




ECO BALANCE

Presents

Enhancing Environmental Impact:
Beach Cleaning Trash Collection
Contribution Tracker





 ResearchGate
<https://www.researchgate.net/publication/35855451...>

Characteristics of microplastics in the beach sediments ...

... Polyester-type **waste** was the majority discovered in the Kayamkulam estuary, a 42.98% [59]. Moreover, based on a study conducted by Venkatramanan ...

235 tonnes of waste cleared from beaches in Chennai

Omjasvin M D / TNN / Updated: Jan 19, 2023, 04:48 IST

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 The Hindu
<https://www.thehindu.com/News/Cities/Chennai>

Marina Beach shores littered with waste post Pongal holidays

20 Jan 2024 — **Marina Beach** in Chennai faces cleanliness issues due to food and plastic **waste**, lack of awareness, and insufficient dustbins.

Introduction

Today, the urgent need to manage trash collection systems is undeniable. With mounting evidence of environmental degradation and ecological imbalance, it's imperative that we implement efficient waste management strategies. The proof lies in the visible deterioration of our planet and the escalating threats posed to human health and biodiversity. It's time to act decisively, for the sake of our planet and future generations. Specifically furthermore, the issue of tracking individual contributions to beach cleaning initiatives poses a formidable obstacle. Without a centralized system to monitor and recognize these efforts, fostering widespread participation and accountability within communities becomes increasingly arduous.



KEY SOLUTIONS OF OUR FOCUS:

1. **Development of Digital Platform:**

Creating a sophisticated digital platform to address the challenges of tracking individual contributions to beach cleaning efforts.

2. **Implementation of Gamification**

Features: Incorporating advanced gamification elements such as leaderboards and achievement badges to motivate users to participate in beach cleaning activities.

3. **Integration of Social Sharing**

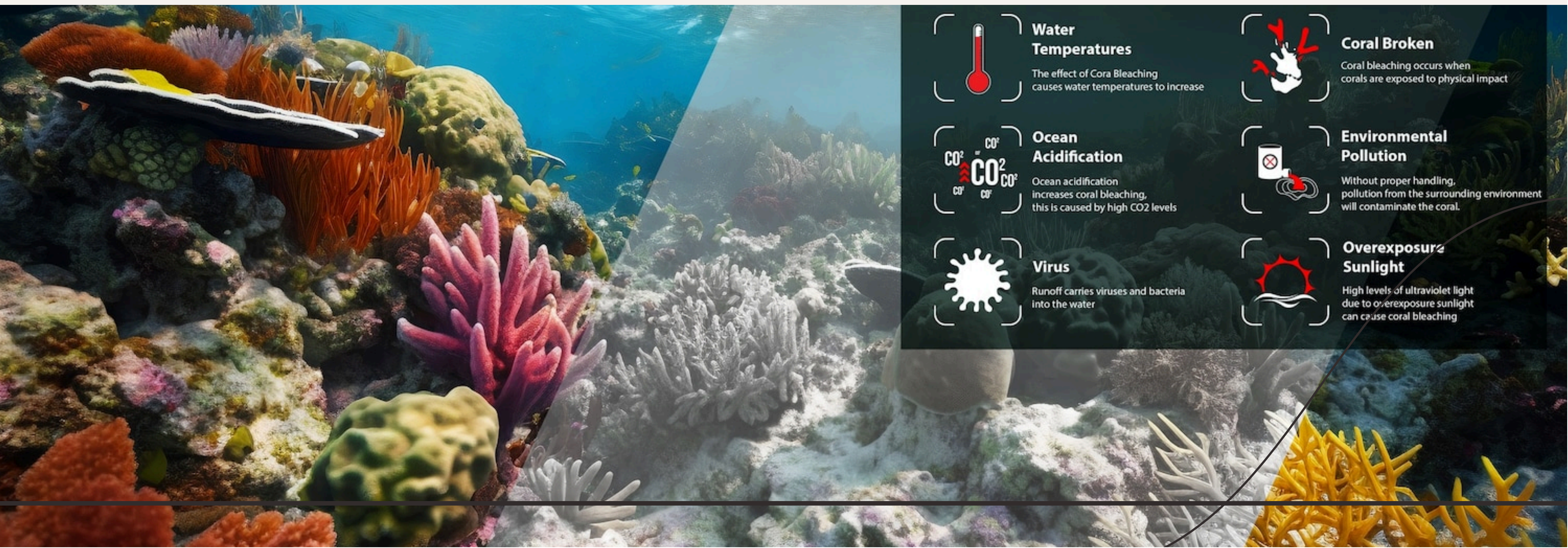
Functionalities: Seamless integration with social media platforms to enable users to share their experiences and accomplishments, amplifying the impact of their actions and inspiring others to join the cause.

Environmental Impact Importance



Our proposed solution involves the development of a sophisticated digital platform tailored to address the aforementioned challenge. This innovative tool will empower individuals to actively engage in beach cleaning activities while providing a streamlined mechanism for tracking and incentivizing their contributions. Through the implementation of advanced gamification features, such as leaderboards and achievement badges, users will be motivated to partake in cleanup efforts and strive for excellence in their environmental stewardship endeavors

The **Trash Collection Tracker** allows users to record and track the amount and types of **waste** collected during beach clean-up activities. It also provides **data analysis** to measure the impact of these efforts over time.



Water Temperatures

The effect of Coral Bleaching causes water temperatures to increase



Coral Broken

Coral bleaching occurs when corals are exposed to physical impact



Ocean Acidification

Ocean acidification increases coral bleaching, this is caused by high CO2 levels



Environmental Pollution

Without proper handling, pollution from the surrounding environment will contaminate the coral.



Virus

Runoff carries viruses and bacteria into the water



Overexposure Sunlight

High levels of ultraviolet light due to overexposure sunlight can cause coral bleaching

Community Engagement

Gamification harnesses dopamine, fueling a psychological competition for safety. It's a potent tool, transforming mundane tasks into engaging challenges. Leaderboards ignite ambition, badges symbolize accomplishment, and rewards validate effort. By tracking progress, we catalyze a collective drive for excellence, ensuring every action contributes to a noble cause.

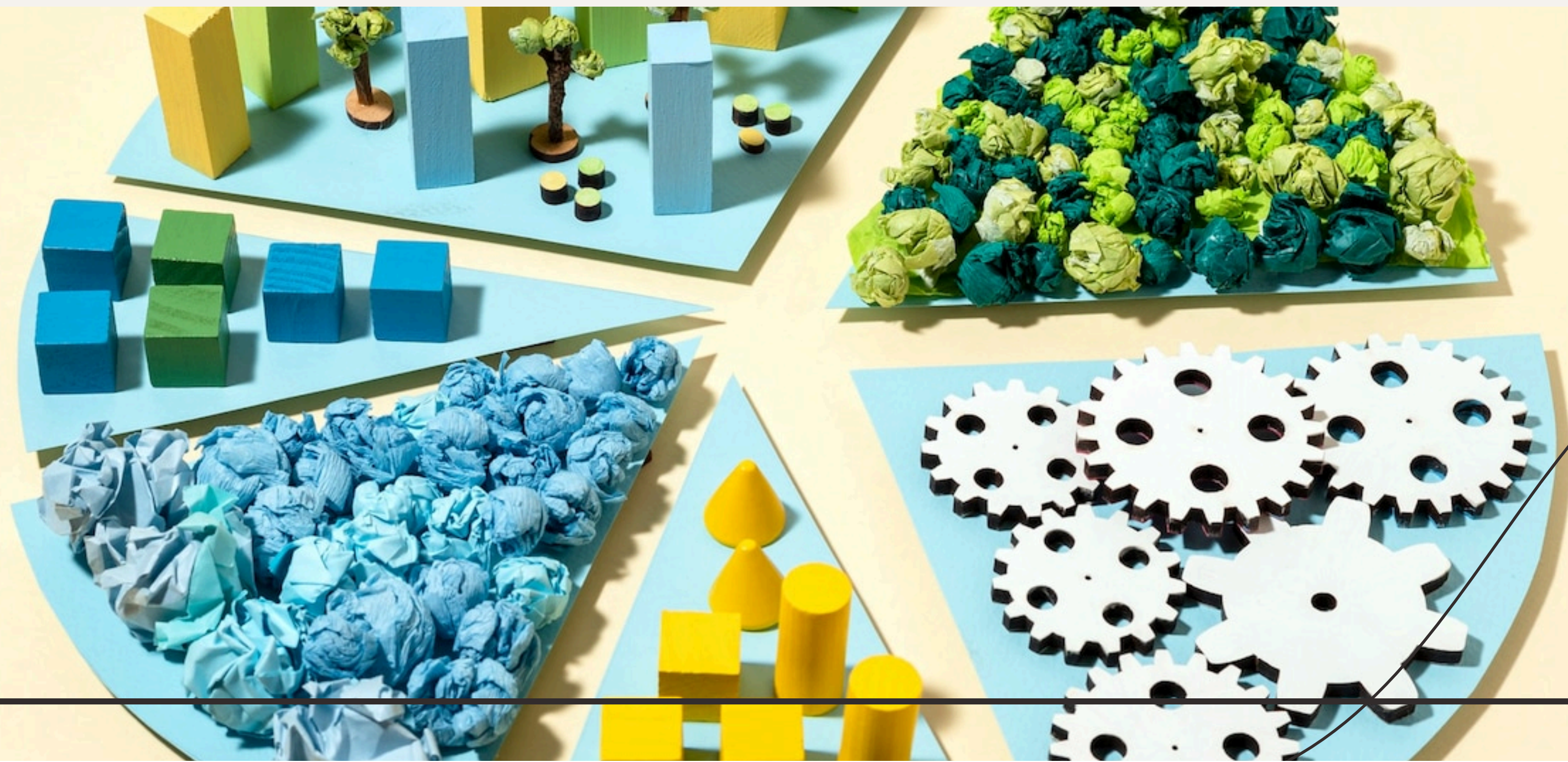


Community Engagement

•In essence, our solution aims to bridge the gap between individual efforts and collective impact by harnessing the power of technology to facilitate and incentivize community-driven beach cleaning initiatives. Through this comprehensive and user-friendly platform, we aspire to cultivate a culture of environmental consciousness and stewardship, paving the way towards a cleaner, healthier, and more sustainable future for generations to come.



The **tracker** provides real-time updates on the amount of **waste** collected, allowing for the measurement of progress in **environmental impact** enhancement. This data-driven approach enables informed decision-making and targeted interventions.



Conclusion

In conclusion, the **Beach Cleaning Trash Collection Contribution Tracker** offers a powerful tool for enhancing environmental impact through effective waste management and community engagement. Together, we can work towards creating cleaner and healthier beach environments for future generations.



Thank you

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AI/DS-B

