A Community Service Project

Report on

Natural Resources and Deforestation

Submitted to

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR

In partial fulfilment of the requirements for the award of the degree of

Bachelor of Technology

In

Electronics and Communication Engineering

By

K.HEMALATHA

202T1A0426

Under the esteemed guidance of

Assistant Professor

Mr. Syed Noorullah

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ASHOKA WOMEN'S ENGINEERING COLLEGE

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2022-2023

Program Book for Community Service Project

Name of the Student	:	K.Hemalatha A.Manjula M.Sai Sree M.Sindhuja M.Yogamrutha B.Poojitha
Name of the college	:	**Ashoka Women's Engineering College**
Registration Number	:	202T1A0426 202T1A0401 202T1A0452 202T1A0447 202T1A0460 202T1A0408.

Period of CSP:2 Months From:30/07/2022 To:03/09/2022

Name & Address of the Community/Habitation: Ulindakonda, Kallur Mandal, Kurnool district.

Community Service Project Report

Submitted in accordance with the requirement for the degree of…….

Name of the college : Ashoka Women's Engineering College

Department : Electronics and Communication Engineering.

Name of the faculty Guide: Mr.syed Noorullah
Period of CSP:2 Months From:30/07/2022 To:05/09/2022

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Year of study :III B.Tech

Register number : 202T1A0426
202T1A0401
202T1A0452
202T1A0447
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Date of submission :05/09/2022.

Student's Declaration

We are student of community service project Program of the Department of Electronics and Communication Engineering ,in Ashoka Women's Engineering College do here by declare that I have completed the mandatory community service from…30/07/2022….. to 05/09/2022 in …….(Name of the Community/Habitation) under the Faculty Guideship of Mr.Syed Noorullah, Department of Electronics and Communication Engineering, Ashoka Women's Engineering College.

(Signature and Date)
K.Hemalatha

A.Manjula
M.Sai sree
M.Sindhuja

M.Yogamrutha

B.Poojitha

Endorsements

Faculty Guide : Mr. Syed Noorullah

Head of the Department : Dr.N.Mageswari

Principal : Dr. R. Naveen Kumar

Certificate from Official of the Community

This is certifying that……..(Name of the Community Service Volunteer) Reg. No……of Ashoka Women's Engineering College(Name of the College)under went Community service in……Ulindakonda……..(Name of the Community)from……30-07-2022……to……5-09-2022.

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

Authorized Signatory with Date and Seal

ACKNOWLEDGEMENTS

First and fore most, I thank the Almighty-God, from the depth of my heart, which has been the unfailing source of strength, comfort& inspiration in the completion of this seminar report.

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I would like to extend my gratitude to Dr**.N.**Mageswari HOD of Electronics and Communication Department for their cooperation and valuable support in every way during the period of the seminar report.

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At last, I would like to thank Management and chairman Sri **Ashok Vardhan Reddy** giving me an opportunity to work on this seminar report and supporting me throughout the period of work at Ashoka Women'

+s Engineering College, Kurnool.

SIGNATURE

CHAPTER1: EXECUTIVESUMMARY

In most poor countries, agriculture is a major employer and source of national income and export earnings. Growth in agriculture tends to be pro-poor – it harnesses poor people's key assets of land and labour, and creates a vibrant economy in rural areas where the majority of poor people live.

Agriculture connects economic growth and the rural poor, increasing their productivity and incomes. The importance of agriculture for poverty reduction, however, goes well beyond its direct impact on rural incomes.

Agricultural growth, particularly through increased agricultural sector productivity, also reduces poverty by lowering and stabilising food prices; improving employment for poor rural people; increasing demand for consumer goods and services; and stimulating growth in the non-farm economy.

CHAPTER2: OVERVIEWOFTHECOMMUNITY

Healthy, sustainable and inclusive food systems are critical to achieve the world's development goals. Agricultural development is one of the most powerful tools to end extreme poverty, boost shared prosperity, and feed a projected G. Growth in the agriculture sector is two to four times more effective in raising incomes among the poorest compared to other sectors.

Agriculture is also crucial to economic growth: accounting for 4% of global gross domestic product (GDP) and in some least developing countries, it can account for more than 25% of GDP.

But agriculture-driven growth, poverty reduction, and food security are at risk: Multiple shocks – from COVID19 related disruptions to extreme weather, pests, and conflicts – are impacting food systems, resulting in higher food prices and growing hunger. The war in Ukraine has triggered a global food crisis that is driving millions more into extreme poverty. The World Bank is making up to $30 billion available as part of a global response to the food crisis.

Accelerating climate change could further cut crop yields, especially in the world's most food-insecure regions. Agriculture, forestry, and land use change are responsible for about 25% of greenhouse gas emissions. Mitigation in the agriculture sector is part of the solution to climate change.

Current food systems also threaten the health of people and the planet and generate unsustainable levels of pollution and waste.

One third of food produced globally is either lost or wasted. Addressing food loss and waste is critical to improving food and nutrition security, as well as helping to meet climate goals and reduce stress on the environment.

Risks associated with poor diets are also the leading cause of death worldwide. Millions of people are either not eating enough or eating the wrong types of food, resulting in a double burden of malnutrition that can lead to illnesses and health crises. A 2021 report found that between 720 and 811 million people went hungry in 2020, more than 10% of the world's population.

Food insecurity can worsen diet quality and increase the risk of various forms of malnutrition, potentially leading to under nutrition as well as people being overweight and obese. An estimated 3 billion people in the world cannot afford a healthy diet.

CHAPTER3: COMMUNITYSERVICEPART

Service activities combined with facilitated means for applying the experience to their academic and personal development" .It is a form of experiential education aimed at enhancing and enriching student learning in course material. When compared to the forms of experiential learning like internships and cooperative education.

A community survey is a method of collecting data from a filtered target audience to help you understand an issue particular to them . Community service is away for people to make a difference in the world .Community service is crucial for people of all ages.

Community service activities help children define their values ,experience empathy, develop social skills, and learn about their community. Community service is often organized through local areas.it may be performed for a variety of reasons including citizenship requirements. Community service essay inspires us to help people and bring a smile to their faces.

Needs And Importance:

Community service around the world play an important role in the development of society, ranging from social enterprises in some of the poorest rural areas of the globe, to service designed to enhance quality of life for the more vulnerable members of society in any country or region. It Improves critical thinking skills.

Background:

Community Service is non-paying by one person or a group of people for the benefit of their community or its institution it may be performed for various reason .It was in1952that the community development project was launched by the government of India and with we find the emergence of new era of community work.

- It may be required by a government as a part of citizenship requirements, like the mandatory &quote ; Hand and hitch-up services & quote; for some municipalities in Germany, or generally in lie of military service or for civil conscription services.
- It may be required as a substitution of, or in addition to, other criminal justice sanctions– whenperformedforthisreasonitmayalsobereferredtoascommunitypayback.
- It may be mandated by schools to meet the requirements of a class, such as in thecaseofservicelearningortomeettherequirementsofgraduatingasclassvaledictorian.
- In the UK, it has been made a condition of the receipt of certain benefits .

ACTIVITYLOGFORTHEFIRSTWEEK

Day & Date	Brief description of the daily activity	Learning out come	Perso Perso n Incha rge Signa ture
Day 1	we searched about our project what is Agriculture.	We came to know about our project.	Mr. Syed Noor ullah
Day 2	e got to know a little information about Agriculture.	We gathered the information about our project title.	Mr. Syed Noor ullah
Day 3	inally we got a clear information about Agriculture.	Finally we came to know about agriculture information.	Mr. Syed Noor ullah
Day 4	l out where the nearest Agricultural land is located.	We searched for nearest cultivation Land.	Mr. Syed Noor ullah
Day 5	We looked at many Cultivational land and we choose the right one.	We discussed about Agriculture to formers who are nearer to us.	Mr. Syed Noor ullah
Day 6	We are all discussed and planned to visit the place	We summarized the information about Agriculture.	Mr. Syed Noor ullah

WEEKLYREPORT

WEEK–1(From Dt 30/07/2022 to 05/07/2022 Dt)

Objective of the Activity Done : Detailed information about Agriculture.

Detailed Report :

Our community service project is about Agriculture. In day one

We searched about what is Agriculture. The next day we got a little bit of information about

Agriculture. The third day we got a full clarity of Agriculture.

Agriculture:

Indian economy is dependent of agricultural productivity. Over 70% of rural

homes depend on agriculture .Agriculture pays about 17% to the total GDP and provides employment to

Over 60% of the population. Therefore detection of plant diseases plays a vital key role in the area of

Agriculture Indian agriculture is composed of many crops like rice, wheat, Indian farmers also grow

sugarcane, oilseeds, potatoes and non food items like tea, coffee, cotton and rubber. All the crops grow

Based on strength of leaves and roots.

There are things that lead to different disease for the plants leaves, which spoiled

Crops and finally it effect on economy of the country.

We went to the village named as Ulindhakonda which is near to our college. There

We have met some of the farmers. We asked what are the crops they cultivate in their forms ?

How many crops they will cultivate in period of year ? We have asked that how they will and from where they will

get water to cultivate forms ?Whether they are getting loss or profit ,if they say profit we asked from

Which crop they are getting profit. From that week we have concluded that they got loss in onion crop in

Previous year, we suggested them to use the organic pesticides so that the environment will not be polluted and we can control some of the diseases.

ACTIVITYLOGFORTHESECONDWEEK

DAY & DATE	**BRIEFDESCRIPTIONOFTHED AILYACTIVITY**	**LEARNING OUTCOME**	**PersonIncharge Signature**
Day –1	We visited to the village named Ulindhakonda which is near our college premises , that to a well cultivated land with greenery spread over the village.	We gathered The information from the people who are cultivating crops.	Mr.Syed Noorullah
Day -2	Their are different types of crops that are to be cultivated in different types of lands according to the season.	We came to know that which type of crop is cultivated at which type of land and the season.	Mr.Syed Noorullah

Day -3	Their are two types of pesticides which were used by the people who are cultivating the crops.	We came to know which type of pesticides were used by the majority of the people.	Mr.Syed Noorullah
Day -4	Organic pesticides	We came to know about The production of the crops by using the natural pesticides.	Mr.Syed Noorullah
Day -5	Inorganic pesticides	We came to know about the production of the crops by using the artificial pesticides.	Mr.Syed Noorullah

Day -6	We summarized the information regarding the village as which type of crops are cultivated in which type of land and by using which type of pesticides.	We gather the information about cultivation of the crops in that village.	Mr.Syed Noorullah

WEEKLYREPORT

WEEK–2(From Dt……..…..to Dt .....)

Objective of the Activity Done: Detailed information on Farming.

Detailed Report:
In the part of agriculture we visited Ulindhakonda in KURNOOL DISTRICT.

In that village most of the people are dependent on farming . One of the common crop which they cultivate is

Corn, cotton, black chick peas and red masoor dal. We have found that most of the farmers a reusing

in-organic pesticides, so that we have explained about the importance of organic in order to use them.

Types of soil:

S.no	Types of soil	Crops Grown
1	Sandy soil	Hibiscus, Carrot, Corn, Lettuce, Potato, Peppers.
2	Clay soil	Wheat, Broccoli, Cabbage, Gram, Paddy, Lentils and pulses
3	Loamy soil	wheat, sugarcane, cotton, jute, pulses, and oilseeds.

These are the three types of soils we have observed in Ulindhakonda. Most of the land which

We have observed there is Loamy soil.

Pesticides:

Pesticides are chemical substances that are meant to kill pests. In general, a pesticide is a

chemical or a biological agent such as a virus, bacterium, antimicrobial, or disinfectant that deters,

incapacitates, kills, pests.

Organic pesticides:

Organic pesticides are usually considered as those pesticides that come from

natural sources. These natural sources are usually plants, as is the case with pyrethrum (pyrethins),

rotenone or ryania (botanical insecticides), or minerals, such as boric acid, cryolite, or diatomaceous

earth**.**

In-organic:

inorganic pesticides do not contain carbon and are usually derived from mineral ores

extracted from the earth. Examples of inorganic pesticides include copper sulphate, ferrous sulphate,

copper and sulphur. Organic pesticides contain carbon in their chemical structure.

ACTIVITYLOGFORTHETHIRDWEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In charge signature
Day–1	We visited to rice crop	We gathered the information from the farmer who is harvesting the paddy farming.	Mr.Syed Noorullah
Day-2	Different types of soils	We came to know about at what particular soil is used to harvest the rice.	Mr.Syed Noorullah
Day–3	Pesticides used	We came to know which type of pesticides are used to this crop.	Mr.Syed Noorullah
Day–4	Organic and Inorganic pesticides	We came to know about both the organic and inorganic pesticides are used according to the situation.	Mr.Syed Noorullah

Day–5	Production of the crop	We came to know about the production of the crop ,after harvesting.	Mr.Syed Noorullah

Day–6	Summarized the information about farming.	We gather the information about farming.	Mr.Syed Noorullah

Objective of the Activity Done: Detailed information about leaf disease.

Detailed Report:

We are reduce the attack of pests by using proper pesticides and remedies. We can. It

reduce the size of the images By proper Size reduction techniques and see to it that the quality is not

compromised to great extent. we can expand the projects of the earlier mentioned authors such that the

remedy to the disease is also shown by the system. The main Objectives is to identify the plant diseases

using image processing. It also, after identification of the disease, suggests the name of pesticide to be used

also identifies the insects and pets responsible for epidemic. Apart from these parallel objectives ,this drone

is very time saving. The budget of the model is quite high for low scale farming purposes but will be value

for money in large scale farming it completes each of t he process sequentially and hence achieving

each of the output.

Due to insect on very much amount in plant, is very severely damaged. On a single the number of maggots can be

six, Therefore, it can severely damaged the leaf of plant. It can be restrict, leads to reduced yields.

Hence we can develop a robot, using image processing to detect the disease, to classify it. This will avoid human

interface and hence lead to precised unprejudiced decision. Generally, Whatever our observations about the

disease is just used for the decision of the disease. A symptom of plant disease is a visible effect of disease

on the plant. Symptoms can be changed in colour, changed in the shape or functional disease of the plant as per

its responsibilities to the pathogens, inspects etc. Leaf wilting is a characteristic of verticillium wilt. It is caused due

the fungal plant pathogens V. dahlia and Verticilliumalbo -atrum. general common bacterial.

WEEKLYREPORT

WEEK–3(From Dt……..…..to Dt .....

DAY & DATE	BRIEFDESCRIPTIONOFTHE DAILYACTIVITY	LEARNING OUTCOME	Person In-Charge Signature
Day–1	In this week we decided to create a solution for the problem which we have observed in week 3.	We came to know the problem .	Mr.Syed Noorullah
Day-2	We thought that to identify the common problems which are faced by the farmers.	The common problem is leaf diseases.	Mr.Syed Noorullah
Day–3	The major problem is leaf disease.	We observed leaf disease in Corn and brown chickpeas.	Mr.Syed Noorullah
Day–4	The leaf disease is observed in brown chickpeas and corn.	We thought to create a solution for this problem.	Mr.Syed Noorullah

Day–5	We thought to create a solution to identify the type of leaf disease.	We came to know the solution by using the technology.	Mr.Syed Noorullah
Day–6	Finally, we solved the problem by using Machine learning and Deep learning techniques.	We came to know that our techniques are working.	Mr.Syed Noorullah

WEEKLYREPORT

WEEK–4(From Dt……..…..to Dt .....

Objective of the Activity Done: Solution identification in leaf diseases
Detailed Report:
In order to build a machine learning model it consists of two phases namely testing and
training phase were the model is first trained and an input is given to test the model which is called the test
processing steps several data. The model consists images such as images acquisition, image pre-processing
segmentation, feature extraction and SVM classifier to classify the diseases. Image is acquired from the certain

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uninformed distance with sufficient lighting for learning and classification. The sample images of the disease
leaves are collected and are used in training the system. To train and the test the system, diseases leaf images
and fewer healthy images are taken. The images will be stored in some standard format. The image
background should provide a proper contrast to the leaf colour .Leaf disease database is prepared with both
black and white background, based on the comparative study black background image provides better
results and hence it is used for the disease identification leaf. Image pre-processing : Image acquired using
digital transformation and histogram equalization. The colour transformation step converts the RGB images to
HIS representation as this colour space is based on the human perception, hue refers to the dominant colour
space is based on human perception. Hue refers to the dominant colour attribute in the same way as perceived
by a human observer. Saturation refers to the amount of brightness or while light added to the huge. Intensity
refers to the amplitude of light. After the RGB to HIS conversion, Huge part of the images is considered for the
analysis as this provides only the required information. S and I component are ignored as it does not give any
Significant information.

ACTIVITYLOGFORTHEFIFTHWEEK

DAY &DATE	BRIEFDESCRIPTIONOFTHEDAILYACTIVITY	LEARNINGOUTCOME
Day– 1	We collected information about Agriculture by using Reference(Documentation).	Started documentation
Day - 2	We divided our documentation into parts.	Each partis assigned to each member four team.
Day– 3	Attached the pictures which we are visited.	We attached the pictures of Agriculture
Day– 4	We collect some more information by references.	We collection formation by references.
Day– 5	Documentation with proper manner.	The documentation is done with well manner.
Day– 6	Completed the document.	Completed the document.

Objective of the Activity Done: All the collect ed information is being documented**.**
Detailed Report:
An application of detecting the plant diseases and providing the necessary suggestions
the disease has been implemented. Hence the proposed objective was Implemented on three different
types of crops namely Rice, Sugarcane and Cotton The diseases specific to these plants were considered
for testing of the algorithm. The experimental results indicate the proposed approach can recognize the
diseases with a little computational effort. By this method, the plant diseases recognize the can be identify
stage itself and the pest control tools can be used to solve pest problems while minimizing risks to people
and the environment
In order to improve disease identification rate at various stages, the training samples .
can be increased with the optimal features given as input condition for disease identification and
fertilization management of the crops. As a part of Future Enhancement the complete process described
In this project can be automated so that the results can be delivered in a very short time.

WEEKLYREPORT

WEEK–5(From Dt……..…..to Dt .....

CHAPTER5 :OUTCOMES 1DESCRIPTION

Details of the Socio-Economic Survey of the Village/Habitation.

Attach the question prepared for the survey.

1.What is your financial status?
2. Do you have any debts?
3. Do you get crop loans?
4. Do you get seeds and fertilizers in time?
5. How do you market your crops?
6. How do you plan for your future?
7. Are you aware of Government plans and facilities?
8.Are you adopting and learn new technologies?
9.Are you inspiring young people to stay in rural areas and become future farmers ?
10.Are you satisfying consumers by changing tastes and expectations?

Describe the problems you have identified in the community

1. Unavailability of good quality of Seeds.
2. Lack of Modern Equipment.
3. Poor irrigation facilities.
4.Small and Fragmented Holdings of land.
5.Dealing with local traders and middleman.
6. Invest in farm productivity.
7. Cope with climate change, soil erosion and biodiversity loss.
8. Poor water facility.
9.Transportation problem.
10.Lack of supplies basic raw goods for building and creation materials.

Short term and long term action plan for possible solutions for the problems identified and that could be recommended to the concerned authorities for implementation.

Since the beginning of agriculture, generations of farmers have been evolving practices
practices for combating the various plagues suffered by our crops following the discovery of the causes of plant
us to develop a wide array of measures for the control of specific plant diseases.
These “traditional principles “, as they have come to be known , were outlined by a committee of
the us national academy of sciences , 1968.
Automatic detection of plant diseases provides benefits in monitoring large field of crops, and thus automatically
detects the diseases from the symptoms that appear on the plant leaves. This enables machine vision that is to provide
image based automatic inspection.
Kim et al,(2009) have classified the grape fruit peel diseases using colour texture features. Analysis .The texture
features are calculated from the spatial Gray-level Dependence Matrices (SGDM) and the classification is done using
squared distance technique .Grape fruit peel might be infected by several diseases like canker, copper burn, grey
spot, mela nose and wind car(Kim et aI..2009). HELLY et al...,(2003) developed a new method in which Hue
Saturation Intensity (HIS)-transformation is applied to the input image , then it is segmented using FUZZY C-mean
algorithm. Feature extraction stage deals with the colour, size and shape of the spot and finally classification is done
using neural networks (HELLY et aI..,2003).Real time specific weed discrimination technique using multilevel
wavelet decomposition was proposed by SIDDIQIL et al. (2009).
In the histogram equalization is used for pre processing . Features are extracted from Wavelet
decomposition and finally classified by Euclidean distance method (SIDDIQIL et..aI,2009) AI-BASHISH et al.(2001)
developed a fast and accurate method in which the leaf diseases are detected and classified using k-means based

segmentation and neutral networks based classification. Automatic classification of leaf diseases is done based on
high resolution multispectral and stereo images . Sugar beet leaves are used in this approach. Segmentation is the
process that is carried out to extract the diseased region and the plant diseases are graded by calculating the quotient
of disease spot and leaf areas. An optimal threshold Value for segmentation can be obtained using Weighted PAZREN.

Description of the Community awareness programmes/conducted w.r.t the problems and their outcomes.

Awareness of agriculture:
Awareness of farmers on agricultural information services in Mara region, Tanzania.
The study objectives were specifically to:
i. To test awareness of farmers on agricultural information services
ii. To asses farmers' agricultural information needs in the study area
iii. To examine how farmers access the agricultural information services with the use of ICT
To increase knowledge and awareness among farmers to enhance the production and productivity of various crops,
The Government of India has initiated various programmes such as Front Line Demonstrations and Extension through network of Krishi Vigyan KENDRAS (KVKs).
National Mission of Agricultural Extension & Technology (NMAET), National Food Security Mission (NFSM), Soil Health Management Scheme, Mission for Integrated Development of Horticulture (MIDH), Bringing Green Revolution to Eastern India (BGREI) and RASHTRIYA Krishi Vikas Yojana

Report of the mini-project work done in the related subject w.r.t the habitation/village.

Introduction:

Agriculture plays a vital role in the Indian economy. Over 70 per cent of the rural households depend on agriculture. Agriculture is an important sector of Indian
economy as it contributes about 17% to the total GDP and provides employment to over 60% of the population. Indian agriculture has registered impressive growth over last few decades. The food grain production has increased from 51 million tones (MT) in 1950-51 to 250MT during 2011-12 highest ever since independence.

Agriculture is the practice of cultivating natural resources to sustain human life and provide economic gain. It combines the creativity, imagination, and skill involved in planting crops and raising animals with modern production methods and new technologies. Agriculture is also a business that provides the global economy with commodities: basic goods used in commerce, such as grain, livestock, dairy, fibre, and raw materials for fuel.

For example, fibre is a top crop in U.S. agricultural production, according to The Balance Small Business, and a necessary commodity for the clothing sector.

Why Is Agriculture Important?

A key to why agriculture is important to business and society is its output — from producing raw materials to contributing to the global supply chain and economic development.

Providing Raw Materials

Raw materials are a core building block of the global economy. Without access to raw
materials, manufacturers can't make products. Non-agricultural raw materials include steel, minerals, and coal. However, many raw materials derive from agriculture — from lumber for construction materials to herbs for adding flavour to food. Corn, for example, is used to produce foods and serves as a foundation for ethanol, a type of fuel. Another example is resins: plant products used in various industrial applications, such as adhesives, coatings, and paints used in construction.

Creating a Strong Supply Chain

Importing and exporting goods such as agricultural products requires shipping methods such as ocean freight, rail, and trucking. Delays in shipping agricultural products from a Los Angeles port can create problems in China, and vice versa, impacting the global supply chain.

For example, sales of soybean crops from Iowa skyrocketed in 2021 due to various factors including delays in South American crop shipments, according to the Iowa Soybean.

Association. In this example, Iowa benefited from a competitive standpoint. However, delays in shipping crops could also be detrimental to regions expecting shipment, limiting availability of products on store shelves and affecting livelihoods. Encouraging Economic Development Agriculture impacts global trade because it's tied to other sectors of the economy, supporting job creation and encouraging

economic development. Countries with strong agricultural sectors experience employment growth in other sectors, according to USAID. Countries with agricultural productivity growth and robust agriculture infrastructure also have higher per capita incomes, since producers in these countries innovate through technology and farm management practices to boost agricultural productivity and profitability.

TYPES OF AGRICULTURE:

1.Shifting Agriculture: In this type of agriculture, first of all a piece of forest land is cleared by felling trees and burning of trunks and branches. After the land is cleared, crops are grown for two to three years and then the land is abandoned as the fertility of the soil decreases. The farmers then move to new areas and the process is repeated. Dry paddy, maize, millets and vegetables are the crops commonly grown in this type of farming. This is practiced in most parts of India especially North East Region.

2.Subsistence Agriculture: In subsistence agriculture, farmer and his family produce cereals for themselves only or for local market. It is characterized by small and scattered land holdings and use of primitive tools. As the farmers are poor, they do not use fertilizers and high yielding variety of seeds in their fields to the extent they should do. Cereals like wheat, rice, millets are mainly raised.

3.Intensive Farming: Intensive farming aims at maximum possible production on the limited farms with all efforts possible under the circumstances. It is capable of raising more than one crop a year and huge capital and human labour is employed on every hectare of land. It is practiced in most parts of densely populated areas.

4.Extensive Farming: It is the modern system of farming done on large farms also known as mechanical farming due to extensive use of machines. Extensive farm raises only one crop a year and employment of labour and capital per hectare of land is comparatively less.

5.Plantation Agriculture: In plantation agriculture, bush or tree farming is done on huge areas. It is capital centred and needs good managerial ability, technical knowledge, improved machineries, fertilizers, irrigation and transport facilities. A particular or singles own crop like rubber, tea, coconut, coffee, cocoa, spices and fruit crops etc. is sown and the yield is generally obtained continuously for a number of years. Plantation agriculture is export oriented agriculture. Most of the crops grown in plantation agriculture have a life cycle of more than two years. It is practiced in Kerala, Karnataka, Assam and Maharashtra.

6.Commercial Agriculture: Commercial Agriculture is practiced to raise crops on a large scale with a view to export them to other countries and earn money. This type of agriculture farming is done mostly in sparsely populated areas. Gujarat, Punjab, Haryana and Maharashtra, mainly practice this type of farming. Wheat, cotton, sugarcane, corn etc. are some of the commercial crops.

7.Dry Land Farming: Dry farming or dry-land farming may be defined as a practice growing crops without irrigation in areas which receive an annual rainfall of 750 mm – 500 mm or even less. In dry land farming, moisture is maintained by raising special type of crops. Gram, jowar, bajra and peas are such crops which need less water. It is practiced in low rainfall areas or where there is inadequate irrigation facility. This is practiced in dry areas of the country such as western, north-western India and central India.

8.Wet Land Farming: Wet land farming depends mainly upon rains, so it is practiced in high rainfall or well irrigated areas. In this type of farming rice, jute and sugarcane are grown. This type of farming is prevalent in the north, north-eastern India and on the slopes of the Western Ghats. On the basis of seasons, crops grown in India can be classified as follows—

(i) Kharif: Kharif crops are grown with the start of monsoon till the beginning of winter (June-July to October-November)

Rice, maize, millets, cotton, groundnut, moong, urad etc. are kharif crops

(ii) Rabi: Rabi crops are sown with the start of winter till the beginning of summer (October-November to March-April).

Wheat, barley, gram and oilseeds are rabi crops.

(iii) Zaid: Zaid crops are grown in short season of summer. Watermelon and cucumbers are Zaid crops.

9.Terrace Agriculture: The hill and mountain slopes are cut to form terraces and the land is used in the same way as in permanent agriculture. Due to scarcity of the availability of flat land, terraces are made to provide small patch of level land. Soil erosion is also checked due to terrace formation on hill slopes.

Soil preparation:

Before raising a crop, the soil in which it is to be grown is prepared by ploughing, levelling, and manuring. Ploughing is the process of loosening and digging of soil using a plough. This helps in proper aeration of the soil. After ploughing, the soil is distributed evenly and levelled in the process called levelling. The soil is then manured.

Sowing

Selection of seeds of good quality crop strains is the primary stage of sowing. After the preparation of soil, these seeds are dispersed in the field and this is called sowing. Sowing can be done manually, by hand or by using seed drilling machines. Some crops like paddy are first grown into seedlings in a small area and then transplanted to the main field.

Manuring:

Crops need nutrients to grow and produce yield. Thus, the supply of nutrients at regular intervals is necessary. Manuring is the step where nutritional supplements are provided and these supplements may be natural (manure) or chemical compounds (fertilizers). Manure is the decomposition product of plant and animal wastes. Fertilizers are chemical compounds consisting of plant nutrients and are produced commercially. Apart from providing nutrients to crop, manure replenishes soil fertility as well. Other methods for soil replenishment are vermicompost, crop rotation, planting of leguminous plants

Irrigation

Irrigation is the supply of water. Sources of water can be wells, ponds, lakes, canals, dams etc. Over irrigation may lead to water logging and damage the crop. This frequency and interval between successive irrigation need to be controlled.

Weeding

Weeds are unwanted plants which grow among crops. They are removed by using weedicides, by manually pulling them with hands and some are removed during soil preparation.

Harvesting

Once the crop is matured, it is cut and gathered, this process is called harvesting. Followed by harvesting, grains are separated from the chaff either by threshing, or manually in small scale (winnowing).

Storage

Grains yielded are stored in granaries or bins at god owns for later use or marketing. Therefore, methods of crop protection need to be better. In order to protect grains from pest and rodents cleaning, drying, fumigation ,etc. ,are done prior to storing.

Pesticides and fertilizers

Pesticides: Pesticides are the substances that are meant to control pests. This includes herbicide, insecticide, nematicide, bactericide, insect repellent, animal repellent microbicide, fungicide and lampricide. Most pesticides are intended to serve as plant protection product

which in general protect plants from weeds, fungi or insects. These are approximately 80% of all pesticide use.

Example: The fungus Alternaria Salone is used to combat the aquatic weed salvinia.

HISTORY:

Since before 2000 BC, humans have utilized pesticides to protect their crops. The first known pesticide was elemental sulphur dusting used in ancient Sumer about 4,500 years ago in ancient Mesopotamia. The Rigveda, which is about 4,000 years old, mentions the use of poisonous plants for pest control. By the 15th century, toxic chemicals such as arsenic, mercury, and lead were being applied to crops to kill pests. In the 17th century, nicotine sulcate was extracted from tobacco leaves for use as an insecticide. The 19th century saw the introduction of two more natural pesticides, pyrethrum, which is derived from chrysanthemums, and rotenone, which is derived from the roots of tropical vegetables. Until the 1950s, arsenic-based pesticides were dominant. Paul Müller discovered that DDT was a very effective insecticide. Chlorinates such as DDT were dominant, but they were replaced in the U.S. by organophosphates and

Carbamates by 1975. Since then, pyrethrin compounds have become the dominant insecticide. Herbicides became common in the 1960s, led by “triazine and other nitrogen-based compounds, carboxylic acids such as 2,4-dichlorophenoxyacetic acid, and glyphosate”. India is the largest producer of pesticides in Asia and twelfth in the world. There are about 150 industrial units manufacturing pesticides and about 500 industrial units engaged in formulations in the country. Here are some India’s top pesticide companies: Some of the top pesticides

industries are

:

S.NO	Name of the company	Year of establish	Headquarters
1	Canara international	1960	Hyderabad
2	Tata chemicals	1985	Mumbai
3	Chambal fertilizer and chemicals ltd	1976	Bombay

4	Gujarat Narmada valley fertilizers and chemicals ltd	1962	Gujarat
5	Gujarat state valley fertilizers and chemicals	1978	Gujarat
6	Hindustan fertilizers corporation limited	1967	New Delhi
7	India farmers fertilizers cooperative limited	1943	New Delhi
8	Travancore limited	1943	Kerala

FROM THE SURVEY THE FOLLOWING PESTICIDES ARE USED BY THE NEAR BY FARMERS

S.no	Name of the crop	Chemical composition
1	Paddy	10% water
2	Banana	Azoxystrobin
3	**Guava**	
4	**Sweet lime**	**Cazorla 92 SP, committee 6.5**
5	**Onion**	**Chlorpyrifos**

6	**Sweet corn**	**bifenthrin ,Methomyl ,carbaryl**
7	**Red gram**	**Quinalphons25%,spionosa45%sc,Deltamerthrin2.8 %**
8	**Cotton**	88% -97% cellulose
9	**Tobacco**	**Methyl bromide**
10	**Black berries**	**Myclobutanil , Cyprodinil**

FERTILIZERS: A fertilizer is any material of natural or synthetic origin that is applied to soil or to plant issues to supply plant nutrient. Fertilizers may be distinct from liming materials or other non-nutrient soil amendments. Many sources of fertilizer exist, both natural and industrial produced.

.Types of Fertilizers .Fertilizers are mainly classified into two main types, organic and inorganic fertilizers.

Organic Fertilizers

Natural fertilisers derived from plants and animals are known as organic fertilisers. By adding carbonic molecules necessary for plant growth, it enriches the soil. Organic fertilisers boost the amount of organic matter in the soil, encourage microbial reproduction and alter the physical and chemical composition of the soil. It is regarded as one of the essential elements for foods t hat are green.

- Agricultural Waste
- Livestock Manure
- Industrial Waste
- Municipal Slug

Inorganic Fertilizers

Chemical fertilisers generated by chemical techniques that contain nutrients for crop growth are known as inorganic fertilisers. The inorganic fertilisers are of the following types:

Nitrogen Fertilizers

Nitrogen fertilisers contain nitrogen necessary for the development of crops. Nitrogen, a key constituent of chlorophyll, helps main balance in the process of photosynthesis. It is also apart of amino acids in plants and contains protein. Nitrogen fertilisers improve the production and quality of agricultural products.

phosphorus Fertilizer

In a phosphorus fertiliser, phosphorus is the principal nutrient. The effective phosphorus concentration, fertilisation techniques, soil characteristics, and crop strains all affect how successful a fertiliser is. The protoplasm of the cell contains phosphorus, which is crucial for cell growth and proliferation. The growth of the plants' roots is aided by the phosphorus fertiliser.

Advantages of Fertilizers

The advantages of fertilisers are mentioned below:

- Easy to transport, store, and apply
- For supplying a specific nutrient, we can select a specific fertiliser due to its nutrient specific nature
- Water-soluble and can easily dissolve in the soil. Hence, they are easily absorbed by the plants
- They have a rapid effect on the crops
- Increase the crop yield and provide enough food to feed the large population
- Predictable and reliable

Disadvantages Of Fertilizers

Fertilisers have the following disadvantages:

- Expensive
- The ingredients in the fertilizers are toxic to the skin and respiratory system
- Excessive use of fertilisers damages the plants and reduces soil fertility
- Leaching occurs and the fertilisers reach the rivers causing eutrophication
- Long term use reduces the microbial activity and disturbs the pH of the soil

Uses of Fertilizers

Fertilisers are used for various purposes. The uses of fertilisers are mentioned below:

- Used to provide additional nutrients to the plants
- They are added to improve the yield of the crops
- Nitrogen-rich fertilisers are used for the greening of lawns
- Organic fertilisers improve the texture and fertility of the soil
- Gardeners use fertilisers to address certain needs of the plants such as nutritional needs
- Fertilisers are added to potted plants to replace the lost nutrients

Some of the top fertilizer industries are:

S.NO	NAME OF THE COMPANY	YEAR OF ESTABLISH	HEADQUATER
1	Coromandel	1960	Hyderabad

	internationa l		
2	**Tata chemicals**	**1939**	**Mumbai**
3	**Chambal fertilizer and chemicals ltd**	**1985**	Bombay
4	**Gujarat Narmada valley fertilizers and chemicals ltd**	**1976**	**Gujarat**
5	**Gujarat state valley fertilizers and chemicals ltd**	**1962**	**Gujarat**
6	**Hindustan fertilizers corporation limited**	**1978**	**New Delhi**
7	**Indian farmers fertilizers cooperative limited**	**1967**	**New Delhi**
8	**Travancore limited**	**1943**	**Kerala**

FROM THE SURVEY THE FOLLOWING FERTILIZERS ARE USED BY THE NEAR BY FARMERS

S.NO	Name of the crop	Chemical composition
1	Paddy	Dry matter ,organic matter , nitrogen , phosphors , potassium
2	Banana	Potassium ,phosphate and magnesium
3	Guava	6-6-6-2(nitrogen-phosphors potassium magnesium)
4	Sweet lime	20-3-19(nitrogen -phosphors potassium)
5	Onion	5-10-5(nitrogen -phosphors potassium)
6	Sweetcorn	16-16-8(nitrogen -phosphors potassium)
7	Red gram	10-26-26(nitrogen -phosphors potassium)
8	Cotton	10-26-26(nitrogen -phosphors potassium)
9	Tobacco	Nitrogen ,phosphors, potassium ,calcium ,magnesium
10	Black berries	20-20-20(NPK),21-0-0(Ammonium sulphate)

DEFORESTATION

Deforestation is the purposeful clearing of forest land.

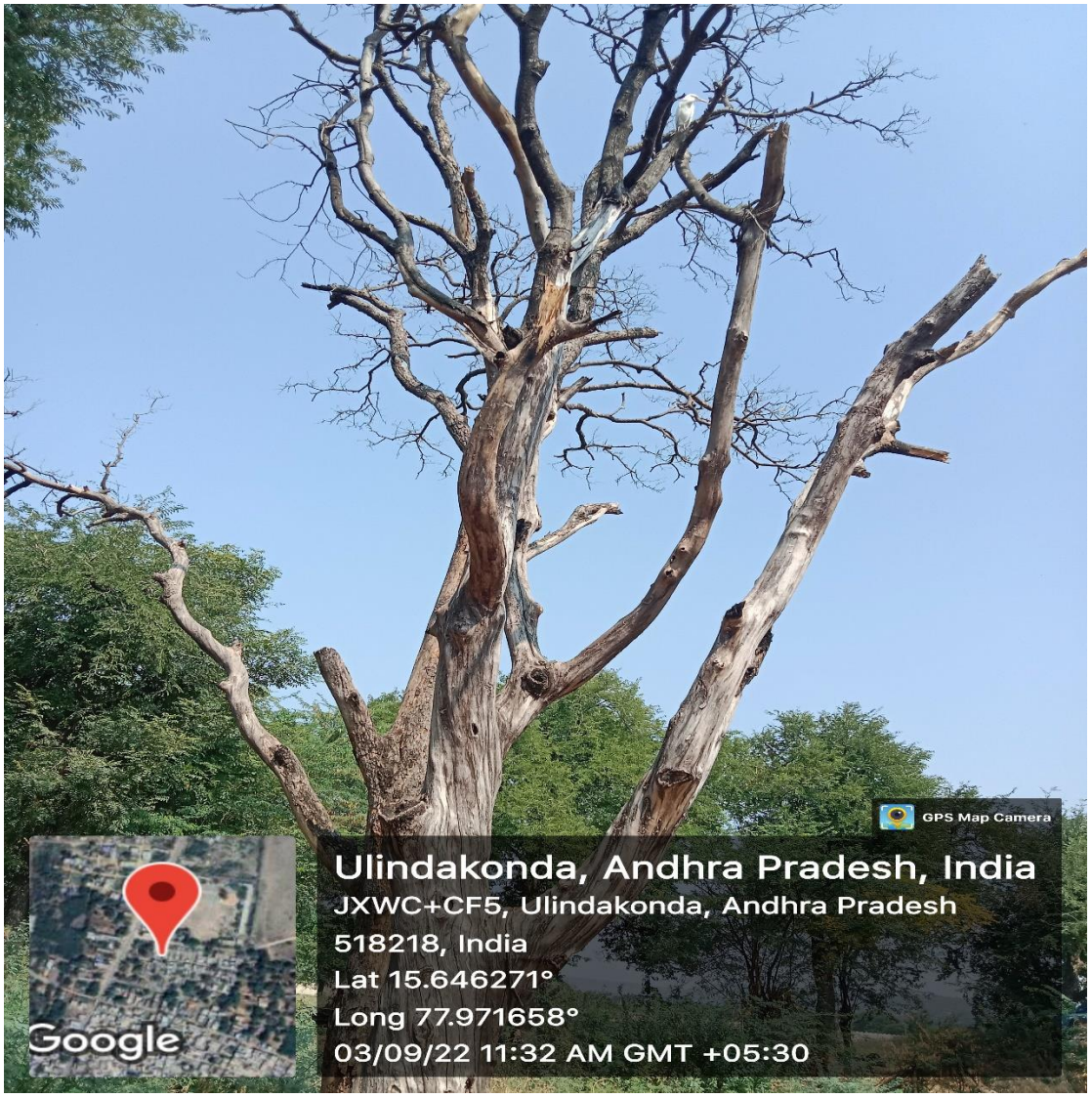
Throughout history and into modern times, forests have been razed to make space for

agriculture and animal gazing, and to obtain wood for fuel, manufacture construction.

Deforestation has greatly altered landscapes around the world.

These are the 5 effects of deforestation:

The loss of tree and other vegetarian can cause climate change, desertifation, soil Erosion, fewer crop, flooding, increased greenhouse gases in the atmosphere, and a host of problems for indigenous people.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Student Self-Evaluation for the Community Service Project

Please rate your performance in the following areas:

Rating Scale: 1 islowestand5is highest rank

Student Name:
K.Hemalatha
A.Manjula
M.Sai sree
M.Sindhuja
M.Yogamrutha
B.Poojitha

RegistrationNo:202T1A0426
202T1A0401
202T1A0452
202T1A0447
202T1A0460
202T1A0408

Date of Evaluation:

Name of the Person in -charge :Mr.Syed Noorullah

Address with mobile number:

	1	2	3	4	5
1) Oralcommunication					
2) Writtencommunication	**1**	**2**	**3**	**4**	**5**
3) Proactiveness	**1**	**2**	**3**	**4**	
4) Interactionabilitywithcommunity	**1**	**2**	**3**	**4**	
5) Positive Attitude	**1**	**2**	**3**	**4**	
6)Self-confidence	**1**	**2**	**3**	**4**	
7) Ability to learn	**1**	**2**	**3**	**4**	
8) WorkPlanandorganization	**1**	**2**	**3**	**4**	
9) Professionalism	**1**	**2**	**3**	**4**	**5**

5

5

5

5

5

5

10)Creativity	**1**	**2**	**3**	**4**	**5**
11)Quality of work done	**1**	**2**	**3**		**4**
12)Time Management	**1**	**2**	**3**		**4**
13)Understanding the Community	**1**	**2**	**3**		**4**
14)Achievement of Desired Outcomes	**1**	**2**	**3**		**4**
15)OVERALLPERFORMANCE	**1**	**2**	**3**		**4**

5

5

5

5

5

Date: **Signature of the Student**

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

Student Name: K.Hemalatha
A.Manjula
M.Sai sree
M.Sindhuja
M.Yogamrutha
B.Poojitha

Registration No:202T1A0426
202T1A0401
202T1A0452
202T1A0447
202T1A0460
202T1A0408

Date of Evaluation:

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 I is lowest and5ishighestrank

5	**1) Oralcommunication**	**1**	**2**	**3**	**4**
5	**2) Writtencommunication**	**1**	**2**	**3**	**4**
5	**3) Proactiveness**	**1**	**2**	**3**	**4**
5	**4) Interactionabilitywithcommunity**	**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) WorkPlanandorganization**	**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**

14)Achievement of Desired Outcomes		**1**	**2**	**3**	**4**	**5**
15)OVERALLPERFORMANCE	**1**	**2**	**3**	**4**	**5**	

Date: **Signature of the Supervisor**

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