



# A Study on Green Start-Up Prospects in India - Fostering a Greener Future in Entrepreneurship

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**Abstract.** India's start-up ecosystem has seen incredible growth in recent years, positioning the country as one of the world's most promising destinations for entrepreneurial endeavours. This study explores emerging start-up opportunities in India with a focus on fostering a sustainable and environmentally conscious future. The Indian government's emphasis on sustainable development, coupled with increasing awareness of environmental issues, has created a conducive environment for innovative entrepreneurs seeking to make a positive impact while achieving business success. This research investigates various sectors within the Indian start-up landscape that hold immense potential for green entrepreneurship. The study highlights key areas, such as sustainable agriculture, renewable energy, waste management, clean transportation, and eco-friendly technology, where Start-ups can play a key role in contributing to India's sustainability goals and addressing global environmental challenges.

Furthermore, this study delves into the challenges and opportunities of green Start-ups, also emphasizes the significance of social and environmental impact alongside financial success, as an increasing number of entrepreneurs are aligning their businesses with the United Nations Sustainable Development Goals (SDGs). These goals are becoming a framework for measuring the contribution of Start-ups to creating a greener and more sustainable future. The findings of this study provide valuable insights for aspiring entrepreneurs, investors, policymakers, and ecosystem builders looking to engage with the burgeoning green Start-up landscape in India. It underscores the need for innovative solutions that not only drive economic growth but also contribute to India's journey towards a greener, more sustainable future.

**Keywords:** Green Entrepreneurship, Prospects and Sustainability

## 1 Introduction

Entrepreneurship and a Greener prospect are two interlinked concepts that play a pivotal part in shaping the world in the 21st century. A greener future refers to a vision where our planet is environmentally sustainable, with reduced carbon emissions, improved resource management, and enhanced biodiversity. It envisions a world where human actions are in harmony with nature, ensuring a healthier and further balanced ecosystem. On the other hand, Entrepreneurship is the engine driving revolution and profitable development. It involves individuals or groups creating and ascending new productions or services to encounter the budding demands of the society. In the context

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of a greener prospect, entrepreneurship takes on a pivotal part in developing and executing viable solutions to address ecological challenges.

This study will explore the importance of Indian Start-up opportunities, through a focus on greener initiatives and sustainable development adopted by an international company. The paper also highlights the current scenario of Start-ups in India and the potential areas for green Start-up opportunities. Additionally, it will delve into the challenges and opportunities for greener Start-ups, success stories of greener Start-ups and conclude with future prospects and a call to action for entrepreneurs and investors to contribute towards a greener future for sustainability. Furthermore, this study delves into the challenges and opportunities faced by green Start-ups, examining the support mechanisms available, including government initiatives, venture capital investments, and incubators dedicated to fostering sustainable entrepreneurship. Through case studies and analysis, illustrating success stories and identifies the critical factors that have led to the growth of green Start-ups Globally. By understanding the opportunities and challenges in this space, stakeholders can collaborate to accelerate the growth of environmentally-conscious Start-ups, creating a significant impact on India's economic and environmental landscape while serving as a beacon of hope for global entrepreneurship with a sustainable focus.

[10] observed the increase in environmental awareness and consciousness has resulted in to growing interest in green entrepreneurship across the globe. In the Indian context, a nation struggling with environmental issues and desire to achieve for sustainable growth and development [6]. The question arises: What are the modern-day potential prospects and demanding situations encountered by these Green start-ups in India, and by what means do these prospects make contributions to foster a Greener future in Entrepreneurship?

India's entrepreneurial landscape is experiencing a surge of start-ups devoted to environmentally sustainable practices, encompassing renewable asset, waste management, and eco-friendly technologies. Though, the definite boundaries, opportunities, and governing frameworks inducing the progress of those inexperienced ventures remain underexplored [9].

## 1.1 Objectives

- To study the prospects of Green Start-ups in India
- To understand the Operational framework and Revenue Model of Green Start-up through Case Study
- To analyse the factors leading to the growth of green Start-ups through Case Study
- To suggest measures to adapt a sustainable model for upcoming and existing start-ups

## 1.2 Review of Literature

[8] observed the idea of green entrepreneurship and its additives. It analyses interlink a while between socio-economic-environmental elements and inexperienced entrepreneurship leading to sustainable green economies. It attempts to have a look at enablers of green innovations and its possibilities and demanding situations. The studies, being exploratory in nature, utilize secondary information for the motive which includes five in-intensity case studies of inexperienced entrepreneurs to examine their motivational elements and key obstacles. Findings: The study reveals that green marketers are guided by environmental, social and economic goals. The boundaries to inexperienced entrepreneurship are constrained information of inexperienced era, excessive investment fees, lack of funds, and trouble in tapping the marketplace because of excessive expenses worried.

[5] found out the association between national interest of green entrepreneurial activity (GEA) and Socio-Economical and environmental development. "The effects showed that higher interest of GEA is undoubtedly related to Socio-economic growth and development however ignores environmental sustainability and development. The diagnosed Socio-economic significance of GEA warrants intensified coverage efforts to support the discovery, advent and exploitation of green enterprise possibilities".

The emergence of green entrepreneurship has become a center of attraction in the global business arena as enterprises increasingly recognize the imperative of environmental sustainability [4]. These studies underscore the pivotal role of green start-ups in mitigating environmental challenges and advocate for a paradigm shift towards more sustainable entrepreneurial practices

In the Indian context, the literature on green start-ups is still developing, with a few noteworthy contributions offering insights into specific aspects of this burgeoning sector. [6] conducted an in-depth analysis of regulatory frameworks shaping the growth trajectory of green businesses in India, revealing the intricate relationship between government policies and entrepreneurial initiatives. Their findings emphasize the need for policies that foster a supportive environment for sustainable entrepreneurship.

Economic considerations also play a crucial role in shaping the prospects of green start-ups in India [3]. They explored the challenges associated with securing financing for green ventures, shedding light on the unique barriers that hinder their growth. This research emphasizes the significance of addressing economic constraints to unlock the full potential of green entrepreneurship in the Indian market.

While this study offers valuable knowledge into the specific industries of green entrepreneurship across the country which can be implemented in India to set global standards, there is a lack of comprehensive understanding that integrates legal, economic and social perspectives This study provides a comprehensive analysis of the challenges and the business environment of opportunities faced by companies adapting green tech based model by addressing the research gap. By building on and integrating

existing knowledge, this study aims to contribute to a nuanced understanding of the prospects for a green future of entrepreneurship in India.

For the purpose of this study, data from several articles and insights on the same have been considered. The author has taken up a case study of Glovo, Spain based company for better understanding of the concepts and its implications. This attempt offers practical examples of how companies address environmental challenges. They illustrate how start-ups can balance profit, sustainability, showcase innovative products and facilities that help the environment and concerned people to make policy decisions related to sustainability.

### **1.3 Research Methodology**

This study adopted qualitative research, under which case study technique was used. Case studies provide an in-depth exploration of a selected research area by using live and past business scenarios as samples. The case will be decided on the basis relevance to the studies subject matter – "Green Start-Up Prospects" – with a focal point on a specific experienced start-up. The selected case will present wider sense of challenges faced by the industry. The secondary data was collected from articles, reviews, case research, business enterprise files, etc. In-depth analysis of documents related to the selected case, such as financial re-ports, business plans, and media coverage, will be undertaken.

#### Limitations

- The study is confined to the available secondary data and may be limited by gaps or biases in the existing information.
- The lack of primary data collection may restrict the depth of insights.
- Case Study from an international company has been considered as a model for adoption to set global standards

## **2 A Study on Food Technology Startup employing Sustainable Energy– A Case Analysis on Glovo, Barcelona, Spain**

For the past couple of years, start-ups in India have seen major growth and recognition. Sectors like, retail, ecommerce, real estate, food tech are the notable industries which witnessed huge inflow. Relatively, the Food sector attracted numerous entrepreneurs in the past. The Global food technology based aggregators set few examples on how the existing business models in India or how the future start-ups can develop their Business model with the essence of sustainability. Founded in 2015 by Oscar Pierre and Sacha Michaud, Glovo is a dynamic Spanish company based in Barcelona that offers on-demand delivery and logistics services.

### **2.1 Business Model of Glovo**

Glovo offers a convenient on-demand delivery service through their app, linking users with proficient couriers who can fulfill a diverse range of delivery needs. From food and groceries to pharmaceuticals and more, Glovo makes it easy for users to request exactly what they need and have it delivered straight to their door. It sets itself apart from other food delivery platforms by positioning as a multi-category platform. Not only can users get food delivered, but they can also conveniently order products from nearby stores, supermarkets, and pharmacies all through the app.

Glovo is revolutionizing the world of delivery with its innovative gig economy model. Through a network of independent couriers, known as Glovers, who utilize various modes of transportation such as bikes, motorcycles, or cars, this platform offers quick and convenient delivery services to users in urban areas. With a global presence in multiple countries and cities, Glovo is constantly expanding its reach. Not only does this model provide income opportunities for individuals, it also partners with local restaurants, grocery stores, and businesses to bring a diverse range of products to its users. By leveraging the power of technology, the Glovo app serves as a central hub, connecting users, couriers, and local businesses. Equipped with features for real-time order placement, the app enhances the overall delivery experience for all parties involved. Glovo provides comprehensive corporate solutions, empowering businesses to utilize the platform for streamlined meal deliveries, efficient document transfers, and convenient on-demand services. Moreover, Glovo has been actively championing sustainability by implementing strategies to minimize their environmental footprint, such as optimizing delivery routes and investigating the integration of electric vehicles in select markets.

## **2.2 Financial Perspective**

When it comes to economical viewpoint, the company prioritizes ensuring universal access to services for all individuals, including riders, restaurants, and customers. And they strive to achieve this through Free App which is provided to the customers (according to the Glovo Official Website, n.d.). They take pride in unwavering commitment to speed and efficiency, as they understand the importance of timely deliveries. This is why they utilize a variety of transportation methods, ranging from cars and motorbikes to bicycles, electric scooters, and even walking, depending on what is most suitable for the riders. By giving them the option to use environmentally-friendly modes of transportation, such as electric vehicles or walking, they are able to largely decrease our carbon footprint. However, the chosen mode of transportation ultimately depends on how far the destination is.

## **2.3 Community Perspective**

Glovo prides itself on implementing a variety of sustainable strategies, thoughtfully crafted and implemented by the dedicated "Social Impact Team". A key focus of these strategies is the satisfaction of both riders and customers. As many Glovo couriers work independently and on a temporary basis, they require special attention and care. This is where the team responsible for their needs and personal growth steps in, going above and beyond to support and guide them. In fact, the team is also responsible for helping couriers discover new job opportunities through Glovo's platform - a valuable springboard for their career advancement. Additionally, regular "Journal reviews" are con-

ducted, providing a platform for couriers to express their needs and concerns. Simultaneously, in order to ensure customer satisfaction through delivering the food, the company provides the option for customers to rate their experience. This shows their commitment to constantly improve and enhance the overall service provided.

#### **2.4 Ecological Perspective**

The company employs a Sustainability Manager who is actively pursuing various environmental objectives by implementing a range of sustainable strategies. Specifically, Glovo is striving towards three main goals to lessen its greenhouse emissions and advance environmental sustainability: reducing food waste, avoiding single-use packaging, and enhancing delivery efficiency. To further this mission, the company has recently launched a greenhouse emissions calculator to closely track and measure its emissions levels, with a specific threshold in mind. Additionally, Glovo's innovative last-mile delivery model has proven to be a more eco-friendly alternative to traditional methods, as a third of all couriers now handle deliveries.

#### **2.5 Contribution towards the Society**

Glovo, as a leading food delivery service, has been making important strides towards building a sustainable social impact. Through their innovative collaboration with multiple NGOs, Glovo has created a social vertical that utilizes their logistics capabilities for the greater good. The primary objective of this model is to use Glovo's extensive network to support community welfare. With a wide logistical reach and periods of inactivity for delivery riders, Glovo offers the option for riders to assist in distributing social orders for NGOs. Furthermore, through partnerships with major food companies, Glovo's riders are able to redistribute excess and donated food, giving meals a new purpose while reducing food waste. As a result, social enterprises and NGOs have access to Glovo's vast logistics network, opening up opportunities to connect with potential food donors directly.

Furthermore, in an effort to uphold its social responsibility, the company played a crucial role in delivering vital resources to vulnerable populations severely affected by the pandemic. This was achieved through the implementation of "Glovo Access," a social platform designed to enhance the company's social engagement (Glovo's official Website). Additionally, during the height of the pandemic when cities were in strict lockdowns and confined, Glovo actively participated in multiple initiatives geared towards aiding the most vulnerable members of society. By mobilizing their couriers, the company ensured that unprotected communities in heavily impacted cities had access to essential supplies and sustenance (Sébastien Pellion, 2020).

### **3 ANALYSIS AND INTERPRETATION**

#### **3.1 Operational Framework**

The business is commission based; restaurants and other participating services are charged commission for the generated business. A similar commission charge is around 10 to 15 which is different based on the size, nature and position of the restaurant where it is located. In case of any Quick Service Restaurants, the mark-up price will be low comparatively, but for stand-alone restaurants, they are priced high.

### 3.2 Investor Model

Before reaching its current stage, Pierre successfully pitched to 118 investors. In 2017, Glovo secured a staggering \$30 million in a Series B fundraising round, spearheaded by Rakuten, a major player in the Japanese internet market. This impressive accomplishment set the tone for future success, as in April 2019, two additional investment rounds were announced, led by Lakestar - an early investor in Spotify. As a result, the startup's total capital has now doubled, reaching an impressive \$340 million compared to its previous amount of \$170 million [4].

### 3.3 Profit Approach

When customers place an order through one of Glovo's partner merchants, a percentage commission is applied. This commission is subject to change depending on the product, typically ranging around 35%. The specific fee charged to partners is determined by the terms of their partnership agreement with Glovo. Along with partner commissions, Glovo also charges a delivery fee which goes towards covering courier costs. This fee is calculated based on factors such as distance, location, and estimated delivery time. Ultimately, the customer's proximity to the restaurant and market directly influences the cost of delivery. In 2018, Glovo launched its membership program, Glovo Prime, which comes at a cost of approximately \$5 per month but offers numerous benefits to its members. This program aims to lower delivery expenses for members and enhance their overall experience with Glovo."

In a strategic move towards diversification, Glovo has entered the market of super-market sales. This development can be attributed to the company's recent establishment of dedicated fulfilment centers. These centers, equipped with experienced pickers, efficiently cater to a wide range of unique products. A dedicated team of employees is in charge of collecting, purchasing, and delivering groceries to customers all day long. Moreover, Glovo seamlessly collaborates with local restaurants, offering them an alternative to traditional delivery methods. In times of high demand, these restaurants can leverage any of the seven dark kitchens situated across Europe to increase their food sales and production. With a motive to enhance overall control over the delivery process, Glovo plans to implement strategic charges accordingly.

### 3.4 Challenges Faced

From an economic standpoint, the food delivery sector faces significant challenges including high costs associated with the need for fast delivery. Moreover, competition is fierce and often unjust as governments impose restrictions on fees and commissions. This has been highlighted by the respondent as a major concern, as it benefits one party (such as restaurants) but has a destructive impression on the platform. The Sustainability Manager elaborates that while the internet may be a free tool for browsing, effectively managing it requires resources, people, and promotion. A recent instance of this is the Portuguese government's imposition of a 20% limit on service fees for all transactions, which acts as an intermediary [1].

From a societal standpoint, there are significant struggles that need to be addressed, including traffic and congestion problems, particularly in large cities, as well as the conflicting behavior of consumers and overall satisfaction of riders. As the demand for

swift and effective deliveries grows, there is also a rising concern about the impact on the environment, such as noise and air pollution. For many urban communities, the introduction of delivery services has been a new and often challenging shift, as they work towards maintaining a harmonious standard of living. The well-being of riders is another crucial social issue that requires careful thought. With the rapid rise of online food delivery platforms, there have been on-going discussions about the employment conditions for riders, highlighting the need for greater attention to the nature of their work [7].

Glovo has set a commendable goal of achieving carbon neutrality by 2021 from an environmental standpoint. They plan to offset 100% of the carbon emissions from their deliveries, for which alternative solutions are not viable. The company has joined forces with Pachama, an AI-based company that protects and restores nature, to achieve this objective. However, it is a daunting task to offset all emissions, especially in terms of transportation. To make the switch to electric options more feasible and accessible to the general public, the associated costs need to decrease. As highlighted in the Pachama Blog, the electric market needs to expand and become more affordable for widespread adoption. This requires the government to play an active role in promoting sustainable practices and providing incentives for their implementation.

**Table 1.** Challenges Faced.

<b>Financial Based</b>	<b>Community Based</b>	<b>Ecological Based</b>
Elevated Expenditure	Growing Traffic issues	Pollution
Limitation in Commission	Behaviour of Customers	Emission from Transports
Intense Competition	Satisfaction of Riders/Delivery Executives	Significant capital requirement for switching to sustainability

Source: Author’s Compilation of Data from Case Study provided

#### 4 Key Takeaways/Findings

- The company not only makes its platform accessible to key stakeholders such as Riders, Restaurants and Consumers, it also includes the larger community under economic considerations.
- As of a social standpoint, the company actively contributes to the overall well-being of the communities it operates in. This includes redistributing food to social institutions and partnering with NGOs through a social, vertical helping model.
- Leading these efforts is the "Social Impact Team," a dedicated team responsible for creating and managing such initiatives.



- From an environmental perspective, the company's main objectives consist of reducing food waste, minimizing the use of single-use packaging, and improving delivery effectiveness. In fact, the company places great importance on these goals as they align with their mission to promote sustainability.
- In an effort to reduce single-use packaging, Glovo formed conglomerates with environmentally-friendly packaging suppliers and offered consumers the option to opt out of receiving plastic cutlery.
- Additionally, nearly one-third of their deliveries now utilize bicycles to lower carbon emissions. Going above and beyond, Glovo has made a commitment to fully offset their carbon footprint by 2021 through collaboration with Pachama. This demonstrates the company's dedication to adopting sustainable practices that consider economic, social, and environmental factors

## 5 Recommendations

With the given insights, the study recommends the following for the existing and upcoming start-ups to achieve sustainability.

- The food or other ancillary service providers can make use of eco-friendly packages where they can limit the usage of plastics
- The partnering eateries can adopt a Zero-Wastage model where they can prevent wastage of excess food on whichever way suits them best
- The delivery executives or the riders can utilize alternate mode of transportation which reduces the carbon footprint produced due to the emission of gases. Aggregators can support them with a minimum funding
- Each partnering firm can create a benchmarking sustainable action or a plan to set as an example in the industry
- As a part of Employee Engagement, the firms can educate the employees on sustainability and its importance so that it instills responsibility

## 6 Green Start-ups landscape in India

The surge in the growth of green start-ups in India can be attributed to a multitude of factors. Foremost among these is an escalating awareness of environmental issues and climate change. As India grapples with severe pollution and resource scarcity, both the government and the public have been galvanized into supporting eco-friendly initiatives. This heightened environmental consciousness has spurred a growing demand for sustainable products and services. India's rich reservoir of young, educated, and innovative entrepreneurs plays a pivotal role in this green revolution. These individuals, armed with a strong sense of social and environmental responsibility, are increasingly drawn to developing sustainable solutions that address the pressing ecological challenges the country faces. Entrepreneurs can consider adopting models which promotes Green Entrepreneurship like above stated Case study as an example.

Moreover, the availability of venture capital and government incentives has been instrumental in fostering a conducive ecosystem for green start-ups. Programs like

"start-up India" and tax benefits for clean energy projects have incentivized entrepreneurs to pursue green ventures. Simultaneously, international trends towards sustainable consumption have generated a burgeoning market for eco-friendly products and services, enticing entrepreneurs to invest in this sector. These multifaceted factors have collectively given rise to a thriving ecosystem of green start-ups in India, poised to make a significant impact in the transition towards a more sustainable future. Apart from these, the following are the factors that lead to the growth of Green Start-up in India

- Government incentives and policies promoting sustainability
- Increasing awareness and concern for environmental issues
- Access to a growing pool of environmentally conscious consumers
- Availability of venture capital and funding for green initiatives
- Collaborations and partnerships with established businesses
- Technological advancements and innovations in clean energy and sustainability
- Support from accelerators and incubators focused on green entrepreneurship
- International interest and investments in India's green sector
- Growing demand for renewable energy solutions
- Rising importance of Corporate Social Responsibility (CSR) initiatives

## 7 Conclusion

The above Case Study sets an example of how to conduct business in terms of not affecting the environment and to promote sustainability. Any established business or Start-ups can adopt the above model to promote Green Entrepreneurship as that is the need of the hour. This study addresses some complex issues at the interdisciplinary junction and requirement for a greener entrepreneurship in the society. Precisely, the article highlights on green entrepreneurship to recognize the part of entrepreneurship which acts as a bridge towards sustainability supporting [3] who showcased an enthralling study on the characteristics of native green firms besides existing firms. Further, the article also detects the need for modernization and globalization with regard to commercial aspects as the pressure is being mounted on the firms to promote sustainability so that the firms will consider working on operational plans and procedures which may reflect in their policy decisions.

### 6.1 Future Direction

Longitudinal studies with In-depth knowledge can be conducted at similar pattern. Food and other related aggregators Comparative studies can be conducted. Assessment of government policies related green start-ups and their Global perspective can be studied. The role of technologies, assessment of social impacts, risk, rewards and Consumer behaviour can be assessed.

## References

1. Acs, Z. J., Audretsch, D. B., Braunerhjelm, P., Carlsson, B.: The knowledge spillover theory of entrepreneurship. *Journal of Small Business Economics*, 32(1), 15–30. (2009).
2. Ball, C. & Kittler, M.: Removing environmental market failure through support mechanisms: insights from green start-ups in the British, French and German energy sectors. *Journal of Small Business Economics*, 2(3), 1–22 (2017)

3. Banerjee, S., & Dutta, A., B.: Green HRM: A Brief Review. *Rainbow Multidisciplinary Pre Reviewed Annual Journal* 3(1), 1-5 (2017)
4. Federica Filippini, Prof. Guillermo Oliva Galván, Sustainability in the last mile online food delivery: an important contribution using the case study of “Glovo”, <https://diposit.ub.edu/dspace/handle/2445/179738> last accessed 2023/11/13
5. Glovo Homepage, <https://glovoapp.com/>, last accessed 2023/11/13
6. Gupta, R., Verma, S.: Green Entrepreneurship in India: Current Trends and Challenges. *Journal of Sustainable Business and Energy Reports* 8(2), 112-130 (2020)
7. Høgevoid, N. M., Svensson, G., Klopper, H. B., Wagner, B., Valera, J. C. S., Padin, C., Ferro, C., Petzer, D.: A triple bottom line construct and reasons for implementing sustainable business practices in companies and their business networks. *Corporate Governance (Bingley)*, 15(4), 427–443 (2015)
8. Jyotishman, D.: Consumer Perception towards ‘Online Food Ordering and Delivery Services’: An Empirical Study. *Journal of Management (JOM)* 5(5), 155–163 (2018)
9. Kumar, A., Singh, R. K.: Sustainable Development through Green Start-ups in India. An Empirical Study. *International Journal of Entrepreneurial Behaviour & Research* 25(7), 1323-1342 (2019)
10. Ministry of Environment, <https://moef.gov.in/wp-content/uploads/2022/03/Annual-report-2021-22-Final.pdf> last accessed 2023/11/01.
11. Pachama. (n.d.). Pachama. <https://pachama.com/about>, last accessed 2023/11/01
12. Panse, C., Rastogi, S., Sharma, A., Dorji, N.: Understanding Consumer Behaviour towards Utilization of Online Food Delivery Platforms. *Journal of Theoretical and Applied Information Technology* 31(16) (2019)
13. Schulz, S. A., Flanigan, R. L.: Developing competitive advantage using the triple bottom line: a conceptual framework. *Journal of Business and Industrial Marketing*, 31(4), 449–458 (2016)
14. Wilson, J. P.: The triple bottom line: Undertaking an economic, social, and environmental retail sustainability strategy. *International Journal of Retail and Distribution Management* 43(4–5), 432–447 (2015)

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