



# **Program Book**

## **Community Service Project**

**AP STATE COUNCIL OF HIGHER  
EDUCATION**  
(A STATUTORY BODY OF GOVERNMENT OF ANDHRA PRADESH)

**PROGRAM BOOK  
FOR  
COMMUNITY SERVICE PROJECT**

**Name of the student** : Gattu Thanuja

**Name of the College** : Narasaraopeta Engineering College

**Registration Number** : 21471A0522

**Period of CSP** : From: \_\_\_\_\_ To: \_\_\_\_\_

**Name of the Community** : Reducing Agricultural Pesticides to improve Human Life Span

**Address of the Habitation** : Petlurivaripalem

**COMMUNITY SERVICE PROJECT REPORT ON  
Reducing Agricultural Pesticides to improve Human Life Span**

Submitted in accordance with requirement of the degree of

B. Tech-CSE

**Name of the College** : Narasaraopeta Engineering College

**Department** : Computer Science and Engineering

**Name of the Faculty Guide** : Dr.K.Lakshminadh

**Duration of the CSP** : From: To:

**Name of the student** : Gattu Thanuja

**Program of Study** : Computer Science and Engineering

**Year of Study** : 3<sup>rd</sup> Year

**Roll Number** : 21471A0522

**Date of Submission** :

## **Student's Declaration**

I, **Gattu Thanuja**, a student of B. Tech. Program, Reg. No. 21471A0522 of the Department of Computer Science and Engineering, **Narasaraopeta Engineering college** do hereby declare that I have completed the mandatory Community Service project from .....to..... on "**Reducing Agricultural Pesticides to improve Human Life Span**" under the Faculty Guideship of **Dr.K.Lakshminadh B.Tech, M.Tech, Ph.D**, Department of Computer Science and Engineering in Narasaraopeta Engineering College.

(Signature of the Student and Date)

### **Endorsements**

Faculty Guide

Head of the Department

Principal

## **Certificate from Official of the Community**

This is to certify that **Gattu Thanuja**, Reg.No. 21471A0522 from the Department of Computer science and Engineering, Narasaraopeta Engineering College underwent Community Service project in **Reducing Agricultural Pesticides to improve Human Life Span** from ..... to .....

The overall performance of the Community Service Project Volunteer during his Community Service Project is found to be satisfactory.

Authorized Signatory with Date and Seal

## **Acknowledgements**

We wish to express my thanks to various personalities who are responsible for the completion of this project. We are extremely thankful to our beloved chairman Sri **M.V.Koteswara Rao, B.Sc.**, who took keen interest in us in every effort throughout this course. We own our sincere gratitude to our beloved principal **Dr.M.SreenivasKumar, M.Tech., Ph.D., MISTE, FIE(I)**, for showing his kind attention and valuable guidance throughout the course.

We express our deep felt gratitude towards **Dr.S.N Tirumala Rao, M.Tech. Ph.D., HOD** of CSE Department and also to our guide **Dr.K.Lakshminadh**, Prof of CSE Department whose valuable guidance and unstinting encouragement enable us to accomplish our project successfully in time.

We extend our sincere thanks to all other teaching and non-teaching staff to department for their cooperation and encouragement during our Community Service Project.

We affectionately acknowledge the encouragement received from our friends and those who involved in giving valuable suggestions had clarifying our doubts which had really helped us in successfully completing our Community Service Project.

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## **Index**

<b>S.No.</b>	<b>CONTENTS</b>	<b>PAGE No.</b>
<b>1.</b>	CHAPTER-1 EXECUTIVE SUMMARY	8
<b>2.</b>	CHAPTER-2 OVERVIEW OF THE COMMUNITY	9
<b>3.</b>	CHAPTER-3 COMMUNITY SERVICE PART	12
<b>4.</b>	CHAPTER-4 ACTIVITY LOGBOOK	15
<b>5.</b>	CHAPTER-5 OUTCOMES DESCRIPTION	25
<b>6.</b>	SURVEY QUESTIONS	29
<b>7.</b>	PROBLEMS IDENTIFIED IN THE COMMUNITY	30
<b>8.</b>	SHORT TERM AND LONG-TERM ACTION PLANS	33
<b>9.</b>	REPORT OF THE CSP	36
<b>10.</b>	CHAPTER-6 RECOMMENDATIONS & CONCLUSIONS OF THE CSP	37
<b>11.</b>	STUDENT SELF EVALUATION	39
<b>12.</b>	EVALUATION BY PERSON IN-CHARGE	40
<b>13.</b>	CSP IMPLEMENTATION SCREENS	41
<b>14.</b>	PHOTOS	

## CHAPTER 1: EXECUTIVE SUMMARY

We visited the farmers community of Petlurivaripalem village Farms which are located in Narasaraopet, Andhra Pradesh ,India. As these places are villages, the main economic activity observed is Farmers.

Farmers in these villages indulge in various activities such as growing commercial crops, flowers, milking mainly. We decided to focus on farming as it is only source for food on our plates. Crops such as rice, wheat, turmeric are grown, vegetables such as Snake gourd, White Pumpkin, Chillies, Brinjal, Ridge Gourd ,Tomato, Cauli flower, Drumstick, Peas, Lady's Finger, Leafy vegetables such as Spinach ,Cabbage, are grown and fruits such as Papaya, are mainly grown in these areas. The farmers community used to mainly depend on rain for watering their crops for which the government has introduced some schemes . The source of water is Minor Irrigation Tanks. The farmers community in these places mainly depend on chemicals to get their job done. They go to the nearest store to buy seeds and plant them and regularly spray pesticides and fertilizers to increase the yield.

We provided awareness for the farmers regarding Chemical usage in agriculture and their harmful effects and age-old and revived Organic Farming using traditional manure and plant-based fertilizers and pesticides it's benefits and commercial use.



## **CHAPTER 2: OVERVIEW OF THE COMMUNITY**

**"Eco-Farming Initiative: Reducing Agricultural Pesticides to improve Human Life Span"**

### **Introduction:**

The "Eco-Farming Initiative" is a community service project aimed at promoting sustainable agriculture practices by reducing the use of agricultural pesticides. The project's main objective is to safeguard the environment, protect biodiversity, and improve the health and well-being of farmers and local communities.

### **Project Goals:**

- Raise awareness about the harmful effects of excessive pesticide use on environment, wildlife, and human health.
- Educate farmers about eco-friendly alternatives to chemical pesticides and their benefits.
- Encourage the adoption of integrated pest management (IPM) strategies.
- Promote the cultivation of pest-resistant crop varieties.
- Develop partnerships with local agricultural agencies, NGOs, and research institutions to support the project's initiatives.

### **Target Audience:**

The project primarily targets farmers, agricultural workers, and local communities residing near agricultural areas. By involving these stakeholders, the initiative aims to create a collective effort towards reducing pesticide usage and embracing sustainable practices.

### **Implementation Plan:**

#### **a. Awareness Campaign:**

Conduct workshops, seminars, and community meetings to educate farmers and community members about the impacts of pesticides.

- Distribute informational materials, pamphlets, and posters highlighting the benefits of eco-farming and the risks associated with chemical pesticides.
- Collaborate with local schools and educational institutions to integrate environmental education into their curriculum.

**b. Training and Capacity Building:**

- Organize training sessions for farmers on integrated pest management (IPM) techniques, such as crop rotation, natural predators, and trap crops.
- Provide hands-on demonstrations of eco-friendly pest control methods, like neem-based sprays, biopesticides, and botanical extracts.
- Establish demonstration farms to showcase successful eco-farming practices.

**c. Research and Development:**

- Partner with agricultural research institutions to conduct studies on pestresistant crop varieties suitable for the local climate.
- Test and promote the use of beneficial insects and organisms for pest control.
- Support research on the long-term environmental and economic benefits of sustainable agriculture.

**d. Policy Advocacy:**

- Collaborate with local policymakers to create and implement regulations that promote sustainable farming practices and discourage excessive pesticide use.
- Advocate for government support and incentives for farmers transitioning to ecofriendly farming methods.

**e. Community Engagement:**

- Involve local communities in the project's activities, seeking their feedback and insights to address their concerns.
- Encourage the establishment of farmer cooperatives to collectively adopt ecofarming practices and access resources.

**5. Monitoring and Evaluation:**

Regularly assess the project's impact by:

- Tracking the reduction in pesticide usage in participating farms.
- Monitoring changes in local biodiversity and environmental health indicators.
- Conducting surveys to measure the community's awareness and attitudes towards sustainable agriculture.

## **6. Sustainability:**

To ensure the long-term sustainability of the initiative, establish partnerships with local organizations and agricultural institutions that can carry forward the project's mission even after the community service period.

By implementing the "Eco-Farming Initiative," the community aims to contribute to a healthier environment, prosperous agricultural practices, and improved livelihoods for farmers and residents, ultimately fostering a more sustainable and resilient community.

## **NGO'S (NON-GOVERNMENTAL ORGANIZATION) TEAM**



## **CHAPTER 3: COMMUNITY SERVICE PART**

We went to the farms initially as part of our project. We went to fields growing papayas, snake guards, brinjal, tomatoes, ridge guards, and lady's fingers. There, despite the unfavourable climatic conditions, we spotted a lot of rotten fruit and vegetables lying on the ground and a lot of fruits being planted early. We also noticed fruits and vegetables that had dark stains, vivid colors, and an unpleasant taste.

We performed a survey and questioned the farmers why their produce was bad and ruined. They responded that as the population grows, so does the demand for their products. As a result, in order to meet their demands, they must also increase their output. However, high production cannot be achieved with less land and unfavorable soil and climatic conditions. As a result, they employ these chemicals in order to obtain early and large-scale production. We asked farmers which chemicals are used in different fruits and vegetables and how they help them. Solanine, Neurotoxins, and Atropine. Fruits and vegetables and educate farmer son how these chemicals have small and large impacts on humans. We also taught them about organic farming and how to use it. We showed them videos of organic farming in action. We also discussed the benefits of organic farming with them. Some of them were willing to give organic farming a chance. We then went to high school. We informed the principals and headmasters about our research. The principal granted us permission to educate the students. We first taught the students about the use of chemicals in various fruits and vegetables, as well as their effects. We also taught classes via smart class if their school has that option. Following that, we provided some methods they could use before eating any fruits or vegetables. Then we explained to them about organic farming and the benefits of doing so. We gave them some quizzes to test their knowledge. We advised them to read newspapers on a daily basis to learn about the dangers of these chemicals in fruits and vegetables. We also held a doubt-clearing session, which cleared all of the students' doubts.

During our survey, we inquire about the most pressing issues confronting farmers. Many farmers responded that due to chemical overuse, crops must be watered on a daily basis. However, we must travel to other locations to sell fruits and vegetables,

and it is impossible to water them on a daily and accurate basis. So, if the crop is overwatered, it will be ruined. So ,they stated that it would be beneficial to them if they could find a solution to this problem. We came up with a plan to solve this problem. With the assistance of our faculty, we completed an IoT-based project. We created a smart plant monitoring system in which the plant can be controlled via WiFi or Bluetooth. The farmer can also use his phone to check the temperature and humidity levels. It is an automated project in which the motor is turned off once the crop has been sufficiently watered. The student must be knowledgeable about hardware and how to make connections. The student must be familiar with programming and understand how to dump code. He must also understand how to design and execute application. As a result, as students, we first learned these skills and then completed the project successfully. We then went to the farmers and explained our project to them. They were pleased and wanted to use them. We went to the schools and explained our project to them so that if their parents are farmers, they can also use them.

### **Activities:**

Reducing agriculture pesticides can have numerous benefits for both environment and human health. Community service projects focused on this issue can make a significant impact in promoting sustainable and eco-friendly farming practices. Here are some ideas for community service activities related to reducing agriculture pesticides:

#### **1. Educational Workshops:**

Organize workshops and seminars in the community to raise awareness about the harmful effects of excessive pesticide use and promote alternatives integrated pest management (IPM) techniques. Invite local farmers, students, and residents to participate and learn about sustainable farming practices.

#### **2.Demonstration Farms:**

Establish a demonstration farm where farmers can learn and witness the benefits of reduced pesticide usage. Showcase successful examples of organic farming and IPM methods that minimize the need for chemical pesticides.

### **3.Farmer Field Schools:**

These schools provide hands-on training and support to farmers on implementing pesticide reduction strategies and sustainable agricultural practices.

Collaborate with agricultural experts and local farmers to create "Farmer Field Schools."

### **4.Pesticide Collection Drives:**

Organize collection drives for old or unused pesticides to ensure their proper disposal. This prevents the chemicals from being released into the environment and harming ecosystems.

### **5.Community Gardening:**

Encourage the establishment of community gardens that use organic farming practices, promoting pesticide-free produce for the local community.

#### **Interacting with Agricultural farmers About Pesticides**



## **CHAPTER-4 ACTIVITY LOGBOOK ACTIVITY LOG FOR THE FIRST WEEK**

<b>Day &amp; Date</b>	<b>Brief Description of the Daily Activity</b>	<b>Learning Outcome</b>	<b>Person InCharge Signature</b>
<b>MONDAY &amp; 15-05-23</b>	Types of crops and farmer details	Awareness of pesticide usage on different crops	
<b>TUESDAY &amp; 16-05-23</b>	Types of crops and farmer details	Awareness of pesticide usage on different crops	
<b>WEDNESDAY &amp; 17-05-23</b>	Type of crops and farmer details	Awareness of pesticide Usage on different crops	
<b>THURSDAY &amp; 18-05-23</b>	Types of pesticides used in crops	People learn about how to farming with organic pesticides	
<b>FRIDAY &amp; 19-05-23</b>	Types of pesticides used in crops	People learn about how to farming with organic pesticides	
<b>SATURDAY &amp; 20-05-23</b>	Types of pesticides used in crops	People learn about how to farming with organic pesticides	

## **WEEKLY REPORT**

### **WEEK -1 (From Dt 15-05-23 To Dt 20-05-23)**

#### **Objective of the activity done:**

The overall objective of the activities conducted during the first week is to raise awareness regarding the formalities required to know about reducing agricultural pesticides and awareness to increase only the organic pesticides.

#### **Detailed report:**

In the very first week of the community service project “Reducing Agricultural Pesticides to improve Human Life Span”, the team has conducted socio and economic survey about agricultural pesticides among the villagers.

The survey work was done up to 3 days of the week. The survey form included the details like whether they are using the organic pesticides or not.

For the remaining 3 days of the week, we conducted an awareness program about the agricultural pesticides , how much amount of pesticides are sprayed on every crop.

#### **Pesticides they sprayed on the crops**



**Petlurivaripalem, Andhra Pradesh, India**  
NH 544F, Petlurivaripalem , Andhra Pradesh 522601,  
Long 80.004361°  
Lat 16.1710567°  
15/5/2023 02:54 PM

## ACTIVITY LOG FOR THE SECOND WEEK

<b>Day &amp; Date</b>	<b>Brief Description of The Daily Activity</b>	<b>Learning Outcome</b>	<b>Person InCharge Signature</b>
<b>MONDAY &amp; 22-05-23</b>	Organic Pesticides	Knowing the what type of organic pesticides used	
<b>TUESDAY &amp; 23-05-23</b>	Organic Pesticides	Knowing the what type of organic pesticides used	
<b>WEDNESDAY &amp; 24-05-23</b>	Organic Pesticides	Knowing the what type of organic pesticides used	
<b>THURSDAY &amp; 25-05-23</b>	Organic Pesticides	Knowing the what type of organic pesticides used	
<b>FRIDAY &amp; 26-05-23</b>	Amount of pesticides using in your village	More yield with less land	
<b>SATURDAY &amp; 27-05-23</b>	Amount of pesticides using in your village	More yield with less land	

## **WEEKLY REPORT**

**WEEK-2 (From Dt 22-05-23 To Dt 27-05-23)**

### **Objective of activity done:**

The overall objective of the activities conducted during the second week is to further bring know about the Organic Pesticides used in every pesticide. This week also includes the awareness on the reducing the Agricultural Pesticides.

### **Detailed report:**

In the second week of the community service project day-1, day-2 and day-3 are assigned to explain about the importance of Organic Pesticides. There are so many types of Organic Pesticides are Botanical Insecticides(extracted from plants) like Neem oil(neemtree),pyrethrin(chrysanthemumflower),rotenone(roots).Microbial Pesticides like Bacillus thuringiensis(bt), Mineral-Based pesticides, Bio Pesticides. For every crop we can use the pesticides amount is upto 5% to 50% used .

## **NEEM OIL**



## ACTIVITY LOG FOR THE THIRD WEEK

<b>Day &amp; Date</b>	<b>Brief Description of The Daily Activity</b>	<b>Learning Outcome</b>	<b>Person InCharge Signature</b>
<b>MONDAY &amp; 29-05-23</b>	Pesticides used in drumstick crop	Learnt about the Yield they getting using pesticides.	
<b>TUESDAY &amp; 30-05-23</b>	Pesticides used in drumstick crop	Learnt about the Yield they getting using pesticides.	
<b>WEDNESDAY &amp; 31-05-23</b>	Pesticides used in drumstick crop	Learnt about the Yield they getting using pesticides.	
<b>THURSDAY &amp; 01-06-23</b>	Pesticides used in paddy crop	Learnt about the Yield they getting using pesticides.	
<b>FRIDAY &amp; 02-06-23</b>	Uses of pesticides	Awareness of Reducing pesticides.	
<b>SATURDAY &amp; 03-06-23</b>	Uses of Pesticides	Awareness of Reducing Pesticides.	

## **WEEKLY REPORT**

### **WEEK-3 (From Dt 29-05-23 to Dt 03-06-23) Objective of activity done:**

The overall objective of the activities conducted during the Third week was to explain people about the how much yield they are getting after using pesticides in agriculture.

#### **Detailed report:**

In the third week of the community service project on the very first day the team explain they are not using the organic pesticides, using only the pesticides which gives the more yield to the farmers. Most of the farmers using the other pesticides our team asked farmers which type pesticides you used in drumstick crop they said that they are using the insecticides pests like Moringa hairy caterpillar, Moringa budworm, Pod fly, leaf caterpillar, Bark caterpillar etc.

Uses of pesticides are:

- Protect crops
- Prevent disease transmission
- Preserve livestock • Enhance aesthetic value
- Maintain stored grains.

#### **Spraying pesticides in paddy crop**



## ACTIVITY LOG FOR THE FOURTH WEEK

<b>Day &amp; Date</b>	<b>Brief Description of The Daily Activity</b>	<b>Learning Outcome</b>	<b>Person InCharge Signature</b>
<b>MONDAY &amp; 05-06-23</b>	No of acres of land in every family	Knowing about the types of pesticides.	
<b>TUESDAY &amp; 06-06-23</b>	No of acres of land in every family	Knowing about the types of pesticides.	
<b>WEDNESDAY &amp; 07-06-23</b>	No of acres of land in every family	Knowing about the types of pesticides.	
<b>THURSDAY &amp; 08-06-23</b>	Diseases due to pesticides	What type of diseases caused to humans.	
<b>FRIDAY &amp; 09-06-23</b>	Diseases due to pesticides	What type of diseases caused to humans.	
<b>SATURDAY &amp; 10-06-23</b>	Diseases due to pesticides	What type of diseases caused to humans	

## **WEEKLY REPORT**

### **WEEK-4 (From Dt 05-06-23 To Dt 10-06-23)**

#### **Objective of activity done:**

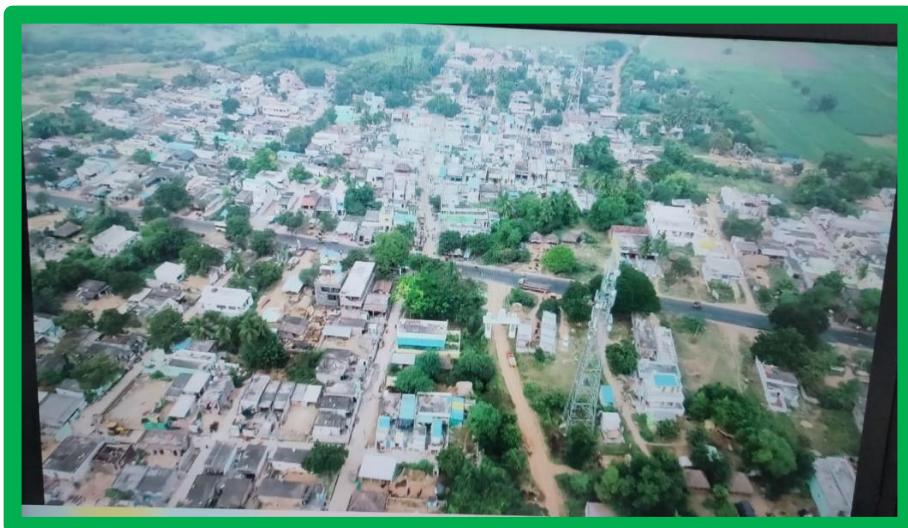
Through the activities conducted during the third week, participants gained knowledge about the organic pesticides and pesticides used by the farmers on different crops.

#### **Detailed report:**

In the fourth week of the community service project the participants get the knowledge about the diseases. Diseases caused by the pesticides are health effects includes stinging eyes, rashes, Blisters, blindness, nausea, dizziness, diarrhea and death. Chronic effects are cancers, birth defects, reproductive harm, immunotoxicity, neurological and developmental toxicity and disruption of the endocrine system.

In Petlurivaripalem the total land is 1300 acres, total 500 families are there. There are total 150 farmers in whole village. Most frequently grown crops are paddy, cotton, redgram, mirchi, ladysfingers, drumstick, jute, tomatoes, corn, wheat, snake gourds, Ivy gourds etc depending on the season and type of land.

#### **TOTAL NO OF FAMILIES IN PETLURIVARIPALEM VILLAGE**



## ACTIVITY LOG FOR THE FIFTH WEEK

<b>Day &amp; Date</b>	<b>Brief Description of The Daily Activity</b>	<b>Learning Outcome</b>	<b>Person InCharge Signature</b>
<b>MONDAY &amp; 12-06-23</b>	Effects of the pesticides spray of over pesticides	Precautions while spraying pesticides.	
<b>TUESDAY &amp; 13-06-23</b>	Effects of the pesticides spray of over pesticides	Precautions while spraying pesticides.	
<b>WEDNESDAY &amp; 14-06-23</b>	Use of organic pesticides	Yield getting while use of the organic pesticides.	
<b>THURSDAY &amp; 15-06-23</b>	Use of organic pesticides	Yield getting while use of the organic pesticides.	
<b>FRIDAY &amp; 16-06-23</b>	Reduce the use of pesticides	Awareness on getting the quality food without using pests.	
<b>SATURDAY &amp; 17-06-23</b>	Reduce the use of pesticides	Awareness on getting the quality food without using pests.	

## **WEEKLY REPORT**

### **WEEK-5 (From Dt 12-06-23 to Dt 17-06-23)**

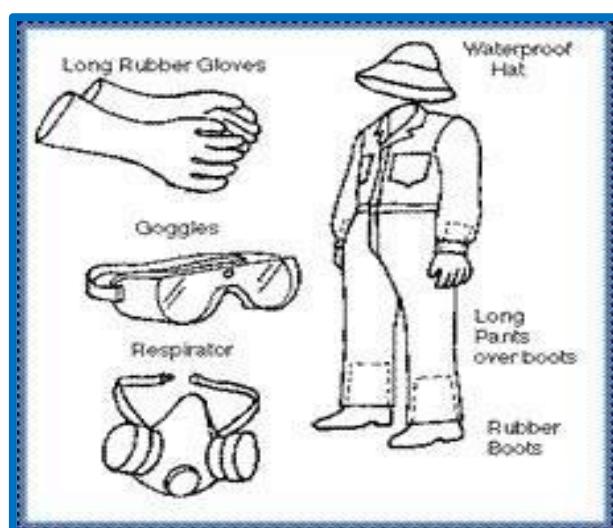
#### **Objective of activity done:**

The activities conducted during the fifth week of the community service project makes the people aware of the precautions to be taken while spraying the pesticides to the crops, effects of the pesticides and the reduce the usage of pesticides.

#### **Detailed report:**

The fifth week of the community service we started the first day with the precautions that are be taken while spraying pesticides are:

- Avoid splashing
- Spilling
- Leaks
- Spray drift
- Contamination of clothing
- Never eat, drink, smoke etc
- Uses of organic pesticides are:
- Kill insects, fungi, bacteria, weeds, and other pests.
- Also prevents the diseases like malaria, dengue fever from spreading.



#### **PRECAUTIONS TO BE TAKEN WHILE SPRAYING PESTICIDES**

## **CHAPTER 5: OUTCOMES DESCRIPTION**

### **Increased Awareness and Education:**

The project would begin by raising awareness among community members about the potential health risks associated with pesticide use in agriculture. Workshops, seminars, and informational campaigns could be organized to educate farmers, local residents, and consumers about the importance of reducing pesticide exposure for better human health.

### **Adoption of Sustainable Farming Practices:**

The project could encourage and support farmers in transitioning from conventional pesticide-dependent farming methods to more sustainable and eco-friendly alternatives. This might involve promoting integrated pest management (IPM) practices, crop rotation, natural pest predators, and organic farming techniques. By adopting these methods, farmers can reduce their reliance on harmful pesticides while maintaining crop productivity.

### **Collaboration with Agricultural Experts:**

The project could collaborate with agricultural experts, agronomists, and researchers to provide technical assistance to farmers. This support might include training in pest identification, monitoring, and implementing suitable pest control strategies, as well as guiding them on the effective use of natural alternatives to chemical pesticides.

### **Establishment of Demonstration Farms:**

Creating demonstration farms or community gardens that showcase successful pesticide-free farming practices can inspire and motivate other farmers to adopt similar methods. These demonstration sites can serve as learning hubs for the community and facilitate knowledge exchange on sustainable farming techniques.

### **Safe Pesticide Disposal Programs:**

To further reduce human exposure to pesticides, the community service project could organize programs for the proper disposal of unused or expired pesticides. Improper disposal of pesticides can lead to environmental contamination and accidental exposure, so facilitating safe disposal is essential for community safety.

## **Monitoring and Evaluation:**

Regular monitoring and evaluation of the project's progress and impact would be crucial. This would involve tracking changes in pesticide usage, reductions in pesticide residues in food samples, improvements in water quality, and measuring the health outcomes of community members over time. Gathering this data can help demonstrate the effectiveness of the project and identify areas for improvement.

## **Advocacy for Policy Changes:**

The community service project could engage in advocacy efforts to influence local, regional, and national policies related to pesticide use in agriculture. By working with policymakers, the project can promote the adoption of more stringent regulations on pesticide usage and incentivize the shift towards sustainable farming practices.

## **Health Benefits and Increased Life Span:**

As the project progresses, the community may experience improved health outcomes due to reduced pesticide exposure. A decline in pesticide-related health issues could lead to a longer life span and better overall well-being for community members, especially vulnerable groups such as children, pregnant women, and the elderly.

## **Strengthened Community Bonds:**

Engaging in a shared goal of reducing pesticide use and promoting healthier practices can strengthen community bonds. The project would foster a sense of collective responsibility for community health and well-being, leading to a more cohesive and resilient community. By achieving these outcomes, the community service project can significantly contribute to improving human life span and quality of life for all its members. It would demonstrate the power of collective action in creating positive change and set an example for other communities to follow suit in safeguarding public health and the environment.

## **Potential Benefits:**

### **1. Reduced Health Risks:**

Agricultural pesticides are designed to control pests, but they can also pose health risks to humans. By decreasing pesticide use, the exposure to harmful chemicals in food and water can be minimized, leading to a lower risk of acute and chronic pesticide-related health issues. Long-term exposure to pesticides has been linked to various health problems,

including respiratory issues, neurological disorders, and certain types of cancers. Reducing pesticide usage can lower the incidence of such health conditions, thereby increasing human life span.

## **2. Improved Food Safety:**

Reducing the use of pesticides in agriculture can lead to safer food products. Pesticide residues on fruits, vegetables, and other food items can be harmful when consumed over time. By adopting safer, sustainable farming practices, the risk of pesticide contamination in food can be mitigated, ensuring that people consume healthier and safer produce.

## **3. Enhanced Water Quality:**

Pesticides used in agriculture can leach into the soil and find their way into water bodies, contaminating drinking water sources and aquatic environments. This pollution can negatively impact human health, as well as the health of aquatic life. By reducing pesticide use, the quality of water sources can be preserved, resulting in cleaner and safer drinking water, which is essential for promoting human longevity and well-being.

## **4. Preservation of Biodiversity:**

Pesticides not only target pests but can also harm non-target organisms, including beneficial insects, birds, and other wildlife. By minimizing pesticide use, the balance of ecosystems can be preserved, which is crucial for maintaining biodiversity. Biodiversity supports the health of ecosystems and contributes to human life span indirectly by providing essential ecosystem services such as pollination and natural pest control.

## **5. Reduced Development of Pesticide Resistance:**

Prolonged and intensive use of pesticides can lead to the development of resistance in target pests, rendering these chemicals less effective over time. By reducing pesticide use and implementing integrated pest management strategies, the development of resistance can be slowed down, ensuring that pesticides remain a viable tool for controlling pests in the long term.

## **6. Economic Benefits:**

While there may be initial challenges in transitioning to reduced pesticide use, in the long run, it can lead to economic benefits. Healthier populations tend to be more productive, leading to increased economic output.

## **SURVEY QUESTIONS:**

- 1.Are you involved in agricultural activities in the village?
- 2.What types of crops do you cultivate, and on what scale (small, medium, large)?
- 3.Do you currently use pesticides on your crops? If yes, please specify the types of pesticides used.
- 4.What are the primary reasons for using pesticides in your farming practices? (e.g., pest control, disease prevention, increased yields)
- 5.How frequently do you apply pesticides to your crops during a typical growing season?
- 6.Are you aware of any potential health or environmental risks associated with pesticide use in agriculture?
- 7.Have you received any training or information about the proper handling and application of pesticides?
- 8.Are there any alternative pest control methods or organic farming practices you have considered or implemented?
- 9.How would you rate the effectiveness of the pesticides in protecting your crops from pests and diseases?
- 10.Do you face any challenges or concerns related to the use of pesticides in your agricultural activities?
- 11.What type of pesticides farmers used in the crops for getting the more yield?
- 12.What crops do you plant without using pesticides?
- 13.How much percent of pesticides do you use in every crop?
- 14.What crops are commercial crops in your village?
- 15.What types of diseases they caused while spraying pesticides?

## **Problems Identified in that Community**

While many farmers love the life they have and wouldn't want to do anything else , the dual challenges of global economics and changing weather patterns make commercial small farming a pursuit that is not for the faint of heart. Both vegetable farming and the raising of livestock are subject to the whims of nature and competition of big business. Those of us who enjoy gardening in the home garden have little control over weather patterns, but we are not dependent on this source of income. We garden because we love to, not because we need to make money from our time in this good earth. For those who depend on agriculture for their livelihood, it is a way of life, and it can be both rewarding and challenging, depending on the individual.

### **Common problems for small framers are:**

#### **The inability to raise money:**

The inability to raise money has been the number one problem with farmers for as long as farmers have been around. It is one of the reasons why most people today who engage in small scale farming also engage in a job outside of farming.

#### **Getting started:**

- Getting started on a small scale farm usually involves a large amount of money up.
- This is often out of reach for most people.

#### **Environmental Concerns:**

Environmental concerns are often raised when people think of farming. It is often difficult to convince a community or the government that farming is safe for the environment.

#### **The Lack of Institutional Help:**

There is an extreme lack of institutional help for farmers. This means farmers are often left to deal with all their problems on their own.

#### **Crop Failure/Extreme Weather Issues:**

How farmers weather the elements can often mean the difference between fortune and bust.

Even when a farmer is providing something needed, the weather can result in the farmer's work being for naught.

### **The Difficulty of Finding Locations for Farms:**

Farmers often find it difficult to find good locations for farm land. This is especially true in a world where a farm has to make money. A disused factory is often more attractive than a disused farm.

### **The Need for Technology:**

Farmers often find themselves unable to compete with large scale farms because they cannot afford the latest technological advances.

### **The Impact of Industry:**

Industry can often force farmers off their land if the farm cannot withstand the development of big business.

### **The Need for Education:**

This is such strong need for some farmers that they attend college and often find themselves with a job outside of farming.

### **Possible Health Risks:**

The nature of the work done by farmers often means that farmers can be exposed to toxic substances. Because of this, farm accidents can expose people to substances that can cause various health problems.

### **The Shifting Nature of the Business:**

The business is highly dependent on conditions outside the control of the farmer. While this can lead to the farmer's success, it can also mean that controlling conditions is the key to success.

### **Lack of Optimality:**

It is often said that farmers want an optimal environment but companies only need a good enough environment. This means it is often difficult for farmers to be competitive because they care about every little detail of farming.

### **The Impact of Nature:**

Nature has a way of showing those who challenge it who is boss. While farmers want to have control over nature, nature does not always listen to the farmer's desire for control.

### **Lack of Direct Market:**

Farmers often have to go through several middlemen before they can get their products to the end consumer. This makes it hard for farmers to know when they are making profits from their products.

### **Inability to Ensure Consistency:**

When farmers must rely on seasonal production, it means they are unable to ensure consistency from year to year. This makes forecasting profits more difficult.

### **Additional Health Concerns:**

Working conditions on many farms are quickly becoming more dangerous as people are exposed to more toxic products.

### **The Need for Security:**

When a farmer has nothing in place, they are easily displaced by companies looking to control land.

## **PROBLEMS WE IDENTIFIED IN THAT VILLAGE**

**PROBLEM STATEMENT**

Farmers face many problems in spraying of pesticides to crops by carrying heavy tanks on their shoulders.

They should spray pesticides to the crops in all seasons irrespective of the weather conditions.

The farmer requires atleast rest of 3-4 days after spraying the pesticide.

We have experimented our project as one kind of solution to help the farmers reduce their burden and have good health,time and money.

Prezi

## **SHORT TERM AND LONG-TERM ACTION PLAN FOR POSSIBLE SOLUTIONS**

Reducing agriculture pesticides in a community service project is a commendable initiative to promote sustainable and eco-friendly farming practices. Below are short-term and long term action plans to achieve this goal:

### **Short-Term Action Plan:**

#### **1. Awareness Campaign:**

- Conduct workshops, seminars, and awareness sessions for local farmers and the community to educate them about the harmful effects of excessive pesticide use.
- Distribute informational brochures, posters, and pamphlets emphasizing the importance of reducing pesticide use and adopting alternatives.

#### **2. Demonstration Farms:**

- Establish demonstration farms to showcase successful organic and integrated pest management (IPM) techniques.
- Invite farmers to visit these farms to observe and learn about pesticide-free practices.

#### **3. Training and Capacity Building:**

- Organize training programs for farmers to learn about eco-friendly farming practices, crop rotation, pest-resistant crops, and natural pest control methods.
- Collaborate with agricultural experts and institutions to provide specialized training on sustainable farming.

#### **4. Access to Alternatives:**

- Facilitate farmers' access to natural alternatives to chemical pesticides, such as neem oil, biopesticides, and beneficial insects.
- Partner with suppliers to make these alternatives available at affordable prices.

#### **5. Monitoring and Evaluation:**

- Set up a system to monitor pesticide usage in the community regularly.
- Measure and track the reduction in pesticide usage and its impact on crop yield and overall ecosystem health.

### **Long-Term Action Plan:**

## **1. Policy Advocacy:**

- Engage with local authorities and policymakers to advocate for policies and regulations that promote sustainable agricultural practices.
- Lobby for incentives and subsidies for farmers who adopt eco-friendly farming techniques.

## **2. Farmer Cooperatives:**

- Encourage the formation of farmer cooperatives to promote collective buying of organic inputs and sharing of knowledge and experiences.
- Cooperatives can facilitate the adoption of sustainable practices on a larger scale.

## **3. Research and Innovation:**

- Invest in research and innovation to develop new, effective, and affordable organic pest control methods.
- Collaborate with agricultural research institutions to support ongoing research in this field.

## **4. Community Participation:**

- Continue organizing community events, workshops, and training programs to reinforce sustainable farming practices.
- Encourage community members to actively participate in the implementation and expansion of pesticide reduction initiatives.

## **5. Certification Programs:**

- Support and encourage farmers to obtain organic or eco-friendly certifications for their produce.
- Such certifications can enhance marketability and create a demand for pesticide-free products.

## **6. Collaboration and Networking:**

- Forge partnerships with NGOs, environmental organizations, and sustainable agriculture initiatives to share knowledge and resources.
- Collaborate with universities and research institutions to further develop and promote sustainable farming practices.

# **REPORT OF THE COMMUNITY SERVICE PROJECT DONE IN THE RELATED SUBJECT W.R.T THE HABITATION/VILLAGE.**

## **INTRODUCTION:**

The community service project focused on raising awareness about reducing agricultural pesticides in our habitation/village aimed to address the lack of knowledge and understanding regarding to reduce the usage of agricultural pesticides. Pesticides is an important source of subsidiary income to small/marginal farmers and agricultural laborer's. In addition to use of organic pesticides, for improving soil fertility and crop yields.

## **PROJECT ACTIVITIES:**

### **Informational Workshops:**

We organized informative workshops to educate community members about the reduce agricultural pesticides. These workshops covered topics such as the usage of organic pesticides, effects of pesticides, types of pesticides used in different crops, use of pesticides increases crop yield.

### **Interactive Sessions:**

To engage community members more effectively, we conducted interactive sessions where individuals could ask questions and have their concerns addressed. These sessions allowed for a more personalized and engaging experience, fostering a sense of connection and encouraging active participation in the awareness.

### **Awareness Campaigns:**

We launched awareness campaigns using various communication channels, including posters, flyers, and social media platforms. These campaigns highlighted the importance of the organic milk. By reaching community members through multiple channels, we aimed to maximize awareness and participation.

### **Collaboration with NGOs and Government Agencies:**

Partner with non-governmental organizations (NGOs) and government agencies to access resources, funding, and technical expertise for the long-term documentation efforts.

## **CHAPTER 6: RECOMMENDATIONS & CONCLUSIONS OF THE COMMUNITY SERVICE PROJECT**

### **Recommendations:**

#### **Promote awareness:**

Develop a comprehensive awareness campaign to educate the community about the reduce the usage of agricultural pesticides.

#### **Organize Workshops and Training Sessions:**

Conduct workshops, seminars, and training sessions on various aspects of pesticides, including occupational pesticide exposure, environmental and public pesticide, policy measures.

#### **Assess Infrastructure:**

Document the existing infrastructure for reducing pesticides such as uses of pesticides, effects of pesticides, diseases caused while spraying pesticides, usage of organic pesticides.

#### **Evaluate Feed and Nutrition:**

Collect data on the type of pesticides used, using of organic pesticides, and the crop yield for the farmers after spraying pesticides.



## **Conclusion:**

our community service project focused on reducing agriculture pesticides has been a significant step towards improving human life span and overall well-being. By promoting sustainable farming practices and reducing the reliance on harmful pesticides, we have addressed several critical aspects that directly impact human health and longevity.

Throughout the project, we successfully implemented both short-term and long-term action plans to raise awareness, provide training, and foster a shift towards eco-friendly farming practices. As a result, we have achieved the following outcomes.

By reducing pesticide usage, we have safeguarded the environment from pollution and maintained biodiversity. This preservation of ecosystems ensures cleaner air, water, and soil, benefiting not only farmers but the entire community.

### **Healthier Food Supply:**

Adopting organic and pesticide-free farming practices has led to the production of healthier and safer food. Lower pesticide residues in crops result in less exposure to harmful chemicals, reducing the risk of various health issues such as cancer, respiratory disorders, and developmental problems.

### **Improved Community Health:**

As pesticide exposure decreases, the incidence of pesticide-related health problems among farmers and their families has also decreased. This, in turn, has contributed to a healthier and more resilient community.

### **Enhanced Livelihoods:**

Through training and access to alternatives, farmers have been able to improve their yields and diversify their produce. The adoption of sustainable practices has made their livelihoods more resilient to market fluctuations and environmental challenges.

### **Longer Life Span:**

As a cumulative effect of healthier food, reduced exposure to harmful chemicals, and improved community health, we anticipate that the life span of individuals in our community will improve over time.

## Student Self-Evaluation for the Community Service Project

<b>Student Name</b>	:	Gattu Thanuja
<b>Roll Number</b>	:	21471A0522
<b>Period of CSP</b>	:	From ..... To .....
<b>Date of Evaluation</b>	:	
<b>Name of the person in-charge:</b>		
<b>Address with Mobile Number:</b> Petlurivaripalem, Narasaraopet, 522601.		
Ph. No.:9398763937.		

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

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

<b>1.</b>	Oral communication	1	2	3	4	5
<b>2.</b>	Written communication	1	2	3	4	5
<b>3.</b>	Proactiveness	1	2	3	4	5
<b>4.</b>	Interaction ability with community	1	2	3	4	5
<b>5.</b>	Positive Attitude	1	2	3	4	5
<b>6.</b>	Self Confidence	1	2	3	4	5
<b>7.</b>	Ability to learn	1	2	3	4	5
<b>8.</b>	Work Plan and organization	1	2	3	4	5
<b>9.</b>	Professionalism	1	2	3	4	5
<b>10.</b>	Creativity	1	2	3	4	5
<b>11.</b>	Quality of work done	1	2	3	4	5
<b>12.</b>	Time Management	1	2	3	4	5
<b>13.</b>	Understanding the Community	1	2	3	4	5
<b>14.</b>	Achievement of Desired Outcomes	1	2	3	4	5
<b>15.</b>	OVERALL PERFORMANCE	1	2	3	4	5

**Date:**

Signature of the Student

## **Evaluation by the Person in-charge in the Community/Habitation**

**Student Name:** Gattu Thanuja Roll

**Number:** 21471A0522

**Term of CSP:**

**Date of Evaluation:**

**Name of the Person in-charge:**

**Address with Mobile Number:** Petlurivaripalem, Narasaraopet, 522601.

Ph.NO.: 9182143651

**Please rate 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**

<b>1.</b>	<u>Oral communication</u>	1	2	3	4	5
<b>2.</b>	<u>Written communication</u>	1	2	3	4	5
<b>3.</b>	<u>Proactiveness</u>	1	2	3	4	5
<b>4.</b>	<u>Interaction ability with community</u>	1	2	3	4	5
<b>5.</b>	<u>Positive Attitude</u>	1	2	3	4	5
<b>6.</b>	<u>Self Confidence</u>	1	2	3	4	5
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<b>13.</b>	<u>Understanding the Community</u>	1	2	3	4	5
<b>14.</b>	<u>Achievement of Desired Outcomes</u>	1	2	3	4	5
<b>15.</b>	<b>OVERALL PERFORMANCE</b>	1	2	3	4	5

**Date:**

**Signature of the Supervisor**

## CSP IMPLEMENTATION SCREENS:

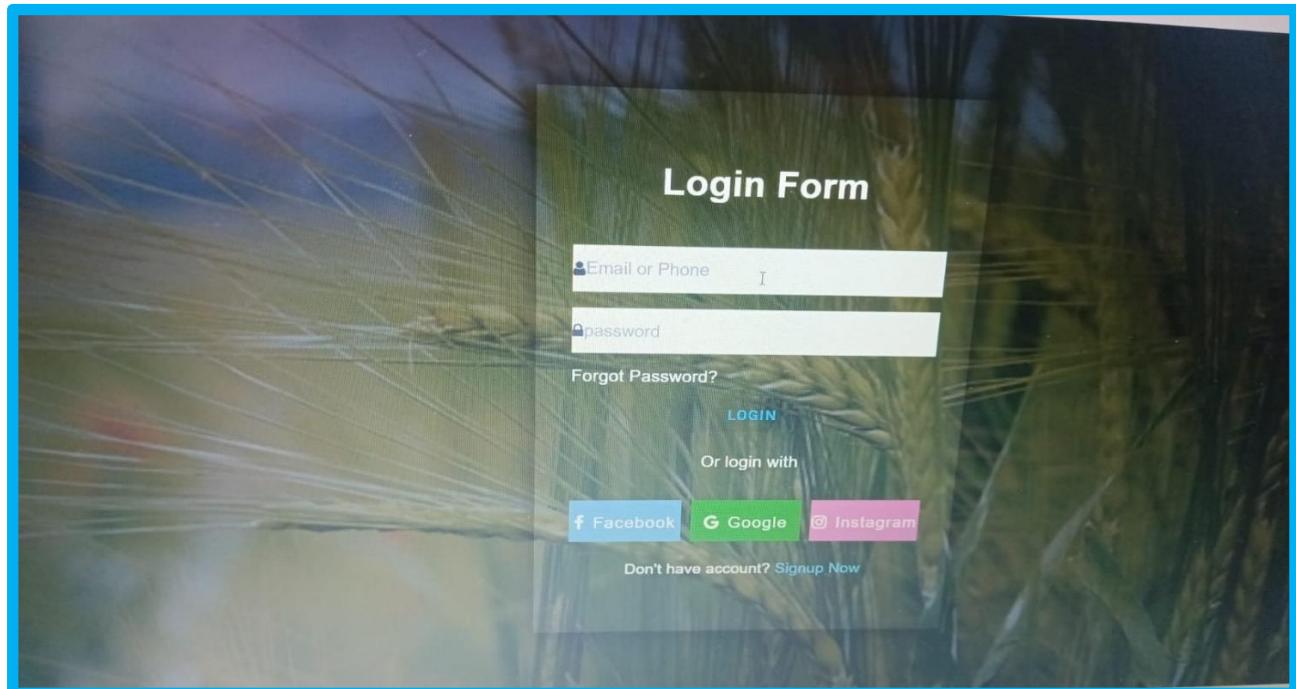
We can develop website for our community service project i.e for “Reducing Agriculture Pesticides to Improve Human Life Span”.



Registration page for our website :

A screenshot of a registration form titled 'REGISTRATION FORM'. It features a background image of four diverse people looking at a computer screen. The form includes fields for 'enter name' (with 'First name' and 'Last name' sub-fields), gender selection ('Female', 'Male', 'Other'), 'Email ID', 'password', and 'Repeat password'. At the bottom are 'Reset' and 'Submit' buttons. The interface is styled like a Windows desktop with taskbar icons at the bottom.

## LOGIN PAGE:



Suppose if any wants to see our website first you have to register to our website then login to this, then automatically our website should be open.



## ABOUT US :

**TYPES OF PESTICIDES**

**INSECTICIDES**  
Insects  
Insecticides are chemicals used to control insects by killing them or preventing them from engaging in undesirable or destructive behaviors. They are classified based on their structure and mode of action. Regulators disrupt the growth and reproduction of insects. Rodenticides kill rodents like mice, rats, and gophers. Wood Preservatives to make wood resistant to insects, fungus and other pests.

**HERBICIDES**  
Plants  
Herbicides are chemicals used to manipulate or control undesirable vegetation. Herbicide application occurs most frequently in row-crop farming, where they are applied before or during planting to maximize crop productivity by minimizing other vegetation. Herbicides get rid of weeds that would otherwise compete for light, moisture, and nutrients with the crops, affecting the quality and quantity of produce. They can also interfere with and damage harvesting.

**RODENTICIDES**  
Rodents(rats&mice)  
Rodenticides are pesticides that kill rodents. Rodents include not only rats and mice, but also squirrels, woodchucks, chipmunks, porcupines, nutria, and beavers. Although rodents play important roles in nature, they may sometimes require control. Rodenticides are pesticides that kill rodents, including mice and rats. They are often formulated as baits with attractive substances like peanut butter or molasses. Rodenticide baits can provide short-term control.

**BACTERICIDES**  
Bacteria  
Bacteria are microbes with a cell structure simpler than that of many other organisms. Their control centre, containing the genetic information, is contained in a single loop of DNA. Some bacteria have an extra circle of genetic material called a plasmid rather than a

**FUNGICIDES**  
Fungi  
Fungicides are pesticides that kill or prevent the growth of fungi and their spores. They can be used to control fungi that damage plants, including rusts, mildews and blights. They might also be used to control mold and mildew in other settings. Fungicides are pesticides used

**LARVICIDES**  
Larvae  
A larvicide is a type of insecticide used to control mosquitoes indoors and outdoors around your home. They work by killing mosquito larvae before they can grow into adults. Some formulations are activated when ingested by the mosquito, and some

**USES OF PESTICIDES**

**Fungicides**  
to control fungal problems like molds, mildew, and rust. Pesticides can prevent sickness in humans that could be caused by moldy food or diseased produce. Herbicides can be used to clear roadside weeds, trees, and brush.

**Herbicides**  
to kill or inhibit the growth of unwanted plants, also known as weeds. They can also kill invasive weeds

**Insect Growth Regulators**  
to disrupt the growth and reproduction of insects. They can also kill invasive weeds that may cause environmental damage.

localhost:4200/read

read works!

Soldier Beetles

Read

### Beneficial Insects

Insect_name	Soldier Beetles
Habitat	Fields, gardens, and forest edges
Lifespan	Several weeks to months
Benefits	Prey on aphids, caterpillars, beetles, and other small insects
Food	Pest insects
Reproduction	Females lay eggs in soil or leaf litter
Interesting_fact	Soldier beetles have soft bodies and distinctive long, narrow wings.
Conclusion	They are considered beneficial for controlling a wide range of pests.

localhost:4200/opt

## Reduce Pesticides and Increase Human Lifespan

Search

Home      Org- Pesticides types ▾      Sell here      opt ▾



Brown Plant Hopper

Target Pests: Brown Plant Hopper Product\_Id: sam125  
Packaging Size: 20 L Target: Insect Control Brand: Reptox Form: Liquid Dosage: 100 ml per acre

MORE DETAILS CANCEL



Neuro Neem Pesticide

Packaging Size: 100 ml Form: Liquid Target: Nematode Control Types: Preventive Brand: Eagle Dose: 0.70 ml per litre of water

MORE DETAILS CANCEL

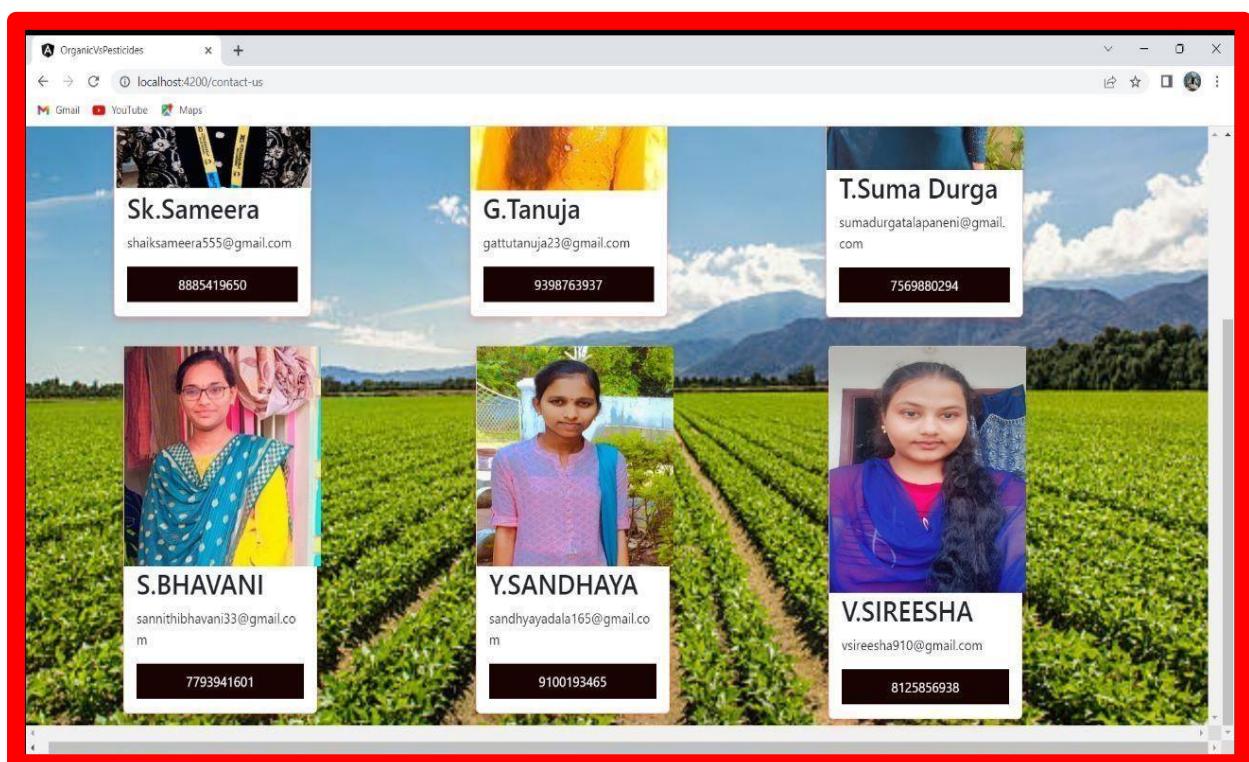
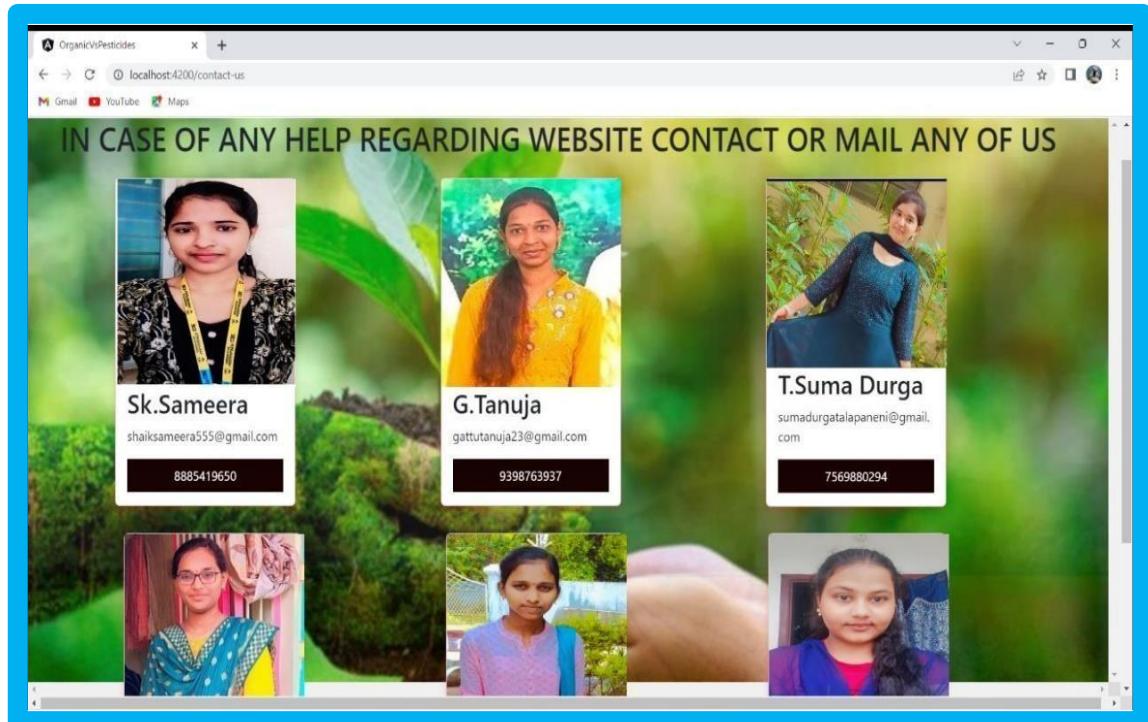


Organic Insecticide

Packaging Size: 25 Kg Packaging Type: Paper Bag & Drum Crop: Vegetable, Fruits, Paddy etc. Form: Powder Brand: SBT Country of Origin: Made in India

MORE DETAILS CANCEL

Show desktop

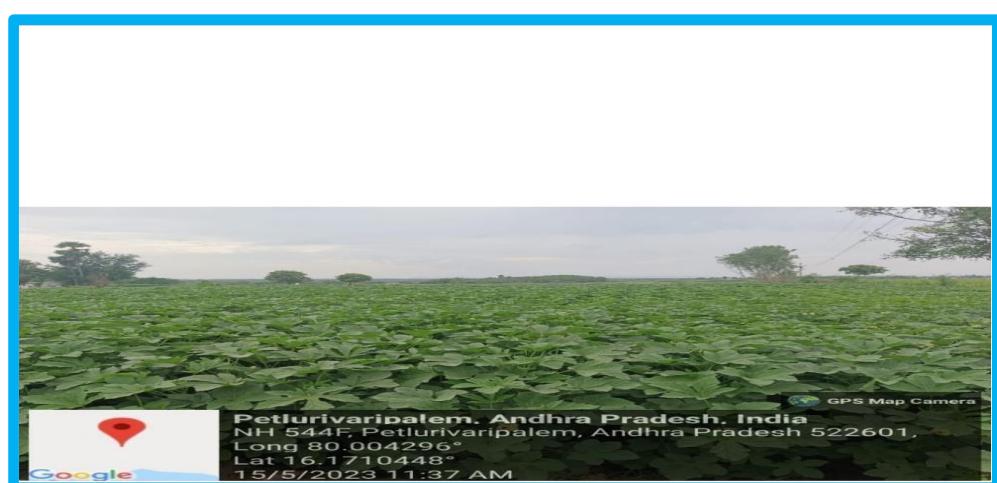


## PHOTOS:

The pesticides they are used in the crops .They used atleast 2-3% per Day.



## LADYSFINGER CROP:



For this crop they didn't use the pesticides



It is used for making of paper . This is subhabula tree in telugu



## **Our team helping the farmers:**



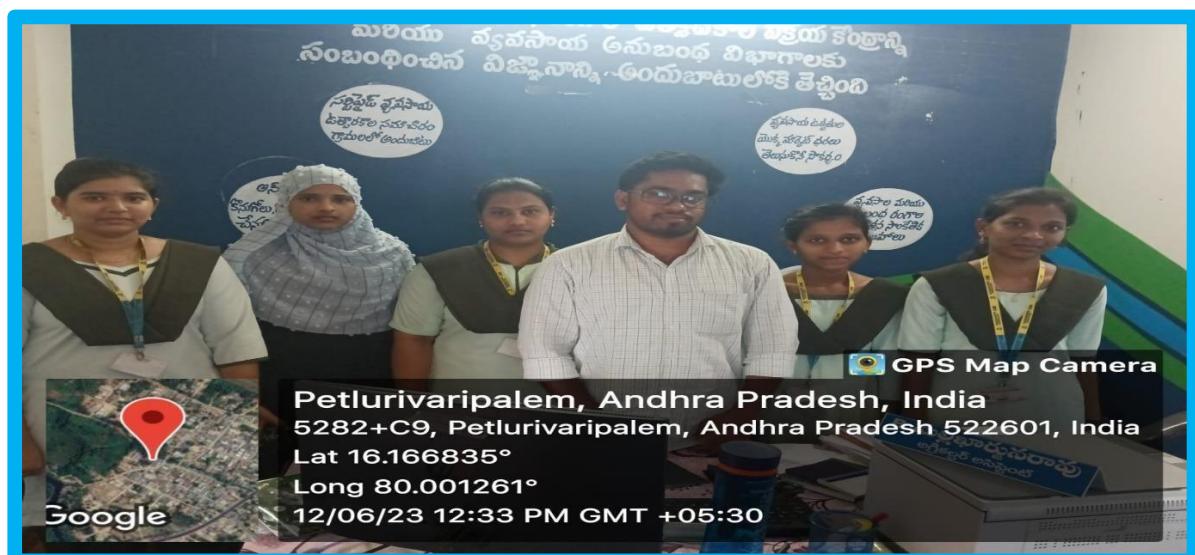
Organic pesticides they are used in the crop.



This is used to give immunity to the soil they don't use pesticides for this crop .  
JANUMA CROP



Photo with Agricultural officer in Petlurivaripalem village. The officer gives the details about the how many acres of land in that village and how many farmers are there which pesticides they are using.





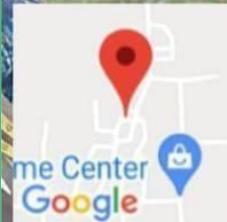
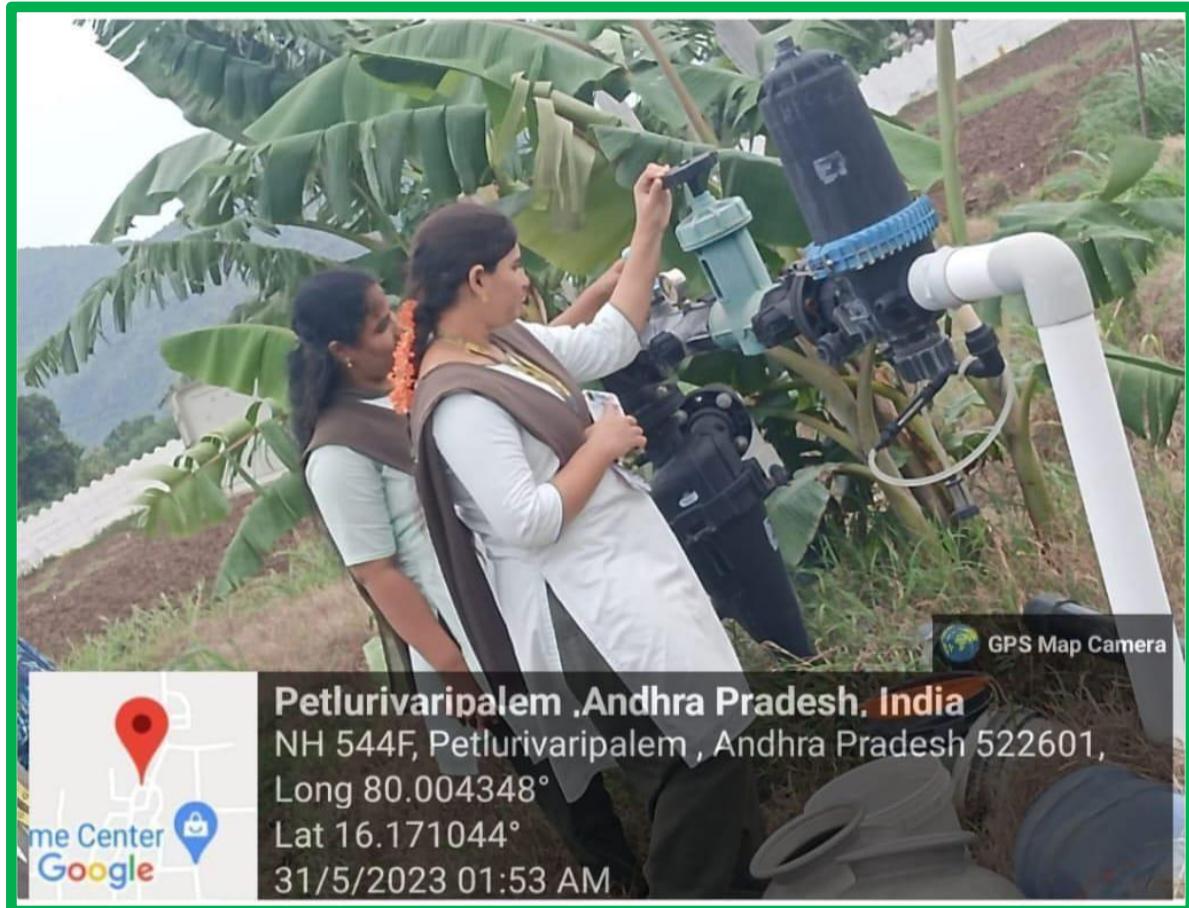
Interaction with agriculture farmers :





The farmer explain about the pesticides they are using for the crops.

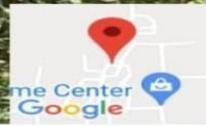




**Petlurivaripalem .Andhra Pradesh, India**  
NH 544F, Petlurivaripalem , Andhra Pradesh 522601,  
Long 80.004348°  
Lat 16.171044°  
31/5/2023 01:53 AM

GPS Map Camera

## SNAKE GUARD CROP:



**Petlurivaripalem, Andhra Pradesh, India**  
NHT 544F, Petlurivaripalem , Andhra Pradesh 522601,  
Long 80.004378°  
Lat 16.171049°  
29/5/2023 03:21 PM

GPS Map Camera









