# Green Cover Index (GCI) Analysis Report

## Introduction

This report provides an analysis of the Green Cover Index (GCI) over the years, predicts its trends for the next decade, and includes details about the plot's area and proximity to lakes.

## Plot Analysis

The following are the coordinates of the plot points:

|  |  |
| --- | --- |
| Latitude | Longitude |
| 12.933381 | 77.575350 |
| 12.933371 | 77.575495 |
| 12.933204 | 77.575562 |
| 12.933219 | 77.575329 |

The calculated area of the plot is 372.53 square meters.

The plot is outside the legal buffer zone. The closest lake details are as follows:

|  |  |
| --- | --- |
| Attribute | Value |
| name\_of\_th | Yediyur kere |
| unique\_id | 626 |
| valley |  |
| area |  |
| latitude | 12.9342068913904 |
| longitude | 77.5756000427416 |
| ward\_number |  |
| ward\_name |  |
| ward\_counc |  |
| ward\_office |  |
| aream3 | 39826.227529684198089 |

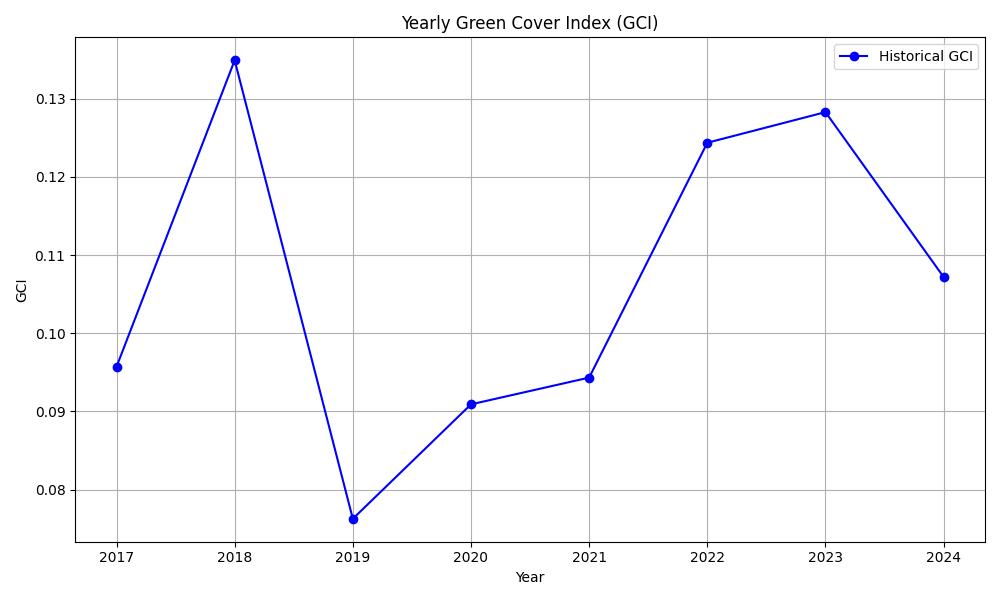
## Historical GCI Data

The following table shows the historical GCI values:

|  |  |
| --- | --- |
| Year | GCI Value |
| 2017 | 0.10 |
| 2018 | 0.13 |
| 2019 | 0.08 |
| 2020 | 0.09 |
| 2021 | 0.09 |
| 2022 | 0.12 |
| 2023 | 0.13 |
| 2024 | 0.11 |

## Historical GCI Plot

The following plot shows the historical GCI trends:



## GCI Predictions (2025-2035)

Using a linear regression model, the GCI values for the next decade have been predicted:

|  |  |
| --- | --- |
| Year | Predicted GCI Value |
| 2025 | 0.12 |
| 2026 | 0.12 |
| 2027 | 0.12 |
| 2028 | 0.12 |
| 2029 | 0.13 |
| 2030 | 0.13 |
| 2031 | 0.13 |
| 2032 | 0.13 |
| 2033 | 0.14 |
| 2034 | 0.14 |
| 2035 | 0.14 |

## GCI Predictions Plot

The following plot shows the historical GCI values and the predictions for 2025-2035:

