries building their blue economies.

The presence of women in the majority of blue economy sectors, including in fisheries and aquaculture, is mostly in traditional, low value addition activities involving low skill sets, often informal and unaccounted for. Gender discrimination in terms of wages and work conditions is pervasive (World Bank, 2020).

Though the majority of women's work is still in traditional fishing activities, they are entering into historically male dominated domains. The number of women fishing on their own and owning boats is steadily increasing in many developing countries. However, gender statistics are an understatement and do not reveal the true picture of the contribution of women in fisheries and aquaculture.

Unfortunately, available data is not sufficiently gender disaggregate and fails to capture the multidimensional nature of the activities of the fisherwomen and their contribution remains undocumented. Consequently, policies often fail to keep the gender perspective in mind (UN Women, 2020).

According to the Food and Agriculture Organisation (FAO, 2018, 2019), women account for about half of the global fisheries and aquaculture workforce, and their roles range from harvesting and processing to marketing and trading. However, women in fisheries face various challenges as they remain unrecognised and undervalued, including unequal access to resources, limited decision-making power, and marginalisation in policy development.

Local stereotypes and patriarchal traditions worsen the situation. These challenges not only affect the well-being of women but also the sustainability of fisheries, food security and coastal ecosystems (FAO, 2022). Coastal conservation and disaster risk management (DRM) are important cross-cutting aspects of the blue economy, which refers to the sustainable use of ocean resources for economic growth, improved livelihoods, and environmental protection.

Women play a crucial role in coastal conservation and DRM in all sectors of the blue economy. A notable example of women's leadership in coastal conservation is the "Lima Call for Action" by the International Union for Conservation of Nature (IUCN) in 2016.

The Call highlights the critical contributions of women to marine conservation and calls for their increased participation in decision-making processes and leadership roles.

Women in low-income rural coastal communities are at higher risk of rising sea levels, flooding and other extreme weather events, as they are more likely to live in vulnerable areas and have limited access to resources and infrastructure as a result of poverty and social inequality. Pregnant women also face specific health risks related to exposure to environmental pollutants, such as mercury from fish consumption. To address these challenges, efforts are underway to promote gender-responsive coastal planning and zoning. This includes increasing women's participation in decision-making processes and planning, recognising and supporting women's contributions to coastal livelihoods, and addressing gender-specific vulnerabilities to environmental degradation and climate change. Conservation must go hand in hand with social and gender justice. By prioritising gender equity, equality and inclusion in coastal economies can create more resilient and sustainable communities for all.

Policy Recommendations:

1. Develop gender-responsive policies and programmes:
Policymakers at all levels should develop gender-responsive policies and programmes that recognise and address the specific needs and challenges faced by women living in coastal areas and engaging in various stages of fisheries and aquaculture.

This includes developing targeted interventions to increase women's access to resources and markets, addressing gender-based violence and empowering women to engage in championing the Sustainable Development Goals.

2. Increase women's participation in decision-making:

Policymakers at all levels should promote women's participation in decision-making processes in fisheries and aquaculture, conservation and blue development by creating opportunities for women to engage in leadership, decision-making and planning that enhances their well-being and that of their communities.

3. Address negative social norms:

Policymakers at all levels should work to address social norms that limit women's participation in the blue economy, such as stereotypes about women's roles and responsibilities in fisheries and aquaculture and their role in coastal conservation and sustainable development.

This includes working with communities to promote gender equality and actively supporting women's participation in these sectors, such as providing incentives to engage in activities that are sustainable and reduce harm to coastal environments.

Conclusion:

Gender equality and empowerment are central to addressing crises, from food insecurity and climate change, to conflict, fragility and violence. Women's leadership can enhance long-term economic, environmental, and social outcomes, as well as governance gains (World Bank 2022). Enhancing the equality of women in the blue economy is critical to achieving sustainable and inclusive growth in these sectors. By recognising the contributions of women to blue development in areas such as fishing, aquaculture, coastal conservation, addressing gender-based violence, and promoting women's access to resources and markets, policymakers can help to create enabling environments that support women's participation and ensure that they can fully benefit from blue growth and reduce environmental risks and natural and man-made disasters.



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W20 South African delegate

RURAL WOMEN AND BIODIVERSITY

Green Skills, SDGs, Climate Change and Rural Women

After the G20 declaration of Brisbane, Australia, which was signed in 2014, subtle hope appeared for gender work. An unprecedented solution for measuring—and closing—the gender gap in our economies had been put forward. After we successfully lobbied for the establishment of the Women 20, 2015 was the time to take a step forward for gender work in the G20 countries. Since then, the W20 work has travelled eight countries, always leaving a legacy behind. The essence of the work was not only to establish a fairer world but also to achieve sustainable economic growth for the countries that close their respective gender gap by 25% by 2025.

The W20's regular communiqués propose to close the overall gender gap by recommending policies to governments for the social, financial, digital, economic and leadership inclusion of women. They cover all kinds of areas like education, knowledge bases and skill sets as well as employment, entrepreneurship, contracting (both private and public) and especially in pay gaps and rights to decent work. The COVID-19 pandemic has erased this progress and deepened inequalities. According to the International Labour Organization, socio-economic recovery remains uncertain and enhanced social protection spending will continue to be crucial. Many companies had to close due to lack of business, and we saw that in a crisis women were among the first to lose their jobs—and they may be the last to get them back.

We need to find ways to reverse this trend now. The risk of poverty, particularly among the self-employed, informal workers, women and young people has increased tremendously in many economies. The importance of social security has become more visible and valuable for all. Working models have become more important in the future of the jobs, and legal frameworks should be adopted to promote those that preserve inclusive social security schemes.

In recent years, investments in rural villages have gained momentum. These were not hobby investments but well-thought-out plans where sufficient capital was employed. And it is the women in villages play who a key role in food security, rural livelihoods and agriculture, agro-biodiversity conservation and natural resource management.

Rural women offer great potential for all our futures simply because they are the cornerstones of our food safety and environmental protection. These women are workers without pay— completely leaving aside the gender pay gap—but they are at the same time smart business partners and workers.

In rural areas, our governments need to make investments in infrastructure like building roads and transport links, utilities, irrigation systems and connectivity for internet and mobile devices.

A lack of any of these affects everyone, but we all know that any negative impact puts an additional burden on women and youth; it is estimated that 60% of chronically hungry people are women and girls. Furthermore, the impact of climate change affects everyone negatively, meaning we may have more hungry people in the world. This also means that we will all be poorer. In rural villages, women need not only access to special knowledge but also to know the goals. We need to expand their basic skill sets and knowledge bases, tell them where we strive to go as a society and explain what the aims of the Sustainable Development Goals are.

According to UN Women, if women had the same access to productive resources as men they could increase yields on their farms by 20-30%. This would raise total agricultural output in developing countries by up to 4%, which will in turn reduce the number of hungry people in the world by around at least 12-17%.

I know a rural woman who was delegated the job to take care of the cows. She told me, "At first, I looked at my husband's assignment with doubt, but he told me that I was producing more than him. Later, I was convinced that this was correct, and it is our joint income. Then I figured out that if I play music for the cows, I get even better produce". In rural villages, women need not only access to special knowledge but also to know the goals: how to plant, how to fertilise, how to raise crops and harvest.

This will boost economic output and may create chemical free, organic production, save energy, enable access to clean water and preserve environmental sustainability.

We need to expand their basic skill sets and knowledge bases, tell them where we strive to go as a society and explain what the aims of the Sustainable Development Goals are. Green jobs are defined as decent jobs that reduce consumption of energy and raw materials, limit greenhouse gas emissions, support the fight for climate change, minimise waste and pollution and protect and restore our ecosystems. But green skills are those that improve the uptake and efficiency of green jobs.

It is green skills that will help us achieve the Sustainable Development Goals, including No Poverty, Zero Hunger, Good Health and Well-being, Quality Education, Gender Equality, Clean Water and Sanitation; which will provide Decent Work and Economic Growth, Reduced Inequalities, Sustainable Communities and Responsible Consumption and Production in rural areas; leading to Climate Action, protecting Life on Land and encouraging Value Producing Partnerships.

What else can we hope for?

I propose that our governments spend the energy and the funds to build understanding and consciousness of green skills and goals for village women, developing and promoting a G20-wide green skills programme our respective economies.

We need to get our messages to all our urban, rural and governmental leaders regarding why saving water and irrigation is important;

Why we need clean water?

How optimum fertilisation and pesticide use help crops? and

Why we should try to go towards organic?

How can we be more digitally connected? and why reaching out to customers and sales are crucial?

Green investments in organic farming, agro-tourism, certification and branding processes, sustainable produce and farm-to-market food systems need to be specifically targeted.



Ms. Gülden Türktan

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WOMEN'S INDUSTRY AND ORGANIZED CRIME

Protection Policies in High-Crime Areas

There are several reasons to support women entrepreneurs, not only to create a more equitable and inclusive society, but also because they are important drivers of a country's economic growth. Encouraging women's access to entrepreneurship can lead to increased employment rates, the creation of new businesses, and innovation. Women bring unique perspectives and creative solutions to entrepreneurial challenges, promoting diversity of thought and stimulating innovation.

Gender diversity within businesses leads to greater adaptability and success in the global market. Entrepreneurship can also provide women with a sense of independence, self-confidence, and self-determination. Women entrepreneurs can become inspiring role models for others and encourage them to pursue entrepreneurial paths.

They often reinvest their earnings in the community, contributing to improving people's quality of life and addressing social challenges. Supporting female entrepreneurs means supporting the well-being and development of local communities. Therefore, it is important to incentivize and support entrepreneurs operating in difficult territories with high criminal pressure. Over time, even in the most challenging criminal contexts, women have paved their own paths and assumed different roles, including that of entrepreneurs.

While it is true that wives and daughters of criminals often have to take on leadership roles when their husbands, fathers, or brothers are arrested or die, it should be emphasized that women's daily lives are not always characterized by extreme situations. Many female entrepreneurs seek to counter organized crime by creating legal businesses and supporting the economic development of their communities. Recognizing the contribution and potential of women entrepreneurs who strive to combat organized crime is crucial. Supporting female entrepreneurship in high-crime-density areas is a powerful tool for fighting crime and developing economically depressed regions. Protection and support policies for women-owned businesses play a crucial role in this context. Some possible intervention strategies may include mapping high-crime-density areas to identify zones that require greater support based on data collected by specialized central institutions. Factors to consider include ongoing investigations and legal proceedings related to organized crime, the economic value of assets seized or confiscated in organized crime-related cases, the number of reported crimes against business entities (such as extortion, intimidation, or interference in economic activity), the number of businesses under investigation for organized crime-related offenses, the number of criminal homicides and attempted homicides, and the number of individuals reported for involvement in organized crime.

Geographical mapping should be the first step in defining intervention zones for national policies aimed at protecting female entrepreneurship, using as objective criteria as possible. One supportive policy could be facilitating access to credit. Criminal organizations often exert influence on the business world by providing capital of illicit origin without significant bureaucratic formalities, creating a bond between the productive system and the criminal world that hampers long-term economic and social development. Therefore, one form of protection for female entrepreneurship in such contexts should be financial support from the "legal" credit system, which can include state guarantees for the provided capital without excessive bureaucratic burdens. This would make resorting to "legal" credit more convenient both economically and in terms of time. Additional measures can be implemented in the form of targeted tax incentives. The state should stimulate women-owned businesses operating in high-crime-density areas to acquire assets and hire personnel through measures such as tax credits, non-repayable contributions, and long-term financing at preferential rates. In high-crime-density territories, awareness campaigns on legality would aim to strengthen the cultural foundation and awareness of the available incentives and protection tools for women entrepreneurs. To ensure security, the state should establish dedicated reporting channels for intimidating crimes against female entrepreneurs.

Facilitating the collection of reports through dedicated channels could initiate a faster judicial process and, consequently, more effective protection measures. These activities align with multiple goals of the United Nations' 2030 Agenda for Sustainable Development. They aim to achieve gender equality by ensuring equal opportunities for women leadership and participation in decision-making processes at the political, economic, and public levels (Goal 5). Furthermore, they promote economic growth, decent work, entrepreneurship, creativity, innovation, protection of labor rights, and a safe working environment (Goal 8). They also contribute to the development of quality, sustainable, and resilient infrastructure, inclusive and sustainable industrialization, and access to financial services for small-scale entrepreneurs (Goal 9). Lastly, these activities strive to reduce social, economic, and political inequalities, promote inclusivity, and ensure equal opportunities for all (Goal 10). They are also in line with the United Nations Convention against Transnational Organized Crime (UNTOC). According to Article 28 of the UNTOC, each participating country should analyze trends in organized crime within its territory, develop analytical capabilities, and monitor the effectiveness of anti-racketeering policies.

Additionally, Article 30 of the UNTOC calls for member countries to adopt measures favorable to international cooperation in combating organized crime and promoting sustainable development.

It is of fundamental importance to support and protect female entrepreneurs operating in high-density mafia contexts. These women face difficult challenges and are not intimidated by possible interference from organized crime. With pride and determination, they dedicate themselves to independent economic initiatives, often representing the cultural and traditional excellence of their territories. It is crucial to promote virtuous paths that enable female entrepreneurship free from external influences.

Similarly, women involved in activities at risk of attracting the attention of organized crime or born out of the need for investment of illicit financial resources must be protected with greater awareness and strength. These women should be able to cultivate entrepreneurial economic activities as a means of emancipation and the beginning of a journey towards freedom.

E. Somalvico/K. Petrini/C. Todaro/V. Iavarone/S.Di Traglia - Women's Industry and Organized Crime: Protection Policies in High-Crime Areas CISINT / OSSISNa - 2023



Ms. Katia Petrini

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EDUCATION AND SKILL DEVELOPMENT

Eurasian Women's Forum and Federal Projects as a Catalyst of the National Skill Development System in Russia

Education and skill development is arguably the most crucial aspect in bridging the gender gap. Closing the education gap is the key in tackling inequalities, including the payment gap between women and men. The education gap can only be effectively closed when women get fair and equal access to educational services that would be free of any forms of discrimination.

For the last few years, international cooperation of women leaders has become an integral part of the Russian policy. Giving momentum to this dialogue, Russia convened the First Eurasian Women's Forum in 2018. Since its establishment, the Forum has aimed at solving the most critical issues concerning women's rights and their potential for development. In the aftermath of the First Eurasian Women's Forum, in 2018, the Russian Government adopted the first National Strategy for Women up until 2022.

However, barriers to women's self-realization remain due to the stereotypes about the social roles of men and women (The Government of the Russian Federation, 2022). At the end of 2022, the Russian Government approved the renewed version of the National Strategy for Women until 2030. Tasks of the strategy include integration of women into the digital economy, popularization of STEM-sciences among girls at schools and promotion of female researchers (The Government of the Russian Federation, 2022).

While the share of enterprises created by women in manufacturing has already exceeded 32%, within the framework of this strategy, Russia aims to enhance multiple times the interest of women towards technical professions (The International Affairs, 2018). With the purpose to involve women in the digital economy, the Ministry of Industry and Trade of the Russian Federation implemented the project "Women in the Era of Digital Economy", which facilitated the creation of virtual infrastructure, platforms, digital services, and cloud applications for female entrepreneurs and their companies (Eurasian Women's Forum, n.d.).

In 2020, the Russian Government launched the federal level project that provides women with the opportunity to get additional professional training, retraining or skills improvement courses while being on maternity leave (The Government of the Russian Federation, 2022). It is planned that 230 000 women will be a part of this skills development program till 2024.

In 2021, the Russian Ministry of Science and Higher Education initiated an educational project "Women: Mentoring School" (The Ministry of Science and Higher Education of the Russian Federation, n.d.).

This project allows female students to receive mentoring and guidance from the most successful Russian women, working in business, creative industries and science.

The main goal is to increase young women's competitiveness on the labor market and support them in acquiring the most needed skills and knowledge. The global platform of the Eurasian Women's Forum plays one of the most important roles in promoting equal opportunities of educational and skill development. For instance, the Forum endorsed initiatives called "Girls in IT", "Program of Entrepreneurship Learning for Women" and "Young Medicine". In 2022, the members Eurasian Women's Forum initiated a number of projects with a focus on the support of female entrepreneurial initiatives.

Among the proposed projects - "Women in Private Business", "Women in Nuclear Industry", "Women on Financial Markets", "Female Cooperation in International trade" (Eurasian Women's Forum, n.d.). The purpose of the initiatives is to create a mechanism of financial, social and expert support for female entrepreneurs willing to develop their potential in these industries. Determined to deepen cooperation with the W20 engagement group, the Eurasian Women's Forum established a coordination mechanism in 2021. As a result, the initiatives proposed at the Third Eurasian Women's Forum were reflected in the recommendations to the G20 Leaders of the in 2022.

Another meaningful initiative is the 2022 "Join the IT" educational project, launched by the Russian non-profit organization "Digital Economy" (Digital Economy, n.d.).

It strives to attract more than 1 million female IT-specialists in the digital sphere up to 2024, providing women with the platform to study IT-skills. The project also aims at creating the community of women involved in the digital economy. The Russian charity program "I can" is purposed to support women in difficult life situations (I-can.pro, n.d.). It offers free professional retraining courses in six various areas and helps women to gain brand new skills for certain kinds of demanded jobs in only four months. This program has a capacity of supporting 20 000 women every year. The program offers both retraining and skill development courses for women interested in enhancing their professional knowledge. Russia has accumulated vast experience in both promoting federal initiatives and supporting private and local projects aimed at improving educational services and skill development opportunities for women and girls. Cooperation with the major international institutions, such as G20 and W20, BRICS and other groups would promote sharing good practices and implementation of global programs



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EQUALITY MOONSHOT

The world's topmost priority must be our planet's health. Humanity needs a planet to survive. If our planet slowly dies, a growing human population will increasingly fight for the diminishing supply of resources it requires to live. Further, if we allow inequities - particularly related to gender - to continue, our ability to repair our planet's health is worsened.

While our priority must be on correcting humans' negative impact on the Earth's sustainability, net zero greenhouse gas (GHG) emission commitments could be leveraged to also reduce gender inequality and help achieve the "equality moonshot."

The "equality moonshot" promotes a shared vision in which the world's resources are owned and controlled by a more balanced and representative group of its people so no one will be left behind. Today the ownership of the world's resources is majority male.

The equality moonshot strives to diversify and rebalance this ownership so at least 30% of the world's resources are owned and controlled by females. While 50% is preferred, research shows that 30% representation and participation is the minimum needed to influence decisions.

Based on the most recent IPCC Assessment, the world must unite to accelerate climate actions to limit global warming to 1.5C and women have been underutilized as transformation agents.

Goldman Sachs estimates that \$56 trillion of investment is needed to achieve the world's collective net zero GHG goals and restore our planet's health for a sustainable future. The G20 Leaders could accelerate the clean energy transition and help achieve the equality moonshot by embracing, amplifying, enabling, and supporting collective actions so females capture and benefit from at least 30% of the estimated \$56 trillion investment.

Addressing the climate crisis is tightly related to the implementation of the UN Sustainable Development Goals within Planetary Boundaries, and women and girls play a major role. Key sectors of the global economy like energy, food, and transportation are exacerbating the impact of global warming and innovative women are helping transform them. Dunamis Energy is the first woman-owned manufacturer of electric vehicle chargers and Saule Technology is developing printable photovoltaic cells to reduce the cost of solar energy.

Women are also raising awareness of a "Meta Crisis," which acknowledges that exterior crises, like climate change, are heightened by interior crises, such as the collapse of cultural, social, and public sensemaking and meaning. A renewed focus on generating meaning and purpose is needed, and research shows that women are more likely to require aligned purpose, support employee well-being, and foster inclusion than their male counterparts.

Enabling women's entrepreneurship particularly in high growth sectors like technology has multiplier effects. For example, AwakenHub is an online social enterprise that has created a global network of women-run businesses, supporters, and an Angel Investor Syndicate.

Launched during COVID lockdown, AwakenHub quickly became a lifeline for women facing unemployment and isolation, particularly in rural areas like NW Ireland.

After recruiting over 3,000 members and connecting and engaging them, AwakenHub through its SheGenerate accelerator, successfully graduated 87 women-led companies, by providing crucial support and resources.

Lastly, to build a pipeline of females for the opportunities above, STEM, digital and entrepreneurial skills need to be fostered among girls as early as possible in education systems worldwide, so future generations can counter the Meta Crisis and thrive in a fast-changing world. Initiatives like SheHeroes , NanoValbruna, and STEM4SUD bring role models to young people.



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ENABLING LIVELIHOOD FOR WOMEN THROUGH CSCS

A Digital India Programme

1. The Importance of Digitizing Businesses

Sustainable Development Goal 5 of the United Nations calls for gender equality and the empowerment of women. Within this sphere, enhancing their income is an essential facet of improving their welfare. However, in a developing country such as India with a large population, there is limited scope for creating formal jobs in the government and private sector, and informal employment carries several caveats. In this regard, self-employment emerges as a valuable avenue for improving the income generating capacity of women in developing areas.

However, in pursuing business, it is to be noted that there is often a plethora of restrictions on women in countries like India, especially in rural regions, due to patriarchal social structures, practices such as purdah, and other gender-based taboos. Even in urban areas, women need to balance household responsibilities and income generating work. Thus, women are often confined to their homes and have fewer opportunities to establish physical businesses outside their domiciles.

To address this challenge, digital technologies provide a crucial platform. Online platforms provide businesses the liberty to not only carry out production at home, but also market their produce without physical presence outside.

The Covid-19 pandemic has highlighted the relevance of the use of online platforms for business operation and contactless transactions. Correspondingly, the G20 EMPOWER 2023 focuses on women's entrepreneurship, especially through the use of digital platforms. India's G20 priorities also incorporate women-led development and digital technological upliftment. However, our analysis of the recent available NSSO enterprise survey data (2016) reveals that less than 5% of women enterprise owners use online facilities for business purposes.

Thus, the potential of the internet requires greater diffusion of internet access among self-employed women in India. However, this lacuna also presents a business opportunity. In this regard an endeavour of the Government of India under the digital India programme is worth examining.

2. The CSC-VLE Scheme and its Impacts on Women

One of the main challenges faced by this scheme in promoting gender equality and women empowerment is the level of agency that women entrepreneurs have in running their businesses.

Some women who have managed to obtain proficiency in this activity enjoy the greatest levels of freedom and empowerment. However, it is seen during our recent survey that, even in urban regions, some women continue to be reliant on male relatives to provide complete support. While this does help them to earn an income, their level of independence continues to be low. Other issues in establishing and operating CSC businesses include a lack of access to finance and low diffusion of quality internet services. Skilling also remains a major concern for many women whereby many CSC entrepreneur need proper guidance.

Enhancement of women micro-entrepreneur's credit under schemes such as the MUDRA Yojana to better reflect the financial requirements to start an online business, wider availability of computer skill training centres in rural areas, and regular computer training and support under the CSC programme, combined with increasing awareness of the benefits of the scheme could help address these challenges. Such efforts could better effect women's empowerment through digital entrepreneurship in India.



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EDUCATION AND SKILL DEVELOPMENT FIGHTING GENDER

Fighting gender stereotypes through lifelong education programs

Education is a strategic topic for gender equality. The lack of empowerment of women and girls and the high degree of social and economic exclusion of more vulnerable women at the same time represent a human rights issue and will hinder democratic development by disabling social and economic growth. Therefore, this opportunity for developing the fullest potential of women and girls will only be triggered by policies devised to overcome discrimination and stereotypes, and by investing on capabilities and opportunities for both women and girls.

To achieve those outcomes, Governments will have to act either (1) on objective obstacles to women's participation - visible barriers - through laws, regulations, social infrastructures that overcome gender pay gap, digital divide, work/life unbalance, discrimination, horizontal and vertical segregation, precariousness; and (2) on subjective and cultural obstacles - invisible barriers like prejudices and gender and professional stereotypes - through education, vocational guidance, role modelling, communication and mentoring.

Stereotypes (gender and not only) are automatic and unconscious cognitive processes (and therefore unavoidable), and derive from the principle of categorization, a way by which starting from childhood we distinguish objects (and then also people), grouping them by similarity - between them- and difference - between categories.

For this reason it is incorrect to think that we can eliminate stereotypes, while it is essential to encourage people to the awareness of their existence and their fallacy. They are in fact generic and simplified descriptions of categories of people, functional to organize expectations in advance of a single - because I know belonging to the group - and at the same time to reduce the cognitive load.

Moreover, stereotypes - and gender stereotypes in particular - are not simple descriptions - erroneous - having informative value, but starting from childhood are internalized through socialization, and become self-prescriptions of patterns of attitudes and behaviors to which to adhere, on pain of being socially sanctioned.

This concept is very important considering violence against women. From a psychological point of view, it is also known that gender-based violence simultaneously causes emotional dependence, low self-esteem, reduced autonomy, negative self-vision, and finds in these same factors elements that favor its establishment.

For this reason too, it becomes essential to promote in men and women the so-called protective factors, useful to prevent the development of violent relationships and to reduce the permanence in them: and in particular the psychological, economic and relational autonomy of both partners.

Counteracting the reproduction of gender stereotypes that exclusively prescribe communal traits (relationship, care) to women, and agentic traits (action, public space) to men, with the effect of reducing for both the free expression of self, in favor of a forced and unattainable complementarity.

This is why governments of G20 must be asked to allocate resources to combat gender stereotypes and the development of awareness in the population of gender inequalities and the distortion of reality they generate in all contexts. from education, to job roles, to the development of biased artificial intelligence systems.

The actions must be articulated in three fundamental points:

1. Lifelong Education programs
2. Programs of "training trainers"
3. Awareness-raising activities.

1. Lifelong Education programs from kindergarten to university (where dedicated courses are planned in all curricula), with tools adapted to different ages and progressive increase in learning, aimed at boys and girls.

The themes: education to rights, to equality, to the culture of respect opposed to that of possession, to financial autonomy, to care, to the proper management of relationships, education to STEM.

In parallel: a. revision of school textbooks for the elimination of gender stereotypes from study books, for all school orders;

b. civic education interventions aimed also at the correct use of social media, on content, languages, methods of relationship

c. empowerment and role modeling actions, which enrich the modes of representation of the female and male gender, offering males and females a wider spectrum of possible identifications (in attitudes, behaviours, roles, professions not only traditional and genderized);

d. orientation paths to educational and professional choices, which support in young people and adults of both genders a "vision of themselves in the future", also through education at STEM and the reduction of gender digital divide.

2. Programmes of "Training trainers" on the theme of gender stereotypes, through widespread educational interventions, aimed at adults, who can act as multipliers: teachers, educators, trainers, managers of public and private companies, associations of parents, doctors, social workers, psychologists, and counsellors.

In parallel: development of platforms and technological tools for self-training on the issues of inequalities and gender stereotypes (apps, video training, podcasts, youtube channels, tv on demand), also accessible by people with low schooling.

3. Awareness-raising activities of the media and communication agencies on the themes, stereotypes and prejudices, gender inequalities (and relations between these elements)

In parallel: preparation of Guidelines, and activation of support tools and control on information correctness, focused on the development of old and new media.

Particularly important in this context the narration of violence against women because: play a correct information function on these issues as a whole; reserve spaces for the narration of stories of exit from violence, enhancing the potential in terms of social recovery and dissemination of "good practices" of intervention that promote autonomy and independence of women.

Governments have to believe in the transformative power of education of women . Higher education increases the likelihood of working, of being economic autonomous, and leads to greater empowerment of women. Fighting against gender stereotypes, through education and training of all is the way to improve the condition and quality of life of women and men. This is a pillar of growth and sustainable development.

Archer J., Loyd B.(2002)Sex and Gender, Cambridge University Press
Camussi E. (2005) Stereotypes of working women: the power of expectations, social Science information 44; 113 UNESCO (2023) Leave no one behind: gender equality in transforming education summit national commitments UNESCO (2021) From access to empowerment: operational tools to advance gender equality in and through education Council of Europe combating gender stereotypes and sexism in the media EIGE Gender awareness-raising



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TOWARDS THE ERADICATION OF GENDER BASED VIOLENCE & FEMICIDE (GBVF) AND VIOLENCE AGAINST WOMEN & GIRLS (VAWG)

Gender Based Violence and Femicide (GBVF) and Violence Against Women & Girls (VAWG) are forms of violations of human rights. GBVF & VAWG further contributes to the various forms of discrimination against women, girls and persons identifying themselves as women and girls. As a consequence of the complex interplay of patriarchy, culture, negative masculine construct and toxicity thereof, this kind of violence affects the fundamental right(s) to freedom, silences the voices of the survivors, creates barriers and prevents the equal and just participation of women in public and private spheres. VAWG & GBVF manifest as physical, sexual, psychological, economic and other forms of violence. While the fight against this scourge needs to be at policy level, there is a greater role for women at grassroots level to lead the fight in their homes, communities and advocacy platforms.

As India presides over the G20 and hosts W20 in 2023; Brazil and South African will be presiding in the next two consecutive years presenting an opportunity for these countries of the global south to lead the fight against VAWG and GBVF globally. Women's leadership at the grassroots level becomes more meaningful and valuable as it allows for nuances in a deep sense of knowledge of what transpires in the grassroots.

Of course the starting point is to define and want to define and discuss "gender". D'Cunha (2002) defines gender as different societal roles, qualities, characteristics, and behaviour that society considers suitable for men and women, and these differ within cultures. Like in most societies, women tend to be classified as wives, mothers and beneficiaries, and men as producers, bread winners, and public figures and leaders. This categorization of men and women is socially attributed to their domestic and productive sphere roles and the categorization offers relative status and position between men and women, with women more underprivileged in most circumstances.

VAWG is defined by the UN Declaration on the Elimination of Violence Against Women (CEDAW) as any act of GBVF that results in, or is likely to result in physical, sexual, economic or psychological harm or suffering to women and/or girls, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life[1]. GBVF on the other hand, is based on an imbalance of power and is carried out with the intention to humiliate and make a person or group of people feel inferior and/ or subordinate. This type of violence is deeply rooted in the social and cultural structures, norms and values that govern society, and is often perpetuated by a culture of denial and silence.

In South Africa and the South African Development Cooperation (SADC) region, GBVF, Discrimination and VAWG have reached unprecedented proportions. And in the context of Covid-19, GBVF is the twin pandemic. This is despite SA's constitutional democracy being entrenched in a world class Bill of Rights as enshrined in the Constitution of the Republic of South Africa, 1996. The Bill of Rights[1] guarantees freedom of expression, as long as this freedom is not used as propaganda of war, incitement to violence or the advocacy of hatred based on race, ethnicity, gender or religion. Despite this protection, the high levels of GBVF in South Africa permeate most women's lives across a continuum resulting in significant numbers of women living with high levels of trauma on an ongoing basis. The World Health Organisation (WHO) estimates that 12.1 in every 100 000 women are victims of femicide in South Africa each year which is five times the global average of 2.65. Other forms of gender-based violence are also prevalent.

Before 2006, Brazil did not have a criminal law against domestic violence. 15 years later, Brazilians successfully ensured that the Supreme Court reaffirmed that same-sex unions are families. This, despite Brazilian President making homophobic statements that sought to restrict the rights of lesbian, gay, bisexual, transgender, and queer (LGBTQI+) people. President Jair Bolsonaro stated that Brazil must not become a "gay tourism paradise".

However, ensuing an outcry from feminist organisation in Brazil, the Supreme Court in Brazil reaffirmed that families "are not only those made of a man and a woman"[1]. While, this is a recorded victory for victims and survivors of gender stereotypes, this is a classic case of insensitivity that most often than not serves as a catalyst to GBVF. Even with this triumph, the Brazil still has some regressive policies against women. Abortion is legal in Brazil only in cases of rape, to save a woman's life, or when the foetus suffers from anencephaly – a fatal congenital brain disorder. This goes against the basic human rights of women to choose. The infringement of rights and characterized restrictive abortion laws is a form of discrimination against women. Equitable access to safe abortion services is first and foremost a human right. Where abortion is safe and legal, no one is forced to have one. Where abortion is illegal and unsafe, women are forced to carry unwanted pregnancies to term or suffer serious health consequences and even death. Approximately 13 percent of maternal deaths worldwide are attributable to unsafe abortion—between 68,000 and 78,000 deaths annually[3].

Violence occurs in about 35 per cent of women globally in their lifetime. In a study done in India, on about 10000 women, 26 per cent reported having experienced physical violence from spouses during their lifetime[4]. The prevalence could be as high as 45 per cent as indicated in the research.

[1] The Bill of Rights, Chapter 2, the Constitution of the Republic of South Africa

[2] <https://www.hrw.org/world-report/2020/country-chapters/brazil#>

[3] Black women's health imperatives

[4] Jeyaseelan L, Kumar S, Neelakantan N, Peedicayil A, Pillai R, Duvvury N. Physical spousal violence against women in India: some risk factors. J Biosoc Sci. 2007;39:657-70

The WHO indicates that it is necessary to recognize victims of intimate partner violence, sexual violence, or their suicidal behaviour. The individual cases of violence to women often first come to attention with health care providers. The psycho-social care is generally not viable and this leaves a large gap in terms of much required comprehensive care[1]. Recent WHO guidelines emphasize role for physicians and other health professionals, as key gatekeepers in efforts to monitor, identify, treat, and intervene.

This abstract sought to make short comparisons between the South-South countries who are leading the G20 for three consecutive years, India, Brazil and China. The vision is for these countries, who form part of the BRICS to lead the fight against VAWG and GBVF. The concluding remarks serve as recommendations on how countries can hold each other accountable in the fight against GBVF & VAWG. Countries should:

1. Hold each other accountable in the type laws and policies passed and developing integrated and coherent public policies to ensure the right of every woman and girl to live free from violence;
2. Raise awareness of the rights and responsibilities of women, girls and persons who identify as girls by empowering and support the right to freedom from violence and offer quality services for survivors;
3. Provide redress by through redress that strengthens institutional responses to GBVF and VAWG;

1. Raise the cost to men and other perpetrators of engaging in GBVF by establishing or increasing criminal sanctions and mandating maximum sanctions;
2. Allocate adequate funds for training for professionals involved in the multi-agency response (in the law enforcement, judicial, social, and health sectors) with the aim of reducing the risk of secondary victimisation;
3. Provide safe and welcoming workplaces by
 - a) supporting ratification and full implementation of the ILO Convention n. 190;
 - b) ratifying all international and regional conventions related to VAWG like CEDAW;
4. Combat human trafficking and modern slavery of women and girls by paying particular attention to migrants, asylum seekers and refugees and other marginalised group.



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[1] World Health Organization Fact Sheet No 239. Violence against Women, updated. 2013. Oct, [accessed on November 22, 2013]. Available from: <http://www.who.int/mediacentre/factsheets/fs239/en>.

THE WORLD NEEDS A JOINT EFFORT TO ACHIEVE CARBON GOALS

This year's Group of Twenty (G20), the premier forum for economic cooperation between the world's largest economies, is chaired by India which recently overtook China as the world's most populous country. India identified environmental protection and combating climate change as the key themes of its G20 presidency. These issues will be discussed at the G20 summit in New Delhi in September, while a dedicated working group is meeting this month in Mumbai.

Reducing greenhouse gas emissions, the most significant of which is carbon dioxide (CO₂), is a complex task that can only be solved by coordinated global efforts. In 2015, the UN member countries signed the Paris Climate Agreement, committing to limit the increase of the earth's temperature to 2 degrees Celsius by 2050. The largest polluting countries have pledged to achieve "carbon neutrality", which refers to a net zero balance of emissions: the U.S. and European Union by 2050, China and Russia by 2060, and India by 2070.

Governments are using economic incentives like the emissions trading system to encourage companies to cut carbon emissions. Once a country imposes restrictions on emissions from certain industries and companies, enterprises which cannot quickly decarbonize their production can buy emission allowances

either from the government, or from companies that have invested in decarbonization projects, achieved verified emission reduction, and therefore can sell emission quotas equivalent to this reduction.

The first emissions trading system was introduced by the European Union in 2005. In the U.S., such a system operates at the level of individual states such as Washington and California. China introduced its emissions trading system in 2021 but has already overtaken the EU in terms of the volume of traded units. Each unit is equal to 1 tonne of CO₂ emissions, although it is worth less in China than in Europe due to market differences.

India is planning to introduce its emissions trading system this year. Besides enforcing its climate goals, India has another motive to introduce carbon credits as soon as possible. The country is concerned that Indian goods may fall under Europe's Carbon Border Adjustment Mechanism (CBAM), which takes effect in 2026 and is protectionist in nature, imposing carbon taxes on goods from countries that don't regulate emissions as much. Russia has also seen CBAM as a challenge to its exports to Europe, which decreased after sanctions.

Russian companies, however, continue to implement their climate strategies and ESG agendas despite international tension.

In September 2022, Russia created a national register of carbon units. So far, the register includes a project by electricity generator RusHydro to transform its combined heat and power plant in Vladivostok from coal to gas usage, as well as a project to build a solar power plant in the Sakhalin region by DalEnergoinvest company. The latter will serve Sakhalin's goal of achieving carbon neutrality by 2025.

This year, Russian petrochemical company SIBUR even received international verification for the climate project at its flagship ZapSib plant in Tobolsk. The European company Verico SCE verified that SIBUR reduced greenhouse gas emissions by 3 million tons of CO₂-equivalent between 2017 to 2022 as a result of the project's implementation. Decarbonization is a major part of the company's sustainable development strategy. Once regulatory procedures are adjusted, the company will be able to sell these carbon units in the Russian market, but so far not beyond borders, in part due to the lack of a global emissions trading system.

SIBUR was one of the first Russian companies to pursue forest climate projects as a way to reach carbon neutrality in the future. As part of its Green Formula initiative, the company plans to plant at least 5 million trees by 2025 and to issue carbon credits against them. This is aligned with Russia's overall approach since the country promotes nature-based climate solutions and views the ability of forests to absorb carbon as an important tool for decarbonization.

Despite regional differences, national carbon trading systems are successfully developing in different countries, however, they remain separate and unaligned. Initially, the United Nations aimed to make this system international so that different countries and companies from various geographies could trade carbon emissions with each other. Unfortunately, last year's UN climate conference, COP27 in Egypt, failed to achieve progress in implementing this idea. Hopefully, this year, the G20 countries will succeed in developing tools for cross-border emissions trading to create a worldwide incentive to reduce carbon footprint.

Climate change cannot be tackled by individual countries on their own. This goal requires coordinated policy and the joint effort of different countries.



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