



Program Book

Community Service Project

AP STATE COUNCIL OF HIGHER
EDUCATION

(A STATUTORY BODY OF GOVERNMENT OF ANDHRA PRADESH)

Student's Declaration

I, L. Raju....., a student of B.Sc (MCS) Program, Reg. No. 210130805189 of the Department of Mathematics Mrs. A.V.N. College do hereby declare that I have completed the mandatory community service from 01/01/22 to 10/01/2023 in to..... (Name of the Community/Habitation) under the Faculty Guideship of Mrs. Sheik Shaukat (Name of the Faculty Guide), Department of Mathematics in Mrs. A.V.N...... College

L. Raju.
(Signature and Date)
10/01/2023

Endorsements

Sheik Shaukat
Faculty Guide

P. Gandhi
Head of the Department, Head of the Department
Department of Mathematics & Statistics
Mrs. AVN College, Visakhapatnam

[Signature]
Principal
PRINCIPAL
Mrs. A.V.N. COLLEGE
VISAKHAPATNAM

ACKNOWLEDGEMENTS

I wish to express my gratitude to those who extended their valuable co-operation and contribution towards the project

I would like to thank my project mentor Mr. Shikha Shaukhan sir, Mrs. A.V.N. College for his valuable time and continued assistance for the successful completion of the project.

I would also like to express gratitude to Mr. Shikha Shaukhan sir, Mrs. A.V.N. College management for facilitating this project and providing the guidance throughout the duration of the project.

I would also like to thank the faculty and staff of the institute, and all my team members for their support.

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.

The stress on our water environment as result of increased industrialization, which aids urbanization, is becoming very high thus reducing the availability of clean water polluted water is of great concern to the equation organism, plants, humans, and climate and indeed alters the ecosystem. The preservation of our water environment, which is embedded in sustainable development, must be well driven by all sectors. While effective water environment, integration of environmental policies into the other firms core objectives coupled with continuous periodical engt enlightenment on the present and future consequences of environmental/water pollution will greatly assist in conserving the world environment.

Since water forms a core of the existence of human and living things, its preservation and sustainable availability cannot be over emphasized the availability of clean water is greatly threatened by various human activities and of interest is pollution which in turn affects the ecosystem and causes various climatic changes. While various waste water treatment methods are being explored by industries and various treatment plants, untreated waste water is still being discharged into the water bodies by some industries.

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.

Activities undertaken in the Community during the Community Service project.

- * Study on water pollution
- * Preparing Questionnaire.
- * Study about the location to be Survey.
- * Survey with our Questionnaire.
- * Analysing the survey data
- * finding solutions for the problem
- * Explaining the people how to solve their water problem.

CHAPTER 5: OUTCOMES DESCRIPTION

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

- * Are you aware of water pollution?
- * What do you think about water pollution?
- * Did water pollution affect your life?
- * How does water pollution affect your life?
- * What kind of water do you use as the main source of your drinking water?
- * Do you pay attention to local drinking water quality?
- * Are you satisfied with your drinking water quality?
- * Do you have any problem with your tap water quality?
- * Do you think any factors affect the quality of your tap water?
- * Do you pay attention to the pollution events reported on TV or in the newspaper?
- * Do you have a municipal or panchayat tap water facility?
- * Which months do you face scarcity?
- * Are you taking any precautions to prevent water pollution?

Describe the problems you have identified in the community

* Problems Identified in the Community

⇒ Lack of awareness on water pollution

⇒ There is no proper municipal or panchayat taps water facility.

⇒ There is no proper main source of drinking water.

⇒ facing water scarcity.

⇒ Health issues due polluted water

⇒ factors affecting the quality of drinking water
wastage of drinking water.

⇒ No proper storage for saving water.

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 attitudes and behaviour to improve water use efficiency Awareness Programmes.

S. No	Name of program	Mode	Date
1.	Awareness program on water Conservation	Prasarani news paper phone in programme	
2.	Community based water resource management	Krishidashan (Chandana vahini) phone in programme	
3.	on occasion of world water day Talada mauliya Jagad Kauluya	Krishidashana (Chandana) vahini) phone in programme	

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.

While there are many things that need to be done in order to protect the environment one highly important method of maintaining the health of the environment is to reduce water pollution, of which there are many effective solutions that can assist with this goal. Water pollution results from harmful substances contaminating any body of water. These substances typically include microorganisms and chemicals like oil. When pollution gets into a body of water, it will cause the water quality to worsen and eventually become toxic to humans and the surrounding environment.

- * Wastewater Treatment
- * Plastic Waste Reduction
- * Water Conservation
- * Install a water-efficient toilet in your home
- * Sepsic Tanks
- * Avoid using the toilet as a waste basket
- * Stormwater management
- * Green Agriculture
- * Denitrification

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 affects its use. Water bodies include lakes, rivers, oceans, aquifers, reservoirs and groundwater. Water pollution results 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 storm water. It can be grouped into surface water pollution [either fresh water pollution or marine pollution] or groundwater pollution. For example, allowing inadequately treated wastewater into the natural waters can lead to degradation of these aquatic ecosystems. 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 it would otherwise provide.

Sources of water pollution are either point sources or non-point sources. Point sources have one identifiable cause, such as a storm drain, a wastewater treatment plant or an oil spill. Non-point sources are more diffuse, such as agricultural runoff. Pollution is the result of the cumulative effect over time. Pollution may take the form of toxic substances (e.g., oil, metals, plastics, pesticides, persistent, organic pollutants, industrial waste product) stressful conditions (e.g., changes of pH, hypoxia & anoxia, increased temperatures, excessive turbidity, unpleasant taste or odour, and change of salinity).

or pathogenic organisms. Contaminants - many include organic and inorganic substances. Heat can also be a pollutant and this is called thermal pollution. A common cause of the thermal pollution is the use of water as a coolant by power plants and industrial manufacturers.

Control of water pollution requires appropriate infrastructure and management plans as well as legislation. Technology solutions can include improving sanitation, sewage treatment, industrial wastewater treatment, agricultural waste water. Control of urban runoff (including stormwater management) effective control of urban runoff includes 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 often of 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 substance that enter water bodies are

often toxic

=> petroleum hydrocarbons, including fats (gasoline diesel fuel jet, fuels, and fuel oil) and lubricant (motor oil) and fuel combustion byproduct, from oil spills or storm water runoff

=> volatile organic compounds, such as improperly stored industrial solvents. problematic species are organochlorides such as polychlorinated.

Biphenyl (PCBs) and trichloroethylene, a common solvent. per. and polyfluoropolyether 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 of 2017. according to an estimate by the joint sanitation 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, particles, 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 input of nutrients.

THERMAL POLLUTION :-

Thermal pollution sometimes called thermal enrichment; is the degradation of water quality by any process that changes ambient water temperature. Thermal pollution is the cause of a fall in the temperature of a natural body of water caused by human influence.

Biological pollution :-

The introduction of aquatic invasive organisms is a form of water pollution as well it causes 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 water.

⇒ PUBLIC HEALTH AND WATER BORNE DISEASES :-

polluted water spread gastrointestinal diseases and parasitic infections and killed 1.8 million people

These were also referred to as water borne diseases"

⇒ OCEAN ACIDIFICATION:-

Ocean acidification is another impact of water pollution. Ocean acidification is the ongoing decrease in the pH value of the earth's oceans caused by the uptake 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 mineral and unwanted constituent, contaminant or impurity in the ground water. In which case it is more likely referred to as contamination rather than pollution.

When these ground waters supplied to people, they get diseases like cholera, dried joint pain, kidney problem, liver diseases and throat diseases, skin allergies.

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

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

CHAPTER 6: RECOMMENDATIONS AND CONCLUSIONS OF THE MINI PROJECT

Since water forms a core of the existence of human and other living things, its preservation and sustainable availability cannot be overemphasized. The availability of clean water is greatly threatened by various human activities and of interest is pollution which in turn affects the ecosystem and causes various climate changes. While various wastewater treatment methods are being explored by industries and various treatment plants, untreated wastewater is still being discharged into the water bodies by some industries. Thus, effective environmental protection policies compliance drive will be of immense benefit to the environmental protection policies. Integrating the goals and objectives of various actors involved in environmental deterioration will help policies performance. This will serve as a step forward in the direction of and reversing water pollution.

PHOTOS AND VIDEO LINKS

