



Quarterly Report

Title: Plastic Waste Management and Recycling

Date:06.04.2024

Submitted By:

Dr.D.Palanikkumar-Professor and Head, CSE

E.P.Prakash-Assistant Professor, CSE

Dr.N.G.P. Institute of Technology

Dr.N.G.P. Nagar, Kalapatti Main Rd, Coimbatore, Tamil Nadu

641048

Quarterly Project Report of Unnat Bharat Abhiyan

Institute Details	
Name of the Institute	Dr. N.G.P. Institute of Technology
AISHE Code	C-36929
District	Coimbatore
State	Tamilnadu
Name of the Regional Coordinating Institute	Tamilnadu Agricultural University, Coimbatore
Contact information	
Principal Investigator	Dr. D. Palanikkumar
Email id	hod_cse@drngpit.ac.in
Contact number	9994277233
CO-Investigator	E.P.Prakash
Email id	prakash.ep@drngpit.ac.in
Contact number	9994777300
Student team members	Rishi S, Vasundraa S and Selvapriyadharshini
Project Information	
Title of the Project	Plastic Waste Management and Recycling
Name of the Subject Expert Group	NIT, Suryatkal (Basic Amenities)
Name of village(s) where project development activities were carried out	Kakkadavu
Date of commencement	28.12.2023
Planned date of closure	28.06.2024

LIST OF STAGES IN OUR PROJECT:

STAGE 1: ECO-TRACK MODULE

1. Scheduling and real-time tracking of garbage collectors
2. Identification of smart dustbins

STAGE 2: REGENMARKET

1. Segregation of plastic waste and facilitating for reselling

STAGES OF COMPLETION:

STAGE 1: ECO-TRACK MODULE

1. Scheduling and real-time tracking of garbage collectors'
 - a. The basic webpage layout of the module has been designed and created.
2. Identification of smart dustbins
 - a. The prototype model is created

STAGE 2: REGENMARKET

1. Segregation of plastic waste and facilitating for reselling
 - a. Front-End work has been designed and completed
 - b. Connection with the database for reselling and sales has been completed

OTHER ON-GOING TASK

1. Data collection work related to plastic waste in kakkadavu block
2. Collecting information about plastic recycling industries in and around kakkadavu block and Coimbatore.
3. Working on GPS tracking module and integrating with our webpage
4. Working on all other data-related sub-modules of the webpage such as data about waste, data about industries, data about sales etc.)
5. Working on login modules for different stake holders of our project

CHALLENGES FACED


- Shortage of time for live surveying due to academics and semester examinations.
- Coping up with academics and learning at the same time for application development.
- Segregation of plastic waste from the mixed up organic and household wastes.

ACHIEVEMENTS MADE:

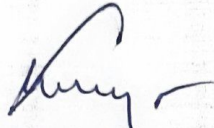
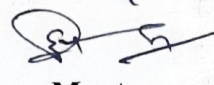
- Designed a customized e-commerce website for our application.
- Got a wider view of expanding capital potential for the project.
- Made tweaks in current project, terms of ideas to expand the capitation pool and income.

LESSONS LEARNED:

- Time management.
- Resource management.
- To overcome complex or difficult concepts of implementation by seeking help from industry experts.

1. 
2. 
3. 
Students

1. Vasundra S
2. Ritthi s
3. Selvapriyadharshini



Mentor

1. Dr.D. Palanikkumar
2. Mr. C.P. Praveesh


HoD-CSE

Dr.D. Palanikkumar M.E., PhD.,
Professor & Head
Department of Computer Science and Engineering
Dr.NGP Institute of Technology
Coimbatore-641048