

Dynamics of Green Entrepreneurship Concept: A Review of Literature

Pathagama Kuruppuge Tharindu
IIC University of Technology
Phnom Penh, Cambodia
pktharindu@outlook.com

Ravindra Koggalage
University of Vocational Technology
Ratmalana, Sri Lanka
koggalage@yahoo.com

Abstract—The environment is extremely important to human existence, and, at the same time entrepreneurship is recognized to be vital in economic development. In as much as entrepreneurship is of great importance, individuals and organizations must consider the consequences and impacts of their business operations on the environment: this leads to the concept of green entrepreneurship. Green Entrepreneurship is regarded as one of the major drivers for the green economy. Due to sustainable development issues, the concept of green entrepreneurship is gaining significant momentum, but the phenomenon is still under-researched. The primary objective of this study is to review, explore, and integrate current views in the field in view of clarifying relevant concepts in green entrepreneurship context. In this research, an exploratory approach was adopted which involves the review and analysis of various research works on green economy and entrepreneurship. This paper discusses the key concepts of green entrepreneurship, offers a new and more dynamic view of the evolving nature of it, and concludes that it is essential to look at the green economy as a diverse constellation of myriad actors instead of corporate reinventions of status quo.

Keywords—Green Entrepreneurship; Entrepreneurship; Environmental Awareness; Sustainability; Green Economy;

I. INTRODUCTION

In the British Parliament in 1832 there were two groups of politicians debating as to whether they should abolish slavery or not. One group argued that there's no way that in the middle of the worst economic crisis that England has seen in decades, they could be talking about voluntarily and proactively giving up what they thought was their economic advantage: free labor. After a lot of debate, the decision was made to abolish slavery [1]. It was one of the most important reform movements of the 19th century. That decision forced members of the parliament to have to work together with scientists and members of the academia alongside entrepreneurs and companies to come together and create the right conditions for innovation and entrepreneurship to flourish in the English society [2]. Trying to find an alternative to free labor created the right conditions for innovation and a lot of technological breakthroughs were developed which in

turn gave birth to the Industrial Revolution which made England the most powerful nation and the most powerful economy in the history.

It is recognized that the role of entrepreneurship is vital to the development and the well-being of society [3]. Not only do they create wealth from their entrepreneurial ventures, but also, they create jobs and the conditions for a flourishing society [4]. Ironically, the same entrepreneurship is widely blamed for negative implications on society from its business operations. Such unsustainable business activities are recognized by researchers as a “business-as-usual model” [5]. It is the business ventures that decide the future of this planet. Thus, it is paramount that business becomes a sensible process, not a destructive process. Yet, many businesses have continued to indulge in “business-as-usual” practices, which are preoccupied with profit maximization objectives at the expense of all other social benefits [6].

Historically, the economy and the environment have often been in opposition. Scientific evidence regarding adverse environmental impacts of economic development and the significant risks for human and non-human life posed by rising levels of atmospheric greenhouse gases has led to increased awareness and concern amongst policymakers [7]. It is recognized within both policy circles and academia that current western modes of production and patterns of consumption are unsustainable [8] and it has been putting a lot of pressure on the scarce and limited resources all over the globe. The Intergovernmental Panel on Climate Change (IPCC) composed of over 3,000 different scientists from all over the world, agrees that with a 95% chance climate change is not only real but it's us human beings that are accelerating this process [9].

Since environmental issues are becoming increasingly important, there has been a growing interest to find innovative ways to address them. This has resulted in a rather new concept compared to entrepreneurship, namely “green entrepreneurship”. With green entrepreneurs seen as the main driving force in the transition to new economic forms, policymakers have expressed interest in developing “green” or “low-carbon” economies [10].

II. LITERATURE REVIEW

A. *The Concept of Green Entrepreneurship*

Efforts to reduce adverse effects of business operations on the environment gave rise to the

Stockholm declaration in 1972, Bucharest World Council of Churches conference in 1974, Rio de Janeiro Earth Summit in 1992, among others. During this struggle, the phrase “sustainable development” was coughed out as a slogan used in harmony for environmental wellness that later transformed into a “green” or “greening” revolution [11].

Green entrepreneurs have been given a number of definitions by various researchers. According to Hall [12], the term “green entrepreneurship” came out for the first time in the book “The Green Entrepreneur: Business Opportunities That Can Save the Earth and Make You Money” by Gustav Berle in 1991. Berle’s definition is rather short and poetic: “Green entrepreneurship is taking responsibility to create the world we dream of.”

An accurate definition and clear understanding of the term “green entrepreneurship” becomes especially important in a world where large corporations prefer to invest in green marketing (creating a green image without a real, measurable, and strategically directed change in their business processes) rather than in green innovations [13].

The green entrepreneur is defined as “... an entrepreneur who operates in the green sectors which include someone who seeks to transform a sector towards sustainability such as through green innovation (green products, processes, and/or services) that either reduce resources or improve efficiency toward zero-waste...” [14]. These individuals tend to have an environmentally focused mindset, which may involve differing characteristics in finding ideas, managing operations, solving problems, and identifying opportunities. Consequently, there is a linkage between individual characteristics, the way they operate the business, and the environment under consideration.

Most authors state the following characteristics as inherent to green entrepreneurs:

- They work as entrepreneurs, realizing ideas with a high level of risk.
- They have strong inner motivation related to a heightened sensitivity to environmental problems.
- They address environmental and/or social needs consciously, and this is at the core of their business activity.
- Their business ventures have a net positive effect on the natural environment, and at the same time, they are financially sustainable.
- They consciously strive to contribute to a more sustainable future, both with their social and environmental values.

Green entrepreneurship can exist in two ways: ‘already established’ firms that migrate into greening and new ‘born green’ firms that rooted in the founders’ concern for socioenvironmental wellness [15]. In other words, green entrepreneurship could either be accidental or deliberate. Therefore, new-born green

firms are considered originally eco-oriented that tend to operate in an environmentally friendly consistent way towards the restoration of the lost socio-environmental sanity in our society. While the already established firms which suddenly realized the need to become green, tend to operate in an environmentally erratic manner [16]. This difference in green entrepreneurship types might not be far from the issue of the sincerity of purpose in the struggle for taking advantage of green consumerism in the market.

B. The Concept of Greenwashing in Green Entrepreneurship

Greenwashing is when an organization spends more time and money on marketing themselves as environmentally friendly than on reducing its environmental consequence. It is a deceitful advertising gimmick intended to lure consumers who prefer to buy goods and services from environmentally conscious brands [17, 18].

Greenwashing is not a recent phenomenon: the term has been used to describe the practice of making unjustified or flowery claims of sustainability or environmental friendliness to gain market share. Environmentalist Jay Westerveld coined the term “Greenwashing” in 1986 in a critical essay in response to the perceived hypocrisy at a hotel he visited. The hotel placed notices about reusing towels to protect nearby reefs while it was in the middle of expanding into those very waters. Thus, he concluded, the hotel was simply trying to reduce costs by not having to wash towels as much but were trying to market this cost-cutting ruse as eco-friendly behavior [19].

Studies suggest that consumers are susceptible to unfunded green cues, finding that the mere presence of green cues positively affects consumers’ buying the intention and brand-image perceptions [20, 21]. However, recent studies argue that consumers are better informed about the negative impact of entrepreneurial activities on their socio-environmental wellbeing today than ever before [22, 23]. Therefore, firms that desired to enjoy consumers’ loyalty should not only produce and market green products and services but must also be able to adhere to green initiatives toward achieving environmental sustainability.

While some of the seemingly green firms that indulged in greenwashing overpromote their environmental benefits through marketing gimmicks, the genuine pro-environmental brands would eventually be distinguished and patronized by the public. Subsequently, the former would eventually drop out of the market against the availability of the facts behind the figures in the public domain while the eco-oriented business products take over the stage. Be that as it may, greenwashing is still a deceptive marketing tool and unethical profiting process in the firms’ green marketing endeavors. Furthermore, greenwashing has only limited advantages (perceived environmental performance), poses a major threat (perceived integrity), and has no true competitive advantage [22].

C. Green Entrepreneurs and the Development of a Green Economy

Climate change and environmental degradation pose the greatest challenges to life on earth, and thus the protection and promotion of nature is a significant global problem in modern society [24, 25]. Natural resources are essential to our well-being, and their sustainable use is the foundation of the economy. In recent years, and particularly since the beginning of the global economic crisis, there has been a need to create a new development model referred to as the green economy. The foremost important challenge facing society today is the need for economic activity to remain within the ecological constraints of the finite planet. As Victor and Jackson [26] have acknowledged, humanity must live in a "secure operating system" defined by clear "planetary boundaries" if they are to hope for sustainability in the long run. Transition to sustainable economic development involves the solution to such global problems that are mainly supported by the green economy.

It is increasingly accepted that the transition to a green economy is not only essential from an environmental viewpoint but also promises vital economic potential. Not only can it help to deal with the challenges of rising resource prices, but it is also recognized as a significant market opportunity, as green technology markets are growing rapidly. Building a green economy will facilitate investment in resources as well as sustainable natural capital management that will drive growth [27]. Moreover, a shift towards a green economy is also seen as a way to deliver new jobs, growth, and improved business competitiveness [28] while the ecological modernization approach to the green economy is seen as a niche development that could challenge the dominant regime [29].

The vision of a green economy is an internationally competitive economy that is both ecologically and socially compatible. It creates a real link between ecology and the economy, increasing social protection and combating poverty, striving for social justice [30]. In light of perceived environmental constraints, the aim is to realize environmentally friendly, qualitative, and therefore, sustainable growth, based on a comprehensive understanding of the interrelationships between economics, finance, and politics [31]. Sustainability is a way of using the resources in such a fashion without compromising the needs of future generations. Green Entrepreneurship is a creative way of achieving it to an extent where the ultimate goal is to develop diverse and sustainable production and consumption models that ensure prosperity and high quality of life around the world.

The indications are plentiful that the transition to a green economy has a broad-spectrum social rationale as well as an economic rationale [32]. Nevertheless, the review of the literature has revealed that green orientation is mostly within the sphere of research investigations [33]. Therefore, the realization of a green economy requires changes in production and consumer habits to become sustainable, factoring in

megatrends to ensure prosperity and high quality of life, both globally and for future generations.

III. RESEARCH METHODOLOGY

This study aims to explore various perspectives on green entrepreneurship to simplify some unresolved key concepts and synthesize current views in the area. The methodology adopted to achieve this objective of the study was an integrative review of the literature. With this, authors were able to explore historical, contextual, and new trends in green entrepreneurship through a systematic search approach of relevant publications in the field.

IV. RESULTS AND DISCUSSION

Berle [34] describes the term of green entrepreneurship as being a business opportunity which will protect the earth and make money. Most of the definitions associated with green entrepreneurship are also related to the startup phase of an organization. Green entrepreneurs see environmental values as a competitive advantage of their business and understand environmental values as a crucial component of their identity [35]. In literature, green entrepreneurs are often pictured as a stimulus which can bring about the desired change in society, and alter the behavior of the existing organizations by making them more responsible [36, 37].

With the need to recognize prospects and difficulties in the process of going green, as entrepreneurs, searching for furthermore opportunities in this regard is equally important [38]. Thus, this led to the sprouting of business ventures with a green outlook. Hence, green ventures put emphasis on efficiency, innovation, market acceptability, revenue growth, flexibility, effective risk, relationship management, and other market benefits [39].

Studies show that the effects of the emerging green market on green entrepreneurship and sustainable development are positive and significant. In this respect, the adoption of environmentally responsible business practices can, conceivably, open up a further range of opportunities for entrepreneurs. The migration to a sustainable business model provides numerous niches that organizations can successfully identify and service. Among other things, these include the development of new products and services, improvements to the efficiency of existing organizations, new methods of marketing, and the reconfiguration of existing business models and practices [40].

However, green entrepreneurship isn't only significant because it presents new opportunities for the early adopters who identify and exploit such opportunities but also because it has the potential to be a major force within the overall transition to a more sustainable business model. In a market-based economy, entrepreneurs play a crucial role in the inevitable adoption of green business practices by the wider business community through the lead role that they present to other firms [40]. As observed by Dean and McMullen [3] the green entrepreneurs have taken advantage of market failure of old business practices

by filling these need gaps in the emerging green markets. Therefore, ecopreneurs encourage other firms to proactively go green by demonstrating the economic benefits that come from being greener.

V. CONCLUSION

To conclude it must be stated that the trend in green entrepreneurship research has changed over the years from a more theoretical focus toward a more practical one. The main driver for this transformation was the business environment, which is forced to continuously look for improvement measures to survive. These improvement measures relied always on discovering new opportunities, and thus, nowadays the scholars worldwide consider the notion of opportunity to be the paramount element of entrepreneurship. It is an avowal that environmental sustainability is often achieved by discarding the orthodox approach to economic development that has abused the environment thus far and as such, a consensus is required on what constitutes green entrepreneurship.

The study concludes that the benefits of green entrepreneurship are tremendous, and therefore the inability of entrepreneurs to conduct their business within the purview of green entrepreneurship represents a failure to recognize opportunities in greening. We also conclude that born-green firms stand a chance to profit more from external green strategies compare to their conventional entrepreneurs' counterparts. More so, we argue that leveraging internal green strategies like green reputation are formidable assets in terms of competitive advantage.

REFERENCES

- [1] J. R. Oldfield, *Popular Politics and British Anti-Slavery: The mobilisation of public opinion against the slave trade 1787-1807*. Routledge, 2012.
- [2] J. Walvin, *England, Slaves and Freedom, 1776–1838*. Springer, 1986.
- [3] T. J. Dean and J. S. McMullen, "Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action," *Journal of business venturing*, vol. 22, no. 1, pp. 50–76, 2007.
- [4] F. Ulutas, and E. Alkaya, *Green Entrepreneurship In Turkey. Türkiye Teknoloji Geliştirme Vakfı (TTGV)*, 2010.
- [5] T. Dyllick and K. Muff, "Clarifying the meaning of sustainable business: Introducing a typology from business-as-usual to true business sustainability," *Organization & Environment*, vol. 29, no. 2, pp. 156–174, 2016.
- [6] I. Muo and A. A. Azeez, "Green entrepreneurship: Literature review and agenda for future research," *International Journal of Entrepreneurial Knowledge*, vol. 7, no. 2, pp. 17–29, 2019.
- [7] S. L. Lewis and M. A. Maslin, "Defining the anthropocene," *Nature*, vol. 519, no. 7542, pp. 171–180, 2015.
- [8] T. Jackson, "Prosperity without growth: The transition to a sustainable economy," 2009.
- [9] G. Levermore, "A review of the ipcc assessment report four, part 1: the ipcc process and greenhouse gas emission trends from buildings worldwide," *Building Services Engineering Research and Technology*, vol. 29, no. 4, pp. 349–361, 2008.
- [10] A. R. Davies and S. J. Mullin, "Greening the economy: interrogating sustainability innovations beyond the mainstream," *Journal of Economic Geography*, vol. 11, no. 5, pp. 793–816, 2011.
- [11] G. Dale, "Origins and delusions of green growth," *International Socialist Review*, vol. 97, pp. 1–14, 2015.
- [12] R. Hall, "The enterprising ecovillager achieving community development through innovative green entrepreneurship," 2013.
- [13] F. Farinelli, M. Bottini, S. Akkoyunlu, and P. Aerni, "Green entrepreneurship: the missing link towards a greener economy," *Atfd Journal*, vol. 8, no. 3/4, pp. 42–48, 2011.
- [14] M. G. Entrepreneurship, "Entrepreneurship at a glance," 2011.
- [15] N. Darnall and D. Edwards Jr, "Predicting the cost of environmental management system adoption: the role of capabilities, resources and ownership structure," *Strategic management journal*, vol. 27, no. 4, pp. 301–320, 2006.
- [16] D. F. Pacheco, T. J. Dean, and D. S. Payne, "Escaping the green prison: Entrepreneurship and the creation of opportunities for sustainable development," *Journal of Business Venturing*, vol. 25, no. 5, pp. 464–480, 2010.
- [17] F. H. Junior, B. Galleli, D. Gallardo-Vázquez, and M. I. Sánchez-Hernández, "Strategic aspects in sustainability reporting in oil & gas industry: The comparative case-study of brazilian petrobras and spanish repsol," *Ecological Indicators*, vol. 72, pp. 203–214, 2017.
- [18] T. Pimonenko, Y. Bilan, J. Horák, L. Starchenko, and W. Gajda, "Green brand of companies and greenwashing under sustainable development goals," *Sustainability*, vol. 12, no. 4, p. 1679, 2020.
- [19] S. Hazel and M. Brittany, "Greenwashing in the information industry," *The iJournal: Graduate Student Journal of the Faculty of Information*, vol. 5, no. 2, 2020.
- [20] J. A. Spack, V. E. Board, L. M. Crighton, P. M. Kostka, and J. D. Ivory, "It's easy being green: The effects of argument and imagery on consumer responses to green product packaging,"

Environmental Communication: A Journal of Nature and Culture, vol. 6, no. 4, pp. 441–458, 2012.

[21] B. Parguel, F. Benoît-Moreau, and C. A. Russell, "Can evoking nature in advertising mislead consumers? the power of 'executional greenwashing'," *International Journal of Advertising*, vol. 34, no. 1, pp. 107–134, 2015.

[22] M. D. De Jong, K. M. Harkink, and S. Barth, "Making green stuff? effects of corporate greenwashing on consumers," *Journal of business and technical communication*, vol. 32, no. 1, pp. 77–112, 2018.

[23] G. Dale, "Climate, communism and the age of affluence: Review of falc." 2019.

[24] Q. Ye, R. Zhou, M. A. Anwar, A. N. Siddiquei, and F. Asmi, "Entrepreneurs and environmental sustainability in the digital era: Regional and institutional perspectives," *International Journal of Environmental Research and Public Health*, vol. 17, no. 4, p. 1355, 2020.

[25] I. L. O. Skills and E. Branch, "Skills for a greener future: key findings," 2019.

[26] T. Jackson and P. Victor, "Green economy at community scale", *toronto: Metcalf foundation*, 2013.

[27] K. Faccer, A. Nahman, and M. Audouin, "Interpreting the green economy: K. Faccer, A. Nahman, and M. Audouin, "Interpreting the green economy: Development Southern Africa, vol. 31, no. 5, pp. 642–657, 2014.

[28] J. Lovell, A. Raingold, and J. Wingfield, "Building britain: The path to sustainable growth for the built environment," *London: Aldersgate Group*, 2012.

[29] D. G. and, "Sustainability transitions and green regional economies," *Regions Magazine*, 2018.

[30] S. A. Rahman, A. Amran, N. H. Ahmad, and S. K. Taghizadeh, "Grameenphone: creating a win-win at the base of the pyramid in bangladesh," *Global Business and Organizational Excellence*, vol. 33, no. 5, pp. 41–53, 2014.

[31] J. Madžgalj, V. Ivanović, and M. Brzaković, "Green economy in the function of creating green jobs," 2020.

[32] K. Richomme-Huet and J. De Freyman, "What sustainable entrepreneurship looks like: An exploratory study from a student perspective," in *ICSB World Conference Proceedings. International Council for Small Business (ICSB)*, 2011, pp. 155–177.

[33] M. Pachaly, "Barriers and triggers to green entrepreneurship: An exploratory study," *Master's Thesis*, 2012.

[34] G. Berle, "The green entrepreneur: business opportunities that can save the earth and make you money. liberty hall pr," 1991.

[35] J. C. Allen and S. Malin, "Green entrepreneurship: a method for managing natural resources?" *Society and natural resources*, vol. 21, no. 9, pp. 828–844, 2008.

[36] B. D. Parrish and T. J. Foxon, "Sustainability entrepreneurship and equitable transitions to a low-carbon economy." *Greener Management International*, no. 55, pp. 47–62, 2009.

[37] K. Hockerts and R. Wüstenhagen, "Greening goliaths versus emerging dauids—theorizing about the role of incumbents and new entrants in sustainable entrepreneurship," *Journal of business venturing*, vol. 25, no. 5, pp. 481–492, 2010.

[38] D. C. Esty and A. Winston, *Green to gold: How smart companies use environmental strategy to innovate, create value, and build competitive advantage*. John Wiley & Sons, 2009.

[39] M. E. Porter and C. Van der Linde, "Toward a new conception of the environment-competitiveness relationship," *Journal of economic perspectives*, vol. 9, no. 4, pp. 97–118, 1995.

[40] M. Schaper, "The essence of ecopreneurship," *Greener management international*, pp. 26–30, 2002.