

PLASTIC FREE MARKET

IMPACT ASSESSMENT REPORT



TABLE OF CONTENTS

<u>EXECUTIVE SUMMARY</u>	<u>03</u>
<u>INTRODUCTION</u>	<u>04</u>
.....Purpose of the Assessment	<u>04</u>
.....Scope and Objectives	
<u>METHODOLOGY</u>	<u>05</u>
.....Data Collection Methods	<u>05</u>
.....Data Analysis Techniques	
<u>BACKGROUND OF THE PROJECT</u>	<u>06</u>
.....Project Implementation	<u>07</u>
.....Market-wise Insights	
<u>IMPACT ASSESSMENT METRICS</u>	<u>09</u>
.....Assessment Metrics	<u>10</u>
.....The Impact Comparison	
<u>CHALLENGES AND LESSONS LEARNED</u>	<u>11</u>
.....Unforeseen Challenges	<u>11</u>
<u>SUCCESS FACTORS</u>	<u>12</u>
.....Potential Collaboration	<u>13</u>
.....Scaling the Model Market	
<u>CONCLUSION</u>	<u>15</u>
<u>APPENDICES</u>	<u>16</u>

Executive Summary

The project on plastic-free market initiative launched in 10 Noida markets aimed to address single-use plastic pollution by reducing usage, promoting sustainable alternatives, and raising awareness about environmental and health concerns.

Objectives

to minimize the environmental impact of plastic waste while fostering awareness and behavioral change among the selected markets

Key Findings

to reduce Single-Use Plastic Consumption with the Implementation of Sustainable Alternatives

Single-Use Plastic Management	The efficient handling of plastic waste is a crucial aspect of sustainability. This report summarizes the discoveries and perspectives obtained from the Baseline and Endline Surveys on Plastic Waste Management.
Market Assessments	Conducted a thorough assessment of the selected markets to understand the prevalent use of single-use plastics and identified key areas for collaboration with stakeholders.
Awareness Campaigns	Conducted surveys in every market to raise awareness among vendors and consumers about the environmental consequences of single-use plastics and promoting sustainable practices.
Sustainable Options Rollout	The introduction of eco-friendly options in the markets showcased the feasibility of transitioning away from traditional plastic products
Community Engagement	Fostered strong partnerships with market associations, local businesses, and residents. Encouraged community-led initiatives for sustainable practices beyond the project duration
Waste Management Improvements	Improved waste management practices were noted during collaboration with local authorities to establish a sustainable waste management system.

“The Single-Use Plastic Management Project in 10 Markets of Noida has made significant progress in reducing plastic pollution, increasing awareness, and promoting sustainable practices.”



Introduction

This report outlines findings from the Endline Survey on Plastic Waste Management, evaluating the success of plastic-free zones in specific markets under the **Clean Noida** project by the **HCLFoundation**.

The Assessment focuses on understanding and evaluating the impact of the waste management initiatives for single-use plastic. Implement various methods and tools to measure the effectiveness of the awareness programs and their impact on the markets and society. Also covers the importance of driving positive change and sustainability within the selected zone.

Purpose of the Assessment

The purpose of assessment is to evaluate and measure an individual's knowledge, skills, abilities, and performance in order to make informed decisions about their progress, development, and future opportunities on single-use plastic management.

Assessment aids in recognizing strengths and areas for improvement, establishing objectives, and offering feedback to enhance performance. It is applied across different fields like awareness and healthcare to assist in decision-making and enhance results.



Methodology

Sampling Strategy

Data Collection Methods

Surveys and Questionnaires

Review of Internal Records

Data Analysis Techniques

Quantitative Analysis

Comparative Assessment

Scope and Coverage

Market Assessments

Awareness Campaigns

Market Surveys

Sustainable Practices

Scaling Initiatives

Allocation of Resources

Growth Insights

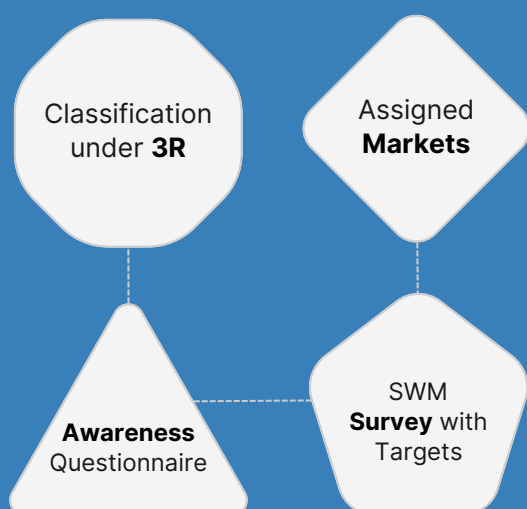


Methodology

The study on single-use plastic behavior was conducted through surveys in assigned markets and sectors to gather information aligned with assessment objectives and local context, identifying risks at the outset.

Establishing Baseline & Endline Conditions for Selected Markets!

Define the objectives of the Endline survey, outlining the baseline factors assessed in this single-use plastic management project. Determine the specific market audience in various sectors for data collection during this annual period. The survey aimed to evaluate the advancements and accomplishments of plastic waste management programs, focusing on three key areas of plastic use: **Reduce, Refuse, and Revamp**.



Methodology for Data Collection

The survey delves into the effectiveness of ongoing initiatives by examining key factors like waste recycling rates, waste reduction tactics, and community involvement. To ensure thorough data collection, a wide range of market audiences from different sectors – such as shops, businesses, educational institutions, and government agencies – are being targeted.

Methodology for Data Analysis

Educate Mobilizers on the survey questionnaire to ensure comprehension and successful survey administration. Compare Endline survey data with baseline data to gauge the project's impact over time. Analyze the data to pinpoint trends, patterns, and significant findings.

Quantitative Analysis	Comparative Assessment
• Waste Segregation • Recycling of Waste	• Environmental Impact • Impact on health
• Plastic usage • Will of Adapting alternatives	• Awareness VS Usage • Will VS Reasonings



Project Background

The awareness survey was designed to assess the effectiveness of plastic-free zones in specific markets as part of the Clean Noida initiative on Single-Use Plastic Management. Both baseline and endline assessments were conducted to gather data on the environmental and health impacts linked to single-use plastics.



The Implementations

The survey encompasses a **sample size of 20 establishments**, including shops, businesses, institutions, and various market areas across **10 selected markets in Noida**. Primarily focusing on educating the public about the adverse impacts of plastic on both health and the environment. By categorizing markets as **Aware, Partially Aware, or Unaware**, through engaging stakeholders in discussions, providing access to reliable information, and highlighting the interconnectedness of health and environmental well-being, individuals grasp the strides necessary to comprehend the consequences of plastic consumption.

About Survey Structure & Awareness Assessment

As the movement towards sustainability gains momentum, being **AWARE** of the full spectrum of consequences of plastic use is becoming increasingly crucial. Individuals falling into the **AWARE** category not only recognize the environmental harm caused by plastic but also understand the potential health risks associated with its usage. Their ability to articulate these dual impacts positions them as informed advocates for change. Meanwhile, the **PARTIALLY AWARE** group, though acknowledging the environmental repercussions of plastic, may not be fully cognizant of the health implications. By continuing to educate themselves and others, they found the opportunity to transition into the **AWARE** category, thereby broadening their understanding and influence. For those in the **UNAWARE** section, there is an opportunity for growth and enlightenment.

Market-wise Insights

By conducting an annual awareness survey involving stakeholders, a comprehensive understanding of single-use plastic waste management practices was gained. This allowed us consistent monitoring, trend identification, and informed decision-making to enhance sustainability efforts.

Brahmaputra Market

Baseline survey: 70% aware of environmental hazards, 40% aware of health hazards.

Endline survey: 100% aware of environmental hazards, 95% aware of health hazards.

Impact Assessed: 98% aware of enviro & health hazards, shows significant increase in awareness among 20 participants.

Aware 98% (43% ↑↑↑)

Ganga Shopping Market

Baseline survey: 77% aware of environmental hazards, 33% aware of health hazards.

Endline survey: 100% aware of both environmental hazards and health hazards.

Impact Assessed: 100% aware of enviro & health hazards, shows significant increase in awareness among 19 participants.

Aware 100% (45% ↑↑↑)

Kangchenjunga Market

Baseline survey: 70% aware of environmental hazards, 41% aware of health hazards.

Endline survey: 100% aware of environmental hazards, 95% aware of health hazards.

Impact Assessed: 98% aware of enviro & health hazards, shows significant increase in awareness among 20 participants.

Aware 98% (42% ↑↑↑)

X - Block Market

Baseline survey: 70% aware of environmental hazards, 30% aware of health hazards.

Endline survey: 100% aware of environmental hazards, 95% aware of health hazards.

Impact Assessed: 98% aware of enviro & health hazards, shows significant increase in awareness among 20 participants.

Aware 98% (48% ↑↑↑)

Y- Block Market

Baseline survey: 42% aware of environmental hazards, 19% aware of health hazards.

Endline survey: 100% aware of both environmental hazards and health hazards.

Impact Assessed: 100% aware of enviro & health hazards, shows significant increase in awareness among 20 participants.

Aware 100% (69% ↑↑↑)



Market-wise Insights

By conducting an annual awareness survey involving stakeholders, a comprehensive understanding of single-use plastic waste management practices was gained. This allowed us consistent monitoring, trend identification, and informed decision-making to enhance sustainability efforts.

Parthala Market

Baseline survey: 25% are aware of environmental hazards and 10% are aware of health hazards.

Endline survey: 100% are aware of environmental hazards and 84% are aware of health hazards.

Impact Assessed: 92% were aware of the environment & health hazards, which shows a significant increase in awareness among 19 participants.

Aware 92% (74% ↑↑↑)

Amrapali Princely Estate

Baseline survey: 94% aware of environmental hazards, 42% aware of health hazards.

Endline survey: 95% aware of both environmental hazards and health hazards.

Impact Assessed: 100% aware of enviro & health hazards, shows significant increase in awareness among 19 participants.

Aware 95% (27% ↑↑↑)

Golf City Market

Baseline survey: 66% aware of environmental hazards, 12% aware of health hazards.

Endline survey: 95% aware of environmental hazards, 90% aware of health hazards.

Impact Assessed: 93% aware of enviro & health hazards, shows significant increase in awareness among 21 participants.

Aware 93% (54% ↑↑↑)

Indira Market

Baseline survey: 85% aware of environmental hazards, 25% aware of health hazards.

Endline survey: 95% aware of environmental hazards, 90% aware of health hazards.

Impact Assessed: 93% aware of enviro & health hazards, shows significant increase in awareness among 20 participants.

Aware 93% (38% ↑↑↑)

NRI and Sapphire Arcade

Baseline survey: 80% aware of environmental hazards, 33% aware of health hazards.

Endline survey: 100% aware of environmental hazards, 95% aware of health hazards.

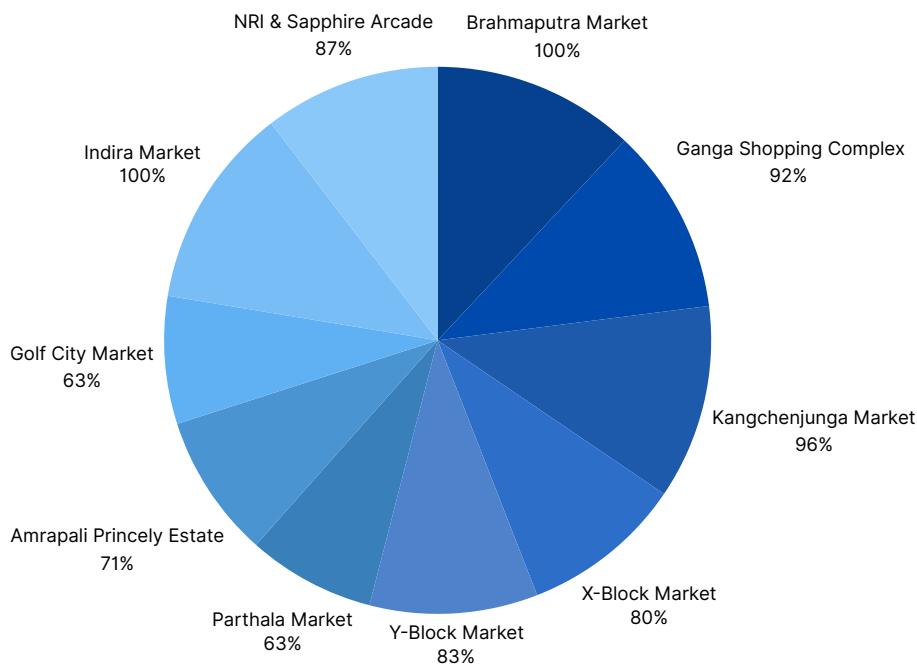
Impact Assessed: 98% aware of enviro & health hazards, shows significant increase in awareness among 17 participants.

Aware 98% (41% ↑↑↑)



Impact Assessment Metrics

The awareness survey was conducted to assess the effectiveness of plastic-free zones in specific markets with the goal of reducing the harmful impact of single-use plastics. The evaluation was based on the percentage of reduction in plastic waste meeting usage criteria from baseline to end-line survey.



Reduction in Single-Use Plastic Consumption

The implementations of educational surveys to raise awareness about environmental conservation and encourage residents to adopt eco-friendly practices in collaborate with local businesses to implement eco-friendly packaging, and promote sustainable practices within the community.

Community Engagement

96%

People are aware of plastics' usage impact on the Environment as well as on Health. However, despite the high level of awareness surrounding the impact of single-use plastics on the environment and health, there is still much work to be done in terms of taking action. While knowledge is a powerful tool, it is the action we have taken based on that awareness that truly made a difference.

The findings from both evaluations essentially enhanced strategies, scaling successful interventions, and advocating for policy reforms to foster a more sustainable and environmentally friendly community in Noida. The Clean Noida initiative is committed to fostering a cleaner, greener, and healthier environment for all residents through the cooperative endeavours of the local community, businesses, and government entities.

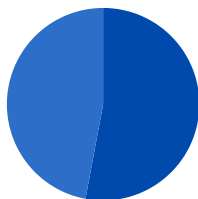


Impact Assessment - The Comparison

Through meticulous analysis, it becomes evident that there exists a significant variance in the adoption and efficacy of waste management practices across different markets within the region. This data comparison for the single-use plastic waste management in Noida unveils a nuanced picture of the current scenario.

The report compares waste and single-use plastic reduction efforts in 10 different markets, highlighting successes and areas needing improvement.

SINGLE-USE PLASTIC USAGE & REDUCTION FROM BASELINE TO ENDLINE



■ Baseline Plastic Usage
■ Endline Plastic Usage

84%

Percentage Decrease in Single-Use Plastic Usage

End Results	Point of Reference	Carrying out
Single-use plastic consumption	Derived overall USAGE in 10 markets of Noida	- Baseline - 18% - Endline - 16%
Reduction in Single-use plastic consumption	Derived overall REDUCTION in 10 markets of Noida	- Baseline - 82% - Endline - 84%
Awareness	Awareness on environmental and health hazards from plast	- Baseline - 48% - Endline - 97%
Community engagement	Commitment towards cleaner greener initiative from the locals, businesses, and govt. entities	- Baseline - 85% - Endline - 96%
Adapting sustainability	Willingness towards switching to eco-friendly alternatives of plastic	- Baseline - 81% - Endline - 89%
Plastic free Shops	Total count of shops become plastic free under Plastic-free Market initiative	244 Nos



Challenges & Lessons Learned

An evaluation of strategies has identified various impacts and challenges associated with sustainable plastic waste management, while also highlighting opportunities for advancement and positive transformation.

Unforeseen Challenges

Assessing the effectiveness of the strategies implemented revealed the project's overall impact and identified potential challenges in achieving sustainable plastic waste management goals. Findings showed that the social risk landscape includes factors like community perceptions, limited public awareness, economic dependence on plastic, stakeholder engagement, and the risk of unintended social consequences. An obstacle faced was the reluctance of community members to change waste disposal habits.



Lack of Public Awareness

- Efforts to promote waste management face challenges due to lack of awareness, hindering the adoption of sustainable practices.

Lessons Learned

- Continuous awareness campaigns aim to educate about single-use plastics' health impacts and encourage responsible waste management.



Inconsistent Regulatory Compliance

- Some businesses neglect to adhere to plastic waste guidelines, complicating enforcement and disposal procedures.

Lessons Learned

- The need for periodic revisions and strict enforcement of guidelines to ensure consistent compliance across businesses and industries.



Economic Dependence on Plastic

- Businesses face challenges transitioning from single-use plastics to sustainable options due to cost and limited alternatives, necessitating a nuanced approach.

Lessons Learned

- Identifying and promoting sustainable alternatives can mitigate economic concerns and promote long-term environmental sustainability.

Success Factors

The awareness initiative's success led to the establishment of the first Model Market in Noida and Uttar Pradesh through authoritative collaborations of officials and the market people as part of the Plastic Free Market Project under the MyCleanCity program.

The Potential Collaboration for Plastic Free Market Initiative

The Plastic Free Market project by HCL Foundation aimed to establish a plastic-free zone in the market. The initial survey led to the selection of the Brahmputra Market as the Model Market. The action plan for the market was finalized following extensive discussions among our team, HCLFoundation's project coordinators, the market association, and shopkeepers but faced setbacks with market association due to the Noida Authority's separate plan. Meanwhile, the awareness campaign progressed in **Kangchenjunga Market**, situated in Sector 53 of Noida, a key stakeholder willing to collaborate. The market serves consumers from Kangchenjunga Apartments and nearby Sector 61 societies. 55 shops in the market, with 50 active. Ram Lakhan Choudhary, President of the association, supported the initiative.



Discussing Concerns and Action Plan with the Association.



The Brahmputra Market whitewashing project began after approval by the market association.



In early September, attended the Kangchenjunga Market Association's general body meeting, initiating a milestone for the upcoming months. We deliberated on our agenda, outlined our strategy, and underscored the significance of our intentions for the project.

Success Factors

The awareness initiative's success led to the establishment of the first Model Market in Noida and Uttar Pradesh through authoritative collaborations of officials and the market people as part of the Plastic Free Market Project under the MyCleanCity program.

Scaling Kangchenjunga Market as a Model Market!

The project commenced by educating shopkeepers on sustainable packaging to diminish plastic usage, while eateries adopted waste segregation practices. In Phase II, emphasis was placed on enhancing aesthetics and fostering innovation within the market, with collaborative assistance from the market association and the Noida authority for maintenance and civil infrastructure improvements.

The market association and Noida authority collaborated on maintenance and civil works, including boundary walls, pipelines, and floorings, carried out from mid-September to October. The authority has assigned work to a contractor, with 7.5 lakh rupees spent to date and more work planned beyond February 20, 2024. The market association has enhanced security measures through the implementation of camera surveillance. Discussions revolving around the theme of market paintings, the presentation of a blueprint for a model market during a high-level meeting, and the acquisition of tasks following the market association's request letter have been successfully accomplished.

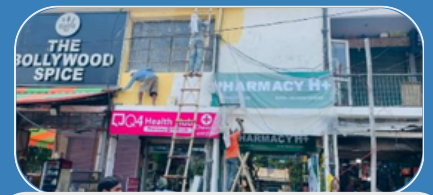
Noida Authority	HCLF Implementing Partner	Market Association
- Boundary Extension - Pipelines & Drainage - Civil & Flooring - White-washing & Repair - Terrace work	- Mobilization & Awareness - Capacity building - Segregation trainings - Thematic paintings	- Strict regulatory advisory - Camera fencing - Hired guards & sweepers



The civil work after whitewashing is hindering progress.



Discussing Concerns and Action Plan with the Association.



Whitewashing and repair supervised by Kangchenjunga Market Association



The authority is conducting drainage cleaning work



Photo taken before team involvement or regulatory input



Photo taken before team involvement or regulatory input



Beautification of a Model Market

We transformed the market by incorporating elements from Kangchenjunga National Park in India, showcasing its culture and essence. The market features artwork depicting the park's motifs, floor paintings, benches, and planters made from recycled plastic. Aerobins for composting and a Cloth Bag Vending Machine for eco-friendly bags were introduced. The market aims for sustainability and cleanliness, with visits planned to appreciate its initiatives.

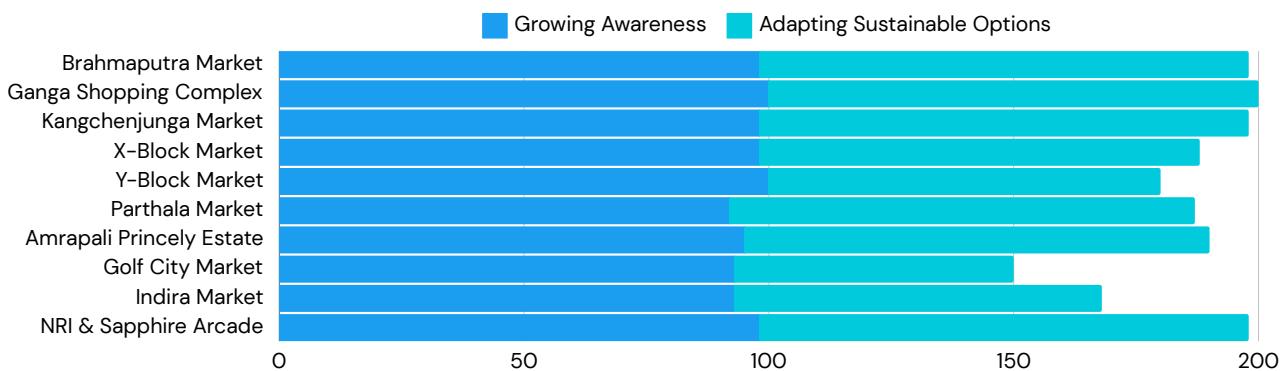


Conclusion

The markets in Noida have shown the demand for eco-friendly products and waste management increasingly to align with sustainability trends. The focus is reducing single-use plastic, encouraging innovation for plastic-free markets, and supporting economic growth.

Achievements

The impact assessment of the plastic-free market initiative in Noida reveals a shift towards sustainable practices and heightened environmental consciousness. The findings show a growing awareness of the harmful effects of single-use plastic, driving demand for eco-friendly products, and creating new economic opportunities. This transition represents a positive change, demonstrating environmental responsibility can coexist with economic growth. Noida sets an example for other regions in the global fight against plastic pollution.



Future Plan & Milestones

As we move forward, continuous monitoring and evaluation will be essential to ensure the long-term success and sustainability of the plastic-free market initiative. The impact of awareness serves as a valuable tool for ongoing decision-making, allowing stakeholders to adapt strategies in response to emerging challenges and opportunities.



Appendices

We have embraced an awareness survey methodology to assess consumer perspectives and behaviors concerning single-use plastic waste management. Collaboration with market stakeholders and compliance with pertinent regulations and governmental directives found as vital components of establishing a plastic-free market.

Appendix A: Survey Questionnaire

Clean Noida Shops	
Section 3	
Market ☐ X-Block ☐ Y-Block ☐ Brahmaputra ☐ Ganga ☐ Indra ☐ Kanchanjunga ☐ Sapphire Arcade & NRI ☐ Princely Estate ☐ Golf City ☐ Parthala Shop name Shop Type Shop Owner name Contact no.	☐ Yes ☐ No ☐ Not sure If Yes, explain the process of recycling waste, where do you send it for recycling? Are your customers informed about the environmental impact of plastic use? ☐ Yes ☐ No ☐ Not sure Do you have any initiatives to encourage customers to use eco-friendly alternatives to plastic? ☐ Yes ☐ No ☐ Planning to implement If Yes, explain the initiative in place or planned Are you aware of plastic pollution and the impact it has on our health and environment? ☐ Yes ☐ No ☐ Aware, but don't know the impact it has Are you aware of single use plastic ban law? ☐ Yes ☐ No Would you be willing to switch to eco-friendly packaging alternatives to your current packaging of order/product? ☐ Yes ☐ No ☐ Other Do you practice waste segregation? ☐ Yes ☐ No ☐ sometimes
What types of plastic materials are commonly used in your shop/market? ☐ Single-Use Polythene ☐ Plastic Packaging for products ☐ Plastic containers/cutlery ☐ Others(specify) Why do you prefer to use the plastic products- especially plastic bags? ☐ They are cheap ☐ They are light in weight ☐ They are easily available ☐ Lack of alternative material Did your packaging materials have recyclable/Decomposable symbols? ☐ Yes ☐ No ☐ Not sure Is the trend of utilization of plastic bags increasing or decreasing? ☐ Increasing ☐ Decreasing ☐ Not sure According to your opinion, should the utilization of plastic bags be continued or discontinued? ☐ Continued ☐ Discontinued Do you currently recycle plastic waste generated in your shop/market?	

Appendix B: Market Stakeholder Interviews

Appendix C: Regulatory Framework and Government Initiatives



Thank you for the
ongoing support!



Guided Fortune Society

H83F+MXV Command Control
Centre, Sector 94, Noida, Uttar
Pradesh 201313
www.guidedfortunesociety.com

