

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

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Abstract

Purpose: This research is investigating the principles of Sustainable Development (SD) and green entrepreneurial business models (GEBMs) potentialities that shape the future of the green markets. **Methodology:** Quantitative methodology employed to gather empirical data. The research incorporated dual samples representatives, targeting green entrepreneurs and green consumers engaged with ethical green goods and initiatives. **Results:** The analysis results provide compelling insights into the correlation between SD goals and the rise of GEBMs. The key findings highlight the pivotal role of environmental consciousness, regulatory frameworks, and market demand in shaping the emergence and success of green entrepreneurial ventures.

Keywords: Sustainable Development, Green Entrepreneurial Business Models, Environmental Consciousness, Regulatory Frameworks, Market Demand.

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دور التنمية المستدامة في النهوض بنماذج ريادة الأعمال الخضرا

الملخص

الغرض: تبحث هذه الدراسة في القيم والمبادئ المتعلقة بالتنمية المستدامة وإمكانيات نماذج الأعمال الريادية الخضراء، وكيفية تشكيلها لمستقبل الأسواق الخضراء. **المنهجية:** في هذا المسعى البحثي، تم توظيف منهجية كمية بدقة لجمع البيانات التجريبية. اشتمل النهج على إدارة استطلاعين شاملين، تم بناؤهما بدقة بأسئلة مغلقة. ضمّ البحث عينات مزدوجة تمثيلية، مستهدفاً رواد الأعمال الخضراء، وقادة الأعمال الخضراء، والمستهلكين للمنتجات الخضراء المنخرطين بالسلع الخضراء الأخلاقية والمبادرات الخضراء. التزمت عملية جمع البيانات بالمعايير الأخلاقية الصارمة والمتانة الإحصائية لضمان صحة وموثوقية المعلومات المجمعة. تم تنفيذ تحليل البيانات الكمية باستخدام تقنيات إحصائية متقدمة.

النتائج: تقدم نتائج التحليل رؤى قوية حول الارتباط بين أهداف التنمية المستدامة وصعود نماذج الأعمال الخضراء الريادية. تكشف البيانات عن أنماط وعلاقات معقدة، مما يلقي الضوء على العوامل التي تدفع اندماج الممارسات المستدامة داخل المساعي الريادية. تبرز النتائج الرئيسية دور الوعي البيئي، والأطر التنظيمية، والطلب في السوق في تشكيل ظهور ونجاح المشاريع الريادية الخضراء.

الكلمات المفتاحية:

التنمية المستدامة، نماذج الأعمال الريادية الخضراء، الوعي البيئي، الأطر التنظيمية، الطلب السوقي.

1. Introduction

Consumers are now moving towards a healthier lifestyle and products, where going green largely and with a rapid rate in the business domain, as a catalyst by grabbing the green consumers' attention. The world around us has been changing and therefore people are very much focusing on their surrounding direct environment. As such, small companies and industries are also emphasizing environmentally friendly business practices and producing products that are not harmful to the planet (Ulusoy, 2016). As a result, Sustainable Development (SD) has obtained a motive by the business to be applied. In addition, the SD concept is the main focus of a wide range of nations. One of them is Egypt with the strategy of 2030 which is addressing the sustainable development concept and its outcomes (ElKhouly et al., 2020).

It is worth noting that SD is one of the most important tactics used to save the environment and boost the ethical businesses. SD is rapidly gaining importance and eventually, it will replace all the traditional methods used and create new transformational moves towards green marketing and applying the SD concepts in business models (Nosratabadi, Saeed, et al 2019). In this realm, different international entities introduced several initiatives that encourage young adults, and start-ups to submit proposals for new sustainable and green entrepreneurial business models that address the sustainable development values and principles. The focus of this thesis is to assess the

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

relation between the role of sustainable development in rising the entrepreneurial business models. By definition, most of the green business models are based on either producing green products or capitalizing on practicing green marketing tactics to pursue their new green initiatives within the scope of the sustainable development possibilities.

SD includes more than one aspect that foster the green theme, not only changing the process where the products are produced; like the appearance of the product, how it is finished, and how it was promoted. Therefore, managers and owners of the companies should understand the main notion behind the SD values to capitalize on their competencies as much to infuse the green concept which favours the consumers' green preferences. Over and above, a big portion of being green relates more to services than tangible real goods. As such SD is embedded more in the service sector than the tangible real physical goods domain. Whereby, new terminologies have appeared such as servitization. Servitization is the idea of converting physical tangible real goods values into intangible services, that could deliver more for less. Needless to say, our world has witnessed entrepreneurial ideas which capitalized on the service sector. Different service applications established their entire models online (Holcombe, R. G. ,2003).

2. Research Gap

There is a deficiency and lack in research relating Sustainable Development (SD) values to the Green Entrepreneurial Business Models' long-term future success in the Egyptian context, will be covered by this study. By addressing the outcome of the previous studies and literature review, the research will cover the gap of studies acknowledging the relation between the evolving awareness behind the sustainable development effectiveness and the future possibility of the green entrepreneurial business models' success, in the Egyptian context. This study seeks to fulfil this gap, through investigating the rising relationship between the Egyptian green entrepreneurs and the ethical practical practices among the ecological, economic and social spheres in Egypt. This study will contribute to build the connections and linkage between the future ambiguity represented in the Sustainable Development calls and values with the positive practical green solutions and initiatives represented in the green entrepreneurial transformative strategic plans.

3. Sustainable Development Indicators

3.1. Social Set (SS): Responsible practices/consumption for social prosperity and lifelong welfare:

Responsible consumption has become increasingly associated with societal and cultural groups that possess high cultural resources, amplifying the demand for environmentally friendly products and services from various perspectives (Zaidi et al.,

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

2022). Consumers who are environmentally conscious exhibit purchasing behaviour that is influenced by their demographics, culture, socioeconomic status, personality, and other attitudinal variable (Hameed et al., 2021). As a result, green consumers are becoming more socially aware and are increasingly inclined to make eco-friendly purchasing decisions. This provides an added incentive for green providers to integrate social responsibility measures into their social settings' dynamics (Paul et al., 2019). highlighting the importance of environmental and social protection as a top priority (Mehta & Singh Chahal, 2021). The growing cultural and behavioral control exercised by environmentally conscious consumers towards unhealthy product purchases and environmental knowledge is directly proportional to the novelty of social settings and responsible communities' future (Choi & K.P.Johnson, 2019).

This has attracted the attention of diverse public parties, stimulating environmentally conscious consumers to achieve environmental and social growth through environmental attitudes (Zhuang et al., 2021). It is worth mentioning that the green cultural moves boosted the sustainability methodological effect among the modern communities (Manta et al., 2021). Whereby, green products with an environmental added value have competitive purchase impact and market value for the small green businesses (Ogiemwonyi, 2022). The consciousness consumerism movements begun to have protective consumers

campaigns against unethical social practices (Lakatos et al., 2021). Consequently, the responsible purchasing intentions towards green goods and services gained a huge global and local awareness, accelerating the green entrepreneurial business models' future success (Massoud Moslehpour et al., 2022).

3.2. Institutional Domain (ID): Green governance for transparent cycles within the green communities:

Open and transparent corporate governance is a key aspect of flexible green corporate governance that fosters environmental transparency with environmentally conscious consumers (Thi Hong Van Hoang et al., 2021). As such, green managerial formats is considered as the companies' backbone for boosting sustainable development implications (Habib et al., 2020). Whereby, Green governance is linked with humanities and nature, to lead the natural progress (Abuzeinab et al., 2017). Inspiration full of integrative innovation, that indicates green production success. Hence, green communities meet sustainable prosperity (Dixi Zhong et al., 2020) Noting that, the idealized ethical leaders have positive impact on their subordinates' trust (Žak, 2021). The extent the ethical green businesses' regulations call for the social responsibility, the more focus on ethical behaviour levels for exchanging resources upwards & downwards is appraised (Weian Li et al., 2020). Motivating employees, and investing in their capacities, booms the green production effect (Schaltegger & Burritt, 2018). Green governance within the national political authorities, is an

incentive tool to boost green practices in the local market (Byers & Gilmer, 2021). Green and ethical governed companies shape the future sustainability domains for environmental and cultural proactive modes through their green figures and reporting (Felice Diekel et al., 2021). small green companies build open channel knowledge among its employees for sustainable productive development (Wang & Su, 2022).

3.3 Environmental Dynamics (EDy): Capitalizing on the eco-Friendly products, that accelerate the environmental positive effect:

Personal norms associated with green purchase intentions leading to conspicuous consumption are a fundamental element that increases the appreciation of ecological products (Kumar & Anand, 2014). Environmentally conscious customers prioritize cost savings and convenience in their long and short-term lifestyles (Iris Vermeir et al., 2020). Also, their green environmental practices call for resistance-less policies that positively impact environmental needs (Naman Sreen et al., 2020). Whereby, producing ecological products for less energy is ensuring the preservation of natural communities (Charles Baah et al., 2021). Buying green products is associated with self-identity/personal convenience (Kavita Sharma et al., 2022). Where, cost savings for effective financial performance presented in companies implementing eco-friendly products

over the eco-frenzy directed ones (Barbarossa & Pelsmacker, 2014). Small green companies face pressure to act according to environmental ethics by maintaining sustainable and ethical manufacturing processes (priyadharshini. N, 2019). The production of eco-friendly products is mainly driven by three dimensions addressing green packaging materials, green manufacturing technology, and ethical market appeal (Anh Thu Nguyen et al., 2020) & (Dacinia Crina Petrescu et al., 2020). Green productivity stability is increased by offering ethical/green products (Mario G.R. Pagliacci et al., 2019)

3.4 Economic Growth (EG): Green radical innovation for eco-innovative future and sustainable economic improvement:

Green consumers wield significant purchasing power that can influence the practice of environmentally responsible behaviour (Migheli, 2021). The development of economics and radical green products through fair trade practices has proven more successful when it is implemented universally across all partners in the up and downstream streams (Mare, 2012). Despite their consciousness, green consumers are not particularly price-sensitive when it comes to making purchasing decisions that will contribute to their future prosperity (Nicole Darnall et al., 2012). Whereby, low risk motive to for change is a key drive for green products (Kennedy et al., 2017). Hence, consumers' call for responsible

economics purchase decisions are considered strategic measures for ethical economic growth (Berki-Kiss & Menrad, 2022). Green small companies strive to improve their relationship with the external natural environment through fair trade practices (Shafique Ur Rehman et al., 2021). Thus, the green investment liabilities have significantly affected the reduced rate of the unemployment rate (Yiniu Cui et al., 2022). Improving eco-technical methodologies reduces costs for sustainable green economy (Ying Guo et al., 2020) & (Chen et al., 2014). Ethical economy efficiency level capitalizes on fair investments and transformative reforms (EUROPEAN COMMISSION, 2022).

4. Green Entrepreneurial Business Models' indicators

4.1 Environmental Effect (EE): Green environmental impact of green small businesses serving the green demand shift:

According to (Guo, 2020), green entrepreneurial business models (GEBMs) are likely to stimulate competitive actions among their rivals, prompting them to take proactive measures. GEBMs are characterized by a firm commitment to environmental protection, which in turn drives the adoption of green business strategies aimed at safeguarding the environment and ensuring long-term sustainability. Small companies that prioritize high environmental standards in their green value

supply chain are more likely to achieve sustainable success, as noted by (Leonidas C. Leonidou. et al., 2017).

4.2 Innovation Adoptability (GRI): Eco-innovative developments, addressing appropriate technologies for sustainable innovation:

GEBMs frequently engage in the creation and implementation of innovative environmentally sustainable technologies across a range of industries, often characterized by significant departures from established norms. (Guo, 2020). Environment-related innovation in all sectors promotes the GEBMs' future access for green success (GGK Platform, 2013).

Further, green small businesses focus on pioneering innovative technologies (Ying Guo et al., 2020). Interfaces between technological development policy and research creates a framework for bringing new GEBMs on top. Innovation for change is a key for small companies' market sustainability (Esben Rahbek Gjerdrum Pedersen, 2016).

4.3 Green Employability (GEm): Internal fair labor relations and green organic structure, is a key factor for green light entrepreneurial business models, serving high rate of response green customers' needs:

Green leadership has an indicator-ship towards the external and internal calls of GEBMs (Guo, 2020). Ethical labour force participation have high rate of small companies' possibilities

(GGK Platform, 2013). GEBMs capitalize on long-term investments in the social abilities of their employees. Thus, small green companies' growth is enhanced by their ethical governance (Sidra Pervez, 2020). Whereby, green entrepreneurial business models' growth is reflected by the effectiveness of their employment rate (Wafa Alwakid, 2021)

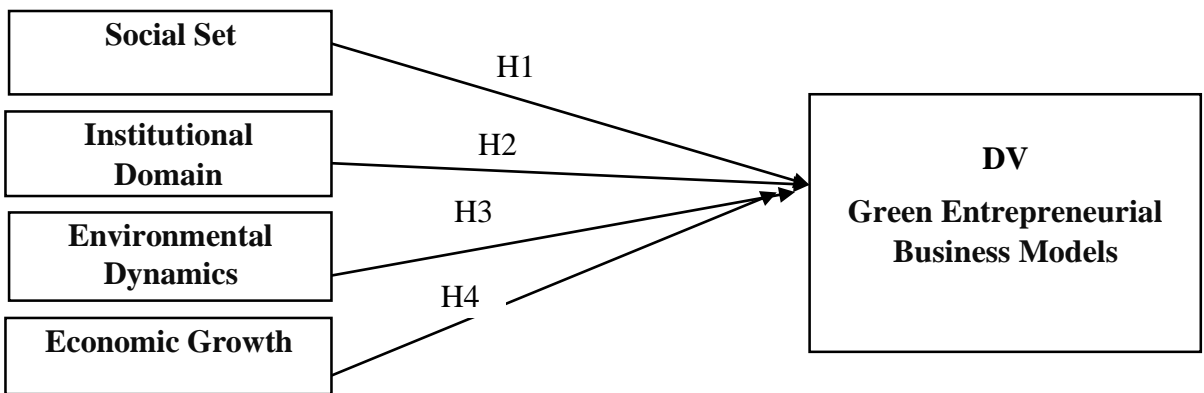
**4.4 Efficient Resources Usage (ERU): Green
entrepreneurs are proactive for effective use and
retailoring of resources for having best quality for less
outlays:**

GEBMs are known to employ eco-friendly tactics to stimulate competitive responses from their rivals (Guo, 2020). Hence, the implementation of intelligent waste recycling practices has been identified as a critical factor in promoting the sustainability of small green companies (GGK Platform, 2013). Thus, the efficient recycling strategies enhances the value of the small green companies' financial sustainability (Álvaro Dias et al., 2020). The effectiveness of use of the green resources encourages green success & operations in the small firms. (Leonidas C. Leonidou. et al., 2017). It is worth mentioning that small companies allocate substantial resources to social to measure companies' environmental value (Esben Rahbek Gjerdrum Pedersen, 2016)

4.5 Volunteering Projects (VP): Community alignments and responsibility share are key factors for green entrepreneurial business models' success and future competitiveness:

The proactive stance of green entrepreneurial business models (GEBMs) towards community initiatives is reflected in their high competitiveness (Guo, 2020). GEBMs derive a competitive edge from their participation in eco-friendly business communities and their social engagement. (Leonidas C. Leonidou. et al., 2017). In this context, sustainable success is measured by the average number of individuals benefiting from essential community services (Wafa Alwakid, 2021). Small companies measure success through social external impact. (Esben Rahbek Gjerdrum Pedersen, 2016).

5. Theoretical Framework



Theoretical Framework

5.1 Social Set (IV1)

The tremendous increase of the global population has been accompanied with huge damages to the global social case. Overtime the social trends started to get closed oriented to the light and the humanistic tranquilizations. As such, it opened venues for the social changes aligned to consumers' mindsets shift. It was witnessed that by time, that such changes shaped the uncertainties and threats of the traditional businesses, especially the mechanistic ones. Hence, the green small businesses boomed the market accommodation, through the green social mindsets' prioritization towards better environmental prosperity (Manta et al., 2021). Consequently, the green social orientation started to mirror the green mass demand of quality products and healthy lifestyle of well-educated consumers' dominion (Hussain & Nazir,2021).

5.2 Institutional Domain (IV2)

Green innovation and transparent code of conduct, as well as accountability and creditability are considered the main factors for the sustainable adaptable and accountable green market success. Whereby, small green businesses are nowadays measuring their green success by their internal and external green prints, through green entrepreneurial internal architecture (structure) as well as innovative value systemss and activities (Habib et al., 2020). It is worth mentioning that small green businesses are the pioneers to tailor their internal organic

structure to be aligned with the external market calls to serve the green business models' main discernment. Green small businesses accelerate their ethical employment values, that assure the general and comprehensive salutary principles of the sustainable development (Ebrahimi & Mozaffar, 2017).

5.3 Environmental Dynamics (IV3)

Small green business strategic presence is sustainably associated with the external macro and mico environmental changes. The extra small green businesses are strategically based and outgoing oriented, the more they get flexible to cover the external environmental dynamisms (Naman Sreen et al., 2020). As such, the green small businesses prioritize their strategic agenda towards the environmental future ambiguity and future barriers, as well as the opportunities to hit the success benchmarks. It is a mutual gain approach to cover the environmental gaps, and to boost the green small businesses' future possibilities, with the maximum benefit of the environmental munificence (Yang, 2019).

5.4 Economic Growth (IV4)

The balance between the green economic growth and the environmental sustainability is one of the most distinguished focuses of sustainable entrepreneurship. It is an instructive theme nowadays that the green consumers' purchasing power, as well as the environmental calls are positively associated with the emergence of green economy unities. The economic growth

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

is the oxygen in businesses (Rehman et al., 2021). Hence, it is the current concern to establish equilibrium between the sustainable entrepreneurship with the sustainable development values at an up scaling economic growth attribution. This is by definition favoured by emerging green market interventions, indicating a positive relation between of the green market economic growth and the green entrepreneurship potentialities, out of light green business models serving the green market demands (Lotfi, Yousefi, & Jafari, 2018).

5.5 Green Entrepreneurial Business Models (DV)

The rise of green entrepreneurial business models is depending on the pressure of green consumption and offering eco-friendly products as illustrated in the previous literature. Small and Medium Enterprises (SMEs) are facing different challenges and motives to implement green businesses models in comparison with big companies (Guo, 2020). From a conceptual theoretical approach, It was found that the most important motive to SMEs is its green societal image in the market. While the least important motive is the technical knowhow (Aghelie, 2017).

6. Research Questions

Major Research Question

What is the relationship between sustainable development and green entrepreneurial business models?

Minor Research Questions

MRQ1: What is the relationship between social set and the rise of green entrepreneurial business models?

MRQ2: What is the relationship between institutional domain and the rise of green entrepreneurial business models?

MRQ3: What is the relationship between environmental dynamics and the rise of green entrepreneurial business models?

MRQ4: What is the relationship between economic growth and the rise of green entrepreneurial business models?

7. Research Hypotheses

The research seeks to investigate the following hypotheses:

H1: There is a significant relationship between social set and the rise of green entrepreneurial business models.

H2: There is a significant relationship between institutional domain and the rise of green entrepreneurial business models.

H3: There is a significant relationship between environmental dynamics and the rise of green entrepreneurial business models.

H4: There is a significant relationship between economic growth and the rise of green entrepreneurial business models.

8. Research Objectives

The purpose of the research is investigating the values and principles of sustainable development and green entrepreneurial business models

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

potentialities, could shape the future of the green markets. The research seeks to achieve the following objectives:

- Examining the green consumers' consciousness towards green products
- Test the potency of the light green business models, represented in the green entrepreneurial business models to shift the demand in the Egyptian context.
- Identify roadmap for green entrepreneurs to develop innovative green businesses.
- Promote the role of SD in current and future calls.
- Demonstrate the connection between SD and effective role of green entrepreneurial business models in the transformative economic, industrial, and environmental moves.

9. Sampling

The sampling technique chosen for this research is convenient sampling, ensuring accessibility to the sample units. This method aligns with the researcher's nature of work and their extensive network within the green consumer community. In summary, this research adopted a meticulous scientific approach, employing targeted sampling techniques and strategic sample frames to explore the intricate relationship between green consumers and entrepreneurs in Egyptian market. Through a comprehensive analysis of the collected data, the study aims to contribute valuable insights to the field of green marketing and sustainable entrepreneurship, fostering a deeper understanding of the actors influencing environmentally

conscious consumer behavior and entrepreneurial endeavors in these urban settings.

As for the second sample size of research is 496 representing green entrepreneurial businesses. The researcher will distribute the two questionnaires among via the online venues (Malhotra, 2007). This field study was conducted on consumers who are interested with the green products (first target population) and the entrepreneurs who are interesting with the production of green products (second target population).

A total of **839** questionnaires of **GC** were received, however, only **588** questionnaires were valid and used in the research results. While a total of **632** questionnaires of **GE** were received, only **496** questionnaires were valid and used to validate the research results. The researcher targeted 800 participants per sector to validate the research results. Whereby, the response rate of the **GC** questionnaire was 73.5% and the response rate of the **GE** was 62%.

10. Finding and Results

Reliability and Validity Test of GC Sector.

Cronbach's Alpha and Validity Coefficients of each Variable
For (GC)

Symbol	Variable of GC	Cronbach's Alpha	Validity
X ₁	Social Set (SS) of GC	0.875	0.935
X ₂	Institutional Domain (ID) of GC	0.692	0.832
X ₃	Environmental Dynamics (ED) of GC	0.909	0.953
X ₄	Economic Growth (EG) of GC	0.888	0.942
Y	Green Entrepreneurial Business (GEB) of GC	0.810	0.900

Cronbach's Alpha and Validity Coefficients of each Variable
for (GE)

Symbol	Variable of GC	Cronbach's Alpha	Validity
IV ₁	Social Set of GE	0.910	0.954
IV ₂	Institutional Domain of GE	0.752	0.867
IV ₃	Environmental Dynamics of GE	0.806	0.898
IV ₄	Economic Growth of GE	0.804	0.897
DV	Green Entrepreneurial Business of GE	0.845	0.919

Correlation Analysis

To test these hypotheses, the researcher analysed the Pearson's correlation coefficient between the study variables for each sector, and the researcher reached the following results:

Coefficient of Correlation between the Study Variables of
GC

Variables	Correlation	SS (GC)	ID (GC)	ED (GC)	EG (GC)	GEB (GC)
SS (GC)	Pearson Correlation	1				
	Sig. (2-tailed)					
ID (GC)	Pearson Correlation	0.641	1			
	Sig. (2-tailed)	0				
ED (GC)	Pearson Correlation	0.649	0.726	1		
	Sig. (2-tailed)	0	0			
EG (GC)	Pearson Correlation	0.688	0.601	0.699	1	
	Sig. (2-tailed)	0	0	0		
GEB (GC)	Pearson Correlation	0.697	0.669	0.736	0.799	1
	Sig. (2-tailed)	0	0	0	0	

Correlation between the Study Variables of GE

Variables	Correlation	SS (GE)	ID (GE)	ED (GE)	EG (GE)	GEB (GE)
SS (GE)	Pearson Correlation	1				

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

	Sig. (2-tailed)					
ID (GE)	Pearson Correlation	0.795	1			
	Sig. (2-tailed)	0				
ED (GE)	Pearson Correlation	0.622	0.608	1		
	Sig. (2-tailed)	0	0			
EG (GE)	Pearson Correlation	0.643	0.653	0.774	1	
	Sig. (2-tailed)	0	0	0		
GEB (GE)	Pearson Correlation	0.631	0.709	0.681	0.754	1
	Sig. (2-tailed)	0	0	0	0	

Hypotheses' Conclusion: The study revealed the support of all hypotheses in coordination with the participants' answers to validate the research major and minor questions.

Hypotheses' Conclusion

Hypothesis	Conclusion
<p>Hypothesis 1: There is a relation between Social Set (SS) and the rise of Green Entrepreneurial Business (GEB) for both GC and GE sectors.</p>	Supported
<p>Hypothesis 2: There is a relation between Institutional</p>	Supported

Domain (ID) and the rise of Green Entrepreneurial Business (GEB) both GC and GE sectors.	
Hypothesis 3: There is a relation between Environmental Dynamics (ED) and the rise of Green Entrepreneurial Business (GEB) both GC and GE sectors.	Supported
Hypothesis 4: There is a relation between Economic Growth (EG) and the rise of Green Entrepreneurial Business (GEB) both GC and GE sectors.	Supported
Hypothesis 5: There is a relation between SS, ID, ED, EG and GEB and the demographic variables both GC and GE sectors.	Supported

Multiple Regression Model for GC sector

Multiple regression analysis was applied to study the association of the independent variables with the dependent variable for each sector **GC** and **GE**.

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

Multiple Regression Model for GC Sector

Sector	R	R Square	Adjusted R Square	Std. Error of the Estimate
<i>GC</i>	0.852	0.726	0.724	0.2872

Multiple Regression Model for GE Sector

Sector	R	R Square	Adjusted R Square	Std. Error of the Estimate
<i>GE</i>	0.812	0.659	0.657	0.3759

11. Discussion

11.1 Green Consumers' Findings

The study results indicated a significant relation between social set and the rise of green entrepreneurial business models hypothesis. This connection is rooted in the intricate interplay between the prevailing social dynamics within the market and the broader societal shift towards the embrace of green products and sustainable practices. The association between the current market social and societal moves towards green products and the driven need to the green entrepreneurial business models, providing light and green products, which is aligned and mirroring the scientific arguments of (Lewandowska, Witczak, & Kurczewski, 2017), (Padhy, 2013), (Neha Zaidi et al., 2022) & (Wencan Zhuang et al., 2021). While the study was revealing an opposite argument for

the cultural aspect of the consumer that affects the responsible consumption pattern. According to (Irfan Hameed et al., 2021), the demographics are a main factor affects the green consumption. The study proved that there is a huge move towards the sustainable lifestyle among different levels, the culture remains a main pillar, while due to modern educational forms and governmental initiatives, communities started to move gradually towards responsible practices. In conclusion, the common connection is centered in promoting sustainable future possibilities, which by definition driven among the social sets and green consumers' dimensions to provide to green entrepreneurs the venue to enter the green competition as a market need, proved by using Pearson's coefficient of correlation analysis showed a significant positive correlation between the variable SS (GC) and the variable GEB (GC) where the correlation coefficient between these two variables equals 0.697.

Moreover, the study proved the hypothesis relating institutional domain and the rise of Green entrepreneurial business models significantly. This alignment was corroborated by a multitude of comprehensive market studies and rigorous scientific research, all converging on the consensus that robust internal and external systems oriented towards sustainability and environmental consciousness find fertile ground for implementation within small and nimble enterprises. There was directly proportional relation with a

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

number of market studies and scientific research agreed with the fact the

green strong internal and external systems are easy to be implemented at light small business for better green customers satisfaction and alignments with the external customers' and market's calls. According to (Virakul, Busaya, 2015) & (Thi Hong Van Hoang et al., 2021) the institutional domain carries a lot to boost the green entrepreneurial business models for more green business practices, which was proved by the green startups' transparent and open channels that connect them to the external community much rapidly. The research highlighted the instrumental contribution of the institutional environment in fostering conducive conditions for the proliferation of eco-friendly business practices. To validate the postulated hypothesis, the study employed a rigorous statistical approach, utilizing Pearson's coefficient of Correlation Analysis. The outcomes of this analysis unequivocally demonstrated a robust and statistically significant positive correlation between the institutional domain (ID) and the growth of Green entrepreneurial business models (GEB). The research proved the hypothesis and showed a significant positive correlation between the variable ID (GC) and the variable GEB (GC) where the correlation coefficient between these two variables equal 0.669.

The study results proved the third hypothesis represented in positive relationship between environmental dynamics and the

rise of green entrepreneurial business models. The findings of the study not only confirmed the validity of a positive relationship between environmental dynamics and the proliferation of green entrepreneurial business models, but also delved into the intricate mechanisms that underpin this connection. Where according to (Kumar & Anand, 2014), (Iris Vermeir et al., 2020) and Kavita Sharma et al., 2022), green purchase inner intentions are the leading factor for green products' appreciation. The study further showed a compelling interplay between the green ecological experience and the comprehensive journey of green products, stretching from their inception in environmentally conscious manufacturing processes to their ultimate positive impact on long-term sustainability. The study agreed with (Anh Thu Nguyen et al., 2020) study, addressing the green ecological experience to be associated with a full green inside-out experience from green manufacturing through a green value chain to a sustainable delivery mood for a long-term impact. Further the study disagreed with (Divya priyadharshini. N, 2019) for the sensitivity of green start-ups for green costing. The study proved that the green small companies do more from less with creativity and alignment with the surrounding healthy and green needs (Weiss, P. V., Scheiblich, M., Buzatu, A., & Costache, I. C. 2019). The research proved the hypothesis and showed signification results using Pearson's coefficient of correlation analysis showed a significant positive correlation between the variable ED (GC) and the variable GEB (GC)

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

where the correlation coefficient between these two variables equal 0.736.

On the opposite side of the spectrum, the study also uncovered some intriguing insights that warrant consideration. Despite the apparent connection between economic growth and the proliferation of green entrepreneurial business models, there were certain nuances that deserve attention. The research illuminated the fact the fourth hypothesis representing the green consumers were inclined towards supporting eco-friendly businesses, this propensity wasn't uniform across all segments of the population. Further analysis indicated that the correlation between economic growth (EG) and green entrepreneurial business models (GEB) was more pronounced among a specific subset of consumers. This subset exhibited a notably higher correlation coefficient of 0.799, affirming the positive relationship between their willingness to spend on sustainable products and the subsequent growth of green businesses. However, it's important to recognize that this correlation wasn't as strong for all consumer groups. This finding underscores the need for targeted marketing and outreach strategies, as well as a more nuanced understanding of consumer preferences within the green economy. It suggests that while there is potential for substantial economic growth through the promotion of eco-conscious businesses, a one-size-fits-all approach may not be the most effective path forward. Instead, businesses and policymakers should consider tailoring

their initiatives to cater to the diverse spectrum of consumer behaviours and attitudes towards sustainability. In conclusion, the study's results emphasize the potential economic benefits of green entrepreneurial models but also highlight the importance of a more granular understanding of consumer dynamics in the context of sustainable businesses. By recognizing the variations in consumer behaviour and preferences, businesses and policymakers can craft more targeted strategies to harness the full potential of the green economy.

11.2 Green Entrepreneurs' Results

The study results indicated the strong connection between the social sets and the green entrepreneurial business models green practices hypothesis from the green entrepreneurs' questionnaire. Where the green interviewed entrepreneurs shed light on a critical dimension: the educational and lifestyle levels of green communities, which are integral components of the socio-cultural landscape, appear to be directly correlated with the success of green products. This observation aligns seamlessly with the insights discussed by (Branch, 2018), who emphasized the significance of these sociocultural dynamics in driving environmentally conscious consumer behaviours. Furthermore, the study delved into the external green value chain, encompassing both upstream and downstream processes, and its substantial impact on the performance of green entrepreneurial ventures. This resonates with the arguments put

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

forth by (Leonidas C. Leonidou et al., 2017), who expounded on the pivotal role played by the broader value chain in promoting sustainability and eco-friendly practices. The research findings validate the theories advanced by (GGK Platform, 2013) and (Sidra Pervez, 2020), which prioritize ethical social practices as catalysts for long-term success and investments in enhancing the social abilities of employees. In light of these insights, it becomes evident that the success of green entrepreneurial business models is intricately linked to multifaceted social and environmental dynamics. Entrepreneurs and organizations should not only focus on their products but also cultivate a deep understanding of the communities they serve and the broader sustainability value chain. The results were proven by Pearson's coefficient of correlation analysis showed a significant positive correlation between the variable SS (GE) and the variable GEB (GE) where the correlation coefficient between these two variables equal 0.631.

As for the second hypothesis in the green entrepreneurs' questionnaire represented in the institutional domain and its significant correlation with the green entrepreneurial business models. The intricate relationship between internal resources, indigenous practices, and green production capabilities within small businesses, it's crucial to further explore the multifaceted nature of these interactions. The study uncovered that each green practice adopted within green small businesses plays a

pivotal role in contributing to the broader dynamics of green knowledge dissemination. This approach aligns seamlessly with the perspective put forth by (Bradley, T., & Ziniel, C., 2016), emphasizing that these practices are not isolated actions but integral components of a knowledge-sharing ecosystem. However, while the importance of green governance and institutional governance for driving green innovation cannot be overstated, there exist certain contextual challenges that need consideration, as highlighted by (Dixi Zhong et al., 2020). In the Egyptian business landscape, for instance, the implementation of these governance structures faces hurdles related to high costs and the demand for extensive technical know-how. These constraints translate into direct costs for small businesses, which can be a significant barrier to the adoption of green practices and innovation, particularly for those with limited resources and expertise. This dilemma underscores the need for tailored support mechanisms and strategic interventions to empower green small businesses in Egypt and similar contexts. Initiatives that provide access to affordable training, technical assistance, and collaborative networks can help bridge the knowledge and resource gaps that inhibit the widespread adoption of green practices. By addressing these challenges, small businesses can not only enhance their green production capabilities but also contribute meaningfully to the broader sustainability goals of their communities and the planet. In conclusion, the research highlighted the intricate interplay between internal resources, green practices, and knowledge dynamics within green small

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

businesses. It also underscores the contextual challenges faced by these businesses, particularly in regions like Egypt. To unlock the full potential of green entrepreneurship in such environment, concerted efforts are needed to facilitate knowledge exchange, reduce barriers to entry, and promote sustainable practices among small businesses, ultimately fostering a more environmentally responsible and economically vibrant ecosystem. The results were proved by using Pearson's coefficient of Correlation Analysis showed a significant positive correlation between the variable ID (GE) and the variable GEB(GE) where the correlation coefficient between these two variables equal 0.709.

The third hypothesis for the green entrepreneurs' questionnaire represented in the environmental domain and its significance to the green entrepreneurial business models was proved to have high correlation significance. This correlation was driven by several factors, including the pivotal role of ethical and green customer satisfaction. The research found that green small businesses' owners are offering green products through innovative and conscientious approaches resonated strongly with environmentally conscious customers, aligning seamlessly with the arguments put forth by (Leonidas C. Leonidou et al., 2017) and (Esben Rahbek Gjerdrum Pedersen, 2016). It was highlighted to the great importance of aligning green businesses' strategies with the values and expectations of eco-

conscious consumers. However, it's important to acknowledge the challenges faced by green small businesses, as emphasized by (Divya Priyadharshini. N, 2019). The research showed that these businesses often operate in sectors with complex manufacturing processes that pose significant environmental challenges. Overcoming these hurdles to maintain ethical and environmentally responsible practices can be demanding, and the pressure to do so is palpable. Despite these challenges, the research brought to light the enormous market potential and opportunities for mutual cooperation in the Egyptian market. The findings suggest that the Egyptian business offers substantial possibilities for collaboration and agreements in support of green initiatives and sustainable production practices. This aligns with the broader global trend toward environmental consciousness and sustainability, where businesses that embrace eco-friendly practices often find themselves in a favourable position in the market. The positive correlation between the environmental domain (ED) and green entrepreneurial business models (GEB), as evidenced by Pearson's coefficient of Correlation Analysis (correlation coefficient of 0.681), underscores the tangible connection between environmental awareness and entrepreneurial success. This correlation highlights the potential for businesses to thrive by not only addressing environmental concerns but also by actively engaging with ethical and sustainable practices, thus paving the way for a more environmentally responsible and prosperous future. In conclusion, the study underscores the intricate

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

interplay between the environmental domain, ethical considerations, and entrepreneurial success. While green small businesses may face challenges in navigating complex manufacturing processes, the Egyptian market offers promising opportunities for businesses to embrace sustainability and thrive. Ultimately, the findings emphasize the importance of aligning business strategies with environmental ethics and consumer preferences to foster green entrepreneurial success.

The research's fourth hypothesis tested the relationship between economic growth (EG) and green entrepreneurial business models (GEB), revealing a compelling and substantial correlation, underscoring the profound association of economic factors on the success and development of eco-conscious businesses. This connection is of particular significance, as it points to the pivotal role that green small businesses can play in addressing pressing societal challenges. one noteworthy aspect is that green small businesses hold immense potential in mitigating unemployment issues, a perspective aligned with the arguments presented by (GGK Platform, 2013). These businesses, by virtue of their commitment to sustainability and innovation, can create new job opportunities, fostering economic growth and social well-being. This dual benefit, where environmental concerns align with economic prosperity, showcases the dynamic potential of green entrepreneurship. Where the study highlighted the critical role of economic

empowerment in driving economic growth and development, which in turn bolsters the efficiency of the economy. This viewpoint resonates with the research of (Sidra Pervez, 2020), (Esben Rahbek Gjerdrum Pedersen, 2016), and (Wafa Alwakid, 2021), all of whom emphasize the intertwined relationship between economic empowerment and sustainable economic progress. Their findings underscore the notion that investing in green entrepreneurial ventures not only fosters environmental sustainability but also contributes significantly to the broader economic landscape. The substantial and positive correlation between the variable EG (GE) and the variable GEB (GE), as revealed by Pearson's coefficient of correlation analysis (with a correlation coefficient of 0.754), serves as empirical evidence of the strong connection between economic growth and the success of green entrepreneurial business models. This correlation strengthens the argument that fostering green entrepreneurship can be a potent driver of both environmental and economic benefits. In conclusion, the study highlights the mutually reinforcing relationship between economic growth and green entrepreneurial success. Green small businesses, with their capacity to address unemployment challenges and promote economic empowerment, stand as key players in this equation. These findings underline the potential for green entrepreneurship not only to address environmental concerns, but also to catalyse economic development and enhance the overall efficiency of the economy, ultimately contributing to a more sustainable and prosperous future.

12. Research Recommendations

With reference to the study scope and statistical results. It was revealed that the Egyptian market is cantered in the pre-mature stage of green competitiveness (Aboelmaged, M. 2018). The study recommendation is directed to shedding the light to the need to identify the most relevant key challenges and opportunities among the green entrepreneurial business landscapes, as well as prioritizing their potential impact, was hugely identified from the study scope and practical deliverables. In cooperating to advocate the need to focus on developing inclusive and comprehensive policies and framework encourages incorporates societal moves with green governance and environmental dynamics, aiming for economic empowerment that will support green entrepreneurs in the near future. Indeed, strategizing partnerships is one of the more significant recommendations for the study deliverables. As having connected key stakeholders and relevant parties interrelated, assures powerful and impact directed domains to the apply and implement the needed policy frameworks for collective objectives. Moreover, creating intensive socio-cultural and sustainability awareness addressing the transformative impact of entrepreneurial businesses, is important to encourage their participation as legal active participants in all industries. Fostering the modern culture of social innovation and social sustainable entrepreneurship among the green businesses, giving small businesses scale of

opportunities to get monitored and incubated for escalated levels in the market. It is important to disseminate success and engage success practices and praxis with the wider communities to adopt and support green small businesses.

Strategizing green businesses' access upon indigenous resources and actual planned resources for better frugal consumption with better efficiency, with alignment to the Egyptian current local moves and instructions. This is a vivid application promote green collaborations and agreements to enhance green impact processes. In addition, having the governmental recognition and reward excellence plan for green innovative project to promote active citizenship and responsible investment. This will lead to a significant recommendation represented in encouraging women percentage at all levels to promote gender equality, especially in light small green business with free access to operation. In addition to, providing job creation addressing green and ethical growth and economic empowerment.

The research recommendations were summarized in the following key points:

1. The need to identify the most relevant key challenges and key opportunities among the green entrepreneurial business landscapes as well as prioritizing with reference to their potential impact, was hugely identified from the study scope and practical deliverables.
2. Advocate the need to focus on developing inclusive and comprehensive policies and framework encourages incorporates

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

societal moves with green governance and environmental dynamics, aiming for economic empowerment that will support green entrepreneurs in the near future.

3. The need to strategize partnerships with key stakeholders and relevant parties, assuring interconnected domains to the apply and implementation the needed policy frameworks.

4. Creating intensive socio-cultural and sustainability awareness addressing the transformative impact of entrepreneurial businesses, to encourage their participation as legal active participants in all industries.

5. Foster the modern culture of social innovation and social sustainable entrepreneurship among the green businesses, giving small businesses scale of opportunities to get monitored and incubated for escalated levels in the market.

6. Encourage women percentage at all levels to promote gender equality, particularly in light small green business with free access to operation.

7. Induce external and internal transparency and accountability for ethical operations among the green entrepreneurs.

13. Conclusion

The research connected the theoretical framework model and the primary data gathering with the industrial implication and managerial moves, for further green investment on wider scale. The study emphasized the positive correlation between the green need for market products and the enhancement of a green

entrepreneurial businesses' distinctiveness and higher value. This well-established green market moves demand careful consideration from both industrial and managerial standpoints. The managerial ramifications are significant, involving the bridging the gap between the current status quo and the untapped potential inherent in combining sustainable development practices with entrepreneurial endeavours. This integration is aligned with the increasing demand for eco-friendly products and provides a strategic avenue for businesses to boost their brand value while positively contributing to environmental sustainability. Addressing this shift in consumer preferences necessitates shrewd local and managerial decisions that capitalize on sustainable practices, fostering a mutually beneficial relationship between business expansion and environmental responsibility, as well as community calls on a larger scale, to align with Egypt vision 2030.

This research constraints and limitations are focused on the emerging demand for green products in the Egyptian market on a small scale. The study is constrained by a single-time examination, preventing a comprehensive exploration of developmental perspectives and multi-dimensional trends over time. Additionally, the availability of data of the green consumer behavior within the Egyptian consumerism landscape is constrained, primarily focusing on figures and statistics derived from SEKEM companies, a prominent player in the realm of green associations. This delimited data framework further contributes to the study's limitations.

14. Future Research Recommendations

As green entrepreneurship continues to evolve in response to shifting environmental, economic, and social dynamics, there remains a wealth of opportunities for future research to deepen our understanding and inform strategic action. Building upon the insights gleaned from the preceding analysis. This section outlines key areas for future investigation and offers recommendations to guide scholarly inquiry and practical interventions in the realm of sustainable entrepreneurship. The researcher summarized the possible future research recommendation in the following points:

1. conducting thorough research on the current state of green entrepreneurial business models, their impact on the environment and economy, and their alignment with societal norms and values.
2. Examine the appropriate legal policies that could serve and boost the green entrepreneurship ecosystem to provide favorable and impactful business environment to the market.
3. Investigate the process of monitoring and evaluating the green entrepreneurs' success and sustainability agenda.
4. Study and assess the environmental impact of green business model on long period to avoid green washing practices on a long-term scale.
5. Investigate the possibility to embed and intensify the educational awareness for the environmental, social and economic dynamics for better future possibilities.

6. Study the green technology development that support the green entrepreneurs and fulfil the community local and global needs.

15. Research limitations

The constraints of this research are evident in several aspects. Firstly, the research scope is confined to a limited scale when it comes to assessing the emerging demand for green products within the Egyptian market. This restriction hinders a comprehensive exploration of local developmental perspectives. Furthermore, due to scientific constraints, the study is restricted to a single-time examination of the population, preventing the thorough investigation of multi-dimensional trends over time. The availability of data pertaining to green consumer behavior within the Egyptian consumerism landscape is constrained, primarily focusing on figures and statistics derived from SEKEM companies, a prominent player in the realm of green associations. This delimited data framework further contributes to the study's limitations.

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

References:

- Abuzeinab, A., Arif, M., Qadri, M. A., & Kulonda, D. (2018). Green business models in the construction sector: An analysis of outcomes and benefits. *Construction Innovation*, 18(1), 20–42. <https://doi.org/10.1108/CI-07-2016-0041>
- Aghelie, A. (2017). Exploring drivers and barriers to sustainability green business practices within small medium sized enterprises: primary findings. In **International Journal of Business and Economic Development** (Vol. 5). www.ijbed.org
- Álvaro Dias, Graça Miranda Silva, Mafalda Patuleia, Maria Rosario, & González-Rodríguez. (2020). *Developing sustainable business models: local knowledge acquisition and tourism lifestyle entrepreneurship*. <https://www.tandfonline.com/doi/abs/10.1080/09669582.2020.1835931>
- Alwakid, W., Aparicio, S., & Urbano, D. (2021). The influence of green entrepreneurship on sustainable development in Saudi Arabia: The role of formal institutions. **International Journal of Environmental Research and Public Health**, 18(10). <https://doi.org/10.3390/ijerph18105433>
- Anh Thu Nguyen, Lukas Parker, Linda Brennan, & Simon Lockrey. (2020). *A consumer definition of eco-friendly packaging*. https://www.sciencedirect.com/science/article/pii/S0959652619346621?casa_token=hfULaliRRcMAAAAA:qzQo8lz_KWaGbCszhdj9-w-UsIh9w9swFrXSQavUgAQM2D73zbNZ3EdHrT2KMiCUVO0eT-inJrA
- Ann Le Mare. (2012). *Creating and maintaining Fair Trade: Meanings and practices of four Southern Fair Trade enterprises*. https://www.researchgate.net/publication/263499690_Creating_and_maint

[aining Fair Trade Meanings and practices of four Southern Fair Trade enterprises](#)

- Barbarossa, C., & De Pelsmacker, P. (2014). Positive and negative antecedents of purchasing eco-friendly products: A comparison between green and non-green consumers. *Journal of Business Ethics*, 3(2), 7–12.
- Charles Baah, Douglas Opoku-Agyeman, Innocent S.K. Acquah, Yaw Agyabeng-Mensah, Ebenezer Afum, Daniel Faibil, & Farid Abdel Moro Abdoulaye. (2021). *Examining the correlations between stakeholder pressures, green production practices, firm reputation, environmental and financial performance: Evidence from manufacturing SMEs*.
- Chen, Y. S., Chang, C. H., & Lin, Y. H. (2014). The determinants of green radical and incremental innovation performance: Green shared vision, green absorptive capacity, and green organizational ambidexterity. *Sustainability (Switzerland)*, 6(11), 7787–7806. <https://doi.org/10.3390/su6117787>
- Dacina Crina Petrescu, Iris Vermeir, & Ruxandra Malina Petrescu-Mag. (2020). *Consumer Understanding of Food Quality, Healthiness, and Environmental Impact: A Cross-National Perspective*. <https://www.mdpi.com/1660-4601/17/1/169>
- Daniel Berki-Kiss, & Klaus Menrad. (2022). *Ethical consumption: Influencing factors of consumer's intention to purchase Fairtrade roses*. <https://www.sciencedirect.com/science/article/pii/S2772801322000069>
- Divyapriyadharshini . N. (2019). *Consumer Awareness towards Green Products and Its Impact*.
- Dixi Zhong, Qiuju Luo, & Wanxin Chen. (2020). *Green governance: understanding the greening of a leading business event from the*

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

perspective of value chain governance.

<https://www.tandfonline.com/doi/abs/10.1080/09669582.2020.1864385>

- Dooyoung Choi, & Kim K.P.Johnson. (2019). Influences of environmental and hedonic motivations on intention to purchase green products: An extension of the theory of planned behavior.
- Ebrahimi, P., & Mirbargkar, S. M. (2017). Green entrepreneurship and green innovation for SME development in market turbulence. **Eurasian Business Review**, 7(2), 203–228. <https://doi.org/10.1007/s40821-017-0073-9>
- Elena-Simina Lakatos, Ligia-Maria Nan, Laura Bacali, George Ciobanu, Andreea-Maria Ciobanu, & Lucian-Ionel Cioca. (2021). Consumer Satisfaction towards Green Products: Empirical Insights from Romania. **Sustainability**. <https://www.mdpi.com/2071-1050/13/19/10982>
- ElKhouly, S. E., Mabrouk, A. M., & Yehia, E. A. (2020). Green Manufacturing Practices as a Tool for Improving Competitiveness in the Light of Egypt's Vision 2030 “An Empirical Study on Egyptian Ceramic Industry. **Journal of Financial and Administrative Studies**, 8(2), 381-398(2), 381-398.
- EUROPEAN COMMISSION. (2022). *Towards a green, digital and resilient economy: our European Growth Model*. https://www.staten-generaal.nl/9370000/1/j4nvi0xeni9vr2l_j9vvkfvj6b325az/vl82fmx00szx/f=/vl5ccnyjpptu.pdf
- Felice Diekel, Natalia Mikosch, Vanessa Bach, & Matthias Finkbeiner. (2021). *Life Cycle Based Comparison of Textile Ecolabels*. <https://www.mdpi.com/2071-1050/13/4/1751>

- Francesco Manta, Francesco Campobasso, Annunziata Tarulli, & Domenico Morrone. (2021). Showcasing green: how culture influences sustainable behavior in food eco-labeling. **British Food Journal**. <https://www.emerald.com/insight/content/doi/10.1108/BFJ-05-2021-0478/full/html>
- Fulai Sheng, U., Bassi, A., Lehmann, M., World Bank Marianne Fay, the, Hamilton, K., Jorgensen, E., & Lange, G.-M. (2013). Moving towards a Common Approach on Green Growth Indicators A Green Growth Knowledge Platform Scoping Paper Green Growth Knowledge Platform Authorship & Acknowledgements.
- Gerard Paul Prendergast, & Alex S.L. Tsang. (2019). *Explaining socially responsible consumption*. <https://www.emerald.com/insight/content/doi/10.1108/JCM-02-2018-2568/full/html>
- Habib, M. A., Bao, Y., & Ilmudeen, A. (2020). The impact of green entrepreneurial orientation, market orientation and green supply chain management practices on sustainable firm performance. *Cogent Business and Management*, 7(1). <https://doi.org/10.1080/23311975.2020.1743616>
- Holcombe, R. G. (2003). The origins of entrepreneurial opportunities. *The Review of Austrian Economics*, 16, 25-43
- Irfan Hameed, Zeeshan Hyder, Muhammad Imran, & Kashif Shafq. (2021). *Greenwash and green purchase behavior: an environmentally sustainable perspective*. <https://link.springer.com/article/10.1007/s10668-020-01202-1>
- Iris Vermeir, Bert Weijters, Jan De Houwer, Maggie Geuens, Hendrik Slabbinck, Adriaan Spruyt, Anneleen Van Kerckhove, Wendy Van Lippevelde, Hans De Steur, & Wim Verbeke. (2020). *Environmentally*

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

Sustainable Food Consumption: A Review and Research Agenda From a Goal-Directed Perspective.

<https://www.frontiersin.org/articles/10.3389/fpsyg.2020.01603/full>

- Katarzyna Żak. (2021). *Implementation of the green governance concept and green management practices in corporations of EBRD regions - selected issues.* <https://bibliotekanauki.pl/articles/1844876>
- Kavita Sharma, Chandni Aswal, & Justin Paul. (2022). *Factors affecting green purchase behavior: A systematic literature review.* <https://onlinelibrary.wiley.com/doi/full/10.1002/bse.3237>
- Kishore Kumar, P., & Anand, B. (2013). A Study on Consumer Behavior towards Eco-Friendly Paper. 2(1). *Type: Double Blind Peer Reviewed International Research Journal Publisher: Global Journals Inc, 13.*
- Leonidou, L. C., Christodoulides, P., Kyrgidou, L. P., & Palihawadana, D. (2017). Internal Drivers and Performance Consequences of Small Firm Green Business Strategy: The Moderating Role of External Forces. *Journal of Business Ethics, 140(3), 585–606.* <https://doi.org/10.1007/s10551-015-2670-9>
- Lotfi, M., Yousefi, A., & Jafari, S. (2018). The effect of emerging green market on green entrepreneurship and sustainable development in knowledge-based companies. *Sustainability (Switzerland), 10(7).* <https://doi.org/10.3390/su10072308>
- Malhotra, N. K. (2007). *Marketing Research Fifth Edition, Upper Saddle River. New Jersey.*
- Mario G.R. Pagliacci, Adriana Manolica, Roman Teodora, & Gabriela Boldureanu. (2019). *The Consumers of Green Products. The Case of Romanian Moldavia Counties.*

<https://www.researchgate.net/publication/337239927> The Consumers of Green Products The Case of Romanian Moldavia Counties

- Massoud Moslehpour, Ka Yin Chau, Lijie Du, Ranfeng Qiu, Chia-Yang Lin, & Batzaya Batbayar. (2022). *Predictors of green purchase intention toward eco-innovation and green products: Evidence from Taiwan*. <https://www.tandfonline.com/doi/full/10.1080/1331677X.2022.2121934>
- Matteo Migheli. (2021). *Green purchasing: the effect of parenthood and gender*. <https://link.springer.com/article/10.1007/s10668-020-01073-6>
- Naman Sreen, Shankar Purbey, & Pradip Sadarangani. (2020). *Understanding the Relationship Between Different Facets of Materialism and Attitude Toward Green Products*. <https://www.tandfonline.com/doi/abs/10.1080/08911762.2020.1751370>
- Neha Zaidi, Sweta Dixit, Mohit Maurya, & Mridul Dharwal. (2022). *Willingness to pay for green products and factors affecting Buyer's Behaviour: An empirical study*.
- Nicole Darnall, Cerys Ponting, & Diego Alfonso Vazquez-Brust. (2012). *Why consumers buy green*. <https://www.researchgate.net/publication/230753628> Why consumers buy green
- Nosratabadi, S., Mosavi, A., Shamshirband, S., Zavadskas, E. K., Rakotonirainy, A., & Chau, K. W. (2019). *Sustainable business models: A review*. *Sustainability*, 11(6), 1663
- Osarodion Ogiemwonyi. (2022). *Factors influencing generation Y green behaviour on green products in Nigeria: An application of theory of planned behaviour*. *Environmental and Sustainability Indicators*. <https://www.sciencedirect.com/science/article/pii/S2665972721000659>

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

- Pedersen, E. R. G., Gwozdz, W., & Hvass, K. K. (2018). Exploring the Relationship Between Business Model Innovation, Corporate Sustainability, and Organisational Values within the Fashion Industry. *Journal of Business Ethics*, 149(2), 267–284. <https://doi.org/10.1007/s10551-016-3044-7>
- Pooja Mehta, & Harpreet Singh Chahal. (2021). *Consumer attitude towards green products: revisiting the profile of green consumers using segmentation approach*. <https://www.emerald.com/insight/content/doi/10.1108/MEQ-07-2020-0133/full/html>
- Shafique Ur Rehman, Sascha Kraus, Syed Asim Shah, Dmitry Khanin, & Raj V. Mahto. (2021). *Analyzing the relationship between green innovation and environmental performance in large manufacturing firms*. <https://www.sciencedirect.com/science/article/pii/S004016252031307X>
- Shuyi Wang, & Daizhong Su. (2022). *Sustainable Product Innovation and Consumer Communication*. <https://www.mdpi.com/2071-1050/14/14/8395>
- Sidra Pervez. (2020). *Defining green business ethics and exploring its adoption within the textile industry of Pakistan*. https://www.researchgate.net/publication/339129404_Defining_green_business_ethics_and_exploring_its_adoption_within_the_textile_industry_of_Pakistan
- Stefan Schaltegger, & Roger Burritt. (2018). *Business Cases and Corporate Engagement with Sustainability: Differentiating Ethical Motivations*. <https://link.springer.com/article/10.1007/s10551-015-2938-0>
- Thi Hong Van Hoang, Wojciech Przychodzen, Justyna Przychodzen, & Elys'e A. Segbotangni. (2021). *Environmental transparency and*

performance: Does the corporate governance matter?

<https://www.sciencedirect.com/science/article/pii/S2665972721000246>

- Ulusoy, E. (2016). Experiential responsible consumption. *Journal of Business Research*, 69(1), 284–297.
<https://doi.org/10.1016/j.jbusres.2015.07.041>
- Vivienne Byers, & Alan Gilmer. (2021). *The Challenge of Sustainable Consumption for Governance and Policy Development—A Systematic Review*. <https://www.mdpi.com/2071-1050/13/12/6723>
- Weian Li, Minna Zheng, Yaowei Zhang, & Guangyao Cui. (2020). *Green governance structure, ownership characteristics, and corporate financing constraints*.
- Wencan Zhuang, Xiaoguang Luo, & Muhammad Usman Riaz. (2021). *On the Factors Influencing Green Purchase Intention: A Meta-Analysis Approach*.
<https://www.frontiersin.org/articles/10.3389/fpsyg.2021.644020/full>
- Yazdanifard, R., & Mercy, I. E. (2011). The impact of Green Marketing on Customer satisfaction and Environmental safety. *International Conference on Computer Communication and Management*, 5, 637–641.
- Ying Guo, LiFang Wang, & Yanyu Chen. (2020). Green Entrepreneurial Orientation and Green Innovation: The Mediating Effect of Supply Chain Learning.
<https://journals.sagepub.com/doi/full/10.1177/2158244019898798>
- Ying Guo, LiFang Wang, & Yanyu Chen. (2020a). *Green Entrepreneurial Orientation and Green Innovation: The Mediating Effect of Supply Chain Learning*.
<https://journals.sagepub.com/doi/full/10.1177/2158244019898798>

The Role of Sustainable Development in Rising Green Entrepreneurial Business Models

- Yiniu Cui, Gangyi Wang, Muhammad Irfan, Desheng Wu, & Jianhong Cao. (2022). *The effect of green finance and unemployment rate on carbon emissions in china*. https://www.researchgate.net/profile/Muhammad-Irfan73/publication/362174586_The_effect_of_green_finance_and_unemployment_rate_on_carbon_emissions_in_china/links/62da668caa5823729ed64bf5/The-effect-of-green-finance-and-unemployment-srate-on-carbon-emissions-in-china.pdf