

Creative & Innovative India *Overcoming barriers to women empowerment*

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Background

In September 2015 at the United Nations General Assembly, 193 nations collectively adopted the Sustainable Development Goals (SDGs) that placed gender equality and women empowerment at the heart of the 2030 agenda.¹ In this regard, one cannot overstate the importance of focusing on women's economic empowerment. It is a widely acknowledged fact that empowered women add to the economy by leading to job creation and adding to the country's Gross Domestic Product (GDP).² It is estimated that if women participated in economic activity on an identical footing with men, it could lead to a global growth of USD\$ 25 trillion by 2025.³

However, the achievement of these goals requires a combination of transformative shifts, integrated approaches and gender specific solutions to address the prevalent gender gap in the economy and promote the growth of women in male dominated sectors.⁴ This will be a challenging task, to say the least and based on current trajectories, the ever widening economic gender gap will not be closed for another 217 years.⁵

Given the fact that women remain adversely affected by various forms of discrimination and exploitation, one of the ways through which they can break through the barriers of archaic societal norms is by leveraging their innovative and creative strengths. Innovation and creativity through empowering women, especially in the fields of technology and entrepreneurship serve as the engines of advancing the interests of women by increasing their access to education and socio-economic opportunities along with providing them with financial stability.⁶ The importance of promoting innovation, creativity and entrepreneurial activity is even more acute for developing nations such as India.

In an era where Indian women are increasingly breaking the glass ceilings by running Corporate Houses, leading ministries and outshining men in sports, women still continue to be highly under-represented in all sectors of the economy. Globally, India ranks comparatively low at 139 out of 144 countries in terms of economic participation and opportunities for women.⁷ India, being an emerging economy is particularly faced with gender specific barriers in innovation and

entrepreneurship, such as lack of adequate finances, patriarchal social structures, access to education and structural challenges, which hinder the advancement of women at par with men.⁸ The low representation of women in the field of innovation and entrepreneurship can be attributed to lower opportunities being presented to the women in the country and lack of a policy framework conducive to their growth.⁹ Moreover, the cultural, socio-economic and financial barriers faced by them further remove them from competing on a level-playing field as compared to their male counterparts.¹⁰ Women also have less access and exposure to the fields of Science, Technology, Engineering and Mathematics (STEM).¹¹ However, despite these limitations, women are competing to enter traditionally male dominated sectors and have marked their presence in the fields, including, but not limited to, innovation and entrepreneurship.¹²

On the occasion of World Intellectual Property (IP) Day¹³, this viewpoint paper aims to elaborate on the discourse of empowering women by highlighting the challenges faced by women in India in pursuing innovation and entrepreneurship, and delineating potential solutions for addressing these challenges.¹⁴

Barriers To Entry And Growth Faced By Women

In India, women face a number of constraints in pursuing innovation and entrepreneurship that leads to unequal economic outcomes and growth opportunities as compared to men. These constraints have been broadly classified as follows:

i. Financial Constraints

In India, women tend to have less access to adequate financial resources to sustain innovation and creativity. Women are 26 percent less likely than men to have an account at a formal financial institution.¹⁵ The loan rejection rates for women owned SME's also account to be the double of

those owned by men.¹⁶ Further, owing to patriarchal social set-up and property laws, women have less collateral security and a low borrowing capacity to raise capital.¹⁷ Although pursuant to the Family Law Amendment Act 2005 women have the right to an equal share in their father's ancestral property, the access of this right is restricted owing to several social and cultural barriers faced by women.¹⁸

Women also have limited awareness and understanding of available finance options, which translates into reluctance to access finances through formal networks.¹⁹ Therefore, women tend to largely rely on own savings or depend on their support system, such as family, friends and other informal sources, for finances.²⁰ Subsequently, women tend to operate smaller businesses and lack supportive resources that serve as a hindrance to innovation.²¹

ii. Socio-cultural Constraints

In India, innovation and entrepreneurship are socially constructed as a masculine phenomenon.²² Women are expected to transcend into traditional gender roles of housekeeping or pursue feminised sectors in the economy such as personal care services, education etc.²³ Additionally, women also tend to have smaller professional networks than men owing to restricted participation in a certain sectors.²⁴ The gender stereotypical idea that women must draw a perfect balance between their careers and family with the latter being their sole responsibility further inhibits them from thriving in technical roles.²⁵ The archaic social structures coupled with deeply ingrained cultural factors contribute to low participation rates amongst women in entrepreneurship and innovation.

iii. Educational Constraints

In India, about 57 percent of women pursue STEM fields in college; however only 34 percent of the Information Technology workforce is female.²⁶ Additionally, as per a recent survey, Indian women

are less likely to pursue STEM careers than men owing to factors such as, the constant need to update their skills, discouragement from the society, disparity in pay between male and female employees and having to deal with a male-dominated work environment.²⁷ The lack of role models and mentors has often been cited as a deterrent for women wishing to pursue careers in STEM fields.²⁸ Further, majority of Indian women lack formal education and thereby lack the skills, knowledge and experience required to operate or scale a business.²⁹ Women also lack access to information and communication technologies, such as social media and the Internet.³⁰

iv. Structural Constraints

In India, women also face structural constraints in the form of unfavourable institutional and regulatory framework.³¹ The hallmark of

innovation and creativity is in protecting ones intellectual property.³² The Intellectual Property (IP) laws in India accord protections to innovations in the form of copyrighting literary works, trademarking brands and patenting new devices or processes.³³ Universally, the Patenting System shares a unique relationship with women in the form of dismal patent filing records of women as compared to men.³⁴ In India, out of the total 1.93 lakh people engaged in research and development, only 27,532 (14.3 per cent) are women.³⁵ This could be attributed to the above-mentioned barriers, coupled with lack of legal awareness of the procedure or protections envisaged by the IP framework that hinders the advancement of women.³⁶ Additionally, the nature of research and development required in filing technical papers for patenting is very challenging and heavy on pocket.³⁷

Box Story: Breaking the Stereotypes

Despite the challenges outlined above, Indian women are constantly pushing boundaries to mark their presence in competition intensive sector, previously not ventured by women. The following women broke all stereotypical barriers and emerged as change-makers by innovating for the betterment of the society. Displaying their skills and courage, they have become role models for other women to follow.

Mehvish Mushtaq

She is the first Kashmiri woman to develop an android application, called Dial Kashmir. It is the digital equivalent of 'Yellow Pages' for Kashmir that provides contact information of relevant government departments and essential services in the conflict-torn State.³⁸

Hemalata Annamalai

She is the founder of Ampere Electric, a company that designs and manufactures electric vehicles like e-cycles, e-scooters, e-trolleys, special-purpose vehicles for waste management and for differently abled people. She recently received funding and support for her project from Ratan Tata and has successfully established her name in the otherwise male-dominated automobile industry.³⁹

Neha Narkhede

She is the co-founder and chief technology officer (CTO) of Confluent Inc., a startup that builds the Apache Kafka messaging system, also co-created by her.⁴⁰ Apache Kafka serves as an open source technology platform that acts as a central nervous system of a company's data and makes it available for use in real time.⁴¹

The Way Forward

The success of Indian women in pursuing innovation and creativity is threatened by many paradoxes. On one hand, we pride ourselves on being a nation that upholds the right to equality and shuns gender discrimination as a constitutional protection; on the other, we give our passive consent for the society to be governed by orthodox patriarchy. Closing the gender gap in innovation and creativity would not only drive global growth but also boost the per capita income and GDP growth rate of our country.⁴²

Globally, there is a growing consensus in promoting women empowerment as a catalyst for socio-economic growth, poverty eradication and overall development of a nation.⁴³ It's time that India also aligned itself with this view by undertaking not just gender neutral but gender uplifting measures, some of which have been outlined below. However, in order to fully realise the goal of eliminating gender inequality and empowering women, a joint effort will be required by all stakeholders including the government and the society at large.

i. Financial Empowerment

Financial inclusion of women requires access to finances through spreading financial literacy and exploring innovative means of assessing their credit worthiness in the absence of collaterals.⁴⁴ In the wake of rapid advancement towards digital economy, promoting access to digital trade and awareness about digital payment systems would contribute towards the financial empowerment of women.⁴⁵ For instance, in Kenya, a basic digital financial tool that allows women to send, store and receive money through mobile phones has transformed participation of women in the formal market economy.⁴⁶

Financial institutions must focus on extending their outreach to women entrepreneurs in the form of need based, subsidized, short-term and long-term loans or investment funds to promote

innovation and creativity.⁴⁷ Tapping the true potential of women's market would require determined efforts towards gender-lens investing from government as well as private players.⁴⁸

ii. Socio-cultural Empowerment

There is a need to rethink the primitive social structures and cultural barriers that govern our nation. Earlier this year, Saudi Arabia announced that women would be able to start their own businesses without requiring the permission of a male guardian, a welcome step towards women empowerment from the conservative nation.⁴⁹ Government, Private players and Non-Governmental organizations (NGOs) should collaborate to organize awareness campaigns or use the power of media to end gender stereotyping and encourage women participation in all sectors of the economy at par with men.

Hashtags and online campaigns have given the women around the world a voice and have connected them to a larger community thus imbuing in them a sense of collective strength and boosting their confidence in undertaking challenging roles. The #SheMeansBusiness initiative launched by Facebook in several countries has sparked waves of inspiration and capacity building amongst women at a macro level by enabling them to connect with the global world and expand their business.⁵⁰

iii. Educational Empowerment

Access to education being a key challenge for women in innovating, corporations and nongovernmental organizations (NGOs) should undertake skills training and mentoring initiatives for women as part of their corporate social responsibility. The government must encourage participation of women in STEM fields through enabling policies and programs that hone their technological skills and impart lifelong learning. For instance, the Department of Science and technology in India, under the ambit of KIRAN (Knowledge Involvement in Research Advancement through Nurturing) program aims

to provide training and support to women pursuing careers in STEM fields, including those who had a break in career.⁵¹

The government should also undertake steps to spread digital literacy amongst women at the grassroot levels. The Odisha government has partnered with Facebook under the #SheMeansBusiness initiative to train 25,000 women entrepreneurs and self-help groups (SHGs) on digital marketing.⁵² Similarly, the Village Phone program in Africa, in addition to providing access to credit also provides women entrepreneurs with the necessary training to set up phone service businesses, thereby increasing women's economic participation in rural communities.⁵³ Further, there is a need to disseminate positive image of female STEM practitioners amongst the youth in order to sustain more role models and mentors for women.

iv. Structural Empowerment

The government should strive to constantly address the gaps in laws and policies for encouraging more women-led innovations and enterprises as well as sustaining the ones already existing in the market. India's National IPR Policy that was launched in 2016, is aimed at enabling a 'creative and innovative India'.⁵⁴ Amongst its objectives, it provides 'to encourage and support capacity building among Women Creators, Innovators, Entrepreneurs, Practitioners, Teachers and Trainers'.⁵⁵ Towards that end, NITI Aayog aims to create a cell for women entrepreneurs to provide assistance on legal issues and intellectual property.⁵⁶ However, achieving the objectives of the National IPR Policy will remain a pipedream till it is supplemented with material initiatives that don't just exist on paper. The government may also consider public procurement to open up market opportunities for women and setting up dedicated incubators and accelerators to provide infrastructure to women's initiatives.⁵⁷

Additionally, in order to encourage and protect innovations, it is imperative to instill a patent friendly environment for women innovators. India has the highest rate of incomplete gender attribution data to track the participation of women in the patenting process.⁵⁸ Thus, in order to undertake effective policy decisions, there is a need to devise better systems to collect data and assess the gender gap in patenting.⁵⁹

Conclusion

In order to realise and contribute to the SDG of achieving gender equality and women empowerment by 2030, it is imperative to begin the change at home i.e. India should make the objective of eliminating gender inequality and addressing the obstacles faced by women in their pursuit to empowerment, central to its national development planning and budgeting. Further, it is pertinent to identify the causes behind accelerated gender disparity in the country and their impact on women empowerment. Women entrepreneurs and innovators represent an untapped source of holistic development in the nation. The need of the hour is for the government and private stakeholders to take concrete actions through strategic partnerships to ensure the implementation of policies and programs targeted at narrowing the gender gap in innovation and entrepreneurship. As summarised by the Organisation for Economic Co-operation and Development, through encouraged participation of women in innovation and entrepreneurship, women 'create jobs for themselves and generate employment for others, produce income to improve the livelihoods of their families (and thus reduce poverty), serve markets with valued products and services, gain economic autonomy, reduce the level of social exclusion and contribute to economic growth'.⁶⁰

Endnotes

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¹³ Every year, April 26 is celebrated as World Intellectual Property Day to raise awareness about the 'role played by intellectual property rights (patents, trademarks, industrial designs, copyright) in encouraging innovation and creativity.' This year's theme is Powering change: Women in innovation and creativity. The event was established by the World Intellectual Property Organization (WIPO) in 2000. Retreived from: <http://www.wipo.int/ip-outreach/en/ipday/> ((last accessed on 16.04.2018)

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