



# Program Book

**Community Service Project**



**AP STATE COUNCIL OF HIGHER  
EDUCATION**

**(A STATUTORY BODY OF GOVERNMENT OF ANDHRA PRADESH)**

A

Project Report on

“Uses of Chemicals on Fruits and Vegetables”

Submitted to

Geethanjali Institute of Science & Technology, Nellore (AUTONOMOUS)

(Affiliated to JNTUA, Anantapuramu)

In

Partial fulfillment of the requirements for the award of the degree of

Bachelor of Technology

In

Computer Science and Engineering (Cyber Security)

By

T PENCHALA PAVAN KUMAR

(222U1A3760)

Under the Esteemed Guidance of

MS. S.Sahaja,

M.Tech, Assistant professor.



Department of Computer Science and Engineering (Cyber Security)

Geethanjali Institute of Science and Technology

(Affiliated to Jawaharlal Nehru Technological University, Ananthapuramu)

Accredited by NAAC “A” Grade

(AUTONOMOUS)

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# GEETHANJALI INSTITUTE OF SCIENCE AND TECHNOLOGY

Accredited by NAAC "A" Grade

(AUTONOMOUS)

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2022-2026

## Department of Computer Science and Engineering (Cyber Security)



# Certificate

This Is to certify that the project work entitled "Uses of Chemicals on Fruits and Vegetables" is the work done by

**T.PENCHALA PAVAN KUMAR**

**(222U1A3760)**

Submitted to the department of Computer Science and Engineering (CS), in partial fulfillment for the award of the Degree of **Bachelor of Technology** in **Computer Science and Engineering (CS)** to the **Geethanjali Institute of Science and Technology** (Affiliated to Jawaharlal Nehru Technological University, Anantapuramu) is a record of bonafide work carried out under my guidance and supervision. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

### Project Guide/Supervisor:

Ms.S.Sahaja, M.Tech,  
Assistant professor,  
Department of CSE(CS),  
GIST,  
Nellore(Dist).

### Head of the Department

Mr.T.Sai Prasad Reddy, M.Tech  
Assoc Professor,  
Department of CSE(CS)  
GIST,  
Nellore (Dist).

Date of External Project: \_\_\_\_\_

INTERNAL EXAMINER

EXTERNAL EXAMINER

# **GEETHANJALI INSTITUTE OF SCIENCE AND TECHNOLOGY (AUTONOMOUS)**

## **INSTITUTE VISION**

To Emerge As A Center Of Technical Excellence, Transforming The Engineering Aspirants Into Dynamic And Socially Responsible Technocrats

## **INSTITUTE MISSION**

**IM1:** Implementing effective strategies for imparting quality education in a conducive academic ambience to upgrade the intellectual and professional dimensions of the learners personality.

**IM2:** Facilitating skill development and research to fulfill societal needs

**IM3:** Inculcating moral principles , environmental consciousness and social responsibility among students

**IM4:** Grooming the students to handle the career challenges successfully

## **DEPARTMENT OF Computer Science and Engineering (Cyber Security)**

### **DEPARTMENT VISION**

Producing competent graduates to provide modern IT security standards to successfully address the challenges faced by private and public sectors

### **DEPARTMENT MISSION**

**DM1:** Implementing innovative teaching and learning methodologies consistent with the latest trends related to cyber security

**DM2:** Enhancing the technical capability of the learners to handle the cyber risks.

**DM3:** Imparting practical learning in the latest technologies

**DM4:** Creating a conducive environment that fosters creativity and team work.



# GEETHANJALI INSTITUTE OF SCIENCE AND TECHNOLOGY (AUTONOMOUS)

## PROGRAM OUTCOMES

Engineering Graduates will be able to:

**PO1: Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.



**PO2: Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO3: Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO4: Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**PO5: Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**PO6: The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice



**PO7: Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PO8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**PO9: Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**PO10: Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**PO11: Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**PO12: Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

## PROGRAMME SPECIFIC OUTCOMES:

**PSO1:** Develop secure software for the protection of digital applications.

**PSO2:** Evaluate the function of cyber security to minimize risks of an organization's cyber space.

## PROGRAMME EDUCATIONAL OBJECTIVES

A graduate of Computer Science and Engineering (Cyber Security) will be able to:

<b>PEO 1</b>	Function as effective professionals with their applied skills, problem solving capabilities and professional skills in the domain of cyber security.
<b>PEO 2</b>	Emerge as effective communicators with relevant employable skills in the spheres of cyber security and related domains.
<b>PEO 3</b>	Offer sustainable solutions equipped with cyber security skills to complex social problems.
<b>PEO 4</b>	Engage themselves in the continuous development of their computing and cyber security skills with deep commitment.

**Program Book**  
**for**  
**Community Service Project**

**Name of the Student:** T.PENCHALA PAVAN KUMAR

**Name of the College:** GEETHANJALI INSTITUTE OF SCIENCE AND  
TECHNOLOGY

**Registration Number:** 222U1A3760

**Period of CSP:** **From** 27/05/24 **to** 21/07/24

**Name &Address of the**  
**Community/Habitation:** BUCHIREDDYPALEM(V),  
BUCHIREDDYPALEM (M), NELLORE DISTRICT



# **COMMUNITY PROJECT SERVICE PROJECT REPORT**

Submitted in accordance with the requirement for the degree of B. Tech

<b>Name of the College:</b>	<b>GEETHANJALI INSTITUTE OF SCIENCE AND TECHNOLOGY</b>
<b>Department:</b>	<b>CSE (CYBER SECURITY)</b>
<b>Name of the Faculty Guide:</b>	<b>Ms.SAHAJA, MTech , Assistant professor</b>
<b>Duration of the CSP:</b>	<b>From: 27/05/24 to 21/07/24</b>
<b>Name of the Student:</b>	<b>T PENCHALA PAVAN KUMAR</b>
<b>Program of Study:</b>	<b>B.TECH</b>
<b>Year of Study:</b>	<b>III Year</b>
<b>Registered Number:</b>	<b>222U1A3760</b>
<b>Date of Submission:</b>	

## **Instructions to Students for Community Service Project**

Please read the detailed Guidelines on Community Service Project hosted on the website of AP State Council of Higher Education <https://apsche.ap.gov.in>

**Link:** <https://apsche.ap.gov.in/Pdf/Guidelines%20for%20the%20OJT%20Internship%20Community%20Service%20Project.pdf>

1. It is mandatory for all the students to complete 2 months (180 hours) of Community Service Project as a part of the 10 month mandatory internship/on the job training.
2. Consider yourself as a committed volunteer in the community, you work with.
3. Every student should identify the village/community/habitation for Community Service Project (CSP) in consultation with the College Principal/the authorized person nominated by the Principal.
4. Report to the community/habitation as per the schedule given by the College. You must make your own arrangements of transportation to reach the community/habitation.
5. You will be assigned with a Faculty Guide from your College. He/She will be creating a WhatsApp group with your fellow volunteers. Post your daily activity done and/or any difficulty you encounter during the programme.
6. You should maintain punctuality in attending the CSP. Daily attendance is compulsory.
7. You are expected to learn about the community/habitation and their problems.
8. Know the leaders and the officials of the community/habitation.
9. While in project, always wear your College Identity Card.
10. If your College has a prescribed dress as uniform, wear the uniform daily.
11. Identify at least five learning objectives in consultation with your Faculty Guide.

These learning objectives can address:

- a. Information about the community, including the realities and problems of the society.
- b. Need for creating awareness on socially relevant aspects/programs.
- c. Acquiring specific Life Skills.

12. Practice professional communication skills with team members, and with the leaders and officials of the community. This includes expressing thoughts and ideas effectively through oral, written, and non-verbal communication, and utilizing listening skills.
13. Be regular in filling up your Program Book. It shall be filled up in your own handwriting. Add additional sheets wherever necessary.
14. At the end of Community Service Project, you shall be evaluated by the person in-charge of the community/habitation to whom you report to.
15. There shall also be evaluation at the end of the community service by the Faculty Guide and the Principal.
16. Do not indulge in any political activities.
17. Ensure that you do not cause any disturbance to the inhabitants or households during your interaction or collection of data.
18. Be cordial but not too intimate with the persons you come across during your service activities.
19. You should understand that during this activity, you are the ambassador of your College, and your behavior during the community service programme is of utmost importance.
20. If you are involved in any discipline related issues, you will be withdrawn from the programme immediately and disciplinary action shall be initiated.
21. Do not forget to keep up your family pride and prestige of your College.
22. Remember that you are rendering valuable service to the society and your role in the community development will become part of the history of the community.

## **STUDENT'S DECLARATION**

I, T PENCHALA PAVAN KUMAR, a student of III year, B.Tech Program, Reg.No. 222U1A3760 of the **Department of Computer science and engineering (CYBER SECURITY)**, GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY College do here by declare that I have completed the mandatory community service from 27/05/24 to 21/07/24 in **Uses of Chemicals on Fruits and Vegetables** program under the Faculty Guideship of **Ms.SAHAJA,M.Tech**, Department of Computer Science and Engineering in GEETHANJALI INSTITUTE OF SCIENCE AND TECHNOLOGY.

**(Signature and Date)**

### **Endorsements**

**Faculty Guide:** Ms.SAHAJA,M.Tech, Assistant Professor

**Head of the Department:** Mr.T.SAI PRASAD REDDY,M.Tech, Assoc Professor

**Principal:** Dr. SUNDEEP KUMAR. K, M.Tech, Ph.D

## **CERTIFICATE FROM OFFICIAL OF THE COMMUNITY**

This is to certify that **T PENCHALA PAVAN KUMAR** Reg. No. **222U1A3760** of **GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY** underwent community service project **Uses of Chemicals on Fruits and Vegetables** in **BUCHIREDDYPALEM** from 27/05/24 to 21/07/24

The overall performance of the Community Service Volunteer during her community service is found to be..... (Satisfactory/Good).

**Authorized Signatory with Date and Seal**

## **ACKNOWLEDGMENTS**

We express our deepest sense of gratitude to Sri Mr. N. SUDHAKAR REDDY, B.Tech, SECRETARY and CORRESPONDENT, Geethanjali Institute of Science and Technology, Nellore, and other members of Management for providing all the facilities for this work.

We express our sincere thanks to our honorable Director Sri Dr. G. SUBBA RAO, MTech., Ph.D., MIE, LMISTE, MSAE., Geethanjali Institute of Science and Technology, Nellore, for his consistent help and valuable suggestions.

We express our sincere thanks to our honorable Principal Sri Dr. SUNDEEP KUMAR K, MTech., Ph.D., Geethanjali Institute of Science and Technology, Nellore, for his consistent help and valuable suggestions.

Our special thanks to T. SAI PRASAD REDDY, H.O.D of CSE(CS) Dept, Geethanjali Institute of Science and Technology, Nellore, for keen interest, critical, constructive and support each and every stage of project and for giving his advice whenever needed.

We would express heartfelt gratitude and indebtedness to our guide, Ms.Sahaja,M.Tech, Assistant Professor, Dept of CSE, Geethanjali Institute of Science and Technology, Nellore, for his keen interest, critical, constructive and support each and every stage of project and for giving his advice when ever needed.

During the entire course of dissertation work we received valuable academic input as well as moral support from other departments, general teaching and nonteaching faculty at Geethanjali Institute of Science and Technology, Nellore. We were motivated by the uphold and moral encouragement given to me by my beloved parents. Finally, we extend our sincere thanks to those who helped directly and indirectly during the completion of our project work.

**T PENCHALA PAVAN KUMAR**

**(222U1A3760)**

## ABSTRACT

Chemicals play a pivotal role in agriculture, particularly in the cultivation and preservation of fruits and vegetables. This abstract explores their uses, focusing on their benefits and potential concerns. Chemicals, such as pesticides and fertilizers, are commonly employed in fruit and vegetable farming to enhance crop yield and quality. Pesticides protect plants from pests and diseases, reducing crop losses and ensuring higher yields. They also contribute to food safety by minimizing contamination and spoilage during growth and storage.

Fertilizers enrich soil nutrients, promoting robust plant growth and improving crop productivity. They help maintain soil fertility, crucial for sustainable agriculture. Additionally, chemicals are used in post-harvest treatments to prolong shelf life, prevent decay, and maintain visual appeal, ensuring fresh produce reaches consumers worldwide. Despite these benefits, there are concerns about chemical residues on food and their potential impact on human health and the environment. Regulatory frameworks aim to mitigate risks through stringent safety standards and monitoring programs.

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## CHAPTER 1: EXECUTIVE SUMMARY

**Community Description:** The project was conducted in Buchireddypalem, a semi-urban area in Nellore District. The community faced challenges related to the excessive and unsafe use of chemicals on fruits and vegetables. Many local farmers and vendors relied on chemical pesticides, fertilizers, and artificial ripening agents, often exceeding permissible limits. These practices raised concerns about food safety, environmental damage, and health risks to consumers. The objective was to raise awareness about the responsible use of chemicals on fruits and vegetables and promote safe and sustainable agricultural practices.

### Summary of Activities:

- **Awareness Campaign:** A series of awareness campaigns were organized to educate the community about the dangers of excessive chemical use and the benefits of safe agricultural practices. Topics covered included the health risks associated with chemical residues, the advantages of organic farming, and the environmental impact of improper chemical usage.
- **Collaboration and Knowledge Sharing:** Efforts were made to foster collaboration and share knowledge about sustainable and chemical-free farming methods. Workshops and interactive sessions were held to demonstrate the use of natural fertilizers, biopesticides, and organic ripening techniques. Community members were encouraged to share traditional and eco-friendly farming methods.
- **Marine Resource Management Initiatives:** Initiatives such as promoting organic farming and the responsible use of chemicals were introduced. Farmers were trained on how to calculate the correct dosage for pesticides and fertilizers, the timing of their application, and the benefits of alternatives like crop rotation and composting. Community members were also educated on the importance of washing fruits and vegetables to reduce chemical residues.



## **Learning Objectives and Outcomes:**

- **Understanding the the Impact of Chemical Usage:** Community members gained a clear understanding of the harmful effects of excessive chemical use on health, the environment, and soil fertility. They were also made aware of the importance of balanced chemical usage and alternative practices.
- **Practical Implementation Skills:** The community acquired practical skills in adopting safe and sustainable farming techniques, such as preparing compost, using biopesticides, and applying natural ripening methods. Vendors and farmers learned safe practices to minimize chemical residues in produce.
- **Collaboration and Community Engagement:** The project fostered a collaborative environment among farmers, vendors, and local organizations. This encouraged community engagement in adopting safer agricultural practices and promoting food safety awareness.

## **Conclusion:**

The community service project on the responsible use of chemicals in fruits and vegetables successfully raised awareness and promoted safer agricultural practices in Buchireddypalem. Through activities such as awareness campaigns, knowledge-sharing sessions, and training initiatives, the project achieved its learning objectives and contributed to a healthier and more sustainable food system.

## CHAPTER 2: OVERVIEW OF COMMUNITY

**Historical Profile:** Nellore has a rich historical background and traces its origins back to ancient times. The region has seen the influence of various dynasties, including the Mauryas, Satavahanas, Cholas, and Pallavas. After India gained independence in 1947, Nellore became part of the state of Andhra Pradesh, which was formed in 1956. Nellore has also made progress in educational institutions and has a diverse cultural heritage with festivals celebrated with enthusiasm and traditional fervor. There are several temples and religious sites in and around Nellore. One of the prominent temples is the Sri Ranganatha swamy Temple.

**Community Diversity:** Nellore is a mix of various communities, each contributing to its social and cultural tapestry. Nellore consists of different communities of people speaking Telugu, Urdu, Malayalam etc. and also consists of people with different diverge religions like Muslims, Hindus, Christians, Brahmins and other communities. Nellore's diversity fosters a vibrant cultural exchange where people of different communities share their traditions, practices and cuisines, creating a harmonious and inclusive atmosphere.

**Traditions, Ethics, and Values:** The community of Nellore holds the traditions, ethics and values that are deeply rooted in its cultural fabric. Traditional customs and rituals play a significant role in the lives of community members. Respect for elders, hospitality and a strong sense of community support are highly valued. The Nellore upholds ethical principals such as honesty, integrity, and humility, which guide the behavior and interactions of its residents.

**Socio-Economic Conditions:** Nellore's economy is primarily based on agriculture with focus on crops like rice, sugarcane, pulses, and oilseeds. The region benefits from fertile soil and an extensive network of canals and waterways that aid in irrigation. Agriculture remains a significant employer in Nellore, providing livelihoods to a substantial portion of the population. Despite progress, there are sections of population in Nellore that face economic hardships and poverty. Income inequality might exist between urban and rural areas, and certain communities could be more vulnerable to socio-economic challenges and uplift marginalized communities.

## CHAPTER 3: COMMUNITY SERVICE PART

Promoting sustainable agricultural practices and raising awareness about the impact of chemical usage on fruits and vegetables are vital aspects of community service. By engaging in activities related to chemical usage on produce and promoting awareness, individuals can contribute to healthier communities, support sustainable farming, and ensure the well-being of future generations. Here are some ideas for community service related to the use of chemicals on fruits and vegetables and raising awareness:

**Farm Clean-Up Events:** Organize or participate in farm clean-up events in the community. Collaborate with local organizations, schools, or government bodies to identify suitable locations and obtain necessary permissions. Encourage community members to join in and help clean farming areas, educating them about the impact of chemical waste on soil health and the importance of maintaining a clean and safe agricultural environment.

- **Community Organic Farming Projects:** Establish community organic farming projects where people can come together to learn about and practice chemical-free farming methods. These projects not only promote sustainable food production but also create a sense of community and provide educational opportunities on organic farming, soil health, and sustainable agriculture.
- **Educational Workshops:** Conduct workshops or seminars on the impact of chemical usage on fruits and vegetables, such as the dangers of pesticides and the benefits of organic farming. Invite local experts and agricultural specialists to share their knowledge and expertise. Educate participants about the positive impacts of reducing chemical usage and encourage them to adopt chemical-free farming methods.
- **Awareness Campaigns:** Share information on the use of chemicals in fruits and vegetables, the health risks associated with chemical residues, and the benefits of consuming organic produce. Create engaging content like videos and activities to grab people's attention and encourage them to get involved. Use social media, local media, and community events to spread the message.
- **Volunteer Opportunities:** Collaborate with environmental organizations, agricultural bodies, or local government agencies that focus on promoting sustainable farming. Offer volunteer opportunities for community members to participate in activities like assisting in organic farming, maintaining pesticide-free zones, and conducting research on chemical-free alternatives. This hands-on experience will deepen their understanding and connection to the cause.

- Community service in promoting awareness about the use of chemicals on fruits and vegetables is a collaborative effort. Involve others in your initiatives, connect with like-minded people, and continuously inspire and motivate individuals to become environmentally conscious and actively participate in promoting chemical-free farming practices.



# GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY::NELLORE

## Department of Computer Science and Engineering

### ACTIVITY LOG FOR THE FIRST WEEK

<b>DATE &amp; TIME</b>	<b>BRIEF DESCRIPTION ABOUT DAILY ACTIVITY</b>	<b>LEARNING OUTCOMES</b>	<b>PERSON IN-CHARGE SIGNATURE</b>
<b>DAY-1</b>	Researched sustainable practices in various industries for community projects.	Gained insight into sustainability methods for community use.	
<b>DAY-2</b>	Studied environmental challenges like deforestation and water pollution.	Identified key issues for addressing through community projects.	
<b>DAY-3</b>	Explored how technology supports community development in agriculture and education.	Discovered technologies for enhancing community projects.	
<b>DAY-4</b>	Reviewed case studies on engaging communities in service projects.	Learned strategies for effective community involvement.	
<b>DAY-5</b>	Compiled research data and prepared a plan for the next phase.	Developed a clear direction for implementing activities and surveys.	
<b>DAY-6</b>	Refined project plan and outlined next steps for community engagement.	Finalized strategies for improving community participation.	

# WEEK ONE REPORT

## **INTRODUCTION:**

The first week of the community service project concentrated on researching various topics that could guide future activities. The goal was to explore areas related to environmental sustainability, technology, and community development to create a strong foundation for the project. This research phase was essential to ensure that we have a comprehensive understanding before moving forward with practical activities and engagement in the locality of Buchireddypalem.

## **WEEK ONE DETAILED REPORT:**

In the first week, we conducted in-depth research on five different topics that are crucial for the success of our community service project. Each day focused on a specific area, allowing us to gather relevant data and insights.

## **KEY FINDINGS:**

- Variety of Topics
- Environmental Concerns
- Role of Technology
- Need for Awareness
- Flexibility in Approach

- **CONCLUSION:**

The first week of research provided valuable insights into sustainable practices, environmental issues, and the role of technology in community service. With this knowledge, the project is better positioned for its next steps, including engaging the community and planning practical actions.



# GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY::NELLORE

## Department of Computer Science and Engineering

### ACTIVITY LOG FOR THE SECOND WEEK

DATE & TIME	BRIEF DESCRIPTION ABOUT DAILY ACTIVITY	LEARNING OUTCOMES	PERSON IN-CHARGE SIGNATURE
DAY-1	Reviewed previous research and chose "Uses of Chemicals on Fruits and Vegetables" as the focus for the project.	Agreed on project focus, setting the stage for future awareness campaigns on chemical usage in agriculture.	
DAY-2	Studied the impact of chemicals on fruits and vegetables, focusing on pesticides, preservatives, and natural alternatives.	Gained insight into the health and environmental effects of chemicals on produce and identified possible alternatives.	
DAY-3	Conducted surveys with local farmers and vendors to understand their current use of chemicals on fruits and vegetables.	Discovered traditional farming methods and assessed interest in adopting chemical-free farming practices.	
DAY-4	Reached out to local government bodies to discuss regulations and support for chemical-free farming initiatives.	Established initial government connections for potential support of sustainable farming and reduction of chemical usage.	
DAY-5	Developed a detailed plan for future awareness activities, based on gathered insights.	Created a structured plan to engage the community and collaborate with local authorities to promote chemical-free produce.	
DAY-6	Finalized plans for engaging local schools and communities in awareness efforts about the impact of chemicals on fruits and vegetables.	Defined strategies to involve schools and local groups in promoting safe and chemical-free agricultural practices.	

## **WEEK TWO REPORT**

### **INTRODUCTION:**

In the second week of the community service project, the team finalized the topic of "Uses of Chemicals on Fruits and Vegetables" for its relevance to health, agriculture, and environmental sustainability.

### **WEEK TWO DETAILED REPORT:**

The decision was based on the research conducted in the first week, which identified the use of chemicals on fruits and vegetables as a critical area for the community of Buchireddypalem. The week was dedicated to deepening our understanding of the impact of chemical usage on fruits and vegetables and developing plan to engage the community in awareness and educational efforts.

### **KEY FINDINGS:**

- Chemical Usage is Prevalent
- Lack of Awareness
- Health Concerns
- Support for Change
- Need for Education

- **CONCLUSION:**

The second week successfully established "Uses of Chemicals on Fruits and Vegetables" as the core focus of the community service project. By selecting this topic, we laid the foundation for promoting safe agricultural practices and engaging the community in awareness and educational efforts.





# GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY::NELLORE

## Department of Computer Science and Engineering

### ACTIVITY LOG FOR THE THIRD WEEK

DATE & TIME	BRIEF DESCRIPTION ABOUT DAILY ACTIVITY	LEARNING OUTCOMES	PERSON IN-CHARGE SIGNATURE
DAY-1	Researched types and industrial uses of chemicals on fruits and vegetables.	Understood the diversity and impact of chemical usage on fruits and vegetables.	
DAY-2	Studied environmental challenges related to the use of chemicals on fruits and vegetables.	Learned the impact of unsustainable chemical usage on health and ecosystems.	
DAY-3	Explored sustainable alternatives to chemical usage, such as organic farming.	Discovered how sustainability balances health, ecology, and agricultural productivity.	
DAY-4	Investigated the role of chemical usage in local farming livelihoods.	Gained insights into the social and economic implications of chemical usage in farming.	
DAY-5	Reviewed policies and regulations for chemical usage and food safety.	Understood regulatory frameworks for safe usage and alternatives to harmful chemicals.	
DAY-6	Analyzed innovations in organic farming and chemical-free produce development.	Learned about emerging technologies and sustainable farming practices.	

## WEEK THREE REPORT

### **INTRODUCTION:**

The following report presents the findings of a third-week-long preliminary survey conducted on “Uses of Chemicals on Fruits and Vegetables.” The fourth week will focus on the survey and awareness activities conducted in the locality of Buchireddypalem and its surrounding areas. This week also focused on preparing next week’s schedules based on the data from the first and second surveys.

### **WEEK THREE DETAILED REPORT:**

In the third week, we started implementing our survey plans and awareness activities titled “Uses of Chemicals on Fruits and Vegetables” in the northern and western parts of Buchireddypalem. Through this, we discovered some key points and received recommendations from the local population. Midway through the survey, we found that most people were not fully aware of the harmful effects of chemicals on fruits and vegetables. This journey also improved our skills in survey conducting, data analysis, and community engagement. By the end of the week, we had prepared a schedule for next week’s survey based purely on the data from the fourth and fifth surveys.

### **CASE STUDY-1:**

<b>Name</b>	Sarath
<b>Age</b>	40
<b>Gender</b>	Male
<b>Plant</b>	Mango
<b>Disease</b>	Powdery mildew, Anthracose
<b>Pesticides Used</b>	Copper oxychloride, Hexaconazole

## CASE STUDY-2:

<b>Name</b>	Ramaiah
<b>Crop</b>	35
<b>Gender</b>	Male
<b>Plant</b>	Sampangi
<b>Disease</b>	Leaf blight, Stem rot
<b>Pesticide Used</b>	Metalaxyl, Carbofuran

## KEY FINDINGS:

- Lack of Awareness about Harmful Chemicals
- Excessive Use of Chemical Pesticides and Fertilizers
- Limited Use of Organic Farming Practices
- Health Concerns Related to Chemical Residues

## RECOMMENDATIONS:

- **Increase Awareness Activities:** The locals of Buchireddypalem suggested that we increase our awareness activities to cover all of Buchireddypalem and its surrounding areas. They also suggested focusing on schools and local markets.
- **Conduct Awareness Events:** They recommended that we conduct awareness events focused on chemical-free farming techniques and the health benefits of consuming organic fruits and vegetables.
- **Expand the Survey:** Community members suggested expanding our survey to different areas of Buchireddypalem to gather a more comprehensive data set and ensure a thorough understanding of the community's relationship with chemical usage in agriculture.

## • CONCLUSION:

The third week was successfully utilized, and we identified specific areas where further initiatives should be implemented. Additionally, we developed a clearer strategy for the next week's survey, building on the insights from the fourth and fifth surveys.



Fig-1



Fig-2



Fig-3



Fig-4



# GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY::NELLORE

## Department of Computer Science and Engineering

### ACTIVITY LOG FOR THE FOURTH WEEK

<b>DATE &amp; TIME</b>	<b>BRIEF DESCRIPTION ABOUT DAILY ACTIVITY</b>	<b>LEARNING OUTCOMES</b>	<b>PERSON IN-CHARGE SIGNATURE</b>
<b>DAY-1</b>	Studied advancements in harvesting, processing, and preserving fruits and vegetables.	Learned about innovations enhancing efficiency and sustainability.	
<b>DAY-2</b>	Explored local markets to understand demand and distribution of fruits and vegetables.	Gained insights into supply chains and consumer preferences.	
<b>DAY-3</b>	Researched health effects and impacts of chemicals on fruits and vegetables.	Understood the risks of chemical residues on human health.	
<b>DAY-4</b>	Conducted surveys with community members in the fruit and vegetable supply chain.	Learned about challenges and opportunities for promoting organic alternatives.	
<b>DAY-5</b>	Evaluated findings and brainstormed project titles addressing key issues.	Selected a relevant topic for the community service project.	
<b>DAY-6</b>	Developed an action plan for the project, including objectives and methods.	Outlined a clear roadmap to address identified challenges.	

## WEEK FOUR REPORT

### INTRODUCTION:

The fourth week of the community service project focused on further survey activities and raising awareness about the Uses of Chemicals on Fruits and Vegetables in the locality of Buchireddypalem and its surrounding areas. Building on the data from the third week's findings, this week aimed to cover more areas and address the recommendations given by the local community. A significant portion of this week was dedicated to engaging with schools, markets, and local farmers, gathering additional data, and implementing more targeted awareness activities.

### WEEK FOUR DETAILED REPORT:

In the fourth week, we expanded our survey to the eastern and southern parts of Buchireddypalem, based on the data gaps identified in Week One. Our awareness activities were enhanced by targeting schools, where we presented the importance of chemical-free farming, and local markets, where we engaged vendors and farmers about the health risks and environmental impact of chemicals on fruits and vegetables.

### CASE STUDY-1:

<b>Name</b>	Suresh
<b>Age</b>	49
<b>Gender</b>	Male
<b>Plant</b>	Jasmine
<b>Disease</b>	Root rot, rust, powdery mildew
<b>Pesticide Used</b>	Carbendazim, chlorothalonil

## CASE STUDY-2:

Name	Ramanaiah
Age	38
Gender	Male
Plant	Chilli
Disease	Bacterial leaf spot, mosaic virus
Pesticide Used	Copper hydroxide, copper oxychloride

### KEY FINDINGS:

- **Lack of Awareness:** Many people were not aware of the harmful effects of chemical use on fruits and vegetables.
- **Concerns About Costs:** Farmers believed that switching to organic methods might reduce their earnings.
- **Youth Engagement:** Young people showed interest in learning about safer agricultural practices.
- **Reliance on Traditional Practices:** Many farmers continue to rely on conventional methods of farming using chemicals.

### RECOMMENDATIONS:

- **Enhance Educational Programs:** Conduct more frequent and targeted educational programs in schools and local communities, focusing on the long-term health benefits of consuming chemical-free fruits and vegetables.
- **Collaborate with Local Authorities:** Partner with local government bodies to provide support and resources for farmers transitioning to organic farming, possibly introducing subsidies or training programs.
- **Promote Safer Farming Techniques:** Encourage the adoption of sustainable farming techniques through hands-on workshops and demonstrations.

- **CONCLUSION:**

In the fourth week, we expanded our efforts and learned more about the community's challenges. The key focus going forward will be on increasing awareness, supporting farmers with sustainable farming practices, and collaborating with local authorities for better results.



Fig-1



Fig-2





# GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY::NELLORE

## Department of Computer Science and Engineering

### ACTIVITY LOG FOR THE FIFTH WEEK

DATE & TIME	BRIEF DESCRIPTION ABOUT DAILY ACTIVITY	LEARNING OUTCOMES	PERSON IN-CHARGE SIGNATURE
DAY-1	Studied technologies used in the application of chemicals on fruits and vegetables.	Learned about advanced systems for monitoring and controlling chemical usage.	
DAY-2	Visited fruit and vegetable farms to observe chemical usage practices.	Understood real-world challenges and innovations in reducing chemical use.	
DAY-3	Researched the effects of chemical residues on fruits and vegetables.	Analyzed how pesticides, herbicides, and fertilizers impact product quality.	
DAY-4	Conducted surveys with experts on safe chemical usage in agriculture.	Gained practical insights into current methods and sustainable practices.	
DAY-5	Reviewed findings and brainstormed ideas for reducing chemical usage.	Proposed solutions to reduce chemical usage and promote organic farming.	
DAY-6	Prepared an action plan for implementing a chemical usage awareness project.	Prepared an action plan for implementing a chemical usage awareness project.	

## WEEK FIVE REPORT

### **INTRODUCTION:**

This This report summarizes the activities conducted during the fifth week of our project on the "Uses of Chemicals on Fruits and Vegetables." Our primary objective this week was to raise awareness about the effects of chemicals on fruits and vegetables, enhance stakeholder engagement, and ensure the practical application of chemical-free farming practices in local agricultural communities.

### **WEEK FIVE DETAILED REPORT:**

In the fifth week, we expanded our survey to the western and northern parts of Buchireddypalem, addressing the data gaps identified in Week Two. Our awareness activities were enhanced by targeting local farms and vegetable markets, where we educated farmers on the importance of chemical-free farming practices, and community centers, where we engaged fruit and vegetable vendors about the benefits of organic produce and the dangers of chemical residues for long-term health and sustainability.

### **CASE STUDY-1:**

<b>Name</b>	Sudhakar
<b>Age</b>	42
<b>Gender</b>	Male
<b>Plant</b>	Banana
<b>Disease</b>	Panama wilt, cigar end rot
<b>Pesticide Used</b>	Propiconazole, mancozeb

## CASE STUDY-2:

Name	Desapande
Age	35
Gender	Male
Plant	Lady's finger
Disease	Charcoal rot, powdery mildew
Pesticide Used	Metalaxyl, potassium bicarbonate

### KEY FINDINGS:

- **Demonstration of Chemical-Free Farming:** The demonstration of natural alternatives to chemical pesticides and fertilizers was a key success, providing farmers with practical
- knowledge.
- **Awareness Sessions:** Awareness sessions effectively communicated the health risks associated with chemical residues on fruits and vegetables.
- **Stakeholder Engagement:** We successfully established communication with local farmers and stakeholders, securing their support and participation in the project's chemical-free farming initiatives.

### RECOMMENDATIONS:

- **Enhanced Stakeholder Engagement:** Successfully established communication with local authorities and key stakeholders, securing their support and participation in the project's chemical-free farming initiatives.
  - **Improved Awareness and Knowledge Sharing:** Awareness sessions effectively communicated the importance of chemical-free farming and organic methods, with farmers showing interest in applying these techniques to reduce health risks and increase market demand for their produce.
  - **Improved Project Management and Planning:** The project team successfully reviewed the week's progress and used the findings to create a more focused plan for the next phase of the project, including targeted training and resource support for chemical-free farming techniques
- **CONCLUSION:**

The fifth week of the "Uses of Chemicals on Fruits and Vegetables" project marked significant progress in both awareness and practical engagement with local farmers and vendors. By introducing chemical-free farming practices, conducting practical demonstrations, and gathering valuable feedback, the project is moving closer to its goal of fostering a healthier and more sustainable agricultural community.



Fig-1



Fig-2



Fig-3

Discussing about seeding prices





# GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY::NELLORE

## Department of Computer Science and Engineering

### ACTIVITY LOG FOR THE SIXTH WEEK

DATE & TIME	BRIEF DESCRIPTION ABOUT DAILY ACTIVITY	LEARNING OUTCOMES	PERSON IN-CHARGE SIGNATURE
DAY-1	Studied advancements in disease management technologies.	Learned about modern methods for disease prevention.	
DAY-2	Visited marine farms to observe disease management practices.	Understood challenges and effectiveness of current practices.	
DAY-3	Researched common diseases affecting fruits and vegetables.	Identified symptoms, transmission, and impacts of diseases.	
DAY-4	Conducted surveys with experts on disease management challenges.	Gained insights into common issues and possible solutions.	
DAY-5	Reviewed findings and brainstormed project ideas.	Proposed ways to enhance disease management practices.	
DAY-6	Created a detailed action plan for implementing solutions.	Developed a strategy to improve disease control measures.	

## WEEK SIX REPORT

### **INTRODUCTION:**

The management of chemicals used on fruits and vegetables is a critical aspect of ensuring public health and promoting sustainable agricultural practices. Effective prevention, monitoring, and control of chemical usage are essential to minimize the impact of harmful residues on human health and the environment. This week's focus was on understanding and improving chemical usage practices in fruit and vegetable farming to enhance food safety and promote eco-friendly farming methods.

### **WEEK SIX DETAILED REPORT:**

In Week 6, we focused on advancing our understanding of chemical usage and improving sustainable practices in fruit and vegetable farming. Building on the data collected in Week 5, this week involved expanding our survey efforts to address data gaps, enhancing awareness activities, and engaging with local stakeholders to promote organic farming methods and efficient chemical usage management.

### **CASE STUDY-1:**

<b>Name</b>	Subbarao
<b>Age</b>	32
<b>Gender</b>	Male
<b>Plant</b>	Cotton
<b>Disease</b>	Bacterial blight, wilt
<b>Pesticide Used</b>	Sulphur based fungicides

## CASE STUDY-2:

<b>Name</b>	Ashok
<b>Age</b>	40
<b>Gender</b>	Male
<b>Plant</b>	Brinjal
<b>Disease</b>	Bacterial wilt, collar rot
<b>Pesticide Used</b>	Herbicides, fungicides

## KEY FINDINGS:

- Recent developments in organic alternatives and bio-fertilizers are significantly improving chemical usage management in fruit and vegetable farming.
- Visits to local farms revealed varying practices in chemical usage, with some farmers adopting sustainable alternatives while others continued using synthetic chemicals.
- The excessive use of chemicals can severely affect the health and safety of consumers, leading to potential health risks and environmental pollution.

## RECOMMENDATIONS:

- **Promote Use of Organic Alternatives:** Encourage the adoption of organic pesticides, bio-fertilizers, and natural pest control methods to reduce dependence on synthetic chemicals.
- **Improve Water Quality for Washing Produce:** Implement water treatment technologies to ensure fruits and vegetables are washed with clean water, reducing the risk of contamination from chemical residues.
- **Regular Monitoring and Evaluation:** Conduct regular assessments of chemical usage practices and promote adherence to safety standards through workshops and training for farmers.

## • CONCLUSION:

Week 6's activities have provided valuable insights into the management of chemicals used on fruits and vegetables. By addressing data gaps, enhancing stakeholder engagement, and promoting best practices, we aim to improve food safety and support sustainable agricultural practices that protect human health and the environment.



Fig-1



Fig-2



Fig-3



Fig-4





# GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY::NELLORE

## Department of Computer Science and Engineering

### ACTIVITY LOG FOR THE SEVENTH WEEK

DATE & TIME	BRIEF DESCRIPTION ABOUT DAILY ACTIVITY	LEARNING OUTCOMES	PERSON IN-CHARGE SIGNATURE
DAY-1	Planned the website structure, including pages like "About," "survey," "Advantages," "Disadvantages," and "FAQ."	Created a clear and organized website framework.	
DAY-2	Designed wireframes and mockups focusing on aesthetics and usability.	Developed an appealing and user-friendly design.	
DAY-3	Developed the "About the Project" pages.	Completed pages with engaging visuals and clear content.	
DAY-4	Created the "Survey" and "Key Findings" pages, detailing actions and outcomes.	Provided detailed and accurate project information.	
DAY-5	Tested the website for functionality across devices and browsers.	Ensured a fully functional and user-friendly platform.	
DAY-6	Collected feedback from users and made improvements to enhance the website.	Improved user experience based on feedback.	

# WEEK SEVEN REPORT

## INTRODUCTION:

In the seventh week of the community service project, the focus was on developing a website to showcase all project details, including its goals, activities, and findings. The aim was to provide an accessible online platform for the community and stakeholders to stay informed and engaged with the project's progress.

## WEEK SEVEN DETAILED REPORT:

By developing this website, we aimed to make the information easily accessible to the community, stakeholders, and interested parties. The week was divided into different tasks related to planning, designing, and developing various pages of the website.

## KEY FINDINGS:

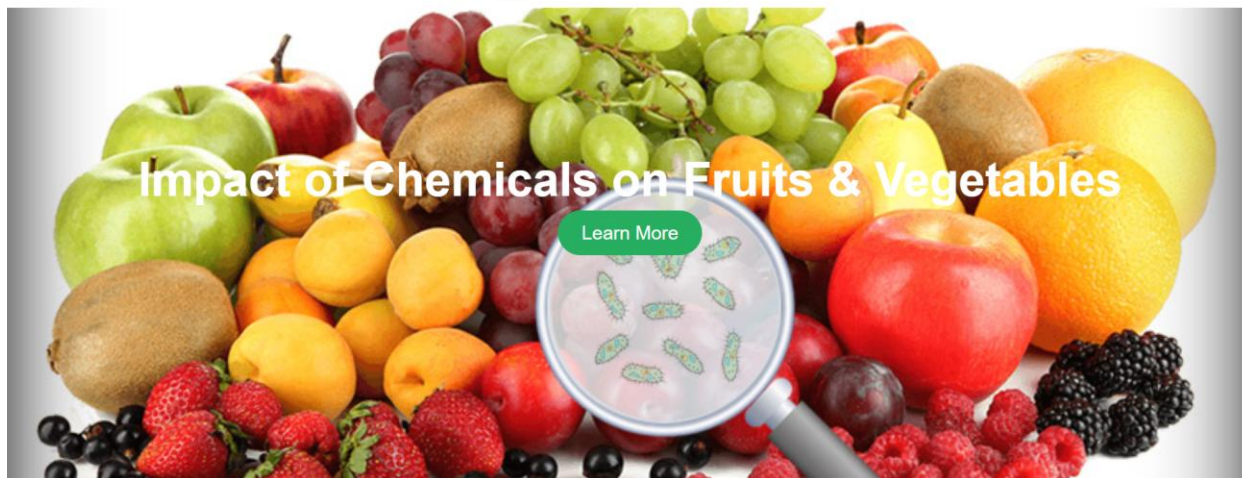
- Lack of Awareness about Sustainable Marine Products
- Overharvesting of Marine Resources
- Low Use of Sustainable Fishing Practices
- Limited Interest in Marine Conservation

## RECOMMENDATIONS:

- **Regular Updates:** Continue to update the website regularly with new activities, findings, and milestones to keep the community engaged.
- **Add Interactive Features:** Consider adding interactive features like a blog or forum for community feedback and discussion about the project.
- **Optimize for SEO:** Improve the website's visibility by optimizing it for search engines, ensuring that it reaches a wider audience.
- **Expand Content:** Include additional resources such as downloadable reports, educational materials, and links to external resources related to marine product sustainability.

- **CONCLUSION:**

The seventh week was a significant milestone for the project as we successfully developed and launched a website to serve as a digital hub for the community service initiative. The website now acts as a platform for sharing the project's goals, activities, and key findings with a wider audience, ensuring ongoing engagement and transparency.



**Fig-1:**



## About the Project

Aims to raise awareness about the impact of chemicals like pesticides and preservatives 🍌. While they help increase crop yield and extend shelf life 🕒, they can also pose health risks 🤒 and harm the environment 🌍. Excessive chemical use can lead to pesticide residues on food and damage to beneficial insects 🐝. The project will focus on promoting safer, organic alternatives 🍏 and encouraging sustainable farming practices 🌱. Through surveys 📊 and awareness campaigns 📢, it aims to educate the community about the importance of reducing chemical usage.

**Fig-2:**



## Survey Details

The survey for the "Uses of Chemicals on Fruits and Vegetables" bproject aimed to understand public awareness and perceptions regarding the use of chemicals in food production. The survey collected responses from farmers, consumers, and market vendors to assess their knowledge of chemical usage, health risks, and the need for sustainable practices. Key insights revealed that while many people acknowledged the role of chemicals in preserving freshness and pest protection, there was significant concern about health hazards and environmental pollution. The survey emphasized the need for greater awareness about the safe use of chemicals, alternative natural solutions, and the importance of promoting organic farming practices. This information serves as a foundation for community education and policy recommendations aimed at reducing chemical dependency in agriculture.

## Survey Photos

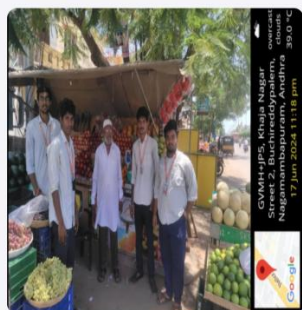
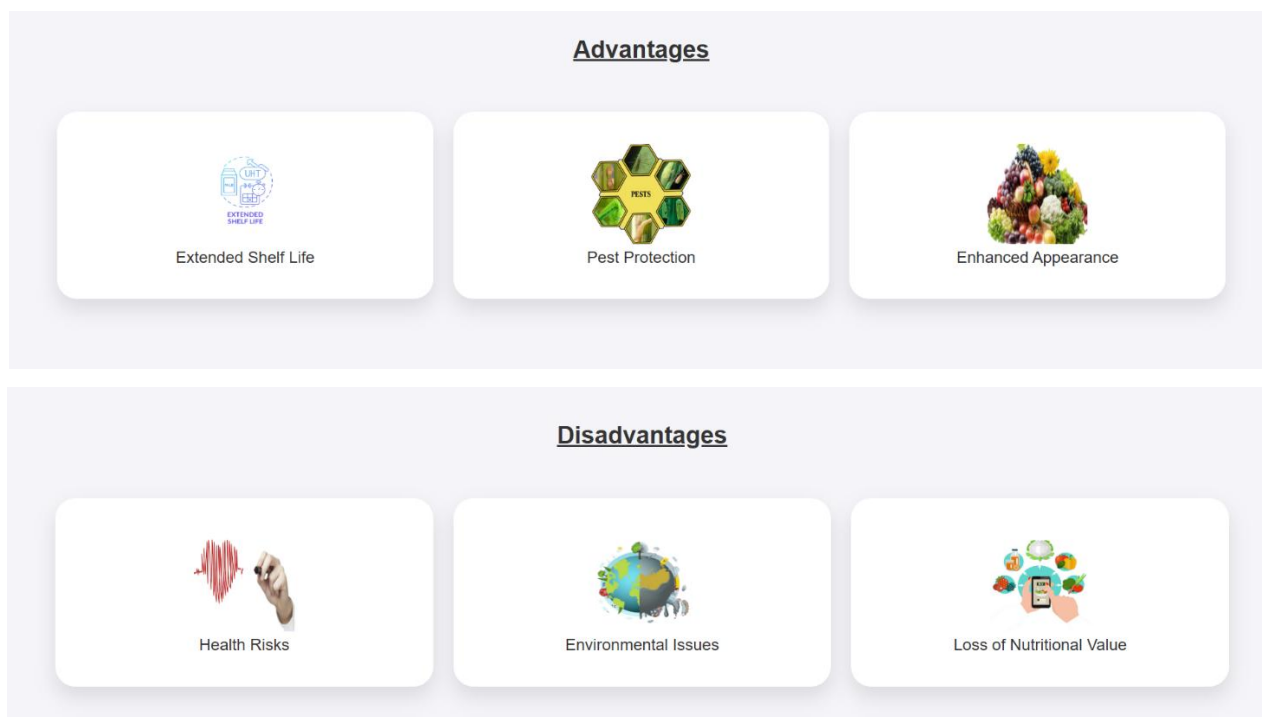
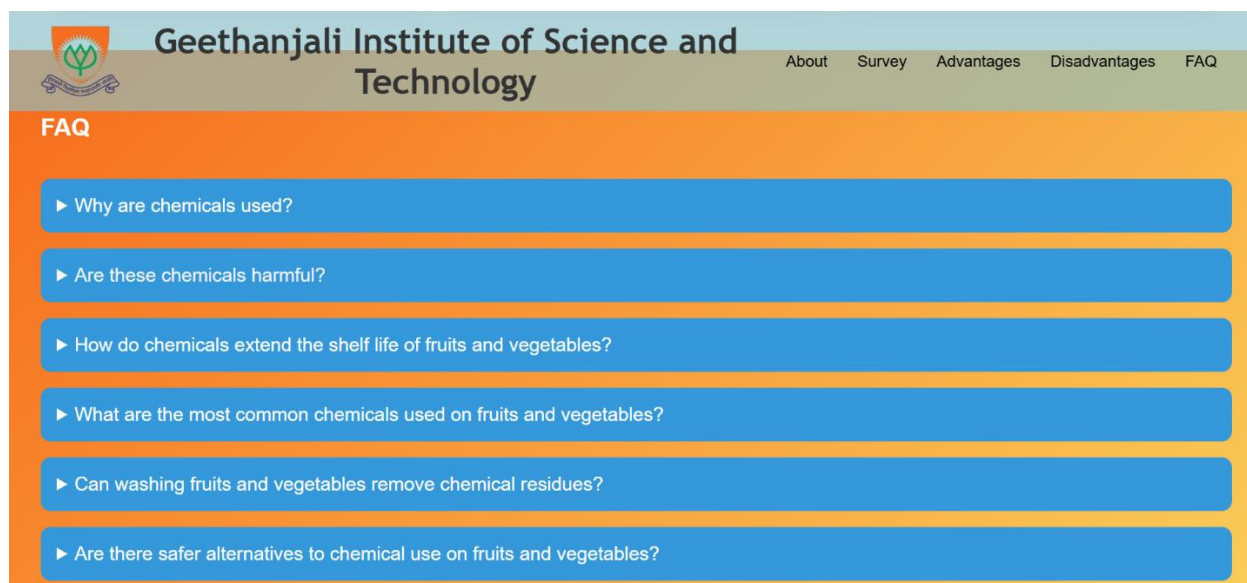


Fig-3:





**Fig-4:**



**Fig-5:**

**Website URL :** <https://github.io/csp-project/>



# GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY::NELLORE

## Department of Computer Science and Engineering

### ACTIVITY LOG FOR THE EIGHTH WEEK

DATE & TIME	BRIEF DESCRIPTION ABOUT DAILY ACTIVITY	LEARNING OUTCOMES	PERSON IN-CHARGE SIGNATURE
DAY-1	Collected all project data, including reports, surveys, and feedback.	Compiled a comprehensive repository of project materials.	
DAY-2	Outlined the document structure with sections like Introduction, Activities, and Key Findings.	Established a clear and logical document flow.	
DAY-3	Drafted detailed content for all sections, focusing on insights and recommendations.	Prepared a complete draft covering all project aspects.	
DAY-4	Reviewed and edited the draft to ensure clarity, consistency, and professionalism.	Finalized polished content for presentation.	
DAY-5	Designed the document layout with visuals and completed formatting for submission.	Created a professional and visually appealing document.	
DAY-6	Presented the finalized document to stakeholders and collected feedback for future improvement.	Successfully shared the document and received actionable feedback.	

# WEEK EIGHT REPORT

## **INTRODUCTION:**

The eighth week of the community service project was dedicated to preparing a comprehensive document summarizing all the activities, findings, and outcomes of the project. This document aims to serve as a final record of the project, ensuring that all information is clearly documented for future reference and potential use by stakeholders.

## **WEEK EIGHT DETAILED REPORT:**

During the eighth week, the team systematically gathered data from all previous weeks, organized it into sections, and used visuals and formatting to create a professional, detailed project document. The document was finalized after thorough review and editing to ensure accuracy and clarity.

## **KEY FINDINGS:**

- **Comprehensive Documentation**
- **Clarity and Accessibility**
- **Enhanced Presentation**

## **RECOMMENDATIONS:**

- **Use as a Reference:** Share the document with local authorities, community members, and other stakeholders to inform future projects.
- **Digital Distribution:** Consider uploading the document to the project website for easy access and broader reach.
- **Maintain Updates:** Ensure that the document is updated if further developments occur in the project.

## **CONCLUSION:**

The eighth week marked the successful culmination of the community service project with the preparation of a detailed and well-organized document. This document captures the entire journey of the project, from its objectives to its outcomes, serving as a valuable resource for future initiatives and continued community engagement.

## CHAPTER 5: OUTCOMES DESCRIPTION

- **Awareness and Knowledge:** The survey revealed the level of awareness and knowledge among the residents of Buchireddypalem regarding the uses of chemicals on fruits and vegetables. It identified individuals' familiarity with chemical residues, their potential health hazards, and the benefits of organic farming practices.
- **Current Practices:** The survey provided insights into the current farming practices and chemical usage in fruit and vegetable cultivation within the community.
- **Perceptions and Attitude:** The survey assessed the perceptions and attitudes of the residents toward chemical-free farming and organic produce. It identified their awareness levels and their current practices related to reducing chemical use in agriculture.
- **Challenges and Obstacles:** The survey highlighted the challenges and obstacles the community faces regarding adopting chemical-free farming methods. These insights helped identify barriers that need to be addressed and guided the development of strategies and interventions.
- **Community engagement and Support:** The survey actively engaged community members, encouraging their involvement in promoting organic farming practices and fostering collaboration. It also highlighted the support expected for the proposed chemical-free farming project.
- **Recommendations and Suggestions:** The survey provided recommendations and guidance for the action plan regarding the use of chemicals on fruits and vegetables. It included strategies for engaging the community and implementing effective chemical-free farming practices.



## **QUESTIONNAIRE:**

1. Have you ever purchased or consumed chemical-free fruits and vegetables? If so, how often?
2. Are you aware of any certifications or labels that indicate fruits and vegetables are chemical-free?
3. Have you participated in any awareness programs or campaigns promoting chemical-free farming?
4. How willing are you to support businesses that sell organic and chemical-free produce?
5. How familiar are you with terms like "chemical-free farming" or "organic produce"?
6. What sources of information (news, social media, educational programs) have influenced your knowledge about chemicals used on fruits and vegetables?
7. Do you think using chemical-free farming methods will increase the cost of fruits and vegetables?
8. In your opinion, how important is it for the government to promote chemical-free farming practices?
9. When buying fruits and vegetables, do you consider the health risks associated with chemical residues?
10. Would you be willing to pay more for certified organic or chemical-free produce?
11. Have you noticed any health issues that you believe could be linked to consuming chemically treated fruits and vegetables?
12. Do you actively seek out vendors or markets that sell chemical-free produce?
13. What challenges do you face in accessing chemical-free fruits and vegetables in your area?
14. Do you think schools and colleges should include awareness sessions on the dangers of chemical residues on fruits and vegetables?
15. How do you think chemical usage on fruits and vegetables affects the environment?
16. What role do you think farmers' markets can play in promoting chemical-free produce?
17. Are you aware of natural alternatives to chemical pesticides and fertilizers used in farming?
18. How would you rate the current level of community awareness about the harmful effects of chemicals on produce (Low, Medium, High)?
19. What steps do you think local authorities should take to promote chemical-free farming?
20. Do you have any suggestions for initiatives that can increase the production and consumption of chemical-free fruits and vegetables?

## **PROBLEMS IDENTIFIED IN THE COMMUNITY:**

- **Lack of Awareness:** The major problem identified in the community is the lack of awareness regarding the harmful effects of chemicals on fruits and vegetables and the benefits of consuming chemical-free produce.
- **Lack of implementation:** There is no proper guidance or support for implementing chemical-free farming practices. A small percentage of the community is aware of these practices, and there is a gap between knowledge and action.
- **Excessive Use of Chemicals:** The survey revealed that there is a heavy reliance on chemical pesticides and fertilizers, leading to health risks and environmental damage.
- **Lack of Chemical-Free Farming Initiatives:** The survey indicated a lack of organized activities focused on promoting chemical-free farming practices.
- **Environmental Degradation:** Overfishing excessive use of chemicals in farming leads to soil degradation, water pollution, and a decline in biodiversity.

## **SHORT TERM ACTION PLAN:**

### ➤ **Awareness and Education:**

- Conduct awareness programs and campaigns to educate the community about the dangers of chemicals on fruits and vegetables and the benefits of organic produce.
- Organize community events and demonstrations to showcase the advantages of natural farming practices.

### ➤ **Preparing the Survey:**

- Assess the community's understanding of chemical-free farming practices, identify areas of concern, and evaluate the willingness to adopt healthier practices.
- Use a mix of survey questions to gather diverse insights on the community's knowledge and preferences.

➤ **Conducting the Survey:**

- Encourage community members to complete the survey within a specific timeframe to gather data efficiently and ensure comprehensive insights.

➤ **Analyzing the Survey Results:**

- Analyze the survey data to identify common themes, preferences, and priorities regarding chemical-free farming and consumption.
- Determine which aspects of the survey results are most crucial for the short-term action plan.

**LONG TERM PLAN OF ACTION:**

➤ **Policy development and Implementation:**

- Collaborate with local authorities to develop and implement policies that promote chemical-free farming practices.
- Advocate for subsidies and support for farmers transitioning to natural farming methods.

➤ **Research and Innovation:**

- Invest in research to explore innovative solutions for organic farming and natural pest control methods.
- Collaborate with agricultural experts to educate the community on the latest sustainable farming technologies.

➤ **Strengthen Community Engagement:**

- Foster community participation and evaluate the effectiveness of initiatives promoting chemical-free farming.
- Encourage community-led programs that promote healthy practices and involve residents in hands-on farming activities.

➤ **Continuous Monitoring and Evaluation:**

- Regularly assess the effectiveness of initiatives, monitor soil and crop health, and track community adoption of chemical-free practices.
- Ensure proper management and enforcement of sustainable farming practices to guarantee long-term benefits.

# **MINI-PROJECT REPORT: USES OF CHEMICALS ON FRUITS AND VEGETABLES**

## **INTRODUCTION:**

This mini-project focuses on raising awareness about the effects of chemical usage on fruits and vegetables and promoting healthier, chemical-free farming and consumption practices. The project aims to educate the community on the risks of chemical residues in food and the importance of adopting natural farming techniques.

## **IMPORTANCE OF UNDERSTANDING CHEMICAL USAGE IN FARMING:**

Understanding the impact of chemicals on fruits and vegetables is essential for ensuring public health, maintaining soil fertility, and protecting the environment. The project seeks to reduce the harmful effects of chemical pesticides and fertilizers by encouraging the adoption of organic farming and safer agricultural practices.

## **BENEFITS OF CHEMICAL-FREE FARMING IN THE COMMUNITY:**

Chemical-free farming practices provide numerous long-term benefits, including improved soil health, reduced environmental pollution, and safer, healthier produce for consumers. Educating the community about the advantages of natural farming methods and fostering participation can lead to a healthier population and a more sustainable agricultural system.

## **CONCLUSION:**

The project has successfully raised awareness about the risks associated with chemical usage on fruits and vegetables and emphasized the importance of transitioning to chemical-free farming. By engaging the community and local stakeholders, the initiative has laid the foundation for continued efforts to promote safer farming and consumption practices, ensuring a healthier and more sustainable environment for all.

## CHAPTER 6: RECOMMENDATIONS AND CONCLUSIONS OF THE MINI PROJECT

### **RECOMMENDATIONS:**

To sustain the momentum generated by the project, several recommendations were made:

- **Expand Awareness Campaigns:** Continue and expand awareness campaigns within the community, focusing on schools, public institutions, and local markets. Regular activities such as chemical-free farming drives and educational programs can strengthen the community's commitment to safer agricultural practices.
- **Enhance Community Participation:** Organize more community events where locals can actively participate in promoting and adopting chemical-free farming practices.
- **Involve Local Authorities and NGOs:** Partner with local authorities and environmental organizations to provide ongoing support and resources for future projects aimed at reducing chemical usage in farming.

### **AWARENESS RECOMMENDATIONS:**

- **School Programs:** Initiate environmental education programs in schools to instill the importance of chemical-free farming and healthy food practices at a young age. Encourage students to engage in practical activities like organic farming and gardening.
- **Public Workshops:** Organize workshops and seminars to educate the public about the risks associated with chemicals on fruits and vegetables and provide tips on adopting safer farming practices.
- **Digital Campaigns:** Use social media and local websites to promote awareness events, share information on the dangers of chemical residues, and keep the public informed about the progress of the initiative.

### **CONCLUSIONS:**

The “Uses of Chemicals on Fruits and Vegetables” project has highlighted the importance of community-driven efforts to reduce chemical usage in agriculture. The collaboration between the community, farmers, and authorities has led to increased awareness of the risks of chemical residues and the benefits of chemical-free farming. The recommendations aim to build on this momentum, ensuring that the community remains committed to healthier and more sustainable agricultural practices.

# STUDENT SELF-EVALUATION FOR THE COMMUNITY SERVICEPROJECT

**Student Name: T. PENCHALA PAVAN KUMAR**

**Registration No: 222U1A3760**

**Period of CSP: 8 WEEKS**

**Date of Evaluation:**

**Name of the Person in-charge: Ms.SAHAJA, M.Tech,**

**Name of the College: GEETHANJALI INSTITUTE OF SCIENCE AND TECHNOLOGY**

**Please rate your performance in the following areas:**

**Rating Scale: 1 is lowest and 5 is highest rank**

1	Oral communication	1	2	3	4	5
2	Written communication	1	2	3	4	5
3	Pro activeness	1	2	3	4	5
4	Interaction ability with community	1	2	3	4	5
5	Positive Attitude	1	2	3	4	5
6	Self-confidence	1	2	3	4	5
7	Ability to learn	1	2	3	4	5
8	Work Plan and organization	1	2	3	4	5
9	Professionalism	1	2	3	4	5
10	Creativity	1	2	3	4	5
11	Quality of work done	1	2	3	4	5
12	Time Management	1	2	3	4	5
13	Understanding the Community	1	2	3	4	5
14	Achievement of Desired Outcomes	1	2	3	4	5
15	Overall performance	1	2	3	4	5

**Date:**

**Signature of the Student**

## EVALUATION BY THE PERSON IN-CHARGE IN THE COMMUNITY/HABITATION

**Student Name: T PENCHALA PAVAN KUMAR**

**Registration No: 222U1A3760**

**Period of CSP: 8 WEEKS**

**Date of Evaluation:**

**Name of the Person in-charge: Ms.SAHAJA, M.Tech,**

**Please rate the student's performance in the following areas:**

**Please note that your evaluation shall be done independent of the student's self-evaluation**

**Rating Scale: 1 is lowest and 5 is highest rank**

1	Oral communication	1	2	3	4	5
2	Written communication	1	2	3	4	5
3	Pro activeness	1	2	3	4	5
4	Interaction ability with community	1	2	3	4	5
5	Positive Attitude	1	2	3	4	5
6	Self-confidence	1	2	3	4	5
7	Ability to learn	1	2	3	4	5
8	Work Plan and organization	1	2	3	4	5
9	Professionalism	1	2	3	4	5
10	Creativity	1	2	3	4	5
11	Quality of work done	1	2	3	4	5
12	Time Management	1	2	3	4	5
13	Understanding the Community	1	2	3	4	5
14	Achievement of Desired Outcomes	1	2	3	4	5
15	Overall performance	1	2	3	4	5

**Date:**

**Signature of the Supervisor**