

Program Book  
for  
Community Service Project



# Program Book

## Community Service Project

Name of the student

Name of the college

Registration Number

Period of C.S.P.

Name of address of the Community Service Project



AP STATE COUNCIL OF HIGHER  
EDUCATION

(A STATUTORY BODY OF GOVERNMENT OF ANDHRA PRADESH)


**Student's Declaration**

I, S. Damothusa student of <sup>Community</sup> Service Program, Reg. No. 330176305202 of the Department of Statistics in Mrs. A.V.N. College do hereby declare that I have completed the mandatory community service from..... to .....in Ar. Vayyapalem. (Name of the Community/Habitation) under the Faculty Guideship of Mrs. Ch. Hallika (Name of the Faculty Guide), Department of Statistics in Mrs. A.V.N. College..... College

(Signature and Date)

**Endorsements**

Faculty Guide Ch. Hallika

  
P. GANDHI, M.Sc, M.Phil  
Head of the Department  
Department of Mathematics & Statistics  
Head of the Department Mrs. A.V.N. College, Visakhapatnam

  
Principal

PRINCIPAL  
Mrs. A.V.N. COLLEGE  
VISAKHAPATNAM

### ACKNOWLEDGEMENTS

It is really matter of pleasure for an opportunity to thank all the persons who helped directly or indirectly for the successful completion of the project report. "WATER POLLUTION" with special reference to

6/37

I wish to express my gratitude to all the members of \_\_\_\_\_ for giving the proper responses which has been instrumental in completion of this project I am thankful to my mentor

I would also like to extend my gratitude to the principal sir \_\_\_\_\_ for providing me all the facilities that was required

In the end, I wish to thank my parents as well for their support and encouragement without which I could not have completed this project in the limited time frame

S. Narsimha ..

## CHAPTER 1: EXECUTIVE SUMMARY

The community service report shall have only a one-page executive summary. It shall include a brief description of the Community and summary of all the activities done by the student in CSP and five or more learning objectives and outcomes.

Water pollution is the contamination of water sources by substances which make the water unusable for drinking, cooking, cleaning and other activities pollutants include chemicals, trash bacteria and parasites. All forms of pollution eventually make their way to water.

In my survey I have observed that many of the people are affected with water diseases like diarrhoea, typhoid etc.. To control this situation we have to take some objectives. The water act 1974 is enacted with the object of prevention and control of pollution in water.

### Objectives

- \* To identify the ways in which human waste water can cause water pollution
- \* Identify contaminants that are non-chemical pollutants

### Outcomes

- \* Facility should be increased
- \* Awareness should be created.

## CHAPTER 2: OVERVIEW OF THE COMMUNITY

- About the Community/Village/Habitation including historical profile of the community/habitation, community diversity, traditions, ethics and values.
- Brief note on Socio-Economic conditions of the Community/Habitation.

The houses are placed within no place there are street lights for each line of the area people are using municipal water for drinking and other usage.

Some people are buying water cans for drinking purpose. The roads are very clean and clear. Some places are filled with dust and wastage of houses, which is mixed with drinking water.

Some people are using ground water for drinking. The water of this area is not purified. People are suffering from some skin diseases, throat diseases and long term diseases.

### CHAPTER 3: COMMUNITY SERVICE PART

Description of the Activities undertaken in the Community during the Community Service Project. This part could end by reflecting on what kind of values, life skills, and technical skills the student acquired.

#### The ACTIVITIES UNDERTAKEN IN THE COMMUNITY DURING THE COMMUNITY SERVICE PROJECT

1. Survey on Socio economic
2. House hold Survey
3. Report writing
4. Awareness created
5. Awareness programme
6. Submit the project
7. Report the project

#### VALUES, LIFE SKILLS, AND TECHNICAL SKILLS

- ⇒ Team work and problem solving skills
- ⇒ The ability to communicate effectively with others
- ⇒ The collaborative nature of project also reinforces the social and emotional learning programme
- ⇒ people in learning environments have a wider and more diverse social circle
- ⇒ Those who learn readily and continually are better able to pass learn. along what they have learned and act
- ⇒ when people learn, they gain confidence for trying new things and stretching themselves

## CHAPTER 5: OUTCOMES DESCRIPTION

Details of the Socio-Economic Survey of the Village/Habitation. Attach the questionnaire prepared for the survey.

1. Name of the person?
2. Name of the village, (or) town?
3. Gender and age of the person?
4. Type of family (Nuclear / joint / extended)
5. What is your door number.
6. Which sources of drinking water are available in your neighborhood?
7. Which source of does your house hold use?
8. Is their frequency sufficient for your needs?
9. Any water born disease in your house
10. In any of your family members suffering from joint pains
11. Name of the medicine frequently used in the family?
12. Purity and drinking water source
13. How is drinking water purified
14. What impact do humans have on the aquatic life zones?
15. water born disease encountered in the last few years

**Describe the problems you have identified in the community**

Contaminated water and poor sanitation are linked to transmission of diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid and polio. Absent, unadequate or unappropriately managed water and sanitation services expose individuals to preventable health risks. This is particularly the case in health care facilities where both patients and staff are placed at additional risks of infection and disease when water sanitation and hygiene services are lacking. Globally 15% of patients develop an infection during a hospital stay with the proportion much greater in low income countries.

Inadequate management of urban industrial and agricultural wastewater means the drinking water of hundreds of millions of people is dangerously contaminated or chemically polluted. Natural sources of chemicals, particularly in ground water, can also be of health significance including arsenic and fluoride, while other chemicals such as lead may be elevated in drinking water as a result of leaching from water supply components in contact with drinking water.



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.

possible solution for the problem identified

- ⇒ Waste water treatment
- ⇒ plastic waste reduction
- ⇒ water conservation
- ⇒ Install a water efficient toilet in your home
- ⇒ Specific tanks
- ⇒ Avoid Using the toilet as a waste basket
- ⇒ Storm water management
- ⇒ Green Agriculture

Solutions:

⇒ Before raw sewage can be safely released back into the environment it needs to be treated correctly in a water treatment plant in a water treatment plant. Sewage goes through a number of chambers and chemical processes to reduce the amount and toxicity of the water.

⇒ The final stage of treatment is the tertiary phase this stage must be done before the water can be reused almost all solid particles are removed from the water and chemical are removed additionally are supplied to get rid of any left over.

**Description of the Community awareness programme/s conducted w.r.t the problems and their outcomes.**

Awareness about water  
 public water conservation campaigns create awareness  
 in all levels of society about the importance of  
 saving water to cope the with its scarcity and  
 ensure sustainability the aim is to change citizen  
 attitude and behavior to improve water use efficiency  
 Awareness programmes

S.No.	Name of program	Mode	Date
1.	Awareness program on water conservation	prajnanam paper, phone in programme	29-05-2019
2.	Community based water resource management	Kaushidhar (charbha vahini) phone in programme	22-06-2020
3.	On occasion of world water day Jaloda mahila jagata karavya	Kaushidhar (charbha) vahini) phone in programme	22-02-2021

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

A mini-project work in the related subject w.r.t the habitation/village. (For ex., a student of Botany may do a project on Organic Farming or Horticulture or usage of biofertilizers or biopesticides or effect of the inorganic pesticides, etc. A student of Zoology may do a project on Aquaculture practices or animal husbandry or poultry or health and hygiene or Blood group analysis or survey on the Hypertension or survey on the prevalence of diabetes, etc.

The Report shall be limited to 6 pages.

WATER POLLUTION

Water pollution (or aquatic pollution) is the contamination of water bodies usually as a result of human activities, so that it negatively affect its uses. Water bodies include lakes, rivers, oceans, aquifers, reservoirs and ground water pollution result when contaminants are introduced into these water bodies. Water pollution can be attributed to one of four sources. Sewage discharge industrial activities agricultural activities, and urban runoff including stormwater. It can be grouped into surface water pollution (either fresh water pollution or marine pollution) or groundwater pollution. For example, releasing inadequately treated waste water into the natural water can lead to degradation of these aquatic ecosystem. Water pollution can also lead to water-borne diseases for people using pollution water for drinking, bathing, washing or the irrigation. Water pollution reduces the ability of the body of water to provide ecosystem services such as drinking water that is would be otherwise provide.

Sources of water pollution are either point sources (or) non-point sources. Point sources have an identifiable cause, such as a storm drain, a waste water treatment plant (or) an oil spill. Non-point sources are more diffuse. Such as agricultural runoff. Pollution may take the form of toxic substances (eg oil, metals, plastics, pesticides, persistent, organic pollutants, industrial waste products) stressful conditions (eg changes of pH, hypoxia or anoxia, increased temperatures, excessive turbidity, unpleasant taste or odor and change of salinity) or pathogenic organisms. Contaminants may include organic and inorganic substances. Heat can also be a pollutant and this is called thermal pollution. A common cause of thermal pollution is the use of water as a coolant by power plants and industrial manufacture.

Control of water pollution requires appropriate infrastructure and management plans as well as legislation. Technology solutions can include improving sanitation, sewage treatment, industrial waste water treatment, agricultural waste water treatment, erosion control, sediment control and control of carbon runoff (including stormwater management) effective control of carbon runoff including reducing speed and quantity of flow.

## CONTAMINANTS WITH AN ORIGIN IN SEWAGE

The following compounds can all reach water bodies via raw sewage or even treated sewage discharges:-

- ⇒ Various chemical compounds found in personal hygiene and cosmetic products
- ⇒ Disinfection by products found in chemically disinfected by products water (whilst these are the chemicals can be a pollutant in the water distribution network, they are fairly volatile and therefore not usually found in environmental waters)
- ⇒ Hormones and synthetic materials such as the phthalates that mimic hormones in their action
- ⇒ Insecticides and herbicides, after from agricultural runoff

If the water pollution stems from sewage the main pollutants are: suspended solids, biodegradable organic matter, nutrients and the pathogenic organisms

## ORGANIC COMPOUNDS

- Organic substances that enter water bodies are often toxic
- ⇒ petroleum hydrocarbons including fuels (gasoline, diesel fuel, jet fuels, and fuel oil) and lubricant (motor oil) and fuel combustion by products, from oil spills or storm water runoff

⇒ volatile organic compounds such as unpropyl stored industrial solvents, problematic species are organo chlorides such as poly chlorinated biphenyl (PCBs) and trichloroethylene, a common solvent per and poly fluorinated substance (PFAS) are persistent organic pollutants

### TYPES OF SURFACE WATER POLLUTION:-

Surface water pollution includes pollution of rivers, lakes and oceans. A subset of surface water pollution is marine pollution which affects the oceans. Nutrient pollution refers to contamination by excessive inputs of nutrients

Globally about 4.5 billion people do not have safely managed sanitation in 2017, according to an estimate by the joint monitoring programme for water supply and the sanitation

### MARINE POLLUTION:-

Marine pollution occurs when substances used or spread by humans such as industrial agricultural and residential waste, pesticides, noise excess carbon dioxide or invasive organisms enter the ocean and cause harmful effects there

### NUTRIENT POLLUTION:-

Nutrient pollution a form of water pollution refers to contamination by excessive inputs of nutrients

## THERMAL POLLUTION:-

Nutrient pollution a form of water pollution refers to contamination by excessive  
Thermal enrichment is the degradation of water quality by any process that changes ambient water temperature  
thermal pollution is the source of or fall in the temperature of a natural body of water caused by human influence

## Biological pollution:-

The introduction of aquatic invasion organisms is a form of water pollution as well as cause by human influence biological pollution.

## IMPACTS:-

ECOSYSTEMS water pollution is a major global environmental problem because it can result in the degradation of all aquatic ecosystem fresh, coastal and ocean waters

### ⇒ PUBLIC HEALTH AND WATER BORNE DISEASES

polluted water spread gastrointestinal diseases and parasitic infection and killed 18 million people These are also returned to as water borne disease

### ⇒ OCEAN ACIDIFICATION

Ocean acidification is another impact of water pollution. Ocean acidification is the ongoing decrease in the pH value of the world's oceans caused by the capture of carbon dioxide

## GROUND WATER POLLUTION:-

Ground water pollution occurs when pollutants are released to the ground and make their way into ground water. This type of water pollution can also occur naturally due to the presence of a minor and unwanted constituent contaminant or impurity in the ground water in which case it is more likely referred to as a contaminator rather than pollution.

When this ground water is supplied to people they get diseases like cholera, diarrhea, joint pains, kidney problem, liver disease and throat disease. Skin allergies.

Ground water pollution poses a hazard to the well being of people and ecosystems one-quarter of the world's population depends on groundwater for drinking.

These polluted water can be tested in many ways the following diagram represent the water pollution test.

### RECOMMENDATIONS:-

- ⇒ Small water enterprises (swts):- employ kiosks to complement piped water supply
- ⇒ piped water supply:- pilot 24/7 water supply initiative and build local capacity
- ⇒ Digital Tools: Improve governance for VWSG leveraging digital tools



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

### RECOMMENDATIONS-


- ⇒ Small water Enterprises (SWEs) + Employ kiosks to complement piped water supply
- ⇒ piped water supply + pilot 24/7 water supply initiative and Build local capacity
- ⇒ Digital Tools - Improve E-governance for vizag leveraging digital tools

### CONCLUSIONS-


Only a few of which are discussed here rivers and streams demonstrate some capacity to recover from the effects of certain pollutants, but lakes, bays, ponds, sluggish rivers, and oceans have little resistance to the effects of water pollution

- ⇒ There is need to identify a water conservation and demand strategy for urban municipality
- ⇒ There is need for research and development on potential water saving facilities and appropriate technologies




**Visakhapatnam, Andhra Pradesh, India**  
 45-32-10, Akkayyapalem, Visakhapatnam, Andhra Pradesh 530016, India  
 Lat 17.732068°  
 Long 83.297997°  
 23/08/22 12:47 PM





**Visakhapatnam, Andhra Pradesh, India**  
 Sri Krishna Polynoisra, Beside Sivarama Reddy Sweets, 49-112, Akkayyapalem Main Rd, near Jagga Rao Bridge, Latha Nagar, Akkayyapalem, Visakhapatnam, Andhra Pradesh 530016, India  
 Lat 17.732019°  
 Long 83.299129°  
 23/08/22 12:38 PM




**Visakhapatnam, Andhra Pradesh, India**  
 40-30-B Sangam Office Building, Akkayyapalem, Visakhapatnam, Andhra Pradesh 530016, India  
 Lat 17.731977°  
 Long 83.298160°  
 23/08/22 12:46 PM




**Visakhapatnam, Andhra Pradesh, India**  
 Yamanchi Van Vardhi, 45-39-12, Akkayyapalem Main Rd, Srinivas Nagar, Akkayyapalem, Visakhapatnam, Andhra Pradesh 530016, India  
 Lat 17.73264°  
 Long 83.298881°  
 23/08/22 12:38 PM



**PHOTOS AND VIDEO LINKS**

