

## Ecological Footprint Analysis: A Case Study of Mumbai

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### Abstract

*An ecological footprint measures what we consume from nature. Ecological Footprint is an accounting method which focuses on land appropriation. It provides a means for measuring and communicating human induced environmental impacts on the planet earth. The area of study chosen is the city of Mumbai. The research objectives are to calculate the ecological footprint in the study area using ecological calculator, to present the results of the perception of the usefulness of ecological footprint as an indicator for sustainability and also to assess the common understanding about Ecological Footprints and to recommend applicable solutions to improve the situations. The research methodology includes three stages – pre field, on – field and post-field stages. Literature review was undertaken from various online and offline sources. A questionnaire was prepared to collect primary data for calculation of ecological footprint and to carry out a perception study. A sample size of 250 was decided. The specific locations used for data collection have been divided into two classes viz. upper class and lower class with Adarsh Colony, Thakur Village in the former class and Malwani and Poisar Depot in the latter class. The data collected from 250 samples were then analysed with the help of Ecological Footprint Calculator. The data for perception study was analysed using MS-Excel. The ecological footprint has been calculated using the ecological calculator tool available on [www.footprintcalculator.org](http://www.footprintcalculator.org). The perception study encompasses of questions related to their understanding and usefulness of ecological footprint. The perception study tells that the levels of awareness about the concept of ecological footprint is low i.e., 165 people out of 250 (55%). It is observed that use of earth for lower-class and upper class is almost the same, with highest in Poisar with 3.21 and lowest in Malwani with 2.5. The global hectares is also highest for Poisar i.e., 5.48 followed by Thakur Village 5.05. The carbon footprint as percentage of total ecological footprint is much higher for the upper class areas than in the low class areas. The carbon footprint of the areas surveyed is 51.45%. The survey results clearly indicate that steps are to be taken to spread awareness on Ecological Footprint.*

**Keywords:** *ecological footprint, perception, awareness, use of earth, carbon footprint*

### Introduction

All of us make an impact on the earth, because we are consuming the products and services of nature. There are more than six billion people, but there is only one planet earth. Each generation is demanding more of natural resources than what the last generation did. May be after a few years from now the world will become a riskier place with more people, more consumption, more waste and more poverty, but with less forest area, less available fresh water, less soil and less stratospheric ozone layer.