

# **Sustainable Development through Green Entrepreneurship in India: A Study**

*K. Srinivasa Rao\*, Hemant Mulajkar\*\*, P. Nagaraju\*\*\* and B. Nagaparameswari\*\*\*\**

---

## **ABSTRACT**

*The primary aim of any business is profit maximization. As they continue to look forward to it, there are areas that are overlooked. Industries were found to be major contributors to this problem. In an attempt to reduce the impact of global warming, various governments started encouraging their citizens to go for environmentally viable processes. The emergence of entrepreneurship in India as more people are coming forward to start their new ventures. However, most of the entrepreneurs did not focus on how environmentally friendly these innovations are. Green entrepreneurship is in its nascent stage in India and there is a long way to go. The current paper makes an attempt to study the available literature and focuses on various entrepreneurs who have innovated into domains that help protect the environment. The paper focuses on entrepreneurial ventures in green technologies in India.*

**Keywords:** *Entrepreneurship; Venture; Green technologies; Management.*

---

## **1.0 Introduction**

In recent times, entrepreneurship has been the most talked about aspect in the business. Even though the detailed definition of entrepreneurship was given by Jean Baptise in the 19th century, the actual work was done by Joseph Schumpeter. This is regarded as an important contribution in the field of entrepreneurship as he viewed entrepreneurship as creating something new by destroying the old one.

The rationale behind promoting entrepreneurship comes as it will act as a vehicle of economic growth and development has been emphasized as the vehicle of economic growth and development. In a country like India, this is very much needed as we ranked low in the index. In the recent past a lot of studies were carried out on the area of entrepreneurship which clearly indicated that there is a positive correlation between economic development and entrepreneurship.

---

*\*Corresponding author; Associate Professor, Department of Management Studies, B. V. Raju Institute of Technology, Hyderabad, Telangana, India (E-mail: srinivasarao.k@bvrit.ac.in)*

*\*\*Senior Assistant Professor, Department of Management Studies, B.V. Raju Institute of Technology, Hyderabad, Telangana, India (E-mail: hemant.mulajkar@bvrit.ac.in)*

*\*\*\*Assistant Professor, Department of Management Studies, B.V. Raju Institute of Technology, Hyderabad, Telangana, India (E-mail: nagaraju.p@bvrit.ac.in)*

*\*\*\*\*Assistant Professor, Department of Management Studies, B.V. Raju Institute of Technology, Hyderabad, Telangana, India (E-mail: parameshwari.chekuri@bvrit.ac.in)*

Entrepreneurship can play a significant role in driving economic growth and development in developing economies like India. By taking risks and bearing uncertainty, entrepreneurs can create new businesses and industries that generate employment opportunities, increase economic output, and spur innovation. Entrepreneurship can also help reduce regional economic disparities by promoting the development of businesses in less prosperous regions. In addition, entrepreneurs can play a role in promoting gender equality by empowering women to start and run their own businesses.

Moreover, successful entrepreneurship can also lead to the development of critical infrastructure such as transportation networks, communication systems, and power supply, which can improve the overall quality of life for people in these regions. However, it's important to note that entrepreneurship alone is not enough to solve all of the challenges faced by developing economies. Other factors such as access to education, healthcare, and basic resources like clean water and sanitation are also critical for sustainable economic growth and development.

It is essential to shift our focus towards sustainable economic development to ensure the long-term survival of our planet and its inhabitants. Entrepreneurs can play a crucial role in promoting sustainable economic development by developing innovative and sustainable business practices that take into account the social and environmental impacts of their operations. As you mentioned, a new category of entrepreneurs, driven by sustainability concerns, is gaining attention from policymakers, researchers, and other stakeholders. These entrepreneurs are focused on developing businesses that prioritize sustainable practices and make a positive impact on society and the environment. They are adopting innovative approaches such as using renewable energy, reducing waste, and promoting circular economy models to achieve their sustainability goals.

Governments and policymakers can also play a crucial role in promoting sustainable economic development by creating policies and regulations that incentivize sustainable practices and penalize unsustainable ones. For example, tax incentives could be provided to businesses that adopt sustainable practices, while penalties could be imposed on those that continue to harm the environment. In conclusion, promoting sustainable economic development is essential for the long-term survival of our planet and its inhabitants. Entrepreneurs can play a significant role in achieving this goal by developing sustainable business practices, while policymakers can create an enabling environment that incentivizes and supports such practices.

### **1.1 Objectives of the study**

This research paper emphasizes upon the Green entrepreneurship initiatives adopted in the select organizations located in Hyderabad. The objectives include the following:

- To understand the green entrepreneurship.
- To evaluate the organizations those are carrying out business operations using green initiative.
- To suggest the suitable measures for sustainable development in green enterprises.

5<sup>th</sup> International Conference Impact of Current Events on Future of Business  
Vignana Jyothi Institute of Management (VJIM), Hyderabad, India

<https://www.journalpressindia.com/website/5th-intlconference-vjim2023>

## **2.0 Literature Review**

To have a thorough understanding of the topic green entrepreneurship, an in depth literature review was done at two stages, i.e, at research work done at the global level, and the involvement of women in green entrepreneurship.

### **2.1 Global level**

York and Venkataraman (2010) in their research paper projected entrepreneurship as the answer rather than that which causes harm to the environment. Their study indicated that, under some conditions the entrepreneurs will add or will go ahead of the efforts made by the government and prevailing companies to achieve sustainable development. The new age entrepreneurs can not only solve existing environmental problems but can extend their support in bringing their organizational camaraderie towards environmentally sustainable products and services. The two authors had come out with a model that helped entrepreneurs to address the environmental uncertainty, innovate and look after the overall set up by engaging their existing organization to avoid environmental degradation.

In the research paper presented by Silajdžić et al. (2015) it focused on the nations that have transitioned economies indicating that they were experiencing the pressure to scale up the entrepreneurial programs which helps in faster growth that reduces the impact on natural resources. It is noticed that entrepreneurs of transition economies appear not to be prepared to take up the challenges or risks pertaining to green entrepreneurship. Further, the government and educational institutions also did not seemingly contribute towards promoting green entrepreneurship.

The survey report prepared by Chiewattanakul et al. (2021) in Southeast Asia, which is one of the fastest-growing regions in the world, points out how entrepreneurship will play an important role in finding solutions to the problems pertaining to climate change. The document also assesses the existing support ecosystem for environmental related entrepreneurs in southeast Asian countries of Myanmar, Indonesia, Vietnam and Cambodia. This narrowed and thus focus shifted towards environmental entrepreneurship initiatives. The green entrepreneurs try to exceed in developing their business by having a greener and sustainable environment. The report also covers details about the organizations that offer support to green entrepreneurs that address issues pertaining to climate change, mitigation, adaptation, environmental protection and challenges.

The study conducted by Pinkse and Groot (2015) reveals that green entrepreneurs are active politically, but when it comes to pursuing them, they get into collective action. This will elevate the problem as they see the incumbents in industry associations which will try to keep away the political influence. Similarly, Burch et al. (2016) study recommends that, despite the high rate of potential in small and medium enterprises, and because they slowly address the problems utilizing less capital, time and personnel to bring innovation for sustainable development. The organizations outside are instrumental in helping MSMEs in the areas of sustainability, overcoming capacity gaps and facilitation of change.

On the front of industry, energy must be taken as a poster example with regard to environmental dangers and its related operations. To substantiate this, Malen and Marcus (2016) studied the use of social, political and economic factors to impact the Clean Energy Technology Entrepreneurship (CETE). The opportunity for clean energy technology comes from the policies that respective governments make.

Pavithra and Kanimozhi (2019) in their research paper on “Green Entrepreneurship: Strengthening Indian Economy by Innovating the Future” revealed that humans are now increasingly becoming more conscious about the environment and related issues. Many individuals have shifted their preference in having environment friendly items. Green entrepreneurs started helping them provide ample opportunity for the start ups to identify and explore innovative ideas in helping find new products for the society. provides opportunity to the beginners who have identified and explored innovative ideas in serving Indian society.

Maryam, Akram and Soheil (2018) in their study on “The Effect of Emerging Green Market on Green Entrepreneurship and Sustainable Development in Knowledge-Based Companies” found that there is a positive and significant effect of the emerging green market on green entrepreneurship and sustainable development. The entrepreneurs were able to introduce many new Green products and deployed technologies.

## **2.2 Women in green entrepreneurship**

There are very few studies that elucidate the positive coherence between ecopreneurship and women, in general. Not many research related works were done in projecting the studies on Indian middle class women with regard to green entrepreneurship. There were many studies which were done favoring women which are inclined towards environmental related businesses. An attempt is made by the authors in this paper to bridge the gap between the specific qualities needed to become an ecological entrepreneur.

According to the GEM 2002 India report (Manimala, 2002), the parameters used for skill and motivation among Indian women towards starting a new business is 3.41 which is nearly equal to the global average of 3.46. While, the support for women entrepreneurship is rated as 2.60 which is much below than the global average. A report prepared by Gender Global Entrepreneurship and Development Institute (GEDI) (2013) surveyed 17 countries, in that India ranked 16th position and hence categorized under least favorable conditions for female entrepreneurship. Further, the report identified that for the development of high-potential female entrepreneurship there has to be a co-existence of encouraging conditions like entrepreneurial environment, entrepreneurial ecosystem and entrepreneurial aspirations.

From the above review of literature, we have come to know that there is increasing momentum of entrepreneurship in the region.

## **3.0 Research Methodology**

The research methodology applied in this research was survey research. Most of the data was collected using existing sources like texts, journals. Magazines, and newspapers.

Internet search formed the primary basis and was extensively used in gathering the data. The researcher attempted recent data on the given area covering about seven years.

#### **4.0 Green Entrepreneurs: A Study**

The government of Telangana is doing tremendous work in the space of entrepreneurship by starting World's largest innovation center near Gachibowli. The T-Hub stages many emerging startup ideas and innovations. There are few in the line of sustainability development ventures:

1. Hello Dustbin
2. Marut Drones
3. Ewoke Studio
4. Banyan Nation
5. Coral Innovators
6. Eto Motors
7. D'Cal Hardwater Softner

##### **4.1 Hello Dustbin**

Karthik Bollineni, the Director of Hello dustbin Pvt Ltd. is a waste management company based at Hyderabad.

Hello Dustbin is a social enterprise start-up driven by a vision to solve the waste management problems in the society. It collects waste from households, offices, schools and other commercial places through web and mobile applications for recycling purposes.

The company is also working with government bodies to eradicate plastic pollution in rural and urban communities. The program goal is to curb plastic pollution and reduce the carbon footprint in districts. Also to spread the awareness on waste segregation and drive social responsibility among citizens. To indulge in a continuous and sustainable process for making communities environment friendly.

##### **4.2 Marut Drones**

This is a startup innovation owned by Prem Kumar. He had a team led by talented people working towards solutions in drone applications. His entrepreneurial venture will help individuals tackle the menace of mosquitoes in the residential areas. With his innovation, he was able to curtail the spread of malaria and dengue cases. In an interview, Prem expressed that, despite independence of 75 years, we were unable to tackle the mosquito menace. His startup venture will help people combat the same by having hepiCopters in combating the same.

##### **4.3 Shruti Rawal**

Ewoke studio is yet another passionate India about driving sustainability in the apparel and textiles industry, and conscious consumption.

In a discussion with the founder, it is revealed that a design label for sustainable fashion. She studied at the National Institute of Fashion technology. The company Ewoke started with a vision to empower women with the clothes they wear while making a positive impact on society and the environment. In an interview, she shared how an eco-conscious person emerged from the existing studies.

She was always thinking of providing an alternative and that's how Ewoke became a reality. Ewoke was started to address the issue of climate change. In order to do this, the fabrics that used mostly bio degradable and recycled items which leave a minimum carbon footprint.

#### **4.4 Banyan Nation**

Banyan nation is yet another example of sustainable development, started by Rashi Agarwal in 2013, where plastics are recycled using data intelligence and that integrate large supply chain operations. Rashi left a good job in the USA to start this venture

#### **4.5 Sikander Reddy Thandra**

Sikander Reddy started the new startup in Coral Innovation which is a mobile based app wherein it takes in to account the reading and drastically reduce the time taken by monthly billing cycle. It as a self-meter reading app that will apply.

#### **4.6 Rajeev YSR**

Yet another innovation, started by Rajeev, Vice President of Eto Motors. In these days of pollution, he introduced EMaas Electricity and said the most polluted cities in the world are in India. We are India's no. 1 EMaaS (Electric Mobility as a Service) company. EMaaS helps in finding a right platform.

#### **4.7 Uday of D'Cal**

Uday start an innovation in the area of finding solutions to the hard water. The device that Uday has prepared will reduce the Hard Water Softner explained how their invention (device) turns hard water soft for one-tenth the price. It is a hassle-free process as the installation doesn't require any pipes, plumber or electricity. All a user has to do is drop the bottle-shaped device in the water tank. The product has received an overwhelming response and they are exporting to the USA also.

### **5.0 Conclusion**

It's always pleasant moving towards a green economy as it has the potential to achieve sustainable development thereby eradicating poverty on an unprecedented scale, with speed and effectiveness. This potential derives from two concurrent changes. First, there is a changed playing field in which our world and the risks we face have materially changed. These changes require a fundamental rethinking of our approach to the economy. Second,

there is a growing recognition that the natural environment forms the basis of our physical assets and must be managed as a source of growth, prosperity and well-being.

## References

Chiewattanakul, M. K. Melati, V. Hume, F. Wechayachai, and J. Phongphansathaporn. 2021. *Entrepreneurship in Southeast Asia*. Aspen Network of Development Entrepreneurs, Stockholm Environment Institute.

Global Entrepreneurship and Development Institute (2013) Gender Global Entrepreneurship and Development Index (GEDI) Report [online] [http://i.dell.com/sites/doccontent/corporate/secure/en/Documents/Gender\\_GEDI\\_Executive\\_Report.pdf](http://i.dell.com/sites/doccontent/corporate/secure/en/Documents/Gender_GEDI_Executive_Report.pdf) (accessed 23 May 2019).

Malen, J. and Alfred A. Marcus. 2016. Promoting clean energy technology entrepreneurship: The role of external context. *Energy Policy* Volume 102, pp. 7–15. ISSN 0301-4215. <https://doi.org/10.1016/j.enpol.2016.11.045>.

Manimala, M.J. (2002) *Global Entrepreneurship Monitor Report*, Indian Institute of Management, Bangalore [online] <http://www.gemconsortium.org/country-profile/69> (accessed 23 May 2019).

Maryam, Akram and Soheil (2018) The Effect of Emerging Green Market on Green Entrepreneurship and Sustainable Development in Knowledge-Based Companies, *Sustainability*, 10(7), 2308. <https://doi.org/10.3390/su10072308>

Pavithra and Kanimozhi (2019) *Green Entrepreneurship: Strengthening Indian Economy by Innovating the Future*, International Educational Scientific Research Journal, 5.

Phillips, M. (2013) ‘On being green and being enterprising: narrative and the ecopreneurial self’, *Organization*, Vol. 20, No. 6, pp.794–817.

Pinkse, Jonatan and Koen Groot. 2015. Sustainable Entrepreneurship and Corporate Political Activity: Overcoming Market Barriers in the Clean Energy Sector. *Entrepreneurship Theory and Practice* 39, no. 3 (May): 633–54. <https://doi.org/10.1111/etap.12055>.

Sharma, M. A. M. (2017). *Green Entrepreneurship: Strengthening Indian Economy by Innovating the Future*.

Silajdžić, I., Sanda Midžić Kurtagić, and Branko Vučijak. 2015. Green entrepreneurship in transition economies: a case study of Bosnia and Herzegovina. *Journal of Cleaner Production* Volume 88, pp. 376–384. ISSN 0959-6526. <https://doi.org/10.1016/j.jclepro.2014.07.004>.

Terjesen, S. and Lloyd, A. (2015) Global Entrepreneurship and Development Institute [online] <https://thegedi.org/female-entrepreneurship-index-2015-report/> (accessed 23 May 2019).

York, J. and S. Venkataraman. 2010. The Entrepreneur-Environment Nexus: Uncertainty, Innovation, and Allocation. *IEEE Engineering Management Review* 25(5): pp. 449-463. DOI:10.1016/j.jbusvent.2009.07.007