Sustainable Entrepreneurship

Edited by

Amrita Dutta

Sandeep Poddar

Amiya Bhaumik

Published by :
Lincoln University College, Malaysia
in collaboration with
Lincoln Research and Publications Limited, Australia

www.lucp.net • www.lincolnrpl.org

Sustainable Entrepreneurship

Amrita Dutta

Principal
Netaji Nagar College, Kolkata, India

Sandeep Poddar

Deputy Vice Chancellor (Research & Innovation)
Lincoln University College, Malaysia

Amiya Bhaumik

President
Lincoln University College, Malaysia

Published by :
Lincoln University College, Malaysia
in collaboration with
Lincoln Research and Publications Limited, Australia
www.lucp.net • www.lincolnrpl.org

Copyright © 2022

Lincoln University College, Malaysia and Lincoln Research and Publications Limited, Australia

All rights reserved

No part of this book can be reproduced or transmitted by any means, electronic or mechanical, including photocopying recording or by any information storage and retrieval system without prior written permission from the publisher.

Published on: 19th December, 2022

Published by:

Lincoln University College

Wisma Lincoln

No. 12-18, Off Jalan, Perbandaran SS 6/12

47301 Petaling Jaya Selangor Darul Ehsan

Malaysia

Tel.: +603-7806 3478 Fax: +603-7806 3479 Toll Free: 1-300-880-111 E-mail: lucp@lincoln.edu.my

Web.: www.lucp.net in collaboration with

Lincoln Research and Publications Limited

144A, Marsden Road Ermington, Sydney NSW 2115 Australia

Tel.: +61-411497511

E-mail: info@lincolnrpl.org Web.: www.lincolnrpl.org

ISBN: 978-0-6488798-9-3 eISBN: 978-967-2819-14-1 doi: 10.31674/book.2022se

Price: USD 100

Editors



Amrita Dutta

Principal

Netaji Nagar College, Kolkata, West Bengal, India

Dr. Dutta has completed a Major Project on Alienation and Existence in light of Literary pursuits of Tagore and Sartre granted by UGC. She also did a minor project on' Speech Act' granted by UGC. She was a fellow of a Pilot Project on 'Retired Women

Academics in West Bengal' funded by Women Studies of Jadavpur University. Dr. Dutta has written and edited books, journals and contributed chapters and articles of many books. Dr. Amrita Dutta is currently co-supervisor of two research scholars, external examiner of one research scholar and has participated as an expert in Pre-Registration Seminar of a Research Scholar. Dr. Dutta is a member of Board of Discipline and NSS Advisory Board of C.U and Presidency University. She was invited to give lectures both in Colleges and Universities and one of them was on APJ Abdul Kalam. Dr. Amrita Dutta took both UG, PG classes in Colleges, JU and RBU and has been acting as a Principal for more than 10 years. She has also received certificate of Honour from more than one college and university for her outstanding service to the society and mankind.



Sandeep PoddarDeputy Vice Chancellor (Research & Innovation)
Lincoln University College, Malaysia

Prof. Dr. Sandeep Poddar, presently the Deputy Vice Chancellor (Research & Innovation) of Lincoln University College, Malaysia. He also served as Senior Research Director and Executive Editor (Publications), Lincoln University College, Adjunct Faculty

(Honorary), Bharat Center Canada. He has graduated from University of Calcutta in 1993 with Honours in Zoology, he has obtained Post Graduate Diploma in Dietetics from All India Institute of Hygiene and Public Health 1995, Master of Science in Zoology with specialization in Biochemical Genetics from Dayalbagh Educational Institute 1998 with distinction. In addition to this he also obtained Master of Business Administration (MBA) from Lincoln University College in 2021. He has completed Ph.D. in Zoology from Vivekananda Institute of Medical Sciences on Cytotoxicity in 2004. After completing Ph.D. he pursued Post Doctoral Research in different projects on Hemoglobinopathies and Oral Cancer mutation. He is serving as reviewer of several International Journals. He has published several research papers, organized international conferences, and edited books in Malaysia, Australia and India. Dr. Sandeep is founder Assistant Secretary of Dr. Tarak Nath Podder Memorial Foundation, Kolkata, India.



Amiya Bhaumik
President
Lincoln University College, Malaysia

Dr. Amiya Bhaumik is the Founder and Former Vice-Chancellor of Lincoln University College. He is purely from the field of education. Dr. Bhaumik is Executive Vice President of the International Education Consulting Group, St. Louis, USA since 1999. Dr. Amiya

Bhaumik was Research Fellow of UNESCO, Paris. During this tenure, Dr. Bhaumik has traveled extensively to Europe, Africa, Asia and Latin America. He has served as Professor of Business Administration in University of Lucknow, India and in University of Malaya and many other places. Dr. Amiya Bhaumik is a very dynamic personality. He has authored numerous book chapters and has huge number of publication in many national and international journals. He has also edited several books.

Contents	_Pages
Preface	i-iii
The Growth of Ecotourism - Ecopreneurship the Means – An Introspection Biswajit Bhadra	1-10
Microfinance, Entreprenuership and Sustainable Development Bhajan Chandra Barman	11-16
Sustainable Entrepreneurship: The Case of Mitticool Private Limited Kaberi Bhattacharyya	17-21
An Overview of Sustainable Entrepreneurship Anupam Karmakar	22-34
Translation and Sustainability: Towards the Concept of Translator as Entrepreneur Poulami Roy	35-42
Sustainable Entrepreneurship – Why does it Matter Today? Amrita Dutta	43-47
'Swiggy's' Sustainability Drive: The Debut Tale Bipasha Ghose Dastidar	48-52
Art Therapy; a Healing Tool in Health Care Anindita Mitra, Ishita Mandal, Lipika Mondal	53-58
Socio-economic Inequality and Sustainability of Emerging Economies of South Asia Sneha Roychowdhury	59-70
Women/Men Entrepreneurship in Textile Industry in India Bibekananda Basu	71-95
The Impact of Social Media on Sustainable Entrepreneurship: A Case Study of Rural Women in West Bengal Saddam Hossain, Anuradha Halder	96-105
Entrepreneurs and Role of Leaders Tinni Dutta, Sujata Saha	106-115
Self-Rated Health for the Elderly People in India: Sustainable Enterprise for a Sustainable Society Soma Ghosh	116-123
Sustainability and Circular Economy in Mining Syeed Afroz Hussain, Deepak Pandey, Manjeet Singh Bhullar, Tulika Chakrabarti	124-135
Entrepreneurship as a Catalyst in Creating Sustainable Livelihood of the Handicraft Artisans of India Sriparna Guha, Anirban Mandal, Sandeep Poddar, Fedric Kujur	136-147
A Study on Sustainable Entrepreneurship Iffat Jahan Qaiser	148-156

Preface

Discovering, developing, and taking advantage of business opportunities that advance sustainability by benefiting society at large through social and environmental benefits is known as sustainable entrepreneurship. Sustainable entrepreneurship combines economic, environmental, and social factors into the goals, actions, and planning of an organization. Innovative businesses are those that take social and environmental factors into account. The book intends to point out the opportunities that arise from putting sustainable entrepreneurship into practice.

Nowadays, ecotourism is widely recognised as a powerful tool for safeguarding forests, wildlife, biodiversity, and picturesque landscapes. Existentialism takes many different forms, but ecopreneurship is a particular brand of existentialism. Therefore, ecotourism and its natural assets and raw materials to create, as well as directing people to travel is an attractive force. The economy based on fossil fuels that has been in use since the industrial revolution is no longer able to support the growth of humanity, according to Bhadra's explanation in the first article.

The encouragement of female entrepreneurs to launch small companies in rural areas is greatly aided by microfinance. Rural impoverished women are now managing small businesses in addition to farming and household duties. They are employed in a variety of microbusinesses, such as baking, dairy farming, poultry farming, etc. According to the author of the study "Microfinance, Rural Women Entrepreneurs, and Sustainable Development," microfinance significantly influences the decision of female entrepreneurs to launch small firms in rural areas.

In order to survive, people are being put to the test by today's degraded natural environments, and the results are not always satisfying. These conditions include pollution of the air, water, and food. Kaberi Bhattacharyya brings out the path-breaking entrepreneur and visionary versatility and resuscitate attempt to revive the age-old tradition of clay pottery in India and in keeping these cultures alive.

Sustainable entrepreneurship is the term used to define the relationship between entrepreneurship and sustainable development. Development that is sustainable typically satisfies current requirements without endangering the capacity of future generations to satisfy their own needs. The primary goal of the essay "An Overview of Sustainable Entrepreneurship" is to define entrepreneurship and discuss the relationships between entrepreneurs.

Sustainability implies harmony, a strong sense of cooperation, and the pursuit of the welfare of all. There are many obstacles in the implementation of sustainable practices and different actors might regard different practices as sustainable. The fifth article examines several current scholarly studies that concentrate on entrepreneurship and translation within the framework of sustainable development.

Sustainable entrepreneurship is a concept that emphasises the long-term effects of company decisions on the social and environmental landscape. The importance of sustainable entrepreneurship can be considered as a unique viewpoint that links the creation of economic, social and environmental values with a emphasis on the welfare of future generations. The author examines the tensions that exist between the

concepts of sustainability and entrepreneurship in the article "Sustainable Entrepreneurship - Why does it matter today."

The term "sustainable entrepreneurship" describes the process of enlisting fresh resources to launch various initiatives that would result in structural improvements in both the social and environmental spheres. The article "'Swiggy's' Sustainability Drive: The Debut Tale" attempts to examines Swiggy's success story and all the elements that contributed to its achievement of this outstanding position. In light of this context, it is impossible to deny the emergence of sustainable practises in existing businesses that embrace societal advancements as a whole.

While battling illness in 1942, British artist Adrian Hill found the advantages of painting and drawing. Midway through the 20th century, art therapy gained widespread popular acceptance as a therapeutic strategy. Under the direction of a qualified practitioner, art therapy is used to unwind or engage in self-care through creativity. The authors of this article have provided a thorough analysis of art therapy that highlights its advantages and potency for both mental and physical well-being.

The COVID-19 pandemic's scars have delayed expansion, giving fuel to the fire. South Asian inflation, rising food and energy costs, trade restrictions, a lack of food security in the area, gender inequality, unequal growth and distribution, unplanned migration putting an unprecedented strain on the informal economy, etc. In this chapter Roychowdhury discusses socioeconomic inequality and the viability of South Asian emerging economies.

The primary sources of human income in the past were cottage industries, handloom production, and handicraft manufacture. As science and technology advanced, people tended to retain their way of life in the industries, offices, various sorts of businesses, banks, etc. As a result, entrepreneurship began to slow down. In his article, Basu covered the most potential growth areas for entrepreneurship and creative ideas with engagement of women and men.

Sustainability in business, whether in terms of the environment, society, or economy, is growing in popularity. Due to its influence on the entrepreneurial environment and ability to promote innovation through unrestricted knowledge flow, social media has a huge effect on the life of an entrepreneur. In their study, Hossain and Halder make an effort to explain the role of social media platforms in the development, marketing, and long-term viability of commercial organizations.

The paper "Entrepreneurs and Role of Leaders" demonstrates a link between entrepreneurial leadership characteristics and business performance. The paper reveals the key findings that leadership benefits executives with an entrepreneurial mindset, allowing them to dramatically improve the performance of their firm.

Self-rated health has become a popular topic of debate because of the COVID-19 pandemic, which has turned healthcare into an absolute emergency on a worldwide scale. The thirteenth article seeks to highlight the prevailing health crisis, especially in

relation to the elderly population's self-rated health status following the sudden COVID-19 pandemic, as well as the government's efforts to manage healthcare systems as sustainable businesses in order to safeguard the lives of the elderly population.

Sustainability and Circular Economy in Mining is a newly developed approach in the domain of mining that aims to upgrade cutting-edge technology for mine operations, which improves both the environment and profitability. At the same it reduces the environmental impact of mining once operations are completed. Chakrabarti et al., designed their book chapter to ensure that everyone is aware of the significance of environmental concerns in mining as well as the value of the mining sector and the techniques to thrive as a mining industry entrepreneur.

According to Guha *et al.*, entrepreneurship serves as a catalyst for establishing sustainable livelihoods for Indian handicraft artisans. The study "A Study on Sustainable Entrepreneurship" contributes to the understanding of the concept of sustainable entrepreneurship by identifying that factors other than entrepreneurial will, such as social and cultural contexts and institutional realities, may have an impact on the adoption of sustainable practices in small businesses.

The editors are grateful to the management of Netaji Nagar College, Kolkata, India and the administration of Lincoln University College, Malaysia for their assistance and approval in publishing this book. We are grateful to the authors for their worthwhile contributions. We hope and anticipate that this book will offer all readers and researchers in this field a useful learning experience and a citation resource.

Amrita Dutta Sandeep Poddar Amiya Bhaumik

doi: 10.31674/book.2022se.001

The Growth of Ecotourism - Ecopreneurship the Means - an Introspection

Biswajit Bhadra

Department of Commerce, Netaji Nagar College, Kolkata, West Bengal, India Army Institute of Management, Kolkata, West Bengal, India

Corresponding Author's Email: biswajitbhadra09@gmail.com

ABSTRACT

Ecotourism is now widely acknowledged as a potent instrument for protecting forests, wildlife, biodiversity, and beautiful landscapes. It accomplishes this through developing viable, alternative sources of income for people that depend on forests, as well as public and decision-makers are becoming more aware of conservation. To ensure that the communities are interested in the conservation of forests and wildlife, it is crucial to create a sustainable flow of non-extractive financial advantages from the environment for the communities in order to endorse community control and managing the environment. Perhaps the only way to achieve this is through ecotourism. In order to make ecotourism more attractive and effective, ecopreneurship is one of the most important professions that will provide proper guidelines for the enrichment of ecotourism. In this article, an attempt has been made to explore to what extent ecopreneurship contributes to the growth of ecotourism in India.

Keywords: Environment, Ecotourism, Ecopreneurship

Introduction

The first atomic bomb was detonated at Alamogordo in 1945, ushering in a new age for mankind—the era of the social sciences. For the first time in his long battle to extract a living from his surroundings, man now has the promise of nearly unlimited control over his physical reality. Thanks to the remarkable success of those scientists who are engaged in doing research on cosmic energy, they have an idea about the sources of energy in the atom. The man now possesses the ability and knowledge necessary to feed, clothe, and house the entire globe. Nevertheless, millions of people go without food, clothing, or housing despite this knowledge (Combs, 1959).

The greatest problems of the time that the human civilisation is facing, are no longer problems of production and control of 'things' but of communication and cooperation among people. Having won control over the material world, the people of the world are now confronted with a problem that was not known to them earlier, which can be ascribed to 'how to control ourselves'! Human beings are not concerned about the atomic bomb, but the fear lies with the persons who may use it because of the fact that

"Fat Man" and "Little Boy" were dropped in Japan in 1945.

It is of no use to mention that human beings have achieved control over 'things' only to find themselves faced with the equally vital problem of learning to live with one another.

It is of no use to mention that the business of doing business was the mantra of the past century. This meant that profit and shareholder value took precedence over employee welfare and environmental protection. While this laissez-faire may have provided some basis for prosperity, it came with high social costs for many and long-term environmental costs for the planet. Corporate social responsibility has been on everyone's lips for years. This implied that a corporation should integrate social principles into all aspects of its operations. The issue was that this truly only applied to profitable pursuits. The issue was that this truly only applied to profitable pursuits. Anything different would be a breach of the corporation's obligation to maximise profits for shareholders. The current time period that the present generation is passing through is different. There is no real scientific reason to question the fact that the world's major ecosystems are all in decline. Why? As per the observation of the United Nations Millennium Ecological Assessment of 2005, human activities are putting so much strain on the world's natural systems that the earth's ability to support future generations can no longer be taken for granted. Former UN Secretary-General Kofi Annan stated that the entire basis for life on Earth is deteriorating at an alarming rate.

In addition to the statements above, it is wise to refer to the UN's 2015 position. Billions of fellow countrymen continue to live in poverty and are denied a life of dignity. Inequality within and between countries is growing. Large gaps exist in terms of opportunity. wealth, and power. Gender inequality is still a major issue. A big worry is unemployment, especially among young people. Global health threats, more frequent and severe natural disasters, escalating conflicts, violent extremism and terrorism, and related humanitarian crises and displacements reduce the development gains achieved in recent decades. A significant portion may be lost. The depletion of natural resources and the detrimental outcomes of environmental degradation, such as desertification, drought, land degradation, freshwater scarcity, and biodiversity loss, have been added to the list of issues facing humanity and are getting worse. Climate change is one of the most significant issues of present time, and because of its detrimental impacts, sustainable development is becoming increasingly challenging for all nations. A sizable portion of the least developed nations, small island developing states, coastal regions, and low-lying coastal states are negatively impacted by climate change, including sea level rise, ocean acidification, and other effects. There is a conflict between the biological processes of Earth and the survival of numerous societies.

Considering all the risks and to mitigate the same the United Nations in 2015 made an attempt as a universal call to take action for the Sustainable Development Goals (SDGs), and in this call, the UN emphasised on the necessity of its elementary needs of

The Growth of Ecotourism

civilisation which are nothing but -

- to end poverty,
- protect the planet, and
- ensure that by 2030 all people enjoy peace and prosperity.

In this journey, the UN has identified 17 SDGs that are to be integrated in such a way that action in one area will affect outcomes in others, and that development must balance social, economic, and environmental sustainability.

What are those 17 SDGs:

- 1. No poverty,
- 2. zero hunger,
- 3. good health & well being,
- 4. quality education,
- 5. gender equality,
- 6. clean water and sanitation.
- 7. affordable and clean energy,
- 8. decent work and economic growth,
- 9. industry, innovation and infrastructure,
- 10. reduced inequalities,
- 11. sustainable cities and communities.
- 12. responsible consumption and production,
- 13. climate action,
- 14. life below water.
- 15. life on land.
- 16. peace, justice, and strong institutions,
- 17. partnerships for the goals. (https://www.undp.org/)

What role an entrepreneur is to play in this connection?

It is known to all that entrepreneurship is considered an important engine for economic and non-economic development because it helps create jobs and improve the quality of products and services. The main goal of an entrepreneur is to fill a gap in the market or

enhance how this need is already being met. Different authors have identified entrepreneurial opportunities according to their own perceptions, and these are: the triple bottom line approach, CSR, social entrepreneurship, environmental entrepreneurship, and mainstream entrepreneurship. All actually fall under the purview of sustainable entrepreneurship.

So, in a nutshell, sustainable entrepreneurship endeavours value creation that will be of immense importance for society through creation of opportunity, and maintainable development in an uncertain environment. This demands a willingness to take risks, an inventive mindset, awareness, and focused ethical considerations, and thereby it will help to encounter challenges with respect to society, the economic situation, and the environment.

Literature Review

In this article, an attempt has been made to explore to what extent ecopreneurship contributes to the growth of ecotourism in India.

Ecotourism - the concept

Focused on the improvement or preservation of natural systems through tourism, ecotourism is a distinct subdivision of the tourism sector. For many people, ecotourism means different things. For some, it's a catch-all phrase for outdoor activities, adventures, cultural tourism, and gentle adventure. Ecotourism was first used by Héctor Ceballos-Lascuráin a Mexican environmentalist, in 1983. He used the term "educational ecotourism" to characterise nature-based travel to comparatively undeveloped places. The responsible use of natural resources is ensured by ecotourism, which also creates employment opportunities for locals (Bhattacharya, Chowdhury & Sarkar, 2012).

According to the International Ecotourism Society (2015), ecotourism is a responsible form of nature tourism that involves interpretation and teaching, protects the environment, and enhances the quality of life of locals. The goal of ecotourism is to benefit communities, the environment, and sustainable travel. One of the key areas that ecopreneurs are involved in is ecotourism, as they work to change the industry so that its practises benefit various fabrics of society, including communities, wildlife, and tourism. Eco-entrepreneurs attempt to realise their dual purposes, which encompass both social and financial as well as environmental value creation, and they aim to address unsolved environmental challenges.

The World Conservation Union (Brandon, 1996) observes that ecotourism relates to visiting relatively untouched natural places in an environmentally responsible manner that encourages conservation, has no detrimental influence on the area's native inhabitants, and offers opportunities for their active and fruitful participation in the local economy.

The Growth of Ecotourism

Authors including Berle (1993) introduced concepts like "green entrepreneur," "environmental entrepreneur," and "eco-entrepreneur," in the early 1990s, which have been summarized to "ecopreneur" since then.

Importance of ecotourism

Travel can teach people more than just geographic facts. It gives them the opportunity to totally immerse themselves in the cultures and ways of other people, and it leaves them with enduring memories that are unlikely to be forgotten. Besides the above, there are other reasons behind the importance of ecotourism, and these are as follows:

- Ecotourism benefits both people and the environment, and it's a great way for everyone to learn about sustainable travel.
- Ecotourism encourages economic stability and makes us more sensitive.
- Carbon footprint is decreased through ecotourism. Animals suffer when people fail to travel sustainably, and it is easier than ever to plan a sustainable trip.

Ecotourism - some issues

The phrase "ecotourism" refers to environmentally friendly travel to remote locations with educational value. For calm, contentment, and enjoyment, people are turning to nature across the world.

Ecotourism is founded on three theories: ecological, marketing, and economics. But the human-centric and bio-centric approaches are becoming less popular. The dominance of man is the foundation of the human-centred approach. This strategy highlighted that God gave man the authority to use the natural resources that are given to him to meet his needs. Human superiority is disproved by a biocentric approach. Man is viewed as only a connecting point in the larger ecological system.

This is built on the ideas of respect and trust for one another. Using these two methods as a foundation, the following are the issues related to ecotourism:

Developing a tourist strategy: A comprehensive strategy would cost a lot of money to implement, creating local community capacity for managing and operating the sector, as well as supporting infrastructure.

Impact of taxation: This can be seen from two angles: taxes on visitor spending and fiscal taxes and advantages provided to the ecotourism sector. Since the government of India abolished the 20% spending tax and expanded the income tax benefits offered to infrastructure units and hotels' duty-free imports of consumer goods, including alcohol, the impact of taxes on the tourism industry is very significant.

Roads: Faster and more effective transportation of tourists and related goods from airports, stations, and tourism properties requires quality roads. The condition of the

roadways has been terrible.

Airports: They provide a visitor with their first direct experience. But regrettably, India's airport infrastructure has much to be desired, including crowded airports, unsuitable layouts, and the country's airport authority's monopoly. Proper amenities, including utilities, shopping centres, and lengthy delays in immigration processing, are lacking. Clean airports that make it easy to arrive are a must-have for international tourists, as are accessible information and tour guides and clean public utilities.

Ecotourism project funding and sustainability: The development and upkeep of flora and fauna as well as other components of solely bio-physical habitats like natural parks, wildlife refuges, or wet areas are required.

Ecopreneurship - the concept

The phrases "ecological" and "entrepreneurship" are combined to form the term "ecopreneurship." Sometimes an entrepreneur pursues success by taking advantage of market possibilities despite the repercussions. This may be viewed as at odds with the desire to protect the environment and stop environmental harm brought on by market forces. Hence ecopreneurship, which refers to venture activity that involves environmental consciousness, is frequently considered sustainable entrepreneurship (Galkina, 2021). Since the late 1990s, ecopreneurship has become a well-liked area of tourism research. Some scholars have used the word "ecopreneurs" to refer to small-scale business sectors built on the principles of sustainability that supply green services or products while also fostering the economic well-being of nearby communities. Therefore, ecopreneurs handle environmental issues in addition to achieving the economic goals of their communities.

Ecopreneurs - their role

In the adoption of more environmentally friendly business practices, entrepreneurial people and their businesses have a great role to play. Growing environmental awareness is creating one of the largest new worldwide marketplaces as the first decade of the twenty-first century comes to a close. This phenomenon is known as a "clean tech boom," and some believe it will last longer than the dot-com boom that came before it. This development has been motivated by the realisation that business has a crucial role to play in addressing issues like climate change because the traditional response of many environmentalists and governments (namely, to encourage behavioural and attitudinal change among the general population) is insufficient in and of itself to ultimately produce desired environmental outcomes. A crucial part of the sustainability movement, market-based solutions have significantly increased the number of new, so-called green businesses. For academics and decision-makers trying to comprehend the nature of "green" corporate operations, this represents a new stage. Environmental business management has typically concentrated on the how and why

of current companies going green. It has invested a lot of time and effort in researching the resources that can be used to help businesses become more environmentally friendly and sustainable, classifying and categorising how current businesses are responding to sustainability and environmental agendas, and identifying the challenges and incentives that can be used to encourage businesses to "go green."

Developments: Ecopreneurship differs from traditional entrepreneurship because it also forges links between environmental advancement and commercial success. Ecopreneurs can profit from environmental concerns by maximising energy and resource use, reducing waste, and utilising and respecting ecosystem services. This initiative therefore began with the notion that environmental issues could be solved by creating environmentally friendly goods and services that offered both commercial opportunities and environmentally sustainable solutions. The Ecopreneurship philosophy is an effective technique to train aspiring entrepreneurs to use their businesses to not only make money but also to contribute to solving major environmental issues. It is a deliberate action with the objective of preserving and enhancing the condition of an environmental resource impacted by human activity. Contrary to what the word implies, it involves managing how human cultures interact with the environment and how their actions affect it. Environmental resource management makes an effort to guarantee that ecosystem services are saved and maintained for fair use by future human generations as well as maintain ecosystem integrity as an objective in itself by taking into account moral, financial, and ecological issues.

Ecopreneurship - the mechanism to create ecotourism

It is plausible that implementing environmentally friendly company practices will present entrepreneurs with a wider variety of opportunities. The transition to a maintainable business framework offers a variety of advantages that resourceful people and businesses can effectively discover and exploit. These include, among other things, the creation of new goods and services, enhancements to the effectiveness of current businesses, fresh approaches to marketing, and alterations to current business models and procedures. However, green entrepreneurship is essential because it may play a big role in the general change to a more sustainable economic paradigm, as well as because it can open up new opportunities for the brave pioneers who recognise and seize them. Entrepreneurs in market-based economies play a critical role in the eventual adoption of green business practises by the greater business community through the leadership they provide to other enterprises. Ecopreneurs serve as a "pull" element that encourages other businesses to aggressively go green, generating competition for the survival of the market by displaying the financial rewards that come from being more environmentally friendly. Several microfinance and company funding programmes have been created for seasoned business owners in order to supply startup and expansion money for green firms.

Entrepreneurs are looking for possibilities to make remarkable profits, notably those related to the environment. There wouldn't be any entrepreneurs if there weren't lucrative prospects. Since there are many entrepreneurs, it stands to reason that there are a lot more of these profitable chances. Since environmental concerns have gained importance in recent years, a surprisingly large number of lucrative options have been discovered to reduce environmental pollution. Contrary to what is taught by neoclassical economics, free markets are in fact characterised by a persistent disequilibrium that permits the emergence of spectacular gains. The drivers of this disequilibrium are the entrepreneurs who innovate and improve their technology, organisational structure, and business processes. This market imbalance is caused by entrepreneurship's creative destruction as well. They also have multiple "market failures" as their source. For instance, businesses and consumers haven't always chosen the best energy technology, even at the present price. Entrenched oligopolies or monopolies, well-respected regulatory bodies, institutional segregation between decision-makers and the paying customers, and a lack of technical expertise are the most likely reasons for failure.

The market is yet another arena where chances for products and services that are environmentally friendly can be found. Customers are willing to pay more for ecologically safe products. Customers who are concerned about the environment and what they eat are driving up demand for eco-friendly products and services. This served as the main impetus for several businesses to adopt the "green concept" in its entirety. The cosmetics sector may be the model for this innovative strategy that takes into account the components, production, packaging, promotion, and overall image. A variety of inter-organizational collaborations and networks have been established over the past 20 years to increase awareness, share best practices, and coordinate action. The Social Ventures Network, Business for Social Responsibility, and the World Business Council for Sustainable Development are a few examples of these networks. There have also been instances of businesses collaborating with non-profits to advance both business and the environment. For example, Ben & Jerry's and The Body Shop collaborate with Cultural Survival on projects including rainforests. Aside from business collaborations, a number of companies have come forward to emphasise environmental protection. In India, the Tata group of industries is an example. International criteria for sustainable business practices greatly influence the operations of Tata Group enterprises. However, a larger part of the group's actions in this area are motivated by conviction and decision. Its support for initiatives to preserve plant and animal species, enhance the use of land and water, and preserve large expanses of forest and natural areas stems from this. Some examples of ecopreneurship that can be cited under the Tata group are as follows:

The Taj Group's 'reef recharge' project

In order to expand coral coverage close to the resort and promote healthy coral growth

on the nearby reefs, Taj Exotica Resort and Spa and Ocean Dive Maldives collaborated on this initiative in 2011. The diversity of wildlife in the area has already increased.

The botanical reserve at Tata Chemicals

Tata Chemicals built a 150-acre reserve that is home to more than 114 kinds of exotic plants and 21 types of native plants on the side of its soda ash facility in Mithapur, Gujarat. Over 70 different bird species, some of which are endangered, can be found there, along with monitor lizards, the rare star tortoise, jackals, wild boars, and the Neelgai.

Habitat of wetlands at tata motors

Tata Motors has converted a scrubby, desolate area inside its 1160-acre facility in Pune's densely populated Pimpri-Chinchwad industrial district into a natural wetland ecosystem that spans 245 acres. This urban green space acts as both a natural source of oxygen and a haven for migratory birds.

Two categories can be used to categorise the efforts of different Tata companies, both big and small, to preserve and improve the environment in and around their operational areas. First, there is the philanthropic focus of the Tata Trusts, which supports a variety of non-governmental organisations working in fields like the management of natural resources, community development, and livelihoods. The second is the group's contribution to conservation (https://www.tata.com/community/environment).

Conclusion

Entrepreneurship is a unique form of existentialism, but ecopreneurship is not just anybody's existential philosophy. Businesses that are not built to be sustainable harm people's health, shorten one's time on Earth, and waste the legacy people wish to leave for future generations, regardless of where they are on the globe. The initiatives taken by different Tata companies, big and small, to safeguard and improve the environment in and around their operational areas can be divided into two groups: first, there is the philanthropic focus of the Tata Trusts, which supports a variety of non-governmental organisations working in fields like the management of natural resources, community development, and livelihoods. The group's involvement in conservation comes in second.

The theoretical possibility that any one or more of the forces covered in this study has the potential to influence change and promote ecoentrepreneurship. Whether such transformation can be maintained over extended periods of time will depend on the aid obtained from other forces. Going green offers few competitive and financial advantages; therefore, it can take some time before ecological ideas find a voice in business. At the grassroots level, where the stakes are lower economically, it appears that there are fewer restrictions on the expression of these values. This is also true at the

higher end of industry, where large industrial enterprises and multinationals must abide by international standards in order to remain competitive.

In the end, the conclusion is that the economy based on fossil fuels that has been in use since the industrial revolution is no longer capable of sustaining the expansion of humanity. The planet's ecosystems, climate, forests, rivers, and oceans would all suffer irreparable harm. Because history has reached a tipping point, the environmental consequences of our global actions must be carefully assessed. Through ignorance or indifference, the earthly environment can be seriously harmed, which is necessary for humankind's existence and well-being. There is a need for a fresh, green energy infrastructure that can grow the economy and foster a secure environment.

Acknowledgment

The author is thankful for kind support from Netali Nagar College management for supporting and encouragement to complete the present article

References

- Berle, G. (1993). The green entrepreneur: Business opportunities that can save the Earth make you money. United States.
- Bhattacharya, D., Sarkar, R., & Choudhury, B. (2012). Irresponsible ecotourism practices flanking the best national park in India: A multivariate analysis. *SIT Journal of Management*, 1(1), 1-27.
- Brandon, K. (1996). Ecotourism and conservation: A review of key issues. Environment Department working papers; no. 33. Biodiversity series Washington, D.C.: World Bank Group.
- Combs, A. W., & Snygg, D. (1959). Individual behavior: A perceptual approach to behavior, (Rev. ed.), *Harpers*.
- Galkina, T. (2021). International ECOpreneurship: Environmental commitment and international partner selection of Finnish firms from the energy sector. *Journal of International Entrepreneurship*, 19(2), 300-320.

Microfinance, Rural Women Entrepreneurs and Sustainable Development

Bhajan Chandra Barman

Department of Economics, Netaji Nagar College, Kolkata, West Bengal, India

Corresponding Author's Email: bhajanbarman@gmai.com

ABSTRACT

It is undeniable that the emergence of microfinance programme in India in the late 1990s led to a significant portion of rural poor women being able to link with banking services today. As SHG members, poor women now have access to bank deposits and loans. At present, more than 8 crore women are linked with microfinance institutions in India, and a total credit flow of Rs 17,342 crore has been generated within SHGs. Microfinance has a considerable role in encouraging women entrepreneurs to start small businesses in rural areas. In addition to farming and housework, rural poor women are now running small businesses. They work in a broad range of micro-enterprises, including baking, dairy farming, poultry farming, etc. Their contributions include an increase in family income, raising household savings, empowering women, reducing poverty, investing in children's health and education, housing, clean water, improved sanitation, creating new jobs, increasing GDP, and so on. In this way, women entrepreneurs have a great role in positive social change. Thus, the development of the country through rural poor women entrepreneurs is not just a temporary development, it is a sustainable development.

Keywords: Microfinance, Entrepreneurship, Sustainable Development, Self Help Group

Introduction

"Microfinance enables the poor to lift themselves out of poverty through entrepreneurship."

Pierre Omidyar

The Indian financial market is quite large and well structured. The banking system is well-developed. However, due to certain rules and regulations in the banking system, the poor, particularly rural poor women, are deprived of banking services. Many poor women are interested in starting a small business. But they have no capital to start this business. Even if they requested a loan from the bank, it would not be granted because they lacked any assets that could be pledged as collateral for a loan.

Again, the poor can start a business by borrowing from informal sector sources such as moneylenders, merchants, traders, etc. But in the informal sector, the interest rate is

extremely high. So it is not possible for them to start a business by taking loans from the unorganized sector.

To solve this problem, a microfinance program was developed so that the poor, particularly the deprived women in rural areas, could easily get a small loan from the formal banking system. Mohammad Yunus, a Nobel laureate Economist, first thought of a microfinance program and started this program in 1976 in the village of Jobra in Bangladesh. He arranged loans for 42 poor women in that village. The women got loans. Return interest and principal on time. Yunus was the first to prove that poor women were creditworthy and could repay the loan on time.

In India, NABARD launched the SHG-Bank Linkage scheme in 1992, and based on the recommendations of NABARD, the RBI, through banks and NGOs, launched the microfinance program in India in 1994.

Microfinance is a collateral-free small loan that is provided to poor women who cannot afford loans from ordinary banks. It serves as a link between the banks and the poor. The poor, especially the rural poor women, joined this program and started getting loans easily. No property should be pledged for getting this loan. However, such a type of loan is not given to just one person. To get such a loan, a group of taking 10 to 12 women has to be formed. This group is called Self-Help Group (SHG). Each group will withdraw and repay the loan from the bank. In this way, SHGs meet the small capital needs of rural poor women, and the poor women are able to overcome financial difficulties. They started small businesses along with agricultural and domestic work.

Concept of Entrepreneur

The term "Entrepreneur" derived from "Entrepretre," which means to begin something new. In English, entrepreneur is someone who begins a business. In a broad sense, entrepreneur implies a person who proceeds with determination to start a business, intending to make a profit and successfully running the business. An entrepreneur should have self-sacrificing spirit, initiative, an attractive personality, risk-taking ability, leadership, quick decision-making ability, creativity, fairness, honesty, responsiveness to suggestions and criticism, and many more.

The term "entrepreneurship" was used first by Richard Cantillon in 1785. According to Joseph Schumpeter (1934), entrepreneurs are innovators who introduce new products or services.

An entrepreneur not only creates jobs for himself but also provides livelihoods for others. It creates new wealth, leads to capital formation, and develops human resources. It plays a significant role in raising the country's GDP and addressing the unemployment issue.

Concept of Sustainable Development

Development is a nonstop process through which a country's per capita income rises, wealth is distributed more equitably, poverty and inequality are reduced, and the crucial requirements of the larger population are met on a permanent basis. Sustainable development basically refers to planned development for the next generation. It is a long-term, ongoing process of growth that satisfies the requirements of the current generation lack of impeding the fulfilment of those of the future generation. It is used to evaluate people's attitudes and behaviour. People's overall socio-economic progress occurs through sustainable development. The primary goal of it is to utilize resources wisely and to improve the quality of human life, including health, education, nutrition, and so on. Social and economic curses like poverty, illiteracy, starvation, inequality, and others can be eliminated with the help of sustainable development.

Literature Review

Das (2003) came to the conclusion in his paper that the microcredit-SHG model has attracted a lot of attention recently. It is a source of loan for the poor, who were previously viewed as being unbackable.

In his article, Self-Help Groups for the Success of Woman Entrepreneurs, Mohammed (2004) wrote that the challenge of eradicating poverty, fostering sustainable development, and fostering good governance can be met by microcredit.

According to Ayadurai's study (2010), female entrepreneurs in Sri Lanka must be acknowledged as a significant unit boosting the nation's economy. To enable them to "function" successfully as women entrepreneurs, they require the support of the international organisations engaged in the growth and development of entrepreneurship, particularly women's entrepreneurship.

De Aghion and Morduch (2004) claim that the rise of microfinance has opened up a broad sort of opportunities, including the expansion of markets, the eradication of poverty, and the promotion of social change.

In their study, Khan and Rahaman (2007) examined how microcredit affected the poorest segment of society and came to the conclusion that the microfinance programme had a substantial impact on raising the poor family's standard of living.

According to Lokhande's (2009) study, "Microfinance Initiatives in India," microfinance program have a considerable impact on the Indian economy by fostering microentrepreneurial activities that result in the creation of both assets and jobs.

Since there is a positive correlation between microfinance credit usage and performance, Pushpakumara (2011) came to the conclusion that microfinance plays a considerable role in lowering poverty. There is a positive impact on the monthly income, gain from the capital investment, and savings after participating in microfinance credit schemes.

Sinha, Parida and Baurah (2012), in their study showed that due to join in the microfinance programme the household consumption of the poor women increases, income and savings sharp improve, decrease in poverty.

Maru and Chemjor (2013) found in their study that microfinance empowers female entrepreneurs in households by reallocating decision-making authority to them, allowing them to generate income, assets, and savings well above what they otherwise would have or if it had been spent on consumption.

In their study, Chatterjee, Gupta and Upadhyay (2018) demonstrated how entrepreneurship helps people achieve their goals of empowerment.

According to Zgheib (2018), self-employment has the greatest potential to facilitate low-income women's empowerment in comparison to all other employment options, and this potential outweighs that provided by other employment options. Women are motivated to launch their own businesses by financial independence.

Goel and Aggarwal (2020) highlighted that the contribution of microfinance is enormous and has a significant role in eradicating poverty and empowering poor women in social, economic, and political aspects. Microfinance and entrepreneurship have inter-link which contributes to country economy through employment and uplift the social status of living specifically in rural areas.

Microfinance, Rural Women Entrepreneurs and Sustainable Development

It is undeniable that now a large section of rural poor women are capable of linking with banking services due to the emergence of microfinance scheme in India. The poor women who were earlier deprived of banking facilities before the introduction of the microfinance scheme are now getting access to bank deposits and loans as members of SHG. At present, in India, more than 8 crore women are linked with microfinance institutions, and a total credit flow of Rs 17,342 crore has been generated within SHGs. As microfinance institutions provide loans to rural poor women on easy terms, many micro-entrepreneurs have been formed in rural areas of the country. As a result, employment has been created along with self-employment for many poor people in rural areas. This is definitely a positive aspect for the economy.

Today microfinance institutions are the major source of finance in the rural economy, and the moneylender system of the past has almost disappeared.

From various reports, it can be seen that once those who took micro-loans of Rs. 5-10 thousand, now many of them have become micro-entrepreneurs with the ability to take Rs. 1-2 lakh. Thus, microfinance has now become an essential part of the country's development.

It is known that a village is made up of families, and a country is made up of villages. Obviously, a country will develop after every family becomes self-sufficient and

developed. Microfinance is sincerely pursuing that goal. Country's education rate is rising, as are health awareness and people's standards of living. In short, the nation's overall development has occurred.

The poor and disadvantaged people are able to contribute significantly to the overall development of the country by participating in microfinance scheme. Previously, these destitute proletarians were a burden on society and the state. They are now a viable economic force in their own right. Our country has made commendable progress in the areas of population control, average life expectancy, infant mortality rate, abolition of child marriage, rate of girls enrolled in school, and social health awareness.

Conclusion

From the above discussion, it is clear that Microfinance has a considerable impact on encouraging women entrepreneurs to start small businesses in rural areas. Rural poor women are now running small businesses in addition to farming and housework today. Rural females work in a wide range of micro-enterprises, including baking, dairy farming, poultry farming, growing and supplying fruits and vegetables, making sweet dishes, trading rice, grooming, tailoring, raising goats, running petty businesses, manufacturing bamboo wood products, and so on. Their contributions include an increase in family income, raising household savings, empowering women, reducing poverty, investing in children's health and education, housing, clean water, improved sanitation, creating new jobs, increasing GDP, and so on. In this way, women entrepreneurs have a great role in positive social change. Thus, the development of the country through rural poor women entrepreneurs is not just a temporary development, it is a sustainable development.

Acknowledgment

The author is thankful for kind support from Netali Nagar College management for supporting and encouragement to complete the present article

References

- Ayadurai, S. (2010). Report On Field Trip To Foster Collaborative Partnerships With Local Ngos. *National Ngos and Ingos, and To Assess and Identify Immediate and Mid-Term Needs of Returnees and Displaced Communities In North East Sri Lanka, Field Trip From 30th June.*
- Chatterjee, S., Gupta, S. D., & Upadhyay, P. (2018). Empowering women and stimulating development at bottom of pyramid through micro-entrepreneurship. *Management Decision*.
- Das, S. (2003). Self Help Groups and Microcredit Synergic Integration. *Kurukshetra*, 51(10), 25-30.

- De Aghion, B. A., & Morduch, J. (2004). Microfinance: Where do we stand?. *Financial Development and Economic Growth*, 135-148.
- Goel, R., & Aggarwal, M. (2020). A study of micro finance and its outreach in India. *International Journal of Scientific & Technology Research*, 9 (2).
- Khan, M. A., & Rahaman, M. A. (2007). Impact of microfinance on living standards, empowerment and poverty alleviation of poor people: a case study on microfinance in the Chittagong District of Bangladesh. *Handelshögskolan vid Umeå Universitet, Sweden*.
- Lokhande, M. A. (2009). Micro Finance Initiatives in India. *Kurukshetra A Journal of Rural Development*, *57*(4), 16-18.
- Maru, L., & Chemjor, R. (2013). Microfinance interventions and empowerment of women entrepreneurs rural constituencies in Kenya. *Research Journal of Finance and Accounting*, 4(9), 84-95.
- Mohammed, S. (2004). Self-help Group for the success of women entrepreneurs. *Kisan World*, *52*(8), 41-43.
- Pushpakumara, W. P. N. (2011). Impact of Gender on Effective Utilization of the Microfinance Credit Facilities in Sri Lanka.
- Schumpeter, J.A. (1934). *The Theory of Economic Development*. Harvard University Press, United States
- Sinha, A., Parida, P. C., & Baurah, P. (2012). The impact of NABARD's Self Help Group-Bank Linkage Programme on poverty and empowerment in India. *Contemporary South Asia*, 20(4), 487-510.
- Zgheib, P. (2018). Multi-level framework of push-pull entrepreneurship: comparing American and Lebanese women. *International Journal of Entrepreneurial Behavior & Research*, 24(3), 768-786. https://doi.org/10.1108/IJEBR-12-2015-0314

Sustainable Entrepreneurship: The Case of Mitticool Private Limited

Kaberi Bhattacharyya

Department of Commerce, Netaji Nagar College, Kolkata, West Bengal, India

Corresponding Author's Email: kaberi.bhattacharyya@gmail.com

ABSTRACT

The unabated exploration and exploitation of natural resources to feed unbridled human consumption hand in hand with the progress of civilization has rendered the earth and its environment quite unlivable for its occupants. For this, the business houses whose procurement and production processes have been at the root of this cycle of degradation need to 'humanize' their operations enough, to ensure sustainability. While many glowing examples of new-age entrepreneurs going back to nature to respond to the sustainability agenda exist, the case of Mitticool Private Limited has been highlighted in this paper.

Keywords: Sustainability, Entrepreneurship, Case Study

Introduction

The compromised natural conditions of today are testing human resilience to combat pollution in drinkable water, breathable air, pesticide contamination in food, and others in every hour of survival, with not so satisfactory results. The pivot in the damaging cycle has been undeniably the business organizations that, over time, through their selfish and completely thoughtless procurement of raw materials from nature or their merciless production processes, have caused sweeping and often irreversible damage to planet Earth. Progressively, the living conditions for humans have deteriorated, and uncountable species of flora and fauna have ceased to exist or become extinct because they found it impossible to survive or propagate in the transformed conditions.

If sustainability is understood as meeting the needs of the present generation without compromising the ability of future generations to meet their own needs, then a paradigm shift in the procurement and production processes of businesses and in the consumption process in general, is imperative. The crux of the matter is that the entity that has caused the most damage, namely the business organizations, must ensure maximum damage control and, preferably, renewal.

Literature Review

'Green Entrepreneurship', the concept introduced by Berle in 1993, is hailed as the linkage between innovation and sustainability that can uphold the dimensions of

sustainability while meeting the needs of almost 8 billion consumers worldwide. The term 'Green Entrepreneurship' signifying sustainability agenda in entrepreneurial endeavor has been differently addressed viz 'environmental entrepreneurship' (Keogh & Polonsky, 1998), 'ecoentrepreneurship' (Schaper, 2002), and 'ecopreneurship' (Schaper, 2016).

Demuth (2014) asserts that business houses over time have damaged the planet's environment to a frightening level, and the only imperative forward is sustainable business practices. UNCTAD (2017) illustrates through myriad business cases how, over time, this concept of sustainable entrepreneurship and the Sustainable Development Goals complemented each other through real life business actions, providing hope for negotiating future environmental challenges. Dale (2019) reiterates the same idea that sustainable entrepreneurship is the revolutionary tool that can combat the growing challenges in society, the economy, and the environment.

Kulkarni *et al.*, (2022) point out that to achieve the Sustainable Development Goals, funding is crucially required, especially for SDG 2, 3, 4, 6, 7, 9, 13, 14, and 15. Hence, the assessment of such funding requirements is irrevocably linked to their attainment. The 2015 estimates (when the SDGs were adopted) have been substantially surpassed and require careful reassessment as a serious pursuit for their success.

The case of mitticool private limited

While Green Entrepreneurship is still far from full-fledged global adoption, every single entrepreneurial effort in that direction undoubtedly strengthens the sustainability agenda of the planet. Here in this paper is a humble attempt at exploration of one such entrepreneurship Mitticool Private Limited is being studied in the following way:

Mitticool private limited

Mitticool Private Limited is in the business of making clay kitchenware. Mansukhbhai Prajapati, the man behind the business, originally hailed from a modest potter's background in Gujarat. Lack of academic success and financial constraints drove him to work in a tea stall and later at a clay tile factory. It was at this point that he started experimenting with clay to model Indian kitchenware for regular use. This was at the fagend of the 1980s, when clay utensils had quite vanished from the Indian kitchen, and Mr. Prajapati's father, a traditional potter and out of work himself, discouraged his son from going seriously into their fast disappearing family trade of pottery.

However, in 1988, Mr. Prajapati created his first functional clay product - a pan - using a tile press instead of a traditional potter's wheel. Despite disapproval from well-wishers, the entrepreneur in him dove headlong into the business, trusting his instincts and day, a loan from a local moneylender to arrange for the seed capital. Modifying the tile press to make a pan, he manufactured 3500 - 4000 pieces a day, whereas the potters using their wheels could only manage to do about 100 of them, a day. Next on the line was an

earthen water purifier with ceramic candles. Designed to meet the local needs, these unique products, which were also extremely economical, became progressively popular in the market (Austa, 2019).

Gradually, Mr. Prajapati's passion for doing business, his creativity, and his innovation introduced a variety of clay products, including pressure cookers, under the Mitticool banner. This journey, continued with grit and determination, faced challenges at every turn. The Gujarat earthquake dealt a crippling blow to his business by destroying a substantial quantity of stock. A month after the disaster, Sandesh, a Gujarati daily, carried photographs of the broken clay water filter, labelling it "the poor man's broken fridge'. Refrigerator, that too of clay had escaped even Mr. Prajapati's innovation till then. But rising to the true entrepreneurial spirit, Mr. Prajapati sensed opportunity in the crisis. For three years, he tested soils and refrigerator designs along with his family members, took a loan of Rs 19 lakh, putting up his ancestral home as collateral, and finally, in 2005, launched the Mitticool refrigerator. Made from clay, this unique product is 26 inches long, 15 inches wide, and 12 inches deep, carrying two chambers, and does not require electricity to run. It utilizes the fundamental scientific principle that evaporation causes cooling for its working. When the roof, bottom, and walls of this supremely innovative refrigerator are filled with water, its gradual evaporation keeps the contents fresh (Austa, 2019).

In 2006, angel investor Anil K Gupta, professor at IIM Ahmedabad and vice-chairman of the National Innovation Foundation, became interested in the Mitticool refrigerator and funded Mr. Prajapati with Rs 180,000 for 100 such refrigerators which helped pay debts and motivated the entrepreneur never to look back. This flagship product of Mitticool, extremely utilitarian and eminently affordable by those who can't afford a regular refrigerator, has been priced in the range of Rs 3000. The Mitticool refrigerator has put the business on the world map, with the range of products, especially the refrigerator travelling to customers in Dubai and Africa. The Mitticool refrigerator had earned appreciation from the People's President Dr. A.P.J. Abdul Kalam in "4 th National Award Function, Delhi in 2007 who hailed Mr. Prajapati as a true scientist. Within the country, kitchenware is popular in the southern states. The rising demand for Mitticool products has led to the establishment of a series of factories equipped with assembly lines. The innovator in Mr. Prajapati has designed machines to turn clay into his assorted product range in very little time (Sharma, 2012).

Apart from earning numerous laurels for itself (mitticool.com/our-awards) the business of Mitticool has financially stabilized and earning handsome profits for itself. At the end of 2020-2021 financial year, Net worth of the company has increased by 70.60 % EBITDA of the company has risen by 114.70 % and total assets of the company has escalated 24.99 % (www.tofler.in/mitticool-private-limited/company).

Conclusion

In conclusion, it may be stated that, since earth is 3 parts water and 1 part land, the sustainability of clay is unmatched. Yet it takes a path-breaking entrepreneur and visionary like Mansukhbhai Prajapati to recognize its versatility and resuscitate it to its rightful place in the civilization's kitchen. In the process, the age-old tradition of clay pottery making in India has been snatched from death's door to light the hearth in numerous artisan and potter's homes.

Acknowledgement

The author acknowledges the kind opportunity of writing this paper for the esteemed publication in collaboration with Lincoln University College, Malaysia, given to her by Netaji Nagar College and the constant encouragement and support received from the honourable Principal, Dr. Amrita Dutta. Also, the author gratefully acknowledges the academic contributions of the research articles cited in the present paper as its building blocks.

References

- Austa, S. (5th September 2019). From a Roadside Teastall to the Mitticool Success Story: How Mansukh Lal Prajapati did it All. https://yourstory.com/2015/04/manshuk-lal-prajapati-mitticool/amp
- Berle, G. (1993). The Green Entrepreneur: Business Opportunities that can Save the Earth Make you Money. United States.
- Dale, G. (2019). Climate, communism and the age of affluence. A Review of Aaron Bastani in Automated Luxury Communism: A Manifesto, 1-6.
- Demuth, A. (2014). Green entrepreneurship: A promising path towards a sustainable future in Tunisia and elsewhere. Deutsche Gesellschaft für, Internationale Zusammenarbeit (GIZ) GmbH, Germany
- Keogh, P. D., & Polonsky, M. J. (1998). Environmental commitment: a basis for environmental entrepreneurship?. *Journal of Organizational Change Management*, 11(1), 38-49. https://doi.org/10.1108/09534819810369563
- Kulkarni, S., Hof, A., Ambrósio, G., Edelenbosch, O., Köberle, A. C., van Rijn, J., & van Vuuren, D. (2022). Investment needs to achieve SDGs: an overview. https://doi.org/10.1371/journal.pstr.0000020
- Schaper, M. (2002). The challenge of environmental responsibility and sustainable development: Implications for SME and entrepreneurship academics. *Radical changes in the world: Will SMEs soar or crash*, 541-553.

The Case of Mitticool Private Limited

- Schaper, M. (Ed.). (2016). *Making Ecopreneurs: Developing Sustainable Entrepreneurship*. CRC Press. 2nd Edition, Routledge, UK.
- Sharma, M. (2012). Mansukhbhai Prajapati's Mitti Cool Clay Creations brings clay back in fashion'. *The Economic Times*, 3.
- UNCTAD. (2017). Promoting Entrepreneurship for Sustainable Development: A Selection of Business Cases from The Empretec Network. https://unctad.org/system/files/official-document/diaeed2017d6_en.pdf

An Overview of Sustainable Entrepreneurship

Anupam Karmakar

Department of Commerce, New Alipore College, Kolkata, West Bengal, India

Corresponding Author's Email: anupamkar2016@gmail.com

ABSTRACT

Entrepreneurship is what entrepreneurs do just like what managers do in management. The nexus between sustainable development and entrepreneurship is described as sustainable entrepreneurship. Sustainable development is the kind of development that generally meets present needs without compromising the ability of future generations to meet their own needs. The main objectives of this paper are to highlight what is entrepreneurship and relationship between entrepreneurs and entrepreneurs. The second objective of this paper is to explain the importance of entrepreneurial Development creative behavior, and different types of entrepreneurs. The third objective of the study is to analyze the eminent entrepreneurs of India and their values, business philosophy, and behavioural orientation. The fourth objective of this paper is to specifically highlight intrapreneurship, technopreneurship, and social entrepreneurship in today's context. The last objective of this paper is to highlight how to be a sustainable entrepreneur and the relationship between sustainable development and entrepreneurship. Finally, the paper concludes that as an entrepreneur, you may not have all the means that a large corporation has, but there are actions and small steps you can initiate to be called a sustainable entrepreneur.

Keywords: GDP, Fabian, Intrapreneurs, Grameen Bank, United Nations Introduction

Entrepreneurship is what entrepreneurs do just like what managers do in management. Business opportunities are recognized by the entrepreneurs first, then they convert those opportunities into workable ideas and add value through time, effort, money, or skills; next, they implement these ideas and assume the risks of the competitive marketplace; and finally, they realise the rewards from these efforts (Karmakar, 2019).

Table 1: Relationship between Entrepreneur and Entrepreneurship

Entrepreneur	Entrepreneurship
1. Entrepreneur is a person.	1. It is a process of promoting new enterprise.
2. Entrepreneur is the organizer of a new enterprise.	2. Entrepreneurship on the other hand is considered as the organization.
3. Entrepreneur is an innovator.	3. Entrepreneurship is an innovation process.

An Overview of Sustainable Entrepreneurship

4. The person who bears the risk is known as entrepreneur.	4. Risk- bearing is known as entrepreneurship.
5. Entrepreneur is considered as a leader.	5. On the other hand entrepreneu rship is considered as leadership.
6. Motivator	6. Motivation
7. Entrepreneur is a visualizer.	7. Vision is one of the important elements of entrepreneurship.
8. The role of entrepreneur is just like a creator.	8. But entrepreneurship is considered as a process of creation.
9. Entrepreneur is a planner	Entrepreneurship means Planning
10. Administrator	10. Administration
11. Entrepreneur is a communicator	11. Entreprenurship is the process of Communication
12. Entrepreneur is a visualizer	12. Entreprenruship refers to vision
13. Entreprenur is a decision-maker	13. Entrepreunrship is the decision

Importance of entrepreneurship development and creative behaviour

The importance of entrepreneurship lies in organizing the production process, in the absence of which all other essential factors of production like land, labour and capital will remain idle. Entrepreneurs are not inventing any new products but exploiting the existing science and technology advancements to make productive use of other factors of production. The following are the benefits of entrepreneurship and creative behavior:

- 1. Contribution to GDP: Economic development means an increase in Gross Domestic Product, or GDP. In the process of production, income is generated, and entrepreneurs organize such production processes, whether it is manufacturing, agriculture, or services. Such generated incomes are distributed among the factors of production, where the income of land is rent, labour gets wages or salaries, and capital gets interest, and the remaining income, which is profit, goes to the entrepreneur. So rent and interest are earned by only a few people those who have land and capital but the remaining masses are destined to get wages and salaries. So entrepreneurs contribute by way of capital formation and the generation of employment (Badi & Badi, 2005).
- **2. Capital formation:** The investment decision of the entrepreneurs increases the productive capacity of the economy, which results in capital formation. Entrepreneurs invest their own funds and also raise funds formally from their friends and relatives. Such informal funds add to funds that are raised through formal means, like the money market, which includes banks, financial institutions, and capital markets (Badi & Badi, 2005).
- 3. Generation of employment: The businesses promoted by entrepreneurs employ

employees with different abilities, skills, and qualifications. So entrepreneurship does not become a source of livelihood for those who have neither capital to earn interest on nor land to earn rent. So the earnings of these people are not only their livelihood or means of sustenance but also provide a lifestyle for their families and personal job satisfaction. As a result, entrepreneurs have an impact on the lives of many people, either directly or indirectly (Badi & Badi, 2005).

- 4. Generation of business opportunities for others: All new types of businesses create opportunities for different categories of people. Backward linkages occur when any new business creates opportunities for the suppliers of inputs. Similarly when the same opportunity creates opportunities for markets of the output then it is called forward linkages. For example, a pen manufacturer creates opportunities for refill manufacturers (backward linkage) and also for sellers like wholesalers and retailers of stationery products. So, further linkages are induced on the basis of these immediate linkages. For example, refill manufacturers can expand their business into ink manufacturing, which also provides opportunities to advertisers, transporters, and so on. So entrepreneurship, through a chain reaction, provides a stimulus to the level of economic activity (Roy, 2020).
- 5. Improvement in economic efficiency: A process is called efficient when the inputoutput ratio is greater than one. Efficiency means to have greater output from the same input, reducing wastes, improving processes, increasing yield, and bringing about technical progress i.e. changing capital output ratio entrepreneurs improve economic efficiency. Productivity of labour improves when they are provided with good implements that is capital (Karmakar, 2019).
- 6. Increasing the spectrum and scope of sconomic activities: "More" and "better" of the existing cannot be interpreted as development. Development means diversification of activities across the geographic, three-sector, and technological areas. Entrepreneurs try to bring about changes in three sectors of the economy, which leads to economic development. When economies grow, then the contribution of the agricultural sector to the GDP decreases and the contribution of industry and the service sector increases. Entrepreneurs bring a virtual transformation to the economy by changing its status from "underdeveloped" to "emerging" and "developed" by withdrawing investment from the stale sectors and investing funds in green-field sectors (Roy, 2020).
- 7. Reducing social tension: The major cause of social unrest is the unemployment of young and educated people. After completing education, if anyone fails to get gainful employment, he or she is going to feel frustrated. But entrepreneurship development programmes can channel the talent of the youth and educated section of society in the right direction by providing proper assistance, guidance, and training for setting up their own enterprise. As a result of this, employment is generated and social unrest is

reduced (Badi & Badi, 2005).

- **8. Improvement in per capita income:** Opportunities available should be looked into by the entrepreneurs, and if the situation permits, they must exploit those opportunities. The entrepreneur organises various production factors such as land, labor, and capital by putting them to productive use through the establishment of businesses. More and more enterprises floated by entrepreneurs mean enhanced production and employment generation. It results in an increase in the per capita income of the country and an improvement in productivity (Roy, 2020).
- **9. Improvement in the standard of living:** Entrepreneurs adopt cutting-edge technology and make efficient use of resources to produce more goods and services of higher quality at lower costs. This enables the consumer to purchase better-quality products at lower prices, which results in an improvement in the standard of living of the people (Badi & Badi, 2005).
- **10. Promotion of export:** The main thing is that entrepreneurship promotes a country's export business, which contributes to building its foreign exchange reserves.

Methodology

• Data source: The data for this study was collected from secondary sources.

Results and Discussion

Types of entrepreneur

Entrepreneurs are classified into following types:

Based on ownership:

- 1. **Private entrepreneur:** When any individual undertakes the risk of setting up any new business enterprise, he is known as a "private entrepreneur" (Khanka, 2006).
- **2. State entrepreneur:** When the state government undertakes any trading or industrial venture, it is a state enterprise (Khanka, 2006).
- 3. **Joint entrepreneurs:** When a private entrepreneur and the government jointly run any business enterprise and share the risks and profits of the business jointly, they are called "joint entrepreneurs" (Khanka, 2006).

Based on the type of business:

- **1. Trading entrepreneurs:** Trading entrepreneurs are involved in trading activities. They purchase finished goods from wholesalers and sell them directly to customers through retailers (Roy, 2020).
- **2. Manufacturing entrepreneurs:** Manufacturing entrepreneurs manufacture products, i.e., they convert raw materials into finished goods.

3. Agricultural entrepreneurs: Those entrepreneurs who undertake agricultural activities like cultivation and marketing of agricultural products are called agricultural entrepreneurs.

Bade on the use of technology

- **1. Technical Entrepreneur:** This type of entrepreneur runs science- and technology-based industries.
- **2. Non-technical entrepreneur:** This type of entrepreneur is not technically inclined, and they use alternative methods to survive in the industry (Roy, 2020).

Based on Gender:

- **1. Men entrepreneur:** Organizations that are owned, managed, and controlled by men only are called "male entrepreneurs" (Roy, 2020).
- **2. Women entrepreneur:** Any business which owned, managed and controlled by women, having a minimum financial interest of 51% and giving at least 51% of employment generated in the enterprise to women is called women entrepreneur.

Based on size of enterprise

- 1. Small scale entrepreneur: When an entrepreneur invests up to Rs 1 crore in plant and machinery, they are referred to as small-scale entrepreneurs (Roy, 2020).
- 2. **Medium-scale entrepreneur:** When an entrepreneur invests more than Rs 1 crore in plant and machinery, they are referred to as medium-scale entrepreneurs (Karmakar, 2019).
- **3.** Large-sacle entrepreneur: When investment made by an entrepreneur in plant and machinery is more than Rs.5 crore is called large scale entrepreneur.

Based on the level of willingness to create innovative ideas:

1. Innovative entrepreneurs: These entrepreneurs have the ability to think new in terms of introducing new goods, discovering new markets, inaugurating new methods of production, and reorganize enterprises (Karmakar, 2019).

Example: Organised retailing by Kishore Biyani, the introduction of a small car 'Nano' by Ratan Tata, and making mobile phones available to the common man by Anil Ambani are the works of entrepreneurs who are innovative enough to compete in the market (Roy, 2020).

- **2. Immitating entrepreneurs:** These entrepreneurs do not introduce new ideas, but rather imitate those introduced by innovative entrepreneurs. For example, small car manufacturers are imitating entrepreneurs.
- 3. Fabian entrepreneurs: The meaning of the word 'fabian' is "seek victory by

delaying the process rather than by a decisive battle. Fabian entrepreneurs imitate only when it is clear that failure to do so would cause an imminent threat to their very existence or result in the loss of their relative position in the industry (Roy, 2020).

4. Drone entrepreneurs: A person who lives on the labor of others' is called a drone entrepreneur. Drone entrepreneurs are not motivated by gaining market leadership, and they are prepared to suffer losses but not willing to make any changes to their existing production methods (Roy, 2020).

Eminent entrepreneurs of India (Karmakar, 2019)

(i) Dhirubhai Ambani

In the year 1960, the Reliance Commercial Corporation was co-founded by Dhirubhai Ambani and Champaklal Damani.

Table 2: Values, Philosophy and Behavioural Orientation of Dhirubhai Ambani

His Values	His Business Philosophy	His Behavioural orientation
(i)Leadership	(i)Start small grow big	(i)Bold and calculative
(ii)Belief in herself	(i)Ethics in business	(ii) Undeterred by set-backs
(iii)Hard work	(ii)Be revolutionary	(iii)Think in a different way, think
(iv)Persistence	(iii)One life one goal	something big, think fast and
(v)Extreme self-confidence		think ahead.
(vi)Not afraid of challenges and		
difficulties in business		
(vi)Go-getter spirit		
(viii)Vision		

(ii) Sachin and Binny Bansal, Flipkart:

In 2007, Flipkart Pvt. Ltd. was founded by Sachin Bansal and Binny Bansal, an Indian electronic commerce company based in Bengaluru, India. The main business of the company is booking online sales of consumer electronics, fashion, and lifestyle products (Mukherjee & Roy, 2019).

Table 3: Values, Philosophy and Behavioural Orientation of Sachin and Binny Bansal of Flipkart

His Values	His business Philosophy	His Behavioural orientation
(i)Leadership	(i)Continue despite debacle	(i)Sincere
(ii)Hard work	(i)Ethics in business	(ii) Good communication skills
(iii)Persistence	(ii)Precision in work	(iii)Dedication in work
(iv)Extreme self-confidence	(iii)Quality	
(v)Not afraid of failures		

(iii) Ritesh Agarwal, OYO Rooms -

Ritesh Agarwal is the founder of OYO. Rooms commonly known as OYO (abbreviation of 'Onyour Own') is India's largest hospitality company, consisting mainly of a network of budget hotels and accommodation options. Since 2013, OYO has grown to over 8,500 hotels in 230 cities in India, the UAE, Malaysia, Nepal, China, and Indonesia. SoftBank Group recently invested Rs. 630 crore in OYO Group.

Table 4: Values, Philosophy and Behavioural Orientation of Ritesh Agarwal of OYO Rooms

His Values	His Business Philosophy	His Behavioural orientation
(i)Leadership	(i)For doing business education is	(i)Highly motivated
(ii)Thing huge	necessary.	(ii) Good communication skills
(iii)Persistence	(i)Ethics in business	(iii)Dedication in work
(iv)Extreme self-confidence	(ii)Culture of the work team is	
(v)High quality	important	
	(iii)Quality	
	(iv)Dreaming big	

(v) Kunal Shah, Free Charge:

Kunal Shah founded FreeCharge in the year 2010. On a daily basis on-line recharge of Rs.6 million is done by this e-commerce website, translating to Rs. 2.19 billion a year. Online facility to recharge any pre-paid mobile, post-paid mobile, DTH, Data Cards in India is provided by this website. Recharge amount for recharging mobile phones paid by the users is returned to them in the form of shopping coupons of some of the top retailer in India like Barista, McDonald's, Domino's Pizza, Café coffee Day, Puma, Shopper Stop and Jet airways. E-commerce giant Snapdeal acquired FreeCharge for Rs. 2800 crore (\$400 million USD) in cash and stock on April 8, 2015, in India.

Women entrepreneurs in India:

Women entrepreneurs are those women who undertake new ventures. So those women who think of initiating, organizing, and combining factors of production to generate employment are known as women entrepreneurs (Khanka, 2006).

"A women's entrepreneur can be defined as any organization that is owned, managed and controlled by a woman, has a minimum financial interest of 51% of the capital, and gives at least 51% of the employment generated in the enterprise to women."

Some young women entrepreneurs who dared to follow their dreams are:

1. Kiran Mazumdar Shaw:

Kiran Mazundar Shaw started her biotechnology company, 'Biocon' in 1978, based in Bangalore. The company has a research focus on diabetes, oncology, and auto-

immune diseases.

She was awarded the prestigious Padma Shri in 1980 and the Padma Bhushan in 2005 from the Government of India for her outstanding contributions to the progress of science and chemistry. She is named among the world's 100 most powerful women, as per the Forbes List In TIME magazine's she was recently named 100 most influential people in the world.

Table 5: Values, Philosophy and Behavioural Orientation of Kiran Mazumdar Shaw of Biocon

Her Values	Her business Philosophy	Her Behavioural orientation
(i)Leadership	(i)Ethics in business	(i)Courageous
(ii)Belief in herself	(ii)Precision in work	(ii) Undeterred by set-backs
(iii)Not afraid of failures	(iii)Quality	(iii)Corporate citizenship
(iv)Go-getter spirit		
(v)Vision		
(vi)Zeal to learn		

2. Ekta Kapoor

As joint managing director and creative director, she promoted the production company Balaji Telefilms. Ekta Kapoor, who debuted in Bollywood as a serial and movie producer in 2001, produced a number of films and serials between 2010 and 2014. Ekta Kapoor is known by her famous father, Jeetendra Kapoor, and she has helped launch the careers of many actors in Bollywood. She received several awards, like the Society Achiever Award and the Best Entrepreneur of the Year 2001.

Table 6: Values, Philosophy and Behavioural Orientation of Ekta Kapoor of Balaji Telefilms

Her Values	Her business Philosophy	Her Behavioural orientation
(i)Hard work and diligence	(i)There is no rest in business	(i)Honesty
(ii)Belief in herself	(ii)Ethics in business	(ii) Simplicity
(iii)Complete belief in family	(iii)Expand after humble beginning	(iii)Innovation
traditions and family values		(iv)Open minded
(iv)Not afraid of failures		
(v)Persistence		
(vi)Vision		
(vii)Taking inspiration from family		
members		

3. Dr. Swati Piramal

The most prominent name in the healthcare industry is Indian scientist and industrialist Swati Piramal. Her main focus is on public health and innovation. Piramal Enterprises Ltd., previously known as Piramal Healthcare, where she is the Vice Chairperson. She

is the founder of a hospital, the Gopikrishna Piramal Hospital in Mumbai. She has launched public health campaigns against chronic diseases like polio, malaria, tuberculosis, and osteoporosis. For the first time in 90 years, she was the first woman president of India's apex chamber of commerce, ASSOCHAM.

Table 7: Values, Philosophy and Behavioural Orientation of Swati Piramal of Piramal Healthcare

Her Values	Her business Philosophy	Her Behavioural orientation
(i)Extending helping hand	(i)There is no rest in business	(i)Honesty
(ii)Doing good for society	(ii)Ethics in business	(ii) Simplicity
(iii)Courtesy and humility	(iii)Expand after humble beginning	(iii)Innovation
(iv) Innovation as key to success	(iv)Treating employees well	(iv)Humility
	(v) Doing social good	(v) Open minded

4. Vandana Luthra

Vandana Luthra is an Indian entrepreneur born in 1959 and who is the founder and mentor of VLCC Health Care Ltd. which is the India's leading slimming, beauty and fitness brand with a total 150 centers in 75 cities in India.

Table 8: Values, Philosophy and Behavioural Orientation of Vandana Luthra of VLCC Health Care Ltd.

Her Values	Her business Philosophy	Her Behavioural orientation
(i)Belief in good health	Healthy life-Happy life	(i)Good communication
(ii)Good clean business		(ii)Good soft skills
(iii)Doing good only for the women		(iii)Smart and sophisticated
in particular		Courageous
		Helpful
		Hard working
		Нарру

Intrapreneur:

At present, a new type of entrepreneur is emerging in large industrial organizations known as 'intrapreneurs'. They emerge within the boundaries of an existing enterprise and behave like entrepreneurs while working in a large industrial organization. Intrapreneurship has a positive impact on organisational growth and profitability. An organization may have a strong intrapreneurial orientation if it supports intrapreneurship. In organizations with high intrapreneurial orientation, practicing managers try to increase the innovative capacity of the organizations. Therefore, intrapreneurship is the practice of creating an entrepreneurial environment within the organization so that employees can apply their innovative skills to innovate new products and processes (Karmakar, 2019).

In developed countries like America, the concept is very popular. It has been observed that a large number of intrapreneurs are leaving organizations in order to start a new

An Overview of Sustainable Entrepreneurship

enterprise of their own. Many of these intrapreneurs are extremely successful in their new ventures.

An intrapreneur is a person who takes on the responsibility of innovating new ideas, products, and processes within the organisation that are restorative in nature, i.e., that remove stagnation and promote organisational growth (Mukherjee & Roy, 2019).

> Technopreneurship

The term "technopreneurship" is derived from the words "technology" and "entrepreneurship."In simple terms, technopreneurship means the use of technology as an integral and key element in the transformation of goods and services.

A technopreneur is an entrepreneur who is technology-savvy, dynamic, and takes unexplored paths but starts out with only an "idea". He challenges existing practices and systems and thinks of doing things differently. He creates a product or solution that uses the capabilities of technology to change the way something was traditionally done. He succeeded admirably. For example, the founders of Uber Cab created a different way to call a cab that uses the power of technology (a GPS-integrated app) and has completely changed the economics of the taxi/cab industry. Other examples of technopreneurship are Instagram and WhatsApp (Roy, 2020).

> Social Entrepreneur

Individuals who organize, create, and manage a venture for the purpose of social change and innovate solutions for solving daunting social problems are called social entrepreneurs. They measure their success in terms of their impact on society, and they do business for social change (Mukherjee & Roy, 2019).

Examples of some social entrepreneurs:

- **Grameen Bank (Bangladesh):** The concept of Grameen Bank was developed by Bangladesh's Muhammad Yunus who began offering micro-loans to those in needs to help them develop financial self-sufficiency. In the year 2006, Yunus received a Nobel Prize for his work.
- Florance Nightingale (UK): The first school for the nurses was established by Florance Nightingale and she tried her level best to improve hospital conditions.

How to be a Sustainable Entrepreneur

You start a business as an entrepreneur because

- Identified a market problem
- A market gap
- A better solution to an existing method

The difference between entrepreneur and sustainable entrepreneur is that a sustainable entrepreneur does not think about its business profitability only but also other aspects which are outside the business profitability (Roy, 2020).

A sustainable entrepreneur takes into account all levels of sustainability i.e. so much trees should be cut as could be re-growth from plant reforestation projects

When current needs are taken care of without compromising the needs, wants, ability and aspiration of the future generation then that is simply referred to as sustainable development.

The close connection between sustainable development and entrepreneurship is known as sustainable entrepreneurship. Feasible and viable market solutions are created by entrepreneurs, and they act as agents who change the situation in their favour and also realize and exploit opportunities for sustainable development. In pursuit of financial gains, social entrepreneurs need to integrate three perspectives into account, i.e., economic, social, and environmental sustainability (Department of Economic and Social Affairs, UN- https://sdgs.un.org/).

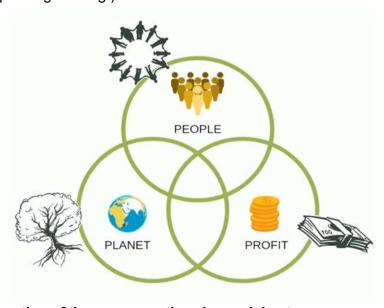


Figure 1: Integration of three perspectives by social entrepreneurs

The goal of an environmental sustainability entrepreneur is to conserve natural resources, develop alternative sources of power, protect the climate and biodiversity, and reduce pollution of the environment (Department of Economic and Social Affairs, UNhttps://sdgs.un.org/).

For business social sustainability encompasses cooperation of people and society, fighting against poverty, maintaining high standard of public health, paying fair wages to

An Overview of Sustainable Entrepreneurship

its employees and providing equal opportunities to the applicants. Acknowledge minority rights, preserve cultural heritage (Mukherjee & Roy, 2019).

The practices of long-term economic growth without negatively impacting environmental, social, and cultural aspects of the community are called economic sustainability, and they cover the basic needs of the employees, i.e., stakeholders, pursue qualitative growth, and take external costs into account, i.e., disposal of environmental damage.



Figure 2: Agenda 2030 by United Nations (https://sdgs.un.org/)

In 2015 all United Nations member states decided on 2030 agenda for sustainable development



Figure 3: Seventeen Sustainable goals formulated by UN

The 17 sustainable development growths were formulated. They provide a shared blueprint of peace and prosperity for people on the planet (Department of Economic and Social Affairs, UN- https://sdgs.un.org/).

Conclusion:

Finally, the paper concludes that as an entrepreneur, you may not have all the means that

a large corporation has, but there are actions and small steps you can initiate to be called a sustainable entrepreneur.

Acknowledgment

Warmest thanks to the Principal of New Alipore College, Dr. Jaydeep Sarangi. Thanks to the Principal of the Netaji Nagar Day College for organizing the international seminar on 'Sustainable Entrepreneurship' held on 16th and 23rd July 2022 in Kolkata.

References

Badi, R. V., & Badi, N. V. (2005). Entrepreneurship. Vrinda Publications, India.

Karmakar, A. (2019). *Entrepreneurship Development and Business Ethics*. Oritental Book Co. Pvt. Ltd., India.

Khanka, S. S. (2006). *Entrepreneurial development*. S. Chand Publishing, India.

Mukherjee, A. K., & Roy, S. (2019). *Entrepreneurship Development and Business Ethics,* Oxford University Press, India.

Roy, R. (2020). Entrepreneurship. 3rd Edition, Oxford University Press, India.

Translation and Sustainability: Towards the Concept of Translator as Entrepreneur

Poulami Roy

Department of English, Netaji Nagar College, Kolkata, West Bengal, India

Corresponding Author's Email: poulamiroy.eng@gmail.com

ABSTRACT

Sustainability denotes unity, a strong sense of cooperativeness, and the most raised notion of ethics: the search for the betterment of all. The present article explores various scholarly research of recent times that focus on entrepreneurship and translation in the context of sustainable development. It also aims to illustrate the relationship between sustainability and translation processes by focusing on the question of how translation plays a vital role and must be placed at the heart of any cultural reflection on social equality. However, the aim of this article is not to establish "sustainability" as a prescriptive concept for translation studies, but rather to incorporate and conceptualize sustainability as a dialogue between translation and cultural communication. Translation as a whole and the process of translating, therefore, can create a new and effective model for sustainable development.

Keywords: Translation Processes, Sustainable Development, Cultural Negotiations, Translator Competence

Introduction

As defined by the World Commission on Environment and Development (WCED), the concept of 'sustainability' denotes an activity that has the ability to cater to current needs, without compromising the needs of the future or putting future generations at risk. Despite the countless social and political imperatives, as well as widespread ecological suppositions observed in recent times, the true nature of the word 'sustainability' has yet to gain a strong foothold among people around the world. However, the very concept should be considered indispensable for addressing the worldwide discussions about the future and well-being of people and people's responsibility towards it.

Translation, a phenomenon that can be inferred both linguistically and cross-culturally, plays an effective role in spreading information, knowledge, and ideas. It is a protector of cultural heritage and essential to the development of a global economy. Today's multicultural and multilingual society demands efficient and empathetic communication between languages and cultures, and the skills of translation are, therefore, becoming

ever more important and desirable. It is past time to investigate what constitutes a sustainable practice, how it operates as such, whether a greater number of sustainable translations can be produced, and, most importantly, how it should be sought after.

On the other hand, the concept of 'entrepreneur' derives its meaning from the French word 'entreprendre' - roughly understood as "undertake", which indicates an essential capacity of entrepreneurship. As translation studies have evolved throughout history, various points have been raised as to the actual roles of translators – they have often been regarded as interlinguistic mediators or described as communicators. However, few scholars have investigated translators' roles and functions as businesspeople, as entrepreneurs. Over the last few years, the business prospects of translation have become an increasingly important topic in translation studies. Sociological, cognitive, ergonomic, and working environment studies have offered perceptions of the complications and variegations of translation as a service. On one hand, studies impending translation from a theoretical angle are relatively few in number, and, in those studies, the translation process is considered a 'professional service'. On the other hand, many sociological studies portray translation as a field with an unskilled, lowstatus, and low-paying workforce with insufficient control over its activity. Since translations are needed in a wide range of contexts, the temperament of services in the existing translation market varies; and for this reason, some translation practices may demonstrate higher components of professional service than the rest. Since the beginning of the decade, translation scholars have been interested in the working lives of non-literary translators, providing observations both from the viewpoint of the translators, as well as from a service-theoretical outlook on the industrialization of translation.

Literature Review

In the Bloomsbury Companion to Language Industry Studies, the industry's stakeholders are analyzed in detail in relation to translation studies (Angelone, Ehrensberger-Dow & Massey, 2019). Cognitive perspectives in the work of the translators, like risk management, knowledge management, and translation as a form of 'distributed cognition', have been explored. The interaction between translators, the range of assignments and hindrances that professional translators have to deal with at their workplace, and the tools they deploy during translations have also been taken into account. As translation technology grows, an increasing number of handbooks and other publications emerge in the field of Translation Studies. One of the latest publications in the field is The Routledge Handbook of Translation and Technology (O'Hagan, 2019). Additionally, some contributions discussing translation as a dynamic concept also demonstrate the service provision perspective, while others exchange views on the intersection between industry-based functional translation theories and practices by emphasizing the quality aspect. While translation professions and the procedures of translation services are the focal points of many studies in this field, a

number of scholars have also integrated useful methods from research related to services into translation. Some recent studies in this field describe the manner in which translation services are offered, marketed, and purchased, focusing especially on the complicated business procedures involving services and emphasizing the demand to examine the market-aspects of translators' training. Several studies view translation as a highly customized and complex professional service. Translations are usually performed by qualified professionals who have a proper and relatively high academic education, which actually contrasts with the claims of numerous sociological studies indicating that translators are often portrayed as low-status-unstable workers.

While commenting on the clients' standpoints on the attributes of non-literary translations, the assurance they expect from the translators, and the entire process of translation as a service, Koskinen states:

Clients often fail to recognise their own role in the service provision process, for example, by neglecting to provide the translator with information on the use and purpose of translation. Translation is indeed a service, with potentially some unique characteristics with regard to customer–service provider interaction and resource integration, i.e., 'co-creation of value' (Koskinen, 2020).

Koskinen places special emphasis on the multi-faceted aspects of translation and the very process as a service, as the term 'service' is quite complex and confusing. Also, by stating so, he contemplates how translation processes as services could be manufactured and designed according to the needs of the clients and users, which leads to the concept of translation as a user-centred process.

Discussion

As the term 'service' encompasses a wide range of economic activities, its interpretations are necessarily extensive, incorporating factors that are endorsed by every other service, such as domestic cleaning, legal services, car repairs, and education. Even though translation requires specialized knowledge as well as a professional workforce, this profession is extensively unmonitored and uncontrolled, preventing it from receiving the level of recognition it deserves, as is the case with professional services like law or medicine. The fact that nearly anybody can practice translation actually decreases the merit of translation as a profession, since the majority of translation services on the market lack a professional control system. There are international standards in the translation field that raise the status of translation as an expert service and enhance the professionalization of translators. Additionally, there are national and global professional associations that enforce codes of conduct and norms for fair, proper, upstanding, and principled translation practices. The specification published by the International Organization for Standardization (ISO), provides requirements for translation service provision, specifying, for example, the competence expected from translators - formal translator training or a minimum of five years of

experience in translation service provision (ISO 17100:2015). There are some countries, however, where authorised translation is a special case: Finland, for instance, regulates the outline of certified translation services through the Finnish National Agency for Education, which requires applicants to pass the assessment process or complete a specialized type of translator training in order to be licensed. In recent years, a crucial step regarding the expansion of the societal significance of translation has been taken: in a United Nations Resolution, translators' role in fostering understanding and development was recognized as an important component of connecting nations and fostering development. As the link between nations, organizations, businesses, governments, and people who do not have the same language or culture, translators enable globalized intercommunication. Nonetheless, many clients and users fail to acknowledge the true value of translation by considering the task of translation to be a secretarial activity rather than a skilled or specialized job. As a result, translators cannot help but suffer from a dearth of societal acceptance and appreciation. To overcome this, translators, as inter-cultural operatives, should maintain a trustworthy position just like physicians or lawyers, and clients should also put their faith in translators to provide translations that enhance understanding in their best interests.

Translation services are intrinsically tailored to meet specific needs, both academically and well as in case of market-service. According to functional translation theory, every translation has a designated goal, and each and every translation solution should fulfil that goal.

With the advances in machine translation systems in recent years, translators stand in a position to accept new roles and acquire new techniques and skills in light of these developments. Translation workflows now involve more than just a source text; translators also need to deal with raw machine translation outputs. Consequently, in a machine-translation setting, translators around the world are expected to edit and modify the end-products in agreement with the predefined guidelines. This can appear to be completely unfamiliar with respect to the common and general translation workflows, where translators take a source-text as the base of translation. As the process of post-editing takes place at several levels relying on the role of the translator and the customer's expectations, the skills and competences of translators are increasingly important. Although machine translation has gained popularity, it has yet to be completely recognized by professionals or accurately implied by trainees. Comparing translators' attitudes towards 'Computer-aided Translation-tools' and systems that produce Machine-Translation, one can see that translators reacted negatively to machine translation systems, unlike the translation memories they had developed over time (Cetiner, 2018). A growing number of professional translation companies have begun to incorporate courses on machine translation into their translation training programmes to respond to market needs, and translator training

institutions are reserving a portion of new and relevant courses on translation technology for machine-translation as a means of responding to market needs. The translation profession's sustainability depends on the skills and competencies needed for its survival. The future of translation research focuses on these skills and competencies. A rule-based system, which is based on pure linguistic rules, was designed for the initial machine translation engines. Nevertheless, with the increasing compilation of massive data, which includes bi-lingual and multi-lingual contents, and using staple-tools to regulate these contents or texts, corpus-based propositions attained traction in recent times. While earlier approaches were used in academic and professional contexts to some extent, it is fair to say that tools and applications of machine translation did not get people's consideration until Google launched Google Neural Machine Translation in 2016 as a new kind of approach. In light of the fact that post-editing is such a complicated process, post-editors play a crucial role in successfully regulating the risk-factors linked with many features of translation, such as consumers' expectations regarding value and standard, profit-making concerns, and data safety. In fact, post-editors are regarded as separate jobs or tasks that require additional training in the professional translation industry. Language industries have experienced profound changes due to machine translation in the last ten years—translation companies of all sizes and individual translators have been using this technical approach; this is largely because of the reported increment in the traits of translation products. Artificial intelligence enables machine translation to try to emulate human translation to some extent, but it also conceals errors in itself in order to appear to produce better translation outputs. The errors are not easily detectable, but they need to be found and edited to ensure that the translation is completed professionally. A growing number of companies are looking for qualified post-editors who can recognize errors and be capable of editing them according to the requirements outlined either by the user/consumer or the concerned authority/agency. Consequently, post-editor expertise has obtained increasing importance in the translation industry as well as in academia at large. Due to this, proper knowledge regarding machine translation, basic programming or operational skills, and the efficiency of maintaining machine translation engines are especially stressed in the competencies for post-editors. Translation companies seek candidates with these skills, while institutions meant for translator training strive to prepare the trainees with them.

A translation service's degree of customizability can range from profoundly individualized to primarily forthright content production; tailored translation services are rendered to translate texts or contents that require modification for the sake of functioning in the target language (TL), such as political or marketing documents. As an example of a greatly customised professional translation, transcreation, often described as a mode of tailor-made content for a specific audience or purpose, satisfies brand and campaign intentions more faithfully in contrast to the author's original posited meaning and objective in the marketplace. Since the prevailing misconception is that

the process of translation has to be an accurate and authentic transfer between languages, which does not allow any adaptation of content, advertising agencies have been handling the translation of large companies' international marketing materials until recently. With the right elements processed by the technological tools, translation technologies might prove to be effective for professional exchanges with a reasonable amount of customization: if the user-specific terms and preferences are acknowledged by the system, the translators who are working on the texts of that user(s) get a perception of the company's preferences and do not need to customize each text separately. Translating is portrayed as a knowledge-based, intelligent activity, relying on the service provider's expertise to produce its core offering. Professional translators, for instance, possess a variety of skills, including insights regarding different languages, cultures, and the process of translation itself, along with knowledge of consumers' preferences and technological overviews; and they know how to assimilate those skills to suit each translation situation. The translation process involves a distinct level of decision-making; therefore, it has to be somewhat knowledge-intensive; and translation is not any different from other professional services from a labour-intensive standpoint. It used to be possible to produce the core offering without investing in technology, but today, service providers are equipped with one or more technological tools in order to keep up with the constant demand for productivity increases. As a cognitive task, translation is likely to be considered a primarily labour-intensive, people-based service, with technology simply supporting rather than fulfilling the major function.

Conclusion

There has been a significant improvement in translation practice in many countries over the past few years, and translators are now gaining professional status in many countries; however, it is important to note that India, despite having identified and documented no less than 1635 mother tongues, divided into 122 languages, has not yet achieved the intended professional status for its translators. Despite the fact that bilingualism and multilingualism have paved the path for the development of the diverse society of India, Indian translators face challenges resulting from the inherent bilingualism and multilingualism of Indian society. In many cases, a translator can be equated with a friend or co-worker, who is bi-lingual and also perceived as being able to help with any questions or extend their services for free or for a very low price. As a result, the challenges become more challenging when Project Managers, with or without proper knowledge of the entire process, compare the costs of a skilled, professional or trained translator with those of their colleagues, who have helped them out for free. The translator's task becomes even more challenging when he/she is trying to bid on an international project and has to explain the differences between the translation process carried out by machine translation and that of a professional translation to the Project Manager or the Indian businessman. A professional translator's external challenges multiply once they interact with the industry; they are

faced with a range of other issues as well, such as payment problems with companies or consumers, a deficiency in the stability of work, a lack of interest from governments toward proper recognition, a shortcoming of standards, funding, and certification to upgrade skills. A translator has a difficult time evolving as a professional in this situation, and those who do evolve are easily considered entrepreneurs, since they cultivate the capability to build and create something from scratch. While practicing this method of making wages every day, the professional translators have to constantly deal with all odds, only with the hope of being recognized as established translators at some point in time. While the difficulties are guite obvious, there are some translators, a significant number of whom live in India, who face these complexities and rise above all obstacles to acquire a livelihood and contribute to the nation's economic, social, as well as cultural development. In addition, a few of them progress guite well and establish small to medium-sized, if not large, translation companies that facilitate and enhance the utility of translation. Furthermore, to face external as well as internal challenges, a translator must consider the reality of globalization, which is one of the key factors behind a dynamic market. Globally, innovation is becoming more important as service providers strive to find ways to achieve customer satisfaction. It is impossible for any firm to have a scope and size large enough to satisfy the needs of its customers, and in order to satisfy consumers one at a time. all firms must have access to the resources of various small and medium-sized companies, therefore building a global ecosystem. Translators, too, can benefit from well-known networks that work wonders, and by utilizing these networks, they can bring competitiveness to their work. It is evident that Indian translators are slowly growing as entrepreneurs, but they have not yet achieved their full potential by adopting a common platform; other setbacks and hurdles are largely the result of vestiges of colonial mindsets that persist to this day. As the shared impacts of events have become apparent, perhaps it is time for a change, and the only hope can be found in knowledge sharing, along with the inter-cultural exchanges of experiences, resources, and ideas. The profession of translation and the utility of translating will thrive in the future if entrepreneurs "network" to manage, procure, and sustain development and growth by taking into account all the means, measures, and infrastructural support available throughout the world.

In conjunction with the focal point of the connection between translation, market and ecology, it is important to enquire about the aspects or factors that make some specific translations more sustainable than the others — what exact function does the sustainability of the process of translation play in sharing and accumulating knowledge; and what are the criteria that can be proved to be useful to assess the sustainability of translating contents related to fields which are more complex than the others. These queries and interrogations have the capacity to pave the path for recognition of the process of translation as a cultural practice and furthermore, also lead towards a more explicit notion of sustainability of translation.

Acknowledgment

For the analytical perspectives presented in the article, the writer is indebted to several books and journals in the field of translation studies – C. Nord's Translating as a purposeful activity and Gouadec's Translation as a profession are chief among those.

References

- Angelone, E., Ehrensberger-Dow, M., & Massey, G. (2019). A–Z key terms and concepts. The Bloomsbury Companion to Language Industry Studies, 387.
- Çetiner, C. (2018). Analyzing the attitudes of translation students towards cat (computer-aided translation) tools. *Journal of Language and Linguistic Studies, 14*(1), 153-161.
- ISO 17100:2015. Translation services Requirements for translation services. https://www.iso.org/standard/59149.html
- Koskinen, K. (2020). Tailoring translation services for clients and users. *The Bloomsbury Companion to Language Industry Studies*, 139-152.
- O'Hagan, M. (Ed.). (2019). *The Routledge Handbook of Translation and Technology*. Routledge, UK.

Sustainable Entrepreneurship – Why does it matter today?

Amrita Dutta

Netaji Nagar College, Kolkata, West Bengal, India

Corresponding Author's Email: amritaroy59@gmail.com

ABSTRACT

Sustainable entrepreneurship is a concept that focuses on the long-term social and environmental ramifications of business decisions. In this article, we look into the conflicts between the ideas of sustainability and entrepreneurship. We delve into the general approach in which an entrepreneur undertakes a new business venture and the implications of adopting sustainable business practices in the face of market competition. We discuss the benefits of being an early adopter of sustainable entrepreneurship as well as the challenges that will impede its global acceptance. We finish the article with a case study of a small-scale business idea and ponder the role of sustainable entrepreneurship in shaping the future.

Keywords: Blithely, Obliteration, Eco-friendly

Introduction

In recent human history, businesses around the world have continually undermined environment and long-term human well-being to maximize fiscal interest. There are innumerable instances of large organizations blithely overlooking the ramifications of the noise and pollution emanating from their business endeavors. Oil spills, carbon emissions, felling of trees, and overuse of oil and timber form the long list of relentless activities that pose major threats to natural environments. Therefore, it is not an exaggeration to suggest that the terms 'sustainable' and 'entrepreneur' do not always go hand in hand. However, very few would argue that sustainable entrepreneurship is also the need of the hour as well as our last resort to prevent the obliteration of life from the face of this planet. Incidentally, the word 'entrepreneur' originated from a French word, meaning to undertake. One can only hope that the future entrepreneurs will truly undertake a mission of rescuing the environment and not plunder it.

Let us take a step back to ponder what an entrepreneur's undertaking truly is. Traditionally, the goal of the entrepreneur has been to act as a bridge between the suppliers and end users. Frese and Gielnik (2014) have pointed out that an entrepreneur tends to exploit any profitable business opportunity in the following three phases. First, he seeks out a viable business proposition through market research.

Second, he puts together the necessary resources needed to bring the idea to fruition. Third, he starts the venture and works toward its overall growth. It stands to reason that an entrepreneur's journey through these steps is not an easy one – he is constantly challenged by the market forces and is striving to make his proposition more attractive to the end users. Needless to say, the environmental impact of his business is the last thing on his mind.

This is a good time to float the idea of sustainable entrepreneurship. As mentioned earlier, it is a marriage of two seemingly dissimilar ideas sustainable and entrepreneur. Sustainable entrepreneurship attempts to balance the immediate payoffs of the business with large-scale market success and societal and environmental innovation. Schaltegger and Wagner (2011) has rightly pointed out that a sustainable entrepreneur assumes a social responsibility for his actions. In other words, he is committed to meeting the supply demands of his product or services, while minimizing the negative environmental and social effects therefrom. Oftentimes, a sustainable entrepreneur ends up seeking out complex environmental and social issues and realizes a successful business model to overcome the problem. Given that a vast majority of business are operating with unsustainable methods, the sustainable entrepreneur is also a bit of a maverick trying to turn things around. To achieve these goals, he employs cost reduction, eco-friendly practices, public awareness campaigns to catch public attention.

The most important thing to recommend for an entrepreneur to realise very consciously the field or market they are entering. First, need to assess the every possible perspective, the viability of the idea or concept and also the competition and upskill behind the planning of business of any sort.

In this context, I remember the utterances of a Social Entrepreneur, Milan Ganatra, Cofounder and CEO of 1Silverbullet, who said that currently we cannot deny the increasing acceptance of digital operations especially from the pandemic period. Now what we need is a certain amount to invest in the business and the will to work hard.

It was suggested by Ganatra that now is the time to work on a hybrid model. The opinion of common men is like the impact of COVID-19 has been multi-fold. It has created an opportunity for those looking to do their own thing.

One can tie up with a big e-commerce company that needs delivery agents to drop products at the consumer's doorstep. This service would be helpful to those who cannot step out themselves.

This brings a very important question to the fore – why would an entrepreneur, whose primary objective is to optimize his monetary returns, look to incorporate sustainable methods into his toolkit? This question is an imperative because a rational entrepreneur will look to weigh the risks-to-reward trade-off for his actions. There are actually several

advantages of sustainable entrepreneurship, especially for budding entrepreneurs.

- Businesses function on novelty how different is your product from those of others? Environment truly can offer that edge to the sustainable entrepreneurs. Specifically, the fact that a business is abiding by the government regulations and expressing concerns over the depleting natural resources makes it a unique proposition. The end users are considerably more trusting of products that follow the prescribed guidelines.
- While sustainable business models come with a higher initial investment, they possess a significantly lower maintenance cost. Sustainable practices coupled with customer goodwill promises a higher long-term reward to the entrepreneur.
- There are innumerable businesses that invest funds towards battling legal cases against disgruntled customers and government agencies. A sustainable entrepreneur is actually capable of cutting down on all those expenses by sheer dint of his eco-friendly practices. This is also a reason why skilled individuals would like to get hired by a sustainable business as opposed to an organization with a dubious track record of causing environmental and social hazard.
- Finally, it is well known that sustainable practices come with tax benefits. Cleaner practices are encouraged by the government, provisioning tax-reliefs under sustainable manufacturing and distribution practices.

Despite these benefits of sustainable entrepreneurship, we are unlikely to find too many organizations adopting these sustainable strategies in the recent future. The primary reason behind this hesitancy is the perception that sustainable entrepreneurship is a 'high-risk high-reward' game. The perception of risk can have several implications here. As we discussed earlier, entrepreneurs are intrinsically risk-takers, i.e., they thrive on challenge. Consequently, it is likely that there exist a few young entrepreneurs expressing willingness to adopt sustainable methods. However, the major challenge for these risk-takers is market forces. Rival companies as well as critics have written off sustainable entrepreneurship as a gimmick or 'greenwash'. There are a few other reasons that impede large-scale acceptance of sustainable entrepreneurship.

- It is often difficult for the up-and-coming entrepreneur to find investors for his new practices. The skepticism of the investors dissuades them from pursuing their vision and at times accepting to play by the conventional rulebook.
- The fact that sustainable entrepreneurship is at a nascent stage means that there is limited access to knowledge about sustainable practices. The lack of the understanding of raw materials and supply chain, together with steep market competition checks the growth of sustainable business models.
- Another problem along very similar lines is the absence of infrastructure. Although

the investors, customers, and governments are beginning to recognize the importance of sustainable entrepreneurship, we have yet to see a massive boom that will incentivize these early efforts. Till such time, the entrepreneurs would continue to swim against the tide.

It is worth mentioning here that the problems are compounded by poverty and unemployment ubiquitous in the developing nations. The entrepreneurs are burdened by loans and familial financial responsibilities that cloud their judgement. They are desperate to make a living and support their basic needs and in no position to have longterm aspirations for a cleaner and happier future. Government efforts to mitigate these problems are seldom enough since many of these nations have an exploding population, and the welfare and incentive programmes are too few to meet their needs. However, I would like to believe that there is light at the end of the tunnel. Especially, the advent of technology has opened several opportunities for the young and enterprising minds of this age. They are beginning to believe that if they are skilled and have unique ideas, the sky is the limit. Let me relate this story of a group of convent school students based in Calcutta. They came up with an idea of creating an assisted living programme for the elderly, especially those whose children have settled abroad. They were able to realize this idea through digital fund transfer and donations from different parts of the world. This programme still exists and continues to grow, providing cleaning, counselling, shopping, and medical support to the aged. Evidently, sustainable entrepreneurship can often take the form of 'social entrepreneurship'. I am hopeful that we will see many such innovations in the days to come.

From the daily newspaper, The Telegraph, I came to know that Surbhi Arora, 35 years old Jalandhar based housewife turned entrepreneur after realising the importance of cleanliness and hygiene last year during the first lockdown. Nobody can deny that entrepreneurs create new businesses, which would definitely add to national income as well as economic growth. But, unregulated entrepreneurship and unfair market practices is never recommended as positive career option.

I would like to finish this article with a discussion on the broader future implications of sustainable entrepreneurship. As the awareness grows, I am certain that the future holds great promise for sustainable practices. We are beginning to see early evidence of companies being penalized for the emission of greenhouse gases, compelling the companies to design climate policies that align with their social responsibility. We shall soon see business leaders paying closer attention towards the assessment of the risks of the environmental impacts of their business. This means that they will focus more and more on technologies that minimize resource wastage and we will witness new products that meet the environmental and social guidelines. Sustainable entrepreneurship will also benefit human health in a massive scale, by revolutionizing the food and beverage industries. Overall, we can only hope that sustainable entrepreneurship, like information technology and the recent pandemic, will reshape

Sustainable Entrepreneurship – Why does it matter today?

the terrains of business practices around the world.

Conclusion

In conclusion, sustainable entrepreneurship will pave the way for innovative business models. On the one hand, business ideas that incorporate sustainable practices will stand out as novelties. This would compel the existing corporations to revisit their strategies. Specifically, the tech giants would take this opportunity to introspect on the downside of technology and ways to mitigate them to be able to create new markets for their products. On the other hand, it will bring about positive ecological, environmental and social change. Overall, as a consequence of sustainable entrepreneurship, we can envision a world where commerce and consumerism can coexist with equity and social welfare.

Acknowledgment

The author expresses gratitude to Netaji Nagar College for giving her the generous opportunity to write this essay for the esteemed publication in cooperation with Lincoln University College, Malaysia.

References

Frese, M., & Gielnik, M. M. (2014). The psychology of entrepreneurship. *Annual Review of Organizational Psychology and Organizational Behavior, 1*(1), 413-438.

Schaltegger, S., & Wagner, M. (2011). Sustainable entrepreneurship and sustainability innovation: categories and interactions. *Business Strategy and the Environment,* 20(4), 222-237.

'Swiggy's' Sustainability Drive: The Debut Tale

Bipasha Ghose Dastidar

Department of Political Science, Netaji Nagar College, Kolkata, West Bengal, India

Corresponding Author's Email: bipasha.dastidar@gmail.com

ABSTRACT

The concept of entrepreneurship has been important, with its varied dimensions all paving the way for sustainable development. The article is an effort to look through the success story of Swiggy and all the factors responsible for making it reach this top-notch position. The former, essentially based upon the secondary data, also tries to explore the notion of a 'helping hand' extended by the former. Chiefly speaking, the immense appeal of serving the masses, especially during Covid times continues to be an inspiration on the part of the enterprise for generations to come.

Keywords: Entrepreneurship, Sustainable Development, Swiggy, Success, Top-Notch, Helping Hand, Inspiration

Introduction

The notion of sustainable entrepreneurship refers to the process of mobilizing new resources that would lead to various activities, thereby bringing structural changes both socially and environmentally. As against this backdrop, one cannot ignore the advent of sustainable practices and their adoption by current enterprises, which have cast a deep influence on societal developments as a whole. Thus, it can be rightly asserted that a lack of sustainable organizations will eventually lead to a vacuum in terms of sustainable development and therefore leave an emptiness for the near future. All Swiggy's safety measures to battle the Covid fear included hygienic delivery for both consumers and personnel coupled with steps to initiate consumer awareness which led to a massive increase in trustworthiness on part of the former (Bapna, 2020).

Literature Review

The writings that have been referred to for this article have dealt with certain dimensions. One such has been the article by Amit Bapna (2020), which essentially highlights the safety measures taken by the food delivery app, Swiggy, for ensuring adequate supplies to its consumers. Besides these, its major focus has been on the newly developed techniques, all of which ease businesses and foster consumers' confidence. Apart from the above, as highlighted by Prachi Gupta (2019), Swiggy's essential enterprise harps upon the concept of electric vehicles as a measure towards sustainable development, where a pollution-free environment coupled with the startup's

profitability act as the key concerns. Anirban Sen (2018) emphasizes the fact that every startup needs to chalk out lucrative avenues for its development, which calls for stronger teamwork and other effective utilization of opportunities. The onset of 'new normal' has added another feather to the former's cap, where people's protection, including that of its own team, had been of the utmost necessity. A sound care accompanying a proper fulfilment of their needs all have largely enabled Swiggy in setting an example for the upcoming startups in the future.

Discussion

Unveiling 'Sustainability': an interpretation

Entrepreneurship as a subject matter relates to developing new businesses, or, in other words, unveiling the capacity to innovate through new technologies commonly referred to as startups. As against this milieu, one cannot ignore the notion of 'sustainable development' which denotes the development that meets the needs of the present without compromising the ability of future generations to meet their own needs, as mentioned in the Brundtland Report of 1987. The Brundtland Report's central themes being social justice and human development, it seeks to accelerate social equity thus promoting an equitable distribution and utilization of resources. Therefore, it can be said that sustainable entrepreneurship as a concept involves discovering, creating, and subsequently making adequate use of commercial opportunities that shall finally contribute towards social and environmental gains within society. Besides this, there is the United Nations General Assembly (UNGA) 2030 Sustainable Development Agenda with its firm commitment towards economic affluence combined with planet protection, which has been followed by all entrepreneurs for positive conservational effects through their creativity.

India needs to move further by establishing new ventures that will push the way for greater novelties on the one hand, while also allowing for the unfolding of various potentials on the part of its citizens on the other. Noteworthy within this context is the Startup India initiative, announced by the Prime Minister of India, Shri Narendra Modi, on August 15, 2015. This endeavour targeted towards building an ecosystem for flourishing inventiveness and startups in the country which would foster economic growth besides opening the doors of employment opportunities.

Swiggy to get set go!: an analysis

The startup ventures have made things accessible, thus adding to the profitability of different enterprises. One such endeavour had been made by Sriharsha Majety, Nandan Reddy, and Rahul Jaimini through Swiggy, India's largest food delivery service. Nevertheless, one cannot forget the factors responsible for Swiggy's accomplishment. One such reason happens to be its broader logistics chain coupled with an efficient engagement and modern technologies. The startup with an employment of a vast

amount of people for delivery, which led to the insertion of delivery charges for customers, along with its able management system, all carved the way for huge profits. All the above had been emphasized by Swiggy board member Vishal Gupta, who said, "Zomato, UberEats and (Ola's) FoodPanda are credible players, but food delivery is not their core business. They can't do what Swiggy does day in, day out" (Sen, 2018).

As against this milieu, one cannot overlook the role Swiggy played during the onset of Covid 19. Swiggy's care package, commonly referred to as 'Swiggy Suraksha' was notable owing to its provision of Rs.14,000 for 2 weeks to all the COVID affected delivery (Business Standard, 2021). Adding to this, the affected families would also be entitled to receive hospitalization cover of upto Rs.1.5 lakh accompanying a life insurance limiting upto Rs.5 lakh in case of an untimely death of a delivery partner. The startup's Covid relief extended up to the provision of income support for one week for the delivery executives during the period of bereavement. This finds expression in the words of Swiggy's Chief Operating Officer, Vivek Sunder. As asserted by him, "With Swiggy Suraksha, we are making sure that our delivery heroes also have the necessary support-including a 24X7 hotline for medical emergencies, access to doctors for themselves and their families, income support, free access to vaccines, hospitalisation cover for themselves and their families if affected by Covid-19" (The Economic Times, 2021).

Swiggy's inventiveness of a 'Care Corner' deserves special mention, through which home-cooked food, medicines, etc have been made accessible to all. The food delivery facility had become hugely popular among the people owing to its newer practices to protect its delivery persons, adding to its raising gains thereby accentuating the startup's overall (Tech Desk, 2021). One of its various measures is Swiggy Genie, or the venture's pick up and drop-off service. The second wave of this pandemic witnessed a massive rise in the availability of oximeters, thermometers accompanying over the counter (OTC) medicines. This had been hugely smoothened by Swiggy Genie which extended its reach to maximum people as was visualized in a 350% increase on account of OTC medicines through the former. Vaccination, an extremely essential antidote against the Covid menace was taken up by Swiggy owing to the former's declaration of vaccinating over 2,00,000 delivery executives. This same scenario had been evident in instances of Amazon and Flipkart who equally contributed towards this vaccination drive by arranging adequate vaccine supplies and spreading awareness regarding this need of vaccines for a corona free environment in the days to come.

The environment's well-being: a concise view

Entrepreneurship relates to originations on the one hand, whereas on the other hand, it also takes into account the notion of eco-friendly protection through an effective utilization of its resources that would set an example for future generations. As against this backdrop, comes the role of cycles made in use by Swiggy to complete nourishment

distributions. The use of Electric Vehicles has been a vital step towards ensuring sustainability. This food tech enterprise had been seeking sustainable development by reducing carbon footprints, zero emissions all to made possible through the use of EV's. The young entrepreneurs had been remarkable enough through their previous efforts regarding the use of E-rickshaws for delivery purposes in cities, namely Lucknow and Delhi, to name a few.

This EV mechanism opted for by Swiggy had been hugely applauded, as had been visible in the former's joint projects with other companies. Noteworthy within this context is Swiggy's agreement with Reliance BP Mobility Limited (RBML) for constructing an EV ecosystem coupled with battery swapping stations throughout various parts of the country. This, being necessary for sustainable development, had been illustrated in the words of Amitabh Kant, CEO, Niti Aayog. According to him, "The Indian industry must continue to work towards driving the adoption of EVs as a part of the nation's overall efforts to transition to sustainable and environmental-friendly mobility. Swiggy's commitment in this direction is a welcomed development. I urge other industry players to factor EVs in their business and operating models for a sustainable future." (Peerzada, 2021).

Conclusion

Summarily, then, it can be said that entrepreneurship demands newer business ideas in accordance with a way of life. Entrepreneurship and sustainable development share a closer connection with each other. This has been broadly highlighted by the emerging startups for whom profitability associating itself with gaining the topmost position amongst all remains an utmost priority. The startup schemes have in the recent times left no stone unturned in looking after the people's expectations which have played a crucial role behind these flourishing enterprises as had been evident during the advent of Covid-19. Therefore, it can be said that though it is true that the growing establishments have been serving the society through their inventive efforts in almost every field this is to continue along with environmental protection that would set an inspiration for all the upcoming endeavours within the world stage.

Acknowledgement

Words shall fall short for expressing the author's gratitude to the College Principal for giving this valued opportunity. She is immensely thankful to all the members including the entire publication team associated with Lincoln University College for all their support. She also is obliged to all the writers of the writings she has referred to while formulating her article. She is also thankful to her family for their support in all matters.

References

Bapna, A. (3rd December 2020). How Indian Delivery App Swiggy Combated the Lockdown Blues. The Drum. https://www.thedrum.com/news/2020/12/03/how-

- indian-delivery-app-swiggy-combated-the-lockdown-blues
- Business Standard. (7th June 2021). Swiggy expands Covid-19 related benefits for 150,000 delivery partners. https://www.business-standard.com/article/companies/swiggy-expands-covid-19-related-benefits-for-150-000-delivery-partners-121060701104 1.html
- Gupta, P. (1st May 2019). Swiggy goes green! Over 10 lakh deliveries on cycle in a month, also pilots EV in 10 Indian cities. Financial Express. https://www.financialexpress.com/industry/swiggy-goes-green-over-10-lakh-deliveries-on-cycle-in-a-month-also-pilots-ev-in-10-indian-cities/1564556/
- Peerzada, A. (5th August 2021). Swiggy Aims To Cover 800,000 Km Per Day on Electric Vehicles by 2025. Business Standard. https://www.business-standard.com/article/companies/swiggy-aims-to-cover-800-000-km-per-day-on-electric-vehicles-by-2025-121080500729 1.html
- Sen, A. (2nd August 2018). How Swiggy became India's fastest unicorn. *Mint*. https://www.livemint.com/Companies/NsVFwJMvONZm8qEDJuGoOM/How-Swiggy-became-Indias-fastest-unicorn.html
- The Economic Times. (7th June 2021). Swiggy Launches Covid Care Package for Delivery Partners Across India. https://www.economictimes.indiatimes.com
- Tech Desk. (6th May 2021). Swiggy adds care Corner for COVID-19 needs: Here's how to use it effectively. *The Indian Express*. https://www.indianexpress.com>techook

Art Therapy: A Healing Tool in Health Care

Anindita Mitra¹, Ishita Mandal^{2*}, Lipika Mondal²

¹Charnock Health Care Institute, Kolkata, West Bengal, India

²Department of Nursing, Aliah University, Kolkata, West Bengal, India

*Corresponding Author's Email: imandal5@gmail.com

ABSTRACT

In 1942, British artist Adrian Hill discovered the benefits of painting and drawing while recovering from tuberculosis. In the mid-20th century, art therapy was broadly accepted publicly as a therapeutic approach. Art therapy is a kind of therapy done under the guidance of a trained professional to relax or practice self-care by being creative. It can be beneficial to an individual or group in any sort of setting, be it hospitals, communities, home settings, or even school. This therapeutic process can be effective for a range of physical or mental health conditions, including specific health problems with ongoing daily challenges, and helps clients to live a better quality of life. Art therapy improves mood and reduces pain and anxiety when offered at the bedside during acute hospital treatment. Art therapy may be excellent for all patients, regardless of sex, gender, age, ethnicity, and diagnosis. The significant role of nurses is to implement different forms of art therapy on a daily basis, including the development of policies, as these interventions are often less expensive and easier to implement. Researchers want to do a systematic review and establish hospital protocols on art therapy for inpatient departments of hospitals. While providing mainstream treatments, hospital authorities and health care professionals can use forms of art therapy to optimize care and outcomes.

Keywords: Art Therapy, Healing Tool, Health Care, Mental Health, Nursing

Introduction

Art therapy is an expression of the soul of a human being. Children are considered to have the purest souls, and they love to explore new ideas. These qualities of mind encourage researchers to work in this field.

A systematic review of art therapy sheds light on its benefits and effectiveness for mental and physical well-being.

Modern art therapy focuses on the creation of images or objects that enrich the personality. The art therapist and client establish a psychotherapeutic relationship through self-expression and reflection. Aesthetic outcomes are not expected outcomes of art therapy (Holttum, 2020). Art therapy mostly focuses on the thought process and feelings of the client through the process of creation.

The goal of therapeutic interventions is highly individual and parallel to the

developmental needs of children (Rubin, 2005).

Education and the learning process are the integrated approach to art therapy, which helps children gain confidence in their expression of feelings and increase their self-esteem

Need

The term 'Art therapy' was coined in 1942 by British artist Adrian Hill, who discovered the benefits of painting and drawing while recovering from tuberculosis. In the mid-20th century, art therapy was broadly accepted publicly as a therapeutic approach. Art therapy is a kind of therapy done under the guidance of a trained professional to relax or practice self-care by being creative. It can be beneficial to an individual or group in any sort of setting, be it hospitals, communities, home settings, or even school. This therapeutic process can be effective for a range of physical or mental health conditions, including post-traumatic stress disorder (PTSD) or trauma, substance use disorder (addiction), dementia, cancer, Parkinson's disease, stress and anxiety, elderly patients, eating disorders, and clients who have not been diagnosed with specific health problems but face ongoing daily challenges.

Art therapy has the potential to improve mental health, emotional state, and stress, as well as to help clients live a better quality of life.

There are several forms of art therapy, including painting, drawing, sculpture, collage, writing, photography, textiles, and digital media using graphic software or video editing software. In several forms of art therapy, painting plays an important role and can be used in several forms like watercolor, acrylic, spray painting, etc. Other creative therapies are music, dance, drama, poetry, etc. It is the responsibility of professionals to give the client direction toward the appropriate form of therapy. Techniques can vary depending on age, physical or mental abilities, and specific purposes. For example, in the case of children or clients with anxiety who are not able to draw or sketch properly, art therapists can use 'collage' techniques and use them for narration or stories. The use of different forms of art can play an important role in the thought process and feelings of an individual's mind, thus improving mental health and well-being.

Methodology

Electronic databases like Scopus and PubMed were searched. Systematic methods for study selection and data extraction were used.

Impact of art materials:

Art materials selection for art therapy is the key factor of outcome. Some materials (pointed pencil) provide us to achieve a sense of control, some (clay) gives space to express feeling. Artistic ability is not included in the process. Collage, cut, and paste are some methods that can be done for individuals who have doubts about their abilities.

Stages of art therapy for children with special needs:

Phase 1: The psychotherapeutic relationship with children is the main focus of this phase. A child needs to explore materials and play for 20 to 30 minutes. This will create a safe space to exchange emotions and feelings.

Phase 2: At this point, the child will begin consciously and thoughtfully interacting with the therapist, and the process of creation will begin.

Phase 3: In the final stage, children will be asked to choose preferred materials for creating objects (paper, paintbrush, color, or any other related materials). Therapists may guide patients in creating the desired object by explaining strokes and mixing colors. Therapists can combine the session with story, play, music, and movements. Before moving on to the more complex part of exploring emotions, children need to feel comfortable and safe with the therapist.

Diagram

- 1. Different aspects for deeper understanding of unfold emotions.
- Nonverbal behavior of the child
- 3. Question to facilitate emotional process.
- 1. Art therapy will focus on certain important aspects to perceive the individual thought (Rubin, 2011).

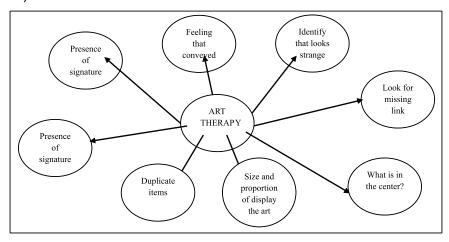


Figure 1: Different aspects for Art therapy

Feedback question for adult participants after attending sessions:

- 1) What feelings do you have with the art therapy treatment?
- 2) What you find beneficial in these sessions?
- 3) Is there anything that you feel was ineffective in the protocol?
- 4) Have you noticed any differences in your reactions to your daily experiences?

- 5) Have you experienced any differences in your personal relationships?
- 6) Reflecting back to when you began this process, what differences do you perceive in your emotions? Daily functioning? Sleep quality? Appetite?
- 7) Rate your experience on a scale of 1-10 where 1 indicates poor and 10 indicates an excellent experience?

Discussion

This paper includes findings from the systematic review of art therapy interventions for different aspects like reduction of anxiety and depression of cancer patients, pain management, mental health issues, and paediatric patients.

In a systematic review by Effa, Dolgoy and McNeely (2020) on Resistance Exercise and Art Therapy on Body Image in Breast Cancer, it has been seen that resistance exercises and art therapy have a positive impact on breast cancer survivors. 08 studies they have reviewed and showed significant within group differences in body image scores.

In the therapeutic potential of bedside art observation in hematologic cancer inpatients: a randomized controlled pilot study by Gore *et al.*, (2022) on 73 hematologic inpatients who engaged in art observation felt that the activity provided positive distraction (85.7%) and decreased boredom (79.6%), and many noted that it reduced feelings of anxiety (46.9%) and depression (24.5%).

Zhang et al., (2015) in their meta-analysis on Effectiveness of Mindfulness-based Therapy for Reducing Anxiety and Depression in Patients with Cancer 2015 stated that mindfulness-based therapy significantly improved anxiety for follow-up ≤12 weeks after the start of therapy of 419 cancer patients

A single group pre-test posttest was carried out by Joshi *et al.*, 2021 on Effect of Mindfulness-Based Art Therapy (MBAT) on Psychological Distress and Spiritual Wellbeing in 53 Breast Cancer Patients Undergoing Chemotherapy. Here it showed one week of MBAT intervention for breast cancer patients undergoing chemotherapy significantly decreased the psychological distress.

A mindfulness-based art therapy study protocol to determine efficacy in reducing college stress and anxiety by Van Lith *et al.*, (2021) explained the efficacy of a low-cost and easily accessible mental health intervention targeting college students experiencing stress and anxiety. The study showed 73 percent of college students were experiencing at least one mental health crisis in their academic session.

O'Neill Haaga (2015) in her embedded mixed method design on "Effects of Art Therapy Intervention for Chronic Pain and Psychosocial Comorbidities" showed significant decreases in self-reported pain after each session with significant decreases in pain interference, depression, stress, and anxiety after the art therapy intervention. Session 4 was designed to teach relaxation and stress relief as coping strategies through the

creation of healing mandalas. Significant findings of pain reduction after Session 4 (t(29) = 3.82, p = 0.001, d = 0.53) may provide evidence of the interplay between stress and pain, which would support current research findings that mandala art can reduce anxiety (Curry & Kasser, 2005).

Conclusion

To present a meaningful meta-analysis, art therapy should be performed by a licensed art therapist in a planned way on a large sample over a longitudinal period of time.

Art is a medium of communication and it enhances abilities to express thought, feeling in a constructive way. This art form can be practiced in an isolated form or combined with music, drama, dance etc. with a small group of neurotypical or neurodiverse children. Art therapy is not necessarily a means of assessing children and their abilities; rather, its therapeutic effects will enhance their confidence in problem solving and conflict resolution.

Implementation

The significant role of nurses is to implement different forms of art therapy on a daily basis, including the development of policies, as these interventions are often less expensive and easier to implement. They can get help from specialists to guide and support the clients in their healing phase. To become an art therapist, more practice is needed in terms of education, training, and professional credentials. In most cases, you may need to be a licensed clinical psychologist, professional counselor, or social worker to provide these services.

Researchers want to do a systematic review and establish hospital protocols on art therapy for inpatient departments. While providing mainstream treatments, hospital authorities and health care professionals can use different forms of art therapy to optimize care and outcomes.

Acknowledgment

The author is thankful for kind support from Netali Nagar College management for supporting and encouragement to complete the present article.

References

- Curry, N. A., & Kasser, T. (2005). Can coloring mandalas reduce anxiety?. *Art Therapy*, 22(2), 81-85. https://doi.org/10.1080/07421656.2005.10129441
- Effa, C. J., Dolgoy, N. D., & McNeely, M. L. (2020). Resistance exercise and art therapy on body image in breast cancer: a scoping review. *Women's Health Reports, 1*(1), 424-435. https://doi.org/10.1089/whr.2020.0058

- Gore, E., Daiss, S. D. P., Liesveld, J. L., & Mooney, C. J. (2022). The therapeutic potential of bedside art observation in hematologic cancer inpatients: a randomized controlled pilot study. *Supportive Care in Cancer*, 30(4), 3585-3592. https://doi.org/10.1007/s00520-021-06747-z
- Holttum, S. (2020). BAAT Guidelines on Art Therapy for people with a psychosis-related diagnosis. https://www.academia.edu/44244883/BAAT_Guidelines_on_Art_Therapy_for_People_with_a_Psychosis_Related_Diagnosis
- Joshi, A. M., Mehta, S. A., Pande, N., Mehta, A. O., & Randhe, K. S. (2021). Effect of Mindfulness-Based Art Therapy (MBAT) on Psychological Distress and Spiritual Wellbeing in Breast Cancer Patients Undergoing Chemotherapy. *Indian Journal of Palliative Care*, 27(4), 552. https://doi.org/10.25259/IJPC 133 21
- O' Neill Haaga, Molly, "Effects of Art Therapy Intervention for Chronic Pain and Psychosocial Comorbidities" (2015). *Expressive Therapies Dissertations*. 79.
- Rubin, J. A. (2005). Child art therapy: 25th anniversay edition. https://doi.org/10.1080/15401380802708783
- Rubin, J. A. (2011). *The Art of Art Therapy: What Every Art Therapist Needs to Know.* Routledge. https://doi.org/10.4324/9780203893845
- Van Lith, T., Cheshure, A., Pickett, S. M., Stanwood, G. D., & Beerse, M. (2021). Mindfulness based art therapy study protocol to determine efficacy in reducing college stress and anxiety. *BMC Psychology*, *9*(1), 1-8. https://doi.org/10.1186/s40359-021-00634-2
- Zhang, M. F., Wen, Y. S., Liu, W. Y., Peng, L. F., Wu, X. D., & Liu, Q. W. (2015). Effectiveness of mindfulness-based therapy for reducing anxiety and depression in patients with cancer: a meta-analysis. *Medicine*, *94*(45). https://doi.org/10.1097/MD.00000000000000897

Socio-Economic Inequality and Sustainability of Emerging Economies of South Asia

Sneha Roychowdhury

Department of Computer Science, The University of Sheffield, United Kingdom

Corresponding Author's Email: s.roychowdhury@sheffield.ac.uk

ABSTRACT

Introduction: Sri Lanka's economic jeopardy, Pakistan's devastating floods, a global disaster in terms of growth, economic slowdown, terrorist outbursts in India, Pakistan, Bangladesh, religious and political turmoil, social challenges, and many more such incidents and facts have made South Asia vulnerable to an unprecedented combination of shocks and distresses. Scars of the COVID-19 pandemic have slowed down growth adding fire to the fuel. Inflation in South Asia, elevation in food and energy prices, trade restrictions, food insecurity in the region, gender inequality, inequitable growth and distribution, unplanned migration amounting to an unprecedented burden on the informal sector, etc. all demand the building of stronger fiscal and monetary policy buffers for strengthening resilience for the sake of South Asian people. Methodology: R programming language and grammar of graphics have been used to draw an exploratory overview about the sustainability of emerging economies of South Asia with respect to their socio-economic profiles. World development indicators (WDI), OECD national accounts data files, the ILOSTAT database, and the Global Terrorism Database have been used as data sources. Results and Discussion: Data visualization has been used to explore the socio-economic inequality of the emerging nations of South Asia. Maps, Time Series plots, Pie charts, Clustered bar charts have been used to help policymakers plan sustainable enterprises for resilience. Conclusion: Policies adopted by these nations towards 'Liberalization, Privatization and Globalization' since the early nineties have witnessed glaring inequalities instead of harnessing the benefits of globalization. India, the largest democracy, reports tremendous social unrest, followed by Pakistan and Sri Lanka, creating a hindrance to their sustainable growth. This is increasing due to dissatisfaction caused by the fall in GDP and consequent income and gender inequality, making the system unable to respond to the causes of good governance.

Keywords: Socio-Economic Inequality, Gross Domestic Product, World Development Indicators

Introduction

'South Asian Economies Bounce Back but Face Fragile Recovery'- this was how the World Bank reacted to the question of prospects the economic growth of South Asia

(The World Bank, 2021). Growth of the economy is not only low, but also uneven. Revenue generation is poor mainly due to the factors that millions of workers are employed in informal sector, unemployment rate is alarming and corruption level is mountain high. Job losses, decreasing incomes, gross discrepancies and inequalities, unskilled human capital etc. are some other factors, compelling Hartwig Schafer, World Bank Vice President to comment that "W' are encouraged to see clear signs of an economic rebound in South Asia, but the pandemic is not yet under control and the recovery remains fragile, calling for vigilance," for the South Asia Region. But this dismal picture challenging the efforts for sustainable growth in South Asia is not pandemic specific, rather it is the consistent feature of South Asian economy.

Sustainability of Emerging Economies of South Asia demand greater investment for revamping their scarce resources, both material and human and for laying a foundation for a more inclusive and resilient growth to fight back against South Asia's deep-seated inequalities and vulnerabilities to the acts of intolerance, aggression, inequitable growth of economy and market etc. Unless governments develop clear policies for social insurance to protect informal workers and marginalized castes and classes of people and can develop a spirit of secularism in governance, equitable and robust recovery in socio-economic growth levels and assurance for sustainability are remote possibilities. All efforts and enterprises for equitable and inclusive socio-economic growth will be futile if regional cooperation is not assured, customs restrictions are not made flexible, health, education, and research are not insured, and corruption issues are not addressed to mobilize resource generation. The purpose of this paper is to provide an exploratory overview of the sustainability of emerging economies in South Asia in light of their socioeconomic inequalities.

Methodology

A framework has been proposed to provide an exploratory overview of the sustainability of emerging economies in South Asia in terms of socioeconomic inequalities.

Data visualisation which is an important component of exploratory data analysis has been beneficial to summarise the main features of the dataset, discover trends or patterns in the dataset, and detect anomalies present in the dataset through iterative visual exploration, which has been used to facilitate insight into complex socioeconomic data.

Description of the dataset:

To propose a comprehensive framework for the exploratory overview about the sustainability of emerging economies of South Asia with respect to their socio-economic inequalities following datasets as mentioned in Table 1. have been considered.

These datasets include data about real GDP growth, Annual Gross Domestic Product (GDP), Poverty and Shared Prosperity, People, Environment, Economy, Global Links

and terrorist attacks, gender disparity in the employment sector, the participation of women in decision-making, etc.

Table 1: Datasets

DATASET	LINK
World development indicators (WDI)	https://data.worldbank.org/
OECD national accounts data files	https://data.oecd.org/
International Labour Organisation, ILOSTAT database	https://ilostat.ilo.org/data/
Global Terrorism Database	https://www.start.umd.edu/research-projects/global- terrorism-database-gtd

Proposed framework:

To draw a comparative picture about the sustainability of the emerging economies of South Asia with respect to their socio-economic profiles following framework has been proposed.

- i. Ask a question: The process starts with asking a question; how does income inequality, gender inequality and blockage in 'pipeline' for women's participation in decision making create dissatisfaction and increase terrorism in the emerging economies of the South Asian region? The data used to answer this question are accessible, insightful, reliable, and built on the diverse research traditions in the social sciences (Ferster, 2012). Visualisations helped us understand how inequalities in different facets of life create socio-political instability. This study may help the government understand the significance of investing in social sectors to accelerate human development.
- **ii. Search for information:** The data sources used for creating insightful visualisations are reliable and accessible. Open data from World Bank and Global terrorism database were used for its reliability and easy accessibility. The database for the World Bank is a collection of global development indicators that is comprehensive and directed towards attaining sustainable development goals (The World Bank, 2021). The global terrorism database (1970–2019) has been used to comprehend the consequences of inequality in different facets of life (https://www.start.umd.edu/research-projects/global-terrorism-database-qtd).
- **iii. Structuring the data:** In this step, the raw data was transformed into processed data to create high quality visualizations. To deal with the missing values, the listwise or case deletion technique was used (Scheffer, 2002). Further, R packages like tidyverse and dplyr were used for structuring the in this study, both quantitative and qualitative data were used from the World Bank's online web resource and the Global Terrorism Database.

- iv. Envision the answer: Envision the answer: In this stage, an attempt has been made to use exploratory data analysis to envision the answer to the research question. The projection of the GDP per capita across the nations on a world map formed the pillar to understand the effect of globalization in terms of income inequality. South Asian regions with diverse socio-demographic cultures report one of the lowest GDPs in the world. The time series plot has helped to give an overview of the trend of GDP growth in the emerging economies of South Asia in the pre-pandemic period. Since a country's development cannot be only measured by its economic growth, an insight about the socio-economic discrimination and about the outlook of the society towards women participation in decision making have been projected by using pie charts. A clustered bar chart has been drawn to unveil the sorry state of gender inequality with a focus on the comparison between the unemployment rate of male and female. This is because there is a nominal variable, i.e., "sex," with two categories (male and female), which has been used to illustrate the differences in the rates of unemployment in these two variables. To draw the conclusion that these societal problems have the potential to increase terrorism because of growing dissatisfaction and mental blockage, a clustered bar chart has been used to illustrate the changing pattern of terrorism for 2017–2019 in the emerging economies of South Asian regions. These comparative overviews have been used to provide an exploratory overview of the sustainability of the emerging economies of South Asia.
- v. Represent the visualization: Grammar of graphics has been considered to create a wide range of visualizations. R programming language has been used in this paper for creating the visualisations.

1. Map:

- Information about locations and shapes of geographic features are stored as coordinates and topology.
- Coordinate: geographic coordinate system
- Geometry: lines
- The lowest GDP has been indicated by orange colour and highest by blue. The missing values have been represented by grey colour.

2. Time series plot:

- Statistic: Percentage
- Geometry (geom): Lines
- Coordinate: Cartesian coordinates since data was continuous
- Scales: Linear
- Variable: Independent variable-year, Dependent variable-GDP growth
- Aesthetic/Scale: Different colours for different lines have been used according to the countries with proper labels and legends,

Socio-Economic Inequality and Sustainability

3. Pie chart:

Statistic: percentage

Geometry (geom): polygon

Coordinate: polar

• Aesthetic/Scale: brewer scales have been used to distinguish between different countries with proper labels and legends.

4. Clustered bar chart:

Statistic: count

Geometry (geom): barCoordinate: cartesian

Position: dodge

• Aesthetic/Scale: Different colours have been used for two categories- male and female. Different colours have been used to segregate the categories of type of attack with proper labels and legends.

vi. Tell a story: In this era of globalization, the upsurge of terrorism indicates a complex story, making it mandatory for policymakers to formulate policies to increase the level of satisfaction of the people. The indicators used to understand the growth in terrorism highlight those countries with an equitable distribution of resources; countries with a lesser amount of inequality are in a better condition with respect to the frequent occurrence of political turmoil and instability. Although Sri Lanka has proven that feminine leadership helps build relationships and social bonding, which may be considered one of the chief reasons for the low occurrence of terrorist activities, income and gender inequality remain critical problems in this region. It can also be argued that the market of Sri Lanka is not as lucrative as those of India and Pakistan; the possibilities of cross-cultural conflicts are limited as compared with the scenario of Geographically, Sri Lanka is in an advantageous position. The strategic importance of India, clubbed with its own indigenous limitations, has made her more vulnerable than others as regards outbreaks of terrorist activities. The political environment of the country and the quality of life of the people are important parameters to measure the rate of human development, which in turn points towards the success or failure of the policy making system of a country. No single criterion can explain the cause of social unrest, nor can there be a generalized derivation applicable to every nation, irrespective of their specialties.

Results and Discussion

The advent of globalization across the globe has brought about phenomenal changes in the socio-economic scenario in all parts of the globe. Aggression of market economy and transformation of citizens into customers/clients have clubbed together with the factors of increased inequality in major facets of life of the common people. In 1980s, US president Ronald Reagan and British Prime Minister Margret Thatcher made the practical application of New Rights Philosophy, activating the Robert Nozick's (1974) concept of 'minimal State or state as night watchman'. Random outsourcing, public choice, free competition, and the managerial state all helped increase GDP, but at the same time they increased gaps among the regions, among the nations, and among the segments of population, which is evident from the GDP per capita map.

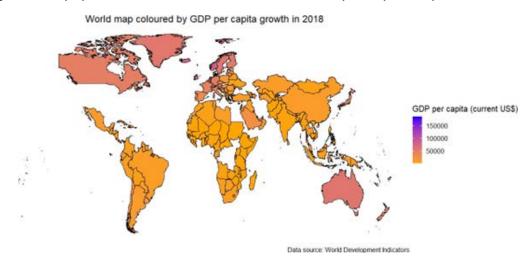


Figure 1: GDP per capita across the world, 2018

The map displays the GDP per capita of different regions with different socio-cultural diversity. The data retrieved from World Development Indicators shows that the GDP per capita projections of European, South Asian, and African regions are in different states of development; there is every possibility for the people of the deprived regions to suffer and to get depressed due to relative deprivation. Moreover, Global Multidimensional Poverty Index (MPI) report, 2018 released by the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative (OPHI) projects a complex picture of poverty in South Asian region, where almost 41% (Global Multidimensional Poverty Index (MPI),2018) of the people are sucked into this black hole of relative deprivation mainly due to extreme concentration of wealth in the hands of privileged .This has instigated the researcher to explore how income inequality, gender inequality, and blockages in 'pipeline' for women's participation in managerial posts, i.e., in decision-making and execution, nurture social imbalance, provoking some sections of the unprivileged to get trapped and create social unrest, and how challenges are mounted against all attempts to ensure the sustainability of the enterprises for socio-economic growth.

South Asia is rich in socio-demographic diversities. Following the Great Recession of

2008, its economy began to enter a new phase. Pandemic in 2020, however, added new variety. Therefore, the period of 2008–2019 has been chosen to seek an answer to the research question stated above with respect to South Asia.

An overview of the economic condition of emerging economies in South Asia is visible from the following graph, drawn based on the data available from the World Bank national accounts and OECD national accounts data file on GDP. It forecasts the scenario for South Asia from 2008 to 2019

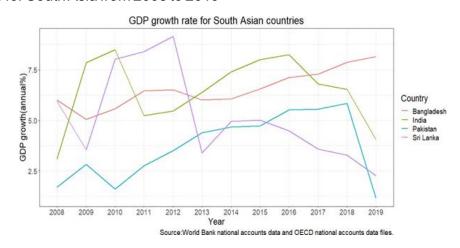


Figure 2: Trend of GDP growth rate in South Asia

This visualization portrays that after the 'Great Recession' (Christiano, Eichenbaum & Trabandt, 2015) in 2008, India's economy started well to harness its potential, and in 2016, the figure was close to 8.1% per annum, followed by Sri Lanka. Bangladesh, however, witness's stagnancy, although its growth in GDP over the decade appears to be consistent. But Sri Lanka, India, Pakistan is found to be coming down the lane since 2018, which makes it mandatory for them to think more for political stability, consolidation of democracy and consistency of its market policies to attract FDI (Foreign Direct Investment).

The two South Asian economists, Mahbub-ul-Haq and Amartya Sen, realised that a country's level of development could not be measured only in terms of its economic growth. Their emphasis was on the need to assure equity, sustainability, productivity, and empowerment. Based on their observations, certain parameters can be considered for discussion to focus on the issues related to social imbalance and consequent social unrest, making attempts to develop a country's socio-economic standards futile and non-sustainable.

1. Concentration of wealth and consequent income inequality:

Concentration of wealth in the hands of a few is evident from the data presented by

World Development Indicator database over the period 2010-2019. Data is being referred to the most recent year available during the period specified.

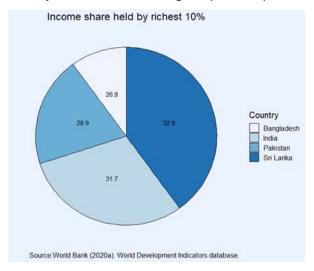


Figure 3: Concentration of Wealth of the Emerging Economies of South Asia

This figure portrays that 32.9% and 31.7% of the income is being shared by the richest 10% in Sri Lanka and India respectively, projecting the highest concentration of wealth in the hands of few, creating perpetual crisis for oppressed minorities, generating venues for exploitation of disadvantaged populations; this leaves the common man with nothing but dissatisfaction, frustration, leading to erosion of societal values and hinders consistent and overall growth of economy. Bangladesh and Pakistan are lagging not far behind in this respect. Despite tremendous efforts taken for development, 'ultimately, due to small capital transfer from developed to the developing countries, globalization widened inequalities (Shahzad, 2015).

1. Labour force participation and employment in South Asia with special focus to gender disparity

In the South Asian region, the lower rate of labour force participation and Employment-to – participation ratio suggest a dismal picture, as compared with the world average, which is a matter of concern for policymakers. This can be identified as a potential cause for the rising trend of social imbalance and social unrest turning into violent outbursts in the region.

"According to the ILO's new estimation, based on improved data sets and methodologies, the global unemployment rate is expected to fall slightly to 5.5 percent in 2018 (from 5.6 percent in 2017). However, with a growing number of people entering the labour market to seek employment, the total number of unemployed is expected to remain stable in 2018" (Elder, 2018).

This story of unemployment becomes more worrisome when it's blended with gender inequality. "Around the world, finding a job is much tougher for women than it is for men. When women are employed, they tend to work in low-quality jobs in vulnerable conditions..." (Molina-Plaza & Allani, 2020).

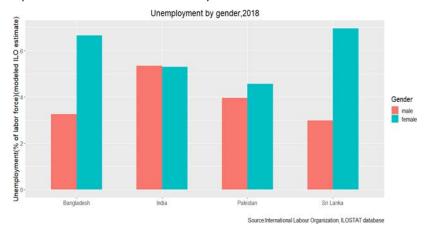


Figure 4: Unemployment: gender disparity

This visualisation depicts gender inequality in the employment sector in South Asia's emerging economies in 2018. It is evident from the data presented by the International Labour Organization database that there is a gap in the rate of employment between the male and female labour force. Diminishing trend in GDP serves as a potential reason for unemployment and gender disparity. Gender disparities are found to be lowest in India, where female and male unemployment rates (% of labour force) are 5.30% and 5.34%, respectively, and highest in Sri Lanka.

1. Participation of women in decision making:

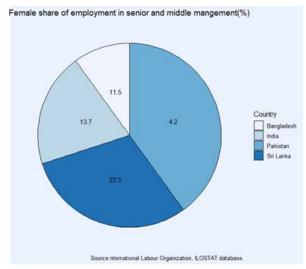


Figure 5: Female share of employment in senior and middle management (%)
Sustainable Entrepreneurship

This visualisation depicts a stumbling block in the "pipeline" for women's participation in managerial positions. It can be witnessed from the data taken from the International Labour Organization database for the year 2018 that the female share of employment in managerial posts is highest in Sri Lanka, followed by India and Bangladesh. The female share of employment in managerial posts can be treated as a vital indicator of women's empowerment and a change in society's outlook towards a progression of democracy and good governance.

If policy making system nurtures gender discrimination, if women are found mainly in vulnerable jobs and not in managerial positions, economic growth and social empowerment are bound to be constrained.

Terrorism as an outcome of socio-economic imbalance

Terrorism is considered a social phenomenon. Social conditions enable the causes of terrorism. Feelings of relative deprivation, inequality, poverty, skewed gender balance and gender disparity in respect to the lower participation of women in decision-making systems, market rivalries, cross-cultural conflicts in multicultural societies, and the failure of governments to address the problems of the people are some of the major causes of terrorism. Poor societies with social imbalance and countries in a state of democratic transition are not only exposed to the risk of terrorist attacks but also use it as a tool to target their neighbours.

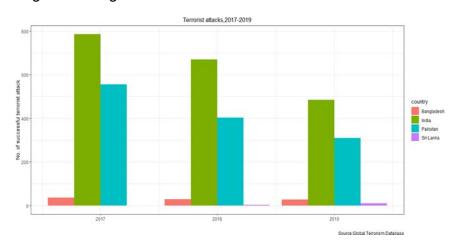


Figure 6: Terrorist attacks in the emerging economies of South Asia (2017-2019)

Based on data from the Global Terrorism Database, this visualisation depicts successful terrorist attacks in South Asian emerging nations from 2017 to 2019.

India, the world's largest democracy, reports tremendous social unrest. This could be a result of growing unemployment and income inequality. Although this is a complex

picture since India's Hegemony in the international system has the potential to make it vulnerable to terrorist attacks. This compels the conclude that terrorism as a social construct is a backlash against globalisation and modernisation.

Pakistan reports second highest terrorist attacks. The female share of employment in senior and middle management is just 4.2%, making the system unable to respond to the causes of good governance.

Terrorist attacks are increasing in Sri Lanka due to growing dissatisfaction caused by the fall in GDP and consequent income and gender inequality.

Bangladesh seems to be in a fairer position in terms of social unrest, although the glaring picture of income and gender inequality of Bangladesh cannot be overlooked.

Policies adopted by these nations towards 'Liberalization, Privatization and Globalization' since early nineties have made these economies witness tremendous reforms, coupled with a revolution in communication technology, to reap the benefits of globalisation but the glaring inequalities instead of harnessing the benefits of globalisation have multiplied the challenges for the governments of these nations. This is a high time to unveil the realities for the sake of better nation-building and the sustenance of human values.

Conclusion

Economic crises are affecting all South Asian countries bitterly, but some are doing better in respect to sustainable enterprises for recovery.

Policies adopted by these nations towards 'Liberalization, Privatization and Globalization' since early nineties have made these economies witness tremendous reforms, coupled with a revolution in communication technology, to reap the benefits of globalisation but the glaring inequalities instead of harnessing the benefits of globalisation have multiplied the challenges for the governments of these nations. India, the world's largest democracy, reports tremendous social unrest since India's hegemony in the international system has the potential to make it vulnerable to terrorist attacks. It is evident that Pakistan reports the second highest number of terrorist attacks, and terrorist attacks are increasing in Sri Lanka due to growing dissatisfaction caused by the fall in GDP and consequent income and gender inequality, making the system unable to respond to the causes of good governance.

Perpetual crisis for oppressed minorities leading to dissatisfaction, frustration and erosion of societal values hinders sustainable growth of emerging economies of South Asia. Strong policy framing and its implementation by unbiased, coherent, and honest governments can bring about changes in the long run. In order to cure society of this deadly social evil, they should know its causes, consequences, and remedies.

Ethical Implication

There is an increasing importance of practicing ethical data visualisation to address explicit and implicit biases in our research. As our datasets have been taken from a reliable source, it can be readily assumed that our visualisation results are free from bias as far as practicable. Although, due to the complexity of the research topic, it is inevitable that some bias has crept into the result. The corruption index, leadership crisis, ethnic cleavages, etc. have also been overlooked in this study due to its limited scope, though they are potential reasons for social unrest. Biased projection of the visualisation will harm society, while some opportunist groups will benefit. Since then, entire globes have become susceptible to the incidence of civil war and terrorism.

Acknowledgment

The author is thankful for kind support from Netali Nagar College management for supporting and encouragement to complete the present article

References

- Christiano, L. J., Eichenbaum, M. S., & Trabandt, M. (2015). Understanding the great recession. *American Economic Journal: Macroeconomics*, 7(1), 110-67.
- Elder, S. (2018). Asia-Pacific employment and social outlook 2018: advancing decent work for sustainable development. *ILO Regional Office for Asia and the Pacific*.
- Ferster, B. (2012). *Interactive visualization: Insight Through Inquiry*. MIT Press. https://datatopics.worldbank.org/world-development-indicators/wdi-and-the-sustainable-development-goals.html
- Molina-Plaza, M., & Allani, S. A. M. I. R. A. (2020). Multimodal women engineers' identity construction. *Applied Linguistics and Knowledge Transfer: Internationalisation, Employability and Social Challenges*, 291-321.
- Nozick, R. (1974). Anarchy, Sate, and Utopia (Vol. 5038). Basic Books, New York.
- Scheffer, J. (2002). Dealing with missing data. Research Letters in the Information and Mathematical Sciences. (2002) 3, 153-160
- Shahzad, M. (2015). Impact of Globalization on Pakistan. *Young ISSI Professionals'* Corner Institute of Strategic Studies, LUMS, Lahore.
- The World Bank. (2021). WDI and Sustainable development goals. https://datatopics.worldbank.org/world-development-indicators/wdi-and-the-sustainable-development-goals.html
- The World Bank. (31st March 2021). South Asian Economies Bounce Back but Face Fragile Recovery. https://www.worldbank.org/en/news/press-release/2021/03/31/south-asian-economies-bounce-back-but-face-fragile-recovery

Women/Men Entrepreneurship in Textile Industry in India

Bibekananda Basu

Veermata Jijabai Technological Institute, Mumbai, Maharashtra, India

Corresponding Author's Email: bibekananda.basu1502@gmail.com

ABSTRACT

The Entrepreneurship is an old concept not only in India but also in ancient world. During ancient days, the cottage Industries, Handlooms, manufacturing of the handicrafts were the main earnings of the human beings. With the arrival of Science & Technology, the people tend to maintain their livelihood in the Industries, Offices, different types of business, Banks etc and the Entrepreneurship started lagging. Now it has again surfaced out with competition, quality, quantity manufacturing, Export market in Micro, small, Medium Industries. Govt of India, Ministry of Textiles have opened their doors in support of the same. The modern Technology is helping the new Entrepreneurs to produce verities and more new conception, more better business turnover. It requires high self-motivation, vision, business conception, contacts with various trades right from the raw material procurement, Manufacturing processes, storage, and logistics. In almost all cases. the Females are at progressive stage. Today, women empowerment has occupied at top level even in Higher education and in B – Schools. Maximum scopes are found in Textile and related fields because of the vast areas, people's growing choices, self-decoration, and presentation especially in the festivals and celebrations. Every state has it's own glorified handloom sarees which are earning Revenues in domestic and Export Markets. Khadi and Village Industries have restored with glamours and huge employments and Earnings. Similar are the cases in Power loom sectors which fetches 60% clothes to the market. Cottage Industries with low manufacturing cost has come, but in certain areas (Dyeing etc) the young generation is declining to enter in the business. Circular Economy, upgrade recycling of the textile materials is growing which is boosting the country's economy, employment, and growing entrepreneurship. This paper has coved maximum areas of growth in Entrepreneurship, women/men's participations and with innovative ideas.

Keywords: Women Participants, Handloom Sectors, Power Loom Sectors, Cottage Industries, Textiles and Allied Products, Innovations

Introduction

Today's world is at the stage of survival. Every category of mankind wants to survive, wants to earn their bread & butter. Although most of the people like to earn money by means of service, jobs in any sector, time bound works but slowly the conception of

Entrepreneurship is being surfacing out. Most of them are involved in Textile and Textile related jobs as the scopes are highest in these sectors as after Agriculture if fetches maximum scopes and employments.

In this sector most of the people are women, and a good percentage is self-earner and independent. There are Self – help group, sole bread earners, or community related. Again, a good percentage are operating from the Rural areas. Among the small-scale Industries, 30-35% are of Textiles and that of about 70% are of Handicraft.

Govt of India has supported this Entrepreneurship by coming out with MSME, Ministry of Skill & Entrepreneurship and with several other schemes. Handloom sectors, power loom sectors, KVIC, Handicraft Boards, micro to small and medium enterprises are gaining space all over the India and any woman/man who are willing to come forward are the best gainers.

Definition

The capacity and willingness to develop, organize and manage a business venture along with any of its risks in order to make a profit. It must arrive from the self-motivation. The entrepreneurship means to start any new business with full concept by getting data.

There should be initiative, dedication and liking to continue the works. Also, to find resources, with better output and less competition. Must have the deep love in the works that can be in single hand, or in a group, in family or cooperative basis. There should be likeminded people to run the business when there is a greater number of people rather than single handed.

The Economical survey reveals that any Entrepreneurship can be related to any field which can make a profitable business that innovations with new & newer products. It essential for the upliftment of the country which will fetch employment, generate revenue in competition with global Market.

Before starting a new business or expansion, one must know the suitable resources of the raw materials, whether the skilled workforce is available, or the unskilled workforce can be upgraded to the proper skill level, financial resources (From Banks, community, relative/friends, in exchange of any movable/immovable properties or from any ancestral properties) and the marketing potentialities. Nothing can be done whimsically.

Ideas can be taken from any similar business, experts, Bankers, MSME, Department of Industries, good economist, wholesalers, areas where one lives, Net survey, from the Institutions where you studied (NID, Nift, Fashion designing, Textile Institutes etc).

Women/Men?

There is as such no fine demarcation is found between the types of works and that of responsibilities of any male or female in Textiles either in the organised or in

decentralised sectors. But it is in general found that the works with heavier loads (Say to operate heavier looms), more of the outside works, logistic related, works related to long distance travels, carrying heavy luggage's, works related at night are carried out by the men. Now a days, even in some places the women are also started taking parts in those fields.

Some of the works are exclusively meant for the women say boutique, women's beautification (During marriage or in any festival, hair dressings, Mehndi works, to colour the border of the feet, facials,) to beautify the floors/walls of the temples, rooms etc.

The involvement of the women in Textiles are found even in thousand years before since the start when the human beings started to wear cloths!



Source: http://thestationspin.blogspot.com/2011/02/weaving.html?m=1

Figure 1: Manufacturing the cloths by the women in ancient India



Source:https://www.ladyscience.com/ethel-mairet-a-pioneer-of-weaving-technology/no52?format=amp

Figure 2: Handloom weaving by women at present days



Figure 3: Women empowerment: The present day's women at work parallel to the male (Chatterjee, 2021)

Why are women preferred in Textile Entrepreneurships?

1 Here are the six advantages that women entrepreneurs have:

- The women are having better social networking, let that advantage can be adopted.
- Intuition....
- Pain Tolerance....
- Multi-tasking....
- Patience....
- Listening.
- In the Field of Entrepreneurship, the women are having very progressive roles. They are becoming more and more educated, understanding their responsibilities and are becoming more Expert both in Domestic front and in running the business simultaneously. They are by nature having more patience, negotiating and budgetary skills.
- The % of the women in the B-Schools is increasing each year. Year 2021-22 IIM -A has shown 23% Female, IIM -Raipur, Kozhikode has shown higher Female intake than men and the overall % in the Top six IIM for the year of 21 has increased to 33.5% from 26 of previous year. All it shows the better participants of the women in Business to high business management and entrepreneurships.
- Today 's women have their multitasking abilities. Affirming this notion, Ms. Husain Chairperson and Managing Director of Shanaz Husain Group of companies elaborate,

Entrepreneurship in Textile Industry

"the women who is creative finds greater freedom to translate her creativity and ideas when she has her own enterprise. For those women without high professional qualifications and those who are from a lower economic sector, entrepreneurship is a means of earning money and contributing to the family income. However, the challenge for the larger sections of women in India lies in crossing the threshold, overcoming barriers, and discovering their own potential and identity. The climate is more conducive today and the time is right." It becomes more effective with the hand in hand works with male counterpart.

- Today the female counterparts can run the business by handling many activities at a time such as to attend phone, check mails and pending works after balancing their social and family life.
- The Women entrepreneurs are mindful on their selection & Choices, who can transfer their thoughts and ideas to others for the necessary actions and better results.
- In General, the women entrepreneurs are underestimated w.r.t. result orientation, but the female mentors with self-confidence can even overpower the males in becoming the successful Entrepreneur.
- Hence any business or Entrepreneurship should be carried out hand in hand and the areas of the Responsibilities can be distributed depending upon the situation.
- It is found that any woman is earning her bread working in an office is not happier than that of any entrepreneur as the latter is the boss of her own. In entrepreneurship she can earn her bread sitting at home too after maintaining her personal and family life.
- **2 Disadvantage:** One of the great Disadvantage of the Female Entrepreneurs that they must pay their personal attention to their child/children. During the start-up of any entrepreneurship, it requires high attention and sometimes the children are neglected. That is unwanted. In such case involvement of the senior citizens, devotion of some times during daytime and more times during off duty hours.

3 Female Entrepreneurs Versus Male Entrepreneurs

- The studies reveal that during the start up of any business, the men are having more advantages over man especially in the Male dominated societies.
- More studies reveal that with the proper understanding between male/female, the success/failure do not matter a lot.
- Despite all above, there are some impacts of the female Entrepreneurship during start up. It is higher if she runs the business as a sole proprietorship.

4 Experience & Expectations

4.1 Risk Tolerance

For the obvious reasons, most of the females like to adopt low risk / low return business. The males at times like to start any business right from low risk to high risk / high profit. It can be more of Technical oriented with new inventions so that there should be less competition. Though the risks are sometimes unavoidable, but the females can opt for risk-oriented business for a better gain. For any risk/gain business one must go for Market research thoroughly.

4.2 Education, Business Size, Hours Worked:

Today the conception of the education in male/female ratio that the females are less intellectuals, less qualified are proved to be far from the truth. All the entrepreneurs managed by single handed or by both, it is found that the level of qualifications and that of working hours are equally comparable for both. It is a welcome move by the female entrepreneurs (small or big) which need not to prove their inferiority with their ongoing developments at each area.

4.3 Conclusion

It is known that the women must follow more tasks in both household and that of outside works. After becoming a mother, sometimes they can not go out for works although they are passion able about it. Hence the women can have the working hours in the flexible time and can show huge output. Starting / running any business from home will be the great opportunity to prove the worthiness in the world of merit.

5 The Entrepreneurships in Textiles and in apparels and why?

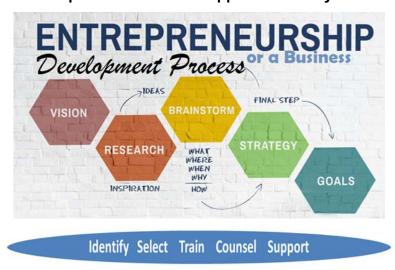


Figure 4: How to create new enterprise? (Chatterjee, 2021)



Figure 5: Road map of a business (Chatterjee, 2021)

6 The scopes in textile

The design, manufacture, and marketing of yarn, fabrics, and ready-to-wear are the main concerns of the textile business. Natural or synthetic raw materials made with the use of chemical industry products are both acceptable (Nylon, polyester, etc.). "What we wear, what we use to decorate, where we sleep on, where we live with (home textile/decor) and many more, all comes under textile industry.

There are many business opportunities in Textile industry. This industry is considered as a profitable for new and aspiring entrepreneurs.

- Indian textile industry is the second largest employer (35 million Workers) next to Agriculture in the country. 60 million people are indirect employee.
- 14% of total Manufacturing Output with 4% of GDP
- 17% of total Export earnings
- The Indian apparel market is projected to generate \$45 billion and reach \$200 billion by 2025.

Currently valued at over US\$ 150 billion3, the textile industry is anticipated to reach US\$ 250 billion by 2019. After China, the industry has the second-largest manufacturing infrastructure in the world. The industry has 512 lakh spindles, 8.6 lakh rotors, and 0.68 lakh looms installed.

• in organized sector, 25.23 lakh power looms and 23.77 lakh handlooms.

6.1 One can start a cloth boutique store/showroom

One of the most lucrative retail venture businesses in India today is a boutique store. Any entrepreneur can launch this business, but you need to have a proper understanding of style trends and fabrics at the very least. It is a store where you can easily purchase fashionable ladies' and children's wear items. Keep your target audience in mind and dress accordingly.

6.2 A shop for the brides

One of the most trending businesses now-a-days are wedding planners, wedding photographers and all these cannot be completed without a wedding dress.

6.3 Hand printed fabric clothing

Handmade items are always high in demand. People always prefer hand-printed fabric art. "Having skill in fabric art and drawing one can initiate this business home based with low start-up capital investment. One can also sell the items from an online marketplace directly by registering the business."

6.4 Customized T-shirts printing

The demand for customized stuffs especially t-shirts is increasing day by day. It's a profitable business venture to start with small start-up capital. "In this business selecting the right machinery according to the desired output is the most important factor in this business. Also, one must have the right network in this industry. Location is another important factor.

6.5 You can start uniform manufacturing company

There are many educational institutes in India and many corporate offices which have uniform system. So, one can try this out. "If anyone is planning to set up uniform making company, then he/she have to contact business supply chain uniform wholesaler, retailer and shops. Location is an important factor in this textile business."

6.6 Cloths available on rent

For attending some distant relative's function, you might not want to buy expensive cloths. People planning to start any business, can go with this. "In this type of business, you have wide range of collection of traditional cloth, apparel, Lehenga choli, men's sherwani and other clothes.

7 About the Textile Industry

FABRICS OF INDIA

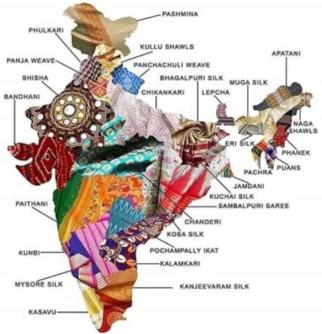


Figure 6: Fabrics in India (Fashionlady, 2019)

The above picture "Fabrics of India "is showing the state wise saree /cloth production in India with super specialist and design. They are earning huge revenue in domestic as well in Export Market.

All of them are produced in the Handloom sectors where maximum Entrepreneurship (both male/females) are found in procurement of raw materials, in productions and in marketing's.

The Indian Textile Industries are the 2nd Largest manufacturer of the Cloths after China. The Indian Cloth Export is 12% (2018 - 19) with the Global Trade in Textiles & Apparels stands for 5%. The strength in both Hand-woven cloth sector and that of power loom sectors as well as the quality producers are the Organised Capital-intensive Mill sectors which is also the 2nd largest in the world. The biggest Employers are those Handloom, Power loom and Handicraft sectors who employs millions of people in Rural and semi urban areas. These unorganised sectors contribute 75% of the Total Textile Production in the Country.

While starting any Textile/ Clothing Manufacturing Plant, plan yourself with expert and experience. This Industry is not only the highest Employer but also having the maximum number of Entrepreneurships. This Textile Industry will be connected to

fashion and Design Industries where the large number of Entrepreneurships are involved. After food, the Textile Industries are the supplier of the cloths to the Mankind. In these Industries, the business rivalry and huge competitions are always persisted.

8 Innovation in fashion world, a new step in modern entrepreneurship.



Figure 7: Innovation in Fashion World (Chatterjee, 2021)

9 Handloom sector:

Handloom weaving is one of the largest economic activities after agriculture providing direct and indirect employment to 43.31 lakh weavers and allied workers.

Most of them are women and people are from poor groups and 77% of the adult weavers are women. One must look at the Northeast region of the country, which dominates the state wise distribution having 48.98% female workers in the handloom industry. West Bengal has 13.85%, Tamil Nadu 5.64% and Orissa 1.73%.



Source: FICCI, 2019

Figure 8: Various type of Hand looms (old systems)

This sector contributes nearly 15% of the cloth production in the country and contributes to the export earnings of the country. 95% of the world's hand-woven fabric comes from India. (Handloom Development Commissioner)



Source: Ministry of Textiles Government of India (2019)

Figure 9: Handloom Sector in NE with Charkha, operated by Female entrepreneur

Weaver entrepreneurs and other manufacturers can take up production and marketing of quality handloom fabrics in bulk within and outside the country. It will empower women and other disadvantaged sections of society engaged in the handloom sector by way of getting better earning through production of value-added quality products. To promote marketing of handloom products in general and to reach the customers of younger generation in particular, a policy framework has been prepared to promote e-marketing of handloom products in a transparent, competitive, and effective manner. A total of 23 e-commerce entities have been approved and sale of Rs.109.88 crore has been made up to 31.03.2020.

The Indian Handloom Products have wide demand in the local as well foreign markets. Since most of the Handloom units are run either as sole proprietor or on the partnership basis so the owners lack the professionalism in their overall handling of the work. Most of the weavers do lack of knowledge about the modern techniques of production, packing, designing, promotion etc. For the development and promotion of handloom industry it is the need of the economy to make a study on the topic. Further it is suggested, more studies are required for identification of the problems facing by the handloom industry related to production, finance, and marketing and to suggest the suitable measures for the development and advancement of industry.

There should be long way to develop this sector to generate more entrepreneurship and employment



Source: https://reflections.live/articles/25/legacy-of-handlooms-in-india-on-national-handloom-day-1571-ks2r2gue.html



Figure 10: Handloom with cottage industry in Odissa

Source: Ministry of Textiles Government of India (2019)

Figure 11: Handloom Entrepreneurship in TN by women

10 Power loom sector

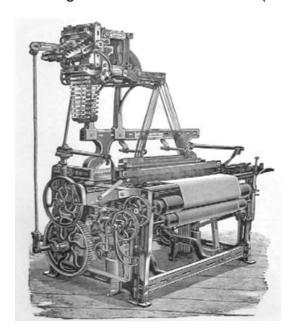
In terms of producing fabrics and creating jobs, one of the most significant sectors of the textile industry is the decentralised power loom sector. It is the highest resource of entrepreneurship.

Today there are about 25 lakhs of Power looms in India where the Bhiwandi comes first (Officially there are 8.5 lakhs looms, auto/non-auto). An amount of 60% of cloth is produced in the power loom sectors which is the big way of Entrepreneurship. All the

Organised sectors get the Cloths outsourced in these sectors. Even Export Fabrics are also outsourced. The Employment in this sector in the Highest among all. As per the survey, more than 7 million people are working in this sector. The Home Textiles and Garment sectors are heavily dependent on this Sector. There are about 2% Auto looms (Source: Textile Commissioner) (or about 50,000 shuttles less looms) who can produce the good standard of the fabrics. More than 50% of the looms are old & Obsolete (Survey). There is no proper maintenance, no quality conception! Most of the entrepreneurs are family business having no conception of Tech. Textile of specialist Fabrics. They feel "Cheaper is the better" and do all unfair means for the quick benefits. Power tariff is a cause of concern. The Author was the head of the ISDS under Ministry of Textile at Bhiwandi Power loom sector and experienced a lot. However, today's young stars are coming forward to improve the situations and 8-10 % of the looms are getting upgraded.

India manufactures 5% of cloth through organized sector, 20% through Handloom sector, 15% through knitting sector and 60% of Indian cloth is produced through decentralized power loom sector (Textile Value Chain, 2020).

Although the growth of power loom industry was slow initially; it has started gearing up now. Number of shuttles less looms has augmented to almost 50,000 and from this about 35,000 looms are working in the decentralized sector. (F to F)



Source: https://sites.google.com/site/theindustrialrevolution234/technology/steam-powered-loom

Figure 12: A typical power loom with Dobby and over pick Loom

11 Khadi

The Khadi and Village Industries Commission (KVIC) is a statutory body formed in April 1957 by the Government of India, under the Act of Parliament, 'Khadi and Village Industries Commission Act of 1956'. It is an apex organisation under the Ministry of Micro, Small and Medium Enterprises, with regard to khadi and village industries within India, which seeks to - "plan, promote, facilitate, organise and assist in the establishment and development of khadi and village industries in the rural areas in coordination with other agencies engaged in rural development wherever necessary" (kvic act, govt of India)

Hand woven Khadi has gained worldwide appreciation as it is durable, climate friendly, zero

carbon, biodegradable, water conserving, long lasting and organic in nature. The demand for Khadi has grown along with the awareness of sustainability.

Given that most weavers in India are women, Khadi is also a symbol of women's empowerment. It is crucial to popularise Khadi since doing so will enable weavers, particularly women, to continue doing what they do best and generate more jobs. Charkhas must return to the weavers' huts from museums, universities, and fashion shows.

It is matter of honour to present "Khadi Goes Global" at the most prestigious international forum at the United Nations headquarter, New York, during 11th to 22nd March 2019. (Pinky Reddy, President - FICCI Ladies Organisation)

During financial year 2022, the khadi and village industries employed over 16.6 million people across India (Keelery, 2022).







Figure 14: Cottage Industry in Khadi in village using Charkha



Source: Ministry of Textiles Government of India, 2019

Figure 15: Special cloths, environment Friendly, manufactured in Khadi Industries (KVIC)

12 Cottage Industries:

In Andhra, Telangana, Tamil Nādu, Karnataka, Odisha, and other states there are several Small Home-made Dye houses who Dye hanks, Tie-Dye, in low temperature, (90, 70, 60 Degree Centigrade) low pressure and even in room Temperature at a very low lost. Then the yarn is dried in open spaces and woven in Handloom / Power looms to make, Saree, Gamucha, Bed sheets, Lungi, and the cloths for the daily use. The yarns are mainly Cotton and Polyester. No specific data is found but in general 3 – 4 Lacks people are engaged (Market survey) for the whole activities. About 60% of the people are female. Apart from it another 20 -25 thousand of people are engaged in Order procurements, Logistics, sales/ marketing, Storing etc. It is a good entrepreneurship but is slowly declining as the young generation in not taking much interest in this business who are searching for white coloured jobs.



Figure 16: A home-made Tie -Dye Fabric (Cottage Ind) in TN



Figure 17: A homemade Dye House, dyeing Hanks in TN



Figure 18: The homemade low-cost Hank dye Houses (Cottage Ind.) in TN 13 The Kite Industries in India

The special thread for kite-flying is prepared by covering the thread with the mixture of glue and ground



Figure 19: The Spools with Yarn applied with manja ready for Kite Flying

"Manja" Applied on yarn and wound on Spool at flanges both sides. (Shown in the Pic). The yarn is very strong with 2 ply or 3 ply cotton, Nylon or FDY manufactured by the respective Industries. The Manja is applied on the yarn depending on the Types of Yarn and Kite to fly. It is done at every state where the Kite flying is celebrated.

In Gujarat, as in nearly every state where kite flying is revered, the kite industry is as old as the kite flying custom itself. The artisan craft, which until a few decades ago was largely unstructured and overlooked, has now blossomed into a 700 billion dollar cottage economy. The largest kite market in India is located in Jamalpur, a small neighbourhood in Ahmedabad's historic core. In Jamalpur, there are more than 1200 families who have been producing kites for many years. It needs special skill to make kites which fly well. the efforts of many people to make a kite, each person specialized in a different aspect of kite making. While one person is an expert in designing the patterns for kites, one is good in cutting the designs, another person more versed in sticking the patterns and someone else in sticking the bamboo. To improve the quality of kites, thin tissue paper is used as the sail while the bamboo for ribs is sourced from Assam. Tassels and frills are added to the kite which will help in making the kite stable during flight while also adding elegance to the kite. There are families, who are completely dependent on the kite business. These families start manufacturing several months before the festival.

In the year 2017-18, this industry had developed a worth of Rs 625 crores. According to an estimated figure, around 1,28,000 people were associated with the kite industry in Gujarat. Gujarat has a 40 per cent stake in the kite industry in the country and it

employs about 1.28 lakh people. The Kite Festival is helping many local artisans and small traders to expand their business, thereby boosting the local economy. But due to the huge arrival of "Chinese Mayanja", it has affected the country's domestic industry badly. More than 70% of the females engaged in this absolute Cottage Industry. (Onmanorama Staff with inputs from IANS)

14 Other textile cottage industries in India

The Entrepreneurship is supported by the small and medium size industries, mostly empowered by female from the rural areas and from the LIG families. The major cottage industries in India are cotton weaving, carpet making, silk weaving, leather industry, metal handicrafts, and small food processing industry. But the majority are of Textiles and allied related. Cottage industries are a major breadwinner for many households in India. Small scale cottage businesses have one advantage that they can be started with very low initial investments, so this type of business is ideal for people with low incomes/villagers. Plus, the raw materials to manufacture cottage industry products are available easily in their surrounding environment.

15 Is there any difference between small scale industries and cottage industries?

There is just a slight difference between the cottage industries and small-scale industries. They are almost the same, but differ in various minute ways such as the features of both the industries, where they are located, who run them, etc.

- Generally, the location of the cottage industries lies in the rural areas and villages whereas small-scale industries are situated in more urban or semi-urban areas
- The cottage industries are primarily run by members of the family, whereas smallscale industries generally employ or hire people
- Cottage industries involve basic tools and equipment, and they invest a very little amount of capital, the small-scale industries invest comparatively higher {the present limit is Rs. 60 lakhs to Rs. 3 crores} and they include heavy and fully equipped machinery run by power
- Cottage and small-scale industries take part in about 40% of the total industrial output in India. There are approximately around 3,50,000 units within the state of West Bengal, providing employment to over 2.2 million people. Furthermore, it has been empirically found out that this industry has provided economic independence to the women in developing and developed countries. Moreover, the whole family involves in producing items in this industry, hence it facilitates numerous families with an employment option throughout the year (Verma, 2019).

It provides large scale employment to weavers because it is a cottage industry which can be set up at home. cottage industry gives employment to lot of weavers and thus said so. hope it helps!! It provides large scale employment to weavers as it is a cottage industry, can be set up at home.

• According to the Ministry of Rural Development, Jammu and Kashmir has the largest small scale enterprises accounting for 32.78 % of total small-scale enterprises.

The Cottage industry is a huge source of employment for the workforce in India and has contributed a lot to the Indian Economy. The growth of small-scale industries has empowered many women to join the workforce, especially in India. These businesses employ more labour than giant corporations, and owing to this, the government, through various initiatives such as PMEGP, has tried to provide credit facilities to these businesses and has conducted various skills development programs to help the rural populations equipped with technology, modern production methods, business strategy, etc. This will help businesses grow and expand like big corporations.

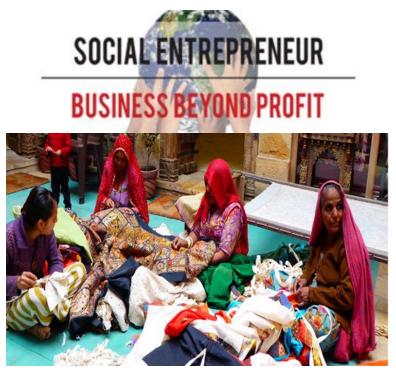


Figure 20: The Cottage Industries, and the employment in rural India (Chatterjee, 2021)

Project Ideas......

Recycled Textiles/Handicraft items

- Mattress pads/covers
- Decorative Pillows
- Punching Bags
- Cotton Balls
- Diapers
- Mops
- Firemen's suits
- Sleeping bag liners
- Sound proofing pads
- Sanitary products
- Baby wipes
- Sponges
- Air filters
- Ironing board pads

- Carpet underlay
- Toys
- Q-tips
- Blankets
- Package trays in autos
- Insulation for homes
- Quilts
- Furniture Decking pads
- Gasket liners
- Jewellery packaging
- Wiping cloths
- Ski Jacket Insulation
- Geotextiles
- Plastic wood



Figure 21: A garment unit



Figure 22: These PPE are produced in Organised and decentralised sectors too (Chatterjee, 2021)



Figure 23: The waste generated after cutting and stitching and then up wards recycled as Garments



Figure 24: The garments from Clothing wastages



Source: Live photo taken at Loom shed in Bhiwandi Power loom sector. It is a Flexible Rapier loom

Figure 25: The Auxiliary selvedge produced in Automatic looms (from Polyester/Cotton yarn) and by products are manufactured in the Cottage Industry Sectors



Source: Live photo taken after manufacturing the same at Bhiwandi Power loom

Figure 26: Matt Produced from the Auxiliary Selvedge



Figure 27, 28, 29 and 30 are manufactured at a Loom shed Unit at Tarapur Industrial Area .

Figure 27: Matt produced from Auxiliary Figure 28: Matt produced from Selvedge Auxiliary Selvedge



Figure 31: bottoms, Size waste, residual warp waste after weaving. Knitting waste recycled

After the completion of weavers Beam and during beam gaiting's, a few quantities of sized yarn remain Figure 31) which are separated in small scale industries, twisted some yarns together and used as weft to produce body wrapper and spread. Hardly any waste is generated if the sized beams are knotted. It being cellulosic fibre are used in raw Pulp mixing to produce Paper. (Source: live information)

16 The support received from the Govt bodies.

16.1 Ministry of Textiles

- Infrastructure Development
- Scheme for Integrated Textile Park
- Integrated Processing Development Scheme (7 Projects)
- Mega Textile Cluster (Kauchh)
- · Integrated Skill Dev Scheme
- 75% by GOI and 25% by Imp Agency (Rs. 10,000/-person)
- 5.3 lakh people trained (81 % placed and 79 % woman)

[16.2] Govt of India Support

- No Capital Gains Tax on Personal Property Sold to Invest in Start-ups
- No Income Tax on Profits To start-ups For First 3 Years
- Self-Certification Compliance for start-ups
- No Inspections for First 3 Years of A Start-up
- start-up Hub Will Be a Single Point Source for Information & Mentoring
- Simplifying Patent Regime & IPR
- 80% Rebate on Filing a Patent Application
- Mobile Oriented Application Form for start-ups
- Exit Policy to Be Introduced For start-ups

Conclusion

- The ideas are vast, endless and every day new and newer ideas are being generated.
- This paper has described whatever available at present. More and more topics could not be included because of the space constraints.

- The gainers are those who up cycle the waste and made excellent handicrafts, usable items like bags, chaddars for the winter seasons.
- More innovative ideas, more new items produced and capturing markets.
- Every Industry i.e., Handloom, Power loom, Khadi, small & Cottage Industries are flourishing steadily and fetching good revenue and Export Market. More supports are to be given to these sectors.
- Some small entrepreneurs are losing the business because they could not acquire the technology, nor a quality producing enterprise. Family dispute, rivalry, and more expenditure than earning have put some of them at bay.

Acknowledgement

The authors are grateful for kind support from Lincoln University College management for supporting and encouragement to complete the present article

References

- Chatterjee, C. (2021). Starting your own Business in Textile & Garments. The textile Association. https://textileassociationindia.com/wp-content/uploads/2021/09/starting-your-own-business.pdf
- Fashionlady. (11th December 2019). Fabric Tour Of India Get To Know All The Unique Handloom Heritage. https://www.fashionlady.in/fabric-tour-of-india/149635
- FICCI. (2019). Indian Handloom Industries Position. https://www.ficciflo.com/wp-content/uploads/2019/03/Indian-Handloom-Industry-Final.pdf
- Keelery, S. (2022). Employment in khadi and village industries across India during financial year 2022, by type. *Statista*. https://www.statista.com/statistics/1123204/india-khadi-and-village-industries-employment-by-type/
- Ministry of Textiles Government of India. (2019). Fourth all India Handloom Census, 2019-20. http://handlooms.nic.in/assets/img/Statistics/3736.pdf
- Textile Value Chain. (9th May 2020). Power Loom Cluster in India. https://textilevaluechain.in/in-depth-analysis/articles/textile-articles/power-loom-cluster-in-india/
- Verma, T. (1st September 2019). A Complete Overview on Cottage Industries in India. Enterslice. https://enterslice.com/learning/a-complete-analysis-on-cottage-industries-in-india/

The Impact of Social Media on Sustainable Entrepreneurship: A Case Study of Rural Women in West Bengal

Saddam Hossain^{1*}, Anuradha Halder²

¹Department of Journalism & Mass Communication, Netaji Nagar College, Kolkata, West Bengal, India

²Visiting Faculty of Media Studies, JIS University, Kolkata, West Bengal, India

*Corresponding Author's Email: saddam.visvabharati@gmail.com

ABSTRACT

Sustainable entrepreneurship is advancing to shift business practices towards environmental, social, or economic sustainability. In the entrepreneurial life, social media plays a noteworthy role in leading innovation by the flow of knowledge without curtailment, thereby shaping entrepreneurial ecosystem. Although studies on sustainable entrepreneurship and social media are comparably new in non-Western contexts such as India, academicians and practitioners are taking crescive interest for further research and exploration within this area. This study probes to explicate the contribution of social media platforms for development of business enterprises and also for its marketing and sustainable growth in modern times. Furthermore, this article solicits to observe how rural women in West Bengal, India shifting their businesses towards sustainability using various social media platforms.

Keywords: Sustainable Entrepreneurship, Sustainability, Social Media Platforms, Women Entrepreneurs, India

Introduction

Entrepreneurship is perceived as a rudimentary engine for both economic and non-economic development that generates job opportunities as well as plays the role of a catalyst in improving products and services. So many fields of entrepreneurship have emerged in present times, and sustainable entrepreneurship (SE) is definitely one of them. SE can be acknowledged as an emerging and new field in entrepreneurship study (Majid & Koe, 2012). Sustainable entrepreneurs are considered to be affluentials as they facilitate the endeavour of sustainable development through the perpetration of financially viable and innovative business models that create positive social and environmental impact (Gregori & Holzmann, 2020). This literature review primarily appertains to the definitions, main themes, and methods that at present constitute the fields of both entrepreneurship and sustainable entrepreneurship.

Additionally, contemporary research has espoused the belief that digital technologies

might be supportive of accepting the challenges that sustainable entrepreneurs encounter (Hussain *et al.*, 2021). This presumption constructs the transformative capacity of digitalization which alters the nature of entrepreneurship and changes approaches to issues of sustainability (Gregori & Holzmann, 2020).

However, recent literature in sustainable entrepreneurship and digital or social media is primarily focused on Western contexts. This article, therefore, in a non-Western context, will shed light on exploring how various social media platforms have in recent times supported the women entrepreneurs from rural areas of West Bengal, India, to flourish their businesses.

Sustainable development is often defined, referring to the Brundtland Report (1987), as "the development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Greco & de Jong, 2017). Sustainable entrepreneurship is the process of sustaining a level of entrepreneurial development to create a paradigm shift in economic activity, namely national GDP, job growth, capital investment, and technology advancement. It conduces to solving environmental, societal, and economic problems through the accomplishment of a prospering business (Networked Research Lab, 2012).

There are four types of sustainability:

- Environmental sustainability that preserves natural resources.
- Economic sustainability that balances economic input/output by reducing surplus and waste
- Social sustainability that sustains inclusion, participation, human values, justice etc.
- System sustainability.

Entrepreneurship via Social Media Platforms

Social media refers to a computer-based technology that expedites the process to companionate the thoughts, ideas, and information by way of the building of virtual networks and communities. It was introduced to keep in touch with family and friends, but businesses soon saw it as a powerful medium to reach customers through a popular new way to talk (The Economic Times, 2022). It facilitates connecting with new customers as well as staying in touch with existing customers. Social media enhances customer service by making one accessible to his customers, who have a tendency to seek immediate feedback. One will be able to respond in a timely manner to their concerns and inquiries. Moreover, it makes the process of marketing and market research easier as it can gather data. Additionally, it assists in selling products and services by making it easier to give discounts and coupons to potential customers at the right time and in the right place. Loyalty programmes that work with social media can also ameliorate to build relationships with customers.

The 21st century is rightly called the digital age as it has given people far more than just the capability to connect with friends, relatives, or other required people online. It has also provided modern entrepreneurs those potentialities which were not imaginable several decades ago.

Whether one has a primarily online or offline business, chances are internet tools, widgets, plugins, apps, and features play an important role in ensuring the success of his business (Brahma & Dutta, 2020).

Mentioned below are some detailed instances of the role of social media platforms in the digital marketing:

Economical start-up cost

Thanks to the Internet thathas made possible to begin an uncomplicated and low-cost business for just anyone. Only through creating a page on social media, specifically a Facebook or Instagram page, one can easily establish a myriad of businesses – such as an apparel store, a handmade jewellery shop, abakeshop, a bookstore or sell one's own paintings online – without the requirement of sustaining a big-budget physical i.e. brick and mortar office or shop.

Supplier research

The Internet might be proven to be an immensely profitable source when searching for wholesalers or service providers that one needs for his startup. Moreover, it provides one the opportunity to look for the finest and most reasonable service providers without doing an excessive amount of legwork and spending a lot of money. Along with the profile review feature of some buy and sell platforms like eBay or Amazon, this makes the Internet very effective in this particular task (Brahma & Dutta, 2020).

More visibility and quick feedback from target audience

As per the testimonies given by some emerging entrepreneurs, social media platforms make their endeavour of reaching their target audiences a lot easier by providing more visibility. They do not have to promote their businesses by going to them physically, as the internet makes the consumers get closer to them as well as saving the time of both the consumers and entrepreneurs. Hence, the internet is definitely winning a lot of brownie points with both of the parties.

Additionally, it helps the entrepreneurs to know if their product or service is being liked by the consumers or not very fast as they can immediately contact with the audience very easily. It also gives them a room to improve their product or service, if at all necessary.

Methodology

Secondary data from books, research journal articles, university publications, and

websites has been aggregated to present an authentic and credible platform for defending the aforementioned research topic. Furthermore, three in-depth interviews based on the qualitative case study approach of the individual women working in start-ups from the rural areas of West Bengal, were conducted to determine the role of social media in sustainable start-up progression. A semi-structured interview with open-ended questions was used to collect data, which allowed the researchers to explore the experiences of participants and gain insight into the issue under study. Online interviews were conducted through the mutually agreed social media platform. These interviews were audio-recorded with the consent of the participants. Each recorded interview was deciphered for data analysis.

Upsurge of Sustainable Businesses commanded by Women Entrepreneurs of India through Social Media Platforms

According to the recent survey, the range of digital marketing is expanding rapidly among different marketing segments in India as well as in Asia. Most businesses are burgeoning the budget blueprint allocated for digital marketing every year. The requirement of women in the area of digital marketing is formidable as they are adept and conversant equitably in performing a task just like a man. Digital marketing, which encompasses SEO, SEM, Social Media and Content Marketing, comprising the core of the sphere, has gained a huge boost in recent times. Providing women, the flexibility to work from anywhere and furthermore escalating their métier in becoming a successful entrepreneur, digital marketing has generated a list of an enormous number of digital brands which are administered by women entrepreneurs. They utilize digital marketing strategies to a great extent, where the creative inputs by women through creative writing, audio-visual production, and marketing campaigns, are advancing the brands towards more traffic.

Social media marketing is the go-to tool for an emerging woman entrepreneur to generate the apprehension that she is foraging for her products/services. The charm of this platform is that it allows one to exhibit any nature of business which wishes to communicate with its target audience. Be it ethical handmade jewellery, a small saree designing artwork to offer, or customised services for interior decoration, social media platforms ensure every woman can become a successful entrepreneur by applying some digital marketing techniques to her business model.

Women in huge women's societies can be in touch with one another now from the expediency of the ménage to cooperate, advertise, and be accessible in each other's companies. They might never have attained this on such a large scale without the help of social media platforms. A younger generation of digital women entrepreneurs had embittered the myth as well that females are "technologically confronted". Rather they are now generating employment in place of searching for them, as was once the case. Obtainability, potentiality, inclusivity, and association with the Web are all helping to

place women in business on the plot -something which will positively influence the world's major economies. In order to gain new clients, women in India explicitly turn to social media. 63% of these businesses use social media networks like Instagram, Facebook, and YouTube for advertising (Sugarmint, 2021).

Listed below are some of the accomplished women entrepreneurs of India who have ventured out to create an all in one sustainable social media marketing firm through their aspiration.

Suta

Sujata and Tanya, both MBAs from IIFT Delhi and IIM Lucknow respectively, spent many years in the corporate industry effectually but their deep-rooted desire to be entrepreneurs as well as a special fondness for the innumerable and diverse forms of art and culture across India led the establishment of Suta. The word 'Suta' literally means thread in Hindi and coincidentally is the combination of their names Su-Sujata and Ta-Taniyaas well. This brand started with an adequate capital in the year 2015 with a group of 4 women, today they have created 14 small groups of women across India, and with their passion and perseverant efforts, are successful entrepreneurs (LIPSINDIA, n.d). The brand SUTA is a fresh design house that has a wide range of Indian ethnic attire with a blend of tradition and contemporaneity to choose from that is available at their online store. They promote their online business on various social media platforms, i.e., Facebook, Instagram, etc., by creating a dedicated account or page for the brand(https://suta.in/pages/about-us).

At Suta, sustainability is a very pivotal focus for them. They have assimilated aspects of sustainability right from the beginning and have kept going. The founders solely believe that by sharing their sustainability journey, they can amass others who are on this journey and inspire them to tell their stories too. Moreover, they ensure that every single product of Suta is ethically made and that the weavers and staff are remunerated sufficiently for their work as well because ethical production is also an intrinsic part of sustainability. Suta's 2030 goals are:

- To switch to 100% natural fibre products and collections.
- To maximize eco-friendly, handloom and hand-made products, thereby on-boarding exponentially more weavers and artisans.
- To officially confirm their ethical standards of operations as per respective certifying agencies and extending their monitoring of ethical practices from farm to wardrobe.
- To track their carbon footprint and maintain the lowest footprint possible through partnerships with supporting organizations and initiatives like Suta Earth.

Sadgi

Sadgi, a home-grown, online jewellery brand based out of Rajasthan, is founded by Tanisha Ruwatia in the year 2021. She pursued a BBA in product design from the Arch Academy of Design, Jaipur. Her brand focuses on creating affordable, handcrafted artisanal pieces of jewellery by the local artisans or responsibly sourced from craftsmen who have been practicing the art of jewellery making since generations. From choice of materials to packaging, every component in their product is delicately hand-picked while keeping the environment in mind. The designs are created in small batches with a strong focus on zero waste. Tanisha principally promotes her brand on the Instagram page (Insta-store), named 'the_sadgi' (https://sadgi.in/pages/what-are-we).

House of Deepthi

Despite gaining a considerable MBA in HR and Finance, Deepthi Balagiri, the founder and CEO of House of Deepthi, began to pursue her passion of clothing and textiles. Her delineated imagination and sheer hard work have brought this woman- led digital sole proprietorship, incorporated in 2021, into a fashion brand known globally. An amalgamation of India's finest weaving techniques with a contemporary approach, this brand curates a sustainable journey with ethically sourced materials (House of Deepthi, n.d).

The Tribe Concepts

Amritha Gaddam established The Tribe Concepts, a sustainable eco-friendly beauty brand, in 2019 by introducing a 90-day miracle hair oil, which got the company a lot of attention and positive reviews (Gowthaman, 2020). The Tribe Concepts is strongly marketed over Instagram and the online reviews have played a pivotal role in the brand's growth so much so that today it gets over two lakh orders worldwide including the US, UK, Canada, UAE and more.

In an interview with BW Business world, Amritha Gaddam, founder of The Tribe Concepts, talks about how a new beauty brand can sustain in an established market and more. Amritha explains that in a market where natural products contain 90% added chemicals and 10% of the real natural ingredient, The Tribe Concepts is the real 100% natural brand where their ingredients are their product. They, as a brand, ensure a sustainable approach right from their product to packaging (BW Businessworld, 2021).

She also asserts that their packaging material is all natural. They offer their products in sustainable steel boxes and glass bottles. Even their taping is through paper tapes. There is no use of plastic. They use recycled papers and cardboard to deliver fragile products. Every single ingredient, which is plant-based, natural, and organic, is sustainably sourced from tribal valleys in India, where the soil is unmarred, and the air is as immaculate as it gets. They assure to give back to the homeland with plastic-free

packaging, zero chemical usage and ethical practices as a 'token' of gratitude. This particular brand endorsed the 'women in business' notion whilst giving support to women at all levels - from handpicking the ingredients to shape up a product, women have been a quintessential part of the journey. 80% of The Tribe Concepts' team and board are women (https://thetribeconcepts.com/pages/about-us).

Results

Question 1: Whatare the benefits of doing business via social media platforms?

An entrepreneur from Debanandapur, a rural area of Hooghly district in West Bengal, asserted that it has been four years since she started doing business with sustainable, handmade jewelry. Previously she used to do this business in the physical mode but after the world was gripped by COVID-19 pandemic, she shifted her business to the online mode. In her opinion, there are uncountable benefits to doing business online, like getting so much visibility for the products, first of all. Previously, it was really tough to reach the target audience in offline mode. Also, as she is doing business through social media platforms like Facebook and WhatsApp, it has become a lot easier to answer the various queries of the customers as well as to contact them directly. She usually posts pictures of the products, i.e., handmade jewelry, on various Facebook local groups so that people from any corner of West Bengal can see those products. Now it is absolutely impossible for her to shift her business once again into the physical mode. From her point of view, any kind of business conducted via social media platforms is better, especially for housewives like her who also have to maintain a household. Even the return and exchange policy has become easier in online mode. Furthermore, getting the wholesalers or resellers has become easier through social media platforms. Also, she has seen that a large number of customers prefer shopping online by seeing pictures of the products.

On the contrary, an entrepreneur from Amlajorah, a rural area of Paschim Bardhaman district in West Bengal, voiced a slightly different opinion regarding online business. She stated that she and her mother are doing business of sustainable cotton apparels since many years. But it has only been one or two years since they have shifted their business in online mode due to the COVID 19 pandemic. As far as she is concerned, targeting the potential audience, or buyers, to be specific, in online business is quite hard because, though they get more visibility from the audience through social media, the number of actual buyers is less here. There are people who say that they will take the product but then do not actually buy it. It might be happening because of the trust issue. Moreover, one can bargain prices in a physical store, but it does not happen in online business. Mostly they do tag a fixed price for the products as a result of which maybe the buyers do not take much products from online pages, according to her.

Though she does not think that everything on social media is negative. They can very

easily reach to the potential customers after all through the social media and it also helps them to preserve so much time as well as money as they do not need to travel here and there. Furthermore, they can do business sitting at their home without building any separate physical office. They do not need any manpower as well.

Question 2: Do they need licencefor doing theironline business?

The entrepreneur from Debanandapur stated that she is an individual who is running this business single-handedly. As it is a small-scale business, she does not need any licence for this till now. But she wants to expand her business in the near future, and then she will definitely need a licence for her business definitely.

An entrepreneur from Sarishapara, in Hooghly, West Bengal, has given a similar statement. She affirmed that to start a business, one does not need a license, but to sustain it while scaling up or when one is selling in huge quantity then he/she needs it. Since they just started their online business of homemade cakes or bakery products, they do not need a licence right now.

The entrepreneur from Amlajorah of Paschim Bardhaman asserted something similar to this query as well.

Question 3: How are they incorporating sustainable practices in their businesses?

The entrepreneur from Amlajorah affirmed that smaller businesses like theirs can find it difficult to turn to sustainable practices. But the clothes, i.e., sarees or kurtis, that they sell online are all made with cotton, which is absolutely eco-friendly. So it can be said that by nature, they are running a sustainable business. Though it will take time to incorporate sustainability into every step of their business, they are still planning to do so.

Similarly, the entrepreneur from Debanandapur asserted that her business is about handmade, ethical jewelry. She reuses scrap metal, materials, and cotton threads to make the products. As she reuses all the resources instead of wasting or buying new materials, it helps to save money as well as the whole process makes her business sustainable. Also, in order to make sustainable jewellery, she looks for suppliers who follow ethical values. Additionally, she uses a small amount of packaging materials instead of wasting these unnecessarily. This is how gradually she is incorporating sustainability into her business.

The home baker from Sarishapara explained as they are a small-scale food brand, they always try to make it to a point to source fresh as well as organic ingredients for baking cakes or other bakery products. They will soon start to use biodegradable packaging for their products as well.

The finding demonstrates that social media plays a pivotal role in tackling resource start-ups. Hence, if it is utilized in the right manner, it can become a crucial, virtual

platform in the sustainable progression of a start-up. Moreover, women entrepreneurs find it an easier and more accessible platform to promote their products or brands. Furthermore, the women entrepreneurs are gradually shifting towards sustainability.

Limitations

Likewise, any typical case study has some limitations that can impact or influence the interpretation of the findings from the research. Since this case study included a small sample of participants, the generalizability and application to practice may not be possible in other settings. Future studies with a larger sample of participants in different learning settings and from different countries would be recommended.

Conclusion

This research study as discussed above in details tells about the stories of sustainable entrepreneurship initiatives from different parts of rural areas of the state of West Bengal. The different women on whom the interviews were taken gave their respective answers to queries of the researchers on "Sustainable Entrepreneurship through Social Media". Economic, social, and environmental sustainability form the core of the research study on sustainable entrepreneurship. This research study tried to find out how social media became the backbone of entrepreneurship. Women nowadays prefer online marketing than physical or offline one as it saves their time as well as money. They get more visibility while promoting their products through social media platforms. They can easily do their business while sitting at home, and for this, they do not need any physical set up, which is very convenient for them. Furthermore, they do not have to travel here and there and do not need much manpower as well. Social media helped to provide the online platform, which helped to evade the physical mode of business and other workings of the entrepreneurs. The online mode of business through social media successfully provided the sustainability factor to the respondents of the researcher. Economic sustainability is noticed in many areas where the respondents, otherwise in physical mode would have spent much more money but were saved due to online mode of functioning. Additionally, women entrepreneurs shifting their businesses towards sustainability by opting for eco-friendly, biodegradable products as their ingredients or raw materials and packaging as well. Both environmental and social sustainability were respectively facilitated through this sustainable entrepreneurial activity.

Acknowledgement

The authors are grateful for kind support from Netali Nagar College management for supporting and encouragement to complete the present article

References

- Brahma, A., & Dutta, R. (2020). Role of Social Media and E-Commerce for Business Entrepreneurship. *International Journal of Scientific Research in Computer Science, Engineering and Information Technology*, 01-18.
- BW Businessworld. (9th February 2021). We As A Brand Ensure Sustainable Approach: Amritha Gaddam, Founder, The Tribe Concepts. https://www.businessworld.in/article/We-As-A-Brand-Ensure-Sustainable-Approach-Amritha-Gaddam-Founder-The-Tribe-Concepts/09-02-2021-375603/
- Gowthaman, N. (17th July 2020). This woman entrepreneur started her natural skin and hair care brand with Rs 20K, clocks revenue of Rs 2.25 Cr. https://yourstory.com/herstory/2020/07/woman-entrepreneur-natural-skin-hair-care-organic
- Greco, A., & de Jong, G. (2017). Sustainable entrepreneurship: Definitions, themes and research gaps. University of Groningen. Working Paper series.
- Gregori, P., & Holzmann, P. (2020). Digital sustainable entrepreneurship: A business model perspective on embedding digital technologies for social and environmental value creation. *Journal of Cleaner Production*, 272, 122817.
- House of Deepthi. (n.d.). The Artisan Behind House of Deepthi. https://www.houseofdeepthi.com/pages/about-us.
- Hussain, I., Nazir, M., Hashmi, S. B., Di Vaio, A., Shaheen, I., Waseem, M. A., & Arshad, A. (2021). Green and sustainable entrepreneurial intentions: a mediation-moderation perspective. *Sustainability*, *13*(15), 8627.
- LIPSINDIA. (n.d.). Digital Marketing Paving The Way For Women Entrepreneurs #WomanPreneurs. https://www.lipsindia.com/blog/digital-marketing-paving-the-way-for-women-entrepreneurs/
- Majid, I. A., & Koe, W. L. (2012). Sustainable entrepreneurship (SE): A revised model based on triple bottom line (TBL). *International Journal of Academic Research in Business and Social Sciences*, 2(6), 293.
- Networked Research Lab (12th July 2012). Sustainable entrepreneurship. UK . https://www.slideshare.net/PaolaDIM/sustainable-entrepreneurship.
- SADGI. (n.d.). Sadgi Sustainable Designer Jewelry. Sadgi: https://sadgi.in/pages/what-are-we
- Sugarmint. (18th December 2021). Women Entrepreneurs and Social Media: The Success Combo. https://sugermint.com/women-entrepreneurs-and-social-media/
- The Economic Times. (27th November 2022). What is Social Media? Definition of Social Media, Social Media Meaning. https://economictimes.indiatimes.com/definition/social-media.

doi: 10.31674/book.2022se.012

Entrepreneurs and Role of Leaders

Tinni Dutta¹*, Sujata Saha²

¹Department of Psychology, Muralidhar Girls' College, Kolkata, West Bengal, India ²Department of Psychology, Surendranath College, Kolkata, West bengal, India

ABSTRACT

A correlation between entrepreneurial leadership characteristics and business success was shown by the research. Key results showed that leaders with an entrepreneurial mindset reaped the most rewards from this kind of leadership, which allowed them to significantly boost their organization's performance. It's more likely that this kind of leadership will be able to efficiently run the company than a manager or an informal leader with no official power. The entrepreneurial leader takes ownership of their actions and recognizes the need of being proactive rather than reactive. In order to achieve the company's goals, they consider new ways of doing things and look for opportunities to work with a diverse range of people and tools.

Keywords: Leadership, Entrepreneur, Effective Performance

Introduction

Modernity is characterized by the discontents of civilization. In times of crisis, whose advice should mankind follow? That is when leadership really shines. However, in recent years, business owners across a wide range of fields have begun to utilize the word "entrepreneur" to characterize the way they run their enterprises. Leadership in today's worldwide culture is not determined by one's resume or one's current skill set. Being an entrepreneur means being willing to give up things that are more important to you so that you may help others. New psycho-spiritual leaders who can cast an inspiring future-of-humanity vision are urgently required. Aspiring to the principles of an abstract, unfettered, and formless life is what all leaders should do. Business leaders that are really effective are those who can modify their approach to leading based on the specifics of the situation at hand.

Leadership: Leaders who put their power to work for the benefit of their people (Yukl & Van Fleet, 1992). For this reason, the ability to direct a group toward its objectives as a defining characteristic of leadership will be treated. It's not uncommon for the individual designated as "team leader" to simultaneously serve as the group's de facto leader. On the other side, there are also leaders who don't have formal positions. Therefore, anybody who can motivate their coworkers to strive toward a common objective might be considered a leader in the workplace. They arise when individuals demonstrate features that are highly desired by the group.

^{*}Corresponding Author's Email: tinnid@yahoo.com

It is feasible to describe leadership as the personal attributes, activities, and styles of decision-making that are demonstrated by the leader. In other words, it relates to the method in which the leader accomplishes the obligations of their position. A position description for a leader may be developed in light of this, but leadership itself is harder to pin down. It is a typical error to dismiss the idea that the dynamics of leadership may be different when the majority of followers do not have direct contact with the leader compared to when they do have such engagement. According to Waldman and Yammarino (1999), analogous notions may be used to identify leadership styles in each of these settings; but, the processes through which followers create impressions of the leader are extremely different. Others' impressions of the leader are heavily influenced by the leader's narratives, vision, and symbolic behaviors, as well as the success of the leader's organization, while the impressions of the leader's closest followers are formed through the leader's day-to-day interactions with the followers.

"Morale" refers to an attitude of satisfaction mixed with the desire to continue engaging in the activities of a given organization and the willingness to strive toward accomplishing its goals. There are two main factors to think about. To begin, it is necessary that the individual has the same aim, as this will give him the incentive to be passionate, active, and self-disciplined. Second, it is the leader's responsibility to foster a group mentality where everyone feels a part of the bigger picture and has each other's backs. Leaders play a key role because they inspire followers to work together tenaciously and "consistently in pursuit of one objective."

Inspirational leadership entails: To implant in supervisors the requirement of employing human connections in supervision is a critical part in the program that is aimed to promote morale. Workers need to look forward to satisfying their own motivations rather than catering to the whims of the movement for supervision to work. The biggest problem with poor management is when bosses can't read their staff's emotions. Supervisors may do a lot for morale by acting democratically and getting workers involved in the day-to-day workings of the department. The supervisor's contacts with his employees must always be fair and impartial. And it's his duty to make the worker feel good about his work by highlighting the relevance of his contributions and heaping praise on him when he does a good job. Instead of putting restrictions on the employee, positive discipline demonstrates the right way to do things and encourages them to adopt it. He has to learn the ins and outs of constructive punishment.

Experts agree that the demands made on leaders are increasing in both scale and complexity (Dess & Picken, 2000). Today's businesses demand a greater degree of informational agility and innovative problem solving from all workers. Constant attention and command and control over subordinates are no longer necessary leadership styles. Keeping a close eye on everyone's work when supervisors and subordinates are spread out throughout the globe may be difficult. Business executives at all levels are responsible for keeping their teams on the same page in the face of rapid change.

Leader characteristics

According to early research (Spangler & House, 2004), leaders often scored better than non-leaders on:

- intelligence;
- a desire for domination or power;
- self-assurance;
- vigor and perseverance;
- expertise with the job.

These two have been shown to be consistent throughout all subsequent study and have been summarized in the following way (Fleishman, 1953):

- Consideration: How much a leader demonstrates that they have trust in their workers, how much they appreciate what their workers have to say, and how much they care about how their workers feel.
- **Structure:** The process through which a person defines his or her own position as well as the responsibilities of people beneath him or her in order to accomplish a set of objectives is known as leadership. The leader is responsible for actively guiding the group's operations, including but not limited to the following: planning, information sharing, scheduling, criticism, and the testing of new ideas.

According to Gastil (1994), the following are the three most essential characteristics of effective leadership in the entrepreneurial realm.

- **Distributing responsibility:** ensuring that a large proportion of group participants actively participate in decision-making and activity.
- **Empowerment:** establishing goals that are challenging but not insurmountable, guiding others without assuming the spotlight, and ceding control to others when appropriate.
- Aiding deliberation: by participating actively, without imposing their will, in the process of identifying and resolving group issues.

The positive contributions that entrepreneurs play in positions of leadership

The following are examples of actions taken by leaders with entrepreneurial traits:

- The enterprise has a significant impact in a corporate environment in which all parties involved have a personal stake in the outcome of problem-solving efforts.
- They are not only involved in the success of their own sphere of influence, but also in

Entrepreneurs and Role of Leaders

the success of the members of their team as a whole, and they are driven to see those individuals accomplish the objectives they have set for themselves in every facet of the business.

- They urge people to broaden their perspectives by traveling often to other departments, interacting with managers and employees in other divisions, and speaking with individuals who do not belong to their own specialization before making significant decisions.
- Despite the fact that the decision will have little impact on their division, they are committed to providing valuable feedback for the benefit of the whole organization and will do all in their power to do so.
- When addressing the firm, they take an all-encompassing approach to the topic.
- They focus on their colleagues and make an attempt to grasp them by asking clarifying questions and probing for thinking rather than passing snap judgments on them. Rather than being quick to pass judgment, they concentrate on their coworkers.
- If a decision is made at the executive table, then executives will support it even if they personally disagree with it, as long as the decision was made at the executive table.
- They are quick to applaud others on their achievements while downplaying the significance of their own achievements.
- They are always eager to provide a helping hand or offer encouraging words to the other executives working in the workplace beside them.
- People who are members of the executive committee are always ready, outside of the context of official meetings, to protect and promote the reputations of their fellow committee members.

Guiding principles demonstrating the significance of entrepreneurship in shaping a future effective leader:

Effortlessly improve your communication skills

It is essential for the success of an entrepreneur's teams, groups, and organizations that they be able to communicate clearly and effectively in a leadership capacity. If the members of the team and the team leader are able to communicate with one another in an efficient manner, then there is a larger probability that the team will be able to accomplish the job at hand collectively.

Maintain a focus on relationships while maintaining a task-oriented attitude

The results of the research suggest that there is a correlation between effective

leadership and behaviors that prioritize both work and relationships (Bass, 1990). Therefore, leaders who are able to exhibit concern for both the job at hand and the people they are leading have a stronger chance of reaching their objectives. This applies to both the task at hand and the people they are guiding.

Make decisions with care

One of the most important tasks that are expected of a leader is the ability to make choices. As it can be seen, the process itself is very important; this is true not just because it's required to arrive at a solution that's great and can be put into action, but also because the process itself is important in and of itself. For example, involving members of staff in decision-making processes might potentially increase overall job satisfaction among employees; but, doing so often slows down the decision-making process. The decision-making leadership model places a strong emphasis on adaptability, which indicates that the decision-making style of the leader should change depending on the specifics of the situation. It's feasible that some decisions need a more authoritarian approach, while others call for a more participative mode of operation. The capacity to determine which strategy will be most successful in a certain setting is the single most significant skill one may possess. If, on the other hand, there is evidence to show that supervisees are generally satisfied with participatory decision making, then it could be advisable to adopt this strategy whenever there is doubt.

Keep in mind that leadership is a two-way street

Even if followers have an effect on their leaders, it also works in the other direction. To achieve victory, a leader requires the support of the people they are responsible for leading. A successful leader is aware of his or her own needs and works to fulfill them, but at the same time, he or she is sensitive to the needs of the people he or she leads and pays attention to those needs.

Master the art of delegating

Successful leaders are able to increase productivity by educating their subordinates to take on more responsibility and larger difficulties in the workplace. This allows the successful leaders to take on more work themselves. Because of this, good leaders are able to focus more of their time and energy on completing other responsibilities. As a consequence of this, the leader as well as the organization as a whole will benefit from this development.

Put your trust in your abilities as a leader

"Leadership self-efficacy" refers to the assurance that comes from knowing one has the skills required to guide others to reach their objectives. Leaders with high levels of self-efficacy (e.g., those who seem confident in their leadership abilities) are perceived as more effective leaders; hence, it is essential for leaders to possess this quality.

Maintain a close watch on the development of your team, set ambitious goals for them, and offer constructive feedback

Research that was carried out on teams working in a variety of contexts revealed that effective leaders monitor the activities of their teams and provide critical feedback in order to increase productivity and address issues.

Adopt a modular approach

Two of the most critical aspects of being an effective leader are having the necessary knowledge and then really putting that knowledge into action. One of the many ways that you may improve your adaptability is by stopping for a moment before responding to a situation in order to examine it in an objective manner. This is one of the ways that you can do this. It is possible for a leader's own subjective experiences, actions, beliefs, and prejudices to have a detrimental influence on their ability to lead. This might happen for a number of reasons. It is far simpler for leaders to continue employing the same techniques that have been effective in the past rather than modifying their approach to meet the new circumstances since it is much more difficult to change their approach to match the new conditions. In the end, however, the most effective leaders are those who are able to preserve their impartiality and flexibility in the face of great pressure.

Leadership when applied to the context of an entrepreneur, the concept of leadership may be seen as the process of motivating a group of individuals to work together toward the achievement of a shared goal. Leadership in a firm may exist at any level of the organization. Some leaders are in positions of authority, and they may be able to exert influence on followers by relying on both the authority that comes with their position as well as their own personal charm. Those who have acquired such status officially are considered to be formal leaders. Even if some of the leaders in an organization may not have formal titles or positions of authority, they are nonetheless able to wield a significant amount of power over the people they supervise. One of the most important requirements is that those in leadership positions must abstain from using force or other forms of physical coercion to obtain what they want. Instead, followers enthusiastically adopt the leader's cause and fight for it as if it were their own. Someone who imposes their will on others via the use of violence and other forms of coercion is not a leader but rather a tyrant.

Entrepreneurial leadership

Leader performance is concerned with the concept that leaders who perform well possess specific attributes that badly performing leaders do not, as opposed to leader emergence, which is concerned with the possibility that a person will become a leader. A good leader could have traits like intelligence, assertiveness, friendliness, and independence; a bad one might exhibit traits like shyness, aloofness, and calmness. Three areas—traits, needs, and orientation—have been the focus of most studies

examining the connection between personality and leadership effectiveness.

Traits

Studies revealed a positive correlation between leaders' extraversion, openness, agreeableness, and conscientiousness, and a negative correlation between leaders' neuroticism. Some researcher observed a strong correlation between leadership performance and the ability to govern, make decisions, and communicate effectively orally. The same is true of leadership ability: high self-monitors are more likely to become effective leaders than low ones.

- **Self-monitoring:** Self-monitoring is an intriguing notion since it emphasizes actions rather than traits when describing leaders. For instance, a leader with a high level of self-monitoring can be painfully introverted and have little real interest in interacting with others.
- Cognitive ability: Empirical research demonstrates a modest but considerable correlation between intelligence and leadership effectiveness. The meta-analysis also found that a leader's cognitive capacity is most crucial when the leader employs a more directed leadership style and is not distracted by stressful events.
- **Needs:** Having a desire for power, need for success, and need for affiliation is a trait of effective leaders that has garnered some support as a personal feature. That a good leader should care more about getting things done than about making friends and influencing others is only one implication of this pattern of needs. A leader who is concerned with maintaining their followers' approval will have a hard time making harsh choices. Leaders with high affiliation needs may value social approval more than professional achievement, which may lead to tension in the workplace.
- **Gender:** Similar to the complexity of leader emergence, meta-analyses reveal that gender plays a nuanced influence in how successful a leader is. However, when the majority of their subordinates were men, or when the situation was traditionally defined as masculine, men proved to be the more effective leaders. When roles were traditionally framed in less male terms, women proved to be more successful leaders. Although it may seem that both men and women are capable of leading effectively, a meta-analysis of leadership styles found that women were more likely than males to exhibit traits indicative of good leadership.

The traits an individual has, such as their willingness to take risks and their capacity for empathy, may be the deciding factor in whether or not a certain startup or mature company that has been operating on the markets for a considerable length of time is successful. There is often a confluence of a number of essential elements that, when brought together, may assist anybody in establishing and maintaining a profitable company.

However, if you're seeking for tips and recommendations on how to become an entrepreneur, you'll have a hard time finding them in a book or article on the subject. Personal attributes like self-discipline, drive, or motivation for participating in business as opposed to working for a firm that pays the entrepreneur a salary are among the main entrepreneurial success elements or characteristics of a successful entrepreneur.

The success of an entrepreneur may be measured by the return on investment (ROI) they are able to generate for their founding investors. They created value out of thin air, which resulted in a healthy financial windfall. If a business isn't profitable, its owners may have to put charity work, such as helping workers or the local community, on the back burner. Companies benefit from leaders who are really empathetic because it humanizes what may be a robotic operation and instills trust in the leader's skills among consumers, employees, and investors.

In addition, business owners need to be polished public speakers since they often serve as the company's first point of contact with prospective employees, customers, and investors. If you don't explain what you're doing and why it matters within the first thirty seconds of a talk, your audience will probably tune out. The capacity to articulate ideas clearly is intrinsically linked to the two hallmarks of successful entrepreneurs: vision and energy. A strong sense of purpose is another essential trait of every successful entrepreneur. She or he must determine what constitutes success for themselves and the business as a whole. As a matter of fact, giving employees a sense of meaning in their work is one of the most important responsibilities an entrepreneur can have. Every company needs leaders who can inspire their staff and guide by example. As a result, people have the right to expect the same standards of conduct from others that they would have preferred to receive themselves. Nothing will be done differently or with different standards.

The key to success is never losing your confidence or your sense of humor, but being alert and keeping a sense of humor in the midst of hardship may certainly help. An optimistic company owner will succeed in any climate and motivate their team to do their best. Leaders with these qualities are able to adapt to new situations without becoming overwhelmed, and they are experts at encouraging their teams to welcome change and seize novel opportunities. In their employment, successful company owners often adopt a more global viewpoint. It is well knowledge that once decided on a course of action, they are very difficult to dissuade from it because of how much they care about the ideas they have established to achieve their goals.

In the domains of psychology and management, the topic of leadership has been the subject of thousands upon thousands of empirical and conceptual investigations over the last almost a century. In spite of this extensive research, the many different parts of this literature have not yet infiltrated the fields of entrepreneurship and small business management. Entrepreneurs are exceptional leaders because they are able to foresee opportunities and mobilize resources from a variety of sources to pursue them. They

create strategic plans that detail the actions needed to attract and organize the group members who will put the plan into action in order to fulfill the vision and create value.

A new theory known as "entrepreneurial leadership" has emerged in the study of leadership to provide a more all-encompassing framework for understanding the complex leadership roles required during startup creation and growth. Because of the free flow of ideas and methodologies between entrepreneurship and leadership studies, a new theory has emerged at the intersection of the two. Entrepreneurial leadership has been studied by academics from both fields from these perspectives until recently.

Even before the term "entrepreneurial leadership" was created, the topic had been discussed. Schumpeter was an early pioneer in connecting entrepreneurial spirit with efficient leadership. One of the most up-to-date definitions of entrepreneurial leadership is the art of leading a group to victory by assisting its members in recognizing and seizing opportunities for innovation.

Conclusion

An idealized form of influence represents the degree to which those in positions of authority choose to do what is right rather than what is straightforward or convenient. When leaders continuously behave in a manner that displays idealized influence, and when workers grow to expect such acts from management, mutual trust and respect are created between management and employees. The conduct of such entrepreneurs in positions of leadership would result in favorable impressions of interpersonal fairness, which are essential to the success of the firm.

Leaders demonstrate inspiring motivation when they push individuals to be the best that they can be and persuade employees and work groups that they can achieve above and beyond what was expected of them. Because of this, the use of inspiring motivation would boost workers' emotions of self-confidence and self-efficacy, which would, in turn, enable them to do their tasks to the best of their abilities. To provide intellectual stimulation for workers, employers should encourage them to think independently, to question long-held beliefs on the flow of work, and to consider traditional issues from fresh angles. Leaders in the workplace encourage the personal development of their employees by offering opportunities for intellectual stimulation. Lastly, leaders demonstrate customized regard when they care for the professional growth of their personnel. This helps people become more effective in their jobs. For instance, leaders are providing a unique and individualized sort of social support for certain workers when they listen to those employees and display empathy for those employees.

Acknowledgement

The authors are grateful for kind support from Lincoln University College management for supporting and encouragement to complete the present article

References

- Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, *18*(3), 19-31.
- Dess, G. G., & Picken, J. C. (2000). Changing roles: Leadership in the 21st century. *Organizational Dynamics*, 28(3), 18-34. https://doi.org/10.1016/S0090-2616 (00)88447-8
- Fleishman, E. A. (1953). The description of supervisory behavior. *Journal of Applied Psychology*, 37(1), 1.
- Gastil, J. (1994). A definition and illustration of democratic leadership. *Human Relations*, 47(8), 953-975. https://doi.org/10.1177/001872679404700805
- Spangler, W. D., & House, R. J. (2004). Personality and leadership. In *Personality and Organizations* (pp. 275-314). Psychology Press, United Kingdom.
- Waldman, D. A., & Yammarino, F. J. (1999). CEO charismatic leadership: Levels-of-management and levels-of-analysis effects. *Academy of Management Review*, 24(2), 266-285.
- Yukl, G., & Van Fleet, D. D. (1992). Theory and Research on Leadership in Organizations. 3, pp.147-197.

Self-Rated Health for the Elderly People in India: Sustainable Enterprise for a Sustainable Society

Soma Ghosh

Hiralal Mazumdar Memorial College for Women, Dakshineswar, Kolkata, West Bengal, India

Corresponding Author's Email: gsoma5995@gmail.com

ABSTRACT

Introduction: COVID-19 pandemic has made health care an absolute global emergency and thus self-rated health has become a burning topic of discussion. This paper attempts to focus on the emerging crisis in health arena, specially in respect to the self-rated health status of the elderly people due to sudden outburst of Covid-19 pandemic and on government efforts in managing health care systems as sustainable enterprise in terms of protecting the lives of the elderly population. **Methods:** Survey of literatures, literature review, observation and self-perception are the basis of assessing nationally representative studies across all layers of elderly population. Well-being and its integration with the environment in the context of the health of the elderly people have been evaluated by using the method of predictive analysis which has helped predicting about mortality and health care needs. Results: From the studies and observation, it has been derived that the governments across the globe were giving constant efforts to improve the health condition of the most vulnerable population, i.e., the elderly and ageing population, as per the direction of WHO, but the role of the private entrepreneurs were mostly revolving around their efforts to maximise their profits and sale health assistance and vaccine to the people at a higher price. Conclusion: This report has been designed to study the relationship between some of the socio-psychosocial domains of life with SRH in terms of the necessity for creating a sustainable society and to assess the sustainability of the enterprises undertaken by the business houses, government and non-government segments of policy making.

Keywords: Gerontology, Resilience, Sustainable Society, Self-Rated Health, Social Inclusion

Introduction

Managing Heath care mechanisms for the elderly population

Health Sector has become a lucrative domain of entrepreneurship in recent years. Covid-19 has raised the question regarding sustainability of this enterprise with its existing set up. The present study has been designed to explore health-related quality of life of older generation in India and its association with the variables of sustainable

entrepreneurship. Sustainable entrepreneurship, i.e., the newly emerging approach of progressive management needs to reorient itself to combine the guest for profit with the thrust for meeting societal values and ethical standards. The attempt to remodel the basic demand of entrepreneurship by promoting the cause of sustainability has to be brought under scanner with reference to promotion of Self Rated Health assessment for the elderly people in India. In Europe the concept of sustainable entrepreneurship has found a new meaning, at least in some sectors like SRH of the older generation. The subjective indicator of health status, especially self-rated health may seem to have significance and relevance for many medical researchers, but in India it is still a neglected phenomenon. India's changing demographic profile demands adequate stress on the mechanism to measure the well-being of the golden treasure of the elderly and ageing population in terms of various complex factors of life. Government should create a general awareness about Self Rated Health (SRH) and to motivate people to focus more on the mental health of elderly which in turn will improve their physical health. Socio-economic and psychological control variables and mediating factors must be evaluated to measure the frequency of occurrence of the feelings of depression, loneliness etc. In UK, the study of ELSA(English Longitudinal Study of Ageing) has identified some of the important indicators of decaying SRH which may further help researchers to carry out some predictive analysis in future with the intention to suggest avenues for strong inner strength of the human assets with silver hair. In India medical researchers, gerontologists, social scientists and policy makers should give attention to the issue for creating a space for sustainable society.

Self-rated Health (SRH) and its Impact in terms of Sustainability of Societal Values

Gerontology is the multicultural study of aging of elderly people. Importance of this study in determining the association of subjective health with complex domains of life is to be understood in terms of longitudinal data. Elderly people of different localities and culture view ageing differently; they have different expectations based on their own personal and social realities and experiences having different impact on their mental and physical health. Self-rated health (SRH) is the mostly widely used, validated, single-item indicator of health status (Wuorela *et al.*, 2020) across social science research. A person's well-being and harmony with the environment act as a strong predictor of mortality and health care needs.

Self-rated health (SRH) is a subjective indicator of health status. It integrates biological, mental, social and functional aspects of an elderly person. It includes individual and cultural beliefs, perception, vision of life and health related behavioural patterns. In discussion of sustainability enterprise for assuring a quality life and healthy living becomes an obvious priority. In medical research and in the works of gerontologists, the self-rated health (SRH) item is to be commonly used as prime indicator for ensuring sustainability of a society in terms of health status for which it is required to capture a

population's general health. In developed countries, the self-rated health (SRH) item is widely used in demographic and population health surveys to capture general health status and to predict mortality rate. But unlike developed nations, in India and some other developing countries its use has been subject to scepticism. India is using the SRH item in demographic and population health surveys, but evidence of its validity is lacking and its foundation is still not properly grounded. Moreover, self-reported measures of health status among the under privileged population in India may be misleading because self-assessment of health is influenced by the social conditions of respondents, cultural perspectives, income constraints, equal access to improved medical facilities and by lack of medical amenities in remote areas. Diversity in sociocultural status of the Indians not only creates a barrier for the researchers and the policy makers to assess the perception of the people regarding SRH, but also acts as a major constraint to generate awareness about the need for identifying health deficits and perceiving illness on time. Validation studies of the SRH in India still remain unattended, which is an important parameter for sustainable existence of a healthy society. In this country, methodological research examining the validity of the SRH item is not systematic, though now-a- days many social scientists and medical researchers are conducting demographic and population health surveys to assess the status of SRH. These studies, however, need to be supported by emerging evidence for their acceptable validity in respect to criterion validity and predictive validity based on mortality rate to help the entrepreneurs to combine the values of sustainability and ethics with their business innovations. In India constructive study on validity check regarding SRH of common adult population is still lagging far behind as compared to that in Europe and USA.

Indians, world's second largest population are prone to suffer from a number of communicable and non-communicable diseases. Critical thinking and problem solving is required to monitor people's health for construction of a sustainable society; without validity check this attempt is futile. Sustainable entrepreneurship in this respect must include the indicator of self-reported health check in India as a major social determinant of health to determine the degree of success of India's move towards creating a sustainable society. This study must focus on the reliability factor also, in the context of India's changing demographic profile.

India's population is aging. The policy makers working on sustainable society must start giving additional weightage on the onset of difficulties in healthy living and a higher mortality of elderly population. A radical change in economic lifestyle of the younger generation in India is leaving the older adults alone at home or old age shelters. Moreover, this digital world and free globalised market economy have made measurement of well-being of elderly people more critical around the globe and it is gradually affecting the social fabric of India as well. Therefore, India should be more sensitive towards the wellbeing of their old assets like the developed countries of the

western world. Many of the psychologists and sociologists perceive that SRH merely reflects psycho-social and socio-demographic adverse conditions of life, which may have ill effects on health. To allow "immunity from pain" and to ensure pleasure as "the only good", as conceived by Jeremy Bentham (Burns & Hart, 1996), the English Utilitarian philosopher, the government should take appropriate policies through its public-centric policies for better and healthy living and consequently for a sustainable society.

Self-rated health is one of the inseparable components of healthy living of the elderly population. The study of the dynamics of relationship between the psycho-social factors influencing self-rated health needs to be the concern of the governments. The researchers and the policy makers need to delve deeper into assessing the perspective notion of self-rated health for policy analysis in terms of sustainability. Self-rated health depends on psycho-social, demographical, physical and socio-economic factors and correlates with the possibilities of mortality and morbidity serving as a measure to reflect poor health among elderly. Loneliness, depression, physical inactivity, insufficient funds to fulfil needs etc. serves as an important predictor of global well-being in elderly. Loneliness serves as an independent risk factor, consequently raising concern for SRH. Lower household income is inversely associated with elders' self-reported health status, in particular for elderly women.

In this technology-driven world questions of social integration and social inclusion are inevitably associated with the use of internet. Digital divide has changed their conditions of life and livelihood. There is a significant relationship between leisure engagement through the use of technology and self-rated health. Scope and possibility of a relationship between such indicators and SRH need to be explored in the context of the multi-dimensional complexities of the Indian society to measure the degree of possibility for assuring a sustainable society and to assess the sustainable enterprises of the government, non-government and voluntary sectors in improving the standards of living of the elderly generation of India. Not only a descriptive analysis, but also a quantifiable study to determine the association between self-rated health and other socio- psychosocial indicators would help to get a potential overview about the relationship between SRH and the development of a sustainable society. Examination of the complex dynamics of relationship between the demographic variables like gender and marital status with SRH is also very much important in this regard.

Loneliness, depression, insufficient funds, inadequate household income, disposable or absolute income of elderly people etc. have a bidirectional relationship with Self Rated Health, which are significantly associated with the question of sustainability of a healthy society. It is in this domain the entrepreneurs, the researchers, the policy makers and the medical scientists need to work hard to gift us a sustainable society by protecting country's older assets and thus by transmitting a strong societal value to the younger blood. Physical Inactivity is associated with poor SRH; a hobby can refresh the

minds of elderly which will help them to live a meaningful life and this can be fostered with the help of the upcoming generation tuned with the values of social responsibility. In the context of the relationship between poor SRH and social integration, corporate houses and the governments should join hands to raise the values of sustainable living. More stress on the analysis of socio-psychosocial indicators of poor SRH should be taken into account by the researchers and policy makers for effectively achieving the purpose of predictive analysis and deploying the policies of corporate social responsibility in promoting the cause of SRH for the older population. The cause of social integration and that of an inclusive society cannot be glorified without assessing the status of healthy living of the elders and thus assessment of SRH and renewed approach of sustainable entrepreneurship must be combined with the greater cause of a sustainable society.

Conclusion

In all the liberal countries health care systems have been brought under the ownership of the private entrepreneurs, who think in terms of profit maximisation. In this context health of the elderly people has become a matter of concern, as they seemed to be more vulnerable, being at risk of severe diseases and consequent co-morbidity, as well as due to financial constraints.

When the Covid virus appeared to be in the stage of mutating itself, leading mortality rate to its peak or when the risk of emergence of new variants made the governments, sustainability of health entrepreneurship had become a topic of critical thinking. To reduce deaths, spread of the disease and to provide long-term solutions governments had to intervene and redefine the scope of entrepreneurship in terms of sustainability.

Governments adopted policies to respond to the need for confronting the crisis and to consolidate the mechanism for a stronger public health infrastructure. But strengthening the architecture for health emergency preparedness and resilience was not an easy job as the concept of sustainable business strategies or entrepreneurship refined by the concern for public health immunity, public trust and access to vaccines and therapeutics was a renewed approach to be injected into the minds of the health entrepreneurs.

Age, education, marital status, religion, occupation, chronic diseases, functional status, and routine medical check-ups were significant correlates of self-rated poor health. Health care sector in India needs to be rejuvenated as the commoners in India still lack equitable access to it due to multiple constraints, like affordability, quality of care and efficiency. As compared to its low- and middle-income counter parts in the world, India is still lagging far behind, which has become prominently evident during Covid-19 Pandemic. Infant mortality (IMR), maternal mortality, predictive and unpredictive mortality rates of the olds in India are significantly higher in India. Presence of adequate workforce and infrastructure in health care system is still a big challenge in India. Out-

of-pocket expenditure also adds fuel to fire. Under this circumstance, self-rated health measurement by the older generation is still too far to attain. Herein lies the responsibilities of the entrepreneurs, NGOs, voluntary organisations, governments, politicians and the researchers to work together to foster the need for creating a larger space for a sustainable society.

Acknowledgment

This is a golden opportunity to express the author's special thanks and gratitude to Professor Dr. Amrita Dutta, Principal, Netaji Nagar College. This scholarly work has reoriented her perception and has compelled her to delve deeper into the critical aspects of lives of the ageing generation.

References

- Burns, J. H., & Hart, H. L. A. (1996). The collected works of Jeremy Bentham: An introduction to the principles of morals and legislation ,2nd edition, Clarendon Press, United Kingdom.
- Wuorela, M., Lavonius, S., Salminen, M., Vahlberg, T., Viitanen, M., & Viikari, L. (2020). Self-rated health and objective health status as predictors of all-cause mortality among older people: A prospective study with a 5-, 10-, and 27-year follow-up. *BMC Geriatrics*, 20(1), 1-7.

Additional bibliography for further reading:

- Agrawal, G., & Arokiasamy, P. (2010). Morbidity prevalence and health care utilization among older adults in India. *Journal of Applied Gerontology*, 29(2), 155-179.https://doi.org/10.1177/0733464809339622
- Arokiasamy, P., Uttamacharya, & Jain, K. (2015). Multi-morbidity, functional limitations, and self-rated health among older adults in India: cross-sectional analysis of LASI pilot survey, 2010. *Sage Open, 5*(1), 2158244015571640. https://doi.org/10.1177/2158244015571640
- Bakshi, S., & Pathak, P. (2010). What makes them feel healthier? the correlates of self-perceived health among older adults in India. https://mpra.ub.uni-muenchen.de/id/eprint/40541
- Banks, J., Nazroo, J., & Steptoe, A. (2014). Wave 6. *The Institute for Fiscal Studies*. https://ifs.org.uk/books/dynamics-ageing-evidence-english-longitudinal-study-ageing-2002-12-wave-6
- Byun, M., Kim, E., & Ahn, H. (2021, November). Factors Contributing to Poor Self-Rated Health in Older Adults with Lower Income. In *Healthcare* 9(11), 1515. https://doi.org/10.3390/healthcare9111515

- Cachioni, M., Cipolli, G. C., Borim, F. S. A., Batistoni, S. S. T., Yassuda, M. S., Neri, A. L., & Paúl, C. (2021). Factors Associated With Positive Self-Rated Health: Comparing Older Adults in Brazil and in Portugal. *Frontiers in Public Health*, *9*, 650294.
- Falk Erhag, H., Ahlner, F., Rydberg Sterner, T., Skoog, I., & Bergström, A. (2019). Internet use and self-rated health among Swedish 70-year-olds: a cross-sectional study. *BMC Geriatrics*, 19(1), 1-8.
- Gracia, E., & Herrero, J. (2009). Internet use and self-rated health among older people: a national survey. *Journal of Medical Internet Research*, *11*(4), e1311.
- Husain, Z., & Ghosh, S. (2011). Is health status of elderly worsening in India? A comparison of successive rounds of national sample survey data. *Journal of Biosocial Science*, 43(2), 211-231. https://doi.org/10.1017/S0021932010000623
- Jenkins, A., & Mostafa, T. (2013). Learning and wellbeing trajectories among older adults in England. University of London
- Jones, J. W., Ledermann, T., & Fauth, E. B. (2018). Self-rated health and depressive symptoms in older adults: A growth mixture modeling approach. *Archives of Gerontology and Geriatrics*, 79, 137-144.
- Kalavar, J. M., & Jamuna, D. (2011). Aging of Indian women in India: The experience of older women in formal care homes. *Journal of Women & Aging, 23*(3), 203-215. https://doi.org/10.1080/08952841.2011.587730
- Kuosmanen, K., Rovio, S., Kivipelto, M., Tuomilehto, J., Nissinen, A., & Kulmala, J. (2016). Determinants of self-rated health and self-rated physical fitness in middle and old age. *European Journal of Mental Health*, *11*(01-02):128-143. http://dx.doi.org/10.5708/EJMH.11.2016.1-2.8
- Lawrence, E. M., Rogers, R. G., Zajacova, A., & Wadsworth, T. (2019). Marital happiness, marital status, health, and longevity. *Journal of Happiness Studies*, *20*(5), 1539-1561.
- Nilsson, I., Häggström Lundevaller, E., & Fisher, A. G. (2017). The Reationship between Engagement in Leisure Activities and Self-Rated Health in Later Life. *Activities, Adaptation & Aging*, *41*(2), 175-190.
- Nummela, O., Seppänen, M., & Uutela, A. (2011). The effect of loneliness and change in loneliness on self-rated health (SRH): A longitudinal study among aging people. *Archives of Gerontology and Geriatrics*, *53*(2), 163-167.
- Pandey, A., & Ladusingh, L. (2015). Socioeconomic correlates of gender differential in poor health status among older adults in India. *Journal of Applied Gerontology, 34*(7), 879-905. https://doi.org/10.1177/0733464813481850
- Peleg, S., & Nudelman, G. (2021). Associations between self-rated health and depressive symptoms among older adults: Does age matter?. Social Science &

- Medicine, 280, 114024.
- Rush, J., Rast, P., Hofer, S., & Diehl, M. (2018). Long-term increases in daily Stress reactivity predicts well-being: findings from daisi Measurement burst data. *Innovation in Aging*, *2*(suppl 1), 967-968.
- Tiwari, S. C. (2013). Loneliness: A disease?. Indian Journal of Psychiatry, 55(4), 320.
- Wilson, C. M., & Oswald, A. J. (2005). How does marriage affect physical and psychological health? A survey of the longitudinal evidence. *A Survey of the Longitudinal Evidence* (June 2005).
- Woo, J., Yu, R., Cheung, K., & Lai, E. T. C. (2020). How much money is enough? Poverty and health in older people. *The Journal of Nutrition, Health & Aging, 24*(10), 1111-1115.
- Yanguas, J., Pinazo-Henandis, S., & Tarazona-Santabalbina, F. J. (2018). The complexity of loneliness. Acta Bio Medica: *Atenei Parmensis*, 89(2), 302.

Sustainability and Circular Economy in Mining

Syed Afroz Hussain¹, Deepak Pandey¹, Manjeet Singh Bhullar¹, Tulika Chakrabarti^{2*}

¹Department of Mining Engineering, Sir Padampat Singhania University (SPSU), Udaipur, India

²Department of Chemistry, Sir Padampat Singhania University (SPSU), Udaipur, India

ABSTRACT

Sustainability and Circular Economy in Mining is the new generation way to take responsibility in mining to reduce the environment effect through mining after mining operation is completed and upgrading to new age technology for Mine operations which will be beneficial in terms of profitability and environment. This book chapter is written to make sure that every individual understands the importance of environmental concerns in mining, along with the importance of the mining industry and how to be the best entrepreneur in the mining industry. The context of this article includes the Sustainability and circular economy objectives of mining in environmental policy, the methods and ways for companies to become sustainable mining companies, and different case studies to help understand why reclamation is important. Three companies are used as examples in the case study. British Coal Mines, Appalachian Botanical Company, and Singerini Colleries Company Limited. Each case study is related to the "Reclamation" procedure of a project. In the conclusion part, it is explained why it is important to reclaim mine land, what are the various procedures to reclaim mine land, and why, as an entrepreneur, it is important to consider reclamation in mining.

Keywords: Sustainability, Circular Economy, Mining, Reclamation, Entrepreneur

Introduction

Sustainability and Circular Economy is representing an Economic Model where the objective is to produce goods and services in a sustainable way, by limiting the consumption and waste of resources (raw materials, water, energy) as well as the production of waste (Berg, 2019).

Sustainability is the model of representing the Economy through Reducing Green House Emissions like Carbon Monoxide, Sulphur Oxide etc. For sustainable development to be achieved, it is crucial to harmonize three core elements: economic growth, social inclusion and environmental protection. These elements are interconnected, and all are crucial for the well-being of individuals and societies.

Sustainability is a societal goal that broadly aims for humans to safely co-exist on Earth

^{*}Corresponding Author's Email: tulika.chakrabarti@spsu.ac.in

over a long time. Specific definitions of sustainability are difficult to agree on and therefore vary in the literature and over time.

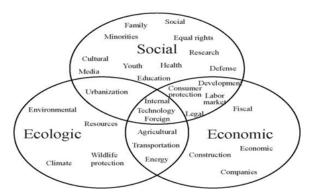


Figure 1: Sustainability Representative Model by Circular Chart

The concept of sustainability can be used to guide decisions at the global, national and individual level (e.g. sustainable living). Sustainability is commonly described along the lines of three dimensions (also called pillars): environmental, economic and social. Many publications state that the environmental dimension (also referred to as "planetary integrity" or "ecological integrity") should be regarded as the most important one. Accordingly, in everyday usage of the term, sustainability is often focused on the environmental aspects. The most dominant environmental issues since around 2000 have been climate change, loss of biodiversity, loss of ecosystem services, land degradation, and air and water pollution. Humanity is now exceeding several "planetary boundaries".

According to Berg (2019), "Sustainability means meeting our own needs without compromising the ability of future generations to meet their own needs. In addition to natural resources, we also need social and economic resources. Sustainability is not just environmentalism. Embedded in most definitions of sustainability we also find concerns for social equity and economic development".

Circular Economy (CE) is the model of representing the Economy through Recycling the Waste, Using Product's which are Reusable and Ecofriendly which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products if possible. In this way, the life cycle of products is extended.

Circular Economy is the way to tackle global challenges as climate change, biodiversity loss, waste and pollution by emphasizing the design-based implementation of the three base principles of the model.

The three principles required for the transformation to a circular economy are:

1. To eliminate waste and pollution.

- 2. Circulating products and materials.
- 3. The regeneration of nature.

The "circular economy" is defined in a completely different manner to the traditional linear economy. The idea and concepts of a "circular economy" (CE) have been studied in a framework of three principles driven by design: eliminate waste and pollution, keep products and materials in use, and regenerate natural systems. It is based increasingly on renewable energy and materials, and it is accelerated by digital innovation. It is a resilient, distributed, diverse, and inclusive economic model (Reuter et al., 2019).

Sustainopreneurship (entrepreneurship and innovation for sustainability) is an idea that emerged from the earlier concepts of social entrepreneurship and ecopreneurship. The concept aims to use creative business organization in order to solve problems related to sustainability. With social and environmental sustainability as a strategic objective and purpose, sustainopreneurship aims to respect the boundaries set in order to maintain the life support systems in the process. In other words, it is "business with a cause" – where ideally, world problems are turned into business opportunities by the deployment of sustainability innovation (Abrahamsson, 2006).

Sustainability and Circular Economy prospective in Mining

All people know that one of the major factors for pollution and all other effects on Earth and Environmental is mining. So, it is important to see or make way for possibilities for Sustainable and Circular Economy prospective for mining to encourage Mining Companies across the Globe to move towards the Goal set by UNITED NATION.

Sustainable development in coal mining is taking effective action on both environmental and social fronts. Ministry of Coal (India) has come up with an action plan to move forward with a comprehensive Sustainable Development Plan and has initiated its speedy implementation.

The Ministry of Coal Primary focus is on making an immediate social impact through Out of Box measures besides regular environmental monitoring and mitigation during mining operations. Sustainable development was first in attention in 1987 with the publication of "The Brundtland". The Context of the Publication at that time clearly explained the concept of Sustainable Development indicating a warning of the negative environmental consequences of economic growth and globalization.

Today, most of the challenges faced by humankind, such as climate change, water scarcity, inequality, and hunger, can only be resolved at a global level by promoting sustainable development: a commitment to social progress, environmental balance, and economic growth.

The United Nations approved the 2030 Agenda on implementation of a new sustainable

development roadmap, which contains the Sustainable Development Goals, The Sustainable Development Goals should be considered global goals. This is an important call from the United Nations to all countries around the world to address the great challenges that humanity faces and to ensure that all people have the same opportunities to live a better life without compromising our planet (UNESCO, 2015).

Government of India under various Ministries has set a massive capital expenditure for developing and planning activities related to sustainable development for next 5 years. The future goals of India are very high and will set benchmark as world's second highest populated nation is heading towards sustainable future.

Objectives of Environmental Policy for Mining

Today the topics discussed are Sustainability & Circular Economy system in Mining. The Mining Industry will affect environment for years, but it is seen rapid change in New Age Mining Method. Where advance machinery and methods have been adopted by Mining Industry to tackle environment effects by the Industry. The Motive of Sustainable & Circular Economy is to reduce Air & Noise Pollution, Prevent Soil Erosion to adopt Sustainability activity and adopt new method which can eliminate the risk of Environment, Climate and Ecological Hazardous. Following are the various objectives of this policy.

- To take account of environmental concerns in planning and decision-making.
- To successfully complete conditions imposed by Environment & Forest department and other statutory clearances issued by regulatory agencies.
- To make sure and prevent pollution by continuous monitoring and measurement of Environmental parameters at surrounding Living Areas.
- Identifying the impacts of Mining towards Environment and prepare environment management system.
- To reclaim the mined out areas along with mining operations and making sure that suitable measures for conservation of adjacent forests, wildlife and bio-diversity.
- To follow "Zero waste policy" and promote recycling of materials, wherever possible.
- Optimize the use of resource i.e. Electricity, Oil and Water.
- To take up projects related to development of villages as part of corporate social responsibility.
- To provide the employees with proper training and information to take responsibility and implementing the best particles and work for organization and Environment.

Methodology

The Method of Working in Mining is done by two types

1. Underground Mining 2. Opencast Mining.

In Underground Mining environment hazard can be prevented by backfilling the extracted area. Sustainable Development in Underground can be developed by upgrading equipment's and machineries which are Sustainable & Effective to use for Mine operations. The Environment hazardous in Underground Mining is however lower has compared to Opencast Mines. However, there is an latest case study on this topic which will discuss below.

The Environment Hazards in Opencast Mines are occurred from starting time of a project. For an Opencast project to start the topsoil where through prospecting Minerals are done. If it occurs in Forest Area total forest area within Mine boundaries are cleared (Cutting of Trees), which natural destruct the Ecology of the Forest Area. Opencast Mining production is profitable than Underground in terms of production as there is no left over of mineral and complete extraction is possible. [The process of recovering the effected lands due to Opencast across the way world is being tackle by various methods and latest technology which will discuss below and also it will discuss a case study related to Post Mining process (Reclamation).

- 1. Lower-Impact Mining Techniques By Using Electric, Hydrogen or Hybrid Machineries like Electrical Dragline, Shovel, Dumper and all other machinery to reduce Carbon Footprint and Noise Pollution.
- 2. Investing in research and development of Green Mining Technology
- 3. Closing and reclaiming sites of shut-down mines
- 4. Accurate tallying of toxic mining waste- Mine Tailing Process
- 5. Improving environmental performance By Reducing Air & Noise Pollution which occurs due to Mining
- 6. Better legislation and Regulations

The steps taken by indian government for reducing environment impact by mining

In the latest survey report for Fiscal year 2022. The Number of Mines in India are 1245. At present, the demand for Coal Consumption in India has increased from 900 Million Tonnes – 1200 Million Tonnes per year. The Ministry of Mines also expects the demand to be of Consumption of Coal to Improve by 1500 Million Tonnes by 2040. Also, in Metal Industry the present demand is around 86 Million Tonnes per year as of 2022 fiscal year, And Steel Industry is excepted to grow by 7-10%. It is also possible that steel demand

will reach 230 million tonnes per year by 2030.

Because the mining industry may see an increase in demand, it is critical to consider that the environmental impact of mining is reduced in the process. Hence Ministry of Environmental, Forest and Climate Change (MoEFCC) has taken decision on January 8,2020 after Supreme Court Order to implement Reclamation of mined-out areas to be now Compulsory.

Under "National Mineral Policy 2019" which guides mining activities in India, also talks about the importance of land reclamation once mining is complete.

For instance, If one can look at the official data (2018-19) regarding land restoration and reclamation of 52 opencast coal mines projects of Coal India Limited (CIL), The data shows that the total mine leasehold area is 671.44 square kilometers. Of that, the total excavated area is 255.43 sq. km. and of that 60.80 sq. km. (23.80 percent) of the land restoration has been planted (biologically reclaimed), 99.99 sq. km. (39.15 percent) is under backfilling (technical reclamation) and 94.64 sq. km. (37.05 percent) is under active mining. CIL is an important player in mining and is a public sector company of India it accounts for over 80 percent of India's total coal production and is also considered the world's single largest coal producer (Aggarwal, 2020).

Some government companies implementing environment reclamation and development.



Figure 2: Eco in NLCIL, Tamilnadu: Boating facility



Figure 3: Mine water purifier to Drinking water at Gondegaon, WCL, Maharashtra



Figure 4: Gunjan Park of ECL – An Opencast mine turned into a beautiful Eco-Park with water body



Figure 5: SCCL: Solar Power Plant at Manuguru (30 MW)

Different Case Study for Why, What and How Sustainability Entrepreneurship is Beneficial in Mining: -

(A) Why to introduce sustainability and circular economy: -

British Coal Mines in Ghugus City, Chandrapur, Maharashtra, On August 27,2022 in Ghugus City of Chandrapur. House Collapse and Sink upto 50 feet down. The house suddenly collapsed and sunk 50 feet down in Ghugus town which is famous for the British coal mines. This incident has left the entire town in a state of shock. Gajju Madavi, a resident of the Amrai ward of the city was at home with his family when suddenly his house started to collapse. He rushed out with his family and within a moment his house collapsed to the ground.



Figure 6: Sudden Collapse of a House in Ghugus City Due to Irregular Backfilling

This happened because during the British era coal was mined from open pits. But as the city expanded, people built their houses near the mine. Today, the entire city of Ghugus is situated on top of an underground coal mine. At present, the residents of Amrai Ward are being demolished and shifted to a safer place to avoid a Major Accident (Ali, 2022).

(B) A project which introduces sustainability and circular economy:-

Appalachian Botanical Company is a start-up company owned by Jocelyn Sheppard-founder & president of Appalachian botanical company. The company started its journey from Boone country, west Virginia (USA), the role of the company is to transform sections of a Opencast strip mine into an beautiful lavender blooms and buzzing honey bees. Which transform the waste land by mining into Wonderful Farm-Land. This is economically profitable along with the land which has been polluted is with mine impurities (like shale coal , iron) which endangers the surrounding water bodies and may flow towards nearby water bodies during Monsoon season and also cause Acid Raining.

Lavender is a relatively easy to grow plant and depending on the variety, it (lavender) actually have minimal water to grow and attention demands, with some of the prominent variations only requiring watering once everyone to two weeks. Most of Appalachian Botanical lavender are produce during June and July and are harvested quickly thereafter to ensure premier quality oils.

The organization waits until after the "prime harvest" period to allow their honey bees to collect the nectar and pollen. Today, company boasts a wide variety of home and body products, all crafted with their own lavender and honey.

The company has seen great success since its foundation of three years (i,e:- 2019). They operate as a "zero waste company," as they use ingredients each and every part to blend into outstanding products.



Figure 7: Plantation of Lavender in Open pit Reclamation project in USA [12]

As the company moves forward the plan for them is globalize the company and reclaim the land which are left over after mining, there revenues are increasing and profitable. The company concern with environment impact by mining is also making sure they involve in social cause too by providing jobs to those who are addictive to Drugs etc to make sure they have a proper rehabilitation.

(C) Singerini colleries company limited-Telangana

The SCCL Mining Company is a mining company from Telangana which has achieved milestone achievement in terms of mining company as per Production. It will be interesting to see how they have implemented sustainability and circular economy within the company as well as by assisting communities. The Reclamation Model for SCCL is bring various other models and figuring out the best model out of it.

- 1. Creation of Eco-parks
- 2. Mine Water Utilization
- Plantation Reclamation
- Processed Overburden
- 5.Bottom Ash Utilization
- 6. Promoting Renewable Energy

The Company with its various projects has not only Reduce Carbon Footprint But also have decreased there maintaining cost as company.

The Steps taken have being milestone achievement like

Sustainability and Circular Economy in Mining

- Proposed Eco-Park at Gautham Khani OC on 23.07.2020.
- > About 100 surrounding villages are being benefitted by excess mine water discharge with Mine Water Output of 993 LKL.
- Bottom ash is being utilized successfully for stowing in UG mines.
- Processed Overburden of around 3120091 Cubic Meter.
- ➤ By proposing to set up 299.5 MW capacity solar plants (in 3 phases) with capital outlay Rs.1361.5 Crores.
- > By Using Roof Top Panel in Various Office's with Approximate Capacity of 240 KWp.

With this different Models SCCL has made sure that Company not only Switch towards Green Energy but also find way to implement the best suitable model for different locations for not only just Reducing Carbon Footprint also making sure to be profitable and helpful to Communities living by and helping Village's.

Companies like SCCL clearly benefit from implementing the Sustainability and Economy Model and set a good example for others. It is also Helping Companies like NTPC by using Bottom Ash Produced by Thermal Plants can be used for Stowing in Underground.

Conclusion

- ➤ Through this Case study, it is now known that it is possible to achieve Sustainability and Circular Economy in mining and to become a successful company with Net Zero Carbon Output.
- > By looking at the Incident in Chandrapur British Coal Mines it has been focused on on proper and safe reclamation with commitment.
- ➤ It is known that after mining also income can be generated generated through mine land and also make the land fertility improve which is said that Circular Economy and Win-Win situation.
- ➤ It is seen that big players in coal Industry like Singerini Colleries Company Limited are also trying they level best to implement sustainability day by day.
- And Also that it is important for a all the mining industry to follow the Environment policy of government not only for the Country but for the better World.
- ➤ Not only it has let to implementing environmental policy for old giant companies like CIL, SCCL. It has also given birth to Net Zero Companies like Appalachian Botanical

Company which are making farmland possible in mining area with sustainability and economy of the Company growing in a good pace. Which shows a positive sign for all the other Companies around the World.

- > The Carbon Footprint across the world is increasing day by day and it is important to act know for the future generations to be safe.
- > The rules are made for Social Cause and not implementing it is indirect way of effecting yourself and world.
- > In SCCL case Study we see that Waste Ash can also be used properly for Back Filling which in British Coal Mines Company did not implement and now, the result is seen.
- Also, through SCCL case Study it has been observed that if one think properly every waste can be made useful like mine water being used for Village supply after filtering and ash from Thermal Plants being used as Back Filing in Mines.
- > Government across the globe along with United Nations is giving priority to implement sustainability in every aspect of life.
- > It will definitely take time to completely be Net Zero or stop depending on fossil fuels for electricity and petroleum too.

Author's view towards sustainable entrepreneurship for mining

In a World , where backlash from Environment Protesters and Climate Activists for mining (which is a major cause of pollution) is becoming a sensitive issue, the reality is that everybody is dependent on natural resources like Coal, Oil for ourselves and even for country's economic perspective. Even Metal Mining Industry plays a vital role and will remain important to the World for variety of uses. As a Mining Student, it is known that the Fertilizer used by farmers for agricultural need required minerals which are also Extracted by miners (Phosphate Mines). By Looking into actual facts, it has been understood that Mining and Agriculture will always remain Primary Industry for Human's.

To become a Good Entrepreneur in Mining Industry, one needs to ensure and reduce the effects of mining towards environment by following the government Policy. Even if there are no policy from government from few countries, since Environment and Climate Change are International issues, as an entrepreneur in mining goals need to be set in International Level to stay ahead for competition.

In the above case studies examples has been observed of various companies for understanding the way towards Sustainability and Circular Economy can be effective. As an entrepreneur it is important to keep in mind that profit doesn't mean just getting extra money in less time without caring environment in long run. The ideal company

must have a good reputation in terms of economical and management perspectives as well as a positive concern on environmental impact. A good start up should be a problem solver for the society.

Acknowledgement

Authors feel grateful and would like to thank "SIR PADAMPAT SINGHANIA UNIVERSITY" for providing them appropriate opportunity. They sincerely thank, Vice- Chancellor:- Prof.(Dr.) Padmakali Banerjee and Dean Research Prof.(Dr.) Vinod Patidar for giving motivation and enthusiasm to complete the article. Authors would also like to thank each and every individual in Reference part for helping them with their valuable research.

References

- Abrahamsson, A. (2006). Sustainopreneurship—business with a cause. https://www.diva-portal.org/smash/get/diva2:205051/FULLTEXT01.pdf
- Aggarwal, M. (23rd January 2020). Government makes re-grassing of mined-out areas mandatory. *Mongabay*. https://india.mongabay.com/2020/01/government-makes-re-grassing-of-mined-out-areas-mandatory/
- Ali, M. (31st August 2022) 160 houses close to Ghugus mine sinkhole vacated https://timesofindia.indiatimes.com/city/nagpur/160-houses-close-to-ghugus-mine-sinkhole-vacated/articleshow/93889508.cms
- Berg, C. (2019). Sustainable action: Overcoming the Barriers. Routledge. https://en.m.wikipedia.org/wiki/Special:BookSources/978-0-429-57873-1
- Reuter, M. A., van Schaik, A., Gutzmer, J., Bartie, N., & Abadías-Llamas, A. (2019). Challenges of the circular economy: a material, metallurgical, and product design perspective. *Annual Review of Materials Research*, 49, 253-274.
- UNESCO (3rd August 2015). Sustainability development. http://www.undp.org/content/undp/en/home/presscenter/pressreleases/2015/09/24/undp-welcomes-adoption-of-sustainable-development-goals-by-world-leaders.html

Entrepreneurship as a Catalyst in Creating Sustainable Livelihood of the Handicraft Artisans of India

Sriparna Guha^{1*}, Anirban Mandal², Sandeep Poddar³, Fedric Kujur⁴

¹Brainware University, Barasat, Kolkata, West Bengal, India

²ICFAI Business School, Kolkata, West Bengal, India

³Department of Business and Accountancy, Lincoln University College, Petaling Jaya, Selangor D. E., Malaysia

⁴Department of Management, Xavier Institute of Social Service, Ranchi, India

ABSTRACT

This research tries to investigate the effect of entrepreneurship on the sustainable livelihood of handicraft artisans. The study focuses on to check the relations between sustainable livelihood, entrepreneurship and employment by providing insight into rural crafts activities and evaluating the decision to engage in the craft business. In this study, several literatures have been reviewed which are based on sustainable livelihood and entrepreneurial activities. The uniqueness of the paper is that this study uses the concept of entrepreneurship as a method to find ways to support the livelihood of the artisans, offering an innovative understanding of a phenomenon that has the potential to make a real contribution to the lives of the artisans.

Keywords: Sustainable Livelihood; Artisans; Handicraft; Entrepreneurship; Entrepreneurial Ability

Introduction

In developing nations, artisanal and other non-agricultural occupations account for a significant portion of available livelihoods. Long associated with place and region, artisanal enterprises are occasionally classified as cultural forms of economic activity. Eastern India's economy is substantially reliant on the handicraft industry, as it is a major contributor to employment. The industry is economically significant due to the large number of employment opportunities, low infrastructure investment, and high value addition (Dana, 1999; Hazra, 2017). There is demand for handicrafts on both domestic and international markets. These artisans have an insufficient amount of money to support themselves. In fact, some of these artisans are so impoverished that they were compelled to abandon their traditional profession and seek wage-based employment. All of these factors contribute to the craftsmen's depression and poverty (Dutt, 2019). This work examines the means of subsistence of artisans who

^{*}Corresponding Author's Email: sriparna.pink@gmail.com

manufacture and sell handicrafts. Not only are people concerned with reviving and generating employment in handicrafts, but also with eradicating poverty and improving living conditions in craft communities.

While there is an abundance of literature on sustainable livelihoods (Narula, Magray & Desore, 2017), there are few details about SLs in a developing country undergoing socioeconomic transformations for artisans (Luckman, 2013; Kontogianni et al., 2019). The greatest socioeconomic challenge for any developing nation is reducing poverty (Oyekunle, & Sirayi, 2018). The majority of literature in India focuses on the entrepreneurial livelihoods of rural farmers in the agricultural and allied sectors (Singh, 2013), whereas the research on the entrepreneurial livelihoods of rural artisans engaged in handicrafts is limited. The younger generation of this trade does not see any potential in these societies that produce traditional handicrafts; as a result, they have little interest in learning these crafts, enhancing their skills, or engaging in this sector. All of these factors contribute to the extinction of craft skills, the unemployment of youth, and their engagement in low-wage work, all of which contribute to low self-esteem, exploitation, deplorable working conditions, and further marginalisation.

Purpose of the study

This paper therefore discusses these explanations for artisans to understand the causes leading to their life-diversification behaviour and try to investigate any option which can lead to maintain their required standard of living and entrepreneurship has been identified as a conductive element. The authors reviewed the previous literatures and developed a conceptual model which can be used for future study.

Methodology

The present paper is qualitative in nature. The authors conducted a literature analysis in order to identify gaps for future study by proposing a conceptual model.

Literature Review

Sustainable Livelihood

According to Frank Ellis (2000), "a livelihood is a concept that co-defines the living conditions of a person or a household, comprising the properties (human, financial, social, physical, and natural capital), the activities, and access to them (through institutions and social standards)." Barrett, Reardon and Webb (2001) argued that poverty reduction strategies are typically aimed at increasing the poor's wealth by providing them with additional financial, capital, physical, natural, or social assets (Carney, 1998; Mohapatra & Saha, 2021). Rural artisans are traditionally from disadvantaged social and cultural groups because of their minimal economic resources, and weaving is typically the only livelihood practise (Anas, 2010). If parents engage in the development of the arts and develop their skills as craftsmen, they also

pass this know-how to their children. While efficiency increases the living standards of the craftsmen, they are able to enrol their children in training facilities so that they can further improve their skills and make a more productive contribution. Human capital is the accumulation of artisans' skills. In certain cases, innovations and modernization methods remain unknown to the craftsmen living in isolated rural areas. Due to a lack of financial planning, many artisans do not save money. Generally, they do not plan when and how much to pay; as a result of their enormous expenditures, they have very little money left to invest (Lent, 2020; Mohapatra & Saha, 2021). Stitching by hand is a difficult task in the production of textiles, so individuals must rely on machines to achieve rapid, competent efficiency. Modern clothing manufacturing requires computers to recognise a variety of designs, systems, patterns, and materials; therefore, technological advancement is a crucial field. To improve living conditions, it is essential to preserve physical infrastructure assets. When people are engaged in the production of goods, suitable infrastructure is required. Determining the obstacles to rural artisanal activities, upon which a great number of people in developing countries rely for employment and subsistence, is therefore an important area of research.

Theoretical Background of Human Capital with the livelihood

The Oxford English Dictionary defines "human capital as an ability of employees who are treated as a resource or commodity." The Oxford English Dictionary includes the concept that there is investment in people (e.g., education, training, health) which improves the productivity of a person. Human capital includes knowledge, experience, expertise and good health which, when combined, enable people to use different livelihood strategies and attain their own goals. Human capital relates to household work: education, knowledge and health (Ellis, 2000). Education is one of wealth, which leads to rising wages and developing livelihood practices. There is a correlation between household education and family income (Rubavel, 2014).

In the sense of sustainable livelihoods, human capital emerges as an attribute that influences livelihoods. In order to access all the other types of capital, human capital is required apart from its inherent value (Diebolt & Hippe, 2022). This makes it important for meaningful outcomes to be obtained in any direction in terms of livelihoods though inadequate as a stand-alone tool (UNDP, 2017). The practice of introducing the weaving trade to the next generation means that the whole essence of the art culture is passed to the next generation and is not just a livelihood. As a consequence, over thousands of years weaving have been amazingly stable. Rural Artisans are traditionally from disadvantaged social and cultural groups because of their minimal economic resources, and weaving is typically the only livelihood practice they can use in tandem with semi-subsistence farming (Anas, 2010). If parents engage in the development of arts and develop their skills as craftsmen, they also pass this know-how to children. While efficiency increases the living standards of the craftsmen, they are in a position to enrol their children in training facilities so that they can further improve their skills and

make a more productive contribution. Human capital is the collection of skills worked by the artisans. This expertise flows as returns on investment are greater than their expense (direct and indirect) (Diebolt & Hippe, 2022). The human capital can be compiled with health, education, skill and proper training (Ellis, 2000).

Theoretical Background of Financial Capital and Livelihood

Financial capital refers to financial instruments used by people in order to meet their living standards (UNDP, 2017). The term includes both flows and stocks, which may include both consumption and output. The quality is therefore crucial if the other variables or properties are to be used effectively (Odero, 2006). Financial capital includes both flows and capital resources, which will support both demand and production (Kabir *et al.*, 2012). The bank account helps to secure structured loans for livelihoods. Poor households can or may not be aware of opening a bank account and receiving a formal credit (Rubavel, 2014). The complexities of a major rise in the financial capital of households should be taken into account in close relation with other financial instruments, in particular with the more formal and informal loans. It can force rural households to change their living conditions. The stock of financial capital is a primary determinant of livelihood diversification needs and prospects. Cash income and loans are included in financial capital (Ding *et al.*, 2018).

In certain cases, the innovations and modernization methods remain oblivious of the craftsmen living in isolated rural areas. It is thus necessary for them to start producing their goods, using conventional materials and methods, so that they can know what types of crafts are in demand in the marketplace. The project and programs have been initiated in all the artisan societies participating in order to raise people's consciousness to use creative approaches and methods to boost profitability. Many craftsmen save nothing due to the lack of financial preparation. Mostly they don't intend when and how much to pay properly, very little money is left to invest even because of their huge expenditures (Yusuf, Yusuf & Yusuf, 2018).

Theoretical Background of Social Capital and Livelihood

Social capital comprises social infrastructure (networks, social relations, associations) from which individuals rely on different subsistence approaches involving concerted acts of social capital or social infrastructure (Scoones, 1998). In the rural areas, connections with neighbours, considered as a social capital, are significant and helpful in helping one another and sharing the assets (Rubavel, 2014). Membership of numerous social networks allows drawing on wealth and become informed of diverse facets of livelihood practices. Social networks contribute to the creation of emerging technology awareness and expertise (Rubavel, 2014). It is to be noted that poor households tend to have weak decision-making capability in subsistence practices (Dutt, 2019).

In most situations, handicrafts and other products need coordination, only one person is not involved, but groups of people are involved. Manufacturing processes thus entail coordination. For example, the works of more than one person are needed for a long piece of fabric embellished with various kinds of artistic skills like sticking, picking and so on. The processing of various types of products thus involves many tasks and skills. Craftsmen who excel in their company hire numerous other professional craftsmen to improve productivity. In order to manage subsistence events, links to the social network of the community-based organization, different associations, political affiliations and the social groups are necessary (Ellis, 2000).

Theoretical background of physical capital and livelihood

Physical capital requires basic services and industrial materials required to sustain livelihoods. The network explores structural developments that affect connectivity and access to public resources (UNDP, 2017). The physical properties are like access to road and transport (UNDP, 2017), housing and safe buildings (Ellis, 2000), access to water and sanitation (Ellis, 2000), clean and affordable energy (UNDP, 2017) etc. and technological tools help to select the livelihood tasks to take on and handle the livelihood and fix insecurity in livelihoods (Rubavel, 2014). Smallholder farmers' physical capital includes tangible assets (Arowolo, 2012). They are often commonly processed commodities and mostly supplied by public services to farmers (Arowolo, 2012). Infrastructure is an essential source of physical capital that is very essential to rural areas. Infrastructure requires physical improvements that help people fulfil their basic needs and be more efficient (Scoones, 1998).

The shortage of infrastructure for utilities contributes to vulnerability of sustaining operations. Transport, electricity, irrigation, technology and markets are the core four pillars of infrastructure in rural areas (Arowolo, 2012). Manually stitching is a difficult job in development of fabrics, so the individuals have to use machines to achieve fast efficient efficiency. In present-day life, clothing manufacturing requires computers to recognize various types of designs, systems, patterns and materials, so the upgrade of technology is considered an important field. It is important to retain physical infrastructure resources to boost living conditions. When people work in the production of commodities, appropriate infrastructure is needed. After the manufacturing cycle has been finished, the craftsmen are still ready to market and display their goods and hence the appropriate means of transport are necessary for them.

Theoretical background of natural capital and livelihood

Natural capital refers to things such as water, climate, soil, sunlight, trees, minerals, etc. (Scoones, 1998). Natural capital is used to characterize natural resources supplies, from which additional resources and services that can be helpful to livelihoods can be created. This group covers a wide range of tools such as land and soil, food production, water, air quality, forest resources, water supply etc (UNDP, 2017; Pereira, Shackleton

& Shackleton, 2006). West Bengal has a predominantly rural population that relies on natural resources for its livelihood, such as fertile land, livestock and water. Natural capitals are eroded, exhausted and unrivalled by disruptive or insufficient governance systems and processes that are necessary for rural livelihoods to live on.

The individual artisan must ensure that raw materials are of high quality and goods are manufactured by making them more durable and do not quickly wear out in manufacturing and development of arts and crafts. The key factors used in making crafts and different kinds of works of art are known as raw materials. For the manufacture of a final product, high quality raw materials are used.

Sustainable livelihood, entrepreneurship and employment opportunity

The strategy for sustainable livelihoods heightens sensitivity to the lives of the vulnerable. They coordinate and demonstrate how they contribute to limiting or expanding livelihood opportunities (Ramadani et al., 2017). It will aid in the preparation of growth plans and determine the current activities' contribution to their sustainability (Serrat, 2017). It has been argued that rural entrepreneurship is a vital and successful component of living standards, productivity, and economic growth (Ozgen & Minsky, 2007). The Global Entrepreneurship Monitor (GEM) reported that countries with low gross domestic product require a high level of need-driven entrepreneurial activities (GDP). Promotion of entrepreneurship in economically depressed rural areas (Petrin & Gannon, 1997) is a crucial factor in revitalising the rural population. It has a significant impact on the standard of living of rural residents (Ozgen & Minsky, 2007). Increasing rural entrepreneurship would expedite the growth of autonomous rural communities. increase income streams, support infrastructure development, generate capacity, revitalise rural communities, and have a significant impact on reducing poverty (Dana, 1999; Ozgen & Minsky, 2007). Businesses make the greatest contribution to sustainable development by integrating environmental and social solutions into their primary business objective, delivering economically and socially superior products, and having a direct impact on the mass market and society (Guha, Mandal & Kujur, 2022a). Historically, artisan business was primarily tied to place and town and was frequently referred to in terms of cultural forms of enterprise (Ramadani et al., 2017). Investing in artisanal goods offers a tremendous opportunity to improve the economic, environmental, and social conditions of rural communities through the global marketplace and the economic and social development of numerous rural households. With market liberalisation, tourism, increased labour mobility, and diversification of rural livelihoods, there have been both benefits and challenges for artisans (Ramadani et al., 2017). The relationship between "full employment" and "sustainable livelihoods" has been investigated within the context of international efforts to promote economic growth and eradicate global poverty (Lawrence & Singh, 1996). In this analysis, the term "livelihood diversification" refers to individuals' efforts to find new income-generating opportunities, which vary greatly in their degree of freedom of choice (to diversify or not to diversify). Many rural diversification activities include microenterprises, as the value of microenterprises for job creation and income generation in rural areas is increasingly recognised (Ellis, 2000).

Entrepreneurship, Employment opportunity and enhanced standard of living:

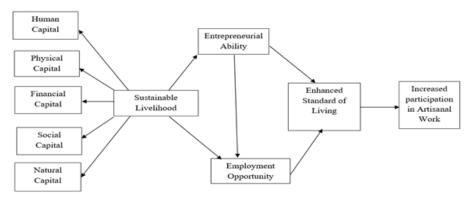
Entrepreneurship, employability, and creativity are gaining attention in India's economic sectors. The economic and social development of a nation depends primarily on the emergence of a robust and dynamic entrepreneurial private sector (Ugoani & Ibeenwo, 2015). Entrepreneurship is uniquely related to employment because it is a mechanism that generates employment opportunities. The term "self-employment" refers to a group of individuals who, based on their family background or demographic position, have aspirations and plans for a particular line of work (Panda, 2021). Entrepreneurs who primarily manage small to medium-sized businesses in the unorganised sector provide society with advantageous employment opportunities (Panda, 2021). Despite theories, realistic evolution of indigenous MSMEs (micro, small, and medium enterprises), and government policies and enterprise programming that resulted in regular change and programme modifications (Ugoani & Ibeenwo, 2015), the ultimate goal of reducing unemployment through entrepreneurship has yet to be realized. Therefore, both private and public providers must collectively pursue a systemic initiative to ensure sustainable employment through entrepreneurship (Nguyen, Costanzo & Karatas-Özkan, 2020).

Entrepreneurship is a significant contributor to rising living standards. Entrepreneurs have not only improved the standard of living by creating jobs, but they also satisfy human needs and desires. Additionally, they create and implement jobs that improve the quality of life. The creation of jobs by new and seasoned entrepreneurs is central to economic expansion (Roskruge, Poot & King, 2016). It is hoped that a growth-oriented entrepreneur is more important in a country because they can create jobs (Stam & Stel. 2011). Entrepreneurs implement new abilities that can create jobs and improve national, social, and economic conditions (Audretsch, Keilbach & Lehmann, 2006). Long-term statistics revealed a correlation between employment level and standard of living, which has proven to be the strongest correlation. While entrepreneurship has demonstrated a significant, long-term effect on all dimensions of quality or standard of living (Morris, 1998), its influence may, from a holistic standpoint, focus on the critical aspects of creativity, innovation, and individual and community lives (Marcketti, Niehm & Fuloria, 2006). According to Adewumi (2020), there is a need to help informal enterprises transition into the formal economy by constructing a bridge for them. He continues by stating that respectable work requires respectable business and that the government should make it easier for small businesses to thrive in order to create more jobs. According to Mahadea (2012), "to create new jobs, you must first create an environment conducive to entrepreneurs launch new businesses and then encourage them to grow their one-person operations into official organisations employing a sufficient number of individuals."

Entrepreneurship and enhanced standard of living and workforce participation in the present job:

As an antidote to these high unemployment rates in developing nations, entrepreneurship has been recognised as the linchpin of job creation, which subsequently fosters and sustains robust economic growth and performance (Peprah & Adekoya, 2020). A critical examination of these studies reveals that the question of whether entrepreneurship stimulates employment levels in developing nations, specifically India, remains unanswered. To address these research gaps, authors investigate how entrepreneurial activities affect employment growth and living standards in developing nations. According to Gupta (2021), despite the fact that the entrepreneurial performance in India has been characterised as poor, there are positive indications that entrepreneurship and entrepreneurial aptitude in India are contributing to the growth of employment in the Indian economy. Moreover, India is rife with opportunities for self-employment and other entrepreneurial endeavours, but a dearth of research on Indian artisan entrepreneurship creates a significant knowledge gap regarding the contribution of entrepreneurship to economic growth and development in India (Peprah & Adekoya, 2020; Guha, Mandal & Kujur, 2022a).

Therefore, based on the previous literatures the conceptual framework of the study will be as follows:



Source: Authors' Compilation

Figure 1: Conceptual Framework

Conclusion

This paper investigated the relation between entrepreneurial ability and sustainable livelihood and aimed at answering whether enhanced living standard can influence work participation in the present artisanal job or not through the existing literatures. This study also aimed to emphasize the features of rural artisan entrepreneurs, the factors that influence their decision to engage in an artisanal activity, and the constraints that affect their growth and contribution to the economy - all in the context of the developing

world. The authors have aimed that with the help of this research work and the conceptual model a dimension may be addressed and this dimension surely add great values to the existing field.

Acknowledgment

The authors are grateful for kind support from Lincoln University College management for supporting and encouragement to complete the present article.

References

- Adewumi, S. A. (2020). Challenges and prospects of rural entrepreneurship: a discourse analysis of selected local government areas of Osun state, Nigeria. *Int J Bus Manag Stud*, 12(2), 544-560.
- Anas, U. A. (2010). Weaving Livelihoods: A study of the determinants and effects of Livelihood Diversification on Guatemalan weaving households. Master of International Development and Management Project, Lund University, Sweden
- Arowolo, S. A. (2012). *Implications of Food Value Chain Support Structures for Water Resource Management by Smallholder Farmers in the Eastern Cape Province* (Doctoral dissertation, University of Fort Hare).
- Audretsch, D. B., Keilbach, M. C., & Lehmann, E. E. (2006). *Entrepreneurship and Economic Growth*. Oxford University Press, United Kingdom.
- Barrett, C. B., Reardon, T., & Webb, P. (2001). Nonfarm income diversification and household livelihood strategies in rural Africa: concepts, dynamics, and policy implications. *Food Policy*, *26*(4), 315-331.
- Carney, D. (Ed.). (1998). Sustainable Rural Livelihoods: What contribution can we make? (p. 122). London: Department for International Development.
- Dana, L. P. (1999). Preserving culture through small business: government support for artisans and craftsmen in Greece. *Journal of Small Business Management*, 37(1), 90.
- Diebolt, C., & Hippe, R. (2022). The long-run impact of human capital on innovation and economic growth in the regions of Europe. In Human Capital and Regional Development in Europe (pp. 85-115). Springer, Cham.
- Ding, W., Jimoh, S. O., Hou, Y., Hou, X., & Zhang, W. (2018). Influence of livelihood capitals on livelihood strategies of herdsmen in inner Mongolia, China. *Sustainability*, 10(9), 3325.
- Dutt, R. (2019). Socio-economic Conditions of Artisans in Handicraft Market: A Study of Kantha Stitching Artisans in Shantiniketan, Birbhum District, West Bengal (Doctoral dissertation, Tiss Tuljapur).

- Ellis, F. (2000). *Rural livelihoods and Diversity in Developing Countries*. Oxford University Press, United Kingdom.
- Guha, S., Mandal, A., & Kujur, F. (2022). Key Factors of Adoption of Alternative Business Model: A Study on Handicraft Artisans During COVID-19 Pandemic. In *Pandemic, New Normal and Implications on Business* (129-144). Springer, Singapore.
- Gupta, M. (2021). Role of NGOs in women empowerment: case studies from Uttarakhand, India. *Journal of Enterprising Communities: People and Places in the Global Economy.* 15 (1), 26-41. https://doi.org/10.1108/JEC-04-2020-0066
- Hazra, K. K. (2017). Prospect of traditional craft in present economy: a study of earthen doll of Krishnagar, West Bengal. *International Journal of Management (IJM)*, 8(4).
- Kabir, M. S., Hou, X., Akther, R., Wang, J., & Wang, L. (2012). Impact of small entrepreneurship on sustainable livelihood assets of rural poor women in Bangladesh. *International Journal of Economics and Finance*. *4*(3), 265-280.
- Kontogianni, A., Damigos, D., Kyrtzoglou, T., Tourkolias, C., & Skourtos, M. (2019). Development of a composite climate change vulnerability index for small craft harbours. *Environmental Hazards*, *18*(2), 173-190.
- Lawrence, J. E., & Singh, N. (1996). Sustainable Livelihoods and Employment: How Are These Concepts Related?.
- Lent, M. (2020). Everyday entrepreneurship among women in Northern Ghana: A practice perspective. *Journal of Small Business Management*, *58*(4), 777-805.
- Luckman, S. (2013). The aura of the analogue in a digital age: Women's crafts, creative markets and home-based labour after Etsy. *Cultural Studies Review, 19*(1), 249-270.
- Mahadea, D. (2012). Prospects of entrepreneurship to the challenge of job creation in South Africa. *Journal of Developmental Entrepreneurship*, 17(04), 1250020.
- Marcketti, S. B., Niehm, L. S., & Fuloria, R. (2006). An exploratory study of lifestyle entrepreneurship and its relationship to life quality. *Family and Consumer Sciences Research Journal*, *34*(3), 241-259.
- Mohapatra, L., & Saha, G. (2021). A Study on Sustainable Livelihood Frameworks and Entrepreneurial Opportunities with Specific Reference to the Sabai Grass Handicraft, Odisha, India. In Entrepreneurship and Regional Development (179-200). Palgrave Macmillan, Cham.
- Morris, M. (1998). Social capital and poverty in India. https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/3365
- Narula, S. A., Magray, M. A., & Desore, A. (2017). A sustainable livelihood framework to implement CSR project in coal mining sector. *Journal of Sustainable Mining*, 16(3),

- 83-93.
- Nguyen, H. T., Costanzo, L. A., & Karatas-Özkan, M. (2020). Stakeholders' perceptions of sustainable entrepreneurship within the context of a developing economy. *Journal of Small Business Management*, 1-40.
- Odero, K. K. (2006). Information capital: 6th asset of sustainable livelihood framework. *Discovery and Innovation*, *18*(2), 83-91.
- Oyekunle, O. A., & Sirayi, M. (2018). The role of design in sustainable development of handicraft industries. *African Journal of Science, Technology, Innovation and Development*, 10(4), 381-388.
- Ozgen, E., & Minsky, B. D. (2007). Opportunity recognition in rural entrepreneurship in developing countries. *International Journal of Entrepreneurship*, *11*, 49.
- Panda, D. (2021). Unorganised entrepreneurship and employment generation in India. *International Journal of Information and Decision Sciences*, *13*(1), 59-69.
- Peprah, A. A., & Adekoya, A. F. (2020). Entrepreneurship and economic growth in developing countries: Evidence from Africa. *Business Strategy & Development, 3*(3), 388-394.
- Pereira, T., Shackleton, C., & Shackleton, S. (2006). Trade in reed-based craft products in rural villages in the Eastern Cape, South Africa. *Development Southern Africa*, 23(4), 477-495.
- Petrin, T., & Gannon, A. (1997). Rural development through entrepreneurship. REU Technical Series (FAO).
- Ramadani, V., Hisrich, R. D., Dana, L. P., Palalic, R., & Panthi, L. (2017). Beekeeping as a family artisan entrepreneurship business. *International Journal of Entrepreneurial Behavior & Research*.
- Roskruge, M., Poot, J., & King, L. (2016). Social capital, entrepreneurship and living standards: differences between migrants and the native born. In *Handbook of Social Capital and Regional Development*. Edward Elgar Publishing, United Kingdom.
- Rubavel, M. (2014). Significant Ways and Approach of Sustainable Livelihood for Rural Women—A Skeptical Analysis. *International Journal of Management and Development Studies*, 3(9), 36-40.
- Scoones, I. (1998). Sustainable rural livelihoods: a framework for analysis. issue 72, IDS Working Paper.
- Serrat, O. (2017). The sustainable livelihoods approach. In *Knowledge Solutions* (pp. 21-26). Springer, Singapore.

- Singh, A. K. (2013). Income and livelihood issues of farmers: A field study in Uttar Pradesh. *Agricultural Economics Research Review, 26*(347-2016-17098), 89-96.
- Stam, E. & Stel, A.V. (2011). Types of Entrepreneurships and Economic Growth. http://dx.doi.org/10.1093/acprof:oso/9780199596515.003.0004
- Ugoani, J., & Ibeenwo, G. (2015). Entrepreneurship development and employment generation in Nigeria: A study of the national directorate of employment. *Independent Journal of Management & Production* (IJM&P), 6(3).
- UNDP (2017). Guidance Note: Application of the Sustainable Livelihoods Framework in Development Projects. https://www.undp.org/latin-america/publications/guidance-note-application-sustainable-livelihoods-framework-development-projects
- Yusuf W. A., Yusuf, K. B., & Yusuf, S. A. (2018). Social Capital and Households' Vulnerability to Poverty in Asa Local Government Area of Kwara State. *IOSR Journal of Economics and Finance*, 61-68.

doi: 10.31674/book.2022se.016

A Study on Sustainable Entrepreneurship

Iffat Jahan Qaiser

Seth Soorajmull Jalan Girls' College, Kolkata, West Bengal, India

Corresponding Author's Email: iffatqaiser29@gmail.com

ABSTRACT

Sustainable Entrepreneurship essentially enables in preservation of nature, life aid and network. Sustainable Entrepreneurship contributes to solving societal and environmental hassle through the realization of a success enterprise. In this specific paper the method is to throw some light and tries to explain with the help of sustainable entrepreneurship approximately green agencies advantage to society. The have a look at discussed the sort of business get merchandising outside and inside India and its critical toward environment and society.

Keywords: Sustainable Entrepreneurship, Environment, Society, Green Business

Introduction

Sustainable entrepreneurship is in essence the conclusion of sustainability enhancements geared in the direction of the mass market and offering benefit to the larger a part of society. Actors or corporations contributing significantly to sustainable improvement with their middle businesses may be known as sustainable entrepreneurs. Sustainable entrepreneurship is possibility orientated and objectives at producing new merchandise, offerings, production methods, techniques, and organizational modes which considerably reduce social and environmental affects, and which boom the quality of lifestyles.

Sustainable entrepreneurial ecosystem

The notion of a sustainable entrepreneurial environment (SEE), which connects entrepreneurial ecosystems to sustainability challenges and concentrates on promoting sustainable entrepreneurship, is also a wholly original concept. Given the mounting pressure from pressing societal issues like climate change, the availability of potable water for an expanding global population, and the development of sustainable production and consumption patterns (United Nations preferred meeting, 2015), researchers started examining the peculiarities of sustainable project initiation from the vantage point provided by the concept of sustainable entrepreneurial ecosystems. Only a very small number of academics have up till now specifically focused on sustainable aspects of entrepreneurial ecosystems.

Literature Review

Cohen (2006) describes a sustainable business environment as one within an incredible geographic network committed to sustainable improvement by supporting and fostering recent sustainable ventures. It states that it is an interconnected enterprise of parties.

Udin et al. (2015) explored his completion of SEE within the Green IT region.

Simatupang et al. (2015) looked at how SEE emerged and evolved to support innovation and the emergence of new businesses.

Fichte *et al.* (2018) study explores the association between the incubator his package and the establishment of sustainable businesses, and the relationship between business craze and the advancement of sustainable businesses in entrepreneurial ecosystems.

Bischoff and Volkmann (2018) emphasize the need to integrate the literature on sustainable entrepreneurship with research on entrepreneurial ecosystems. This is because Bischoff combines two research (in this singular study) and empirically discovers that some contextual aspects, such involvement in sustainable business, are particularly multidimensional for his SEE.

Sunny & Shu (2019) Innovation environment and social norms influencing the adoption of sustainable tasks in geographic clusters.

Objectives

To know sustainable entrepreneurship benefits for the society and the environment and type of business gets promotion from sustainable entrepreneurship.

Importance of Sustainable Entrepreneurship

Entrepreneur growth opposition and raise productivity

One of the main reasons people generally become entrepreneurs is the fact that they can't find the right job. Entrepreneurs create new businesses and create job opportunities for people one after another. Many seniors are laid off due to his COVID-19. For this reason, starting a business is a risk to yourself and helps support and expand the entrepreneur's business. Entrepreneurs may not be able to generate income themselves, but they also appoint other people to their business operation and provide the opportunity to pursue.

Entrepreneurs create new business and new markets

As global trends change, so do people's demands, giving entrepreneurs the opportunity to start new businesses. Market saturation drives entrepreneurs to seek new markets

for their services and products. This is believed to have beneficial effects on the financial system. Entrepreneurs may even create entirely new industries that will drive future growth.

Entrepreneurs upload national earnings

A new product or service created by a marketer brings new wealth from an entirely new market. In addition, increased income from entrepreneurship helps increase national revenues. This often comes in the form of improved government spending and taxation, which leads to financing sales, which in turn helps fund ailing sectors and human capital.

Entrepreneurs introduce revolutionary technologies

Individuals often turn to entrepreneurship to provide answers to their areas of interest or to use their creativity, technical know-how, or budget to generate their own income. Sophisticated ideas and ingenuity are the fundamental driving force for entrepreneurs and make significant contributions to the economy.

A corporation that includes sustainability into every aspect is considered to be "green" or sustainable. Inexperienced business owners aim to solve environmental issues while also having a positive influence on society through their innovative commercial ventures and top-notch consumer goods. Promotion of previously used, new, or scarcely used products, a sort of ethical consumption, is one of his business owner strategies for averting this risk. He may also consider resuming his trade.

Green enterprise ideas for 2021

In order to start a sustainable business, we would like to strive to choose eco-friendly products or services that no one else can offer in your market. Start thinking about how we can structure our processes around this product.

A list of 10 sustainable enterprise ideas to assist to get commenced

Up cycling

Upcycling is a system that remodels things that are no longer needed and gives them a second lifestyle. This is a fantastic way to give your customers something special and adds the ideal element to the experience of reducing post-customer waste. This applies to everything from fashion to home goods and everything in between. Change can be as small as painting an antique dresser and replacing the handles, or as significant as turning an antique newspaper into a ball of yarn. It is as much as our imagination and skill. For example, the Up-cycle Corporation of the UK is an up cycle furniture company that offers customers an inexpensive way to add certain pieces to their home. In addition, for a fee, the UK-based, wholly-for-profit business collaborates with clients to professionally update their own furniture.

Remanufacturing or recycling tech

Remanufacturing is often a short to full repair before the device is resold. This is usually effectively second-hand technology, and component purchasers have the alternative to help reduce the amount of technology waste that ends up in the environment but pay much less. Speaking of activity, check out David Wright's Electrickery - Recycled Laptop Artwork. David first recycled the card when he noticed the function of his tool's calculator on his broken computer in 1999. Fast forward to today and he saves virtual additives from the junkyard and turns them into special commodities. We can buy sculptures, lamps, jewelry, and even key chains on his website.

Green cleansing

It's no secret that the majority of cleaning supplies we use today include potentially harmful chemicals. Most of these products, including dish soap, bleach, and surface cleaning, come in single-use plastic boxes that you can discard as soon as you're done with them. Create a private cleaning service, working only with suppliers who limit or do away with single-use plastics, and relying heavily on the motivation of inexperienced cleaners. Review deliberate location strategies for reducing waste and water use in the workplace and techniques for demonstrating the benefits of an inexperienced approach to performance clients. For example, consider gray water recycling, which is fairly smooth drainage from our own family's washing machines and other household systems. For example, our experienced dry her cleaners guarantee low price offers, convenient use of green products for families and business apartments.

Apps

Creating apps is perfect for creating a greener future while minimizing our impact on the environment. We wish to conduct our firm with the fewest resources possible so that we produce less waste and use very little water and power. To help individuals make more educated purchasing decisions, develop an app that will help them locate the closest recycling facility or a list of the environmental initiatives and carbon footprints of various brands. For instance, the UK's Too Good to Travel app reduces waste.

The app makes it possible to buy and collect cheap groceries that are still fresh and appealing but haven't been sold by working with shops and restaurants.

Reusable food and beverage storage and cutlery

The UK alone used an estimated 42 billion plastic straws in 2018. It can take up to 200 years for a single plastic straw to disintegrate. And that gives them just enough time to devastate the environment. By decreasing trash, we can simplify our lives with items like bamboo containers, travel cups, and stainless-steel straws. There are numerous approaches to simplify it. For instance, the UK-based company Sustainable sells a variety of bamboo and biodegradable goods to consumers, including flatware, reusable

shopping bags, and toothbrushes. Reusable and sustainable products.

Zero waste grocery delivery

More people than ever want to use less packaging when they go grocery shopping each week. want to manufacture or purchase organic food in large quantities that is packaged in recyclable or reusable containers. In order to eliminate single-use plastics and create items for the local market, we would like to collaborate with nearby farmers. It benefits both parties. In the UK, The Zero Waste Delivery Company, for instance, is doing a fantastic job of phasing out the usage of single-use plastics and sending plastic refills to homes.

Ink cartridge refill shop

By offering an ink refill service, people can reduce their environmental impact when printing. Reusing old ink cartridges can prevent tons of non-biodegradable material from accumulating in landfills and, if done correctly, can be a lucrative company.

To acquire market share, start by keeping an eye on the rivalry in our area and providing a superior mix of competitive price and first-rate customer service. West Sussex-based Zero Waste Recycling is a fantastic illustration of this idea. The business is dedicated to responsibly recycling cartridges, and all elements that cannot be recycled or reused are carefully broken down into component pieces that can be utilized to create a variety of goods, from paving materials to vehicle parts.

Sustainable buildings

We can be a slightly different development company. Make it a priority to use recyclable and renewable materials and minimize waste in construction projects. Showcase effective methods for managing energy use on the job site while safeguarding the surrounding environment. The construction of an eco-friendly edifice is what we're aiming for here.

For instance, the real estate and investment company Lendlease is incrementally improving neighbourhoods by employing eco-friendly building materials. Every facet of our business, from the energy we use to the businesses we engage with, reflects our dedication to minimizing our environmental effect.

Reusable shopping bags

In contrast to disposable paper or plastic shopping bags, reusable shopping bags, also known as lifetime bags in the UK, can be used repeatedly. Totes are frequently composed of materials like canvas, woven synthetics, natural fibers like jute, or thick plastic that are more robust and may be reused rather than single-use plastic bags. Other purchasers might utilize wheeled trolley bags or string bags, which are frequently available at supermarkets and clothes stores.

Sustainable event planning

Paper plates, balloons, tents, beer cans, and straws. No matter how many people are there, there is a tremendous quantity of waste produced per person. According to a survey, the 279 summer music festivals in the UK (which draw in an estimated 3.17 million music fans) produce an astounding 23,500 mounds of trash on their own. Waste has financial costs as well; cleaning expenses might reach thousands of dollars. Reduce trash and your event's carbon footprint, from birthday parties to weddings, trade shows, and festivals. For all the standard things people need to do to be the most effective hosts, start researching green providers and look for green venue and accommodation options. A UK company that helps make your events greener by planning and executing events of all sizes.

An Indian entrepreneur wants to upend everything from how you shop to how you order food to fix a leaky faucet. However, excessive consumption causes waste, pollution, and environmental damage. Fortunately, there are start-up businesses working to reduce these environmental risks. for the good of technology-based products and society. They contribute to the nation being greener when combined with love of the world. Private actors are entering the arena in India, where official corruption and disinterest typically overwhelm environmental challenges. and encouraging attention.

Indian businesspeople want to revolutionize every aspect of our lives, including the way we buy, order food, and replace leaky faucets. However, waste, pollution, and environmental harm problems accompany excessive consumption. Fortunately, there are entrepreneurs working to reduce these environmental risks. They are assisting the nation in becoming greener by fusing a passion for social good with a technology-driven product. It is encouraging to see private firms launching and concentrating on this area in India, where public apathy and corruption sometimes push environmental objectives to the side.

Meet Indian businesspeople and activists who have started organizations for sustainable development that deal with waste management, alternative energy sources, and awareness-building initiatives.

Digital Green

In order to improve agriculture, health, and nutrition, Digital Green may be a nonprofit organization that links social organizations and technology. They are developing a cutting-edge platform to let regional groups produce and distribute movies for widespread adoption of regionally pertinent techniques. Through locally created movies, they collaborate with local governmental, commercial, and civil society organizations to spread knowledge about enhancing farming methods, livelihoods, health, and nutrition.

Waste ventures - waste management

Recycling Programs India produces nutrient-rich organic compost that reduces landfill waste by up to 90%. With the help of a waste collector, they can segregate the materials at the treatment facility thanks to a multi-year arrangement they have with the local government. The Delhi-based company was established in 2011 and has 44 projects planned for 2018. These two launches happened in a government-run community.

Fourth partner energy - making solar energy accessible

Founded in 2010 by Vivek Subramanian, Saif Dhorajiwala and Vikas Saluguti,

Fourth Partner Energy (4PEL) finances rooftop solar projects for commercial, industrial, and residential clients. They focus on sourcing and building. It recently raised \$2 million on funding.

Banyan nation - plastic recycling

Banyan Nation collects plastic waste from industry and recycles it for further use in industry. Taking a big step forward on the technology side, adding performance enhancers to recycled plastics to extend their lifespan as well as plastic bag manufacturing unit in Patancher, Hyderabad. The company recycles over 300 tonnes of plastic each month.

Say Trees - Tree planting trip

SayTrees not only protects the environment, but also educates and empowers others about the importance of protecting the environment. A group of professionally managed individuals who are determined to participate in a tree planting campaign. The organization is made up of ardent nature lovers who adore trees on the weekends and work in businesses during the week. He now has his 50th planting action throughout his four months of monsoons, which began as a weekend endeavor in 2007.

Priti International - E-commerce of products from waste

Hritesh Lohiya genuinely struck gold in a huge rubbish bin. His business, Priti International, turns trash from the industrial and consumer sectors into beneficial products. This \$10 million business creates handcrafted goods from leftover wood, including handbags made from denim pants and old burlap sacks that were once used to store military tents. Additionally, they create furniture from trash cans, barrels, repurposed tractor parts, old military jeeps, scrap machinery, and ramps built from scooter and bicycle ramps.

HelpUsGreen - recycled flower waste

Kanpur-based HelpUsGreen uses repurposed flowers to create natural and organic items. Additionally, they gather flower waste from religious sites and the Ganges River and use it in their own unique ways for vermicomposting, opulent incense, and bath

products. They work with civil society to engage citizens through data communications platforms to hold business, cultural and government leaders to account. They came into the spotlight after a video went viral showing toxic mercury left behind by Hindustan's Unilever factory in Kodaikanal Hindustan Unilever recently compensated workers affected after Jhatkaa's efforts agreed to do so.

Jhatkaa - campaign platform

Jhatkaa could be a new campaign organization specializing in campaigns on environmental problems. They work with civil society to employ citizens through data communications platforms to hold business, cultural and government leaders to account. They came into the limelight after a video went viral that featured toxic mercury left by a Unilever factory in Hindustan on Kodaikanal. Agreed to compensate

D&D Ecotech – rainwater harvesting

The majority of Indian towns are currently experiencing a water problem as a result of erratic rainfall, population expansion, and increasing urbanisation. The water table has considerably decreased in India as a result of excessive groundwater consumption, which has prompted the government to implement stringent limits on its use. Enter D&D ecotech, a start-up that aids in the adoption of rainwater harvesting by homes and businesses. To meet the demands and requirements of the client, D&D Ecotech also creates distinctive rainwater replenishment and collection systems.

The Ugly Indian – citizen activism platform

A group of Bangalore residents who came together to find their assigned "solutions" around the city created the anonymous collective known as The Ugly Indian, which also has a Facebook page. It began concentrating on the need to raise a generation of activists across the nation who will design these on-site repairs themselves, such cleaning up certain areas of the city, painting them, and adding plants.

Feeding India - bringing leftovers to the poor

The opportunity exists for Feeding India to develop into a humanitarian company monitoring two ubiquitous and interconnected issues in India: food waste and hunger. This is often accomplished by making surplus prepared food accessible from restaurants and caterers to those in need

The Living Greens - rooftop farming

Agricultural engineer and MBA from the Indian Institute of Trade Prateek Tiwari founded Living Greens Organics, a start-up with offices in Jaipur that specializes in rooftop farms and vegetable gardens. By cultivating organic vegetables on every roof and converting every building into a living green building, they contribute to their mission of producing the largest urban carbon credits in the world.

Green Ventures – sustainable energy solutions

Green Ventures creates cutting-edge business concepts and eco-friendly technologies for renewable energy solutions. Large-scale renewable energy generation projects, enhanced energy efficiency programmes, and regional social energy initiatives are some of their solutions.

Conclusion

Entrepreneurship and innovation are frequently necessary to succeed in sustainable business practices. The topic is most pertinent to sustainable entrepreneurship, which is concerned with providing novel goods and services in response to societal issues. The study contributes to identifying that factors other than entrepreneurial will such as social and cultural contexts and institutional realities may have an impact on the adoption of sustainable practices in small businesses, which broadens our understanding of the concept of sustainable entrepreneurship.

References

- Acs, Z. J., Stam, E., Audretsch, D. B., & O'Connor, A. (2017). The lineages of the entrepreneurial ecosystem approach. *Small Business Economics*, *49*(1), 1–10
- Cassell, C., Denyer, D., & Tranfield, D. (2006). Using qualitative research synthesis to build an actionable knowledge base. *Management Decision*, *44*(2), 213-227.
- Bischoff, K., & Volkmann, C. K. (2018). Stakeholder support for sustainable entrepreneurship a framework of sustainable entrepreneurial ecosystems. *International Journal of Entrepreneurial Venturing*, *10*(2), 172
- Fichter, K., & Tiemann, I. (2018). Factors influencing university support for SE: Insights from explorative case studies. *Journal of Cleaner Production*, 175, 512-524
- Simatupang, T. M., Schwab, A., & Lantu, D. (2015). Introduction: Building Sustainable Entrepreneurship Ecosystems. *SSRN Electronic Journal*
- Sunny, S. A., & Shu, C. (2019). Investments, incentives, and innovation: geographical clustering dynamics as drivers of sustainable entrepreneurship. *Small Business Economics*, *52*(4), 905–927
- Uddin, M., Hindu, R. C., Alsaqour, R., Shah, A., & Saba, T. (2015). Knowledge management framework using green IT to implement sustainable entrepreneur ecosystem. *Applied Mathematics & Information Sciences*, *9*(5), 2703–2714

Subject Index

Keywords	Page No.	Keywords	Page No.
Art Therapy	53	Leadership	106
Artisans	136	Mental Health	53
Blithely	43	Microfinance	11
Case Study	17	Mining	124
Circular Economy	124	Nursing	53
Cottage Industries	71	Obliteration	43
Cultural Negotiations	35	Power Loom Sectors	71
Eco-friendly	43	Reclamation	124
Ecopreneurship	1	Resilience	116
Ecotourism	1	Self Help Group	11
Effective Performance	106	Self-Rated Health	116
Entrepreneur	106, 124	Social Media Platforms	96
Entrepreneurial Ability	136	Social Inclusion	116
Entrepreneurship	11,17, 48,136	Society	148
Environment	1,148	Socio-Economic Inequality	59
Fabian	22	Success	48
GDP	22	Sustainability 17,	96, 124
Gerontology	116	Sustainable Development 11, 35, 48	
Grameen Bank	22	Sustainable Entrepreneurship 96, 148	
Green Business	148	Sustainable Livelihood	136
Gross Domestic Produ	ct 59	Sustainable Society	116
Handicraft	136	Swiggy	48
Handloom Sectors	71	Textiles and Allied Products	71
Healing Tool	53	Top- Notch	48
Health Care	ealth Care 53 Translation Pro		35
Helping Hand	48	Translator Competence	35
India	96	United Nations	22
Innovations	71	Women Participants	
Inspiration	piration 48 Women En		96
Intrapreneurs	22	World Development Indicator	s 59

Published by : Lincoln University College, Malaysia in collaboration with Lincoln Research and Publications Limited, Australia

ISBN: 978-0-6488798-9-3

eISBN 978-967-2819-14-1

