# TO SUPPLY LEFTOVER FOOD TO POOR

**College Name: PPG COLLEGE OF ARTS AND SCIENCE** 

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**TEAM ID: NM2025TMID25982** 

**TEAM SIZE: 4** 

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#### **ABSTRACT**

This project focuses on reducing food waste by collecting edible leftover food from various

sources and redistributing it to poor and needy populations. It emphasizes hygiene, coordination, volunteer involvement, and efficient logistics. The project aims to create a scalable, community-driven model that can be replicated across towns and cities, contributing

to both social welfare and environmental sustainability.

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#### INTRODUCTION

Food wastage represents one of the most avoidable sources of greenhouse gas emissions and

wasted resources. Despite sufficient global food production, inequalities in distribution mean

that many individuals lack access to regular nutritious meals.

This chapter outlines the scale of food waste locally and nationally, examines causes, and frames why redistribution is an ethical imperative.

Key objectives of the project include building partnerships, ensuring safety standards for redistributed food, and creating efficient logistics.

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#### LITERATURE REVIEW

Several NGOs have developed models to collect surplus food from urban donors and deliver to the

needy; their studies highlight both success stories and operational challenges.

Academic literature suggests that effective food redistribution requires data-driven route planning and robust volunteer training to ensure food safety.

Technology has been leveraged by a number of platforms to match supply and demand in real time,

reducing response time and waste.

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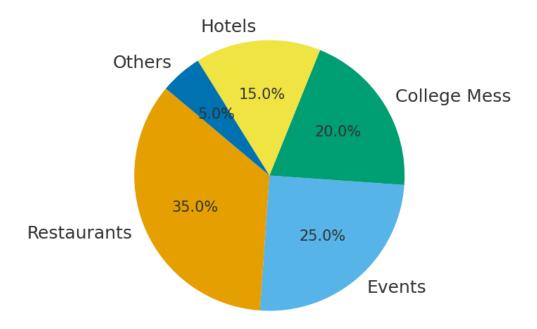
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Figure: Distribution of food sources (e)



### **METHODOLOGY**

Methodology begins with identifying reliable donors and establishing regular pickup schedules.

A checklist for donors ensures items donated meet minimum safety standards.

Collection teams use insulated containers and adhere to hygienic handling procedures. Volunteers are trained and issued simple protective equipment.

Distribution relies on mapping beneficiary locations and optimizing routes; collaboration with

local NGOs helps identify high-need areas.

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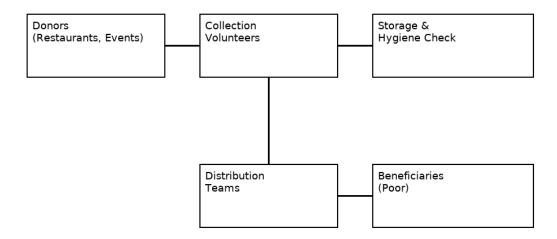
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Figure: Process flow diagram (collection to distribution)



## **SYSTEM DESIGN & IMPLEMENTATION**

System design covers stakeholder communication protocols, documentation (logs of pickups and

distribution), and monitoring indicators for quality control.

Implementation phases include pilot testing, feedback collection, and gradual scaling. Clear

role definitions reduce friction among volunteers and coordinators.

A recommended digital tool would allow donors to register, schedule pickups, and receive

confirmations; recipients can be notified prior to delivery.

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#### **RESULTS & DISCUSSION**

Expected results include measurable reductions in food waste and improved food access for

beneficiaries. Pilot operations can provide quantitative data on meals served.

Discussion considers logistical constraints, possible contamination risks, and how continuous

training can mitigate issues.

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#### **CONCLUSION & FUTURE SCOPE**

In conclusion, the project demonstrates the feasibility of utilizing leftover food resources to

address immediate hunger while reducing waste.

Future work includes building an app, formalizing partnerships with municipal bodies, and

establishing metrics to measure long-term social impact.

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