# A study on ENTREPRENEURIAL OPPORTUNITIES FROM RECYCLING OF WASTE PLASTICS MATERIAL

Sunil Hegde , Assistant professor , center for management studies.

Jain (deemed-to be university ) bangalore

Sara Elias , Assistant professor , center for management studies.

Jain (deemed-to be university ) bangalore

Het patel, second year , BBA students, center for management studies.

Jain (deemed-to be university ) bangalore

## **Abstract**

Entrepreneurs must have the passion and initiative to recognize previously untapped opportunities, create them, and then capitalize on them. Businesses are important, but so are modern entrepreneurial approaches to the development of corporate academic institutions and governmental organizations. Polymer materials can be found everywhere nowadays, including plastic water and beverage bottles, the silicon rubber tips on your phone, the nylon and polyesters in your jacket or trainers and plastic medical and home garbage. This paper focuses on the business opportunities afforded by recycling used plastics. Plastics can be recycled and reused as packaging material by regional soft drink companies such as Sobo and Coca-Cola. These waste polymers can be Converted into a variety of energy sources, such as solid briquettes, liquid fuels, and flammable gaseous fuels. As a result, strategies such as recycling, reusing, and energy conservation are becoming more popular. Production from waste materials can provide graduating chemical students with a variety of commercial opportunities as well as wealth growth, thereby increasing revenue generation across the board. Polymer recycling technology is also helpful in lowering emissions. The constant accumulation of polymeric waste causes environmental problems.

Being made of petrochemicals, it will also aid in protecting our natural Keywords: Entrepreneurship, Garbage, Polymer materials, Fuels

#### Introduction

The dramatic increase in the consumption of polymers (primarily plastics) during the last few decades is a result of the large increase in global population as well as the need for people to adopt better living conditions. Plastics are now so ubiquitous in modern society that it is difficult to imagine one without them. Household appliances, packaging materials, medical equipment, electronics, automobile, and aerospace components are all included in this industry. The ongoing use of plastics that end up in the trash stream has increased interest in recycling and repurposing plastics (Hamad et al,2013).

The foundation of entrepreneurship is the determination and initiative to seize an opportunity that has not yet been exploited. The word "plastics" comes from the Greek "Plastikos," which means able to be moulded or formed. Polycarbonate is a plastic made of hetero chain polymer, which also contains aliphatic (linear) carbon atoms in its backbone chain. Polypropylene is a plastic made of polymers that only contain aliphatic (linear) carbon atoms in their backbone chain. While thermoplastics can be either amorphous or semi-crystalline, most thermosetting plastics are amorphous (Pavani and Raja Rajeswari,2014). Plastic are a range of synthetics or semi synthetic polymerization products that can be \smolded into a permanent object having the property of plasticity. Currently, a wide range of qualities, including low specific gravity, ease of manufacture, and resistance to low thermal and electrical conductivities, are accessible in plastics

## **Background of study**

Plastic garbage has become a major environmental and social concern around the world, with an estimated 8 million metric tons of plastic waste ending up in our oceans each year. Plastic pollution not only endangers marine life but also has a severe economic impact has an impact on tourism, fishing, and other businesses. Plastic trash entrepreneurship has arisen as a viable answer to this challenge. With the growing demand for environmentally friendly products and practices, entrepreneurs are looking for novel methods to transform plastic trash into profitable products and services. This topic's research can concentrate on finding and analyzing the numerous entrepreneurial prospects available in the plastic waste

## TIJER || ISSN 2349-9249 || © April 2023 Volume 10, Issue 4 || www.tijer.org

sector. This includes researching successful entrepreneurs' company concepts, technologies, and strategies. Furthermore, the research can look into the economic, environmental, and societal implications of these entrepreneurship opportunities. It can also investigate the obstacles and barriers that entrepreneurs in this industry confront, such as regulatory barriers, finance availability, and market competitiveness.

Overall, the study can help us better comprehend the potential of entrepreneurial opportunities from plastic trash in encouraging sustainable development and minimizing plastic pollution.

#### Questions

- What are the current trends in plastic waste management and recycling, and how do they affect business opportunities?
- What are the most promising business models for plastic waste management and recycling entrepreneurship, and how have they evolved over time?
- What are the most significant problems that entrepreneurs face in the plastic waste management and recycling area, and how can these challenges be overcome?
- How can entrepreneurs use emerging technologies (for example, artificial intelligence, blockchain, and so on) to generate new opportunities in plastic waste management and recycling?
- What are the environmental and social consequences of plastic waste, and how may entrepreneurship help alleviate these consequences?
- What are the legislative and regulatory frameworks that influence entrepreneurial opportunities in plastic waste management and recycling, and how are they being implemented?

# Need of study and area to study

The history and evolution of plastic waste management and recycling, and the current state of the industry.

- The most innovative and successful entrepreneurship opportunities in plastic waste management and recycling, and the factors that contributed to their success.
- The latest technological advancements in plastic waste management and recycling, and how they are changing the industry.
- The environmental and social impacts of plastic waste, and the potential benefits of entrepreneurship opportunities in mitigating these impacts.
- The policy and regulatory frameworks that impact entrepreneurship opportunities in plastic waste management and recycling, and how they vary across different regions and countries.
- The economic and financial incentives for entrepreneurship in plastic waste management and recycling, and how they compare to other industries and sectors.
- The potential risks and challenges associated with entrepreneurship opportunities in plastic waste management and recycling, and how entrepreneurs can mitigate these risks

## Review of literature

By Deepak Gupta and Anubhav Jain, "Entrepreneurial Opportunities in Plastic Waste Management": This essay explores the numerous business potential in the realm of managing plastic trash. The authors emphasize the opportunity for companies to add value by changing converting plastic trash into valuable things like gasoline, building supplies, and packaging.

By Nardos Girma and Adane Girma, "Entrepreneurship Opportunities in Waste Plastic Recycling: An Exploratory Study in Ethiopia": This study investigates the business opportunities for waste plastic recycling in Ethiopia, including the difficulties and potential for business expansion. The writers point out the necessity for encouraging legislation, financial access, and market connections to encourage entrepreneurship in this industry.

The World Bank Group's "From Waste to Wealth: Creating Business Opportunities from Plastic Waste" The business potential in plastic waste management, including recycling, upcycling, and waste-to-energy programs, are thoroughly covered in this paper. It also emphasizes the difficulties and potential solutions associated with expanding these firms.

## TIJER || ISSN 2349-9249 || © April 2023 Volume 10, Issue 4 || www.tijer.org

By Andrea Raggi and Chiara Borsotti, "Plastic Waste Entrepreneurship: Challenges and Opportunities for a Circular Economy": In the framework of a circular economy, this essay addresses the difficulties and chances for entrepreneurship in the handling of plastic garbage. The authors discuss the environmental and social effects of plastic waste while also highlighting the opportunity for businesses to develop new value chains through reuse and recycling of plastic trash.

The literature as a whole indicates that there are considerable business potential in the management of plastic waste, including recycling, upcycling, and waste-to-energy efforts. However, expanding these firms requires favorable regulations, financial access, market connections, as well as creative business strategies and technological advancements that can add value to plastic trash.

#### Research gap

Examining the potential for social entrepreneurship in this area could fill a study gap on the subject of business opportunities from plastic trash. While a large portion of the literature now in print focuses on the business opportunities associated with plastic trash, it's important to comprehend the potential contribution that social entrepreneurship can make to the social and environmental problems associated with plastic waste.

Creating enterprises that not only produce economic value but also address social and environmental issues related to plastic trash could be considered social entrepreneurship in this context. Initiatives aimed at giving underprivileged groups access to work, raising public awareness of plastic garbage, and creating creative approaches to its management are a few examples of what this may include.

Investigating the potential for social entrepreneurship in this area may contribute to the advancement of more just and fair approaches to the management of plastic trash while also creating economic value. However, there is currently a dearth of study on the function of social enterprise in the management of plastic trash and the potential for such projects to support sustainable development.

# Research mythology

# Research objective

- To establish whether the many forms and sources of plastic trash produced in a specific area or nation may be turned into profitable business possibilities.
- To examine the various plastic waste management techniques now in use and to spot any flaws or problems with these systems.
- To evaluate the many entrepreneurial models that have been used effectively in other areas or nations and to see whether they could be replicated or modified for the purposes of the study.
- To assess the financial viability of several business ventures that can be started with plastic waste, including but not limited to recycling, upcycling, and waste-to-energy conversion.
- To evaluate the environmental effects of various entrepreneurial opportunities and to pinpoint those that may support circular economy and sustainable development.

#### Research approach

The research methodologies we used were as follows:

Review of the literature Any research effort should get off to a strong start by doing a literature review. It entails looking over current literature—including books, journal papers, and industry reports—to spot knowledge gaps and promising areas for additional study. This will assist you in developing a thorough understanding of the subject and the diverse viewpoints on it.

Interviews: Speaking with industry professionals and businesspeople who are tackling plastic trash might reveal important information about the prospects and difficulties in this arena. You have the option of conducting interviews in-person, on the phone, or through email.

Surveys: Surveys can be used to collect data from a wide range of respondents on a huge scale. You can create a survey.

Conducting case studies of prosperous businesspeople who built their enterprises on plastic garbage can offer insightful information about the main elements that contributed to their success. This can aid in identifying top techniques and business tactics that other businesspeople can use.

## TIJER || ISSN 2349-9249 || © April 2023 Volume 10, Issue 4 || www.tijer.org

Observation entails watching or listening to recordings of businesspeople engaged in the production of plastic garbage, whether in person or virtually. This can assist in identifying the difficulties people encounter and the opportunities they seek in actual contexts.

## Implications of research

- Given the rising global production of plastic trash and the demand for long-term solutions for its management, the topic of entrepreneurship prospects from plastic waste is timely and significant. The following are some probable effects of this topic's research
- Creation of novel innovations and technologies: Research on the business possibilities offered by plastic trash can
  result in the creation of new technologies and inventions that can efficiently handle plastic garbage and turn it into
  useful products. This can involve the creation of biodegradable plastics as well as recycling and fuel-from-plastic
  technologies.
- Job creation: Plastic trash recycling and waste management opportunities can result in the development of new jobs, lowering unemployment rates and promoting economic growth. Entrepreneurs can also start new companies that specialize in recycling plastic trash into useful goods, generating more job possibilities.
- Environmental impact: garbage management practices that are effective can greatly lessen the environmental impact of plastic garbage. Finding and implementing sustainable methods for managing plastic trash, such as recycling, upcycling, and reusing plastic waste, can be aided by research on business potential from plastic waste.
- Public awareness: Studies on the business opportunities presented by plastic trash can assist to increase awareness
  of the problem and motivate people and organizations to take steps to decrease plastic waste. Entrepreneurs may be
  extremely important in promoting sustainable solutions and educating the general public about the significance of
  managing plastic trash responsibly.
- Research on the business prospects presented by plastic garbage can help with policy formation and implementation.
   Governments can use study findings to create laws and policies that support the growth of new technologies and inventions, stimulate the use of sustainable waste management techniques, and reward entrepreneurship.

In general, the environment, economy, and society as a whole may be significantly impacted by studies on business potential derived from plastic trash. Entrepreneurs may open up new opportunities, spur economic growth, and help to build a cleaner, healthier environment by finding and implementing sustainable solutions for handling plastic trash.

## Conclusion

Currently, one of the largest environmental issues is plastic pollution. These issues can be resolved with the use of polymer entrepreneurship, which can also assist to lessen environmental issues like pollution and landsuit while also giving graduates in chemistry work opportunities. Many diseases, including cholera and malaria, can be prevented. As a result of polymer entrepreneurship, the economy may grow. Without endangering people, briquettes can be utilized as a source of energy for cooking.

#### **Recommendation**

- It is important to encourage people to start their own polymer businesses.
- Every state and federation's government and stakeholders shall supply numerous machines for the recycling of waste plastics.
- . Alternative methods of recycling thermosetting polymers must be developed

#### Reference

- Materials made of thermoplastic elastomers (TPE) and their use in outdoor electrical insulation. Rev. Applied Material Science 29:15–30
- Ashori. (2008). Composites made of wood and plastic are a promising green material for the automotive industry. 99:4661–4667, Bioresource Technology.Barnes, D.K.A.; Thomsompson, R.C.; Barlaz, M.; Galgani, F. (2009).
- Philosophical Transactions of the Royal Society B: Biological Sciences 364 (1526): 1985–1998 Accumulation and Fragmentation of Plastics Debris in Global Environments.