Kakoli Sen · Surekha Routray ·
Nayan Mitra · Yanire Braña ·
Gordana Ćorić *Editors*

Diversity and Inclusion in the Start-Up Ecosystem

Springer

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in the Start-Up Ecosystem

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Foreword

Women hold up half the sky, it is said. The sky does not segregate, but it aggregates the impact of all those that create its scapes. This is why we recognize it as a beauty because it has been drawn by diverse influences. The world of entrepreneurship can also feel the authentic impact by including the ideas of diverse demographics of entrepreneurs, especially women.

The start-up world traditionally has not funded enough women-led enterprises, and, in doing so, it has missed many viable opportunities for its own growth and the prosperity of the world. Women-led corporates proved to have given significant returns to both shareholders and stackholders and by ignoring diversity, the start-up world impedes its own multifarious growth. Building inclusion and diversity into supporting start-ups naturally enables investors access to not only niches of value but also a larger value proposition even in their "regular" business. The argument for inclusion is clear and loud when you have an inclusive mindset that you have created broader and deeper access to opportunity.

Diversity and Inclusion in the start-up ecosystem require a boost not just because the markets and opportunities of the unheard deserve a space, but also because the lens of the investor needs to look beyond their own self-image for broader gains. The gains to monetary lines are understood in their narrow calculations; however, the broader gains that foster the future can only be tapped by including diverse entrepreneurial ventures, which in turn will seed ecosystems of growth. The opportunity for inclusion is an opportunity for future growth.

I am happy to write the Foreword for this thoughtful book Diversity and Inclusion in the Start-up Ecosystem by an international team comprising Dr. Kakoli Sen, Dr. Nayan Mitra, Dr. Surekha Routray, Yanire Brana, and Gordana Coric who have meticulously worked to bring together stories and research from different parts of the world. This book will provide insights to policy makers, founders, mentors, investors, and most importantly encourage more women to start and manage their entrepreneurial journey. I wish the authors very well in their journey

of bringing Diversity and Inclusion to mainstream and assure them of my support
and mentorship.

Hyderabad, India   Dr. Shanta Thoutam
                                                   Chief Innovation Officer,
                                            Telangana State Innovation Cell,
                                               Government of Telangana

Preface

I have come across several women who turned to starting their own business when they could not take up work in any organization due to family reasons, or when their children had grown up and they had not much to engage themselves with or when their friends and family had egged them to capitalize a specific skill that they had, and a lot many more, who had to fend for themselves due to economic reasons. Almost all started with a passion but never grew much and facing obstacles the passion faded, most also closed down or were bought over by someone else. Some of the common things these women entrepreneurs faced was not knowing what to do when spending on wrong things, rushing through the hiring process, not developing their own business brand, not having any or partnering with the wrong investors, and most definitely operating without a plan B. They also had little family support and were unable to obtain collateral-based business loans, had no role models or support system or a similar network, the COVID-19 also brought the end closer than anticipated.

Seeing the trajectory of these women entrepreneurs and their problems and challenges, I saw a pattern and strongly felt that they all had a story to tell, a passion to follow but it could not go beyond a stage for want of an environment that promotes women entrepreneurship and similarly, with other diversity-linked entrepreneurship. That was the genesis of this book which brings to you stories from these entrepreneurs, researchers, and mentors coming from diverse backgrounds, who have all come together to discuss what an inclusive entrepreneurship ecosystem would look like: one that will promote them to explore, get trained, get ideas, get money, and most importantly get the much-needed support to strive bigger.

This book is second in the series *Responsible Leadership and Sustainable Management* by Springer on similar content, the first book on this theme being "Creating a Culture of Diversity and Inclusion in the Indian Inc.: Practitioner Speak" which brought stories from and about how the Indian corporations practice Diversity and Inclusion. The current book explores how an Entrepreneurship ecosystem should be developed that will and can train women and people from other marginalized communities on Entrepreneurship and help them not just create enterprises but also be role models and inspire others as mentors. This book took almost a year to

complete, while it brought together people from different parts of the world with varied experiences to share. It contains findings of research as well as case studies along with personal experiences of women who have been there and seen or done it in person.

It is not easy to get practitioners to pen down their story, busy as they are practising their art and sharing their wisdom, but this book has brought together a set of first-time writers as well as seasoned authors. It is a journey that I knew will not be easy and smooth; it has seen phases of happiness and despair, but is worth all of it. While I am aware that you would like to pick up sections of your own interest as you pick up this book but as the lead editor, I am also sure that you will find each of the chapters very interesting and insightful. On behalf of all my co-editors, I truly hope that this book will inspire you to take up the cause of creating an inclusive ecosystem and do your bit to support and promote inclusion of diversity in entrepreneurship.

Hyderabad, India   Prof. (Dr.) Kakoli Sen

Contents

Editors and Contributors

About the Editors

Dr. Kakoli Sen is Professor of OB and HRM and Dean—School of Business at Woxsen University, Hyderabad. She is also the co-chair of the Centre of Excellence—Diversity, Equity and Inclusion where she has worked on several Inclusion Projects. A Ph.D. in Management with 10 years in the Corporate and 17 years in Academics, her professional skills include Academic Leadership, Institutional Advancement, International Collaborations, New Program development and Corporate Communications. She has worked as Regional Training Manager for Intel® national project and has done international consultancies in Education sector. She is regularly invited as a Panelist and speaker to various prestigious forums/conferences. Her research interests are women leadership, social entrepreneurship, and diversity and inclusion. She has published research papers and cases in ABDC journals, Richard Ivey and Harvard Business Publishing. Her book *Creating a Culture of Diversity and Inclusiveness in India Inc.—Practitioners Speak* was published by Springer. She also writes articles for ET HR. She teaches and trains in the areas of Organizational Behavior, Human Resource Management and Leadership.

Surekha Routray is a Certified Sustainability Assessor (From UBB, Europe), Certified Valuator (IBBI), and an MBA in Finance and Marketing. She has worked and has expertise in designing and implementing programs with four main sectors of the startup ecosystem namely—agriculture and allied services, animal husbandry, climate and environment, livelihood and diversity and inclusion—and has worked with more than 100 start-ups. She has an interesting amalgamation of 10+ years of corporate exposure (from India and US), 5+ years academic interfacing and 6+ years of startup ecosystem. She has extensively worked on many national and international projects (US and EU) for promoting social entrepreneurship and diversity and inclusion. She is an ardent promoter of technology that can create large scale societal impact. She is also closely working with FPO's and self-help groups in several programs for creating inclusive growth and a sustainable circular economy.

She runs the Founder Start School for Women Entrepreneurs and is one of the session experts for the Sustainability Course for Professional being conducted by All India Management Association (AIMA).

Nayan Mitra works and contributes in the space of Sustainability, CSR and Responsible Leadership. She is the series editor of Responsible Business and Sustainable Management by Springer, is the editor of the books *Corporate Social Responsibility in India: Cases and Development After the Legal Mandate* in India (2017), *Mandated Corporate Social Responsibility: Evidence from India* (2019), *Corporate Social Responsibility in Rising Economies: Fundamentals, Approaches and Case Studies* (2020) with co-editor, Dr. Rene Schmidpeter (Germany) that has been published by Springer International (Switzerland); is Academic Council member and Science Board member in International Academic forums. Dr. Mitra is the recipient of the prestigious Author Award at the Indian CSR Leadership Summit three years in a row: 2017, 2018 and 2019; adjudged as one of the 25 most impactful CSR Leaders in India 2019 and many other international awards for her contribution to CSR and recognised as an Exceptional Woman of Excellence at the Women Economic Forum, 2019 and 2022 (New Delhi, India); the Global Excellence Awards as the Top 40 Female Leaders of the Year, 2020–2021; The Restore Awards, 2021; Womennovator Award 2021; Most Impactful Sustainability Leader Award 2023. She feels deeply for women's issues and is the National President of the Women's Indian Chamber of Commerce and Industry (WICCI) Sustainable Businesses Council; G-100 for Circular Economy;—where she continuously strives to bring in innovative programmes to contribute to the impact of SDG 5. She is also a pro-bono member of the Advisory Council and Board of some of the eminent NGOs in India, whose work with women and children has received global recognition.

Yanire Braña is Guest Lecturer at Georgetown University, Washington DC, USA. She is President and Founder of MET Community, a non-profit organization that supports and promotes women entrepreneurship around the globe through mentoring, training, and networking activities. MET Community started back in 2008, with a few volunteers, and now has grown to over 60-people strong organization calling ten different countries their home. Most of the work is focused on the Americas region. Yanire has extensive experience—over 20 years—in change management, training, mentoring and innovation. Her former employers include the Work Bank Group, Inter-American Development Bank, Banco Popular, Accenture, and Booz Allen. Yanire holds a Law degree from University of Deusto, Spain; Master's degree in International Relations from University of the Basque Country, and an M.B.A. with concentration in eBusiness from IE Business School. She studied Business Sustainability in the University of Cambridge. In addition, she holds certifications in Strategy from London Business School; Innovation Strategies from Harvard Business School; and Organizational Consulting and Change Leadership from Georgetown University. Yanire has been recognized by United Nations, Forbes, and has been recently nominated as one of the TOP 60 Women in the legal industry in Iberia and

also one of the Top 100 members and Global Chairs for the G100 Club founded by Dr. Harbeen Arora.

Gordana Ćorić is senior lecturer of several courses (including dynamic entrepreneurship, business ethics, social entrepreneurship and social innovation, innovativeness, managing growing companies, design thinking, start-up management, etc.) at the VERN University (Zagreb, Croatia). She is also the owner-manager of consultancy and training company Festina lente (business services, counseling, consulting, training programs), where she acts as a trainer, mentor, researcher and program designer. She is a member of various networks of advisors, trainers, and consultants (including crowdfunding academy, business angel's academy, franchising, social impact measurement, lean start-up, beyond (un)employment, social innovation and social entrepreneurship networks, corporate social responsibility, start-up mentors, etc.). Her previous work experience includes work for the European Foundation for Entrepreneurship Research (EFER, Amsterdam, NL) and World Learning in projects of education of entrepreneurs and economic empowerment of women in Croatia and neighboring countries. She has published over 30 professional, scientific and review papers. She is a Ph.D. candidate at the University Josip Juraj Strossmayer, Faculty of Economics (Osijek, Croatia), and her interest includes the specifics of mentorship of various types of entrepreneurs, in all phases of their development.

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Chapter 1
Why Startups Need an Inclusive Ecosystem to Survive and Thrive?

Kakoli Sen

Abstract This chapter explains what a startup is and how they add value to the economy by way of generating jobs, creating markets, generating competition, and inspiring individuals to do innovative businesses. At the same time, it is not easy for startups to survive in the wake of both internal and external factors in their environment that can have an impact on their survival and growth. Disruptions in the form of a pandemic or newer technologies can also have an adverse effect on the fledgling entrepreneurs. While most countries around the world have a large number of entrepreneurs and mostly small, they also face survival and growth challenges mainly in the absence of an ecosystem that gives them some immunity and also supports them in multiple ways. Different countries have addressed this issue in their own way such as offering regulatory relaxations, and providing financial support, market mobility, human capital, and education and training. This chapter brings up suggestions on how different stakeholders could play a role in making an inclusive ecosystem for startups to flourish. This chapter also provides a glimpse of what the other chapters in this book offer.

Keywords Startups · Inclusive ecosystems · Stakeholder participation · Diversity equity and inclusion · MSMEs

1.1 Introduction

There is no one definition of a startup that explains all aspects of it. The Oxford Dictionary and the Cambridge Dictionary mention them as a newly established business and making something (a Business) start, respectively. Eisenmann et al. (2011) suggest if a business starts by launching new products in the market, it can be called a startup. Blank (2007) is of the opinion that it is important for startups to have a business model that is repeatable and scalable. Christensen and Bower (1995) write

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in an HBR article that a startup is successful when they can quickly adapt to changing circumstances and market conditions and charter their growth into the newly created market. Some of the most popular examples of successful startups are Uber, SpaceX, Airbnb, and Facebook which are now mature companies. There could be a variety of startups such as Scalable startups, Small business startups, Lifestyle startups, Buyable startups, Big business startups, and Social startups. Among the must-haves of a startup are a financially viable business model, a compelling business plan, an authentic brand story, a strong team, a dynamic market opportunity, a competitive edge, a clear investment structure, and a shared vision.

Startups could be started by anyone, anywhere, and despite being small entities they play a big role in the economic growth of a nation. They generate jobs, create markets, and generate competition, inspiring individuals to bring up innovative ideas and products in the market. Startups are also critical to recover from economic shocks and economies need to learn from each other to make the most of their potential. With COVID, the old business structures crumbled, and multiple people lost their jobs. While large companies either cut jobs or lost employees, it is the smaller agile companies which were able to switch their business models and structure and created jobs and opportunities for themselves and others. Startups have kept growing through the last recession and will be critical to the overall economic recovery from the COVID-19 pandemic. However, these nascent companies also have scarce resources, both in terms of money and technology, and face tough challenges when they must compete against more established entities in their target markets. A well-developed startup ecosystem can help them manage these growth challenges well.

1.2   Inclusive Ecosystems

In late 2020, the ILO developed an inclusive entrepreneurship ecosystem framework which has six core pillars such as (a) Conducive Policy and Leadership support, (b) Access to Finance, (c) Support services such as mentoring, coaching, and capacity building, (d) Positive Entrepreneurial culture, (e) Skilled and motivated human capital, and (f) Access to Market; and two cross-cutting dimensions—(g) Inclusiveness and (h) Pathways to decent work. Entrepreneurship ecosystems are generally understood as dynamic and complex spaces, for new venture creation and business model innovation. A startup ecosystem could comprise all the institutions, resources, and environments that can create and nurture entrepreneurial intentions and performance in a socio-cultural context. Several factors such as the regulatory framework, market conditions, access to finance, access to market, human capital, education and trainings, and handholding could all be part of the eco-system. Feld (2012) suggests that there are two roles in the ecosystem that are played by the different stakeholders. He further states that while entrepreneurs are the leaders who are creators of the startups, all other stakeholders in the ecosystem are feeders who help the leaders to create and thrive.

When we talk about Diversity and Inclusion in the startup ecosystem, we are essentially discussing how the startup ecosystem conceptualizes diversity among the entrepreneurs and what efforts it makes to make them feel included. There is a very high possibility that many in these diverse groups are not born into entrepreneurial families and are venturing into a startup for the first time and out of necessity. They do not understand business and are unaware of various aspects of conceptualizing a business idea, starting, managing self and competition, or upscaling a business. They may need to be explained the concept of a startup in an environment that they are comfortable with, including being explained in their mother-tongue and how to approach investors or to even manage their businesses.

According to the Global Startup Ecosystem Report (2022), startups are volatile, and about 90% of startups completely fail and when the startup is by a woman, or a person with disabilities or someone without the necessary entrepreneurship training, the chance of failure is much higher. Ecosystems will not just support the startup to operationalize but also help them grow and scale up. Given India's large socio-economic disparity, several entrepreneurs and impact investors are now focusing on social enterprises. Incubator support, alignment of investor philosophies, and better legal policies on funding can provide a boost to this sector. Specific education and skills training and development for entrepreneurship in this area will play a very important role.

The world over, different countries look at their startup ecosystems and try to reach out to diverse communities in various ways. Finland has adopted the strategy to develop a hyper-collaborative startup community which has helped them become one of the top global startup ecosystems. Approximately, 4,000 new startups commenced their operation in Finland in 2022 (Muller 2022). The Finnish government is acclaimed not only for providing the best future-oriented skills and education for youth, but it has also de-risked entrepreneurship by providing startup grants for the first 12 months. The Aalto University students also played a big role by forming the Aalto Entrepreneurship Society in 2009, one of the most active and largest student-run entrepreneurship communities in Europe.

In the ASEAN economies, Micro, Small and Medium Enterprises (MSMEs) comprise most of the businesses and generate maximum employment. The ASEAN Coordinating Committee on Micro, Small and Medium Enterprises (ACCMSME) is trying to ensure that the MSMEs are made so robust that they can compete globally, and are innovative as well as resilient. In this manner, the ASEAN Community is also promoting inclusive development in the region. The region has more than six thousand active startups in fintech, enterprise solutions, e-commerce, big data, and consumer goods and services.

Darcy et al. (2020) in their study on Australia's Disability Entrepreneurial Ecosystem found that in 2015, 18% of the Australian population had some level of disability, and nearly half of these people were not at all in the labor force in 2015 and more than half were permanently unable to work. People with disabilities anywhere in the world often experience a lack of recognition of their qualifications resulting in a mismatch between their skills and the sparse labor market opportunities available to them. Negative societal attitudes toward any disability are commonplace,

and most PwD participants feel that they have no choice but to start their own business but find little support from the ecosystem. The authors discuss a Social–Ecological model of Disability Entrepreneurship that has five levels, Intrapersonal, Interpersonal, Organizational, Community and Public Policy, and Action Research on how to make the ecosystem work for the PwDs more effectively.

According to a World Health Organization (2019) in Member States of the WHO European Region, 6 to 10 out of every 100 people live with a disability. These disabilities are extremely diverse and are neither visible nor do they fit into the popular stereotypes of disabled people as wheelchair bound or blind, mute, etc., yet it affects them in a wide range of socio-economic disparities including reduced labor market opportunities and outcomes, poverty, and social exclusion. In such cases where their mobility or motor actions may be affected and not suitable for a regular workplace and routinely hectic life, it is more convenient for them to be self-employed. It helps them manage themselves better by being less dependent on others for physical, economic, or emotional support. The European Union is trying to work toward an equitable, sustainable, and growth-oriented society with inclusive growth for all sections of the society with their 2020 Strategy. Its disability strategy ensures social inclusion for people with disabilities.

India under the leadership of Prime Minister Narendra Modi has seen a big change in entrepreneurship becoming a thrust area and is trying to build a strong entrepreneurship ecosystem. The ecosystem is aimed at catalyzing a strong startup culture and inclusiveness to drive economic sustainability. As on October 13, 2021, India has 700 plus incubators and accelerators, USD 75 Bn plus startup funding, and 11 direct jobs per startup. The Startup India Hub is a one-stop online platform that allows stakeholders in the startup ecosystem to communicate within themselves, exchange knowledge, and collaborate in a vibrant environment. The government has undertaken 49 regulatory reforms to enable ease of doing business, raising capital, and reducing compliance burden. The startup India Yatra mobile van has covered more than 236 districts and 23 states and reached out to 78,000 prospective entrepreneurs. There are several other initiatives such as National Startup awards, States' Startup Rankings, and International Summit that is aimed at bringing exposure to the startups.

The Atal Incubation Centers nurtured 1250 plus startups, 500 plus of which were led by women. The Women Capacity Development Program shares information about initiatives and training, and provides a platform. A virtual Incubation program for women entrepreneurs to provide pro bono acceleration support was provided to 20 women-led tech startups for three months. According to the latest Economic Survey 2021–22, India has become the third-largest startup ecosystem in the world after the US and China. A record of 44 Indian startups achieved unicorn status in 2021, taking the overall tally of startup unicorns in India to 83, the majority being in the services sector. India has over 61,400 startups recognized by the Department for Promo Industry and Internal Trade (DPIIT), with 14,000 recognized during fiscal 2022. Out of the 44 Indian startups that turned unicorns in 2021, four were helmed by women. However, according to National Sample Survey 2022, only 14% of businesses in India are run by women. Additionally, most of these companies are bootstrapped and run on a small scale. Compared to the global number of 126 million women

entrepreneurs, India stands at a dismal 8 million only. While several government initiatives are offered from time to time, the major hurdles women entrepreneurs still face are socio-cultural barriers, limited access to funds, lack of awareness of markets and marketing methods, mobility challenges, lack of support systems, mentors and role models, administrative and regulatory challenges, and lack of confidence to persist and grow.

Policymakers could create discussion forums where they could engage in dialogues with the indigenous startups, offer them easy entries, and explore their scaleups by supporting them in every possible way. Policymakers could ensure that entrepreneurship education and basic skills training is made available to all. They could support mentoring schemes and workshops for ambitious and capable entrepreneurs. India is being increasingly projected as a "Startup Nation", the clarion call made by none other than the Prime Minister, Shri Narendra Modi. It needs to be reviewed that despite such a direction and policy formulations, why the percentage of women and other marginalized sections is so poorly represented. Is it that while there is a strong vision, the policies are not all-encompassing, is the message not reaching the needy, or is it falling short of what is required to make a nation with a strong startup ecosystem? Both state and central governments need to consider how coordinated their ecosystems are, and how this supports success.

Even within Southeast Asia, where entrepreneurship supports the economic livelihoods of women, the growth of women-owned businesses is constrained. While across Southeast Asia, most women take up entrepreneurship as it is mostly the only way to survive and a source of livelihood and remain in lower income regions, similarly, in the Philippines also, due to limited employment opportunities, women do not get such opportunities and almost 40% of the women start a business to survive. Hence while the number of businesses run by women appears to be large in Southeast Asia and the female entrepreneurship rates are higher than global and regional averages, these businesses are mostly small, and sustenance-focused with little real growth.

The purpose of this book is to bring up the concept of Diversity and Inclusion in the startup ecosystem. It will look at the various stakeholders in the startup ecosystem such as financers, investors, networking platforms, mentors, incubation centers, and women entrepreneurs, and how they help in creating a sounding board for the women or other minority section entrepreneurship aspirants. Women entrepreneurs across the world have continued to remain at the lower rung of the entrepreneurship chain. Garnering support for women from the startup ecosystem has been a longstanding challenge. Due to the sustenance nature of the businesses by the women entrepreneurs and in the absence of a robust long-term business plan, COVID has been able to heavily impact their earnings from their micro businesses and nearly 20% of such business owners have made no money in 2020, according to a survey by non-profit AWE Foundation.

The pandemic has hit the world economy and small entrepreneurs, especially women entrepreneurs have had a hard time sustaining their businesses, and many have also given up. Government agencies could eliminate current biases and disparities in the funding process and ensure representation from all sections of society, and create

more inclusive funding decisions and practices. The government could also create or improve existing financial programs to better serve women-led startups which have different needs.

This book is second in the series "Responsible Leadership and Sustainable Management" by Springer; the first book on this theme was "Creating a Culture of Diversity & Inclusion in the Indian Inc.". This book has twelve thirteen chapters that address a wide range of areas such as the challenges women face as entrepreneurs, how entrepreneurship education may help create higher entrepreneurial intentions, and how mentoring can help these first-time entrepreneurs help set up, manage, sustain, and scale up. Some of the authors have written from different parts of the world such as Israel and Germany and shared the challenges women or people from other marginalized sections of the society such as People with Disabilities across the world face. Some of the authors have written about sustainable businesses such as green startups and green finance, revival of age-old crafts by way of Diversity and Inclusion, and how COVID has impacted women entrepreneurs and others. The chapters also offer action points that government, policymakers, incubators, accelerators, investors, and universities can take up and create an integrated and inclusive eco-system that will offer end-to-end solutions from creating entrepreneurial intention among people from all walks of society irrespective of gender, age, social status, disabilities, caste, or creed. A summary of each chapter follows.

Chapter 2 by Anita Shou, Dr. Vandana Sharma, and Dr. Mihir Joshi looks at the Role of Entrepreneurship Education and Training in encouraging more women entrepreneurs to venture into the technology sector, given the low number of women entrepreneurs in this sector. Their study investigates how entrepreneurship education and training can improve the "entrepreneurial self-efficacy" of women. There are several studies to show that women consider themselves less competent for entrepreneurial activities than men because of gender roles and socio-cultural beliefs. The authors quote several studies that suggest that due to a lack of self-efficacy, women tend to limit their career choices and avoid entrepreneurial endeavors. They also suggest that this belief starts during the early stages of high school, and the early introduction of entrepreneurship programs like "Junior Entrepreneurship Program" should be put forward to girl pupils to develop entrepreneurial skills, which leads to improvement of self-efficacy.

Chapter 3 by Dr. Sourabh Lakhanpal, Mandeep Singh, and Ruhul Amin Choudhury brings up the concept of Green Startups in India and the Ecosystem powered by Green Finance. Industry 4.0 stresses the importance of a circular green economy by optimizing the production pipeline and minimizing waste. The key idea of a circular green economy is to achieve a green ecosystem on both economic and environmental levels and commercialize the services or products that do not harm the economy or environment in any form, targeted at the market while benefitting the society. Sustainable entrepreneurs should be able to serve simultaneously humanity, economy, and environment. Germany comes as an inspiration to the world in terms of green startups and the majority of them are founded and led by women. One out of every three startups in Germany is a green company working on solving problems related to food, energy, manufacturing, etc. The academia also participates and provides

full support. Most of the German universities are launch pads of green ecological cum business ideas. One-third of green startups are in the research and development sector. It highlights that this academia and government collaboration has given a boost to green ventures and could work as a roadmap for other countries to follow.

Chapter 4 by Dr. Rama Venkatachalam, Dr. Aparna Rao, and Prof. Prashant Salwan discusses Equity and Inclusion through Craft Revival and Livelihood and presents a Case Study of the "Kottan Basket" of M.Rm.Rm. The narrative traces the two-decade journey of the foundation as the team surmounted various milestones. When they started out, their aim was to revive, restore, and document the Kottan basket. Revival of the endangered craft also became a means of livelihood for the local women, mostly illiterate and unskilled. The founders identified the sole surviving artisan, an octogenarian Kannamai Aachi, a Chettiar woman to train the first batch of these women, excluded from education and any economic opportunity. The woman faced multiple hurdles to train the other women and help them learn the art and be able to earn a livelihood, as most of the women who signed up were single or widowed women with no family support. Over the daunting next two years, "Project Kottan" took shape and today it is an equitable and sustainable community development initiative. It was the vision of one woman who took up this responsibility against all odds and made it her dual mission to save a dying art and give livelihood to other women.

Avadh Bihari in Chap. 5 presents comparative case studies of corporates supporting social startups as CSR funding and social startups receiving funding and innovating to solve social problems faced by the people in India. An intersection of D&I and CSR is presented to understand how the select corporates perform in D&I vertical while implementing their CSR interventions and how social startups are performing at the vertical of D&I. The many small case studies operating in education, health care, food, disability access, etc. point out the gaps and present the scope of making social startups also diverse and inclusive. According to the author, while corporations are compelled to make these efforts explicitly, social startups are yet to take a serious position on that and move beyond their focus on securing funding. The author also suggests that although D&I should start with inclusive recruitment, retention, beneficiary policies, etc., it should not end with that. Organizations need to strive for safe and participatory ecosystems to engage vulnerable and excluded sections in the decision-making to make interventions holistic and beneficial to all. Corporates, presented in this chapter, are engaged in CSR and it becomes their core responsibility to follow the principles of D&I beyond compliance. In terms of social startups, D&I should not be a post-profit aspect but needs to be incorporated into the core design of interventions.

Chapter 6 by Rupika Nanda, Dr Sourabh Lakhanpal, Mandeep Singh, Ruhul Amin Choudhury discusses the Impact of the COVID-19 Pandemic on Women Entrepreneurs, the challenges faced by them as well as the opportunities it made available. People throughout the world have been severely affected by the COVID-19 pandemic but businesses owned by women were hit harder. The difficulties women company owners already face, such as finding funding, lack of role models, lower levels of business savviness, and managing work/life balance, were magnified by

the pandemic. A stunning 87% of women company owners globally claim they have been adversely affected by the pandemic. The World Bank found that enterprises owned by women were more likely than those owned by men to have shut down. The authors also present examples of two women entrepreneurs who are self-made and an inspiration to others. One of the two women is Falguni Nayar, an Indian billionaire businesswoman, founder and CEO of the beauty and lifestyle retail company Nykaa. According to the IIFL Wealth Huron India rich list 2022, Nykaa creator Falguni Nayar has officially become India's richest woman. The other woman entrepreneur is Purvi Pugalia of SOCH Group who encourages and supports the creative ideas of entrepreneurs and has helped create brands like Munchilicious, This Or That, The Rooted Co, and Not So Pink. The author also shares some of the programs launched by Government of India and various state governments to increase financial inclusion for women, such as the Pradhan Mantri Mudra Yojana, which provides collateral-free loans, Dena Shakti Scheme that offers loans of up to 20 lakh rupees to women entrepreneurs working in agriculture, industry, microcredit, retail outlets, or other businesses, Street Shakti Yojana and Orient Mahila Vikas Yojana, Annapurna Yojana, etc., which aspiring women entrepreneurs could make use of.

Chapter 7 by Zeevik Greenberg and Yahel Kurlander traces the journey of women entrepreneurship in villages in Israel over a period of ten years and presents findings of a 10-year study that monitored women who founded businesses in the rural area. When an economic crisis hit in the 1980s, it was women who were mostly engaged in rural agricultural work by starting small businesses out of necessity and survival. In a period of next ten years, women received professional education and acquired skills and chose to become entrepreneurs, many in the fields of planning, management, and economics; specializations considered "urban". Their customers are spread over the entire country, and these young women are tech-savvy entrepreneurs who are running businesses in their areas of expertise. They have overcome the obstacle of distance from the urban centers and learned how to successfully navigate and reach their target audiences online. While they chose to conduct their businesses from rural areas, the business they have established is not a rural business, but a business located in the rural space. The chapter highlights how education, training, and the right support can encourage young women to set up their own businesses and also give them the flexibility to advance their careers while managing work–life balance and employing other women.

Gayatri Sriram and Aparna Devagiri in Chap. 8 write that policymakers and the government are aware that women entrepreneurs need to be supported, but the support has largely been financial aid, such as loans, etc. India has the third highest number of incubators; however, women have still not been able to make the best of it. The authors rolled out a mentoring project in the cities of Pune and Bangalore during the lockdown period. Considering that mentoring is critical to entrepreneurship development, in the year 2019–20, they conducted a virtual mentoring project with 36 mentors and 92 mentees for a fixed period. By the end of the period, mentees were expected to have completed a business plan with financial details and set out business goals for the coming year. Given the socio-economic barriers in the chosen group, it was difficult for the women to network and connect with potential mentors. The authors opine that

virtual mentoring also ensures a higher number of mentor availability from diverse backgrounds. The study is essentially about Scalable Mentoring Programs and how to structure them to get the best out of them.

Germany-based Leadership Consultant and Coach Peter Griffith in Chap. 9 quotes a study (Startbase 2021) according to which only 11.9% of all startup founders in Germany in 2021 were female and also that when women decided to go into business and start their own companies, they were found to be less likely to seek out female co-founders; only 16 percent of female founders relied on a female team, while 50.5 percent brought men on board. He further shares that Venture Capital also seems to favor male founders, with women founders raising only 1.1% of capital in 2021 in Europe. While the new EU law to improve gender balance on company boards and bring up the underrepresented sex to hold at least 40% of non-executive director positions in listed companies by 2026 is a big step toward increasing gender equality in decision-making throughout Europe, and opens enormous opportunities for women, women leaders in Europe also need to be ready to take up senior-level positions. He writes the chapter in first person and quotes several examples from his coaching and mentoring experiences with women leaders. Peter also suggests a three-pronged approach; (i) Spend focused time and energy evaluating where they want to be in their career in 3–5 years, (ii) Prioritize self-development and network, and (iii) Develop a personal brand and make a 2-min elevator pitch CV.

Chapter 10 by Ms. Suhela Khan and Dr. Feroza Sanjana focuses on women's entrepreneurship and various restraining forces faced by them to take active participation in the global entrepreneurship scenario, and it also discusses the various government policies and initiatives to empower them and build an ecosystem and suggests how to make them more effective. The author quotes the GEM (2014) report that India has much room to close its entrepreneurship gender gaps, ranking 57 out of 65 countries for women's entrepreneurship. Only 6.5 percent of the funding raised among the top 150 funded startups in India went to women-founded or co-founded. This corresponds to the International Finance Corporation (IFC) study (2019) that found only 7 percent of total investment going to female-led businesses. The author shares how disadvantaged women are, in securing funds as the loan rejection rate for women in India is 2.5 times higher than that for men despite them being considered as creditworthy with a significantly low default rate. 90 percent of women entrepreneurs in the country thus rely on informal sources of financing which hinders the upscaling of their own businesses. In addition to liquidity challenges, COVID further disadvantaged women entrepreneurs by posing a changed business environment with a pressing need to shift to less familiar e-commerce platforms to sell their products and services, and a great number of women-led enterprises had to shut down. While government has come up with digital and financial literacy initiatives and training, more disruptive interventions are needed to support women's participation in supply chains and to increase connections with investors and financial institutions, the authors outline three areas that can be transformative, such as supporting new and innovative financial mechanisms to reduce the capital access barriers for women, creating innovative avenues for women entrepreneurs to access new business opportunities, and supporting ecosystem players including

women entrepreneurs themselves to be more gender-inclusive and diverse in their business policies and practices.

Chapter 11 by Dr. Abhay Gaidhane and others brings up a very different but mostly ignored concept of Diversity and Inclusion in Global Health Education. As a post-pandemic effect, the authors emphasize raising awareness about the understanding that the future of health is global, not local. The authors also quote the emerging research that the old model of global health research models will not work and how High-Income Countries (HIC), i.e., Global North, cannot exclude low and middle-income countries (LMIC), i.e., Global South. The world will need to come together to face greater global challenges such as pandemics, migration, pollution, climate change, and other unknowns. Global health research partnerships between HIC and LIC will also promote sustainable and equitable global development. Having diverse composition, they will be able to address local health concerns and promote long-term value for the communities involved. The chapter has an extensive literature review and presents a roadmap for global health equity.

Chapter 12 by Rupamanjari Sinha Ray, Aparna Rao, Surekha Routray, Rajashi Sengupta Mothey, Roopal Gupta, Tanuja Sharma, and Nayan Mitra is about women in sustainable businesses in India. The chapter highlights that there is a lack of awareness, a lack of educational programs on sustainability, and a lack of willingness of women in taking up this entrepreneurial journey. A prevalent mindset that sustainability ventures are difficult to pursue is a deterrent for many to pursue businesses with the sustainability cause. Women entrepreneurs feel that launching sustainable businesses is difficult due to a lack of knowledge about sustainability and, products and services that are sustainable. Launching such products requires patience. It is also perceived that such businesses are not economically viable as low margins and high costs of eco-friendly inputs coupled with regulatory risks might end up in a high gestation period to reach break-even. A transition from a linear to a circular economy is a plausible solution for sustainable business practices. Women tend to be more thoughtful and receptive to circular behaviors, such as reuse, repair, and simply prolonging the usage of an item for as long as possible. The authors suggest that greater participation of women in circular economic development is important, because women can drive responsible consumption and production behaviors through role modeling and cultivating a culture for circularity at many levels.

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Chapter 2
Investigating the Role of Entrepreneurship Education and Training in the Success of Women Tech Entrepreneurs: An Empirical Study

Anita Shou, Vandana Sharma, and Mihir Joshi

Abstract Women are underrepresented in the field of entrepreneurship, and this disparity becomes more apparent in sectors which are conventionally male-dominated, like the technology sector where the ratio of women to men tech entrepreneurs is less than 10%. This is the scenario in India. This chapter undertakes an effort to investigate the influence of "entrepreneurship education and training", on overcoming the barriers among women tech entrepreneurs which in turn will lead to the success of tech ventures. Along with that, the effect of "entrepreneurial self-efficacy" on overcoming barriers to women's tech-preneurship has also been taken. The data is gathered from 101 women tech entrepreneurs. Structural Equation Model (SEM) is used to show how education and training can help in overcoming the barriers, with entrepreneurial self-efficacy as a mediating factor. The present study will provide insights into ways to reduce the gender divide in the space of entrepreneurship, especially in the technology sector in the country.

Keywords Women · Technology · Entrepreneurship education · Entrepreneurial training · Entrepreneurial self-efficacy

2.1 Introduction

Entrepreneurship is one of those fields in which women are underrepresented, despite comprising half of the working population (Molina-López et al. 2021; Strawser et al. 2021). A study by McKinsey reports that if women were involved in the labor force identically to men by 2025, the global economy would grow by $28 trillion (Desjardins 2018). So, boosting women's entrepreneurship is a fundamental promoting factor considered essential by policymakers worldwide for gender

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equality and inclusive economic growth (World Bank 2018). Even though there is a constant increment in women's entrepreneurial activities (Verheul et al. 2006), nonetheless the talent and potential of women in entrepreneurship largely remain untapped in most of the countries (Marlow and McAdam 2013), and the number of female entrepreneurs in developing countries has been largely dissatisfactory (World Bank 2018), which is a testament to their minuscule presence.

The twenty-first century has recognized technology as one of the major stimulants for fuelling economic growth, as well as human and societal progress (Audretsch 1995). It is among the industries in the global economy, which are growing at a rapid pace. Not only is the technology sector a key pillar for India's growth, but it has also created unprecedented disruptive ventures (GINSEP 2021). As per NASSCOM, the Indian Technology sector beholds a surge of over 15% in FY 2022 which translates into the $200 bn revenue mark, concluding into $ 227 bn revenue.

As the majority of the studies concerning women's entrepreneurial activities were concentrated in Western countries, only a little has been discovered regarding the essence of women's entrepreneurship in Eastern countries (Roomi et al. 2018; Panda 2018). Hence, researchers have been called upon to inspect the depth of women entrepreneurship in Eastern countries like India. This will extend their understanding of the restrictions and barriers faced by female entrepreneurs and how they overcome them to shape their entrepreneurial path in the wake of the country's diversity and challenging socio-cultural norms (Brush et al. 2009).

2.1.1 Technology Sector in India and Women

India's start-up ecosystem stands firmly at the third position in the world with approximately 25,000–26,000 tech start-ups with a cumulative growth rate of 39%. It has successfully created 6.6 lakhs direct jobs and 34.1 lakhs indirect jobs in the last decade with a cumulative valuation of around $320–330 Bn through this, thus creating wealth for 1.3 Bn Indians (NASSCOM and Zinnov 2021). Apparently, the ratio of women tech founders to men is reported to be below 10% in India (Inc42 2019), contemporaneously leaving the gender disparity in the technology sector no more a secret.

In fact, the scant representation of women entrepreneurs in the tech sector is a major challenge worldwide, which will lead to the designing of a digital world that would be impaired by female leadership. Many studies have highlighted that policy-makers, academics, and industry leaders have constantly been underappreciating the importance of tech-based women entrepreneurs for industry dynamics, economic development, and social growth (Rose 2019). However, the technology surge and the increase in technology education saw a surge of Indian girls into the tech sector, which is much higher as compared to the United States and many European countries (McDonald 2018; Rathor et al. 2020). But surprisingly that is not translating into women start-ups in the technology sector.

With this backdrop, along with significant gender gaps in technology sectors (GEM 2017), it is evident that treating women as the second gender will increase gender discrimination. In fact, it would severely impact social equality and the economy in terms of jobs, better innovations, and economic gains.

In order to do so, the authors have examined the status of women tech entrepreneurs in India, whose venture manifests technology orientation (BarNir 2012). As per NASSCOM, a tech venture can be understood as "an entity working towards innovation, development, deployment, and commercialisation of new products, processes, or services driven by technology or intellectual property." Women entrepreneurs considered in the study could be classified under these types of tech ventures.

2.1.2 Need of the Study

Several authors have explored and researched the connection between entrepreneurship education and venture creation. Likewise, several research studies have been done on entrepreneurship training that revolve around how entrepreneurship training helps in starting and running new ventures and also emphasizes the significance of training in the field of entrepreneurship. Even though women founders are very unlikely to have any formal entrepreneurship education and they often lack experience in management positions as compared to their male counterparts (Schneider 2017), a recent study by UN Women (2020) confirms that business education and training can help in the advancement of entrepreneurial mindset which thereby encourages women to participate in entrepreneurship activities. Similarly, Global Entrepreneurship Monitor (2020) corroborates that engagement in entrepreneurship training activities like exploring new technologies to explore new business opportunities, and improving social media skills and business model innovation can improve women's work skills among other women from Southeast Asian countries. Considering the above view, our study can be positioned parallel to the research with an additional distinction. Firstly, our study is women-focused and, secondly, it focuses on the technology sector which is of greater prominence in India, with a growth rate of 10% per annum, which is two or three times faster than the global technology industry (NASSCOM and Zinnov 2021).

Studies showcase the significance of Entrepreneurship Framework Conditions (EFCs), a concept brought up by the "Global Entrepreneurship Monitor", which specifically explains the standard of the entrepreneurial ecosystem at a national level, and includes nine key components (Acs et al. 2008). Our analysis has considered one of the factors of EFCs, i.e., entrepreneurship education and training to examine not only the levels of new business creation but also to understand how it helps in overcoming the barriers.

This study contributes to the body of academic knowledge in many ways. We have investigated how entrepreneurship education and training and "entrepreneurial self-efficacy" affect women tech entrepreneurs in India to overcome the barriers. To the best of our knowledge, the study of such nature has not been carried out in India,

where the ratio of tech-based female founders is less than 10% (Inc42 2019). Finally, we offer suggestions to policymakers to devise robust policies to impede the gender disparity in entrepreneurship, specifically in traditionally male-dominated sectors like technology.

The chapter proceeds as follows: the first part explains the introduction and goals of the work, followed by the second part that includes an extensive literature review on the variables used in the study, the third part deals with the methodology and model for research, and the fourth part shows the results of the analysis conducted on the data collected for the study. Finally, part five discusses the conclusions and the limitations of the study from which the scope for further research is examined.

2.1.3 Objectives

The objectives of the study are

1. To investigate the influence of "entrepreneurship education and training" on entrepreneurial self-efficacy among women tech entrepreneurs.
2. To investigate the influence of "entrepreneurship education and training" on overcoming barriers to entrepreneurship among women tech entrepreneurs.
3. To examine the effect of "entrepreneurial self-efficacy" on overcoming barriers to entrepreneurship among women tech entrepreneurs.
4. To study the mediation effect of "entrepreneurial self-efficacy" between "entrepreneurship education and training" and overcoming barriers to entrepreneurship among women tech entrepreneurs.

2.2 Literature Review and Hypothesis Development

2.2.1 Entrepreneurship Education and Training, Entrepreneurial Self-Efficacy, and Overcoming Entrepreneurial Barriers Among Women Entrepreneurs

"Entrepreneurial self-efficacy" is among the significant determinants for predicting the future performance of entrepreneurs. Therefore, it can be argued that a deficiency of confidence and a surplus of diffidence hinder future performance (Shelton 2006). There is growing evidence that women who received entrepreneurship education and training have a strong self-perception of their entrepreneurial competence (Thébaud 2010). Consistent with the theory of social cognition by Bandura (1997), scholars reason that "entrepreneurial education provides opportunities for mastery experiences, vicarious learning, social persuasion, and judgments of one's physiological state". This can be done through "various business plans, aspirational live

case studies, and observation of successful role models". "Education and training" also provide chances for indirect learning by observing the role models who are successful in their respective areas (Zhao et al. 2005). The studies also indicated that the best practice entrepreneurship program tends to increase the self-efficacy and perceived feasibility of participants, as the required skill set for entrepreneurship can be completed through "entrepreneurship education and training" (Mitra and Matlay 2004; Peterman and Kennedy 2003). Entrepreneurship education programs counterbalance low self-efficacy and lead to an increase in the possibility of successful venture creation by women (Wilson et al. 2007).

Izquierdo and Buelens (2008) explain that "entrepreneurial self-efficacy" and entrepreneurial education go hand in hand and that individuals' tendencies to become entrepreneurs increase with "entrepreneurial self-efficacy" (Boyd and Vozikis 1994; Zhao et al. 2005). With entrepreneurial education, self-efficacy can be enhanced due to acquired skills and experience. Inactive experience, modeling, and persuasion help to improve task-specific self-efficacy (Bandura 1982; Hollenbeck and Hal 2004). Hence, through knowledge and experience, entrepreneurs can modify entrepreneurial self-efficacy (Chen et al. 1998). Considering gender stereotypes, many studies have shown that generally women have a lower level of "entrepreneurial self-efficacy" as compared to men (Dempsey and Jennings 2014). On the other hand, some studies indicate the reverse (Coleman and Kariv 2014), while other research discover no gender differences in "entrepreneurial self-efficacy", which could be considered significant (Mueller and Dato-On 2008). Thébaud (2010) discovered that women consider themselves less competent for entrepreneurial activities than men because of gender roles and cultural beliefs, so they need higher education to perceive themselves as capable and skilled enough for performing entrepreneurial tasks.

Similarly, a study by Wilson et al. (2007) explains that "entrepreneurship education has positive effects on ESE, and these are stronger for women than for men. This gender-specific effect could be related to student's learning experience as it has been found that female students perceive more significant benefits from entrepreneurial education than men" (Packham et al. 2010).

(Gielnik et al. 2017) found the moderating effect of "entrepreneurial self-efficacy" and found that "entrepreneurial self-efficacy sustains the positive influence of entrepreneurship training on entrepreneurial passion", which leads to higher rates of venture creation. Similarly, the study by Molina-López et al. (2021) found that ESE plays a mediating effect between entrepreneurial education and training and overcoming barriers related to entrepreneurship. Finally, it can be expected to see a consistent pattern for women tech entrepreneurs. Therefore, we draw the following hypotheses as below

H1. "Entrepreneurship education and training have a positive influence" on the entrepreneurial self-efficacy of women entrepreneurs.
H2. Entrepreneurial self-efficacy mediates "the relationship between entrepreneurship education and training and overcoming barrier" related to entrepreneurship.

2.2.1.1 Entrepreneurship Education and Training and Overcoming Entrepreneurial Barriers Among Women Entrepreneurs

Entrepreneurship is "an ongoing process that requires a myriad of talents, skills and knowledge (Solomon 2007)". Drucker (1985) states that entrepreneurship can be grasped and learned via the right training and education. Mitra and Matlay's (2004) study also confirms that the personality attributes, skills, and abilities needed to opt for entrepreneurship as a career path can be acquired through training. Liu et al. (2019) asserted that education in entrepreneurship is committed to enhancing and blooming the zeal, passion, drive, and entrepreneurial spirit and quality of college-going students to prepare them well for a specific career, organization, or business plan. There are a variety of entrepreneurship education and training methods, including awareness programs about career options and funding sources, field trips, informal inspirational programs such as founder interviews, hands-on experimentation such as consulting with founders and digital simulations, and skill-development sessions (Solomon et al. 2002). It is also committed to designing and developing valuable skills needed by an entrepreneur to help him explore and discover appropriate business opportunities, along with "new technologies and market trends, and skills to find patterns in those changes" (Baron 2006).

According to Leibenstein (1968), education has an instrumental value, stating that: "training can do something to increase the supply of entrepreneurship. Since entrepreneurship requires a combination of capacities, some of which may be vital gaps in carrying out the input-completing aspect of the entrepreneurial role, training can eliminate some of these gaps."

"Entrepreneurship education and training" may be defined and understood in different ways from an ontological perspective. Heinonen and Poikkijoki (2006) delineated three objectives for an "entrepreneurship education and training" program: learn to decode entrepreneurship, learn the entrepreneurial approach, and eventually become an entrepreneur. Likewise, entrepreneurship education and training have three objectives, as suggested by Mwasalwiba (2010), which are to educate for, about, or in entrepreneurship. To better understand, "*Educating for*" has the purpose to catalyzing the process of entrepreneurship and providing pupils with the skills as well as the knowledge required to start a venture. The main focus of "*education about*" is an increased understanding of what entrepreneurship is and its benefits for society are. The purpose of "*educating in*" entrepreneurship targets to turn individuals into change agents in their social setting, and help them build up their skills, like communication, managerial, marketing, competencies, and manage risks and legal awareness to take on more responsibility in their career.

Due to their lack of business knowledge, accounting, marketing and consumer-related activities, capital management, as well as hiring and retaining employees, women entrepreneurs face difficulties (Strawser et al. 2021). We believe extending support to women's growth-oriented ventures is paramount; indeed, entrepreneurial education and training can assist them in acquiring entrepreneurial knowledge and abilities, developing a proactive attitude toward risk, and improving their entrepreneurial performance by overcoming barriers.

In line with the above literature, we propose the following hypothesis:

H3. "Entrepreneurship education and training have a positive influence" on female entrepreneurs to overcome barriers in an entrepreneurial venture.

2.2.1.2 Entrepreneurial Self-Efficacy and Overcoming Entrepreneurial Barriers Among Women Entrepreneurs

"Self-efficacy is considered as the prospect an individual has about one's ability to accomplish a task pertaining to an objective. Self-efficacy can be understood as belief in one's capacity to carry out a task that is tied to a certain objective." Women's perception of their capabilities, concomitant with their judgments about whether they should start their own venture or apply for top managerial positions, can be stemmed from the conviction that they are less qualified than males for many non-traditional jobs (Bandura 1977, 1997).

Further, self-efficacy indicates the beliefs and confidence; individuals have in their talents and capacities to fruitfully execute essential tasks despite the difficulty of these activities. Self-efficacy is essential to comprehending individual behavior since it determines a person's tenacity, resiliency, and commitment when confronted with challenges and the level of effort put in by the person to complete a task (Memon et al. 2019). In the context of the study on entrepreneurship, "entrepreneurial self-efficacy refers to the degree to which an individual believes in his or her own skills and capabilities to complete the obligations necessary to launch a new company enterprise" (McGee et al. 2009). Scholars have also stated "entrepreneurial self-efficacy as a person's evaluation of personal skills in relation to the particular job of entrepreneurship" (Chen et al. 1998).

Entrepreneurship is not only characterized by innovation, risk-taking, and initiative but also by a lengthy and difficult process that requires zeal, dedication, and perseverance. This is also reflected in Social Cognitive Theory which holds the view that "self-efficacy beliefs can be improved or strengthened in the mentioned four ways: (1) enactive mastery; (2) vicarious experience (role modelling); (3) subjective norm (social persuasion); and (4) physiological states" (Bandura 1982). Enactive mastery denotes the personal level of mastery acquired by an individual over a period of time that is displayed through their achievements such as a successful business venture or a business expansion (Bandura 1982). Gaining experience as a practical venture founder/entrepreneur can influence entrepreneurial self-efficacy because working as a founder affords the chance to regularly participate in an assignment and gain belief and conviction in one's skill, hence strengthening optimistic estimates of one's future potential. Role modeling or observational learning is referred to as vicarious experience. Individuals have the ability to modify or re-evaluate their efficacy views as a result of witnessing other people (Bandura 1982). Subjective norm or social persuasion is the positive response received upon their actions and support gained from others. While working on a task, physiological states allude to emotional arousal and strain, which is quite common among new entrepreneurs and new business ventures (Bandura 1982; Souitaris and Maestro 2010).

According to Dempsey and Jennings (2014), women have poorer entrepreneurial self-efficacy because they have less past entrepreneurial experience and, hence, are more likely to receive poor feedback or even failure in their efforts. It is further evident from the fact that "Enactive mastery, vicarious experience, physiological arousal, and verbal persuasion" are the four main factors contributing to self-efficacy. These factors support both men and women equally in overcoming their perceptions of their entrepreneurial self-efficacy. If they feel they lack the mentioned qualities, women might opt not to seek a job or decide against starting their own business. In contrast, even with a few of the abilities mentioned in the criteria, male counterparts could move forward with their venture. Given the gender and role stereotypes faced by women, which lowers their perceived efficacy, this understanding of self-efficacy is particularly pertinent to the comprehension of female behavior in relation to the decision for creating their own ventures or to go for leadership positions.

Since women have a perception of lower self-efficacy for their success in tasks which are traditionally predominated by men, they not only have to deal with the adverse view that others have of their capability in traditionally male-oriented domains, but they also have to tackle the negative view that they hold of themselves in those areas which are traditionally male-dominated. However, this does not mean that women themselves are to blame for the relatively low number of women who start their businesses; instead, it is a result of women who are genuinely internalizing the overall values that are associated with gender and management (Bosak and Sczesny 2008; Haynes and Heilman 2013).

H4. "Entrepreneurial self-efficacy has a positive influence on female entrepreneurs" to overcome barriers in an entrepreneurial venture.

2.3 Methodology

For understanding the influence of "entrepreneurship education and training" (ET) on overcoming the barriers (OB) along with mediation by entrepreneurial self-efficacy (ESE), the conceptual model (Fig. 2.1) is tested through a cross-sectional survey method. The methodology indicating the sampling process and size, data collection process, data refining, analysis, constructs, and measures along with interpretation is explained ahead.

2.3.1 Sampling Procedure

The questionnaire was circulated among 145 women-led tech start-ups, and 103 usable responses were received, achieving a response rate of 71.03%. The data was analyzed using "SPSS v. 23.0" software and "AMOS v 0.23.0". The sampling procedure may give rise to a nonresponse bias procedure (Armstrong and Overton 1977),
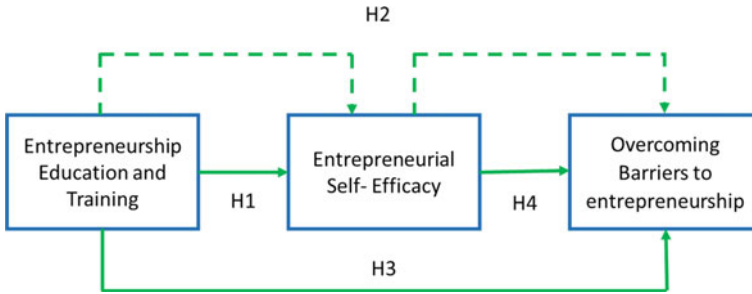
Fig. 2.1 Conceptual model

and to ensure there is no nonresponse bias, the demographic traits of the early respondent group and later respondent group were compared with each other. To check for it, the Chi-square test was used at a 5% significance level, and it was found that the two groups have no significant difference, meaning that nonresponse bias is not an issue for the present study.

Data was processed to extract descriptive statistics of the sample; Fig. 2.2 revealed that 14.9% of participants were between the age group 20–24, 36.6% were between the age group 25–29 years, 25.7% were between the age group 30–34 years, 27.7% were between the age group 35–39 years, 5% are between the age group 40–44 years, 3% are between the age group 45–50 years, and 2% were 50 years and above. According to Fig. 2.3, 54 respondents are postgraduate (53.5%), 42 are graduate (41.6%), and 5 are doctorate (4.9%). According to Fig. 2.4, 85.1% of participants are from urban areas, and 14.9% are from semi-urban areas. According to Fig. 2.5, the venture age of 8.9% was up to one year, 27.7% were 1–2 years, 20.8% were 2–3 years, 24.8% were between 3–4 years, and 17.8% were between 4–5 years.

2.3.2 Data Refinement and Analytical Procedure

Data was screened using SPSS software. Box plots are calculated for outliers and based on the results two outliers were eliminated. As per Tabachnick and Fidell (2013), these outliers may have affected the overall "reliability and validity" of the scale. Grounded on the criteria proposed by Hair et al. (2006), skewness and kurtosis values were checked and found to be within limits.

2.3.3 Measurement Model

The constructs and items are borrowed from the studies conducted by various authors; however, based on the advice provided by Anderson and Gerbing (1982),
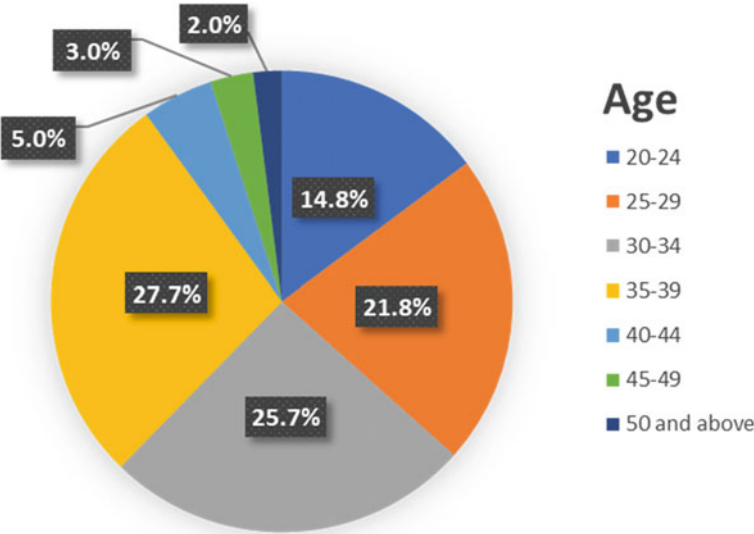
Fig. 2.2 Age-wise distribution
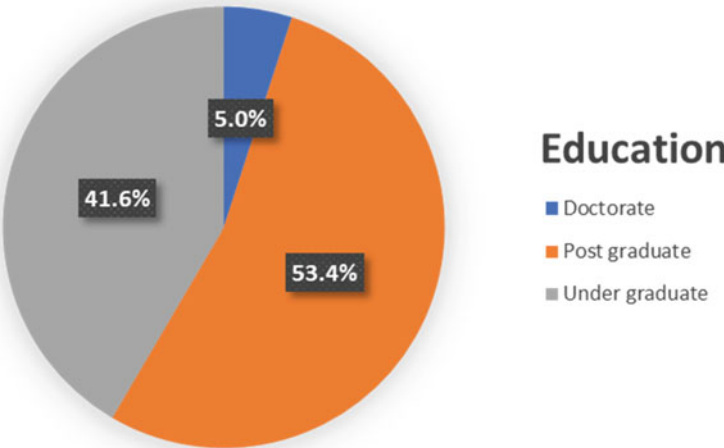
Fig. 2.3 Education-wise distribution

the researchers performed "exploratory factor analysis". Latent variables to the measurement model were identified using "principal component analysis" along with "Varimax rotation". Sampling adequacy was ensured using Kaiser–Meyer–Olkin (KMO), which came to 0.918, indicating the sample was sufficient for "factor analysis" (Hoelzle and Meyer 2013; Lloret et al. 2017). Along with that, "Bartlett's
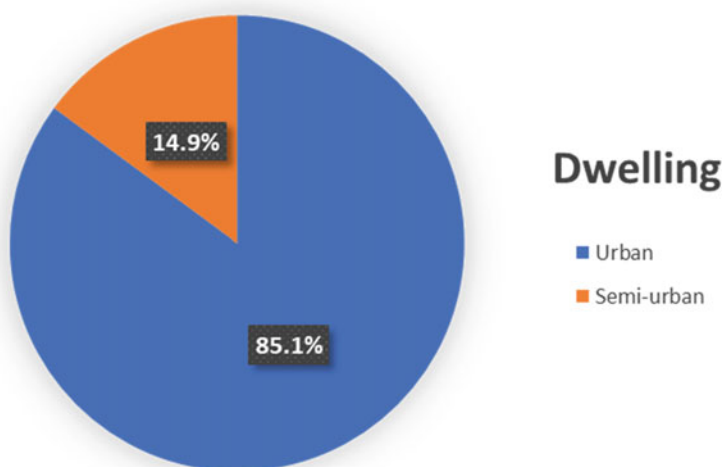
Fig. 2.4 Dwelling-wise distribution
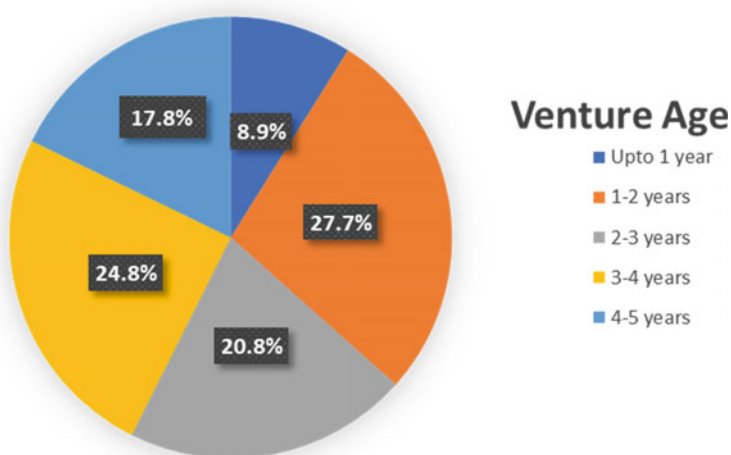
Fig. 2.5 Venture age-wise distribution

test of sphericity" (approximately $\chi 2 = 2850.769$, df $= 300$ and p $= 0.000$) also indicated suitability for factor analysis (Hair et al. 2014). All the factors loaded on their respective constructs, as per the prescribed values by Hair et al. (1998) (Table 2.1). The total variance explained is 79.980%.

After performing "exploratory factor analysis, convergent validity and discriminant validity, Cronbach's alpha (reliability coefficient) and composite reliability" are

Table 2.1 Constructs and loadings

Construct	Items	Mean	Std. deviation	Loadings
Entrepreneurship education and training	ET1	3.47	1.039	0.803
	ET2	3.51	1.040	0.827
	ET3	3.59	1.006	0.819
	ET4	3.49	1.078	0.838
	ET5	3.59	0.944	0.812
	ET6	3.56	1.028	0.863
	ET7	3.60	0.953	0.804
	ET8	3.68	1.053	0.843
	ET9	3.60	1.044	0.828
	ET10	3.59	0.954	0.847
	ET11	3.56	0.914	0.816
Entrepreneurial self-efficacy	ESE1	3.34	1.056	0.876
	ESE2	3.29	1.094	0.873
	ESE3	3.29	1.094	0.871
	ESE4	3.35	1.184	0.820
	ESE5	3.25	1.038	0.809
	ESE6	3.29	1.085	0.844
	ESE7	3.31	1.012	0.851
	ESE8	3.17	1.155	0.915
Overcoming barriers	OB1	3.28	1.155	0.893
	OB2	3.38	1.062	0.880
	OB3	3.39	1.053	0.875
	OB4	3.29	1.149	0.888
	OB5	3.41	1.120	0.870
	OB6	3.36	1.124	0.868

Source Developed for this research

calculated (Hair et al. 2014) (Table 2.2). The "reliability coefficients" ranged from 0.957 to 0.969, and composite reliability from 0.957 to 0.970 for all the constructs and is more than the prescribed threshold level of 0.70 (Nunnally and Bernstein 1994).

Following that, "confirmatory factor analysis" (Fig. 2.6) was carried out on the constructs. Based on suggestions by Fornell and Larcker (1981), the "average variance extracted" value for the constructs was well above 0.50 (Table 2.2). This ensured the "convergent validity" of all the constructs. Along with this the "square of the Inter-construct correlations" was lesser than the "square root of the average variance extracted" for every construct (Fornell and Larcker 1981), ensuring discriminant validity.

Table 2.2 Master validity and reliability

	α	CR	AVE	MSV	MaxR (H)	ET	ESE	OB
ET	0.968	0.968	0.736	0.312	0.969	**0.858**		
ESE	0.969	0.970	0.799	0.312	0.970	0.559***	**0.894**	
OB	0.957	0.957	0.788	0.161	0.959	0.402***	0.395***	**0.888**

* p < 0.050
** p < 0.010
*** p < 0.001
Source Developed for this research

2.3.4 Common Method Variance

"Common method variance (CMV)" was also checked to ensure no bias. For this, two measures were taken. Firstly, during the design phase of the scale, "the factors affecting the responses like common rate effects, scale length, common scale formats, common scale anchors, acquiescence biases, and item characteristic effects" were prevented. Secondly, to examine CMV, Harman's one-factor test was utilized. It showed that variance below 50% can be explained by a "single factor extraction" (Podsakoff et al. 2003).

2.3.5 Structural Model for the Study

Subsequent to that, "AMOS V. 23.0" was used to examine the conceptual model. All the hypothesized relations were tested by using "SEM (structural equation modeling)" (Fig. 2.3). By using the "maximum likelihood estimation technique", the "path analysis" was conducted by Hair et al. (2014) (Fig. 2.7).

Table 2.3 specifies the model fit measures and their acceptable threshold limits. As apparent from the table, all values are within the acceptable range.

2.3.6 Hypothesis Testing Results

Table 2.4 indicates the standardized regression weights, squared multiple correlations, and p values. As apparent from Table 2.4, all the hypothesized relationships were sustained. Based on this, it can be stated that the data supports the conceptual model well.
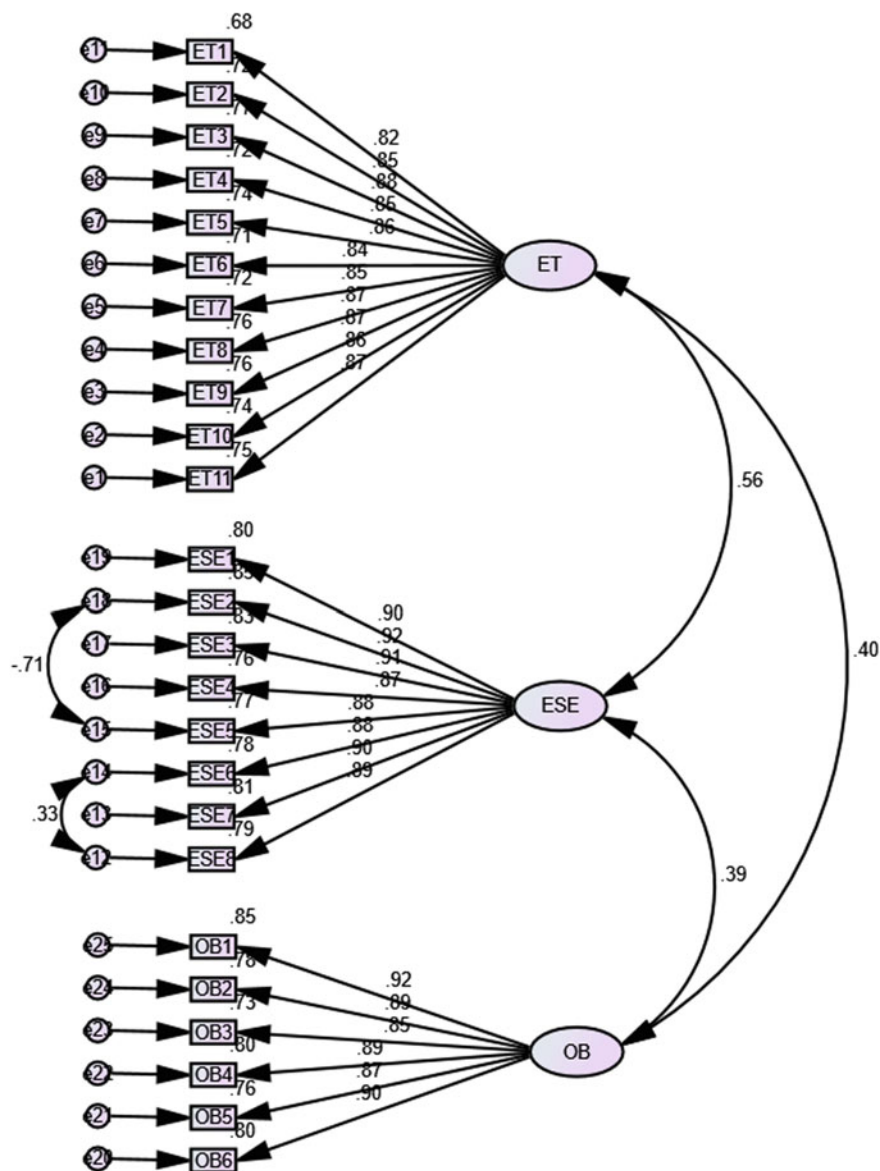
Fig. 2.6 Measurement model. *Source* Developed for this research

The analysis shows that "education and training" have a positive impact on "entrepreneurial self-efficacy" (H1: Standardized $\beta = 0.559$ and $p < 0.001$) and over-coming barriers (H3: Standardized $\beta = 0.263$ and $p = 0.023$). Also, "entrepreneurial self-efficacy" has a positive impact on overcoming barriers (H4: Standardized $\beta = 0.248$ and $p = 0.031$) (Table 2.4).
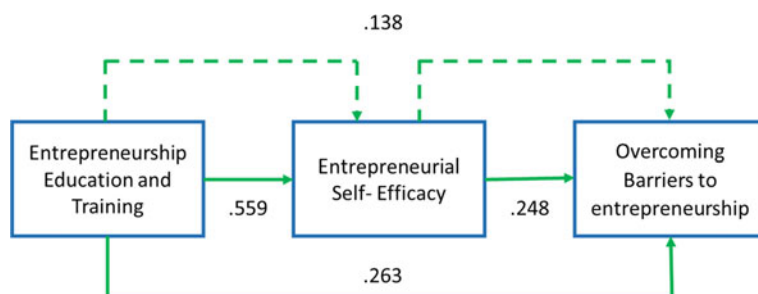
Fig. 2.7 Structural model. *Source* Developed for this research

Table 2.3 Model fit measures

Measure	Estimate	Threshold	Interpretation
CMIN	391.473	–	–
DF	270	–	–
CMIN/DF	1.450	Between 1 and 3	Excellent
CFI	0.957	>0.95	Excellent
SRMR	0.048	<0.08	Excellent
RMSEA	0.057	<0.06	Acceptable
PClose	0.032	>0.05	Acceptable

Source Developed for this research

Table 2.4 Analysis results

Hypotheses				Estimates	β	R^2
H1	**ET**	→	**ESE**	0.559	***	0.312
H3	**ET**	→	**OB**	0.263	0.023	0.204
H4	**ESE**	→	**OB**	0.248	0.031	

* p < 0.050
** p < 0.010
*** p < 0.001
Source Developed for this research

2.3.7 Mediation Analysis

According to Table 2.5, the direct effect of education and training is significant (β = 0.263, p = 0.024), and the indirect effect is also found to be significant (β = 0.138, p = 0.015). Also, zero does not lie between the obtained confidence intervals, i.e., CI = 0.030 and 0.274. This confirms the evidence of partial mediation of one's entrepreneurial self-efficacy between education and training and overcoming barriers

Table 2.5 Mediation analysis

Hypothesis	Effect	Mediator	β	P	C.I	
					LB	UB
	Direct		0.263	0.024	0.037	0.470
H2	Indirect	ESE	0.138	0.015	0.030	0.274

Source Developed for this research

Table 2.6 Objectives versus results

Objectives	Hypotheses	Results
1. To investigate the influence of "entrepreneurship education and training" on entrepreneurial self-efficacy among women tech entrepreneurs	H1	Supported
2. To investigate the influence of "entrepreneurship education and training" on overcoming barriers to entrepreneurship among women tech entrepreneurs	H3	Supported
3. To examine the effect of "entrepreneurial self-efficacy" on overcoming barriers to entrepreneurship among women tech entrepreneurs	H4	Supported
4. To study the mediation effect of "entrepreneurial self-efficacy" between "entrepreneurship education and training" and overcoming barriers to entrepreneurship among women tech entrepreneurs	H2	Supported

Source Developed for this research

(H2: Standardized $\beta = 0.138$ and $p = 0.015$). Therefore, hypothesis H2 is accepted (Table 2.6).

2.4 Conclusion

The present study throws light on the influence of "entrepreneurship education and training" among women tech entrepreneurs. The research has identified that "entrepreneurial self-efficacy" has a significant positive effect on overcoming barriers. It also plays a mediating role between education and training and overcoming barriers, which signifies that an increase in "entrepreneurial self-efficacy" will have a positive influence on improving women's entrepreneurial outcomes.

The study's result further reveals that entrepreneurship education and training positively promote women's self-efficacy, thereby encouraging more and more women to go for entrepreneurship in tech-based sectors and overcome the challenges they encounter in their entrepreneurial journey. The fact that women-led techpreneurship in India is in the nascent stage, support in the form of "entrepreneurship education and training" is much needed by them, which would enable them to be more capable of undertaking unfamiliar and complex business-related tasks and

thus will help them overcome the barriers and advance their confidence to engage in entrepreneurial activities. Accordingly, in dual ways, entrepreneurship education and training strengthen women's entrepreneurial vocation and its outcomes.

2.5 Way Forward

Irrefutably, the technology sector has created the most disruptive ventures and is a promising pathway for realizing economic growth across the globe. It becomes apparent how ignoring women, which constitute one-half of the working-age population, would deprive them of opportunities for growth in one of the rapid-growing markets globally (Strawser et al. 2021). Eventually, this deepens the gender imbalance, and therefore appropriate initiatives could be practised by policymakers, private organizations, and NGOs to gear up the momentum to accelerate women's entrepreneurship, especially in the technology sector.

Due to the lack of self-efficacy, women prefer to limit their career choices and avoid entrepreneurial endeavors (Bell 2022). This perception emerges during the early stages of high school, and to overcome the inherent differences experienced by women, the early introduction of entrepreneurship programs like "Junior Entrepreneurship Program" should be put forward to pupils to develop entrepreneurial skills, which leads to improvement of self-efficacy. The results are consistent with the work of Kazumi and Kawai (2017), which validates that the development of entrepreneurial self-efficacy would help women entrepreneurs, even if they encounter difficulties, to perish and enjoy an upward trajectory of growth for their venture.

It is worth noting that building self-efficacy is instrumental to a firm's accomplishments; however, this does not guarantee that they can't fail in their entrepreneurial endeavors (Miao et al. 2017). Indeed, educational experiences must empower women for their future ventures and prepare them as much for failures as much as it prepares them for success.

Women see themselves as unable to run successful and profitable ventures due to a lack of key skills, valuable knowledge, and support, along with other socially restricting factors (Anna et al. 2000). This reflects the intervention of appropriate training programs that can incorporate creativity, soft and technical skills, which could be dispensed to strengthen self-confidence and empower women to start new ventures (Gavigan et al. 2020).

The significant disparity in women's participation in the entrepreneurial world can be diluted if India starts to see investments in entrepreneurship education as an instrument to do so. Therefore, policymakers who are attempting to increase women in entrepreneurship should be required to involve an educational component as per women's needs. When women are exposed to great entrepreneurship education, it naturally leads to a drastic boost in their self-efficacy, empowering them enough to take up the challenges of the entrepreneurial world. This drastic boom happens when, via entrepreneurship education, women are presented with opportunities for mastery,

understanding of role modeling, exposure to verbal encouragement, and awareness of various emotional and physiological states (Maritz and Brown 2013).

Last but not the least is to bring focused entrepreneurship training programs related to technology at all levels, for instance, initiatives such as "Women Empowerment Through Technology"—a training program collectively by NASSCOM Foundation and American Express, to produce women with tech skill development and entrepreneurship training (Economic Times 2022), and the SAP Lab India initiative came forward in collaboration with the Atal Tinkering Laboratories (ATL) and NITI Aayog to promote STEM education among all the secondary school students in the country (SAP 2019). Not only taking the technical skills into consideration but also bringing in campaigns for women entrepreneurs aimed at enhancing awareness regarding varied programs that can facilitate female tech-preneurship in India. Such initiatives would ensure that women have an equal chance of success when it comes to competing in the technology sector and would also help create a more diverse and inclusive workplace and warranting the very vital benefits to be achieved for women, their families, and the society at large. Lastly, celebrating the achievements of technology-based women entrepreneurs possess the power to inspire more women to come forth and take charge in technology-based entrepreneurship (Shrivastava 2021).

2.6 Limitations and Future Scope

One limitation of the study is that it does not incorporate male tech entrepreneurs other than women tech entrepreneurs, which would have enabled us to draw comparative results. The comparative results would have further thrown light on the impact of "entrepreneurship education and training, entrepreneurial self-efficacy" on women with those of men in the technology sector. To further generalize the key findings, this study needs to be extrapolated in other traditionally male-dominated sectors, with a larger sample size. Another limitation includes survivor bias, as the sample includes running tech ventures only and does not examine the ones that were not able to sustain, the inclusion of which would have provided better insights for the study. In addition, future research could expand views on how structural factors, subjective norms, and individual factors can dynamically affect women's tech-preneurship in the country.

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Chapter 3
A Surge in Green Start-Ups in India: The Study of Sustainable Start-Up Ecosystem Powered by Green Finance

Sorabh Lakhanpal, Mandeep Singh, and Ruhul Amin Choudhury

Abstract Sustainable development is a key concept in environmental law that tries to strike a balance between technology and the preservation of the environment. Economic development cannot be achieved at the expense of environmental degradation. Green finance is the most realistic approach to economic and ecological growth. Several summits and conferences have embraced a sustainable development framework for their action plans in order to address the critical concerns of climate change, aiming at 2030 Sustainable Development Goals which is a set of 17 goals that will work to maintain the balance among economic, social, and environmental sustainability. The chapter aims to provide an insight into the present status of green finance along with its impact on start-ups. The present stats suggest a wide range of start-ups coming out from various sectors, leading India to a global stage of discussion in terms of its participation toward economic and environmental sustainability. As per the extracted published report, it is suggested that the government is taking various initiatives in terms of programs and providing green finance funding to the blooming start-ups and at the same time Indian young entrepreneurs are taking huge benefits out of this by implementation of sustainability start-ups. For some years, India has been on a path toward green project financing, with considerable changes made to the country's financial industry to adopt environmentally friendly practises. Businesses are the engine of the economy, and implementing sustainable business practises is important to achieving carbon neutrality.

Keywords Sustainable development goals · Green start-ups · Green finance

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3.1 Introduction

Green Start-Ups are start-ups that deliver services or products with a primary focus on achieving Sustainable Development Goals without jeopardizing the global economy. The Sustainable Development Goals (SDGs) are seventeen time bound goals, expected to be achieved by 2030 (Tang et al. 2010) that disclose the rules and regulations for the development or manufacturing of any product or service without creating a negative impact on the economy and environment simultaneously. The establishment of these global endeavors across humanity attracted a lot of attention and responsibility toward achieving them. Some of the endeavors of SDGs are climate change, renewable energy, environmental pollution, and carbon neutrality. Many nations have started working toward the SDGs through various initiatives. One popular idea among the others that caught the attention of the global community working on the SDGs is Green Finance. With the idea of promoting green culture among industries and start-ups, many governments and private organizations developed the concept of green revolution in industries. The key ideas are green finance, green bonds, green start-ups, and green workers or entrepreneurs. Green finance is an organized financial activity that is designed to enhance the environment by financing or funding companies (Bengtsson et al. 2018), and start-ups working in this domain. The key idea is to finance or fund the companies whose product or service aids the environment and economy simultaneously. Green start-ups are a subset of start-ups that predominantly works for the environment by building environment and eco-friendly products that are services that often last long. The green firms or companies' business models are even handed toward the environment and economy (Grabosky 1994). Green bonds are the financial amount that is set aside by private organizations or governments to support green activities such as start-up funding or green project funding. Sustainable entrepreneurship is one of the key pillars of a green revolution, developing entrepreneurs who aim to solve the problems in accordance with the environment and economy toward achieving the SDGs.

In the midst of a raise in green finance, green bonds, and entrepreneurship, many governments and private organizations, especially private financial institutions, had come forward through various climate change, environment summits, and conferences to agree on individual contribution toward the goals. One such summit was United Nations Climate Summit in Copenhagen held in 2009 (Guo et al. 2022). In the UNCS at Copenhagen in 2009, wealthy nations promised to contribute financial support in hundreds of billions by 2020 to achieve the 17 SDGs by supporting developing countries. However, the nations failed to contribute and the same agreement was reaffirmed at Cop'26. Historically, banks and non-financial institutions had contributed and sanctioned loans, and financial support to green companies such as renewable energy companies. In contemporary times, the financial institution and banks are hesitant to contribute or sanction financial support to long-term companies as the Return on Investment (ROI) is expected to be very low. In more technical terms, the possibility of asset-liability is uncertain, which concerns the funding institutions. Various other summits and conferences were summoned during the early 20's to

support and spread awareness among the people such as the G20 summit (started in 2008) (Taghizadeh-Hesary and Yoshino 2020). In India, the legislative law and rules are vague on how to allot or contribute to long-term companies. A few methods such as insurance and pension funds are not so significant to finance the long-term or green companies. Green bonds are the finance set aside by huge companies, which are meant to be used for a better environment or invested in green long-term companies. Generally, green bonds are spent by huge companies on their side-line projects that aim to enhance the economy while conserving the environment. India has got very high aspirations for the development of renewable energy. India plans to multiply its current renewable energy of 30 GWs into 175 GWs by the end of 2022. These aspirations demand a huge financial investment of close to 200 billion USD (Tang et al. 2010; Rosembuj and Bottio 2016). However, since the legislative rules on loans and funding for green companies are vague in India, banks and non-financial institutions are hesitant to risk their money. Along with that, the high-interest rates and low payback time make it an impossible action to invest and develop the field of renewable energy (Shrimali et al. 2013). Many flagships and financial initiatives were started to fuel the spread of awareness on a global scale. Flagships such as Principles for Responsible Investment (PRI), Equator Principles (EP) for institutions, and the United Nations Environment Program (UNEP) (Durrani et al. 2020) are established ways for signatories to execute green finance. These serve as reliable sources of information that entitles investment in green companies or ecosystems. With the development of responsible flagships, the sustainable stock exchange has widened its scope for better and constant exchanges in the system. The sustainable stock exchange aids the community of investors in deciding the company to invest in. The ESG indexes and sustainable stock exchange serves the purpose of ensuring the constant volatility of transaction in or among green companies (Klagge and Zademach 2018; Waddock 2008). Green finance, bonds, and sustainable entrepreneurship are all part of a green industrial ecosystem unlike the traditional ecosystem (Chopra et al. 2022).

3.2 Impact of Green Finance in Industry 4.0

Green finance (Sanders et al. 2016) is the central entity of the Fourth Industrial Revolution. The Fourth Industrial Revolution is a huge leap toward integration and upgradation of industries with the aid of novel technological advances. The main ideas of Industry 4.0 are circular green economy with a greener manufacturing pipeline built using technological advances. The key priorities of the Fourth Industrial Revolution are optimizing the production pipeline by minimizing the waste as low as possible. The key idea of a circular green economy is to achieve a green ecosystem on both economic and environmental levels. Besides the optimization and enhancement of the existing industry methods (Awan et al. 2021), IR 4.0 emphasizes equally on digitalization, innovation, etc. Moreover, IR 4.0 regulates the usage and aids in the efficient management of natural resources. The other subtle but important objectives

of IR 4.0 are building a financially stronger ecosystem for businesses and industries by mitigating the financial risks. IR 4.0 is reportedly going to vastly impact the financial system through cryptocurrencies, digital payments, and through many more ways (Chen et al. 2008; Vargas-Hernández 2020).

3.3   Green Start-Ups in India

India has 107 unicorns and more than 65,000 (Ali et al. 2021; Lehrer and Asakawa 2004) start-ups. More than 30,000 are added to the list in just one financial year. India is reportedly emerging as a start-up hub in the world, standing in third place in the number of start-ups across the world. With the initiatives and support from the Indian government, there has been a huge boost in the establishment and growth of start-ups. In just a single financial year 33 start-ups turned unicorns. This rapid growth in the ecosystem has also fuelled the growth of green start-ups. In fact, some of the start-ups now are long-term companies or companies that were founded with the goal to work for SDGs. Many cities are contributing to building the start-up ecosystem including Delhi-NCR, Bangalore, and Hyderabad. Bangalore, once the start-up capital or also called Silicon Valley of India, is surpassed by Delhi-NCR (Schaltegger and Wagner 2011), currently standing as the highest contributor to the ecosystem of start-ups. With the government initiatives such as T-hub by the Telangana government, and other national initiatives from the Indian government, the opportunities were broadly opened for the scope to build and enhance the existing environment. Apart from India, China and USA are also hugely investing and developing adequate opportunities for people of their nations to start a company. Some of the non-financial initiatives that are fuelling the growth of start-up culture are the mass availability of resources to the nation. The number of green start-ups among overall start-ups is increasing (Manolova et al. 2017) year on year. The ratio of green start-ups has been created drastically due to increased funding opportunities by both government and private funding institutions. Presently, there are more than 3,000 green start-ups in India, predominantly working on renewable energy and products that enhance the current situation both economically and environmentally. Among those, more than 5 are unicorns (Ajibola et al. 2020a). India has reported a lot of success stories in green companies, changing the perspective toward green start-ups.

3.4   Inspiration from Germany's Green Finance Ecosystem

The main motto of green finance is to commercialize the services or products that do not harm the economy or environment in any form, targeted at the market while benefitting society. Similarly, sustainable entrepreneurs are individuals or enterprises which work closely toward the SDGs while offering their services or products for the benefit of humans. The main aim of these sustainable entrepreneurs is to serve

simultaneously humanity, economy, and environment (Alsarhan et al. 2021). Hence, I term this as the most responsible job of this century. One strong case study from the start-up ecosystem of Germany (Banga 2019) stands as an inspiration to the world in terms of green start-ups which are major among the existing start-ups in Germany. Moreover, the majority of them are founded and led by women. Germany could be considered the most ideal country for the incubation of any green companies for its relatively better opportunities. In fact, most of the start-ups (Christopher 2015) in Germany are in a green ecosystem. One out of every three start-ups in Germany are green companies working on solving major problems related to food, energy, and manufacturing. One of the major boosts for the incredible growth of the green ecosystem is the academic encouragement and support. Most of the German universities are launch pads of green ecological cum business ideas. In many ways, these launching pads would bring government grants for initial funding. Since most green companies are supported by academia, it is very certain that most of the founders are from an engineering background. Moreover, one-third of green start-ups are in the research and development sector. The huge opportunity space has revolutionized the main objective of companies from commercial to sustainability. It (Garcia-Muiña et al. 2018) is also unsurprising that the support of academia and government has brought a lot of people to address climate change. Additionally, statistics says that 21% of the green founders are women which is much greater than the overall conventional ecosystem. An important thing to consider is the credit of huge support and ecosystem which should not be alluded completely to Germany since most of the green start-ups originated from a specific set of geographical sites in Germany such as McKinley.

3.4.1   Promoting an Environmentally Friendly Start-Ups Environment in India

The proliferation of climate-tech initiatives prioritizes the environment over profit; they must be mainstreamed (Ajibola et al. 2020b). Given India's promises at COP26, it was expected that the Union Budget 2022–2023 would provide a much-needed boost to the renewable energy industry. Among the incentives agreed upon last week in Parliament was the extension of tax breaks for climate start-ups and their counterparts in other industries for yet another year; notably, green start-ups are now part of the emerging industrial landscape (Ajibola et al. 2020b).

Solar energy, photovoltaic (PV) manufacturing, electric vehicles, battery swapping, electronic waste, and reverse logistics will almost certainly assist start-ups in not only finding their feet but also digging in their heels to contribute more to climate mitigation efforts. However, they require an enabling environment as well as funding to advance their business concepts. "Many fledgling firms struggle to compete with low-cost Chinese imports of electronics, controllers, and motors that are critical for diverse cleantech applications", says Abhishek Jain, Fellow and Director, Council

on Energy, Environment, and Water Livelihoods. Some tiny, fledgling start-ups may become more competitive by incentivizing them with a lower GST rate until they achieve economies of scale (Dash 2021).

3.4.2   Women Are Growing in the Green Finance Ecosystem

In the booming green finance industry and ecosystem, women are leading many green companies compared to conventional businesses. The ratio of men to women is much higher in the conventional start-up ecosystem, whereas it is the opposite case in the green start-up ecosystem, as reported by the Green Start-up Monitor (GSM). Considering the recent statistics, numbers strongly say that the number of women to men ratio among the green founders or in a general case has drastically increased. According to the NWBC—National Women's Business Council, 25% of small businesses are led by women. Some of the huge and successful examples of companies founded and led by women are ADinfinitum, Diva Cup, Green Depot, Happy Baby Food, and Stella & Chew's Inc. (Nhamo and Mukonza 2020). So far, a lot of revolution toward building smarter and larger green ecosystems was led as well as supported by women, and the women number is predicted to grow even more.

The World Bank, IMF, and OECD have all committed significant funds to achieve the Paris Agreement's climate goals by 2022. This demonstrates the global leaders' strong determination to promote the green economy on a large scale. Simultaneously, the Climate Policy Initiative published a report titled "Landscape of Green Finance in India 2022", in which it stated that green finance flows in India fall far short of meeting roughly one-fourth of the country's current needs (Kumar 2022). The overall increase was 179% for public sector flows and 130% for private sector flows. This demonstrates an increased commitment from both domestic and international public sources. However, given the level of need and ambition, private-sector finance mobilization must outstrip public-sector finance in the coming years.

3.4.3   Meet the Women Behind the Women's Company, Anika Parashar

Anika Parashar (famously known as Anika. P) is the mastermind behind the empire of women's company. She is one of the most famous women entrepreneurs in India, being covered by her story, the united news of India, and more. The products of the women's company are made available from top e-commerce stores such as Flipkart, Tata, and 1 mg. Women's company is one of the fastest growing companies with a wide range of services from construction services to cosmetic products. The company has grown to a pan-Indian scale in the domain of household services. With the increased attention toward creating sustainable products, Anika founded and has

started building sustainable household services and products. Anika saw an incredible scope and opportunity in building sustainable household services and products. It is a very well-known fact that household women are the most eco-friendly and environmentally friendly creatures on the earth. They mastered every skill from managing time, recycling waste, preserving food to saving money, and in fact generating money (Fig. 3.1).

With similar mental capabilities, Anika determined to create a company curated to serve households with better products. Anika was inspired by the fact that women have been a very key role in managing the households. Generally, in a family, women decide on the products and brands to use since they could better analyze and choose the best among the plausible options. With constant dedication and work, she has developed a small start-up into a nationwide company today serving and impacting a lot of households. With the very little opportunity Anika had, she has come a long way in broadening the company to the US. Many women have expressed their immense and grateful thanks to the products of the women's company. Women found the products to be clear, comfortable to use, and very affordable to buy. The company has been working very closely with an expert women crew to curate the solutions for the forthcoming women generations and their battles. Despite serving womenkind, the company as well the staff are an inspiration to a lot of young generations who would also be eager to bring in change and tune the world into a better place to live on levels and aspects. The women's company is all set to solve a wide range of problems besides empowering women in their own style. The women's company CEO Anika said running a company as such is not a responsibility but an emotion to bring the best for womenkind. The company has set its vision to serve women better. Women are who rightly act best in the world with their smart analytical skills. They could easily multi-task and manage the household, job, and society seamlessly and simultaneously. So, giving them more power through the products would boost them and helps them to stay enthusiastic about the work to be done. That is the reason for setting up the women's company and their vision to serve womenkind better.

3.5 Conclusion

The main findings in Green Finance, Indian Economy are the Indian start-up community, young entrepreneurs are working closing (Sarangi 2018) for developing appropriate solutions for serious climate and environmental problems. As a measure to grow green start-ups in India, many great initiatives were taken up and are being implemented. To achieve net-zero carbon emissions globally, and address much of the climate and environment-related objectives, a significant amount of budget is invested. The funds for decarbonization and innovation in addressing the global climate change problems have grown drastically due to huge attention among the political and normal people. Nations have understood the importance of greening the banking sectors to compact the low accelerated growth of the green ecosystem. Many nations are working on amendments to their policies to bring necessary changes to

Technology and innovations in health start-ups

The COVID-19 pandemic monumentally increased stress on the healthcare sector. It brought to light some massive gaps in the healthcare industry leaving the industry vulnerable. These gaps and shortcomings have paved the way for new startups to take the baton and change the sector, especially with technology and innovation.

For instance, AI-backed solutions have found a strong footing across all sectors, including the healthcare industry. Allowing for remote healthcare monitoring and treatment in case of uncritical situations, AI has helped the healthcare sector go digital. In the wake of the pandemic, startups moved beyond lab solutions to bring healthcare to our doorstep. From drone deliveries to robotics and automation in hospitals and healthcare logistics, to smart stethoscopes. India's healthcare start-ups are gaining momentum.

According to Tracxn Technologies, a global platform to track innovative companies, there were 7,128 health tech start-ups in India as of March 24, 2022. Here is how technology and innovation in the startup healthcare space are accelerating the medical sector -

Femtech - The taboos surrounding women's health, especially menstruation, and fertility have dictated the feminine hygiene sector for a long time. However, the pandemic brought about the need to shed these taboos and address the issues plaguing the women's

health sector. Today, multiple fem-tech startups have brought these issues to the limelight and made them a part of the mainstream debate. Cycle trackers, women wellness, sustainable hygiene products, supportive eco-systems etc. have become mainstream. The growth of the fem-tech evolution has forced companies to look at feminine hygiene as an essential issue to tackle and address with a solution-oriented approach. Innovations such as sustainable period products, and the compassion pad by The Woman Company not only focus on selling the product but also invest in building communities leading to wellness.

1. Vital doorstep deliveries - Healthcare sector truly pivoted towards digitisation with Q-commerce and E-commerce. Many startups and even incumbent healthcare companies are now offering doorstep delivery of medicines on Q-commerce and e-commerce platforms. Increased flexibility regarding micro-warehousing, tie-up with neighbourhood chemist shops, inventory management, and automation to help orders in reaching their customers faster. These are the key areas that tech startups are focusing on.

2. AI for Drug development and Diagnosis - AI is crucial for efficient and rapid processing and decision making. Machine learning has been augmenting the testing and development of new pharmaceuticals and innovative

diagnoses. Innovations like EMR apps to access patients' records in a real timeframe anywhere are proving beneficial for doctors. EMR on mobile is convenient for both in-person and online consultations.

E-pharmacy and e-health are helping individuals explore areas of connecting with doctors in their vicinity or avail of their services in-person as well as online. AI-powered treatments, innovation in sustainable medical products, and extended and augmented reality consultations are a few of the group-breaking innovations in the healthcare sector.

*Views expressed by **Anika Parashar**, Founder and CEO of The Woman's Company*

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Fig. 3.1 Anika Parashar, giving a talk on women's day special. Source: Times of India

bring banking services closer to the green ecosystem (Suman and Ahamad 2018). Alongside, the pressures and demand for green products intensified the revolution of the banking sector toward funding the green companies. India is one among those nations who are trying to restructure their banking sector so that, they could nurture the growth of sustainable entrepreneurs and green start-ups. Moreover, a spectrum

of rich countries such as Canada, the US, and the UK are increasingly funding the nation's green initiatives in an attempt to encourage the culture and growth of green countries. Roughly around \$7 billion in green bonds are raised from the US to support the ecosystem in India. This research article lays a foundation for understanding the current developments and updates in the green ecosystem, especially in India.

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Chapter 4
Equity and Inclusion Through Craft Revival and Livelihood—A Case Study of the "Kottan Basket" of M.Rm.Rm. Cultural Foundation

Rama Venkatachalam, Aparna Rao, and Prashant Salwan

Abstract This is a case study of a non-profit organization set up two decades ago for the revival of the languishing craft of weaving Palmyra baskets and to enable livelihoods for the women in the farming community. The founder undertook the task of identifying and recruiting artisans from the region for training, mobilizing participation, and motivating women to learn, make, and design new products to gain economic independence. All this had to be achieved against the backdrop of cultural beliefs, and societal practices of stay-at-home wives and mothers who were excluded from education as well as work. The founder's goal was to kick start this process and exit, allowing the community to run the project. However, this project led the founder into other aspects of craft revival and organizational development. The challenges are discussed in the case in detail. One key challenge of craft revival has come back a full circle and faces the stakeholders again.

Keywords Livelihoods · Sustainability · Inclusion · Equity · Crafts revival

4.1 Background

India holds close to her heart her long-standing history of arts, crafts, and handlooms. Today, we see a growing recognition of this being a natural treasure trove of sustainable businesses. In fact, it can be safely claimed that the principles of sustainability and circular economy, which are now increasingly gaining recognition in the world,

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have been embedded into traditional Indian lifestyles. By force of habit and training, single use of most products is avoided. As also is recycling, upcycling, or repurposing everything that can be-clothing, broken items, water, food, everything that gets used in the course of daily chores and activities. This continues in one way or the other in most rural homes across the country. However, gender diversity, equity, and inclusion in Indian society are inconsistent across the nation, as orthodox customs and rituals continue to be practised to varying degrees. Chettinad, in Tamil Nadu, is no different.

4.2   A Peek into Chettinad's History of the Business Community, Karaikudi, Southern Tamil Nadu

Chettinad's history dates back to the thirteenth century. What started as a cluster of 90 villages established by the Chettiars is today spread over three clusters totaling seventy-five villages around Karaikudi in Southern Tamil Nadu, and are the homesteads of the famed merchant community, known for financing agricultural deals and money lending (Dragon and Adment 2010). This community is known for its business acumen and entrepreneurial mindset. They have expanded their horizons by venturing out of their localities and foraying into global markets. As seasoned travelers, they came back with richer ideas and implemented them back home. Thus emerged the Chettiar homestead, with palatial homes and rich art and culture. They had established businesses all over the world and plowed back their wealth into their palatial village homes, earning them the name "***Nattukottai",*** meaning country-fort Chettiars. The community faced a major setback post World War II and Indian Independence. Today however, the region is recognized by UNESCO for its culture, art, and architecture—all established by the Chettiars. "Chettinad possesses some outstanding physical characteristics of urban and rural planning which create a unique architectural ensemble with thousands of palatial houses. The ensemble reflects the way the Hindu Tamil community of Chettiars lived. As a result of their travels, they have integrated multiple influences into the Tamil traditions. This blend represents the uniqueness of Chettinad" (Permanent Delegation of India to UNESCO 2014).

Chettinad is known for its handmade, eco-friendly products for architecture, construction materials, fashion, and home decor—handmade "Athangudi" tiles, household products like Kottan (palm leaf) baskets, etc., or exquisite handlooms like Kandhangi Saris and the world famous Chettinad cuisine (Dragon and Adment 2010). The culture of Chettinad demonstrates the circularity of thought, practice, and business models. However, these products were steadily losing their relevance and market demand. As a result, fortunes declined, the arts all but went extinct and the gender gap increased. The challenge of school dropouts loomed large. The answer was in inclusion, equity, and diversity in the workforce. It was necessary to enable incomes for the women in the local agricultural community. Ms. Visalakshi, the founder, recognized the need for affirmative intervention. She set out to connect the

dots by setting up M.Rm.Rm. to provide opportunities for the women as well as revive, restore, and document this range of arts and crafts in the region.

4.3 Why M.Rm.Rm. Cultural Foundation?

This non-profit has followed the concept of People–Planet–Profits since its inception over two decades ago. M.Rm.Rm. has achieved a visible impact in generating livelihoods and the revival of traditional handmade indigenous products that provide a robust alternative to their plastic counterparts. Data was collected through an interview and follow-up interactions with the founder and key informant, Ms. Visalakshi Ramaswamy, and her core team member. They provide a view of the efforts to research, document, revive, and restore fast-disappearing arts from Chettinad in Tamil Nadu. The authors also refer to available literature on the foundation, people, and products. The data has been corroborated through various other independent sources. The twenty-one-year-old organization has gained global recognition for its seminal work. Today, they can boast of having the Geographical Indication (GI) tag for the Chettinad Kottan, UNESCO Award of Excellence in Handicrafts (Seal of Excellence)-South Asia for 2004, 2006, 2008, 2009, and 2012. Their products also have the Craftmark from the All-India Artisans and Craftsmen Association (AIACA) in 2006.

4.4 About the Founder

Before starting M.Rm.Rm., Ms. Visalakshi was associated with the Crafts Council of India (CCI), where she continues to be on the Executive Committee even now. She was also closely connected with "Dakshina Chitra", Chennai, a non-profit promoting crafts and culture since its formative years. Ms. Visalakshi was a member of the All-India Handicrafts Board of the Ministry of Textiles. She is a passionate advocate for the textile traditions of India and has been working for many years to revive the handloom weaving traditions of Tamil Nadu. Kandhangi, a globally recognized brand, is known for its traditional handwoven Chettinad silk and cotton saris.

Her work with the Crafts Council provided rich insights into Indian art and handicrafts. She also co-authored the book "The Chettiar Heritage" with two noted historians, Meenakshi Meyappan and S. Muthiah. The research for this book confirmed the quest for documentation and revival. Her travels in Chettinad in the 90s with the photographer revealed how fast things were disappearing and the declining livelihoods of the local community. Plastic products were taking over, and manufactured items had flooded the market. The moment of truth arrived, and Ms. Visalakshi decided to take on the onus of reviving, restoring, and documenting the history and roots of handmade products made in native Chettinad.

Ms. Visalakshi set up M.Rm.Rm. in the year 2000 with the objective of reviving a languishing craft and enabling livelihoods for the agri-community through sustainable ways. There was a two-pronged problem—declining craft and the non-inclusion of women in economic development. The non-inclusion of women for work is a vicious cycle of high school dropouts, lower incomes, and fewer jobs. The original thought was that the M.Rm.Rm. Foundation would build capacity so that the women could learn an art, contribute to the household income, and gain self-sufficiency. But this was not to happen. The Foundation is now over twenty-one years, and Ms. Visalakshi's journey with the artisans continues, as do the eternal dilemmas. This case highlights the entrepreneurial journey, the challenges faced, and the present status of M.Rm.Rm., and poses some questions on sustainability and the messaging thereof.

4.5   Problem Statement

Due to the growing engagement of the women in the Chettiar community with their family businesses and travels, the craft took a backseat. As a result, the traditional craft lost its place in society as an art handed down over generations. In addition, plastic alternatives had flooded the market. On the other hand, agricultural labor was steeped in poverty. The men worked on farms, whereas the women remained uneducated homemakers, barely earning anything. The challenges for the community were as follows:

- Languishing craft
- Increasing poverty in the agricultural community
- Women were excluded from education and economic opportunity.

The protagonist had to find a middle ground to revive the craft and enable a means of sustainable income for the women in these villages. This had to be achieved in keeping with the cultural and societal practices where women were mostly homebound and uneducated.

4.6   The Genesis-A Rocky Start

The first step was to identify women interested in an additional income to learn the art of weaving palm leaves. The Kottan basket is woven from palmyra leaves that grow in plenty in the dry, dusty terrain of Chettinad. The process involves clipping leaves, splicing them, and dyeing them into bright colors, providing much-needed relief from the dull, gray landscape. The leaves taken from the trees are cut such that the tree is never damaged. The cutting of these leaves only enabled the greater growth of the trees. However, harvesting the leaves on the required scale was not easy.

Though the necessary palm leaves grew in plenty, labor had to be hired, especially for climbing up and cutting.

Originally, the Kottan basket was a "craft hobby" that the Chettiar women had picked up for their free time, when the menfolk were away on their business travels. The cultural norms did not allow for much outgoing social activity or travel. So, women would gather in groups in their neighborhood, to learn the art of weaving Kottan baskets. As a creative activity, it was therapeutic and provided companionship along with productivity. The raw material was readily available as palm trees grew in plenty. This craft evolved into a tradition where the mothers passed on the skills to their daughters. The baskets were used for prayer rituals, storage, and home decor. With the passage of time, the women started traveling with their husbands. They did not have the time for the craft. This had a direct impact on the tradition of basket weaving. The growth in manufactured products made handmade baskets redundant. It took just one generation of inactivity for the craft to disappear. Thus, the pilot project for M.Rm.Rm. was the revival and renovation of the Kottan. This was a challenge since the products as well as the producers had disappeared from the market. Also, this process would have to be optimized for creating products on a commercial scale. A pictorial depiction of the detailed process of Kottan basket weaving is shown below (Fig. 4.1).

4.7   Early Milestones and Challenges

Society usually tends to resist change in certain aspects. And, when it comes to women from the rural communities in the Chettiar cluster of villages, the status quo meant they would continue following age-old traditions laid out by a patriarchal structure. The agricultural community was facing impoverishment. If the women brought in an income, this could change. According to the founder, *"unfortunately, the poorer the community, the less willing they are to take risks or accept change. Progressive thinking is also a challenge."*. So, when M.Rm.Rm. set out on the mission to revive the dying craft of the Kottan, they knew they had a daunting task at hand. The way ahead was to train women artisans in the art of weaving. The fact that they wanted to work with married women did not make it easier, as they were unwilling to venture out of their homes due to the patriarchal norms and expectations that led to barriers due to social and cultural mindsets. Added to that was the requirement that the women would have to attend a year-long training. The first training took place in Keelayapatti village. The women themselves were skeptical about the entire project. The first batch of 10 women had enrolled only to explore what they had to offer. They lacked confidence that they would be able to do it. They did not believe that the project would be sustainable. They expected it to fizzle out like so many others had done in the past. This meant that there was no established model or precedent to follow or replicate. Given the uncertainty of the participants, the outcome was uncertain too.

Fig. 4.1 Process flowchart
of Kottan basket making

PROCESS FLOW CHART

PALM LEAF KOTTAN MAKING

Sourcing of raw material -
Palmyra leaf

↓

Preparation of raw material:
Cleaning
Splicing
Dyeing
Drying and sorting

↓

Weaving of palm leaf
baskets

↓

Finishing

↓

Quality checking

↓

Tagging & packing

↓

Shipping
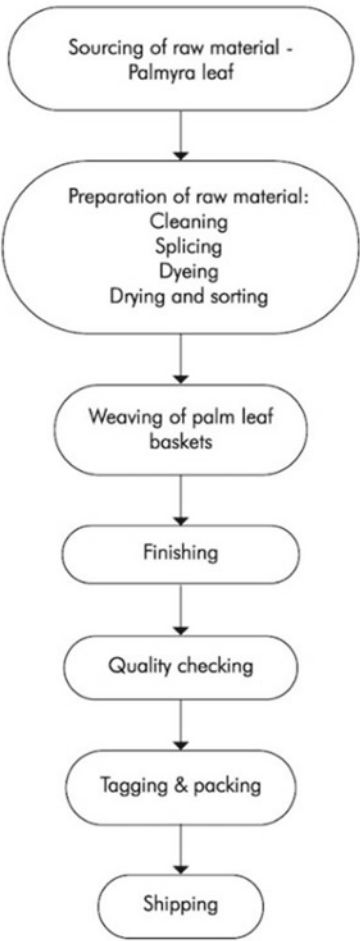
Ms. Nirmala, a teacher and social worker, was the first woman to join Ms. Visalakshi's team, and her association continues even today. There was a need to assess the marketability of the product. However, the first real hurdle was to identify women who could be trained to learn the craft of producing the Kottan baskets. The skilling process would have to include an end-to-end approach—sensitizing them to the need of reviving the dying art, and adapting it to modern-day needs and essential business skills like marketing, which was never really their forte. They were trained

in processes, quality checks, and pricing. They would set appropriate costs to cover their labor so as to set a realistic selling price.

The availability of the main raw material—the palm leaves—was a daunting task. Though it was a dry area where palmyra grew in plenty, harvesting the leaves itself was a process. Earlier, this task was done by toddy[1] makers. However, with a government ban on toddy, the availability of the leaves got scanty while the need for them grew. This was mainly a task done by male members of the community, and they demanded a higher price for the job.

The next challenge was to identify a trainer. The generation of women in the year 2000 had never learned the art. The previous generation was too old to practice it, let alone train someone. The only one who knew the art and was willing to teach was an octogenarian—Kannamai Aachi, a Chettiar woman. Yet another challenge was to standardize the duration of the training. A point to note here is that the skill of basket weaving, especially the palm basket, requires nimble fingers and keen eyes. Thus, it was truly a feat achieved by the octogenarian trainer who ran the year-long training for the women. The team succeeded in engaging the women, convincing them of the value of the project, and enabling them to complete their training. This proved to be a game-changer for the project.

This year-long experience helped the women to have the community bonding that kept them motivated and committed. It also convinced them that, unlike other projects that started off grandly but ended within six months, this foundation was committed to the cause and to them. They also learned the requisite business skills for taking the product to market. The resurrection of this rare craft may thus be attributed to this first batch of women from Keelayapatti. "Project Kottan, which began simply as a craft revival project, has emerged as an equitable and sustainable community development initiative" (Visalakshi 2013).

Needless to say, it was not easy for the women who signed up for the training. They were mostly single mothers with dependent children. Therefore, the training was taken to them, with Kannamai "aachi" (grandmother), Nirmala, the teacher, and Visalakshi traveling to different places to enable the learning process and employment. However, these seven women who survived the course have no regrets today.

To quote Nirmala, the first member of the team, *"I remember joining the Foundation at a time when I was a single parent, struggling to bring up my child with no fixed income. I cannot forget the time I managed to admit my son into the LKG[2] after the foundation gave me an advance to pay the school fees. I am now able to rent a place to stay and educate my son, who is in the tenth standard. Today, with the backing of the job at the foundation, I feel secure and confident about my future"* (Visalakshi 2013). Similar sentiments are expressed by the other 7 women who completed the first training—Kaliamma, Sumathi, Nachammai, Pokkisham, Manimekalai, Muthulakshmi, Muthu, and Nachal. They set off on the journey—organization as well as personal—where they experienced the benefits of a steady livelihood.

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[1] "Palm wine." This is a traditional alcoholic beverage/drink in South India.

[2] Lower Kindergarten.

4.8   Innovation in Product Design and Process

Ms. Visalakshi's ground research had given them insights into the design of baskets that would sell. It was recognized that the older designs for rituals were no longer in demand. The product was thus reinvented to adapt itself to modern-day needs as sustainable packaging and gifting solutions. In addition to the Kottan Basket, Ms. Visalakshi experimented and introduced other palm leaf products, including footwear, bags, trays, pouches, sari bags, gifting solutions, and many more. The Chettinad "Kottan" baskets emerged as multi-utility products, lending themselves to decor as well as gifting solutions, while retaining their traditional touch-feel.

The process of making the basket involved splicing palm leaves evenly. The Foundation designed a mechanical splicer that took away the drudgery of this task. Further innovations were on processes for dyeing the baskets in natural flower and vegetable dyes. The weave and design were reinvented to suit growing demand. Judicious use of the raw material and zero wastage were woven into the ongoing training and quality control checks. The GI Tag helped in adding value to the product as a traditional craft item.

The training included product design and development, business skills, and communication. The weavers had to work as a team to ensure efficient processes from procurement to weaving, quality control, and market reach. This also meant peer-learning and picking up new skill sets like vendor management, negotiation, logistics, sales, marketing, and interpersonal skills. The support from the management (Ms. Visalakshi's team) had to be consistent. All through, the principles of democratic functioning had to be upheld if the community had to be self-reliant and sustainable. Thus, the artisans were involved in the decision-making processes for pricing, wages, and deadlines. The challenge of upgrading and keeping up with the times was met as, with Ms. Visalsakshi's guidance, new products were created to adapt to changing needs.

Once the product design and training are sorted, quality control gains importance. Orders from customers had to be serviced, and only the best quality would cut it. The women were taught to put their names in the basket. This was initiated more to identify poor weaving or other quality issues, but eventually turned into pride of creation and quality. The women would not want their names to be called out in the case of poor quality. Such practices also achieved something otherwise intangible—self-confidence, responsibility, ownership, and leadership.

One of the long-standing principles for M.Rm.Rm., in Ms. Visalakshi's words: *"If something does not sustain itself financially, it cannot stand; running on donations is always not sustainable"*. It was a conscious decision that the project would be run by the women themselves. And therefore, they had to take ownership. This would be possible only through personal investment. An initial loan of INR 2 lakhs from the Aid to Artisans Trust was raised and paid back in full through sales revenues. The first batch of women to receive the training may safely be described as the real pioneers in this revival. The first center was set up at Keelayapatti, from where these women had joined. A professional project assessment is conducted by the operations team

under expert guidance for an informed decision on any new unit that has to be set up. The decision to expand or set up new training centers is driven by market demand. The demand assessment is a part of the project assessment done by the team as well as customer feedback (business to business; and business to consumer across the country as well as the world). 50% advance is accepted for bulk orders to allow them the capital required to procure raw materials and helps them manage timely payments to the artisans. The project has touched people in five more villages. Other centers were set up in Sravayal Pudur, Nachiapuram, Vairavanpatti, and Kanadhukathan, and yet another training center in Koratti. Even today, the organization operates on frugal budgets and a realistic approach. The cost control is maintained right from procurement to last-mile delivery. In Ms. Visalakshi's words, *"You can't dream at someone else's expense"*. The principal product line today is designed for fashion accessories with a focus on functionality as well as aesthetics, especially as gift packages for weddings and festivals.

We tried to explore how this project also created lessons in leadership, growing an organisation and the scale of operations, and expansion within and beyond the community as well as national borders.

4.9 Leadership Approach

Available literature throws up some interesting frameworks and competency models to assess responsible leadership. Why you need Sustainability in your business strategy (2019). In a TED Talk (2013), Michael Porter talks about how businesses can solve social problems. In this talk, there is a reference to the need for businesses to tackle social problems, given the capabilities, understanding, and insights that they can bring toward implementation and execution.

Edmans (2020) talks about the need to shift from the "pie-splitting mentality" of leaders to that of a "pie-growing mentality". According to Edmans, "By having its primary objective as creating social value, a company isn't sacrificing investors' slice, but grows the pie, ultimately benefiting shareholders. Profits remain important, but are generated as a by-product of serving society rather than the end goal in itself." His book "Grow the Pie: How Great Companies Deliver Both Purpose and Profits" bears this out with rationale and examples of businesses who have been successful in achieving this.

Responsible leadership coupled with a recognition of the community's needs results in inclusive development (Murray 2021). In this case, a community of artisans was trained and developed not just for the craft of basket weaving, but for the operations and execution of the entire process—right from procurement of raw material to marketing activities to last-mile deliveries (Visalakshi 2010). The national as well as international exposure to women enabled leadership building too. The inclusive practices ensured that the members took ownership of their work and product quality.

4.10   Business Decisions for Market Scale

Exports to some international markets have created some unprecedented challenges. One experience resulted in the entire shipment of items for an exhibition being shipped back at their cost, because the packers put in some wood to hold the packing together. But wood was one of the items not allowed into the country, and the entire order was sent back from Santa Fe. The palm baskets are lightweight but voluminous, adding to packaging and shipping costs.

A recent order was for 200 palm baskets for a wedding in Hyderabad, Telangana (a different state within India). Due to unseasonal rains, they could not procure the raw material required to service the order. The client was accommodating enough to accept a smaller order. However, this cannot be a sustainable way out. Another challenge is packaging. The products are lightweight but bulky, resulting in large package sizes. The product itself is fragile, and in order to maintain the shape, the packaging is done such that it occupies more space and cannot be fitted in with other products. This increases costs. Challenges and experiences like this have led them to decide they would restrict operations to Indian markets. However, in the post-COVID times, the Foundation has started catering to many overseas orders and now has orders from Japan, France, and the USA, in spite of the packaging costs.

The women have had several opportunities to participate in sales and marketing activities like exhibitions in India and abroad. This provided them with exposure to the customers' questions and ideas. The travel built their confidence and self-esteem.

4.11   Other Outcomes

The Foundation set out for the revival of the craft, but, along the way, it became about the livelihoods and faith of the artisans. The foundation was clear about hiring women who would be stable and committed. Thus, married women with children were preferred. This meant that the children usually accompanied their mothers to the day-care centers. Eventually, support from the foundation was provided for their schooling too. This way, the children were learning while their mothers were busy.

The democratic approach where they were running the project end to end, the stability of income and independence that came with it, cut through barriers of religion, caste, and region. The opportunity to interact with the world, invitations to award ceremonies, workshops, exhibitions, etc. exposed the women to business, marketing, and outreach. All this built up their self-esteem and confidence. To quote Natasha Munson, "*Prosperity comes to those who hustle and push their dreams into existence.*" Today, the artisans have their own houses, have traveled abroad, and have empowered strong women, confident, smart, and intelligent. Their children are well on their way to professional careers. In the founder's words, "*The only thing lacking was education; if they had had an education, they would have done extremely well.*"

4.12 The Strategies Implemented by the Founder and Her Team

The outcomes achieved were easier said than done. It was a process of navigating through complex social, economic, cultural, and psychological issues—for the women who came forward as well as the protagonist.

Product Innovation—The product in its traditional form had limited use. They had to customize it to meet evolving demands. Thus, they came up with a range of products for their retail and corporate clients. To name a few, sling bags, wine bottle holders, winnowing trays, spectacle cases, etc. were designed.

Logistics—The operational cycle involves several steps—right from the procurement of raw materials, splicing the palm leaves, to weaving, dyeing, finishing, packaging, and shipping. The teams in charge of these functions were empowered to learn and optimize their respective outcomes. Thus, a mechanical splicing machine was created to ensure an even and uniform fiber for weaving. Similarly, the preparation of the dyeing, weaving, and finishing was optimized. One problem that continues is the issue of weight versus bulk. Though lightweight, the packaging for the Kottan products is bulky, making it costly to ship. Often, shipping costs are higher than the product itself.

The team in charge of raw materials procurement has negotiated a deal with the local bus operators and drivers. Thus, their suppliers put the material into the bus, and the team collects it at the right station. This way, they can avoid long commutes, saving them time and effort as well as cutting costs.

Quality—Right at the outset, quality control was given prime importance. The initial batches of sales experienced returned products due to poor quality. It was difficult to pinpoint or reprimand anyone. Also, the women would not own up to poor weaving. The core team addressed this challenge by asking the women to weave their names on the basket. This strategy had the desired effect. The communication was positive and constructive—they needed to take pride in their creations. After that, no product returns happened. Quality control holds precedence over other priorities. A product returned due to faulty design or quality demands accountability. This is ensured through color coding, labeling, and ownership of products created by various artisans. Corporate orders, gift orders, etc. depend on consistency of quality. Hence, they have devised standard operating procedures for various stages of production, including decisions to be taken on new units.

Branding and Marketing—The "Kottan baskets" are now under IPR protection through GI. This adds value to the brand and enables marketing opportunities. In addition, the management team has meticulously documented the role, contribution, design innovations, and processes involved in the craft. The management team made it a point to involve women in the various award ceremonies and exhibitions across the world. This greatly boosted the morale and self-esteem of the women, resulting

in higher confidence levels. Today, these women willingly seek out opportunities to exhibit their products (Visalakshi 2013).

4.13 The COVID-19 Impact

The Foundation had been in operation for almost two decades when COVID hit. The socio-economic impact of this period was visible in the next generation. The children had gained a college education and were just starting out in their careers in the cities. The pandemic brought a rude halt to the business. In the early months of the national lockdown, which was sudden and unexpected, the Foundation collaborated with some volunteer organizations and CSR initiatives to provide rations to the families of the artisans. There was no way of working around the situation in the initial months. Orders and sales stopped. "Work from home" was not an option. The women found themselves unemployed for over 6 months, and some of them were trying out other opportunities. However, they could not let go of their existing source of income. During the peak of the lockdown, the community learned the art of managing operations without traveling.

One of the key challenges was the consistency and regularity of orders. Suddenly, businesses had dried up and so had incomes. They were faced with unsold and undelivered inventory; logistics posed a different set of challenges altogether. There was an attempt to keep work going on, but since sales had dropped, stocks piled up, and this led to different challenges in inventory management.

Keeping pace with global trends, the sales efforts were focused on online platforms. Their products are now available online as well. The community also adapted quickly to digital media like WhatsApp and Dunzo for sales, orders, payments, and delivery. The women took pay cuts for a few months during this period. The pay cuts were stopped after Diwali in November 2020, when the sales picked up and the arrears were paid out too. Things started getting better when the second wave hit in 2021. Things slowed down again, but were not as bad as in the earlier phase.

4.14 Situation Today

The founder had planned to exit after these women were independent. But that did not happen as planned. The foundation grew, and so did the business. While people take up roles of responsibility, the onus still rests with Ms. Visalakshi. Today, more than ever before, technology and e-commerce present greater opportunity and market demand. Also, the global demand for sustainable products is increasing. Orders from overseas markets are coming in. However, product packaging, shipping, and last-mile delivery are a challenge. In this scenario, should the M.Rm.Rm. Foundation build at scale? How can they take a decision on marketing the products?

Is the craft more important than the people? If crafts are not a viable option, they need ideas for alternate employment. Though she had set out to revive a dying craft, along the line, it became clear that this craft was a means of livelihood for the women. She is also acutely aware of the emerging challenge of age. The first batch of women to join Visalakshi are now aging and finding it difficult to weave baskets or do the finer Sohi work. M.Rm.Rm. is now facing another challenge—the next generation is disconnected from art. The existing artisans are aging and may not be able to continue for long. A couple of questions here: Should they have inducted their children into the same craft? Is the world of art and craft relegated to that of a low-paying, unattractive field compared to professional education leading to corporate careers? Though they are earning stable incomes and have managed to educate their children, they are still far away from the dream of social security. With the growth of the Foundation, the realization was that livelihoods are a bigger problem to address than the issue of the craft itself.

4.15 Conclusion: Exploration, Survival, and Sustenance

The initial loan of INR 2 lakh was paid off within two years of starting up. Since then, artisans have managed to run the business through their revenues and resources. The process may be described as community-driven where the artisans participate in a wide range of local, state, national, and even international events like exhibitions of handlooms and handicrafts. They sell sarees, palm and plastic baskets, books, etc. (all varieties). The Kottan basket has been redesigned into a packaged product.

In a nutshell, it may be observed that though M.Rm.Rm. has come a long way from starting off as a project that was envisioned to run on auto-pilot, dependence on the founder continues. The various awards and recognitions point to an innate sensibility oriented toward effective marketing and branding. The Foundation itself has taken on several dimensions, like livelihoods, the revival of arts and crafts, documentation and research, and survival during COVID-19. Even today, the question remains: should they plan to scale up or should they stay small? Which of these decisions would be more sustainable for business in general? These questions have been facing the management team for some time, more so now, in a post-COVID era.

4.15.1 Next Steps

As mentioned earlier, the founder expected to move on after the foundation was self-sustaining, but two decades down the line, her engagement has only increased. Today, the focus is that while the revival of traditional crafts and products is critical, even more critical are livelihoods. The processes for decision-making are democratic, the supply chain is streamlined, and the artisans are quite self-sufficient. The next generation has moved on to more lucrative careers. Though there is awareness and

willingness to uphold their traditional products, the dilemma of choosing between a traditional craft with an average income and a modern-day profession continues. However, the community is a lot more inclusive today than it was twenty years ago. The exercise in documentation and research provides valuable insights into these crafts.

The present case mentions how the craft had all but disappeared through one generation of non-practice. The only artisan alive to tell the tale was an octogenarian. The inclusive practices had the desired social impact, with the women contributing to the family income, getting their children educated and encouraging them to move to the city. But, the generation of artisans who got trained twenty years ago is now aging, and the younger generation is now looking at corporate jobs. This definitely raises a question about the sustainability of such an inclusive enterprise. Does the author have some suggestions or does the management have some ideas on how to take this forward? This will give some ideas to other organizations trying to do this.

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Chapter 5
Corporate Social Responsibility, Social Start-Ups, and a Case of Diversity and Inclusion in India

Avadh Bihari

Abstract There is a significant growth of start-ups in India with 44 unicorns in 2021, bringing India to third position. On the other hand, spending on corporate social responsibility (CSR) and reporting has been mandated in India in 2013. Following the amendments, CSR funding is made available for start-ups in the fields of science, technology, engineering, and medicine. This chapter looks into the practices of diversity and inclusion (D&I) of corporates engaged in CSR and of start-ups supported by them. The chapter presents the case of four corporates and finds that though they are promoting and funding social start-ups, there is no push for D&I practices. The chapter presents five select cases of social start-ups intervening in different areas for social change and has some best practices of D&I, which should be replicated by other start-ups.

Keywords Corporate social responsibility · Social start-ups · NGO · Community development · Diversity equity and inclusion

5.1 Introduction

The concept of corporate social responsibility (CSR) was discussed for the first time in academics in the 1950s with Bowen's conceptualization of social responsibility (Aggarwal and Jha 2019). Bowen's conceptualization of social responsibility is differentiated from the current conceptualization of strategic CSR focused on a firm's performance and branding. CSR has become a widely accepted activity and corporates face pressures to take up these activities as per the local context in which they function (Aggarwal and Jha 2019). Since the beginning, CSR was a voluntary act

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by design, ingrained in the religious and cultural practices of the nations (Bergman et al. 2019). However, the voluntary CSR practices in India could not compel corporations to integrate CSR practices into their core business. Voluntary CSR remained an ad hoc, one-time event, with a focus on branding.

Consequently, Government of India (GoI) amended the Companies Act 1956 in 2013 and made CSR mandatory. Schedule VII in the Act prescribes activities to be undertaken as CSR (Majumdar and Saini 2016). The mandate applies to companies with a net worth of (Indian Rupees) INR five billion or more, turnover of INR ten billion or more, and profit of INR fifty million or more to spend a minimum of two percent of their net profit on CSR (Bergman et al. 2019). With this, corporates were mandated to compose a CSR committee, which would plan the CSR activities, define thematic and geographical areas, and other requirements and propose the same to the company's board for approval (Chatterjee and Mitra 2017). A significant change was brought to projective CSR with clear objectives, timelines, funds, and impact (Chatterjee and Mitra 2017). These were presented as major areas to change the nature of CSR practiced in the voluntary period.

Mandated CSR in India is designed to support the development and empowerment of communities and invest in best environmental practices. Apart from nongovernmental organisations (NGOs) working on issues faced by communities, incubators and start-ups are also making a niche in the area of social development. India's tally of unicorns has crossed a century with 44 inducted in 2021 and secured third rank in terms of the number of unicorns (Mehta and Mishra 2022). The business of start-ups is growing, and many more start-ups are taking shape, not only in Tier 1 but in Tier 2 and 3 cities of India. The potential of start-ups is realised and incorporated in Schedule VII of the Companies Act, 2013 through amendments (2014 and 2019) to grant CSR funds. Schedule VII added that funding to incubators, invested in conducting research in engineering, technology, science, and medicine and providing innovative solutions, can be considered for CSR (Choudhary 2020).

The availability of CSR funds is looked at as a boon by some, as start-ups struggle for seed funding from investors. Companies like HDFC, Bajaj Electricals, Mahindra and Mahindra Financial Services, Yes Bank, and Indian Oil Corporation Limited (IOCL) are some of the corporates investing their CSR funds in social start-ups (Ramanathan 2015). However, the uptake of funding start-ups through CSR is still low, because of a lack of awareness and understanding of a large section of corporates in collaborating with start-ups to implement CSR projects (Ramanathan 2015). The contention is that CSR projects are understood as directly making a change in the socio-economic scenario of the communities located in the vicinity of the corporates, whereas start-ups aim to pilot and replicate their innovative solutions and that becomes a deterrent in accessing CSR funds for business purposes (Ramanathan 2015). The quantum of CSR funds accessed by social start-ups is very low: 0.2% in 2015–16 and 0.5% in 2016–17 (Badani, 2018).

India faces enormous challenges due to its diverse population, social problems, and geography. The population still faces some of the most basic problems such as increasing poverty, poor education, health, water, sanitation, employment opportunities, and so on. These problems have different effects on varied caste, class, religious,

gender, physical ability, and regional groups in India. Development of all groups in India is a massive task and that makes the social start-ups necessary to take the development to the remotest geographies, poorest, discriminated, and vulnerable groups of India through technology and innovative solutions (NASSCOM 2019).

Social start-up is a sub-category of start-up and aims to provide solutions to the socio-economic and environmental problems faced by people (Bagaria 2020). Social start-ups are active in various domains such as education, health, people with disabilities (PwDs), financial and social inclusion, water, clean energy, the environment, and so on (Bagaria 2020). Social start-ups like other start-ups focus on using technology to provide solutions to the social problems they are dealing with. Social start-ups can be seen as an opportunity by corporates in terms of reaching difficult and remote terrains through technology. The sustainability of these start-ups is higher, as they would make some profits from their operations and would not die down after the closure of CSR funding (Badani 2018).

Sustainability can be further enhanced with the components of diversity and inclusion (D&I). The debate on D&I is recent, but crucial for the development of business and society (Mitra and Mehta 2021). The globalized world flagged businesses to be adaptive in accepting people from diverse cultures with respect. The concepts of D&I promote diversity in the workforce and their inclusion in the work systems. A diverse workforce as a concept has gone beyond a representation phenomenon and affects the business's goals (Mitra and Mehta 2021). This is well reflected in sustainable development goal (SDG) 10 aiming to reduce inequalities by making sustainable efforts to achieve income and growth for poor and vulnerable sections.

India faces an inequality crisis due to a variety of factors such as caste, class, region, religion, gender, and disability, and corporate India needs to recognize and address it (Praxis 2017). However, the ground realities are different as Indian businesses reflect biases against Dalits/Scheduled Caste,[1] women, PwDs, and other groups; for example, PwDs' representation is only around one percent in corporates (Mehta and Mishra 2022; Praxis 2017). A study on corporate boards in India found no caste diversity in the boards of the top 1000 Indian companies (Praxis 2017). The entrepreneur market has only 14% of women entrepreneurs, and 85% of start-ups do not have women founders (Mehta and Mishra 2022).

Diversity makes the presence of various groups possible and research studies have established a link between a diverse workforce and sustainable innovations as well as better fiscal performance (Mehta and Mishra 2022). This requires inclusion and it does not take place by only hiring people from diverse backgrounds. Inclusion requires social awareness and sensitization to make people feel included by accepting differences. Indian corporates are gradually understanding that the exclusion of any of the groups affects firms' performance in the new era of conscious consumers. For instance, women occupy the largest space as consumers and their inclusion in business has the potential to create sustainable innovations. Still, their workforce participation rate in India is low and has decreased from 35% (1991) to 23.7% (2015–16) (Praxis 2017).

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[1] Minority and indigenous people of India.

D&I are crucial for social start-ups collaborating with corporates to implement projects. Start-ups have established themselves as crucial partners for the growth of the country. It becomes important for social start-ups to follow the principles of D&I and open their gates to a larger pool of talent from different castes, gender, religion, region, physical abilities, educational backgrounds, and so on (Madnani 2022). Diversity is further required at various levels of management to affect decision-making and implementation. Madnani (2022) reported that only 12–15% of the tech start-ups have women representation, due to which they lack experience and perspective. A large section of women, PwDs, people belonging to SC, ST, and OBC groups, LGBTQIA+, and other marginalized groups face social problems. Social start-ups cannot solve their problems without including them (Madnani 2022). These groups are mainly treated as receivers/beneficiaries of the services provided by the start-ups. Contrarily, their inclusion is required to understand the problem, craft the strategy, pilot the solutions, and replicate the final design to bring social change.

D&I in social start-ups need to be examined by understanding their targeted population and proposed solutions. CSR is about inclusive growth and development of the poor, deprived, and marginalized. It becomes crucial to examine the innovations made by social start-ups and their inclusive nature. There is a complete lack of academic literature on the intersections of D&I, CSR, and social start-ups, and this chapter would be contributing literature to these niche areas. The chapter studies select corporates funding social start-ups and how those corporates are taking care of D&I components in their core business and these start-ups.

5.2 Methods

This chapter is an outcome of literature review on CSR and social start-ups in India. The chapter presents case studies of corporates supporting social start-ups through CSR funding and social start-ups innovating to solve problems faced by the people in India. The study analyzes the components of diversity and inclusion in all the cases presented. For the selection of corporates, the author used the list from MCA's CSR portal displaying corporates with their CSR spending. The author studied the engagement of corporates with social start-ups and incubators while selecting them. The selection of four corporates and five social start-ups was based on convenience sampling to fulfill the purpose of the review. The author does not claim that these organizations are best in their settings. The magnitude is huge, and the convenient sample selection is to present cases to understand and gain insights from how D&I are facilitated in corporates and social start-ups. The author selected areas of interventions such as Healthcare, Education, Financial Inclusion, Social Reform and Inclusion, and Disability, after a careful study of multiple interventions in these areas by social start-ups and selected five social start-ups working in different areas and presented them. These are some of the start-ups going beyond technological and financial designs and intervening directly in the communities.

An intersection of D&I and CSR is presented to understand how the select corporates perform in D&I vertical while implementing their CSR interventions. The next section presents cases of social start-ups, their goals, and how they are performing at the vertical of D&I, an equally important area. These start-ups receive grants from corporates, and it would be an intriguing case to explore the 'how' behind it. The author further analyzes the target groups of these social start-ups and presents them as categories for D&I. These categories range from women as beneficiaries to employees, deprived and discriminated children, PwDs, rural poor, and so on as categories to active participants in the interventions, and so on. This is a deviation from the established definitions of D&I and the author would like to present the same as a contribution to the literature on social start-ups, CSR, and D&I.

5.3 D&I: Case Studies of Corporates Supporting Start-Ups Through CSR

This section presents case studies of select corporates supporting start-ups, specifically in social sector innovations, through their CSR. This section is crucial as it talks about the collaboration between corporates and other entities. Diversity and inclusion have received a thrust from the corporate sector, largely owing to policies incentivizing inclusion. It is important to see how corporates promote the principles of diversity and inclusion in their business and with start-ups. Corporates perform funding and incubating roles for start-ups, which gives them certain power to recommend required best practices for the growth of all sections of society. The author analyzed various supported start-ups, provisions laid out, and criteria adopted by corporates in supporting start-ups.

5.3.1 HDFC Bank Ltd.[2]

For the last many years, HDFC Bank has made it to the list of top 10 corporates with the highest CSR budget and spending. With its CSR program called *Parivartan,* HDFC Bank works for the socio-economic development of communities. It has programs in the areas of environment, health care and hygiene, water conservation, financial literacy, rural development, skill development, and livelihood generation. In line with the skills development mission, HDFC has initiated SmartUp grants to support start-up innovation to tackle the critical challenges faced by communities. The bank has collaborated with several incubators to support the start-ups through funds and guidance. The bank understands that the social challenges faced by society are vast and require multi-stakeholder collaboration to provide solutions to people.

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[2] HDFC Bank official website.

The SmartUp program was launched in 2017 and has completed four cohorts till now and supported 90 start-ups with ₹20 crore funding through 22 incubators in areas such as agri-business, health care, skill development, ed-tech, and waste management. Some of the supported start-ups are Kriya Labs, tackling environmental issues by using crop residue to make products, Bleetech producing wearable tech for the deaf, Blackboard Radio empowering vernacular background students with the English language, and so on. The ongoing fifth cohort focuses on start-ups in the areas of environment, health, and gender diversity. HDFC has prepared application criteria for shortlisting these start-ups, focusing on innovation, the development of a model, and scalable business models. However, there is no mention of D&I required in the start-up team.

The bank is now in an established position to support social start-ups, and D&I can be a prerequisite to funding them. The bank is taking steps to promote D&I in its core functions, emphasizing women and people with disabilities. The numbers are much lower for women staff (21.7%),[3] but there is a steady progression. Women in top management have lower representation and salaries than their male counterparts. The bank has introduced programs such as the "Bank Again Program" to bring back former employees and the "Pleasant Parenthood Program" to provide flexible and part-time working options to pregnant women staff. Though PwDs are another inclusion criterion for the bank, there are merely 115 PwDs working in the bank out of more than 140 thousand employees. HDFC needs to take stringent measures to translate the D&I policies into its business practices. D&I need to be ingrained in the system so that it becomes a crucial part of the bank's engagement, internally and externally.

5.3.2   *Indian Oil Corporation Limited*[4]

IOCL launched its start-up program in 2017 in line with the Government of India's initiative of Start-up India. It calls for the attention of start-ups toward the oil and gas industry (preferably) and divides the whole ideation between technology and business domains. IOCL presents itself as a distinct supporter by showcasing its methodology of handholding through internal resources and in-house experts, whereas other corporates support start-ups by hiring third-party such as academic institutes.[5] IOCL has two levels of screening—one, application and presentation, and two, personal interaction. The total score of 100 is divided into 8 unequal items for the application round, and Team is one of the items that is allotted 10 marks. There are no details available about what is expected and evaluated in the Team component. It does not clarify if it looks for diversity and inclusion in the component. Level 2 does not put any weightage on the component of the Team and deals with the project components.

[3] HDFC Integrated Annual Report 2021–22.

[4] Indian Oil Corporation Limited Website.

[5] https://dpe.gov.in/sites/default/files/IndianOil_Start_Up.pdf.

An explicit D&I statement by the company, with selection criteria details, would go a long way toward acceptance and transparency.

IOCL has supported a total of 11 incubations and disbursed ₹20 crores. Out of all these supported start-ups, one of them is Tricho Agronica Private Limited, an all-women entrepreneur organization, presented proudly by IOCL in its report. Tricho Agronica has a low-cost solution for increasing crop yield and reducing crop disease through non-chemical-based formulation. This shows one step further toward women's empowerment where an all-women organization can secure a grant from a company. The organization is taking the lead in a sector which is traditionally considered a male-dominated profession.

IOCL's CSR committee has seven members and is headed by its only woman director. In its Board of Directors, IOCL has two directors, an independent and a government nominee; however, women do not have any representation as full-time directors. Women's representation is 8.77% in IOCL's workforce.[6] A push from top management at the policy and practice level is required to make IOCL a diverse and inclusive space by employing and supporting people belonging to different castes, religions, abilities, educational backgrounds, gender, region, and so on. IOCL does this by distributing its Liquefied Petroleum Gas (LPG) distributorship by reserving it for Scheduled Caste/Scheduled Tribe/Other Backward Classes (SC/ST/OBC)[7] and women so that they can grow financially.

5.3.3 YES Bank

YES Bank implements its CSR projects through YES Foundation, and one of the key interventions is YES Foundation Grant and Accelerator program for social impact organizations (SIO). The Foundation selected SIOs through its program "YES, I am the Change" Social Film Making Challenge. It received more than one hundred thousand applications, evaluated more than 11,000 film submissions, shortlisted around 7,000 SIOs for proposal submission, and awarded 3 years of grant and accelerator support to 22 SIOs.[8] The aim is to build capacities, facilitate sector exposure, and enable SIOs to innovate, collaborate, and address the critical factors to improve their potential and scaling-up abilities. The selected organizations were trained on aspects such as governance, control, compliance, finance, and risk management. The foundation further identified some projects with the potential to scale up through milestone-based grants.

YES Foundation's start-up program is working with SIOs on varied areas such as tackling pollution, the development of marginalized children, homeless young women, and so on. One of their partners is Urja Trust working for the rehabilitation

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[6] IOCL Sustainability Report, 2020–21.

[7] Officially designated groups of people and among the most disadvantaged socio-economic groups in India.

[8] YES Foundation Website.

of young homeless women through a multi-pronged approach of facilitation, transformation, advocacy, and awareness generation. Another SIO is Haqdarshak working on creating awareness about social welfare schemes and enabling people to access them for their benefit. Haqdarshak works in the community through women employees, a prime example of inclusion. YES Foundation has SIOs making an impact, externally, by bringing social change and, internally, by diversifying the workforce and including them in planning, designing, and implementing the interventions.

The bank needs to boost its D&I efforts further as the representation of women is very low. There is one woman each in Board of Directors and Management Team.[9] The representation of diverse caste groups, religions, and PwDs is absent. The bank's governing council provides expert guidance to the foundation, and it also has representation from only 2 women in a team of 10. Acute steps are required to place people from diverse backgrounds (caste, religion, physical ability) at the decision-making levels. This will strongly reflect in their foundation's work as well, which would give a boost to the development of discriminated, marginalized, and deprived populations of the country.

5.3.4 Tata Consultancy Services

Tata has a brand value when it comes to the social development of India. They have been in the domain of philanthropy, charity, and CSR for more than a century. It is strongly visible in all its companies such as Tata Consultancy Services (TCS). TCS provides Information Technology (IT) and digital services to other businesses for transforming their processes. TCS makes it to the list of top CSR funders in India. TCS has a Digital Impact Square (DISQ) program that aims to promote social innovation for tackling grassroots challenges by using advanced technology. DISQ supports young entrepreneurs and start-ups in using technology to provide solutions to the problems faced by the marginalized population who lack access to modern facilities.

The idea of "DISQ"[10] was generated from TCS's support to the Nashik administration in 2015 in managing the crowd while hosting Kumbh Mela. TCS collaborated with municipal bodies and combined their city's knowledge with technology and gave birth to 12 ground-up innovations to manage the crowd successfully for a month during the event. The DISQ center facilitates start-ups that use technology to make a social impact in seven selected themes—education, health, financial and personal security, environment, food and agriculture, housing and empowerment, and citizen empowerment. DISQ has provided space to over 500 young minds to innovate at its facilities, resulting in 50+ innovations across the seven focused themes. The facility is able to convert some of the promising innovations into 11 start-ups.

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[9] Yes Bank Annual Report 2021–22.

[10] TCS DISQ - https://www.digitalimpactsquare.com/.

Third I platform provides technical inputs to prevent crimes in real time used by Nashik and other district police. Maatrivita works for preventing maternal deaths by identifying high-risk pregnancies. The frontline workers are trained to use the Maatrivita application to fill in data related to pregnant women. This data is processed with pre-defined norms and is accessed by the administration, which helps in identifying the levels of risk in pregnant women and providing healthcare services. There are other start-ups such as "Vidyaroha" to decrease drop-out through smart analytics and interactive content, "Tilt" to share cycles in public spaces to make transport affordable and eco-friendly, and "Trestle Labs" invested to make reading inclusive for people with print and learning disabilities.

All these start-ups, supported by TCS Foundation, are engaged in creating solutions for the challenges people face in their daily lives. The listed examples have no or low representation of women and PwDs in their teams. Social start-ups working to impact social norms need to include people from their diverse target groups to make the right impact. These can be further strengthened with an inclusive approach by hiring employees from diverse backgrounds (gender, physical abilities, region, religion, and caste). Diversity helps in understanding the problem correctly with societal norms and that creates a sustainable solution. A major push in this direction is required from TCS as well, as it has a poor representation of women in senior management.[11] The company is framing policies to make an impact at systemic levels. The same policies need to be pushed with its supported start-ups to further the agenda of D&I in organizations.

5.4 D&I: Case Studies of Social Start-Ups Receiving CSR Funds

Corporates play a crucial role in the initial journey of start-ups by supporting their incubations. This includes handholding the start-ups in developing proof of concept and prototypes, conducting market checks, implementing pilots, preparing marketing strategy, and so on. In the case of start-ups, it is equally important to analyze how D&I frameworks are applied in disseminating the solutions developed to the communities.

5.4.1 Samaaveshi Pathshaala[12]

A discussion on D&I cannot be complete without discussing the inclusion of people with disabilities. Among PwDs, there is a category of children with disabilities (CwDs) and Samaaveshi Pathshaala (SP) initiated to work with them. It is a registered NGO actively working in the Karjat block of Maharashtra. Karjat was selected due

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[11] TCS Annual Report 2021–22.

[12] https://www.samaaveshi.org/.

to the high presence of the tribal population. Samaaveshi Pathshaala is an inclusive school that was started with the aim of building an inclusive society where every child has an equal opportunity to grow. CwDs face a range of challenges and discrimination, resulting in early exclusion from accessing formal education. Firstly, the infrastructure is not disabled-friendly, teachers are not trained to work with disabled children, fellow mates and other staff are found to be largely insensitive to the needs of these children, and all these results in low admission and higher dropout.

SP has embraced a holistic approach to working with CwDs and the systems they interact with. SP, with aid from the CSR funds of Cholamandlam Finance and Wipro Foundation, runs an inclusive kindergarten which teaches 25 students (4 children with different kinds of disabilities) by integrating learning methods such as constructivism, social-emotional learning, and universal design of learning to fulfill the needs of all the children. It has opened a community library for primary-level children to sharpen their literacy, life, and STEM skills. In its multi-pronged approach, SP has been working with Zilla Parishad to transform the schools accessed by local children. SP has appointed two full-time teachers in these schools to facilitate inclusive practices to support 28 children (5 CwDs) from grades 1–3. It has further supported the infrastructural development of the school by installing smart TVs for smart and digital learning, 650w solar power for continuous power supply, and also set up a library.

One of the critical interventions by SP is in the anganwadis of Karjat through training the anganwadi workers (staff) and providing infrastructural support. Anganwadi is a type of rural childcare center in India. It is the first place accessed by rural parents for childcare. SP conducted a series of workshops that trained and sensitized anganwadi teachers to make these anganwadis inclusive for CwDs. SP also set up a library in some of the anganwadis with multi-sensory play and learning materials. They identified that almost half of the total 300 anganwadis did not have electricity. So, SP mobilized the resources and installed a 165w solar power system in five anganwadis for continuous power supply. Besides, it has installed a smart TV for the learning of children and provided a smartphone to these anganwadis for e-learning. All these systemic interventions by SP aim to create an inclusive environment for the CwDs. The attempt to make education inclusive would sensitize children about the issues and needs of PwDs, which would support their inclusion in all aspects of life.

Samaaveshi Pathshaala's team is an example of D&I where women (8 out of 10, including one of the founders) are leading the initiative for inclusive education, with representations of PwD as well as ST staff. Both the founders are professional social workers with specialization in disability studies.

5.4.2 *Haqdarshak*[13]

Haqdarshak (HQ) works for making government welfare schemes and services accessible for its target population who are needy, poor, and marginalized. This intervention was based on the identification of the problem and the gaps by HQ. The GoI spends an amount of INR 900 billion on the top 1000 welfare schemes; however, there is low uptake. This is largely owing to a lack of information and awareness about the schemes, their application processes, eligibility criteria, and benefits. HQ found that as a result, a large segment of the population gets excluded from getting their entitlements related to health, education, employment, and other basic needs for their well-being. Thus, based on their assessment, HQ aims to generate awareness about the welfare schemes among the citizens and make the application process simpler, a strong route for people to avail of their entitlements. The HQ team found deprivation and exclusion higher in the poor, specifically in SCs, STs, and OBCs with 58.57% of women beneficiaries. Out of its total impact, it has supported 35.09% OBCs, 33.24% SCs, and 17.49% STs. Further, a majority of the beneficiaries (95.49%) belong to households with an annual income of less than INR 100 thousand. The exercises conducted by HQ resulted in higher awareness and increased utilization of schemes, making an impact at a larger level by engaging communities in local governance.

A very important landmark of D&I adopted by the HQ is its women workers. The role encapsulated for these women is not mechanical but analytical and technical. They identify the needy, match them with available and applicable schemes, and support them in the application process. These women get trained for professional technical work with financial literacy. Their professional and personal profiles get boosted because of the salaries they receive, which impact their household contribution, decision-making, and challenge patriarchal societal norms. A step forward by HQ is targeting transgender, sex workers, and LGBTQIA+, which have remained at the margins of society. HQ with support from YES Bank Foundation in their YES Foundation Grant & Accelerator Program supports the community by obtaining identity documents and helping them avail of social security schemes. HQ has also trained LGBTQIA+ for their livelihood and for a wider reach in LGBTQIA+ communities.

5.4.3 *Skillveri*

With any skilling ecosystem, there are two major issues. One, blue-collar jobs are not attractive enough for the youth population and are not the first choice. There are reasons such as conventional methods which are labor-intensive, low wages, low dignity, and so on. Second, industries are modernizing their technologies and production mechanisms and face serious challenges in finding a skilled workforce. That creates a gap between demand and supply, which affects the growth of the individuals, industries, and in turn, the nation. Skillveri aims to tackle this problem

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[13] https://haqdarshak.com/.

with Skillveri Simulators, innovative solutions provided to skill-training institutes. The simulators made by Skillveri propose intense practical training, making skill training interesting for the trainees and providing them with exposure to updated and advanced technologies used in the industry.

The organization states the next problem addressed by these simulators is the cost aspect. Generally, simulators are expensive and that becomes a problem for skill training institutes and Industrial Training Institute (ITIs), as they do not have funds to secure these technologies. Further, conventional training methods have become more expensive than simulator-based training. This is due to the cost involved in setting up a lab with updated technologies and training each batch with all the consumables and other recurring costs. Simulator-based training claims to provide learning with higher accuracy and reduce the learning period to one-third of conventional training. Further, Skillveri states it has developed specialized offerings to make these simulators a viable option for government and private skill-training institutes. These simulators are currently offered in the trades of welding and spray painting. The training on simulators is focused on precise feedback and analyzing performance-specific parameters, making it different from conventional methods. The organization is supported by Maruti Suzuki Foundation, Ambuja Cement Foundation, Cognizant Foundation, HDFC Bank, and some others. The skilling ecosystem has largely been dominated by the male workforce, more so in technical-intensive trades like welding and spray painting. With simulation learning, a space would be created for more women to get into these trades. The top positions in the organization are occupied by all males with male co-founders. One position at the General Manager level is occupied by a female. To make skilling inclusive, the organizations need to make all-round efforts and start by making its team more diverse and inclusive by bringing more women on their board, management, and team. A step further can be making skilling inclusive for PwDs through simulation technology.

5.4.4   Akshar Foundation—Using Child Labor to End Child Labor[14]

Akshar Foundation has a unique model to provide a quality education through their model school and in government schools. Their philosophy is to train students to teach, learn, and earn. This unique holistic model of training students as teachers engage with environmental protection to recycle plastic, and provide care for animals on the campus. The foundation also works with government schools, principals, and teachers to retain children in schools, bring back the dropout children in the system, and provide quality education to upgrade their learning levels. Through their "Akshar model school" for 100 children in Assam, they train older children to become tutors and teach the younger children in primary classes. Many times, these older children are compelled to drop out of school to earn and contribute to

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[14] https://www.aksharfoundation.org/.

their households struggling to survive. The model pays these children for teaching work in "toy money", which can be used to buy groceries, clothes, etc. The model directly works on two objectives—getting children back to school and paying them for teaching and other work to support their household. A majority of these children worked earlier in hazardous industries such as stone and sand quarrying. With this model, their parents also support them to go back to school.

Akshar Foundation with support from the CSR funds of Oil India Limited, Azim Premji Foundation, Swiggy, and Carbon India Limited is working to include and mainstream children belonging to underprivileged, deprived, and marginalized groups. They come from families with poor financial backgrounds who struggle to support their school education. By inducting older children into the role of tutor, the Akshar Foundation aims to inculcate learning, values, discipline, and skills for their better and brighter future. These older children support the teachers and provide one-to-one support to each student assigned to them. Government schools in India are known for poor quality education and are accessed by children belonging to poor families. Akshar Foundation aims to radically change the quality in these schools by implementing a model, which is inclusive and able to provide attention to children. Akshar Foundation has a diverse team to implement and disseminate this model, with a fair representation of women as their trustees, advisory board, and model school team. However, their board of consultants requires the representation of women as all of them are presently men. The inclusion of women would bring newer dimensions from the board and support the mission of advancing the rights of girl children, who are doubly marginalized in society.

5.4.5 *Gramin Healthcare*[15]

Gramin Healthcare, as the name suggests, works to make healthcare accessible and affordable for the rural population in India. The availability and accessibility of healthcare infrastructure and services in rural areas is poor and people have to travel long distances to take treatment from qualified doctors. This involves time, cost, and resources and all these factors discourage people, pushing them to access services from locally available quacks, risking their lives. Gramin Healthcare was initiated in 2016 to provide 24/7 medical consultations with a network of qualified doctors. Further, it created a network of pharmacists to provide quality and affordable medicines and medical products prescribed and recommended by doctors. The organization is delivering health care to poor, needy, and deprived rural communities in over 1000 villages. IFFCO has bought 26% stakes in the company in 2017. Another collaboration is with IFFCO Tokio General Insurance Company to provide health insurance to the rural community at a minimum cost of INR 300 per annum.

Gramin presents a noteworthy amalgamation of technology-linked development project implementation through their web application. It uses technology as a means

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[15] https://www.graminhealthcare.com/.

to achieve an end that is quality healthcare for all. Healthcare has become exclusionary due to the absence of medical facilities, the unavailability of doctors and nursing staff in rural areas, and the high cost of treatment. This results in many adults and children suffering or losing their lives. Gramin aims to include the underprivileged population under their "Health for All" goal, through its primary clinics serving 3–4 villages in a radius of 10 km, poly clinics serving in a radius of 30–50 km, and Gramin Pharmacies which provide affordable and quality medicines. A significant differentiator of Garmin Healthcare is its emphasis on multi-stakeholder collaboration to deliver these services as India is a vast country with over six hundred thousand villages. It is impossible to cover these villages without collaboration between organizations (profit, non-profit, not-for-profit), corporate, and the government.

Gramin has initiated collaborations to institutionalize, achieve, and deliver quality and affordable care (Shekhar 2020). It connected with IFFCO for infrastructure, marketing, and branding. It further connected with companies in the healthcare domain for capacity building of its staff. The model of Gramin Healthcare is bringing in those who are systematically excluded from accessing basic health care in a democratic country. However, it needs to work on making its profile diverse by including people from various excluded groups. While its Board of Directors currently has only male representation, its management and program teams have a relatively low representation of women. A higher engagement of women in the team brings diversity and that helps in thinking about solutions to social problems with a completely different dimension. Another addition can be PwD as this population faces extreme challenges to get specialized treatments in rural areas. Inclusion and services for PwDs can help the rural poor access specialized treatment in the vicinity, which is not available in the present scenario in India.

5.5 Conclusion

This chapter presents cases of diversity and inclusion in select corporates engaged in CSR and social start-ups receiving corporate grants. The concept of D&I has received the attention of organizations, and there are some efforts to make organizations diverse and inclusive by strategizing through policies and planned programs for recruitment and retention. Although D&I should start with inclusive recruitment, retention, and beneficiary policies, it should not end with that. Organizations need to strive for safe and participatory ecosystems to engage vulnerable and excluded sections in the decision-making to make interventions holistic and beneficial to all. The case studies pointed out the gaps and scopes of making organizations diverse and inclusive. Corporations are compelled to make these efforts explicit; however, social start-ups are yet to take a serious position on that and move beyond their focus on securing funding. Corporates, presented in this chapter, are engaged in CSR and it becomes their core responsibility to follow the principles of D&I beyond compliance.

A majority of social start-ups remain occupied with securing funds to function and replicate their design, keeping D&I out of the picture. D&I are not a post-profit

aspect but need to be incorporated into the core design of interventions. D&I are all the more important in social start-ups as these are initiated to solve the challenges faced by the excluded population in society. Social start-ups have the potential to bring a shift in the design of business by making it inclusive and needs-driven. Most importantly, corporates need to promote D&I practices in the start-ups they are funding by keeping criteria, such as gender diversity, PwDs, caste, religious, and other vulnerable and excluded groups in all levels of management. Innovation by SC/ST should be promoted to tackle structural challenges. Diversity and inclusion in an organization result in a win–win situation as they result in higher profits and bring a sustainable change in society.

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Chapter 6
The Impact of COVID-19 Pandemic on Women Entrepreneurs: Opportunities and Challenges

Rupika Nanda, Sorabh Lakhanpal, Mandeep Singh, and Ruhul Amin Choudhury

Abstract Women entrepreneurs are those who started and developed businesses, which strive to take forward their creative ideas. In the wake of the pandemic, the study seeks to identify challenges and opportunities that are unfurled for women entrepreneurs. Most small and medium-sized businesses, including those co-owned and managed by women, have experienced drastic changes in the scope, order, and organization of business because of pandemic protection measures imposed to reduce health risks as well as the introduction of restrictive measures. The pandemic exacerbated challenges for women business owners: funding, role models, business skills, and work/life balance. Male dominance hindered women-led startups' recovery. Women-led startups in the service sector were hit hardest by the pandemic and faced difficulty securing support. The pandemic impacted social companies' funding amid the global economic downturn. Gender-specific funding and support are crucial to empower them and promote gender parity in business. Governments and organizations should swiftly adopt tailored support to address these issues and enhance women's socioeconomic status.

Keywords Women entrepreneur · Impact of pandemic · Opportunities and challenges · Startup recovery · Funding

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6.1 Introduction

An entrepreneur is an individual who comes up with a novel business idea or business model, who is prepared for the unseen consequences of the risks, and who looks forward to the rewards. The process of pursuing a business is called entrepreneurship. The entrepreneur is generally an innovator, an owner of new ideas, goods, services, and strategies or procedures. "Any women or group of women which innovates, initiates or adopts an economic activity may be called women entrepreneurship" *by Frederick Harbison.*

Good use of women's labor will support socioeconomic development because, in accordance with the central government, "a small scale industry/unit as a related service or commercial enterprise managed by one or more women entrepreneurs in a very proprietary concern during which she/they individually have a share of capital not but 51% as partners/ shareholders/directors of a privately held company or members of cooperative society with not but 80% women employees" (Sangem 2020). In the world, one-third of all businesses are led by women. India has seen a drastic surge in the number of female entrepreneurs as a result of economic growth, better education, industrialization, growth in liberal and democratic culture, and social recognition. In India, particular initiatives have been developed to support the growth in number of female entrepreneurs. Initiatives like Startup India and Standup also make a unique contribution toward the growth of female entrepreneurs (D).

Despite evidence to the contrary, women and particularly female businesses have been more severely affected by the economic effects of COVID-19 than males have been (School 2021). Compared to men, women typically run various kinds of businesses. In contrast to global outreach and potential drain, necessary entrepreneurship activities are those that are more closely related to sectors with lower entry barriers, provide services to local communities, and might need fewer office hours or better chances to manage office hours to involve in other activities, such as raising children. The issue is that opportunity-driven entrepreneurship (founding a business to develop new goods or services) tends to be more of a growth-oriented undertaking and scales better than need-driven entrepreneurship (the entrepreneurial initiative that originates from being unemployed) (Strawser 2021).

The proportion of women who start enterprises out of necessity is at least 30% higher than that of males (Kelley 2012). Some studies have highlighted that female entrepreneurs start their businesses as a second or third profession (Pandey 2016). The growth potential and sustainability of women's entrepreneurship are restricted by this necessity-driven increased focus, which eventually results in cessation. Even though the difference is only approximately 10%, female-owned enterprises close more frequently than male-owned ones. Almost no women own businesses in the digital and technology sectors, which prevent women from accessing one of the global marketplaces with the strongest growth rates (Commission 2019).

COVID-19 has a variety of implications for various company operations, and these effects have been further exacerbated by the level of regional and gender inequality that is currently present. Women, for instance, have been severely impacted because

they had to balance the demands of both the family and the workplace (Sangem 2020). Entrepreneurs that use a discovery-driven approach and are operating in a crisis-affected environment are more likely to be motivated to look for new prospects (McGrath 2010). This demonstrated how difficulties can result in opportunities, an improvement in the amount of employment, and a rise in financial surplus. Therefore, from an economic and innovation standpoint, entrepreneurship may be seen as being rooted in crises like COVID-19 and inspiring individuals to start over with new perspectives on the issue. This approach to a crisis benefits all parties involved, including the government and society. Additionally, the crisis tested a person's social and professional networks. Depending on the nature of their issues and the stage of their businesses, entrepreneurs make use of their networks (Bhushan 2020). Entrepreneurs are frequently driven, forward-thinking, and dynamic, which makes them a wellspring of creative ideas. They are also regarded as risk-takers and team players. They may therefore be the ones to anticipate opportunities in crisis situations and the appropriate course of action.

Women business owners have dealt with the pandemic with grit, flexibility, and optimism. Other entrepreneurs' networks have provided more support to the female business owners in comparison to the support extended from their husband during their business's early phases. It's promoted the development of the business and taking advantage of marketing opportunities their expansion as entrepreneurs (Vanaja 2021).

6.2 Present Scenario of Women Entrepreneurship in India

Ever wonder what the ratio of female business owners in the Indian sub-continent is? According to the 6th economic census conducted by the MSPI (Ministry of Statistics and Programme Implementation), among 58.5 million entrepreneurs in India, 8.05 million are women, or 13.76% of all entrepreneurs. One of the most significant forces influencing society's progress is entrepreneurship. According to a gender-focused global entrepreneurship survey conducted by the World Economic Forum and published in July 2013, India is one of the nations with the worst records for women entrepreneurs. India is ranked 16th out of the 17 nations surveyed, just ahead of Uganda. Turkey, Morocco, and Egypt have performed better than India. Higher Education status of Indian women was found to be underrepresented compared to most other nations. Currently, women's involvement in large-scale entrepreneurship is restricted to businesses and industries based on technology. Even though there are more women running their own businesses internationally, they still have to overcome significant barriers like a lack of funding, rigid societal norms, and limited time and expertise to build their companies.

As there are some ways in which women entrepreneurs are changing the world;

1. **They Have Increased the Role Played by Women in the nation's Economic Development**

First off, these women have made a significant contribution to the employment of the younger generation. These women are contributing to the fight against unemployment by starting small enterprises that have created jobs for other women as well.

Additionally, business owners tap on the public's idle savings by issuing industrial securities. Investments made with public funds result in the efficient use of resources available to the country. The pace of capital formation is increasing, which is essential for the nation's immediate economic progress.

Additionally, they contribute to raising the nation's per capita and net national product, two key indicators of economic progress.

2. **Having a Significant Impact on Changing Social Norms**

"A strong woman uplifts other women."

Women are transforming society in this way. The ladies of today are supporting and promoting one another rather than fighting.

They establish industries in underdeveloped areas to take advantage of resource discounts and government subsidies, eliminating regional inequities in the process.

3. **Raising the Standard of Living**

People can now purchase goods on a tight budget because of all the women business owners. They provide affordable access to people's daily necessities.

These businesspeople have aided rural residents in obtaining their daily necessities. They give products of the highest caliber for pleasure.

4. **Adopted a Pioneering Position as an Inventor**

When it comes to taking chances as innovators, female entrepreneurs are unbeatable. They are setting an example for others and making every effort to better their game. Entrepreneurs take on the roles of a pioneer and an industry leader in their capacity as innovators.

They have made numerous innovations in creating new goods and services that will improve the lives of millions of people and so contribute to economic growth.

This is how women's interest in cutting-edge technology and their innovative ideas for preserving the environment are developing quickly.

5. **Fostering a Sense of Autonomy**

This entrepreneurship gives women the sense of freedom and individuality they have always yearned for. It has enabled modern women to soar.

They have the ability to use their talent and make money, which will enable them and their children to live with the utmost respect and dignity.

The key actors in shaping society's culture are women business owners. Women in our nation are workaholics who participate in activities outside the home and grow in their sense of independence.

As a result, women entrepreneurs in our nation play a crucial role in environmental protection, backward and forward integration, and acting as change agents, all of which contribute to the nation's economic progress.

6. **Protecting Women from Abuse**

Although there has been much worry around violence against women, the situation has radically altered. Women entrepreneurs helped other women become independent by lifting them up and assisting them in doing the same.

Millions of rural women were able to leave their abusive marriages since they were no longer financially dependent on their husbands. They are no longer subject to their spouses' or their in-laws' abuse or torture.

They have the ability to leave such toxic partnerships and take on the role of an independent owner.

7. **World Education**

"A woman can comprehend another woman's needs."

Women can inform other women about important issues. They are developing strategies to educate women and lift them out of the ignorance that surrounds them.

6.3   Case Study of Two Successful Women Entrepreneurs

The success stories are experiences that have been developed in order to involve and encourage young aspiring entrepreneurs across the globe. It is an evaluation tool that have been used by professionals across disciplines for quite some time. The popularity of success stories is due to the innovative and effective ways that they augment an initiative's visibility while engaging participants, partners, funders, and other stakeholders in public health efforts.

Falguni Nayar (born 19 February 1963) is an Indian billionaire business-woman, who is the founder and CEO of the beauty and lifestyle retail company Nykaa. Nayar is one of two self-made female, Indian billionaires.

According to the IIFL Wealth Huron India rich list 2022, Nykaa creator Falguni Nayar has officially become India's richest woman. The entrepreneur ranks 33rd among the top 100 billionaires, with a net worth of Rs 38,700 crore. She has surpassed the founder of Bicon, Kiran Mazumdar Shaw, to become India's richest self-made woman entrepreneur.

According to the data, Nayar's flagship, beauty and wellness goods company Nykaa rose by 345 percent in just last year to a record fortune of 38,700 crore. She rose from 169th to 33rd on the all-time list, which is led by Gautam Adani, who has a fortune of more than ten lakh crore.

Rekha Jhunjhunwala, who was the wife of late stock investor Mr. Rakesh Jhunjhunwala, comes next with a total net worth of 37,200 crore. Other women on the list are Godrej's Smita V Crishna with 32,000 crores, Zoho Corporation's Radha Vembu with 30,500 crores), Biocon founder Kiran Mazumdar Shaw with 24,800 crores, and others.

Nayar was also one of the top 10 gainers, with her wealth raised to 30,000 crores standing in the fifth place. She is the only woman on the roster along with Gautam Adani, Mukesh Ambani, and Cyrus Poonawalla. Falguni Nayar is the second-highest percentage gainer, with a 345 percent increase in wealth. Ravi Modi of Vedant Fashions leads the list, having increased his wealth by 376 percent.

According to Hurun India, the collective wealth of the billionaires has surpassed 100 lakh crore for the first time since the establishment of the wealthy lists, which is more than the cumulative GDPs of the UAE, Singapore, and Saudi Arabia. Over the last year, Gautam Adani made 1,600 crore each day, leaving behind Mukesh Ambani as the richest Indian for the first time (Prakash, 15 October, 2022.).

Purvi Pugalia, Co-founder of Soch Group

Purvi Rohit Pugalia, Co-founder of SOCH Group, is the brains behind the fan-favorite Munchilicious Granola dishes. She has always been a creative soul with a propensity for experimenting with recipes, owing to her background as a graphologist and a literature graduate. But she had no idea that her passion for distinctive cuisine would turn out to be her secret ingredient for success.

We live in a country of a billion minds, and there are billions of ideas and dreams brewing within these minds. SOCH Group aspires to bring as many of these ideals to fruition as possible. We want to build a healthy and sustainable environment around Indian startups by walking alongside them from the beginning and assisting them in scaling their businesses efficiently and sustainably.

SOCH Group was founded in 2015 by Rohit Mohan Pugalia and his wife, Purvi Pugalia. It all started with a necessity, which is where most great creations begin. Purvi decided to use a novel way to convince her husband, Rohit, to start munching on nutritious food. She began creating healthy and tasty granola snacks for Tiffin, which not only won over his heart and stomach, but also ignited his dream. Soon after, he decided to quit his work and pursue his entrepreneurial passion by producing delicious granola snacks. This established the SOCH Group and its first brand, Munchilicious.

Since then, Rohit and Purvi have continuously channeled their hard work and enthusiasm into launching a slew of new businesses and pushing them to new heights. In the process, they have touched many lives, championed fresh ambitions, and fuelled new ideas that promise a brighter future (Pink).

6.4 Women Entrepreneurship and Impact of Corona Virus

The COVID-19 forced numerous private sector businesses to lay off workers. As a result, many people—especially women—who lose their jobs will transition to the informal economy in order to survive. Common online marketplaces like Facebook, Twitter, e-Bay, and Amazon are frequently used by consumers to sell and purchase everyday products like furniture, cars, and household goods. The epidemic has, however, drastically altered the function of commerce in internet platforms as people now only market necessities. This involves providing home baking delivery, selling fresh produce, home education, etc. (Hassan 2022).

An entrepreneurial approach to solving the issue and environmental change is required to handle the COVID-19 situation. "Organization-level behavioral qualities of engaging in product-market innovation, fostering inventive behavior within the firm, initiating relatively hazardous projects, and being the first to come up with proactive innovations" are referred to as entrepreneurial orientation (Wang 2012). This indicates that innovation, taking calculated risks, and having experience in the market are the primary characteristics of entrepreneurship needed to tackle the COVID-19 situation. More and more people and businesses desire to be perceived as entrepreneurial but also involved in cultural and social endeavors.

This indicates that a more modern understanding of entrepreneurial orientation must consider cultural, social, and lifestyle factors. Due to its emphasis on interpersonal relationships, entrepreneurship is a socially ingrained activity. This implies that businesspeople identify opportunities depending on their capacity to use social media. The number of businesspeople who have networks built on interpersonal relationships is referred to as social links. This also includes deals or ties based on solidarity within a group. Social connections make a variety of social resources available for use in entrepreneurship. This indicates that users of social networks offer costless business recommendations and assistance. This is a rare characteristic in social entrepreneurship and aids in the creation of solutions to the COVID-19 challenge.

Assessing the possibility of specific events happening is a component of environmental perception. Due to a sustained period of activity, some habitats may be more stable than others. This can make determining how environmental events will affect a firm easier. It's possible that some environmental situations are more dynamic and alter in response to political events. This means that while evaluating new business opportunities, some degree of caution is necessary. Due to uncertainty, changes may be more significant in tumultuous circumstances. This implies that there are numerous potential directions for scenario planning for how to handle COVID-19. This makes it possible for a more circumspect approach to evolve when considering possible consequences of courses of action.

Because it necessitates taking some sort of action, entrepreneurship implicitly serves a functional purpose. This indicates that being an entrepreneur requires making a deliberate choice to seize a business opportunity. This indicates that the choice is supported by an assessment of the potential and an understanding of the necessity to identify market gaps. The desire to act in an original manner is inherent in decisions related to entrepreneurship. According to Lerner, Hunt, and Dimov (Lerner 2018), "the essentiality of entrepreneurial action is important to the study of entrepreneurship." This indicates that the purpose to bring about change is what drives the causal structure of entrepreneurial action. Therefore, "behavior in reaction to a judgmental decision under ambiguity regarding a probable chance for profit" can be used to characterize entrepreneurial action (McMullen 2006). An emphasis on the concept of intention leading to conduct is made possible by thinking about entrepreneurship from an action perspective.

An entrepreneur is someone who takes advantage of a commercial opportunity by innovating in some way. This indicates that they anticipate a market void that could be addressed due to a fresh business concept. In order to accomplish this, some type of profitable product, strategy, or service must be developed. Entrepreneur concentrates on how they might be involved in both innovation-oriented, result-oriented, and wealth-seeking activities by successfully seeking out new opportunities. Additionally, because of sociological and environmental elements, the context has a significant impact on entrepreneurial activity. This implies that family firms may occasionally face social pressure to take on certain activities. Entrepreneurs' efforts to grow their family businesses may be aided or hampered by their environment. This indicates that attention should be paid to how the environment can support entrepreneurship.

Understanding how opportunities and novel ideas are identified is a necessary component of entrepreneurship. As new ideas can come from various methods of thinking, this frequently requires some creativity. According to the dictionary, creativity is "the generation of original and practical ideas by one person or a small group of people working together" (Amabile 1996).

Creative business concepts require relative thinking in terms of how they materialize. Businesses impacted by COVID-19 must take some sort of action in order for ideas to reach the market. This entails the iterative process of ideas being improved and developed further. To do this, the concept must be transformed into practical business solutions that, once implemented, can win over stakeholders. The opinions and suggestions of others are necessary for ideas, so it is crucial that stakeholders offer their opinions. Initial concepts can be altered depending on how others view them. This means that in order to help ideas develop by firms, it is crucial to elaborate on them. This entails conversing with others through a conversational process. Discussion of concepts can aid in the development of new breakthroughs. Although, based on input from the effects of COVID-19, some concepts might need to be abandoned.

Early in 2020, the unique coronavirus that causes the illness COVID-19 first emerged, and it has since profoundly altered worldwide culture (Parnell 2020). The term "new normal" describes a society in which social and physical distance is required in order to slow down the outbreak of the illness. The way people interact and behave in society as a result has undergone a significant cultural shift. Since they serve as opportunity agents in society, entrepreneurs are the main beneficiaries of these developments. While entrepreneurs are frequently judged on their ability to solve issues or improve society, they might also be under pressure to produce specific outcomes (Williams 2017). This implies that they may need to drastically alter their company path rather than necessarily benefiting from change, such as that brought on by the coronavirus health epidemic. Policymakers are then faced with a conundrum since they want to encourage entrepreneurship to solve societal problems but also protect existing assets.

People in Wuhan, China, were confirmed to have a novel coronavirus that is extremely contagious in December 2019 (Cortez 2020). The virus was first believed to have originated in Wuhan's live animal markets, but there has since been substantial debate about the disease's precise ancestry. The Chinese government shut down Wuhan because of the virus's spread and forbade people from leaving their habitats except to access necessary services. The Chinese government declared on January 23, 2020, that Wuhan would be closed, and more than five million citizens left the city (Alon 2020). The virus's impacts have an impact on both society and the economy. Changes in living and working conditions are responsible for a large portion of the social repercussions. Due to this, many have felt the need to socially isolate themselves and have become more reliant on digital forms of contact. The trend toward digitization had already begun before the virus, and it was hastened once the virus's means of transmission was discovered. Many healthcare systems collapsed as a result of the virus's effects, which had a knock-on effect on other economic sectors. The virus had a severe impact on several nations, including Spain, where the healthcare system was overburdened.

Since there was no known medical cure or therapy for the illness, safety measures or precautions including hand washing, personal hygiene, and social seclusion were encouraged. Although this assisted in halting the disease's spread, it also led to harsh societal constraints, such as mobility limitations and the closing of playgrounds, schools, and institutions. The limits have the greatest impact on several areas of the global economy, particularly the tourist and hospitality sectors, whose business models depend on frequent contact between people. Because of travel limitations placed in place and borders closing, the exponential and continuous development in international travel came to an end. Individual nations closed their borders as a result of this anti-globalization stance, which was unprecedented. This stood in stark contrast to earlier calls for open borders and unrestricted international travel. This has had a significant impact on increased dependence on international travel among people who live in many countries.

With live games ending and outside sporting activities being prohibited, the sports business was also severely impacted. Many sports' reliance on in-person participation has a significant knock-on effect, especially for people employed in the industry. A health pandemic had never had such an impact on how sports were performed, organized, and viewed. Numerous sports training facilities were shut down, which forced sportsmen to alter their training regimens. In addition, industries are having trouble with supply chains since so many people are stuck at home (Kraus 2020). The reduction of several industries has led to supply chain disruptions. At the same time, crucial firms that have carried on must implement new health regulations like personal protection gear, physical separation, and ongoing cleaning. As a result, entrepreneurship offers ways for people, companies, and governments to handle the COVID-19 dilemma.

6.5   Challenges of Women Entrepreneurs

1. **Conflicts between Office and Household Commitments**

In both developed and developing countries, women are averted from setting up successful businesses because of their responsibilities to their families. Few women can commit all their time and energy to their businesses because they are primarily responsible for their family members.

2. **Gender Inequality**

Despite significant progress made by women in mid-school and high school education, they frequently lack the combination of training, technical abilities, and practical experience required to support the creation of very successful firms.

3. **Lack of Finance**

One of the biggest obstacles that entrepreneurs must overcome is getting access to capital, and this is particularly true for women who are more likely to be a Paucity of

personal identification, a lack of property in their own names, and the requirement for their husband's countersignature on numerous documents make it difficult for women to start businesses in India in 1145.

4. **Legal Constraints in Family Law**

The development of female-owned businesses depends heavily on the institutional and legal context. Laws governing the private domain, particularly those that land, inheritance, and marriage may limit women's access to resources. Something can be pledged as security to obtain a loan.

5. **Heavy Household Responsibilities**

Impose pressure on women, particularly those who live in remote areas and have larger families. They must do their customary responsibilities as housewives, so compared to males; they have less hours of leisure time on the weekends and during the week. a report from the ILO on women entrepreneurs outlines the following issues that female business owners deal with.

6. **Lack of Family Support and Capital**

Cultural norms could discourage a woman from starting her own business. Females with lesser incomes are particularly affected by this. Women lack sufficient financial or legal expertise to start a business.

7. **Lack of Confidence and Faith**

Women entrepreneurs' self-confidence suffers from a lack of role models. The female gender is thought to find selling to be disgusting.

8. **Lack of Public/Private Institutions**

Most public and private incentives are misapplied and they do not benefit women unless they are supported by men. Several trade organizations, such as ministries,

Chambers of Commerce does not provide services for women anticipating women's organizations to take the necessary action. The majority of public when incentives are used inappropriately, they do not reach the lady supported by a man Several trade organizations, such as Ministries, Chambers of commerce do not provide services for women anticipating women's groups to take the appropriate action.

6.6 Opportunities for Women Entrepreneurs in Terms of Financial Equality

Women's entrepreneurship must play a larger part in India's economic development if it is to become a $5 trillion economy. India's gender balance is among the worst in the world, and correcting it is not only critical for gender equality, but also for the whole economy.

The Government of India and various state governments are implementing programs to increase financial inclusion for women. One such high-potential scheme for women is the Pradhan Mantri Mudra Yojana, which provides collateral-free loans.

1. The Dena Shakti Scheme offers loans of up to 20 lakh rupees to women entrepreneurs working in agriculture, industry, microcredit, retail outlets, or other businesses.
2. The proposal also includes a 0.25% interest rate reduction.
3. The Government of India also launched the Stand-Up India Scheme to use the institutional financing framework in order to reach out to the underserved population, including SCs, STs, and women entrepreneurs.
4. Street Shakti Yojana and Orient Mahila Vikas Yojana assist women who own most of a business.
5. Women who want to start a catering business can get a loan through the Annapurna Yojana (Opportunities to Women Entrepreneurs, 1 April, 2022 retrieved at 1.52 pm; 20 October, 2022).

6.7   Conclusion

The COVID-19 outbreak has had severe effects on non-formal women entrepreneurs in India. This article reveals that the impact of the pandemic on women entrepreneurs was challenging as well as provided opportunities also. During the pandemic caused by the COVID-19 outbreak, women entrepreneurs could serve themselves by delivering products and services in a responsible fashion while generating a fortune for their livelihoods. People could buy from such women entrepreneurs with relatively limited risk of infection instead of shopping from departmental stores so that the risk is less of infection. Most of the small and medium-sized enterprises, founded, co-owned, and managed by women, have observed changes in the scope, strategy, and execution of their operations because of COVID-19 protection measures imposed to limit health risks, as well as the implementation of restrictive measures. This pandemic has exacerbated the obstacles that women business entrepreneurs already face, such as securing capital, a lack of role models, lower levels of business knowledge, and managing work/life balance. This article discusses the obstacles and opportunities faced by women entrepreneurs during and after the epidemic, and it concludes with some recommendations for overcoming socioeconomic challenges and improving their social standing.

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Chapter 7
Women's Business in Remote Villages: Two Generations, Many Changes

Zeevik Greenberg and Yahel Kurlander

Abstract The chapter examines female entrepreneurship in Israeli remote rural areas, exploring factors influencing its development, employment challenges, and women's historic role in managing households, agriculture, and livestock farms in these settlements. These villages thrived through agriculture until the 1980 crisis when non-agricultural industries diversified their livelihoods. This economy evolved from agriculture to a multifaceted one, incorporating tourism, hospitality, business entrepreneurship, and liberal professions for income generation. The changes in the rural space have affected the women primarily engaged in the agricultural economy leading to the launching of small businesses and independent professions. They showcased creativity and professional skills through businesses that introduced new services to underserved rural areas. We present findings of a 10-year study that explores rural women entrepreneurs, employing mixed methods to reveal the scope, nature, location, strengths, and impact of their businesses on the overall landscape. Findings also highlight evolving occupations and expanding networks among women in the periphery.

Keywords Rural community · Business entrepreneurship · Women · Periphery · Small businesses · Employment · Gender

7.1 Introduction

In Israel, there are two types of cooperative settlements known as "moshav shitufi" (pl. moshavim shitufiim) and "kibbutz" (pl. kibbutzim) that differ from one another only in their degree of communality. Both the moshav shitufi and the kibbutz historically

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and traditionally relied on agriculture as the core activity that characterized them. A third type of settlement is the "moshav ovdim", a village comprised of a number of private farms.

Since the beginning of the cooperative and private farms in Israel, women have had a significant place in their establishment, maintenance, and operation, and in the agricultural economy. In the cooperative settlements, women were assigned to work in all areas of agriculture but over the years, as the kibbutz/moshav shitufi became more economically stable, there was a devaluation of their status and their employment was concentrated in the service branches (Palgi and Orchan 2005; Palgi and Reinharz 2014). Women were excluded from productive work. They were directed to jobs in the fields of services: education, welfare, care, and other jobs that were defined as service jobs.

In the private farms, however, women were always an integral part of the farming family's workforce. They managed the household, raised the children, managed the livestock farm adjacent to the house, and contributed to seasonal agricultural tasks that required immediate and additional work effort such as picking fruits and vegetables and packing them for marketing. The importance of woman as part of the agricultural economy was reflected in the development of training farms that engaged in professional agricultural training, some of them specifically for females. Despite women's high level of participation in the agricultural economy throughout the early years of Israel's communal and private farms, their significant role is hardly documented (Fogiel-Bijaoui and Sharaby 2017). This can most likely be explained by the fact that the history was written principally by men who emphasized the masculine effort of taming the land as heroic, pioneering, and fulfilling values, while the activities of women were downplayed as belonging to everyday life, hidden from view, taking place in and around the house and less so in public spaces.

Since the mid-1980s, agricultural farms in Israel have undergone a series of economic, professional, and occupational crises that have led to changes in the rural population and the characteristics of employment and livelihood in the rural space. Even the lifestyle that used to be completely rural has now become something akin to suburban, combining life in rural settlements with employment and earnings in nearby towns in urban occupations (Hoggart et al. 2014; Long and Woods 2011).

Examining the causes of the crisis in agriculture shows its complexity: climate change has led to a shortage of water and increased water and fertilizer prices, thus requiring the adaptation of varieties, crop changes, the introduction of new irrigation methods, and the restructuring of the rural economy (Fernandes 2019). At the same time, the increased demand for food supply has also affected the organization of agriculture. These have led to the entry of food corporations that combine economic thinking, development of new varieties, and optimization of work by mechanization and computerization (Karthikeyan et al. 2020; Beltran-Peña et al. 2020). All of these have resulted in fewer people employed in agriculture, a decrease in active farmers, and structural and organizational changes. This set of changes created the need to find other sources of livelihood not based on agriculture (Ben-Dror and Sofer 2010; Ceccato and Persson 2002; Crandall and Weber 2004), so that the formerly agricultural economy has become multi-functional and includes the development

of business entrepreneurship among its diverse sources of income. These processes show a change in the perception of the farmers, but not only, it seems that many times, at least The phenomenon of the economic crisis and the entry of large agricultural corporations brought about a change in the perception of farmers toward their farmland as an asset with multidimensional economic potential (Greenberg 2013; Buhalis and Cooper 1998; Getz et al. 2004; Schnell et al. 2015; Sofer 2004).

In this chapter, we present the characteristics of women's entrepreneurship in rural settlements in the periphery. The remoteness of these settlements from large cities and the country's urban center, the distance between the villages themselves, the small number of customers locally and a small amount of professionals, the poor quality of the few roads in the rural area, and the limited employment options, all pose challenges to women in areas of employment, livelihood in their field of specialty and professional development (Adams and Funk 2012; Lewis and Humbert 2010; McLaughlin et al. 2012). Entrepreneurship and starting a business are two ways to deal with these challenges. Here we discuss the phenomenon and characteristics of female entrepreneurship in the periphery.

Sofer and Saada (2017) and Greenberg et al. (2018) claim that there are two generations of women's businesses in the rural space by presenting the characteristics of each generation of those businesses, the current development trends, and their impact on life in rural Israel. This chapter is based on a study that has been ongoing for several years and focused on clarifying the characteristics of female entrepreneurship in the rural area in Israel.

7.2 Changes in Employment and Livelihood in the Rural Area

The changes in the rural area and the transition to a multi-functional economy promote the development of new jobs, including business entrepreneurship. Many studies show that this change in employment poses a lot of challenges for women. The paucity of jobs, since most of the businesses are of male nature, the large distances between the home and the workplace, and also the traditional way of life in some villages make it difficult for women to go out to work outside the rural economy (Sofer 2004; Heilbrunn 2004; Torri and Martinez 2014). The degree of integration and the activity in networks affect the growth potential of businesses in terms of knowledge acquisition, raising capital, innovation, and access to new markets and customers. Many studies look at the effect of interconnection networks on the economic success of businesses (Kristiansen 2004; Greenberg et al. 2018). The entry of women from rural communities into the business sector and the field of entrepreneurship, which were traditionally considered male fields, presented the opportunity to examine the characteristics of business entrepreneurship in rural communities, especially those of women's activity in these fields.

In agricultural settlements adjacent to towns and cities, and therefore, located on the "rural–urban fringe", changes became apparent in the different use of one-time agricultural buildings for storage and trade purposes, in the entry of small-scale industry and mainly in earning one's livelihood in nearby cities. All of these changed the face of the agricultural settlements and in many cases even caused tensions among the residents (Dolev and Kimhi 2008; Kimhi and Rapaport 2004; Sofer 2004; Sofer and Saada 2017). Sofer (2014) noted the process that turned the rural space into a type of suburbia as well as the entry of an urban population that changed the face of rural settlements and turned them into prestigious suburbs of the nearby cities. As for female employment, some women "set up shop" in the town or city to practice their profession in an environment with increased potential clientele, and many sought work in the businesses and service industries of the town or city adjacent to the rural settlement. Many of them are gainfully employed and their contribution to the household is a fixed salary determined in negotiations between them and their employer.

In agricultural settlements far from large cities, the reality of women's lives is more challenging. The big distance between one settlement and another and between the rural area and the towns and cities and the country's urban center, as well as the fact that roads are few and often in sub-par conditions, as typifies rural areas in many countries, the likelihood is low that women will find worthwhile work outside the rural settlement. In addition, areas that are far from large cities characteristically offer a paucity of employment opportunities for women, little chance to advance professionally, and low wage levels compared to urban areas. These situations often prompt women in rural communities to attempt entrepreneurship and develop small businesses in their areas of expertise (Greenberg et al. 2016; Schnell et al. 2015).

7.3   Business Entrepreneurship as a Tool for Economic Development

The development of small businesses and entrepreneurship is a great stimulus at the local and regional levels and even for the country's economy; in many countries, small businesses are a source of employment for tens of percent of the population and their significance in national production is significant at the local and regional level (Jayawarna et al. 2013; Wallerstein 2011), as well as at the national level (Foss and Bjørnskov 2016; Bosma et al. 2018). In Israel, there has been a steady growth of small businesses: in the annual report of the Ministry of Commerce and Finance, there were 625,000 small businesses operating in Israel in 2021, an increase of 13,000 businesses compared to 2019. About 56% of these businesses are self-employee businesses. and about 32% employ between 1 and 4 employees; these small businesses represent 12% of the employment force in Israel. The self-employed and small businesses contribute about 100 million NIS per year, which is about 55% of the national product (Ben Aharon 2021). This rate is somewhat lower compared to

the average in OECD countries, Canada, and the United States, but is similar to the total rate of entrepreneurship in Norway, Ireland, the UK, France, Greece, Singapore, and the European Union (Singer et al. 2015).

Researchers who focus on small businesses tend to link the establishment of a business with entrepreneurship, claiming that entrepreneurs can be divided into two types: (1) the pioneering entrepreneurs—characterized by boundary-breaking and innovative thinking. Such entrepreneurs view the space around them as a field of opportunity and re-creation, and they base themselves on creative thinking that breaks convention and focuses on inventing and developing new and original products (Benzing et al. 2009; Akcigit and Kerr 2018). This type of entrepreneurship takes place under conditions of uncertainty and thus involves a high level of risk. (2) Streamlining entrepreneurs—those whose initiative is improving and optimizing existing processes or developing technologies to improve the quality of existing products. These entrepreneurs operate in a more certain and safer environment, and their level of risk is low compared to those who produce new products "from scratch" (Pramono et al. 2021; Schumpeter 1951).

7.4 Women's Entrepreneurship

The world of entrepreneurship and business is traditionally viewed as a male space. Similar to other business fields, the number of women active in the field of entrepreneurship and small business management is small compared to men (Gupta et al. 2009; Shinnar et al. 2012; Wu et al 2019).

In Israel, in 2004 only 20% of business owners were women, and by 2021 their share had grown to 23% (Ben-David 2004; Ben Aharon 2021). These data show an ongoing trend of a slow and steady increase in the number of women entrepreneurs. Most female business owners are small business owners (Ben Aharon 2016, 2021). An examination of the types of businesses that women operate reveals that they run a higher percentage of service businesses than in other sectors of business. Women's businesses are often concentrated in the fields of education and remedial teaching, personal care, complementary healthcare, and personal services. Compared to these fields, the proportion of women owning businesses in engineering, economics, industry, and management and production is low.

Investigation of the rates of entrepreneurial women by region shows that there are distinct gaps between urban and rural areas. In the Tel Aviv area and generally in the center of the country, the rate of female-owned businesses stands at about 20%, while in the periphery, the northern and southern districts where there is a large number of rural settlements, the proportion of independent businesses run by women is low. In the northern district, only 7% of women are self-employed while in the southern district only 6.2% (Heilbrunn 2021). These two regions, from which the data for this chapter were collected, are characterized as areas with a traditional population with a lower level of education and a lower percentage of professional training (Shamai

et al. 2015). Many of the residential areas are rural settlements whose level of general development is low compared to the Tel Aviv area and the urban center (Lerer 2018).

From the research literature, it appears that the decision by women to pursue business entrepreneurship and start a small business stems more from constraints than from real desire. We can distinguish between "push and pull" factors that motivate women to leave work as an employee and become independent owners of their own businesses. Among the "push" factors are the need to contribute to the family economy (Isaga 2018; Moreira et al. 2019), lack of interest in the previous workplace, lack of growth potential due to power relations based on gender considerations in large organizations, and aversion to hierarchy (Garcia-Tabuenca et al. 2015; Sa'ar 2014). "Pull" factors may include the desire for social and economic mobility, the need for personal development, a personal challenge, the desire to engage in an area that interests them, and a desire for self-realization in the context of managing and leading a business (Sa'ar 2010; Heilbrunn 2022).

7.5   Women's Entrepreneurship in Rural Areas

Women's entrepreneurship in rural areas far removed from large cities is a growing phenomenon in different countries. The disparities between men and women in the workplace, the gender-dependency relations within the nuclear and extended family, and the need to find livelihood solutions in the farming areas after the economic crisis, all of these led to the development of programs to advance women's entrepreneurship (Shakil et al. 2020; Ben Aharon 2021). The economic thinking behind this initiative is to encourage women to promote and develop themselves and at the same time to promote economic development and economic growth at the family and regional levels, to harness the potential in women for profitable economic activity, and even to support female empowerment based on economic success so that in the future this empowerment can redefine the range of possibilities that women will have in choosing a profession and source of income (Alston 2004; Eyben and Napier-Moore 2009). Women's entrepreneurship in rural areas is provoked by similar motives to those in urban areas, mainly the paucity of opportunities for professional advancement, the feeling of having exhausted their potential in their workplaces, and tensions arising from the desire to combine a career with meeting the needs of the family (Getz and Carlsen 2000; Lewis and Humbert 2010; McLaughlin et al. 2012; Sa'ar 2017).

In Israel, the initiative for the development of women's small businesses is two-way, from the bottom up by private initiatives of women (Sofer 2004) and from the top down by State and regional programs for the development of a local economy, a regional economy, and a growth economy. Various government offices have established "transition" centers for the development of employment and entrepreneurship as well as community innovation centers and incubators for business development (Heilbrunn 2022).

Women's businesses in the peripheral areas often have unique characteristics, such as the use of own and family capital and less reliance on bank loans, the location

of the business in or near the home, expertise in an area related to the management of the home and the traditional agricultural economy such as lodging in a rural atmosphere, as well as production based on local produce and personal services. Some researchers have noted that these businesses allow women to turn their traditional activity into a profession and the skills they have acquired into expertise of economic value, thus contributing to their professional and personal empowerment (Schnell et al. 2015). Many women's businesses in the periphery are included in the "self-employment" category, meaning that she is the sole employee in the business and may receive assistance and support from her immediate family members, and thus the entrepreneur enjoys the flexibility between her work in managing the business and managing the household (Figuerao-Armijos and Johnson 2013).

The development of women's businesses in the rural space obviously contributes to economic capital at the personal and family level, but it also contributes to the development of human and social capital, both at the individual level and in general. Women enjoy more workplace opportunities (Atterton and Affleck 2010; Corcoran et al. 2010), contribute to improving their family's economic situation (Bock 2010; Duhan 2007; Pato 2015) and reduce traditional gender gaps and inequality (Khatiwada and Silva 2015). The development of a sense of professional identity and self-worth, as well as the spirit of innovation that prevails in these businesses, contribute to internal motivation in the rural space. The increase of small businesses in the more remote areas also serves as a source of attraction to the rural space for those who seek a slower-paced quality of life but were afraid that the move would adversely impact them economically and the quality of the services they will receive; it allows young people to understand the economic potential that lies in the rural space and increases the chance that they will choose to make their homes there (Markantoni et al. 2014; Afolabi et al. 2013).

Investigation of the business characteristics of female entrepreneurs in rural communities far from large cities was carried out between the years 2011–2021. For this study, data were collected on women's businesses regarding the type of business, the location of the business, the characteristics of the female entrepreneurs, the business's growth potential, and the entrepreneur's opinion about the success of the business and meeting the goals she had set for herself.

Longitudinal research that examines a phenomenon over a long period of time can teach us about changing trends, changes in mood, and the progression of phenomena in space and time.

This research was conducted in rural settlements in the northern periphery of the State of Israel. Female entrepreneurs from the four most common types of rural settlements in the region participated in the study: moshavim shitufiim, private moshavim, kibbutzim, and independent small villages (also called "community settlements"). Arab villages were not surveyed for three reasons: first, Many Arab villages have undergone accelerated growth and urbanization processes and are, therefore, no longer "villages" but towns, nor can they be labeled "rural"; second, a researcher who does not belong to the Arab sector will have a very difficult time obtaining data from them; and third, it is a society in a situation of transition from a traditional patriarchal society to a modern one, where many women are still not allowed to

work outside the home, and if they do, it is within a structured employment situation. The independence of entrepreneurship is not commonly accepted in the Arab sector (Greenberg and Sagiv-Reiss 2013; Hussain 2020).

7.6 Characteristics of Entrepreneurship in Rural Areas

In building the entrepreneurship profile, we referred to personal characteristics such as age, years of experience in the field, professional training, and the degree of expertise according to the definitions of the specific field. This profile enabled us to understand the motives that encouraged women to establish independent businesses. Who is the female entrepreneur?

Table 7.1 shows the age distribution of female business owners in the periphery in two time periods separated by a decade. The distribution shows that there are no large gaps between the different age groups of the female entrepreneurs and that they are at an age of occupational development. Over the years, growth can be seen in the number of entrepreneurial women (150 in 2011 and 190 in 2021). This growth may be explained by the development of programs to promote women's employment and entrepreneurship as well as the migration of young couples with families to rural communities during this decade. The two trends that stand out in the study are (1) growth in the percentage of young women turning to entrepreneurship from 2011 to 2021 (12 to 18 of the 21–30 age group, respectively, and 44 to 63 of the 31–40 age group, respectively). In contrast, the number of older women, aged 61–70, in entrepreneurial endeavors is decreasing. These women are members of the first generation of entrepreneurs, the generation that experienced the economic crisis that crushed the agricultural economy and forced them to find other avenues of employment and livelihood. The businesses they established were based mainly on tourism, rural accommodations, and personal services.

Education and professional training are significant components of the entrepreneur's human capital and are often the basis for choosing the field of business and the source of inspiration for its establishment. The study findings disclosed that, in

Table 7.1. Distribution by age of women who own small businesses in rural communities

Age group	2011		2021	
	N	%	N	%
21–30	12	8.0	18	10.0
31–40	44	28.8	63	33.0
41–50	37	24.8	52	27.0
51–60	26	17.4	35	20.0
61–78	31	20.8	22	12.5
Total	150	100	190	100

2011, the number of years of education of female entrepreneurs was about 15.5 years (SD 2.8), increasing insignificantly to 16.7 years in 2021. Approximately, 84% of female entrepreneurs had an academic degree vs. about 70% of male entrepreneurs, about 18% of them had a high school education and 5% had studied for certification. An examination of the professional training areas of female entrepreneurs showed that their human capital is high. In 2011, 75% of female entrepreneurs reported that they attended continuing education classes in their field of entrepreneurship, while in 2021, over 87% reported that they had undergone professional training or continuing education in their field of business.

7.7   Types of Women Businesses

Table 7.2 shows the distribution of businesses according to their types in each of the years. Business mapping was done at two levels: expanded mapping detailing the different types of businesses, and limited mapping according to the classification of the Central Bureau of Statistics.

From Table 7.2, it is possible to learn about the changing trends in the growth of female business entrepreneurship in rural communities from the significant upward trend in the number of women turning to entrepreneurship. The number of entrepreneurs has increased, and in 2021, it stands at 190 women's businesses in the settlements researched in this study, an increase of 40 women's businesses over a decade. It is important to note that we do not have information about businesses that operated in 2022 and those that closed or stopped operating. The fields of entrepreneurship highlighted represent distinct trends of growth in the fields of employment of entrepreneurial women between the years 2011 and 2021. It appears that among the small businesses, a reduction from 2011 to 2021 in the pursuit of tourism, rural hospitality (from 19 to 11% alone, respectively), food services, and care and beauty services (from 8 to 3% respectively) stands out. The tendency of women to engage in personal services related to the well-being of the individual, such as mental therapy, body treatments, and complementary medicine, as well as in art and applied art depicted in 2011, has changed in favor of engaging in the fields of sales, media and graphics, professional management services, and technical services (from 1.8% to 5.7, from 1.5 to 1.9%, and from 0.0 to 8.3, respectively).

These findings indicate the importance of professional training and higher education among the owners of these businesses. The variety of businesses run by women shows that some businesses do not depend on the traditional rural space at all. They do not rely on agriculture and the processing of agricultural products as in the past, they teach about a new phenomenon in the rural area, the entry of new populations into this area that brings professions and businesses that are traditionally considered urban, into the rural area.

Table 7.2 Details of women's entrepreneurship areas by year

Areas of entrepreneurship according to the classification of the Central Bureau of Statistics			Changes in the areas of entrepreneurship of women by years				
			Area of entrepreneurship	2011		2021	
Area	N	%		N	%	N	%
B&Bs	46	17.2	Rural hosting	29	19.3	21	11.0
tourist services	39	14.5	Restaurants and pubs, food services	13	8.6	9	4.7
			Bike trips, jeeps, etc. and adventure tourism	2	1.3	9	4.7
Agricultural products	35	13.3	Processing of agricultural products—wine, oil, cheeses	9	6.0	6	3.2
			Direct sale of agricultural produce	5.3	15	15	7.8
			Breeding and service for domestic animals, and horse tourism	3	2.0	9	4.7
Mental/emotional therapy	17	6.3	Conventional and alternative treatment and diagnosis	13	18.6	4	2.1
Beauty and body services	26	9.7	Beauty services	6	4	6	3.2
			Spa and body care	6	4.0	2	1.0
			Sports, gymnastics and dance	5	3.3	1	0.5
Cultural events, writing and editing	10	3.7	Cultural and entertainment events	3	2.0	5	2.6
			Media and graphics—design, editing, translation	5	3.3	7	3.6
			Books and writing	2	1.3	2	1.05
Art—production and sale	26	9.7	Art and applied art—production and sale	15	10.0	14	7.3

Table 7.2 (continued)

Areas of entrepreneurship according to the classification of the Central Bureau of Statistics			Changes in the areas of entrepreneurship of women by years				
			Area of entrepreneurship	2011		2021	
Area	N	%		N	%	N	%
			Production of various accessories and products	2	1.3	0	0
Sales	14	5.2	Clothing, footwear, etc.—production, design and sale	2	1.3	5	2.6
			Various sales	**4**	**2.6**	**14**	**7.3**
Construction, carpentry and design	10	3.7	Building	**1**	**0.6**	**5**	**2.6**
			Carpentry and frames—useful and artistic	2	1.3	5	2.6
			Design	1	0.6	1	0.5
Office services	20	7.4	Professional office and management services	**4**	**2.6**	**21**	**11.5**
			Technical office services	**2**	**1.3**	**6**	**3.15**
Domestic and technical services	15	5.6	Gardening, cleaning and home services	2	1.3	1	0.5
			Technical services	**2**	**1.3**	**13**	**6.8**
Other	10	3.8	Other	3	2.0	9	4.7
Total	268	100	Total	150	100	190	100

7.8 Where Female Entrepreneurs Set Up Their Businesses

The study's findings concerning the location of the small business show that, both in 2011 and in 2021, most of the businesses were located at or near the owner's home. In fact, about 75% of the women's businesses are situated in or near her home—in the space surrounding the house or in the yard of the house. About 20.5% of the women whose businesses are not located in the house or in the adjacent yard have established their businesses in the community where they live, for example, a bakery entrepreneur rents the kibbutz kitchen where she lives, an entrepreneur in the field of planning and architecture rents one of the old moshav management offices that has not been in use for several years. Someone whose work involves office services rents a building previously used by the school system in that community. About 16% of the female entrepreneurs reported that their businesses are not located in the community of residence; some set up businesses in the town or city closest to their residential area and others in business centers established at important crossroads in the area.

In the in-depth interviews, the female entrepreneurs were asked about how they arrived at establishing their business and how it operated. The interviews revealed unique characteristics of the new generation of entrepreneurs in the rural area: They come to the rural space out of choice. Some were born in rural settlements, lived in an urban center for several years, studied in institutions for higher education or gained professional training, acquired a profession that interests them, and which often has no connection to the rural settlement, and choose to initiate a small business where they could work in their profession.

> Today most of the activity is on the computer, I receive a project, I work on it as much as necessary and send my planning. If necessary, I coordinate meetings with several clients and travel to the meeting day.

Another interviewee said:

> I studied tourism because it interests me, it was clear to me that I was returning to the family business and starting to manage it professionally, it's not B&Bs, it's a complex that includes several things that I developed—a comprehensive rural tourism experience.

A third interviewee said "When we chose to move to the Galilee, it was clear to me that I was not giving up my job. Most of my work is moving between clients, many of the days I'm traveling, on the road, passing between clients, seeing what's needed, and selling. There are workdays at home. Work on the books, on the accounts, and the coordination. It's workday that is done at home, in the kitchen […] My kitchen is the best office I've ever had."

The interviews reveal a new generation of professional women. They studied and received professional training, they live in rural settlements by choice, the connection between them and agriculture is almost non-existent, and they are engaged in the profession they chose and which they want to develop. The choice of an independent business shows their lack of compromise in relation to their professional occupation. They prefer to establish a business that will allow them to practice their profession than to compromise and integrate into local employment places.

As for the operational aspect of the business, the interviews emphasized the significance of social network activity for marketing and promoting the business. These women are active in local, regional, and national networks; one of the entrepreneurs in the field of tourism said:

> I realized that if I want the business to grow, I need to take the initiative, if I wait then they won't come. I started working with marketers and with tourism people whose specialty is rural accommodations, and since then they come from all over the country, booking in advance [...] I definitely got a lot of extra bookings and that adds to my financial security.

Another business owner who designs jewelry said: "Here in the kibbutz, there is almost no one who buys, it's a poor population (she smiles), I can't depend on people from this area […] The best way to earn revenue is to reach those who have money to spend, and I chose to change direction, I market and sell in stores in the large cities".

An independent entrepreneur in the field of design said: "Working through the Internet, the use of online conversations definitely bridges the distance. I am in

continuous contact with clients, and this allows me to increase the number of clients, increase markets and expand."

Entrepreneurial women are characterized by active thinking; they often use new technologies, computers, and teleprocessing to maintain relationships with customers, and they work actively to bring more consumers and buyers to the businesses they manage. They are different from the generation of their mothers, the first generation of women entrepreneurs who waited for consumers to reach them. The women of the second generation are busy with business thinking, promoting, and increasing sales, establishing business relationships, and increasing the range of consumers. They seek to break into other spaces themselves, with the understanding that marketing activity will increase the circle of customers and profits. This is a way of thinking that is different from the traditional way of thinking; it focuses mainly on professionalism.

7.9 Discussion

For the past four decades, businesses have been developing in the rural space in Israel that are partially replacing the region's traditional occupation with agriculture. The onset of this trend in independent businesses originated in the economic crisis that upended rural communities during the 1980s (Schnell et al. 2015; Sofer and Saada 2017). Most of the women's businesses surveyed in 2011 were small businesses based on agriculture, tourism that sought the rural space close to its natural resources, and on traditional skills of women. The main trend was tourism, hospitality, and the processing of agricultural produce. This development of women entering business entrepreneurship coincided with the regional transition from a space based mainly on agriculture to a multidimensional employment space where the region's residents became professionals in areas beyond agriculture.

The businesses during the first generation of female entrepreneurship were characterized by a local identity. They combined traditional occupations such as tourism and rural hospitality, and the development of branches that relied fully on tourism such as restaurants and tours, or partially, such as goods made from agricultural produce, specialization in consumer products based on agricultural produce, agricultural tourism, etc. The research shows that the development of small businesses in the field of services tangential to agricultural activity, enables women to contribute to the income of the family farm and allows for better utilization of the agricultural produce, adding additional avenues of income and possibilities for employment and even prestige from the business success of women in these communities. However, it is worth noting, however, that these types of businesses operating in the rural periphery retain their character based on the role of the traditional village and the traditional roles of women in the village (Sofer and Applebaum 2008).

Another significant characteristic concerning the locality of the business in the rural space is that many are in or near the home. This has serious economic significance as it enables savings in fixed expenses such as rent, allowing the entrepreneur

to reduce costs and invest more in promoting the future development of the business. Another significant advantage of locating the business at home or near is the involvement of family members in the operation of the business during periods when help is needed (Schnell et al. 2015).

The study's findings on the second generation of female entrepreneurship show the development of a greater variety of businesses run by women, most likely attributed to the different characteristics of the women themselves. Their mothers may have acted as entrepreneurs out of necessity. Their daughters start their own businesses out of choice. They choose to return to live in the rural settlement, choose to practice the profession they have acquired, and choose to run a business that will allow them to focus on the field in which they have expertise. The types of business have also changed with the second generation of female entrepreneurs, many are in the fields of planning, management and economics, and specializations previously considered "urban". Even though the business is in a rural settlement, its customers are spread over the entire country and many of them are in the urban center.

The current generation of entrepreneurs has also adopted urban techniques for running and promoting their businesses. Many works with social networks, initiating contact with customers, marketing themselves through websites, marketing companies, and more. Hence, the business they have established is not a rural business, but a business located in the rural space. These innovations reflect their perception of themselves as business managers and their business as a means of economic development and as a resource to be developed and promoted. This change in thinking and active use of networks for marketing and sales reinforces the fact that women in the rural space are no longer maintaining businesses that are secondary to the main occupation of agriculture nor are they necessarily providing an income that is secondary to the family's main breadwinner; they are legitimate, savvy entrepreneurs who have overcome the obstacle of distance from the urban centers and learned how to successfully navigate and reach their target audiences (Taylor 2010; Tregear and Cooper 2016).

Of course, a significant reason for the difference between this generation's female entrepreneurs and the previous generation's is the level of education of women today. Many have higher education and professional training. These women represent the second generation, young women who chose to come and live in the countryside but wish to engage in the fields they studied, compared to the women of the previous generation who established businesses as a solution to economic distress experienced following the crisis in the agricultural sector (Markantoni et al. 2014; Greenberg et al. 2018). Establishing their own businesses is a response to a combination of realities: the lack of employment opportunities, the distance from their homes to the workplace, and the "glass ceiling"—social barriers that make it difficult for women to advance in the workplace—which is probably even more pronounced in the periphery, where fewer employment opportunities for everyone compared to the urban centers (Garcia-Tabuenca et al. 2015). Exercising their expertise and training in business entrepreneurship allows them to continue to develop and perhaps even achieve greater revenue and profits. The location of the business at home or near it gives women the flexibility to advance their careers but choose their schedules

so that they may respond to the needs of their families. The activity of women in online networks also indicates innovation that characterizes women of the second generation. The essence is a transition from the passivity that characterized the local activity of the first-generation women to activeness and entrepreneurial thinking, which includes marketing and sales in new and distant spaces. The development of such businesses and their economic success may contribute to the move from the city to rural settlements of those who wish to lead a rural lifestyle and at the same time continue to engage in the fields in which they specialized.

This is how female entrepreneurship contributes to the success and renewal and the future growth potential of the rural space distant from large cities. The contribution of women's businesses to the rural area creates employment opportunities for educated women who wish to exercise their professional abilities. These businesses also bring personal and professional services closer to the residents of the region, improving the quality of life in these areas by eliminating the need for local residents to travel long distances in order to obtain them. They also strengthen support for other businesses in the area by drawing in people who live elsewhere and exposing them to the diverse products and services that the rural space has to offer.

7.10 Summary

Early in this chapter, we explained the challenges and difficulties faced by families in Israel's rural periphery when an economic crisis in the 1980s created massive obstacles to the continuation of farming and agriculture. The research findings showed that one way out of this crisis was the establishment of small businesses by women. The current study also showed vast changes between two time periods that represented two different generations of female entrepreneurship, differences that included the reasons that small businesses owned and run by females emerged, the types of businesses established, the characteristics of the entrepreneurs themselves such as level of education, and the methods they use to advance and grow their businesses, making their mark nationally and even internationally through social and business networking. This type of professionalism in the rural area has also altered the face of Israel's periphery, attracting young families to the rural space to enjoy a quality of life they may not find in urban centers.

The processes of change in the rural area are ongoing, with the rural area changing according to the current economic and social reality. Our findings may also indicate a subtle movement from a traditional and conservative space to a more open space that allows women to engage in their chosen professions that allow them to develop and advance from within the traditional rural space.

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Chapter 8
Scalable Mentoring Programs—The Key to Entrepreneurship Development

A Little Bit of Structure Goes a Long Way

Gayatri Sriram and Aparna Devagiri

Abstract Any country intending to grow economically cannot afford to rest its strategies for growth on Government employment and large private sector organizations. The role of entrepreneurs is critical in ensuring large-scale employment and equitable economic activity. In India, the potential of women entrepreneurs participating in this growth has not yet been realized. A key factor in ensuring the success of entrepreneurs is mentoring. Thus far, mentoring seems to have been more of an organic activity, where an entrepreneur meets someone more experienced and asks them to be their mentor. Often this form of guidance continues over the years. While it adds value, it does not support scaling of mentoring programs, access to mentors or provide a reasonable guarantee of successful outcomes. This paper looks at the core elements of making mentoring scalable, accessible, and result oriented, based on a nine-month virtual mentoring project conducted for 92 women entrepreneurs in 2020.

Keywords Women entrepreneurs · Mentor profile · Virtual mentoring model · Scalable mentoring · Result-oriented mentoring · Accessible mentoring · Structured mentoring · Mentoring research

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8.1   Introduction

Entrepreneurship is a much needed yet under-researched domain in India. Eco-systems active in this space are highly focused on providing urgent and exigent support to entrepreneurs (Korreck 2019). Businesses supported by such ecosystems tend to be medium and large-scale enterprises. In order for entrepreneurship to grow as a key economic driver, institutions need to include small and marginal entrepreneurs as well. The percentage of women engaged in small and marginal businesses is higher than ever before, however, sustaining growth in this sector continues to be a challenge (Mathew 2019).

Women entrepreneurs and their increasing presence in India have significantly influenced the social and economic demographics of the country. In India, 20.37% of women are MSME owners which accounts for 23.3% of the labor force. They are the backbone of the economy. Women-led businesses provide a great impetus to the economy. India has 432 million working-age women and 13.5–15.7 million women-owned businesses that provide direct employment to 22–27 million people. In addition, a number of businesses are being controlled by women. Indian women are independent and have a strong motivation to start their own businesses. According to Boston Consulting Group, start-ups founded or co-founded by women generate 10% more cumulative revenue over a five-year period. These start-ups have a more inclusive work culture and employ 3x more women than men. Moreover, women-led businesses are estimated to grow 90% in the next five years.

As recently as 2018, India witnessed a historic low in the participation of women in the labor force—23.5% of the total labor force. Furthermore, women continue to face issues such as an increase in their domestic duties (exacerbated further by the pandemic), shrinking or a complete loss of their livelihoods, limited mobility, and economic opportunities, as well as constant surveillance by their families and community members. Due to the complexities entrenched in the socio-economic composition of Indian societal structures, multi-stakeholder interventions working in the space of women entrepreneurship must focus on deconstructing gender stereotypes; motivating and galvanizing women through skill training; enabling access to financial aid; and focus on awareness generation on available resources such as welfare schemes, processes, and entitlements (Shah 2021).

There is an understanding among policymakers and the government that women entrepreneurs need to be supported. However, it has largely been financial aid, such as loans, and at times access to capital. Incubators are, perhaps, the first and most visible institutional support available to entrepreneurs. India has the 3rd highest number of incubators with over 250 incubators being present in India. Incubators and accelerators play an important role in the growth of start-ups. Incubators are responsible for mentoring the start-ups, providing ideation and technical support, providing access to resources which would have been too expensive if purchased individually, providing access to networking events and support for fundraising (Swiss Business Hub India 2019).

Some incubators do offer business classes, networking opportunities, access to markets, and mentoring. They often report a low response to such offerings, reasons often cited are that entrepreneurs are busing running the business. Much is yet to be learned about how effective these support activities are. Evidence is often anecdotal, and where there are reviewable records, it is most commonly relating to larger and funded enterprises. Measuring the impact and effectiveness of incubators is an area that remains neglected. The aphorism "what gets measured gets improved" (credited to Peter Drucker) also stands true for incubators. While the incubation policy of AIM mentions performance measures, we do not know the outcomes of it being implemented (Sharma and Vohra 2020).

Larger and funded organizations by their nature find investors and support systems, through which they find mentors. Smaller businesses and businesses that are located in smaller towns rarely are able to find mentors. Kabbage, Inc., a global financial services, technology, and data platform serving small businesses, surveyed more than 200 small businesses throughout the US to understand the importance of mentorship to small business owners. The findings show.

Only 22% of small businesses had mentors when they started their businesses. Another 17% indicated they have an advisor, which suggests a paid relationship for consulting and advice. This leaves a wide percentage of business owners, 63%, not pursuing professional guidance at the onset of their business. 92% of small businesses agree mentors have a direct impact on growth and the survival of their business (Sharma and Vohra 2020) Incubators seem to have volunteer mentors empanelled, however, we have not found large-scale mentoring programs offered by entrepreneur development organizations. A study of Incubation in India surveyed entrepreneurs to understand what they believe an incubator "has" in terms of support and still "needs". Within "Has", the most prominent services and support include brand building/reputation, financial resources, business resources, confidence building, networks, and personal mentoring and coaching. Participating entrepreneurs often identified the incubator managers as "friends who help". Entrepreneurs also highlighted how incubator managers infused optimism, hope, and confidence, which helped them persist on their path. Continued association with the respective manager even after s/he had moved out of the incubator highlighted the value of the personal connect of the incubator managers with entrepreneurs. The three key services that start-ups "Need" from incubators are (a) connect with specialized mentors, subject matter experts, customers, and vendors, (b) help in building their own brands, and (c) processes to remain engaged (especially critical for virtually incubated start-ups) (Sharma and Vohra 2020).

8.2 Mentoring

Over the years, there have been several definitions of the word mentoring, and several interpretations of the process and its applicability.

The term "mentor" originally appeared in Homer's Odyssey. Odysseus asked his friend named Mentor to guide his son Telemachus, while he was away at war. Much later, Francois Fenelon's book Adventures de Telemaque (1699) based on Homer's Odyssey, was translated into English and became politically influential in the eighteenth century. Mentor and Telemachus's roles could be seen reflected in the roles of magistrates and the princes in their charge—thus popularizing the term "mentor". It is interesting to note that as per Homer's Odyssey, Mentor failed in his task, and the Goddess Athena took on his persona and displayed what we now understand as good mentoring, i.e., tutoring, role modeling, advising, and inspiring (Dominguez 2013).

An adapted definition of mentoring states that "Mentoring takes place between young persons (i.e., mentees) and older or more experienced persons (i.e., mentors) who are acting in a non-professional helping capacity to provide support that benefits one or more areas of the mentee's development" (DuBois and Karcher 2013). Over time, the focus on age has been replaced almost completely by a focus on experience, especially in technology-related industries. Changing demographics in the workplace, and smaller age bands in start-ups have also contributed to this.

Mentoring has gained popularity over the years. It is said that about 70% of Fortune 500 companies and 100% of Fortune 50 companies have a mentoring program (Cantalupo 2022).

What is the purpose of mentoring entrepreneurs?

There is general agreement that entrepreneurs benefit from mentoring. Having a mentor can change the playing field for a small business. Research has shown us that those small businesses which receive mentoring early in the development business achieve higher revenues and increased business growth. A survey by the UPS Store found that 70% of small businesses that received mentoring survived more than five years—double the survival rate of non-mentored businesses. The same survey found that 88% of business owners with a mentor said that having one was invaluable.

In their 2009 paper, St-Jean and Audet state as follows. We have observed that mentoring offers an opportunity for novice entrepreneurs to mainly develop cognitive and affective learning. In a context where he may experience some difficulty in obtaining proper training, particularly due to a lack of time and resources, which are often a by-product of starting up a business, this type of support may help him meet some of his needs. Mentoring is particularly helpful in allowing a transfer of knowledge about the business world and developing a competence set that will be useful to the entrepreneur, within the limits of what the mentor can offer (E. St-Jean and Audet 2009).

Researchers observed that some entrepreneurs had developed an improved vision for their business and others had identified new business opportunities to pursue. Mentoring can also help improve various affective learning aspects including self-image, self-efficacy, and resilience in the face of difficulties (McShane 2019).

Mentoring Women Entrepreneurs

Women entrepreneurs as a group have fewer role models. As a result, fewer likely opt for entrepreneurship as a life or career choice. This also means that women time and again have to forge fresh paths at various stages of entrepreneurship. Women are also likely to be less educated and have less exposure to the world of business and therefore women-owned businesses are more likely to fail. A report by the World Bank Group suggests that …there is evidence of a gender-based performance gap between female and male entrepreneurs. Women tend to enter into entrepreneurship activities at a lower economic level than men, with female entrepreneurs operating informally and concentrated in low-productivity sectors with limited potential for growth. Second, while all entrepreneurs in developing countries experience significant obstacles in their business activities, evidence suggests that the extent of the barriers faced by women entrepreneurs is often significantly larger than those experienced by their male peers (World Bank Group, n.d.)

Systemic biases such as women being perceived as weaker, not risk-taking, and not understanding nuances of dealing with male-dominant markets all contribute to women not being taken seriously as entrepreneurs.

Mentoring for non-technology businesses

A lot has changed in recent years, especially for women starting tech-based businesses. A quick search on Google throws up a number of institutions running incubators and other support systems for women in technology-related businesses. However, for women running non-tech businesses, much has not changed.

Non-tech start-ups in general have fewer role models in India, and women in these areas are even more so. They face even more hurdles because of this. At times, they seem to be invisible to entrepreneurship development organizations. A quick Google search of non-tech start-up incubators shows barely any results for exclusively non-tech incubators. This is more so when it is a business that is seen as women's work like food or childcare. This is where mentoring comes in. Where role models are not seen, mentors can be a sounding board for ideation and problem-solving. Where women entrepreneurs face systemic biases, mentors can support them to prepare well mentally and mitigate the effects of some of those biases.

Where systems are serious about supporting entrepreneurs from diverse businesses, especially women entrepreneurs, mentoring needs to be a key anchor to incubate, grow and accelerate start-ups. Studies also show that mentors predict a greater chance of success even for entrepreneurs who already have considerable experience of their own. Successful start-ups are more likely to be led by entrepreneurs that have been taken under the wing by a more experienced mentor (Vaismann 2021).

Mentoring and the challenge of scaling

The traditional format of mentoring does not render itself to scale. Conventionally, mentors are expected to be experienced business owners in the same or very closely allied businesses as mentees. Newer businesses, some of whom may not even have

been conceptualized a decade ago, would naturally not have the required seniority or a large enough pool of successful business owners who want to be mentors.

The conventional format of meeting one to one assumes that mentors and mentees are based out of the same towns or cities. This works for established and mature industry centers and not necessarily for sunrise industries and upcoming geographies.

When it comes to women entrepreneurs, we add the layer of socio-economic pressures such as biases held by mentors signing up from groups that are predominantly male and the diffidence on the part of women entrepreneurs from socio-economic backgrounds that frown upon one-to-one meetings with men.

Support institutions offering mentoring also in general subscribe to the conventional format of mentoring. They take on the difficult task of fostering entrepreneurship in their context, however, they often are reluctant to experiment with alternative models. This means that we need to find ways to increase the size of the mentor pool and design ways in which many kinds of business owners from various geographies are able to reach out and work with mentors.

Virtual mentoring and its importance for scale

We have consistently alluded to the socio-economic and psycho-social dynamics apparent among women entrepreneurs. We also believe that similar issues are faced by entrepreneurs from smaller cities, minority communities, and disadvantaged people across the spectrum.

From our own experience and that of women entrepreneurs we mentored in the past, we knew that face-to-face meetings are a high investment for many in this group. While acknowledging that face-to-face mentoring meetings are appropriate at some point in the growth of an organization, we decided to exclusively offer virtual mentoring for our project. The widespread use of technology-based communication tools made our choice practicable.

The advantages we saw were:

1. A pool of mentors is not limited by geography.
2. The logistical challenges of meeting face-to-face, especially in large cities can be avoided. This is especially true for women entrepreneurs who often report facing time pressure in their businesses.
3. Allows for a wider range of time schedules. Before working from home became a norm, a lot of women chose entrepreneurship for the flexibility it offers to manage their home and work. Virtual mentoring offered women the opportunity to schedule mentoring meetings from home at a time when it worked best for them outside of business hours.
4. This format allowed the meeting content to be as short or long as needed without the pressure of time and effort investment. Mentees need not feel that since the mentor has traveled "x" distance or spent "y" time, they need to make the meetings immediately valuable.

Of course, while these were the thoughts contributing to including virtual mentoring in the design, by the time the program was rolled out, the pandemic

hit and the whole world quickly adapted to a virtual mode of working. If there were skeptics or people with different preferences, the situation made it a necessity.

8.3   Our Research

In the year 2019–20, we conducted a virtual mentoring project with 36 mentors and 92 mentees. Each entrepreneur mentee was randomly assigned one mentor for a fixed period. By the end of the period, mentees were expected to have completed a business plan with financial details and set out business goals for the coming year.

We entered this study with two hypotheses:

– virtual mentoring works effectively for non-technical, women-owned businesses.
– The personality and experience of the mentor have a limited impact on their capability to be effective mentors.

Therefore, the research questions we asked were:

What could be the impact of virtual mentoring on women entrepreneurs working in non-technology domains?

Conventionally, the entrepreneur seeks mentors at different points during the growth of the business. We were looking at offering mentoring to smaller businesses that were most likely to be in the early stages of growth.

Are there aspects of a mentor's personality and profile that make them more successful than other mentors?

History seems to indicate that entrepreneurs are seen as more suitable mentors for other entrepreneurs. We looked at this as well as another aspect of the mentor profile, the personality traits.

In our own context, given the potential and the diversity of entrepreneur groups, the support structure that would work well and sustain over the long term needed to be scalable and somewhat customizable. We interpreted this as identifying a distinct form of mentoring that would allow for the ecosystem to build quickly and for the women entrepreneurs to access easily. We chose to study the impact of virtual mentoring on women entrepreneurs, based on our conviction that mentoring, and virtual at that, works well and has till now been seen as something the entrepreneur may choose to engage with, rather than a systemic offering.

Entrepreneurs need mentoring, that has been established. When it comes to women entrepreneurs, the need is greater. The lack of role models, along with systemic issues such as gender bias and social pressure makes the need for mentors critical to women entrepreneurs.

The conventional method of finding a successful businessperson as a mentor is very difficult for women entrepreneurs, especially for small, non-technical businesses.

The genesis of this project was combining the need for scaling up entrepreneurship and validating our conviction that mentoring was one of the pivotal interventions for the entrepreneur to grow and scale. Kochan (2002) identified three primary elements in developing and managing successful mentoring programs: (i) taking a systemic view; (ii) attending to organizational structures; and (iii) developing support systems. Strategies for taking a systemic view include being attentive to the context by examining and dealing with elements that might hinder and facilitate program success, connecting mentoring program goals to organizational goals, and addressing the individual needs of the mentoring pair of dyads. The element of attending to organizational structures emphasizes the need to include and involve others in continuous planning and assessment, preparing mentors and mentees for their roles and responsibilities, and providing appropriate financial and human resources. The last element in fostering program success, providing support systems, involves assuring that there is appropriate program coordination, guiding the pairing and functioning of mentoring relationships, and providing incentives and recognition for participation (Clutterbuck et al. 2017).

Keeping our own observations of women entrepreneurs and their need for mentoring, and guidance from other research, we arrived at the following pillars of our Process:

– There will be a defined outcome to mentoring.
– Mentoring will be virtual.
– Mentors do not have to be entrepreneurs.

With this in mind, we looked at the objectives from a research perspective. What helps an entrepreneur work with support offered by an ecosystem? One key point was for the entrepreneur to take charge and decide their path ahead and define the way they would like to take it forward. Given this, we defined the guiding principles for mentoring as:

• Mentor and mentee determine their own path.
• Goals will depend upon where the entrepreneur wants to go in her business.
• Pace will be determined by the entrepreneur.

8.4 Why Virtual Mentoring?

Even before the pandemic took hold, we were proposing virtual mentoring as a solution. Especially since mentees would be (when this scales) from B and C-tier cities, it was important to come up with a methodology that doesn't depend on face-to-face interactions.

Given the socio-economic barriers in this group, it is much more difficult for women to network and connect with potential mentors. We also needed to account for the cultural norms that could impact building business or mentoring relationships with men outside the family.

Virtual mentoring also makes more number and diversity of mentors available, not limiting to geography or network reach; and keeps the woman "safe" in terms of overstepping many socio-cultural norms.

Most importantly, it is logistically easier to set up a phone call or e-meeting, making it more likely that women would make use of the mentoring opportunity (Singh and Kumar 2019).

8.5 Profile of Women Entrepreneurs Mentored

Our partners GAME (Global Alliance for Mass Entrepreneurship) through their networks mobilised women entrepreneurs to be mentored.

- There were a total of 92 mentees onboarded into the program.
- Mentees came from industries such as Food and Beverage, Clothing and Accessories and Lifestyle, Wellness, Education, and allied areas. A few other businesses such as Branding and Web design were represented by one or two entrepreneurs.
- Entrepreneurs were located mostly in Bangalore and some were from Western India.
- Mentees' annual revenue while starting the project was:

  Minimum—0.
  Maximum—42 Lakhs.
  Median—2.4 Lakhs.

8.6 Part A

This section looks at our first research question—What could be the impact of virtual mentoring on women entrepreneurs working in non-technology domains?

Our project showed significant benefits from virtual mentoring for the participants. When the 92 participants signed up, only 4 of them had some form of a rudimentary business plan. Even these were essentially presentations about the business, without any financial projections included. By the end of their mentoring, 42 women entrepreneurs had completed their business plans.

We credit this shift to six key elements of our project which are detailed below.

8.6.1 Elements of a Scalable Mentoring Program

We found the following project elements to be critical to scaling a mentoring program for entrepreneurs:

- Who can be a mentor?

- Outreach Strategy.
- Structure—(Onboarding and Induction).
- Mentoring Interactions.
- Communication and monitoring mechanisms.
- Closure of engagement.

Each element will be considered from the perspective of the mentor and mentee.

Who can be a mentor?

One of the two focus areas of this project was the impact of the profile of mentors on the success of mentoring. Keeping this in mind, we ensured that our outreach and onboarding were agnostic in terms of:

1. The professional background of the mentor.
2. Experience with mentoring.
3. Gender.

However, we believed that professional work experience was essential to be able to grasp business issues and respond to them during mentoring sessions and also build trust with mentees.

We ultimately onboarded a total of 36 mentors. Their profiles were as follows:

Professional Background:

Professional coaches, senior business executives (with some P & L responsibilities covering HR, IT/ITeS, Biotech, Manufacturing, and Education), and entrepreneurs made up the mentors group (as in Fig. 8.1 below).

Gender:

63% of mentors were women and 34% were men.

Experience with mentoring:

Professional Background	% Of Mentors Onboarded
Professional coaches	22%
Senior Business Executives	26%
Entrepreneurs	26%
Consultants	27%

Fig. 8.1 Professional background of mentors onboarded

The majority of mentors had some exposure to mentoring throughout their careers. 78% had declared that they had been a mentor (including informally, for students, etc.) at some time. 83% had declared that they had a mentor themselves at some point in the past.

Scaling a mentoring program means having a large number of mentors empanelled. Broadening the criteria for selecting mentors is a logical and practical means to enhancing the availability of mentors.

8.6.2 Outreach Strategy

Mentor Outreach

To sign on mentors, initially, the outreach was through personal networks primarily using social media apps like WhatsApp and LinkedIn.

A few weeks into the initiative, three campaigns were rolled out on Linked In, Facebook, and WhatsApp simultaneously calling for volunteer mentors. To start with, static posters were used which resulted in one or two responses. Post that a micro video of about a minute was created and posted on the platforms listed above. This resulted in many responses, especially on LinkedIn.

Outreach was conducted in phases based on the onboarding of mentees. Initially, we found an overrepresentation of professional coaches. Later, we found much fewer professional coaches and more volunteers from corporate and not-for-profit organizations. LinkedIn and social media brought us a much more diverse profile of mentors than our personal networks did.

For scale, outreach strategy is critical. Only a series of differentiated and innovative outreach strategies can ensure a wide pool of mentors. There can be a natural tendency to reach out to the immediate circle while identifying mentors. However, to ensure a diverse set of mentors, especially for a large-scale mentoring initiative, the following aspects contribute to reaching a wider group of professionals ensuring success:

1. Approach through diverse channels—reach out to mentors using formal and informal networks and channels to ensure you can cast a wider net.
2. Use multiple media—people respond to messaging differently. Text, audio, video, each one has preferences. The same message using multiple media is likely to be more impactful.
3. Keep messaging consistent—Even though different modes of communication may be used, ensure the core message remains the same.
4. Clarify expectations—Say what the task is about, and clarify tasks and timelines.
5. Outline support offered—Even the most experienced mentors would require orientation and ongoing support. It is advisable not to assume that something would be known.

8.6.3 Structure

What we mean by structure

Structure implies something that has boundaries. With reference to the project, the structure is bounded by the goal of the project (including timelines), and a defined process to get to the goal. In view of this, we began the way we intended to go—maintaining a level of formality and objectivity in the engagement. For example: having an application process for mentors and mentees using online forms followed by a conversation. Not all applications for mentors and mentees were accepted.

Why we saw the need for structure

One of the reasons conventional mentoring is a challenge is that it is seen as a fluid, organic process, largely dependent on the chemistry between the mentee and mentor at a given point in time. The expectation is that it is an ongoing relationship, which can end without any tangible outcome.

Additionally, there is confusion in the entrepreneurs' minds about what mentoring truly means. "Specialized mentors" and "subject matter experts" would actually classify as consultants who come into the business to support in resolving a specific issue or providing advice for a fee. For any form of mentoring to be successful, perhaps clarifying what mentoring means needs greater focus.

We wanted to consider how providing a structured approach would impact the possibility of clear outcomes for the mentor and mentee. Organizations supporting entrepreneurship may have reservations about investing in mentoring at scale as the outcomes may not be known in advance. By introducing structure with goals, we provided one way to measure the effectiveness of mentoring.

Another critical reason could be that women entrepreneurs are often reluctant to engage in mentoring for a variety of psycho-social reasons. By providing structure with pre-set expectations, we endeavored to make the process attractive enough for people to try it out.

Support systems

Since the program had well-defined, specific outcomes and timelines, we realized that there is not much elbow room in terms of mentor and mentee easing into the relationship. We also wanted the mentors to align with our conceptualization of mentoring as laid out previously in this chapter. We understood that even those mentors who had significant experience as mentors would need input to understand and align with our requirements.

We introduced the mentors to the expectations from them in the onboarding session, which was followed by ongoing training relating to the templates and outcomes expected. We also conducted training on the mentoring style they need to adopt, which we felt was an important element in achieving learning for the mentee and meeting mentoring goals. For a "novice entrepreneur", as St Jean calls them, learning is of primary importance. St Jean also states that in order to maximize

learning outcomes for the entrepreneur, training mentors is important, especially in how they can build effective relationships with their mentee, so that positive outcomes can be generated (St-Jean et al. 2016) Apart from this, as administrators of the project, we were available for the mentors during open houses and on WhatsApp.

More than 42% of mentors pointed to the onboarding sessions, training, and open houses as key enablers for them during the project.

Structures were laid out for the following:

Mentoring process When the mentors were first onboarded, they were taken through an orientation program that gave an overview of the outcomes expected and the process they were to follow. The training was then provided to familiarize ourselves with our conceptualization of mentoring, which was as per the guidelines included in the table below.

	Mentoring guidelines
1	Fixed duration
2	Standardized outcomes
3	Nondirective mentoring style
4	Use of standard templates for working toward outcomes

The above guidelines became the boundary within which mentors were expected to work. Training was provided at the beginning and during the project to familiarize and reinforce these expectations. One area we were particularly focusing on was ensuring the psychological safety of the mentees.

8.6.4   Outcomes

This project was meant to achieve two outcomes for mentees:

- Business Plan—the creation of a business plan with a focus on financials
- Business goals for the upcoming year—to achieve the short-term objectives that needed to be met in order to meet the goals in the business plan

Why these and not something like revenue or profit?

When we started the research project, as referenced earlier, we saw the need to have pre-set outcomes for mentoring. The typical business outcomes would have been revenue or profit. However, we had seen from earlier experience and from stakeholder input that one of the key reasons that women-owned businesses find it difficult to grow is not being able to access required funding: debt or equity. For small non-technical businesses, it was even more of a challenge as equity was not on offer. The stakeholders such as bankers and government grantors have said that women-owned businesses do not come with required financial records. In our experience,

the first step to building records is to start with a financial plan. And we put that as the first expected outcome.

Revenue and profits were part of the plan, and the timeline needed was decided by the business owner.

The next outcome we designed for the project was drawing out the goals for the business not as a generic to-do list, but as a full-fledged goal sheet using the SMART format. We wanted the entrepreneur to list out the different goals and work through the process of accomplishing them with timelines and resources that they may need.

We considered these two outcomes to be fundamental to the growth of the business and also most often overlooked when building a business.

Secondly, with each business and its cycles being different, we felt that having outcomes that any business could work with will yield us the data for research.

As an input into scale, we believe that different outcomes may be set based on the needs of the cohort and entrepreneurship development organization. We do mphasizes that the outcomes are meaningful for the entrepreneur and measurable in part if not fully. We concede that mentoring may have fuzzier elements depending on the kind of business and the nature of the context it operates. Entrepreneurship development organizations may choose a mix that can capture concrete results as well as allow for customization of the process between mentor and mentee.

8.6.5   Mentoring Interactions

While we did not monitor the number of meetings or the detailed content of each meeting, we did provide the mentors with a direction for mentoring. One of the guidelines was to keep conversations non-directive. The idea was to get the mentees to figure out solutions for themselves that would work in their context, with the mentors acting as sounding boards and helping them to work out solution scenarios. The mentors were also asked to be aware that they could easily slip into a parent or expert mode as conversations progress. While parents and experts have roles to play in an entrepreneur's life, we designed the program this way so that mentees can get into the practice of solving their own challenges holistically. The closed-ended design with pre-set outcomes also contributed to giving a set flow to these interactions.

Conventional mentoring places the mentor in an expert/guru or benevolent elder position. We believe that the ensuing power dynamics especially with women entrepreneurs may negatively impact open discussions and sharing. Our mentor orientation and handbook emphasized the need for the non-directive process of mentoring with this in mind.

In this non-directive model, the mentor is not expected to know much about the business. This means that the model can be easily ported onto large-scale mentoring programs.

8.6.6 *Communication and Monitoring Mechanism*

Communication

A large-scale mentoring initiative is likely to be multi-locational, possibly virtual. Mentoring may not happen face-to-face, and the mentor and mentee may not physically meet at all. Communication and an effective means of monitoring the program are essential to ensure there is oversight and some level of control and direction for the administrators of the program.

In this program, we focused on communication with both mentors and mentees.

Communication with mentees

We communicated with the mentees largely using WhatsApp groups that were set up for the purpose, and emails when necessary. The WhatsApp groups were used for following up and general updates. GAME and their partners reached out to mentees on a need basis.

Communication with Mentors

In addition to a vibrant WhatsApp group and email communications, as needed, we regularly conducted Open Houses for mentors. These were generally well attended, with mentors joining in at their convenience to share experiences, issues, success stories, and even advice for us.

Apart from the mechanics of communication, we had, from the beginning, built rapport and created safe spaces for all participants to share their thoughts, feelings, and experiences. While it may feel daunting to reach out to participants and mentors regularly within a large-scale program, it is critical to set the standards early on. In a volunteer-based mentoring program such as ours, we were very aware of this, ensured that we offered different modes of getting in touch with us, and followed up and resolved every query within a reasonable time.

Monitoring Mechanisms

Monitoring a mentoring project provides critical information on the success of process design and outcomes and has been an important aspect in the design of mentoring projects. In 2016, the European Mentoring and Coaching Council developed and launched the International Standards for Mentoring and Coaching Programs (ISMCP); an independent accreditation awarded to organizations designing, delivering, and evaluating mentoring and/or coaching programs either "in-house" or externally. Within this framework, a core standard is the ongoing monitoring and evaluation of the program.

Despite the growing number of survey reports that highlight the importance of this aspect of mentoring program design and management, measurement and evaluation continue to be one of the most challenging areas for both individuals in program management positions and researchers (Haddock-millar et al. 2018).

Do not underestimate the program administration and program structure required to run a virtual program. Because of the nature of virtual relationships, we believe there is a need to track and stay in touch with mentoring pairs, to an even greater extent than when the program is run face-to-face (Clutterbuck et al. 2017).

For our program, the basis of monitoring was self-reporting by both mentors and mentees on the frequency and quality of interaction. Mentors were also reporting on progress toward the goal. Our design was intended to collect periodic process efficacy data from the volunteer mentors as well as the mentee entrepreneurs. In the beginning, the orientation process and subsequent onboarding laid out the requirements of monitoring and tracking for both groups. The activities we were tracking were primarily the meetings that the mentees had with mentors. We hoped to get inputs on the quality of interaction and track the progress that the entrepreneur was making through the process. Monitoring at this level afforded us a slice of the mentor's perspective, touching upon key elements of entrepreneurship, such as the business and management skills of the mentees.

We had early on rejected any correlation between the number of meetings and quality of mentoring, on the fact that the mentee would drive the process based on need. We found there is a tendency among entrepreneurship development organizations to mark the number of meetings between mentor and mentee. This is evidenced by the prominence given to this data point on the dashboards of different mentoring platforms. In our experience, we found that an arbitrary number or target for meetings was superfluous as the mentee-mentor interaction is not pre-defined. It is equally likely that the number of meetings that reach the looked-for outcome is 1 or many more. It is not possible to predicate this number and make it in any way mandatory. Our stance on this was vindicated by the outcome data of this project where the range of the number of meetings for successful mentoring was 1 at the lower end and 14 at the higher end.

By and large, mentors were forthcoming with inputs with respect to their mentee's progress. Mentors walked through a checklist of different aspects of entrepreneurship such as financial understanding, marketing skills, people management, etc. Some mentors also chose to step out of the boundaries of this process and used the opportunity to share specific feedback, their questions, and reservations about different aspects of this project.

8.6.7   Closure of Engagement

It was a deliberate part of our plan to have a close-ended mentoring initiative. One of the challenges of mentoring at scale was measuring the effectiveness of mentoring. Conventional mentoring, which is the more prevalent form, is expected to be organic and the decision to engage or not is left to the entrepreneur and their mentor. In the immediate term for us as a research project, this was not feasible and if any entrepreneurship development organization were to use this as a playbook, open-ended mentoring will not yield replicable results, cohort after cohort.

8.7 Part B

The second research question we asked was—Are there aspects of a mentor's personality and profile that make them more successful than other mentors?

The question of who makes for a successful mentor is often asked. The question of "Who?" includes a mentor's experiences and capabilities, i.e., what we can see. It also includes the mentor's internal personality. Something that we see symptoms of but is not entirely visible to us.

For the purpose of our study, we interpreted "successful" as having completed the key milestones for the project.

8.7.1 Impact of Mentor's Personality on Mentoring

In our study, we have noted that the personality traits of the mentor seem to have only a marginal impact on mentees' completion of milestones. The most widely accepted 5-factor model of personality as laid out by Goldberg, followed by McRae et al. was used as the framework for mapping mentor personality.

With Openness, Conscientiousness, Extroversion, Agreeableness, and Neuroticism as the factors reported, we were confident that a reliable personality trait map of successful mentors can be drawn out if such a definitive profile was indeed at work.

CB5 Personality Questionnaire Study

To be able to gain insight as to what makes a successful mentor, we attempted to track the minutiae of the mentor profile. The Chatur Big 5 Personality Questionnaire (CB5) was identified as the instrument that would help us identify any personality characteristics that correlate to mentoring success. CB5 is based on the Big5 Model of Personality, normed on an Indian representative population which was a critical aspect of this project. We wanted to ensure that all of the research is valid for our local context. Another reason for choosing CB5 was that it is available in local languages and in the future where needed organizations can apply it to contexts where English proficiency is not needed. We asked for volunteers among the mentors to take the test.

The CB5 reports on the CANOE framework: Conscientiousness, Agreeableness, Neuroticism, Openness, and Extraversion.

The test marked respondents on a continuum of low to high for each of the above factors. An example is given in Fig. 8.2 below:

Conscientiousness - How one works towards goals

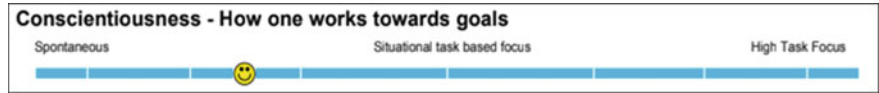| Spontaneous | Situational task based focus | High Task Focus |

Fig. 8.2 Extract from one Bg 5 report showing one of the factors as it applies to the test taker

For the purpose of this report, we converted these point markers on the continuum as scores. This enabled quantifying the results. We focused on Agreeableness and Conscientiousness as the key characteristics that affect mentoring; agreeableness for the relationship-building aspect and conscientiousness for the outcome achievement aspect of mentoring. A total of 21 mentors took the test (58%).

We compared the Business Plan submission numbers with scores for both factors (see figure below). There was a bare marginal effect of these factors on the achievement of mentoring milestones.

CB5 scores:

1 Conscientiousness					
Converted Score in from CB5 continuum (range)	Whether Business Plans Submitted by Entrepreneurs?				
	Yes	No	Total	%Yes	% No
2.5 to 4.5 A (More spontaneous)	16	23	39	41.03%	58.97%
5 to 8 B (More task focused)	9	9	18	50.00%	50.00%
2 Agreeableness					
Converted Score in from CB5 continuum (range)	Whether Business Plans Submitted by Entrepreneurs?				
	Yes	No	Total	%Yes	%No
2.5 to 4.5 C (More challenging)	7	9	16	43.75%	56.25%
5 to 8 D (More accommodating)	18	23	41	43.90%	56.10%

How to read this table.

Row A and B: A higher percentage of mentees completed business plans when they had mentors who were more task-focused.

Row C and D: There was no difference in the percentage of mentees completing business plans when comparing Agreeableness levels.
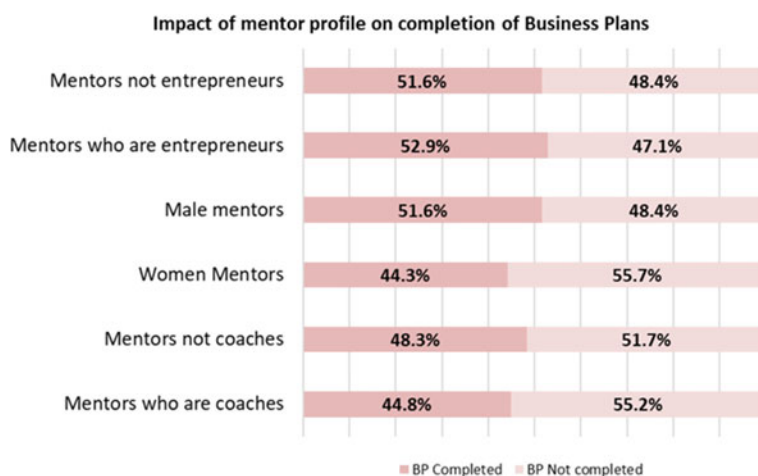
It is possible that a task-focused mentor can get slightly better results when the process and goals are well-defined.

Organizations seeking to set up a mentoring platform to scale, need to onboard mentors using an open platform. Personality traits are not a great enough factor to impact such programs. At the individual level, our process did not track personal experience of interaction, what is commonly known as chemistry.

Impact of professional background

The background/personality/experience of the mentor has no impact on the completion of project objectives.

Non-entrepreneurs were found to be as successful in guiding mentees to the outcomes as entrepreneurs (see figure below). If a set of professionals with even lateral exposure to business are given a specific mentoring goal, tools to get to that goal, and support on using those tools, then successful mentoring is possible. They need not have had exposure either to the industry in which the mentee entrepreneur is operating, nor do they need to be entrepreneurs themselves.

Impact of mentor profile on completion of Business Plans

	BP Completed	BP Not completed
Mentors not entrepreneurs	51.6%	48.4%
Mentors who are entrepreneurs	52.9%	47.1%
Male mentors	51.6%	48.4%
Women Mentors	44.3%	55.7%
Mentors not coaches	48.3%	51.7%
Mentors who are coaches	44.8%	55.2%

There is some research to show that a mentor's background does not have an impact on mentoring outcomes. Our results do not allow us to assert that a mentor who has had prior entrepreneurial experience will provide better mentoring support than those who have had a career in the civil service or large organizations. Contrary to our initial expectations, it seems that the mentor's career does not impact the mentoring relationship. This result is important for entrepreneurship research. A mentor with experience as an entrepreneur is not giving better mentoring than unexperienced ones. Based on our results, it is not obvious that unexperienced entrepreneur could develop his/her cognitive schemas when being mentored by an experienced entrepreneur, not as he/she will have better information to identify opportunities, better networking, or more insightful learning. It seems that mentors with experience in the business

world, but not necessarily as being themselves entrepreneurs, would be enough to develop mentoring outcomes for the novices (St-Jean et al. 2016).

In terms of building scale, this means that program administrators can spread a wider net to connect with mentors. Partnering with different business and industry councils, and inducting cross-industry professional bodies as mentors become a clear possibility.

Impact of Gender

The above figure also shows that there was only an insignificant impact of the mentor's gender on the mentoring outcomes. Women entrepreneurs did not seem to respond any differently or express the need for a woman mentor as they worked toward the outcomes. Here we must caution that we cannot draw parallels to the impact of women role models for women entrepreneurs. We can only conclude that for a mentoring program with specific outcomes and timelines, the gender of the mentor does not have a significant impact.

For us personally, this was a surprising part of our findings, as our hypothesis was based on our lived experience.

8.8   Challenges

Digital Divide

In today's world, especially in the Indian context, anything that needs to scale needs to be designed with a technology-based framework. Mentoring programs are no different. An article on mentorcliq.com speaks of the difficulty of managing a mentoring program without technology support. Traditional mentoring programs typically involve one person (an administrator) tasked with gathering data about prospective mentees and mentors, analyzing the data, and matching the mentor with the mentee. The process usually involves people filling out an application, securing a recommendation from a manager or supervisor, or some other form of nomination activity that gets submitted to the program administrator. The administrator must transfer the data gathered from each application and insert it into a spreadsheet. Finally, he or she goes through the process of accepting participants, analyzing development goals, and matching or pairing the "right" mentor with the "right" mentee. Essentially, one person is responsible for the bulk of the process, which when combined with his/her other primary job responsibilities, can be understandably overwhelming (Browning 2021).

In the earlier paragraphs, we have highlighted the need and effectiveness of technology solutions that aided communication and monitoring. There can be no doubt that without such facilities our project would not have been possible. That said, there are still a couple of last-mile issues that need to be addressed.

1. We assumed that a lot of our participating entrepreneurs would use smartphones and laptops. We found that it was not 100%. We did have a few who did not use smartphones and a few more who did not use laptops or have exclusive access to one. With scale, the number of entrepreneurs who do not use technology for much of their business is likely to be greater. With women entrepreneurs who start microenterprises, exclusive access to laptops in the early days may be difficult. Paradoxically this period is when businesses need a lot of support and mentoring

2. Availability and accessibility of consistent and robust networks, cellular or internet is not guaranteed even in metro cities in our country. It is compounded by power supply issues occurring at times in different parts.

   When planning to scale, while achievable numbers are staggering, a thread of inequity creeps in where viable businesses by virtue of their location lose out on mentoring or other support because of a lack of robust internet connectivity. It is necessary that we look beyond the numbers to ensure that at scale, we are inclusive of those who are yet to be part of the digital nation.

Language inclusiveness

When we designed the program, our focus was the city of Bangalore and surrounding areas as our geography boundaries. However, the participating entrepreneurs came from different educational backgrounds, and our partners brought in participants from outside of the cities as well. Whereas most of our mentors and mentees were comfortable with English, we did encounter a couple of instances where we needed to accommodate language preferences other than English. We envisage that scaling mentoring would mean that language preferences and abilities need to be accommodated. This is not just a utilitarian issue, but a human perspective.

Technology today has the means to offer quick translations of written documents. However verbal interactions, especially nuanced ones such as mentoring conversations are not yet fully supported by technology.

Here is where some pre-planning helps. While onboarding mentors, we gathered data on their language abilities as well. This helped us respond to requests for specific language preferences. At scale, preferences may be easier to accommodate. Technology can help in making such accommodations easier.

8.9   Learnings

Our conclusions from this project with reference to scaling up a mentoring program are as follows:

- Mentor outreach is essential, and it is not difficult.

  - A key aspect of setting up a mentoring initiative is finding mentors. When we first reached out to mentors, we were unsure of the response. We began by looking at our immediate network, but then quickly broadened the scope of our outreach.

○ We found that there are a host of professionals who are successful in their fields and willing to invest time in mentoring. Perhaps even volunteer without expectation of remuneration. It is a question of reaching out to them and reeling them in.

○ Being active on social media and having a strong network would be the first step to creating a robust outreach strategy. Consistent messaging, the use of multiple media platforms, and leveraging all available social networks can bring good results in terms of signing on mentors.

- Some form of technology as a foundation for monitoring and tracking is essential to scale.

○ For multiple reasons, our mentoring program had to be run without a technology platform supporting it. This meant that we had to rely on having staff available to do what a robust platform can do—follow up, gather information, collate, and present basic data. Even with our 92 mentees and 36 mentors, we found this to be a tedious and sometimes frustrating, and time-consuming process.

○ If a mentoring program intends to scale, it is essential that those running it invest in some form of technology that would support the process. Ideally, there should be minimal manual interventions for mentor–mentee matching, monitoring meetings, tracking movement toward the goal, etc. To some extent, even training and support could be built into these platforms. This would free up the administrators to focus on the quality of mentoring and ensure the mentors and mentees are given the support they need.

- Have clear expectations in terms of project outcomes and timelines and design processes accordingly.

○ Mentoring is typically seen as a long-term, on-demand relationship where the mentor shares their experience and advice. This view of mentoring works when it is an informal relationship, and the numbers are small. The need for mentoring women entrepreneurs in India is significant, and to meet that demand, we need to relook at how we define mentoring in this context. And for a business mentoring program to be effective, it needs to be approached like a business.

○ Any mentoring program that intends to scale, therefore, needs to operate with a clear set of results in mind. Defining outcomes and setting timelines helps clarify expectations for everyone and helps channelize efforts to a particular goal.

○ Once the mentoring goals are fixed, both the mentee and mentor are clear on why they are participating. For administrators, there is clarity in terms of what needs to be monitored, and measuring progress becomes easier.

○ Such mentoring initiatives are often not funded. Clear outcomes and the ability to provide some data in terms of return on investment would perhaps go a long way in terms of funding such programs.

- A wholly volunteer-based mentoring program can work for a limited time and coverage.
    - ○ Another challenge in scaling a mentoring initiative is whether mentors would be volunteers or paid for their time. In our project, we assumed that mentors would be volunteers, and therefore, went ahead on that basis. While conventional mentoring expects all mentors to be volunteers, there are arguments for paid mentoring that appear valid. Volunteer mentors do give their time and effort to give back to the community by supporting entrepreneurs. However, this may mean that volunteers cannot take on many entrepreneurs at one time, often capped at 3 or 4 mentees at a time per mentor. In our project, mentors opted to work with a maximum of two mentees at one time. Obviously, this works against scale.
    - ○ Stakeholders generally understand the positive effects mentoring can have on an entrepreneur's personal and professional development. However, where possible, monetizing the financial contribution of mentoring may help stakeholders to understand the monetary value of mentoring (Clutterbuck et al. 2017) Entrepreneurship development organizations may consider a panel of mentors who are available to work with entrepreneurs on a full-time basis. Offering payment to mentors means that mentoring itself can become a vocation or alternate career path for senior professionals and business owners. The question remains though, what would be an acceptable compensation for the mentors? Some creativity is called for here, but the payment problem need not be a hurdle. In the start-up world, design thinking and fail-fast are known and accepted principles. So, we leave it to entrepreneurship development organizations to design their mentoring panel in a way that works best for them, keeping in mind the need for scaling.
    - ○ It would be valuable to study the impact of paid versus volunteer mentoring, its impact on the quality of mentoring, the mentee, and the administrators of such a program.

8.10 Limitations

The study was limited to two urban centers. Entrepreneurs were primarily from Bangalore, and Pune, with a sprinkling from other parts of the country.

The topic of mentoring applies to all entrepreneurs, regardless of geography, gender, or size of business. The project run by us was only for women entrepreneurs and for small businesses.

The project was run during the Covid lockdowns. At many points, there were delays in completing milestones because either the mentee or mentor was infected and needed a break.

Research on virtual mentoring for entrepreneurs is still sparse, especially in the Indian context.

Our budget did not allow for the use of technology for monitoring milestones, and it had to be done manually.

8.11 Conclusion

Mentoring is one of those initiatives that entrepreneurship development organizations recognize as critical but often do not institutionalize systematically. Many see mentors through a conventional lens, where mentors inspire, exhort, and advise entrepreneurs through different phases of growth. In our current context where all stakeholders agree that creating more entrepreneurs is the way toward economic growth, we need to widen accessibility for mentoring to a diverse range of entrepreneurs.

With more and more brand-new ideas being launched as businesses, the older interpretation of a mentor as a successful elder in the business is not sustainable, especially at scale. Our attempt here has been to define mentoring as an activity that many professionals can take up and ensure paths to success by encompassing the process in a structured framework.

The success mantra we have arrived at is: "mentor virtually, support, and monitor, in a milestone-based framework".

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Chapter 9
Importance of Being Yourself—Awareness and Understanding in Leadership

Peter Griffiths

Abstract The current startup ecosystem creates leaders with whom people need help connecting to because they need to see themselves represented in their leaders. For example, in Europe, the demographic is commonly white males who look and act the same. This sends a message to anyone different that they are unsuitable to do the same work or be in that position. This often makes people feel like they are not enough and have to re-create themselves to fit in and be accepted or have credibility. Having the confidence and freedom to be authentically yourself, however, opens the doors to becoming a leader that can impact others to do the same. The challenge with traditional DEI is that it is not a silver bullet. Leaders need to be aware of themselves and understand what gets in the way of them being excellent, and impactful leaders often create diverse startup ecosystems and companies. This includes their own beliefs, thoughts, fears, and emotions. This chapter contains examples from experiential learning environment, who are impactful female leaders and torchbearers for other women and develop high-performance teams.

Keywords Leadership diversity · Bias · Stereotype · Self-awareness · Coaching · Mentoring

9.1 Introduction

This chapter is for everyone who might feel different and does not necessarily fit into the demographic of what a co-founder or leader should look, and sound like in a startup or any business. It is also to all male and female leaders to understand why it is essential to surround yourself with people who think, act, and look different than you and allow everyone to freely express themselves. My work as a coach and co-founder of my own company, The Mind Takeaway, and as a trusted mentor to

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female leaders in the European Innovation Council has shown me that when people try to fit into a mold that doesn't suit them as unique individuals, it often leads to stress, burnout, and mental health challenges.

I grew up in the UK and lived and worked in the Middle East before settling down in Berlin, Germany. During my experience in working and supporting leaders and founders in Europe, I found that the following challenges are similar and recurring. The startup ecosystem is stacked against female founders and minority groups because it is a male-dominated environment where patriarchy exists within the ecosystem and society. According to the Startbase (2021) report, only 11.9% of all startup founders in Germany in 2021 were female.

The proportion of women among startup founders is grossly deficient. There is a dire need of women leaders as role models. A few examples are Cher Wang, founder of billion-dollar tech company HTC. Another is Arianna Huffington, the co-founder and former editor-in-chief of the successful news website HuffPost (previously the Huffington Post). Interestingly, even when women decide to go into business and start their own companies, they are less likely to seek out female co-founders; only 16% of female founders rely on a female team, while 50.5% bring men on board. (Startbase 2021). When leaders, especially females, do not feel safe (both physically and mentally) and cannot see a mirror of themselves in their teams or their industry, they often behave in an inauthentic way, feel uncomfortable and lose their most valuable asset, which is to be uniquely themselves.

Venture Capital also favors male founders. All women founders raised only 1.1% of capital in 2021 in Europe, and 8.8% to mixed-gender founding teams of the total amount of funding raised by companies in their sample, only 1.3% went to ethnic minority founding teams, says the State of European Tech 21 Report. There needs to be more progress in diversity and inclusion. 38% of women and 56% of ethnic minority respondents have experienced discrimination in the past 12 months while working in European tech (State of European Tech, 4 C.E.).

I often share this quote with my clients because I hold it true; although I cannot attribute this 100% to Oscar Wilde, I still think it holds and is a powerful statement. **"Be yourself; everyone else is already taken."** The main reason I share this quote is that your impact will be limited until you are comfortable being yourself in front of others. I do agree, though, that you can't just act as you want and not be aware of the consequences. So, for example, I often explore this topic with my clients and explain to them that if you are new in your role in the leadership team. You do not already know how things are in that team, it is best to slowly get to know everyone, be mindful about what you share, and gauge the reactions, then work your way up from there. Until you can show people your unique self, you will find it much harder to positively impact others and crucially be free of having to wear a mask or copy others' uncomplimentary behaviors, such as acting aggressively or talking too much in meetings just to be heard. Intuition, the ability to connect with others (human connection), and creativity are all lacking when leaders spend all of their energy trying to be accepted, validated, and behaving in a way that is not conducive to setting a good example for others.

9.2   The Challenges Leaders Face (Especially Women)

These are the main challenges leaders face in the startup ecosystem and the world of work and entrepreneurship. Some of the following challenges are personal ones that we can all face in the workplace.

- High stress, working too many hours, and burnout is commonplace.
- Women feel like they are not taken seriously by their male counterparts.
- Confidence and freedom to be themselves is lacking, even though they have earned their place at the table.
- Women who mirror toxic male behavior just to fit in.
- Feeling the need to work much harder than their male counterparts just to get ahead.
- Women and people from minority groups are paid less.
- Needing to know all the answers and not being comfortable not knowing what to do.
- Being intimidated, both physically and mentally.
- Aggressive male dominance or behavior that can marginalize or make others feel uncomfortable.
- Unwanted attention and sexual advances in the workplace.

In my conversation with Kristen Anderson, CEO and Board Member of the EWOB, she says that " *sometimes there is a tendency to conform and change our leadership styles because the senior leadership is predominantly male for many companies. People look up and say they don't see a role model, and for me to succeed, I need to change my leadership style to the most valued leadership style, which isn't verbally said, but people are smart they can see who is promoted and they can see what type of leadership style that person is exhibiting. Do they change their leadership style to fit in? So people who feel uncomfortable doing that say they don't have a positive role model and do not feel like they fit into this company. That is where you start losing women, where the pipeline of talent has holes, where women are leaving in certain places, so you don't have the talent joining the companies. A lot of female leaders often say they would like to bring more of themselves in their roles, to contribute with the best that they have, but at the same time, they feel that they cannot do that; They say: I cannot be vulnerable, I can't say this, I can't do that. There are, in my experience, women that can be themselves and have an impact on being themselves. This is dependent on these women cultivating their network of allies, finding other senior women and men to support them, having great mentors, being open to being coached by both men and women, and taking a vested interest in their personal development.*"

9.3   You Can Be Successful by Being Yourself

"We bring a lot of value by having different leadership styles, you don't have to have one style; one size doesn't fit all. When you try to be non-authentic as a leader, the data shows that you can be up to 50% less productive because you are trying to consciously mold yourself into a different person, which takes a lot of energy". You can hear the whole conversation here (The Mind Takeaway Podcast—#66: Gender Diversity in Leadership With Kristen Anderson 2022).

9.4   The Arguments for Diversity

As a leader working in different countries before becoming a coach, I have had the experience of working with diverse groups of people in multiple industries, with both in-person and remote teams. This has helped me develop a strong cultural awareness, and understanding, of how others see the world. Being consistently out of my comfort zone and getting comfortable being uncomfortable has allowed me to be a more impactful leader.

- Diverse teams solve problems more effectively and creatively. Companies with diverse executive teams are 33% more likely to have industry-leading profitability. New research makes it increasingly clear that companies with more diverse workforces perform better financially (Hunt et al. 2021).
- Mckinsey's women in the workplace report say that women provide 60% more emotional support for their teams (Women in the Workplace 2022, 2022).
- Gender equality has strong, positive impacts on Gross Domestic Product (GDP) per capita which grows over time. On average, countries with improved gender equality are expected to lead an increase in GDP of about 12% by 2050 (Nyári 2021).
- Here you can find the latest results of the research on the Gender Diversity Index by European Women on Boards (EWOB), showing which companies and countries are doing better at diversity in those higher-level roles and decision-making positions (Gender Diversity Index 2021, 2022).

In short, the executive summary from the 2021 GDI Report:

- 35% of Women on Boards.
- 7% of Female CEOs.
- 0.59 Gender Diversity Index.

"There are still too few women in leadership positions. The results of the latest GDI show that progress is too slow and that in 2021 we are still far away from a balanced corporate leadership in Europe."—European Women on Boards.

Jennie C. Stephens, Professor of Sustainability Science & Policy, School of Public Policy & Urban Affairs at Northeastern University, explored with me, for the mind

takeaway podcast, how feminist leadership isn't just about women, it's an invitation for all of us to acknowledge the harm to society and the hurt for so many when we have these complicated power structures. Jennie said, "*The research shows that when women, people of minority backgrounds, and indigenous people are in leadership positions, they bring different priorities, lived experiences, and perceptions of risk when it comes to the Climate Crisis*". We also reflected on some great examples of compassionate, empathetic female leaders during the pandemic, where transparency, clear communication, and community-based leadership were demonstrated, elevating people to rise above fear and not be paralyzed by social media and news outlets. You can hear the whole conversation here (The Mind Takeaway Podcast—#54: Diversifying Power With Jennie Stephens 2021).

Dr Else van der Berg, Founder of Sonderhouse in Berlin, Germany, says, "*It's imperative to become comfortable with uncertainty, and 'typical female traits' are a great natural fit for this. Things are changing so rapidly, and especially for companies bringing something 'disruptive', relying on market research or data doesn't work. Data is always backwards-looking, studies/research are misrepresented in the media, taken out of context, created via imperfect practices (e.g. scientists modifying results to fit better with the desired outcome) etc. I always felt the need to make sure my decisions were logical and relied on research data, and I am now more and more seeing the weakness of this approach. But it creates a massive opportunity for what is generally considered female traits: relying on intuition! Using empathy to connect with coworkers and customers! So, the traditionally "female" way of thinking will help companies become future proof*".

I also want to share a case study of a strong female role model I have had the pleasure of seeing grow. Her name is Miroslava Culic, the co-founder of The Mind Takeaway. Mira has grown as a leader, and gained confidence through experiential learning by "doing", plus having guidance from her coaches and mentors along the way, have made a tangible impact for her. It has helped her explore and refine her unique approach to leadership. Her biggest challenge was being able to see the positive impact of her work; she grew up as a refugee and developed a narrative that her work was not so valuable and that she didn't matter as much as the other people around her, especially people in leadership roles, or, if they looked like they came from a place of privilege. In our first few years of working together, I witnessed Mira dimming her light and making herself look small in front of others, be it colleagues or even, sometimes, our clients.

When Mira realized the labels holding her back and the negative narrative created about herself and how this showed up in her work as a business owner and leader, things started to change for the better. There is a powerful poem written by Marianne Williamson which impacted Mira. I often share this quote in our workshops or leadership development programs.

"*Our deepest fear is not that we are inadequate. Our deepest fear is that we are powerful beyond measure. It is our light, not our darkness that most frightens us. We ask ourselves, who am I to be brilliant, gorgeous, talented, fabulous? Who are you not to be? You are a child of God. Your playing small does not serve the world. There is nothing enlightened about shrinking so that other people won't feel insecure*

around you. We are all meant to shine, as children do. We were born to make manifest the glory of God that is within us. It's not just in some of us; it's in everyone. And as we let our own light shine, we unconsciously give other people permission to do the same. As we are liberated from our own fear, our presence automatically liberates others" (Williamson 1996).

Once Mira realized that playing small does not serve the world, her reality started to look very different, not only for Mira but also for our clients who began to benefit from that insight too! Now Mira supports leaders to do their best work and allowing others to do the same everyday. The female leadership clients I worked with have similar challenges with confidence and authenticity, especially when the team, company or industry is not so diverse. The good news is that they did not have to wait for those companies to change; once they realized that they could be more of themselves and understand the value they bring to their role, they could let go of the fear and feelings of being an imposter. Even though my clients, who have solid experience and were already leaders in their industries, often needed help seeing their value in certain situations, such as meetings, doing business development and asking others for help and support. I have seen the same challenges regardless of the role, seniority, and industry.

9.5   What Have I Done to Address This?

As a leader in various roles through the years before I started my own company, I consistently worked on myself through coaching, training, reading, and research. I have always been deeply curious about how the world, our minds, and people work. This has helped tremendously to increase my awareness and, through exposure to many different perspectives and cultures by living in different countries and getting comfortable with being uncomfortable. Two podcasts where I explore topics relating to psychology, leadership creativity and DEI, regular speaking events at summits and being interviewed about the topic of leadership and diversity and inclusion have been fertile ground for me to explore what gets in the way of diversity and inclusion to flourish inside organizations and teams. Only by connecting with others, exploring the challenges, and collaborating where possible can we hope to solve the complex systemic issues.

As a consultant and coach, I have often listened to understand and "get" the world of others because their world and challenges were quite different from mine (different realities and priorities). I am an ally for human-centric leadership and have built lasting relationships (human connection) with people and organizations such as the European Innovation Council, where I volunteer as a mentor for founders and CEOs: the EIC does fantastic things to support female leaders by providing support and programs in the European Union and beyond. In leadership roles myself, I always aimed to trust and support my team's growth by allowing people to be themselves, giving them room to make their own mistakes and learning from failure.

By embracing dissent and having uncomfortable, often challenging conversations within the D&I space and with people that are being impacted negatively by having a poor employee experience, being unheard or marginalized or worse still, being targeted by those who hold privileged positions, I have always tried to frame discussions around the subject of what can be done to improve the lives of others without trying to fix things or tell people what to do. Only then can we hope to tackle some of the challenges that affect the startup ecosystem.

9.6 How Has It Helped?

Through personal development, coaching, mentoring, and having allies, women who see who they are (their authentic selves) and understand their actual value (their capacity for impact) are more likely to succeed, feel safe, and feel valued. Seeing this first-hand, through the work that I do as a coach and consultant, plus mentoring leaders for the European Innovation Council, I have seen the difference these things can make to the lives of others. If I also think back to the teams, I managed in Europe and the Middle East and how, with the right level of support, many of my direct female reports went on to become great leaders themselves and have much success in their careers just by being themselves.

The senior leaders I coached and mentored have become much calmer, trust themselves more often in challenging situations, and have gained confidence through experience. Their quality of life has improved; better mental health, work–life balance, and a deep sense of purpose. Increased intuition, better decision-making, and creativity can flourish once a person sees their value. I never get tired of seeing a person realize their true potential over time and with support. It is a humbling experience and a real honor to do my work. It is always a two-way exchange, as I learn a lot throughout the journey of supporting leaders. There is never a dull moment, that's for sure!

Another massive benefit to working on yourself and gaining awareness of the importance of feeling safe for you is that psychological safety can improve for both leaders and their teams. You have to feel safe first to allow others to do the same—when you are on an airplane receiving safety instructions, the flight attendant instructs you to "put your oxygen mask on first" before helping others. Once you feel safe, you can create safety for others.

9.7 Suggestions for the Future

In my work coaching and mentoring leaders, these are some of the most valuable suggestions that have a positive impact.

- Get comfortable with being uncomfortable. When we feel vulnerable and insecure, we overprotect, control, micromanage, and share those signs of stress with our teams.
- Listen to the people. By listening, you create trust, you create safety and, therefore, when you go to delegate "stuff", you are likely to get better results.
- Get yourself booked on a self-defense course. This was one suggestion that came up in a recent conversation with one of my mentors, Jamie Smart, a Sunday Times

"Best Selling Author", to help overcome the discomfort of feeling intimidated in the presence of people you perceive as stronger than you. That way, you address the physical challenges, gain confidence, and feel safer.

My three tips to help you become a better leader and foster inclusive company cultures are;

1. Get a good coach and mentor to help you reduce stress, develop your leadership skills and build your confidence to be able to explore your unconscious biases and blind spots.
2. Find allies in your community and cultivate relationships continuously.
3. Accept any opportunities for support and apply for funding and accelerator programs.

Rather than just share my suggestions, based on my own experience about diversity and inclusion from the lens of a white western male, I thought it would be more valuable for the incredible women I have interviewed for this chapter to share their suggestions and tips to inspire others to go into leadership roles become entrepreneurs or start their own companies.

The European Council has approved the EU law to improve gender balance on company boards. The directive, which will be transposed into national law, states that members of the underrepresented sex should hold at least 40% of non-executive director positions in listed companies by 2026.

This is a big step toward increasing gender equality in decision-making throughout Europe and leads to more opportunities for women to take Board and C-Suite roles.

Now is the time for women leaders in Europe to take 3 steps towards getting prepared for more senior-level positions. The first is to spend focused time and energy evaluating where they want to be in their career in 3-5 years. Women tend NOT to prioritise their self-development because of all their other commitments at work and home.

The second is to actively network with other women and men outside of their own company/industry/country. For example, they could join an organisation that is broad in its membership, such as European Women on Boards, to network with senior leaders who are also working to increase gender diversity in decision-making.

My third suggestion is women need to work on their 2-minute elevator pitch', CV, and LinkedIn profile to highlight their experiences that make them a top candidate for their next role, including getting help from experts on their 'personal branding.

Lastly, women should be active role models for other women who are advancing in their careers. They could take roles as mentors or coaches for more junior women

or participate in panels/podcasts to share their journeys and how they overcame barriers in their careers—Kristen Anderson, CEO, European Women on Boards.

Having confidence is a big one. And not letting bad experiences—including structural injustices and personal violations—get you down too much. Right now, I feel the most important quality for me is care and compassion for my colleagues. Everyone struggles differently, so offering care and compassion to others makes every interaction more positive—Jennie C. Stephens, Professor of Sustainability Science & Policy, School of Public Policy & Urban Affairs at Northeastern University.

"Now is the time for Female Founders."

- *Grow your tribe and network like crazy.*
- *Use the current momentum and participation in the programs.*
- *Build and raise like a (girl) Boss.*

Antonia Walzholz—Co-founder and CEO at up.lifted

Join meetups, groups and mentorships where women can push each other forward, plus teach each other what is acceptable behavior and what is not.

Find support systems where women can turn for advice/help in case of sexual harassment. Most small and medium businesses won't have a Works Council, a proper HR function where women can ask for help and support.

Get rid of the "badge of honor" of working overtime. This is a company culture thing; in many cases, it is massively influenced top-down. If leadership starts caring about work/ life balance and stops informally rewarding the people working 80 h a week, that would help. I have seen a move in the right direction in the startup ecosystem, especially since the younger generation doesn't seem to be so accepting of working crazy hours just for free fruit & beers anymore, so that's a significant development—Dr Else van der Berg, Founder of Sonderhouse

9.8 Conclusion

Diversity is not only hiring people from different backgrounds and experiences but also making sure that everyone inside the startup ecosystem feels safe, listened to, valued in their teams and has the right level of support. Many companies fall into the trap of recruiting people and expecting them to fit a specific mold or company culture. Your employees are the company culture, not the other way around. Everyone must make positive changes, take ownership and empower themselves to increase their awareness and embrace their blind spots and unconscious biases. These actions will make a big difference to the future.

Like me, people in privileged positions have to take responsibility to make changes, take a less comfortable path, and get to know and support different people. We should do this not only for others or because it is expected from us but also for ourselves to enrich our lives and be better humans for ourselves, the people around us, and the planet. Women and people from disadvantaged backgrounds in leadership

positions are responsible for making the path for others easier in the future by being role models that others will want to follow.

Companies have a responsibility to create environments that support different ways of working, including childcare, elderly care, and flexible hours. Flexibility is key to attracting and creating the right conditions for females to step into more leadership roles. Flexible working arrangements are more impactful for women, especially those with children. (Forbes & Statista 2022).

There has never been a better time to step into a leadership role or start your own business. From my experience supporting female leaders, more and more allies and supporters are willing to support you. What are you waiting for?

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Chapter 10
Women's Entrepreneurship and the Start-Up Ecosystem in India

Suhela Khan and Feroza Sanjana

Abstract COVID-19 had gender differential impacts in India, with women employees and entrepreneurs being particularly hard hit. The combination of illness, unpaid care, lack of access to financing and domestic violence has left many women struggling at work. At the same time, women entrepreneurs increasingly adapted to a changing business environment, facing liquidity challenges as well as a need to shift to less familiar e-commerce platforms to sell their products and services. Measures to enable their access to finance and markets will be crucial for their economic recovery and for promoting an inclusive start-up environment. This chapter outlines three areas that can be transformative, offering promise for "building back better". These include supporting innovative financial mechanisms to reduce barriers to access capital; creating avenues for women entrepreneurs to access new business opportunities and supporting ecosystem players including women entrepreneurs themselves to be more gender-inclusive in their business policies and practices.

Keywords Women entrepreneurs · Access to finance · Access to markets · Gender-responsive enterprises · COVID-19

10.1 Women and the Start-Up Ecosystem: Going Beyond Representation

Any discussion on Diversity, Equity and Inclusion in the Start-up Ecosystem would be amiss without exploring the role of women's entrepreneurship. For a start-up ecosystem to be inclusive, supporting women entrepreneurs is vital. In India, women make up almost 14% of all entrepreneurs and own around 20% of micro, small and medium enterprises (MSMEs) out of a total of 58.5 million enterprises.[1] They

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collectively contribute to 3.09% of industrial output and employ 10% of the total workers engaged in different economic activities across the country.[1] Still, India has much room to close its entrepreneurship gender gaps, ranking 57 out of 65 countries for women's entrepreneurship[2] and only a third of early-stage entrepreneurs in India being women (GEM, 2014).

The challenges and structural barriers faced by women are often invisible yet persistent impediments to their advancement. A 2022 survey of 58 women entrepreneurs in India by UN Women revealed that women entrepreneurs are most in need of (i) knowledge, skills and tools to attract capital for their business; (ii) support to help make their businesses more viable through market linkages; as well as (iii) to engage in network building opportunities.

Women entrepreneurs in India experience intersecting and multiple forms of discrimination in view of their socio-economic status based on age, color, caste, class, ethnicity, geography, religion, language, literacy, etc. Restrictive social norms prevent women from accessing economic opportunities. They are not viewed as economic agents and individual rights holders instead as members of a family or a community. The persistent threat of sexual violence and safety at public, private and now digital spaces restrict women's mobility and participation in economic activities.

Against this backdrop, women starting their own business face cultural biases on the division of labor within households. Surveys in 2022 by the Pew Research Center reveal that although over half of Indians stated that both men and women in families should be responsible for earning money, 43% see this as mainly the obligation of men.[3] A little over a third of adults surveyed believe that childcare should be handled primarily by women. This is in light of the fact that in India women spend 9.8 times more time than men on unpaid work (Niti Aayog 2017) as against the global average of 2.6 times (UN Women).

India represents the world's third largest start-up ecosystem and was named the fastest-growing one, from 3,000 start-ups in 2014 to over around 11,000 in 2020. Yet, women remain under-represented, accounting for only 35% of employees in Indian start-ups.[4] In 2018, women comprised only 9% of start-up founders.[5] The number of start-ups with at least one female founder declined from 17% in 2018 to 12% in 2019.[6] In 2021, only 5 out of 136 unicorn founders were women and only 14% of tech unicorns have at least one female founder.[7] These figures are of concern.

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[1] As per the 6th Economic Census in 2016 in India.

[2] https://www.mastercard.com/news/media/phwevxcc/the-mastercard-index-of-women-entrepreneurs.pdf.

[3] N = 30,000.

[4] https://inc42.com/resources/women-in-tech-why-startups-need-to-focus-on-gender-diversity/#:~:text=Women%20account%20for%2035%25%20of%20the%20workforce%20in%20Indian%20startups.

[5] https://qz.com/india/1331600/india-is-A-tough-lonely-place-for-female-entrepreneurs/.

[6] https://qz.com/india/1945698/just-14-percent-of-indian-tech-unicorns-have-even-one-female-founder/.

[7] https://qz.com/india/1945698/just-14-percent-of-indian-tech-unicorns-have-even-one-female-founder/.

When it comes to ecosystem actors, women in senior management positions in venture capital funds, the number of women partners in VC funds though low, have increased. A survey by Boston Consulting Group (BCG) and WinPE of 36 Private Equity/Venture Capital (PE/VC) firms including several based in India showed that the proportion of women employees in investing and operating roles at PE/VC firms grew from 16 to 25% in a 3-year period. PE/VC firms have made substantial progress particularly in recruiting women into entry-level associate positions and approximately 40% of associates were women and women in middle management roles.[8] Even so, women still make up less than 15% of partners, who are key decision-makers within PE/VC firms, and more than half of firms surveyed do not have a single female partner. Similarly, there have been several women leaders in India's banking sector though few women Chief Executive Officers (CEOs).[9]

Why is this important for women's entrepreneurship? The lack of representation of women in the finance ecosystem has substantive effects on the growth prospects for female start-ups. Venture capital firms with a female partner are 3 times more likely to invest in firms led by a woman. [10] Moreover, investment in equity, especially at an early stage of an enterprise's lifecycle is very dependent on access to investor networks and familiarity between investors and investees. A lack of female-led fund managers contributes to women businesses lagging on both counts.

Women's start-ups also face discrimination working in "male gender-typed positions". They "are more likely to have their performance devalued, less likely to receive opportunities for career advancement, and more likely to encounter challenges and scepticism in starting and running ventures".[11] Interviews with women-led business show that women entrepreneurs are often treated with less respect which affects their confidence in their business and financial skills and women's businesses are often viewed as risky investments by investors. Other research shows that investors even prefer pitches presented by male entrepreneurs compared with pitches made by female entrepreneurs, even when the content of the pitch is the same.[12]

Unsurprisingly, there are massive gaps in the financing requirements of women start-ups. Globally, it is estimated that only 2.3% venture equity went to women-led start-ups in 2020.[13] In India only 6.5% of the funding raised among the top 150 funded start-ups in India went to women-founded or women co-founded.[14] This corresponds

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[8] https://web-assets.bcg.com/5e/50/3498bf8e46c7be9b1cf554ef2fbf/closing-the-gender-gap-in-investing.pdf.

[9] https://www.moneycontrol.com/news/business/banking-central-why-there-are-only-A-few-woman-ceos-in-indian-financial-services-8404411.html.

[10] https://hbr.org/2017/09/the-comprehensive-case-for-investing-more-vc-money-in-women-led-startups.
   https://www.eib.org/en/stories/investment-in-women-entrepreneurs.

[11] https://www.pnas.org/doi/pdf/10.1073/pnas.1321202111.

[12] https://www.pnas.org/doi/pdf/10.1073/pnas.1321202111.

[13] https://hbr.org/2021/02/women-led-startups-received-just-2-3-of-vc-funding-in-2020.

[14] https://www.thehindubusinessline.com/companies/why-is-the-funding-scenario-dismal-for-women-entrepreneurs-in-india/article30997828.ece.

to the figure in emerging markets where an International Finance Corporation (IFC) study (2019) found that only 7% of total investment goes to female-led businesses.[15]

Put in context, women's entrepreneurs in India have huge unmet financial needs that are overwhelmingly met by informal financing sources, with only 27% of the USD 158 billion total finance requirement of women owned MSMEs being met through formal financing. The loan rejection rate for women in India is 2.5 times higher than that for men in the country[16] despite them being considered as credit worthy with significantly low default rate. Aroundg 90% of women entrepreneurs in the country are thus relying on informal sources of financing,[17] tapping into their own savings, physical assets or inheritances that can be mortgaged or relying on family and friends for taking their business forward.[18]

These challenges put early-stage women entrepreneurs at a particular disadvantage to grow their business and test and refine their business models.

It also prevents access to much needed debt financing, especially given that women businesses lack the requisite collateral. This is even though gender-disaggregated data from banks indicate that non-performing loans are 30–50% lower in women-owned businesses.[19]

Overlooking women start-ups can be an inefficient allocation of capital given that start-ups that are founded or co-founded by women generate more revenue once they receive enough financial means to do so.[20] A study by BCG showed that for every dollar of funding, women founded or co-founded start-ups generated 78 cents, while male-founded start-ups generated 31 cents. These start-ups also performed better over time, generating more in the cumulative revenue over a period of 5 years.[21] Another study by Kauffman Foundation highlights the significant out performance by women-led technology companies compared to all male-owned tech companies by a significant 35% higher return on investment and 12% higher revenue.[22]

In addition to credit constraints, another challenge preventing women entrepreneurs from expanding their businesses is the lack of access to markets. As their businesses mature, there is a lack of mentorship, peer support and gender-lens investors particularly when women entrepreneurs try to grow.[23] Access to markets

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[15] https://documents1.worldbank.org/curated/en/297001633493250648/pdf/In-Search-Of-Equity-Exploring-Africa-S-Gender-Gap-in-Startup-Finance.pdf.

[16] https://www.ifc.org/wps/wcm/connect/ca5c0868-e89d-4b43-ace5-8a702ed29b25/Financial+Inclusion+for+Women-owned+MSMEs.July+31.pdf?MOD=AJPERES&CVID=mOK28X8.

[17] https://pressroom.ifc.org/all/pages/PressDetail.aspx?ID=17061.

[18] https://qz.com/india/2180528/india-ranks-poorly-in-womens-entrepreneurship/.

[19] https://www.ifc.org/wps/wcm/connect/ca5c0868-e89d-4b43-ace5-8a702ed29b25/Financial+Inclusion+for+Women-owned+MSMEs.July+31.pdf?MOD=AJPERES&CVID=mOK28X8.

[20] https://www.unido.org/stories/women-smes-and-sustainable-development-lessons-learnt-road-ahead.

[21] https://www.bcg.com/publications/2018/why-women-owned-startups-are-better-bet.

[22] https://www.inc.com/kimberly-weisul/boston-consulting-group-female-founders-higher-revenues.html.

[23] https://www.andeglobal.org/bridging-the-digital-divide-for-south-asias-women-entrepreneurs-how-meaningful-connections-can-drive-women-entrepreneurs-to-success/.

for women entrepreneurs means greater access to suppliers, producers and buyers for their products and services, in turn creating more potential employment opportunities. It is a key to progress for women entrepreneurs, as it allows them to build more viable and sustainable businesses and increase their incomes. However, building market linkages are challenging given the lack of networks among women entrepreneurs and that large corporates have concerns about volume, quality and reliability of production orders towards small entrepreneurs. The lack of access to digital marketplaces and networks is also related to the gender digital divide. Studies from the United Nations Educational, Scientific and Cultural Organization (UNESCO) show that women and girls are 25% less likely than men to use digital technology for basic purposes, 4 times less likely to know how to program computers, and 13 times less likely to file for a technology patent.[24]

How can the start-up ecosystem become more gender inclusive? Research suggests strong evidence that when male investors tend to have daughters, they are more likely to hire women and this gender diversity in turn improves their fund's performance (Gompers & Wang, 2017b).[25] While this might indicate that the gender of venture capitalist's children can help make them more aware of the specific needs of women and girls, a more systematic effort to build a more gender-responsive ecosystem is sorely needed.[26] In addition to representation, it is crucial that all ecosystem players including angel and venture capital investors, corporates, banks, governments and policy makers as well as women entrepreneurs are sensitized to and address the unique challenges they face. There is a need to (i) design innovative financial products and services that specifically cater to women's credit needs as well as (ii) support them to build stronger forward and backward linkages with corporates and women suppliers. An important component of this is also to (iii) support start-up ecosystem actors, including women entrepreneurs, to be gender-inclusive themselves. Through UN Women's work on capacitating women entrepreneurs through successive training programs, we have learned that women entrepreneurs themselves are interested in and benefit from assessing whether their own businesses are gender responsive. Many have successfully engaged on these issues and taken steps to advance diversity and inclusion, set targets relating to gender equality and started developing gender strategies and action plans for their businesses. The following sections will explore these three areas further and share recommendations for action.

Supporting gender-inclusive women's entrepreneurship holds the potential for greater business returns and investing in women can have ripple effects for national economies. Achieving gender parity in India can generate US$700 billion of additional GDP by 2025.[27] It can

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[24] https://unevoc.unesco.org/home/UNESCO+Publications/lang=en/akt=detail/qs=6172.

[25] https://www.nber.org/papers/w23454.

[26] https://wappp.hks.harvard.edu/files/wappp/files/gender_and_culture_in_vc_literature_review_final.pdf.

[27] https://www.mckinsey.com/featured-insights/employment-and-growth/the-power-of-parity-advancing-womens-equality-in-india.

also contribute to employing more women in the context of India having one of the lowest female labor force participation rates in the developing world at 19% in 2021.[28] Women's entrepreneurship has the promise of creating an additional 150–170 million jobs, more than 25% of the new jobs that are needed for the entire Indian working age population by 2030.[29]

Across all, the social benefits of providing women an enabling business environment are clear. Research shows that women spend 90% of their income on their families, and economically empowered women boost demand, have healthier and better-educated children, and raise human development levels. Advancing women's entrepreneurship is therefore critical to women's economic empowerment and gender equality and will contribute to cross-cutting areas for achieving the Sustainable Development Goals (SDGs).

10.2   The Impact of COVID-19

COVID-19 has made more urgent women entrepreneurs' need for credit and forced them to adapt to the rapidly shifting market landscape. According to the Mastercard Index of Women Entrepreneurs 2021, both men and women's entrepreneurial activity declined across the board, but India saw one of the steepest declines in women's entrepreneurial activity out of the 65 countries studied.[30]

A report by Bain and Company revealed that almost 73% of women-run enterprises in India were negatively impacted due to the pandemic, while the revenue of almost 20% of women entrepreneurs dwindled to zero.[2] The majority of women-owned businesses are in sectors most affected by the pandemic, such as crafts, construction, wholesale and retail trades, textile and apparels, hospitality, tourism, food and financial services.[31] School and daycare closures shifted the burden of caring for children from the paid economy, increasing women's unpaid work. Several entrepreneurs reported a drop-in productivity due to working from home with domestic and care responsibilities.[32] There has also been a sharp increase in incidents of violence against women during the lockdowns.[33]

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[28] World Bank. *Labor force participation rate, female (% of female population ages 15+) (modeled ILO estimate)—India.* Link: https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS?locations=IN.

[29] Google and Bain and Company (February 2020). *Powering the Economy with Her: Women Entrepreneurship in India.* Link: https://www.bain.com/insights/powering-the-economy-with-her-women-entrepreneurship-in-india/.

[30] https://www.mastercard.com/news/insights/2022/mastercard-index-of-women-entrepreneurs-2021/.

[31] Atmanirbhar.

[32] https://www.bain.com/insights/can-covid-19-be-the-turning-point-for-women-entrepreneurs-in-india/.

[33] https://blogs.adb.org/blog/it-time-address-covid-19-S-disproportionate-impact-india-S-women

In the immediate months surrounding the pandemic, a survey by UN Women India with 105 women-led businesses found that women-owned businesses experienced a significant fall in revenues due to the cancellation of orders since the pandemic began and overwhelmingly reported dwindling new orders. Almost two-thirds reported working at lower productivity or just managing to stay afloat. Despite no income, these businesses continued to pay salaries, rents and utilities depleting their working capital and savings. Unlike countries that provided furlough schemes for preventing layoffs and short-term work, several Indian start-ups were forced to take measures themselves.[34] For example, the founding team of Indian tech start-up Superhuman Race invested personal savings to keep the business alive and avoid employee layoffs or pay-cuts.[35]

Disruptions to supply chains including non-availability of raw materials, transport, delivery, and storage impeded the smooth functioning of the businesses. They reported an overwhelming need for increased access to finance and for the government to provide support for easing barriers to access.

Moreover, COVID-19 brought major shifts to the market landscape. The lockdowns in India saw the immediate "closure of mandis and wholesale markets, transport restrictions, disruptions in supply chain and lack of procurement (Tankha 2020 in Bargotra and Narasimhan 2021)".[36] Instead, digital platforms became major platforms for accessing markets, marketing and greater visibility. These platforms have the potential to create a level playing field for women entrepreneurs, however, provided that they are able to harness their opportunities. Moreover, businesses whose models were compatible with remote workers were able to make this shift, whereas those with contract workers in sectors such as manufacturing and logistics were unable to make this transition.[37]

Two years on, the 2022 GEM report notes that the Indian government has taken steps to improve the environment for entrepreneurs including women entrepreneurs by focusing heavily on access to finance and ease of entry. However, not all measures have been effective. UN Women's survey found that over 70% of women-owned businesses were ineligible for credit under the Government of India's Atmanirbhar Bharat stimulus package as they were first-time borrowers. This was at odds with the government's initial measures for micro, small and medium enterprises (MSMEs), which focused on emergency credit lines and moratoriums for existing borrowers.

Although entry barriers to these platforms are significantly low than physical markets, they are highly technical in nature requiring digital as well as maneuvering skills and knowledge in areas such as search engine optimization, performance

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According to the National Commission of Women data, India recorded 2.5 times increase in domestic violence between February and May 2020.

[34] https://blogs.lse.ac.uk/southasia/2021/02/01/could-A-german-labour-policy-innovation-soothe-indias-unemployment-woes-amid-covid-19/.

[35] https://asiapacific.unwomen.org/sites/default/files/Field%20Office%20ESEAsia/Docs/Publications/2020/07/200720_CEO%20interview_V20_Single%20page.pdf.

[36] https://www.epw.in/engage/article/how-did-indias-women-enterprises-fare-during-covid.

[37] https://www.bain.com/insights/can-covid-19-be-the-turning-point-for-women-entrepreneurs-in-india/.

marketing, among others. In these overcrowded platforms, women entrepreneurs need skills to create a niche and unique value proposition, which in case of social enterprises, is more challenging due to the nature of the business.

Thus, while many women entrepreneurs have accessed these markets by listing themselves on e-commerce platforms, they find it difficult to utilize them optimally. Other issues such as high internet data usage costs can further exacerbate this challenge. Further, it requires them to invest in their own skills and train their teams to navigate through these platforms, as well as to redirect their limited resources to pay fees, commissions and purchasing of services towards search engine optimization and to be more visible to online shoppers.

Measures to enable their access to finance and markets will be crucial for their economic recovery and for promoting an inclusive start-up environment. The start-up ecosystem itself has seen a mixed outlook. In the Asia Pacific, technology, biomedical and pharmaceutical and banking companies were least affected, and in some cases saw increased customer demand. In India, many tech start-ups benefitted from the pandemic, such as for home and food delivery services and a majority saw their pre-COVID revenues return by the end of 2020. Similarly, education and healthcare start-ups experienced increased growth.[38]

The response towards recovery of start-ups needs to be gender responsive. This will require bold steps to transform and create a supportive working environment for women given rapidly changing circumstances, particularly in light of the differential impacts of the pandemic on men and women. Since the pandemic, started, 66% of women have reported a deterioration in their mental health, compared to 58% of men (UN Women, 2020).[39] For instance, even before the pandemic women spent 46% of their working day on unpaid care work, with cooking, cleaning and childcare taking up the most time.[40] Employers must recognize the disproportionate amount of the care burden borne by women and adopt flexible working arrangements with full pay to help promote an inclusive recovery.

10.3   Exploring the Transformatory Potential of Three Pathways for Change

This section will explore three potential pathways for change with areas of action, and highlight remaining gaps, both immediate and long term, that these pathways will need to address in order to be effective.

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[38] https://home.kpmg/xx/en/home/insights/2021/03/building-A-resilient-start-up-ecosystem.html.

[39] https://www.ifc.org/wps/wcm/connect/d42380a5-1da3-4605-812e-036125bd6659/202011_IFC_GuidanceNote_COVID19_Gender+B.pdf?MOD=AJPERES&CVID=nm-l9Ic.

[40] https://www.orfonline.org/research/building-indias-economy-on-the-backs-of-womens-unpaid-work/.

(a) **Innovative Finance**

Designing gender-responsive financial products

Access to formal credit for women's start-ups depends on being part of the formal banking system. 98% of businesses owned by women are micro-enterprises, and approximately 90% of them operate in the informal sector.[41] Women in India have traditionally been underserved in opening bank accounts though since 2011 until the present, significant progress has been made with 78% of all adults in India now having a bank account with a very minimal gender gap which has declined from 20% to 6% within a 3-year period.[42] The Pradhan Mantri Jan Dhan Yojana (PMJDY program) has been an important contributor to the opening of 462 million bank accounts, of which a little more than 50% which belong to women.

However, ownership of a bank account does not translate into usage of financial services offered. The World Bank reports that about half of the women in India with personal bank accounts use them in a limited capacity or not at all. What is more, credit received by women is only 27% of the deposits they contribute, while the credit received by men is 52% of their deposits.[43] Possible explanations for the low credit uptake include low engagement and inactive accounts.

Due to the relatively smaller size of women-owned enterprises, microfinance institutions are often regarded as the solution to their financial needs. However, these small ticket loans cannot cater to the needs of women-led MSMEs who often have larger capital requirements. They have financial needs greater than a Self-Help Group can offer but are not seen as profitable enough by commercial bankers.[44] Often therefore women-owned businesses are told that they are too small or too large for investments.[45]

Further, women's lack of access to movable and unmovable property as collateral is a big impediment. As there is little market data available on default rates, banks often use traditional credit scoring models—relying on credit history and collateral—to assess creditworthiness. This poses challenges for many women who simply do not have access to collateral or an adequate credit history. Moreover, banks also face challenges in establishing creditworthiness of women-owned businesses. Banks also view women-owned enterprises as higher risk in the absence of collateral to secure loans.

Various fintech houses such as Kaleidofin, LendingKart, AyeFinance, Agam International and Tala to name a few are developing alternative risk assessment mechanisms that allow financial institutions to assess the creditworthiness of women who

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[41] https://www.orfonline.org/research/women-entrepreneurs-in-india-what-is-holding-them-back-55852/.

[42] Demirgüç-Kunt et al., 2018 in OECD (2022).

[43] https://ideas.repec.org/a/fas/journl/v10y2020i1p7-36.html.

[44] https://www.giz.de/en/downloads/giz2015-en-analysis-loan-products-women-entrepreneurs-india.pdf.

[45] https://www.gatesfoundation.org/ideas/articles/the-importance-of-women-for-economic-development-and-growth.

lack sufficient credit history.[46] There are several solutions proposed by such companies which look at alternative innovations for improving access to finance along the lines of lower interest rate models, alternative credit score assessments, providing women support for credit applications as well as tailoring sector-specific products for women.[47]

Financial literacy and financial intermediaries

When it comes to making use of new opportunities, women have low levels of information on government schemes for access to finance. Nationwide campaigns for improving women's financial literacy are urgently needed. Even today, a mere 27% of Indian adults and only 24% of women—meet the minimum criteria as defined by the Reserve Bank of India as being financially literate.[48] An IFC report highlights that only 17% of women entrepreneurs in India were even aware of financial schemes launched by the government.[49] It also points out that women entrepreneurs in India grapple with numerous challenges which are largely nonfinancial in nature, such as limited financial literacy and product knowledge. Apps such as Meri Dukaan by UBS and Pratham Education Foundation are examples of tech-based platforms for promoting an understanding of basic financial concepts.

Financial intermediaries are also key since women tend to use their bank accounts more as well as save and borrow even more, if they are also served by women bankers and financial intermediaries.[50]

Gender-lens investing (GLI)

Investors are increasingly recognizing gender smart investing as a strategy to create value while advancing gender equality. Gender-smart investing can increase women's economic participation, promote women leaders, drive financial inclusion and substantially improve the lives of women and girls.

Gender-lens investing is on the rise. The number of gender lens funds has quadrupled in the last 4 years.[51] Globally, around USD 4.8 billion was raised in 2019 with a gender lens across private equity, venture capital and private debt vehicles. This is notable as an increase from USD 1.1 billion in 2017. And these figures are rising.[52] More numbers of fund managers are investing with a gender lens in emerging

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[46] https://ifmrlead.org/wp-content/uploads/2021/04/Womens-Entrepreneurship-in-India-Brief-2021.pdf.

[47] https://www.orfonline.org/expert-speak/engendering-fintech-lending-to-power-womens-entrepreneurship/.

[48] https://www.adb.org/results/india-financial-literacy-programs-lifting-families-out-debt-fueling-new-prosperity.

[49] International Finance Corporation (2018). Financial Inclusion for Woman-Owned Micro, Small & Medium Enterprises (MSMEs) MEs.July+31.pdf?MOD=AJPERES&CVID=mOK28X8.

[50] https://www.eco-business.com/opinion/the-missing-women-in-finance/.

[51] https://www.bsr.org/en/our-insights/blog-view/how-gender-lens-investing-can-transform-your-impact-strategy.

[52] https://gendertoolkit.cdcgroup.com/wp-content/uploads/2020/11/Gender-smart-Investing-Guide-for-Fund-Managers.pdf.

markets, including Asia. These strategies can enhance a company's competitiveness, strengthen its supply base, improve its human capital and help build an overall enabling business environment. In India, gender lens investing is only at a nascent stage—where a recent study of 20 leading impact investors shows that they are interested in the term gender-lens investing but are not actively incorporating it in practice, with only three of the funds having a demonstrated focus on serving women entrepreneurs and no funds focused on women-owned businesses or had a gender-based investment focus.[53]

Albeit while there might be a growing interest in GLI, there remains a strong need to clarify and raise awareness among the investor community in India on GLI, to set clear targets that will make clear to investors how they would receive returns on investment (ROI) by investing with a gender lens. The Melinda Gates Fund for women entrepreneurs in the United States can provide such an example. There are also guidelines for investors and debt issuers. For instance, the Gender Bond Guidelines have been developed by UN Women, the International Capital Market Association (ICMA), and the International Finance Corporation (IFC), aimed at using sustainable bond issuances to advance gender equality. It is also a resource for investors seeking to understand and support projects and strategies that are designed to advance gender equality objectives, into sustainable debt products. These guidelines offer a welcome start for addressing the knowledge gap in promoting women's empowerment through sustainable finance products.

Moreover, in order to adequately recognize the potential for tapping into the strengths of different stakeholders, a mapping of the landscape of gender lens investing in India—including investors, incubators, enterprises, corporates and other stakeholders will be crucial. This should be complemented by a rapid assessment of the level of understanding of GLI and strategies to achieve it among investors. Furthermore, more data on the effects of GLI on gender equality and supporting women entrepreneurs in India will be necessary. Given that GLI in India is at such an early stage, it will be important to undertake these exercises in order to build evidence for further action.

(b) **Access to Markets**

Improving women's access to markets requires stronger backward and forward linkages for their business. One way to support forward linkages is to enable women to be suppliers to larger corporates. UN Women's assessment of gender-responsiveness of corporate procurement in India revealed that entrepreneurs do not find corporates "accessible", that is, they do not know who to approach or how to enter a corporate value chain. In addition, a lack of resources and skilling has meant that women entrepreneurs are often under-equipped to meet the demands of corporates in terms of quality. On the other hand, corporates find it difficult to find women businesses whom they can procure from.

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[53] fsg.org/blog/investing-in-women/

Government policies for enhanced market access

In this regard, public procurement policy in India is commendable wherein government buyers are mandated to buy a minimum 25% of their annual purchases from micro and small enterprises (MSEs) and 3% from within the 25% target is mandatorily earmarked (the notification uses "shall") for procurement from MSEs owned by women. In addition to enabling provisions for women entrepreneurs, the government's e-marketplace (GEM) provides a transparent and integrated platform for government buyers and potential sellers. It is a national digital portal that facilitates the online procurement of goods and services for government departments, organizations and public sector undertakings (PSUs). However, there is still room for improvement. The share of women-owned enterprises in the annual procurement of goods and services by central ministries, departments and CPSEs has grown from zero in FY18 to 0.61% in FY20. More push to increase this percentage is needed. The Government should actively promote women-owned businesses in their procurement processes such as exemptions to entry criteria in government tenders and procurement. Further, women start-ups themselves can create gender-responsive backward linkages and support other women micro and small enterprises by sourcing from them.

Government support platforms and addressing the digital divide

Towards promoting greater market linkages for women entrepreneurs, the Ministry of MSME could assist women-owned businesses in increased networking opportunities with stakeholders and local distributors. The NITI Aayog Women's Entrepreneurship Platform is an important step towards providing an acceleration, incubation, mentorship and networking platform for women entrepreneurs, though its effectiveness is yet to be measured. Moreover, to adapt to the changing digital environment of marketplaces, policymakers can support women entrepreneurs further by ensuring digital access for women for onboarding themselves onto e-commerce platform as well as to access new and emerging forms of digital finance and solutions for women to advance their businesses including online platforms such as the WEP for assisting women entrepreneurs with legal and tax compliance among other capacity-building and support services. To do this, however, it will be necessary for the government to address and take further action on the gender digital divide, given that recent data suggest only 42% of Indian women surveyed have ever used the internet, as compared to 62% of men.[54] Increasing internet connectivity particularly in rural areas will be crucial.

Gender-responsive corporate procurement (GRP)

Another way to promote women's access to markets is if companies engage in gender-responsive procurement. "Gender-responsive procurement is the selection of services, goods and civil works that considers their impact on gender equality and women's empowerment". For example, Sodexo India started its Women Entrepreneur

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[54] https://www.dw.com/en/indias-digital-divide-grows-among-rural-women/a-55949074.

Policy, which was rolled out in 2017 with the commitment of increasing the number of women suppliers and increasing the value of women-owned businesses in the wider supplier ecosystem. One of the ways the company did this was by creating awareness among their existing suppliers in order to increase the number of women entrepreneurs contracted by them. Realizing that many of these enterprises did not meet their internal health and safety standards, Sodexo Services India trained them on their internal requirements. As a result, Sodexo increased their purchasing from women entrepreneurs by 200%.

UN Women has implemented tools that will encourage companies to procure from women vendors and to improve their business share.[55] In India, many companies took the UN Women Gender-Responsive Procurement Assessment Tool as a means to measure and track their procurement spending with women entrepreneurs. See Box A below.

> **BOX A: gender-responsive procurement: a corporate strategy to support women start-up's access to markets.**
> Women are overrepresented at the lowest tiers of the global value chain across many industries, operating smaller businesses and carrying out lower-skilled, lower-paid jobs often in unsafe and exploitative working conditions. WeConnect International estimates that women-owned businesses only benefit from 1% of procurement contracts by large corporations and governments.[56]
>
> Among corporates, it is estimated that procurement offices manage an average of 64% of a company's total enterprise spend. The value of these contracts adds up to billions of dollars of market opportunities in each country and trillions of dollars worldwide. However, existing market dynamics in the procurement market are not equal between men and women. Structural gender inequalities, based on outdated gender norms are impeding women (from a variety of backgrounds—race, class, sexual orientation, ability and education) to gain equitable access to networks, finance and markets.
>
> As part of the European Union-funded "WeEmpowerAsia" program, UN Women has developed a first-ever Gender Responsive Procurement (GRP) Assessment Tool for private sector companies to determine their current state of GRP and plan for the action steps. WeConnect International provided technical assistance support for the development of the GRP Assessment Tool and created the accompanying Action Planning Tool.

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[55] https://www.unwomen.org/en/about-us/procurement/gender-responsive-procurement.

[56] https://weconnectinternational.org/weconnect-international-women-owned-businesses-make-inroads-in-mexican-automotive-industry/.

The UN Women GRP Assessment Tool was piloted as part of the GRP Training Program implemented in partnership with amfori, the Confederation of Indian Industry and WEConnect International, targeting two cohorts of private sector companies based on 13 European and Asia–Pacific countries, including EU corporations (amfori members) and their suppliers in the Asia–Pacific and corporations in India.

The GRP Assessment Tool assessed companies in five key areas: Gender Equality Commitments, Internal Procurement/Supply Chain Management, Procurement Policy and Strategy, Supplier Database and Data Reporting and Supplier Engagement and Diversification. Based on the received scores, the companies were categorized as Beginners, Improvers, Achievers and Leaders.

- 10 out of 22 companies (45%) completed the GRP Assessment in India.
- The majority of companies have an understanding of GRP (90%) and Supplier Diversity and Inclusion (SD&I) (70%) and have positive attitudes towards SD&I.
- 50% agreed or strongly agreed that the overall GRP Assessment Tool score accurately reflected the realities of their companies.
- 90% agreed or strongly agreed that they felt more confident in their capacities to lead or contribute to implementing GRP programs in their respective companies after completing the tool.

The results showed that companies are at a nascent stage of their journeys on GRP and that most companies are at a beginner level in terms of their gender-responsive procurement efforts. The companies received the highest (average) score in Internal Procurement and Supply Chain Management, while the lowest average score was received in Supplier Database and Data Reporting, highlighting the fact that many of the companies do not have existing supplier tracking mechanisms or report procurement spend with diverse suppliers.

Source: UN Women (2022).

(c) **Building a Gender Responsive start-up Ecosystem**

What steps can improve the representation of women in the start-up ecosystem? A first step is to recognize the need to support high-potential women within the banking and finance sectors as well as within start-ups and to adopt a gender lens in the operations, policies and practices in the workplace from hiring to gender-responsive policies towards non-discrimination, the prevention of sexual harassment and promotion of diversity and inclusion, to employee retention and growth as well as performance management. Embedded within this are steps needed to ingrain across all levels of the organization, a shift in norms and workplace cultures. To illustrate, parental leave should include both men and women and should not implicitly by only allowing for maternity leave place the onus of childcare upon women alone. For

example, the Swedish government provides a very generous parental leave provision to workers. With a basic parental leave allowance of 480 days, both partners have an equal share of 240 days of leave. This leave can be transferred from one partner to another, even if the partner is not the same person as the child's parent. The only requirement for transfer is that two adults live together in a partnership recognized by Swedish law.

As the world steps out of the pandemic, organizations should adopt flexible working arrangements with full pay even beyond the COVID-19 crisis for all workers.[57] That said, it will be imperative that increased flexibility for women does not create a situation where only women end up working from home and men go to the office, in a manner that offices become "locker rooms" or spaces where only men are present.[58]

Sensitization for those working in the industry to become aware of prevailing biases as well as to address socially ingrained practices which promote a hesitancy to view women as bankable options are also important. For instance, Price Waterhouse Cooper (PWC) India has undertaken an overhaul of its performance evaluations to debase the process and criteria for evaluating employee performance to make sure it does not unfairly disadvantage women. Such case studies provide examples of how investment firms and start-ups can make a substantive change to their performance evaluations.

Similarly, investors can become aware of the biases that might influence their investing decisions and design gender-responsive evaluation criteria, given research that shows the prevalence of bias against pitches by entrepreneurs who display feminine-stereotyped behaviors during funding pitches, regardless of whether they are men or women.[59] The World Bank's WeFI reports that gender intelligence trainings for employees in banks have proven to be effective in tackling gender biases in lending decisions.[60]

Investors need to also become aware of the strong business case for investing in women entrepreneurs. Investors in companies with strong gender diversity strategies benefit from a higher growth rate with additional returns running at a compound annual growth rate of 3.5%.[61] Companies with gender-diverse boards too generate a higher return on equity than those that do not. Governments, players in the financial sector and ecosystem actors need to socialize investors on this important need. For example, platforms such as WinPE in India regularly convene Indian investors to discuss the importance of gender lens investing as well as strategies and challenges to advance women in private equity firms, providing an important channel for socializing key actors on the business case among other related issues.

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[57] https://www.empowerwomen.org/en/resources/documents/2020/04/covid-19-and-gender-equality-A-call-to-action-for-the-private-sector?lang=en.

[58] https://www.weforum.org/agenda/2020/10/phumzile-mlambo-ngcuka-un-women-jobs-reset/.

[59] https://journals.sagepub.com/doi/10.1177/1042258717728028.

[60] https://we-fi.org/wp-content/uploads/2022/10/We-Fi_Evidence-Paper-Oct2022.pdf.

[61] https://www.ifc.org/wps/wcm/connect/ac8fca18-6586-48cc-bfba-832b41d6af68/IFC+Invest+in+Women+October+2017.pdf?MOD=AJPERES&CVID=lYLVAcA.

Working towards a shift in business cultures also requires providing mentorship and support to women within the start-up ecosystem. Structured networking opportunities among new and potential women investors need to be created and promoted. Examples of such women investor networks and platforms include Women in Investing Network, Women's Investor Network (WIN).

Investors should also create an environment that goes beyond funding for women's start-ups, where start-ups are incubated and are connected with the necessary support and networks. Engagement with the investing community should also go beyond financing and investment-related commitments and investing experts should provide guidance and mentorship to high-potential entrepreneurs. This is also smart business, given that the business case for nurturing high-growth potential women entrepreneurs is clear.

To do this, there exist multi-stakeholder frameworks with wide purchase, which can help to take these steps. Public commitments such as the UN Women's Empowerment Principles (WEPs) are important to start a company's journey towards these goals. The WEPs are an important way for companies to demonstrate their commitment to women's economic empowerment and gender equality across their value chains but far more is required in putting such commitments into action. Today, over 320 companies in India are signatories to the Principles and many are aligning their policies and practices in line with the WEPs. In India, 99 companies have taken the tool, with a majority of companies falling in the "Improver" category, which means there are still actions that can be taken by the companies in the country to deepen their work on gender equality.[62]

At the same time, if a business is owned and run by a woman, this does not necessarily mean that it is by extension, an inclusive business. Women entrepreneurs too need support to become gender responsive. UN Women's WE RISE Toolkits offer women entrepreneurs targeted guidance on not only how to identify their finance needs and access the right kinds of finance but also to assess the gender-responsiveness of their own organizations.

Governments too have a strong role to play in building a diverse start-up environment, given that there is strong positive evidence on the correlation between less gender-biased laws and policies and women's employment and entrepreneurship. These can help kick-start transformative change towards a more diverse start-up ecosystem.

10.4   Conclusion

Investing in womens' start-ups will not only promote growth but inclusive growth which is urgently needed. Evidence suggests start-ups founded or co-founded by women are more likely to have a more inclusive work culture and employ 3 times

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[62] There are four results' bands of Beginner, Improver, Achiever and Leader. Aggregate results from UN Women Internal database on the GAT Tool (Last accessed 30 October 2022).

more women than men. The start-up ecosystem in India has a long way to go in terms of women's representation and in providing an enabling environment for women founded or co-founded start-ups to succeed and thrive, not only in terms of improving women's representation but also in innovating to provide more accessible sources of finance, promoting greater awareness and uptake of schemes for women entrepreneurs to thrive and grow. In addition, more support is needed in having access to the internet and bridging the digital skills gap for women business to tap into their full potential. As the country turns toward economic recovery to "build back better", the above-outlined pathways offer a concrete call to action for all stakeholders to work together for accelerating women's entrepreneurship.

Notes

1. Forbes India (November 2021). *Women make up for 13.76 percent of entrepreneurs in India; own 20.37 percent of MSMEs.* Link: https://www.forbesindia.com/article/news-by-numbers/women-make-up-for-1376-percent-of-entrepreneurs-in-india-own-2037-percent-of-msmes/71731/1.
2. Bain and Company (April 2020). *Tales of grit and survival: How Covid-19 is redefining business for women entrepreneurs.* Link: https://www.bain.com/about/media-center/bain-in-the-news/2021/tales-of-grit-and-survival-how-covid-19-is-redefining-business-for-women-entrepreneurs/.

Chapter 11
Diversity—A Challenge in Global Health

Abhay Gaidhane, Quazi Syed Zahiruddin, Punit Fulzele, Nilima Thosar, and Anam Quazi

Abstract The future of global health requires new models for research partnerships. The pandemic has highlighted the need to address interconnected challenges worldwide. High-income countries (HIC) must include low- and middle-income countries (LMIC) in collaborations. Quick learning and adaptation are essential in our fast-paced world. Together, we must confront complex global issues like pandemics, migration, pollution, and climate change. Sustainable Development Goal 17 emphasizes the importance of partnerships for achieving equitable global development. Collaborations between HIC and LMIC in health research benefit communities by addressing local health concerns and promoting long-term value. These partnerships facilitate access to technology, knowledge sharing, and innovation and should be productive, enjoyable, and inclusive, involving diverse partners with varied skills to tackle challenges and nurture talent mobility.

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Global health (GH) is defined as an attempt to improve health worldwide (Hellowell and Nayna Schwerdtle 2022). Global health institutions are bodies primarily involved in development of global health (Hellowell and Nayna Schwerdtle 2022). Even though Diversity, Equity Inclusiveness (DEI) is necessary, it does not address the structural imbalance of power between HICs and LMICs (Keshri and Bhaumik 2022). Knowledge systems in LMICs suffer because practices are defined and reasoning is informed by HICs (Eichbaum et al. 2021). During colonization, colonized nations chose to sustain power over access to healthcare (Chawla et al. 2022). Recently, in 2010, it was reported that there were around 18.6 million cases of mortality due to shortage of safe and inexpensive surgical care when required, which is around five times more than HIV, tuberculosis, and malaria combined (Meara et al. 2015). This made GH a very calling discipline, many outreach programs from universities and NGOs of Global North are being provided which help > 1/3rd of the world's population and include training and capacity building for the local health care workers (HCWs) (Chawla et al. 2022).

11.1   GH in Colonized Nations

Health facilities were developed in colonized nations during the colonial period with intentions to sustain the political and economic system by protecting the bureaucracy and military and prioritized them over access to health care (Chawla et al. 2022; Garg and Gupta 2011; Mushtaq 2009) Nowadays "parasitic helicopter/parachute research" and "epistemic injustice" words are used to address decolonization injustice (Bhakuni and Abimbola 2021; The Lancet Global Health 2018). This is more prevalent on well-known social media platforms since it serves as a straightforward alternative for communication for people engaged in grassroots activism (Chawla et al. 2022). Motion is being made to decentralize epistemic authority and decision-making power in GH as a result of the desk review on decolonization (Hellowell and Nayna Schwerdtle 2022). Also, in research partnerships, better-resourced partner is better profited (Eichbaum et al. 2021).

Challenges in GH Education:

The difficulties in HIC medical schools with regard to GHE are a result of more general imbalances in international health collaborations which include students' inability to take long absences, difficulty securing funding, a deficiency of mentors with a proven commitment to equitable global health practice, and insufficient training prevent them from participating in GHE more meaningfully (Garba et al. 2021).

11.2 How to Improve GH Education

There is a need to incorporate more transformational learning strategies to encourage change in practice and attitudes (Eichbaum et al. 2021). Colonial mindsets must be changed in order for global education collaborations to become more equal (Eichbaum et al. 2021). Recently, there has been an increase in plea for decolonizing global health, and medical schools must take advantage of this to teach decolonizes, also medical schools should not only teach the history of colonial medicine and how it affected certain local contexts but also reduce one-way transient interactions and promote long-lasting interactions (Garba et al. 2021). International experiences must have well-defined responsibilities, stated in pre-visit contracts, and should be overseen. Medical schools must also provide pre-visit training for each exchange that includes site-specific orientation and techniques for productive collaboration (Garba et al. 2021). Finally, institutional advancement criteria must be matched to support this work and medical schools must recruit professors dedicated to creating fair, long-term relationships (Garba et al. 2021).

11.3 Ongoing Practice to Improve GH Education

One example of change in GHE is of Department of Tracks and Special Programs established by RVUCOM in 2011 whose goal is to give interested students further curriculum in a range of subjects that emphasizes on the demands and prospects of American medical practice, currently, they offer a variety of courses on both campuses that cover a variety of healthcare-related topics in addition to the main curriculum. These are all extra, optional courses that can be taken for credit (Bentley 2021). On the other hand, the goal of the Global Medicine Track (GMT) is to prepare medical professionals who are both culturally aware and clinically competent to better serve underprivileged and global communities both domestically and overseas (Bentley 2021). But results from the UK revealed that only 9 institutions (33%) provide undergraduate global health courses, whereas 20 universities (74%) offer post-graduate global health courses, therefore the formation of a postgraduate or undergraduate degree program should be considered by universities looking to enhance the way they provide GHE as it is found that curricular diversity in terms of global health subject was a key differentiator among institutions, and it is recommended for colleges to incorporate more global health subjects into their curriculum (Lee and Quinn 2021).

In addition to being the by-products of colonialism, the areas of tropical medicine and international health also served as a platform for imperialism by destroying traditional knowledge and subsequently capturing the knowledge ecosystem (Cameron-Smith 2007; Gibson 2009). Understanding how feudal systems aided imperial powers in maintaining political colonization is crucial to end the existence of colonialism in global health (Keshri and Bhaumik 2022). African authors with ties to the Global

Health Decolonization Movement stress the necessity of change and call for reforms that are specific, quantifiable, and observable (Oti and Ncayiyana 2021). Others argue for more radical, systemic, and possibly less clear-cut reforms, such as, in the case of one article, a "complete overhaul" of global health that would "remove the coloniser from the discipline" (Chaudhuri et al. 2021). Despite these variations, a few analytical tenets are present throughout the literature; three of these serve as the focus of this commentary (Hellowell and Nayna Schwerdtle 2022). These concern knowledge (the claim that global health privileges "Western" forms of knowledge while marginalizing others), universalism (the claim that a "Eurocentric" conception of humanity defines global health and is therefore incomplete, partial, and unjust), and purpose (the argument that the purportedly colonial origins of global health are retained in the contemporary structures and practices of the field) (Hellowell and Nayna Schwerdtle 2022). Studies acknowledge the decolonial critique's potential to encourage a redistribution of epistemic authority and decision-making power in global health, so enhancing its capacity to "do good", however, studies have also identified a number of potential negative effects, including: (i) undermining faith in scientific knowledge; (ii) highlighting intergroup and international hostilities; and (iii) undervaluing the level of progress already made, which may limit opportunities for future redistributive change (Hellowell and Nayna Schwerdtle 2022). The conflicts are being repaired by raising awareness of these problems and making the necessary corrections, which includes placing a stronger emphasis on the development of local human resources and increasing the proportion and diversity of locally trained staff in every sector, including administration, logistics, and healthcare (Chawla et al. 2022). The decolonization agenda may lead to the necessary division of decision-making power in the field of global health (Hellowell and Nayna Schwerdtle 2022). In order to guarantee a truly equitable non-hierarchical collaboration, including authorship credits, in North–South GH collaborations, several clear and specific guidelines and constructive strategies, including what should be done and what to avoid for the journals and journal editors, collaborating research institutions, and funders, have also been developed (Marks et al. 2019; Morton et al. 2022). Instead of submitting to local publications where they have a fair chance of publication (and thereby enhancing their content), many writers from the Global South continue to send their articles to prestigious journals of Global North where there is little possibility that they will be accepted (Sharma 2021). Local writers need to ideally discuss local issues from a local perspective for local readers (Abimbola 2019). Health Care Workers (HCW) in the Global South should also be willing to venture outside of their comfort zone, break free from reliance, improve local research capacity, and seize the chance to take charge of their own growth and destiny (Masekela et al. 2022; Rasheed 2021). Whereas, the ultimate goal of GH is to ensure that those who receive assistance become independent (Chawla et al. 2022). If this is kept in mind, coupled with the existing level of sensibilization, perhaps everything will be simpler, including the right distribution of academic credit and authority (Chawla et al. 2022). HCWs from the Global North and the Global South must shed their respective colonial and post-colonial mindsets and fully embrace the shift in order to truly become the two

sides of the same GH&GS coin and complement one another to work collaboratively towards the same milestone—universal access to healthcare (Chawla et al. 2022).

11.4 Diversity in Global Health Education

Diversity means the presence of differences in socio-economic status, religion, race, gender, nationality, ethnicity, sexual orientation. In global health education, there can be diverse perspectives with respect to personal, social, cultural, demographic, gender, economic, and environmental and academic experiences.

As per World Health Organization (WHO), 1/3rd women at higher positions like Deans and Men have authored 70% publications. examined the unique barriers females face in global health and found that while care is largely delivered by women, the field is led by men. From these data, it can be seen as there is gender gap in academic medicine (Abimbola 2019; Morton et al. 2022).

COVID-19 affected the global health. As stated in BMJ Global Health, out of 115 identified COVID-19 task forces, > 4% had gender equality in their membership. Overall, there was unequal representation and inclusion of women which prevented the women needs which got overlooked or poorly addressed. Such example suggests that due to unequal gender inclusiveness, decision-making can influence the population at mass level (van Daalen et al. 2020). Gender equality should be implemented in academic sector, global health education so that in decision-making women needs can be taken care of.

11.5 Conclusion

To promote changes in behavior and attitudes, more transformational learning tools must be used. Collaborations in global education need to shift away from colonial views in order to become more egalitarian. Not only should colonial medicine's history and the ways in which it impacted local settings be covered in medical schools, but one-way transitory relationships should be minimized and sustained interactions should be encouraged. In order to ensure equitable non-hierarchical collaboration, several clear and specific guidelines and constructive strategies, cooperating research institutions, and funders have also been developed. Raising awareness and developing an ecosystem to handle such issues, which includes placing a stronger emphasis on the development of local human resources and increasing the proportion and diversity of locally trained staff in every sector should be practised. HCWs in the Global South should also be open to stepping outside of their comfort zone, letting go of dependency, strengthening local research capacity, and seizing the potential to direct their own development and destiny. While HCWs from the Global North and the Global South must let go of their respective colonial and post-colonial mindsets, the

ultimate goal of GH Education is to ensure that those who receive assistance become independent.

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Chapter 12
Women in Sustainable Businesses: Insights from India

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Abstract This chapter throws very relevant light on how women entrepreneurs are engaged in sustainable businesses, their challenges, and opportunities in India. The study employs a mixed methodology including quantitative survey and qualitative interview and Focused Group Discussion (FGD) tools. The sample consists of women entrepreneurs from various sectors ranging from Fabrics and Garments, Plants, Consulting, Jute Products, Recycling Wastes, and Food Business. The study finds that awareness of their sustainable business in an SDG domain, waste management, optimization of resources, reduction of operational costs by through waste management plan and new equipment purchases for energy accounting are present among women entrepreneurs. Yet there are serious challenges in terms of low profitability, expensive green methods, family responsibilities, and lack of confidence and self-resolve. However, the motivation behind working towards sustainable business is social value creation, employment generation, and environmental care. The

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chapter, thus, suggests the roles of circular economy for sustainable businesses and policy interventions in terms of tax benefits, subsidies, and various other financial schemes to overcome these challenges and promote sustainable business among women entrepreneurs.

Keywords Gender diversity · Sustainable business · Circular economy · Social value creation · Public policy

12.1 Introduction

On June 14, 2021, the Sustainable Development Solutions Network (SDSN) released the Sustainable Development Report 2021 (Sachs et al. 2021), which evaluated how well the member nations of the UN were doing, with regards to the 17 SDGs. With a national score of 60.1, India was placed 120th out of 165 nations. The International Spillover Index, which gauges how a nation's activities impact other nations' capacity to realize the SDGs, was also included in the study. Based on the index, India had a spillover score of 98.90, placing it 32nd out of 165 nations. Again, according to the SDG Dashboards and Trends (Niti Aayog 2011), India has made progress towards attaining SDGs 6 and 13—clean water and sanitation and climate action, respectively—and both these goals have been achieved. SDGs 1 (No Poverty), 3 (Good Health and Well-Being), 7 (Affordable and Clean Energy), 8 (Decent Work and Economic Growth), 9 (Industry Innovation and Infrastructure), and 14 (Life under Water) show modest improvement, while the other SDGs, according to the study, are either stagnating in their progress or lack data.

Up to 2030, the onus is on individual nations to assess and track their own national progress towards the objectives. India, a member of the Open Working Group (OWG), and entrusted with creating a proposal on the SDGs, has vehemently advocated for the concerns of developing nations. The proposal from India made it a point to highlight the significance of rapid and inclusive economic growth in uplifting a sizable percentage of the Below Poverty Line (BPL) population. It has also been noted that, despite significant infrastructure development progress, there are still significant challenges in reaching all societal groups with development (Ghai 2021). India has adopted the position that a development plan must include the SDGs. Although eliminating poverty and promoting development via inclusive economic growth remain the top development priorities, these significant obstacles will need for more funding and capacity-building initiatives. India has, therefore, placed a high priority on international cooperation for development and appropriate means of implementation, such as enhanced Official Development Assistance (ODA) and technology transfer on advantageous terms to assist poor nations (Ghai 2021). Again, by integrating the Sustainable Development Goals into their operations, Indian firms might support the government's efforts to realize the SDGs. Leading Indian businesses have fought over issues including waste management, green goods, green buildings, and energy consumption optimization. With smaller businesses needing

additional steps to enable them to become green, the problem is to make sure that such initiatives are accessible at all levels of firms.

12.2   Women in Sustainable Business in India

The link of women to nature or the environment is supported by literature. This connection may be traced back to the 1970s, when Francoise d'Eaubonne, a French novelist, first used the word "ecofeminism" in her book in 1974, called "Feminism or Death." According to the phrase, a woman is compared to nature because of the way she looks and the social roles that society assigns her, as a result of the physiological changes she goes through as a woman. This theory underlines how patriarchal (or male-centered) society treats both nature and women unfairly, showing how societal rules have an unwarranted dominance over both. Available literature on the subject describes women as being "closer to nature" in the nature/culture dichotomy (Tøllefsen 2011) and men as being "closer to culture" (Agarwal 1992).

The historical "Chipko Movement" (FII. 2019) is one example of how participation and responses of women in environmental issues vary from males. Research has shown that women are naturally more compassionate and nurturing than men are (Braun 2010). According to studies, women are also 1.17 times more likely than males to follow social endeavors, and they are 1.23 times more likely to seek environmental endeavors than economic ones (Hechavarria et al. 2012).

According to another finding (De Silva and Pownall 2014), women, as opposed to males, have contributed significantly to bringing about beneficial changes in people's lives and the environment in terms of social welfare and reducing carbon emissions.

In addition to the negative repercussions of globalization, such as the rise in consumerism and the careless use of natural resources, which fueled the demand for "ecopreneurship," it also created conditions for more dynamism and entrepreneurship amongst educated women. Due to certain traits like their fundamental mindset, women's inherent social conditioning, their entrepreneurial orientation, the innate proclivity to care for the environment, desire for education, and aspiration for employment opportunities, studies have shown that educated Indian women are more likely to adopt green entrepreneurship with minimal inducements than men.

In order to advance green entrepreneurship, also known as "ecopreneurship" in India, these entrepreneurial women might therefore prove to be a defining force. These female business owners may be able to encourage other ecosystem participants to adopt a more environmentally conscious mindset in addition to assisting businesses in making the transition, increasing demand for green goods and services, and achieving the twin goals of increasing employment and environmental output (Potluri and Phani 2019).

Under the circumstances, scientific research was conducted by Women's Indian Chamber of Commerce and Industry (WICCI) Sustainable Businesses Council (SBC) to document the various dynamics of a woman-owned sustainable business. This paper is an excerpt from the research, published with due permission.

12.3 Objectives of the Research

The study aims to identify and analyze the following aspects:

- Best practices for women-run sustainable business organizations.
- The current business approach of women entrepreneurs.
- The challenges and impact of women in sustainable business.
- The internal and external support received by the women entrepreneurs.
- The financials of a sustainable business by a woman entrepreneur.

The report also recommends changes and improvements in the core business structure and processes for moving toward and attaining sustainability by aligning them with the Sustainable Development Goals.

12.4 Research Methodology

A thorough study aims to better understand the numerous problems that women in sustainable business confront. Both primary and secondary data were gathered, revised, examined, evaluated, and reported on.

A research instrument was constructed as a result of a thorough literature evaluation. This triangulated the data that were gathered, both quantitative and qualitative. The research tool was a self-administered structured questionnaire, as well as focus groups, interviews, and assistance with semi-structured procedures.

The population of this study is roughly categorized as Indian women business owners who are operating sustainable enterprises. Thus, non-probability purposive sampling and the snowballing approach were used to interview Indian women entrepreneurs who identified as working in the sustainability sector.

A thorough Google Forms questionnaire was used for the initial phase of data collecting. The Women's Indian Chamber of Commerce Sustainable Businesses Council (WICCI SBC) and Sustainable Advancements members shared the link extensively via email and social media platforms like LinkedIn and WhatsApp. Although sharing in groups appeared to be a beneficial strategy, it was found that reaching out to individuals directly produced more results and was thus more successful.

An iterative process of pretesting and pilot surveys helped to identify the drawbacks of the questionnaire approach. This guaranteed scientific rigor and produced a reliable research tool. The questionnaire was divided into two sections: a broad introduction portion and a core section with more focused questions.

The respondents' demographic information was covered in the first portion, which also included 25 questions. There were both closed-ended and open-ended questions. The open-ended questions assisted in justifying the conclusions while the closed-ended interrogations allowed for an impartial study of the circumstance. The following were prioritized while creating the things: ensuring that each question was

readable; avoiding the use of double-barreled items, unclear pronoun references, and positively and negatively phrased items. A special effort was made to avoid asking questions that were laden, misleading, or unnecessary.

Responses from Sect. 12.1 were used to create the sample description, which was then used to summarize the samples and the measures while characterizing the fundamental characteristics of the study's data. The other 25 items in Sect. 12.2 served as the data source for the study's inferential statistics, which have been thoroughly examined and discussed in the following chapters. A total of 51 replies were received and taken into account for the study. No more replies were gathered for the study since 50 responses represented a theoretical saturation.

Responses were examined after data collection in order to draw conclusions and provide additional suggestions. When evaluating the suitability of the construct, six topic experts provided their subjective opinions, which is referred to as content validity or face validity.

The quantitative responses were subjected to a thematic analysis, and the key themes were numerically coded into categories. The main categories for each response were graphically shown using pie charts and bar charts, wherever deemed appropriate. For category and binary variables, the cross-tab approach using the SPSS software program was utilized effectively to examine the relationships between variables. Then, using the Chi-square statistic, statistically significant criteria for Successful Sustainable Businesses were determined.

Following the responses, two focus group discussions and three solo one-on-one interviews were held on each of the five core objectives: women in sustainable business, challenges, impact, support received from both internal and external sources, and finances. These discussions allowed participants to access real-world qualitative data and make recommendations.

12.5   Demographic Profiles of the Respondents

98.1% of respondents were women, while 1.9% of males responded on behalf of a woman-led organization. Of the respondents, 31.7% of women are between the ages of 46 and 55, 29.3% are between the ages of 36 and 45, and 22% are between the ages of 26 and 33.

12.6   Findings from Quantitative Phase

To determine the elements that contributed to the effective implementation of sustainable business, a cross-tabulation was done. The statistically significant criteria relating to the effective implementation of sustainable business are shown in the following table (Table 12.1). Since these are categorical variables, a chi-square test

was used to examine the degree of correlation between the successful implementation of sustainable business and the likely components that contribute to successful business. However, only the characteristics listed in Table 12.1 were found to be statistically significant variables:

- Awareness among entrepreneurs that their business operates in an SDG domain,
- Awareness about the principles of waste management, optimization of resources,
- Reduction of operational costs by recycling and measures for waste management.
- Documented waste management plan.
- Purchase of new equipment for energy accounting.

The fact that only the aforementioned elements were relatively important suggests that environmental sustainability has been given more weight in their assessment of successful business in terms of sustainability. When it comes to their firm's influence on the environment, SDG 12—Responsible Consumption and Production—has taken center stage, even though their primary goal is to make a difference by implementing a sustainable business cycle. Corporate Social Responsibility (CSR), other important social sustainability considerations, and employment creation are given less emphasis when it comes to influencing life on the planet. Thus, training and skill development might be used to instill a sense of the social dynamics that contribute to sustainability.

It is interesting that the sample of female entrepreneurs included more start-ups, and despite the fact that most of them link their company objectives with the SDGs, they were unable to identify a suitable organizational structure for conducting sustainable business. 75.6% of them fall in this category. As a result, they had a general lack of optimism about starting a profitable firm in an era of mass manufacturing.

The respondents said that people are gloomy because there are many aspects of sustainability that they are ignorant about. The issue is made worse by the numerous misunderstandings and difficulties surrounding sustainable businesses and efforts. For instance, waste management is a complicated, widespread problem that affects both the formal and informal sectors, involves numerous stakeholders, and involves various types of waste. Because of the complexity of the problem, no solutions have yet been found.

Table 12.1 Statistically significant characteristics

Factors	Significance of χ^2
Enterprise had sustainable business	0.017**
Knowledge of waste generated	0.094*
Reduction of operational cost by recycling and waste management	0.012**
Documented waste management plan	0.000***
Purchase of new equipment for energy accounting	0.000***
*Significant at 10% *Significant at 5% ***Significant at 1%	

They went on to say that this is due to a lack of knowledge, a dearth of educational resources on sustainability, as well as a lack of motivation and opportunity to embark on this entrepreneurial adventure. Many people are discouraged from pursuing sustainability enterprises due to the perception that such projects are challenging to undertake. As a result, many avoid from trying it themselves.

This suggests that organizations are declaring business strategy alignment with a small number of SDGs without any discernible impact of their actions or comprehension of the same, a practice known as "SDG washing" (Rygh et al. 2021). This, therefore, calls for assistance for female business owners in their efforts to generate employment, contribute to society, and effect noticeable changes therein. In addition, all of the respondents were passionate about sustainability and social effect, but they did not measure the impact that resulted from their efforts. There are several causes:

Lack of knowledge causes confusion about output and outcome metrics, short-term and long-term impacts, and direct and indirect impacts. It also results from a lack of knowledge and resources, including time and human resources.

Consequently, managing sustainability has the following difficulties and limitations:

1. Sustainable business is expensive.
2. Low profits.
3. Socially conscious business methods.
4. Eco-friendly practices.
5. The aptitude to assess impact.

Additionally, support is necessary to overcome the aforementioned difficulties.

Women have the following difficulties in maintaining their entrepreneurial ventures:

1. Gender inequality.
2. Family responsibilities.
3. A lack of resolve.
4. Low confidence and self-worth.

73.2% of women who own sustainable enterprises have been impacted by the current pandemic (COVID-19), which includes obstacles to working from home, sluggish work in progress, activity restrictions, decreased sales, increased costs, and more.

The COVID-19 outbreak and the resulting upheaval have actually had a disproportionately negative effect on female entrepreneurs. The pandemic appears to have had the greatest effects on women entrepreneurs in India of all the nations in this area, with two thirds of women attributing recent company closures to the epidemic (Elam et al. 2021). Women's increasing domestic obligations and a deterioration of societal inequities are some of the factors. The adoption of remote working models, the acceleration of the use of digital channels on both the demand and supply sides, and a shift towards digital rather than physical interactions are just a few of the catalytic changes brought about by COVID-19 that have the potential to level the playing field, particularly for women (Chawla and Sahni 2020).

However, the epidemic also had a beneficial effect on a few of the female business owners. This may be the result of two primary things: the heightened significance of some goods and services during the crisis, and the quick restructuring of the business model to meet the most pressing demands. According to Chawla, Megha, and Prapti Sahni, reinvention and quick adjustment to the "new normal" have proven to be the difference between some firms thriving and others having to close their doors permanently (Chawla and Sahni 2020).

To effectively develop a sustainable business that considers the Triple Bottom Line Approach of People, Planet, and Prosperity, enough help from diverse stakeholder groups is essential to solve the aforementioned problems. The following are some ways that the government may be of assistance:

a. Tax concessions.
b. Marketing assistance and market connections.
c. Financial assistance and digital competence.
d. Leveraging access to government orders (via the GEM portal).
e. Subsidies.
f. Impact evaluation.

The majority of respondents (36.6%) stated that financial returns were their biggest macro problem, followed by environment-friendly practices (14.6%) and socially responsible behavior (12.2%) (Fig. 12.1). 27% believe that the difficulties are related to finances, the environment, and socially responsible behavior as a whole. Micro obstacles such as a lack of funding, the availability of trained staff, a shortage of room and materials, problems with marketing and a new business model are at the core of these macro challenges.

Recent studies on entrepreneurship extensively acknowledge the necessity to define new methods for strengthening the sustainable use of resources, taking into

Fig. 12.1 Challenges faced in adhering to sustainability

Challenges faced in adhering to sustainabitlity
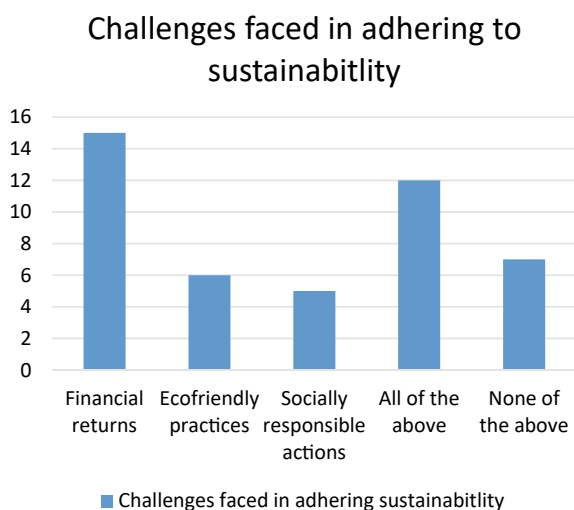
account big obstacles to sustainable development (such as climate change, water pollution, and inequality (Terán-Yépez et al. 2020). While this is happening, declarations, charters, and the UN's 2030 plan (UN report 2015)) highlight the necessity of a profound and dramatic shift in entrepreneurship to combat the effects of human activities that have given rise to a new period known as the Anthropocene (Bebbington et al. 2019).

Entrepreneurs must behave responsibly and take into account the effects that their businesses would have on both local communities and the global system (Cavallo et al. 2019). The creation of practices and evaluations that take sustainability into account in a firm's triple bottom line—that is, its environmental, social, and economic—is said to be the foundation of the notion of sustainable entrepreneurship, according to the literature (Fischer et al. 2020). Recent research, however, emphasizes the significance of taking into account the triple bottom-line components nested in a larger space produced by the interaction of numerous linked actors working towards a single goal: a sustainable entrepreneurial ecosystem (Alvedalen and Boschma 2017).

Sustainable business owners are nested inside a community in this ecosystem where each participant contributes to the system by participating in an interactive network that may encourage value co-creation (Donaldson et al. 2020; Moggi et al. 2020). Because commercial behaviors are increasingly being imposed on a different order, new studies highlight the significance of taking ecosystems into account in a way that is consistent with the natural world (Smitsman and Currivan 2019).

Although the majority of respondents were unable to identify the institutional assistance needed, financial support and training were the two most important forms of help. Such training should be offered at the level of industry associations for improved Sustainable Business implementation. Through this procedure, female entrepreneurs will be able to find business possibilities in sustainable businesses and raise money from markets with a stronger marketing presentation. Government agencies as well as industry associations can thus play a variety of roles in promoting female entrepreneurs. This study has shown that female business owners have a good comprehension of sustainable business practices and a strong desire to put them into practice. However, essential stakeholders must help pave the road for sustainable business.

12.7 Findings of Qualitative Phase

In this phase, the research could confirm that female company owners can actually recognize their enterprises as sustainable enterprises. The business sectors that emerge from the qualitative phase include:

1. Fabrics and garments.
2. Plants.
3. Sustainability consulting.

4. Jute products.
5. Recycling wastes.
6. Food business reducing wastages.

Sustainable business is actively being participated in by women. A kaftan is a particular sustainable product in terms of fabric waste, according to a woman business owner. Since the garment is produced end-to-end and the only fabric trimming is done for the neckline, there is no waste. Another female entrepreneur believes that through supporting women's empowerment, she can contribute to societal sustainability. Table 12.2 presents the main themes and sub-themes of motivation and challenges of sustainable business. The motivation includes social welfare, creation of value and sustainable products and processes. The women entrepreneurs suggested that there are benefits derived out of sustainable business in terms of profit and social value creation. They also believe that Sustainable Business is a catalyst to ensure women empowerment.

Apart from personal level challenges of being a woman in a patriarchal society, women entrepreneurs feel strongly about regulatory challenges. Rather than having complex certification for products that enhances costs, policies can promote reducing

Table 12.2 Showing thematic analysis of the motivation and challenges

Construct	Axial coding	Sub-coding
Motivation	Social welfare	Save environment, working for marginalized class and women, employment creation
	Creating value	Employment creation, career, sustainable lifestyle, waste reduction, training of farmers
	Products and processes	360-degree view of sustainable products
Opinion about the need for sustainability	Benefits	Profits along with social and environmental value
	Women empowerment	Sustainable business is a catalyst
Challenges	Knowledge gap	Lack of knowledge of GST and regulations, technology challenge
	Regulatory issues	Certification of products, licensing, high costs due to certifications and regulations
	Consistent growth	Economic challenge, accessibility, low margin, convincing customers, conversion rate low
	Personal challenge being a woman	Single mother, resistance to change, societal customs, and patriarchal society

complexity in regulation. Lack of regulatory knowledge can be overcome by outsourcing the tasks to the experts. Moreover, convincing customers to buy an expensive sustainable product will be difficult in itself which again, requires effective marketing strategies.

Out of 11 women, only two women were aware of the SDGs. Despite being aware, they have not aligned their businesses with SDGs. These two women are addressing SDG5, SDG8, SDG10, SDG12, SDG4, SDG17. This shows that knowledge on Sustainable Development Goals is required among entrepreneurs to run their businesses. Though they are engaged in Sustainable businesses, but a formal impact assessment is ignored in their businesses. Two women, however, have informally attempted to map customer satisfaction with quantum of participation. However, there is a pertinent gap arising in the sustainable businesses run by women entrepreneurs in the study. There appears no reason for not measuring the impact except the fact that the women entrepreneurs might find the task to be difficult due to lack of objectivity in impact measurement.

Women entrepreneurs feel that launching sustainable business is difficult due to lack of knowledge about sustainability, and products and services that are sustainable. Launching such products requires patience. It is also perceived that such businesses are not economically viable as low margins and high costs of eco-friendly inputs coupled with regulatory risks might end up into a high gestation period to reach break-even. It is also difficult to convince the customers about sustainable products. An entrepreneur quotes, "In general, people want to make profit and not engage in charity."

The reasons stated by the participants of being involved in sustainable business point to their instinct of nurturing and caring, corroborating the findings of other researchers in the literature. The statement "The time and generation we are living in has to make sense to us," from one of the respondents during the interview, suggests that sustainability is a way of life. Another businessperson wants to "preserve and transmit the knowledge of a generation for/to the progenies." Yet another participant makes a similar point when they discuss "eradicating the disparities that have surfaced due to the pandemic." Yet another entrepreneur aspires to establish a lasting global brand for her goods. Women have the positive outlook to work towards social goals despite obstacles.

Apart from family support, most respondents have not reported of much support, which validates the findings of Phase 1. One of them reports that support for collaborations and partnership arrangements can facilitate expansion of business. She received some support from the stakeholders in terms of showcasing their products on a platform at a low cost. All of them reported that they have not achieved breakeven. Some report to achieve it in a few years' time, while others are far away from break even. Waste management is an integral part of sustainable business and an entrepreneur report to reduce costs in her fabric business by using recycled cloth fabric wastes.

12.8   Discussions and Policy Implications

To encourage entrepreneurship, women business owners in India require improved access to capital, education, and networks. Women entrepreneurs are given specialized support by organizations like NITI Aayog's Women Entrepreneurship Platform, Catalyst for Women Entrepreneurship, and the accelerator for women in tech launched by Zone Start-ups India. They establish connections between them and key players in their sector and encourage networking among the women business owners themselves so that they may benefit from one another's knowledge and experiences. Additionally, they help with fundraising by giving them pitching tips and connecting them with possible investors. According to studies, measures to ease collateral restrictions can enhance equal access to credit (Khera 2018).

In India, both governmental and private organizations have started a wide range of efforts to encourage more women to start their own businesses. By offering access to mentoring and skill training, addressing gender-specific funding issues, and creating market connections, these interventions hope to make a difference. These projects have a lot of potential for replication or growth, which would greatly help more women entrepreneurs given their promising early results. These programs include the Godrej's Beauty-preneur program, the WE Hub, the Mann Deshi Foundation, the TiE Global, Sheroes, and the Telangana government's 2018 launch of the WE Hub (Google & Bain and Company 2019).

Despite the fact that the majority (39%) of them did not get any government aid, those who did, received support in the form of financial support, subsidies, and marketing help.

According to a survey (EdelGive Foundation), 84% of the women still relied on their spouses, family members, or sold their assets for financial help towards starting and maintaining a business despite the existence of government initiatives and advantages for women entrepreneurs. Barely 11% of the women said they were aware of the benefits that were available, but barely a third of those 11% actually used them because they were afraid they wouldn't be able to pay back the loans, which would put their families through further hardship.

A 2019 OECD study found that compared to women, considerably more male entrepreneurs used bank loans to launch their businesses, regardless of the availability of collateral. Only 27% of women use formal lending institutions, according to study conducted by the World Bank in 2012 called "Measuring Financial Inclusion: The Global Findex Database" (Demirguc-Kunt and Klapper 2012).

According to the respondents, the government must provide four things for businesses to operate sustainably. These include cash help, tax breaks, marketing aid, and subsidies.

Given the foregoing, it may be noted that women entrepreneurs need to be guided to inform them of the various financial schemes that the government has implemented to encourage entrepreneurship among women, as well as older programs that have been modified to facilitate women's businesses. These include TREAD (Trade

Related Entrepreneurship Assistance and Development) and the government's Stand-Up India program. To assist women from new and smaller groups to "start-up," the Rashtriya Mahila Kosh additionally offers several loans of up to (Indian Rupees) INR 10 lakh (INR 1 million) under various programs. Zone Start-ups India has developed the Women Entrepreneurship Platform (WEP) by NITI Aayog to help and advance female-led tech businesses (ISST & IWWAGE 2020). The Indian government has also been developing a number of programs to help women entrepreneurs strengthen their skills, as well as giving them access to the necessary value-added services to make conducting business easier.

The final issue in the entire study appears to be lack of awareness about sustainable business practices among women entrepreneurs. Though many of them claim to start a sustainable business, but not very confident about pursuing it. Thus, proper training and awareness programs on sustainable business are the needs of the hour.

12.9 Way Forward

Sustainable business practices might be achieved by moving from a linear to a circular economy. The study's female entrepreneurs are conscious of recycling and trash management. Thus, using circularity to describe their company as sustainable may be effective. To encourage sustainable enterprises run by female entrepreneurs, the adoption of a circular economy must be inclusive, holistically collaborative, and incorporate both genders' participation. The majority of the world's families and communities are headed by women, but as a result of microfinance, there has been an increase in the number of female entrepreneurs in both developed and developing nations.

As a result, gender equality and increased female participation in economic development are crucial for circularity because women can influence responsible consumption and production behaviors by serving as role models and fostering a circularity-friendly culture at the many levels in which they participate in daily life.

A circular economy is only feasible with systemic change in all areas, including government policies, how businesses source and use raw materials, how new products and solutions are designed, how infrastructure for collection and recycling is developed, how education is provided, how consumer behavior is altered, and many other areas. Women are essential to achieve systemic transformation in all of these stages, spanning value chains and industries, and in introducing more ethical business practices that successfully balance success with beneficial social effect.

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