




Program Book

Community Service Project



AP STATE COUNCIL OF HIGHER
EDUCATION

(A STATUTORY BODY OF GOVERNMENT OF ANDHRA PRADESH)

Student's Declaration

I, K. Kakshmi Narayana Reddy Community Service
a student of Program, Reg. No. 720130205127 of the
Department of Stat, Mrs. AVN College do hereby declare that I have
completed the mandatory community service from August to October in
One town... (Name of the Community/Habitation) under the Faculty
Guideship of Mr. Sk. Shank (Name of the Faculty Guide), Department
of Statistics in Mrs. AVN DEGREE College

K. Kakshmi Narayana Reddy
(Signature and Date)

03/03/2023

Endorsements

Shanki
Faculty Guide

P. Gandhi
P. GANDHI, M.Sc, M.Phil
Head of the Department
Department of Mathematics & Statistics
Mrs. AVN College, Visakhapatnam
Head of the Department

Principal
PRINCIPAL
Mrs. A.V.N. COLLEGE
VISAKHAPATNAM

ACKNOWLEDGEMENTS

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I would like to thank my Project mentor Mr. Sheikh Sharukh Sir, M.D.S. A.V.N collage for his valuable time and continued Assistance for the successful completion of the Project.

I would also like to express gratitude to Mr. Sheikh Sharukh Sir, Mrs A.V.N College management for facilitating this project and providing his guidance through 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 supports.

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 aquatic organisms, 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 waste water treatment has the tendency of salvaging the water environment, integration of environmental policies into the actor forms core objectives coupled with continuous periodical enlightenment on the present and future consequences of environmental/water pollution will greatly assist in conserving the water 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 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.

One town also called the "Old Town" is the located in visakhapatnam city. India the area falls under the local administrative limits of greater visakhapatnam municipal corporation.

One town area has more than 300 years of history is British era. the business of whole city was located here including the administration of Vizayanagaram District. There are many old monuments built here like Town Hall visakhapatnam (1904), Kuzipam Market (1914), Europey Cemetary (1619), Queen Victoria pavilion (1904), st. John's church (1844), Queen Mary's school (1800), Ishagmadina dargah (1706), st. Aloysius Anglo-Indian High school (1847) and the light house (1903).

The old town area runs from turney chaultry to End of visakhapatnam port. It has many historical. Educational Institutions. There are so many middle class students are learning education here. The area is Administered by greater visakhapatnam municipal corporation.

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 with data
- * Finding solutions for the problems
- * Explaining the people how to solve there water problem.

ACTIVITY LOG FOR THE FIRST WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
22-08-22 Day - 1 Monday	Few houses are using Municipal water	Drinking Municipal water	
23-08-22 Day - 2 Tuesday	Many houses are getting water from bore	Facilities should be increased	
24-08-22 Day - 3 Wednesday	Few houses getting water from outside but many people are getting mud water	Awareness should be created here.	
25-08-22 Day - 4 Thursday	Many people are drinking mineral water due to low water quality.	Quality of water should be increased.	
26-08-22 Day - 5 Friday	Some Municipal water is having supellents in water.	Facilities should be increased.	
27-08-22 Day - 6 Saturday	Many people are drinking ^{bore} water and using it for cooking too	Water supply should be increased.	

WEEKLY REPORT

WEEK - 1 (From Dt. 22-08-22 to Dt. 27-08-22.)

Objective of the Activity Done:

Detailed Report:

In Velam Peta colony the water supply is too low some people are getting water with mineral water pollutants, pesticides and soil in the water. The water is heated for drinking purpose.

people are suffering from joint pains, fever, colds, cough and some long term diseases. Some people are not getting required amount of water for drinking and usage.

In this colony, the water quality is low. And most of the people are unaware of diseases they are getting from drinking this type of water with bad quality, kidney

diseases and liver problem are exercised in the people who are above 60.

ACTIVITY LOG FOR THE SECOND WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
29-08-22 Day - 1 Monday	In Dungalavanipalem colony few people are suffering from water diarrhoea.	Awareness should be provided	
30-8-22 Day - 2 Tuesday	Few people are suffering from joint pains and long term diseases.	Facilities should be increased.	
31-08-22 Day - 3 Wednesday	In Dungalavanipalem colony some people are getting mud water with soil	water supply should be increased.	
01-09-22 Day - 4 Thursday	In Dungalavanipalem colony people are getting water with mixed pesticides	Quality of water should be increased	
2-09-22 Day - 5 Friday	Some people are drinking bore water due to low water supply.	Water supply should be increased.	
03-09-22 Day - 6 Saturday	Many people are not getting water from Municipal corporation	Supply of water should be increased.	

WEEKLY REPORT

WEEK - 2 (From Dt. 29-08-22 to Dt 3-09-22)

Objective of the Activity Done:

Detailed Report:

Some people are getting water from outside due to mixing of drinking water with drainage water pollution they are getting low quality water. Some people are depending on ground water due to low quality of water.

In rainy season people are drinking water with mud and dust particles people are suffering from fever joint pains and some kidney problems.

Finally, there is no proper water supply, quality of water is too low people are unaware of diseases. They are getting some people are not using Municipal water and they are depending on ground water for drinking.

20% percent of people are working. So they are not getting water from Municipal corporation. They are getting water from outside and for drinking they are getting Mineral water.

THIRD
ACTIVITY LOG FOR THE SECOND WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
05-09-22 Day - 1 Mon	Many house holders are suffering from joint pains and long term diseases	Quality should be increased	
06-09-22 Day - 2 Tues	Few people are drinking bore water and using for cooking	Awareness should be created in people	
07-09-22 Day - 3 Wednes	In Dungalavanipalem colony people are getting water with mixed pesticides	Unaware of the problems from the water	
08-09-22 Day - 4 Thurs	Many people drinking water with mixed bleaching powder.	Quantity of mixed bleaching powder should be decreased.	
09-09-22 Day - 5 Fri	Most of the people are getting water from out side due to water quality	Quality of water should be increased.	
10-09-22 Day - 6 Sat	Few people are drinking bore water and some suffering from joint pains	Water supply should be increased.	

WEEKLY REPORT

WEEK - 3 (From Dt. 06-09-22 to Dt. 10-09-22)

Objective of the Activity Done:

Detailed Report:

Agricultural, Medical and factories waste is mixed with local drinking waters. Because of this they are getting water from outside like mineral water etc. water quality is also very low.

In simple words, people are getting water with mixed bleaching powder with in high quantity. Due to this some people are getting long term diseases, fever, cold, liver problems, kidney problems, etc.

In Dungalavanipalem colony, people are unaware of diseases they are getting.

Quality of diseases they are water is too low. The water supply is low and people with large family are not getting required amount of water people are buying water cans from outside and is with high amount.

FOURTH
ACTIVITY LOG FOR THE THIRD WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
12-09-21 Day - 1 Mon	Most of the peoples are getting mineral water in Dungalavanipalem colony.	people in Dunga-lavanipalem using mineral water to drink	
13-09-21 Day - 2 Tues	Few people are drinking Municipal water in their areas	Facilities should be created	
14-09-21 Day - 3 Wednes	Some people are drinking under ground water and using it for cooking purpose.	Awareness should be created in Dungalavanipalem	
15-09-21 Day - 4 Thurs	Few people are affordable to get filter water	people are in Dungalavanipalem using filter	
16-09-21 Day - 5 Fri	In Dungalavanipalem their are drinking polluted water	Some people are suffering with disease due to drinking of pollution	
17-09-21 Day - 6 Sat	Some peoples are affordable to get filter water	people are of fokable to drink municipal water.	

WEEKLY REPORT

WEEK - 3 (From Dt. 12-09-22 to Dt. 17-09-22)

Objective of the Activity Done:

Detailed Report:

In Durgalavanipalem colony people are drinking Municipal water. Some people are drinking Mineral water and few people are drinking ground water by heating.

They are not getting proper drinking water pollutant were mixed with the drinking water. Some people are getting water with mud particles which is not used for drinking but for normal usage.

Water supply is not supplied properly in required amount of time people are suffering with some skin diseases, throat diseases and some long term diseases.

people are not aware of diseases they are getting from drinking the polluted water.

FIFTH
ACTIVITY LOG FOR THE FOURTH WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
19-09-22 Day - 1 Mon	Most of the people are drinking Municipal water and suffering joint pains	In Dungalavanipalm awareness should be created	
20-09-22 Day - 2 Tues	Many people are getting low water supply and getting water from outside	water supply should be increased	
21-09-22 Day - 3 Wed	Most of the people are drinking mineral water and having good water facilities	water supply should be increased	
22-09-22 Day - 4 Thurs	Many people are getting Municipal water with high mixed bleaching powder	people unaware of diseases they are getting	
23-09-22 Day - 5 Friday	Few people drinking bore water and using it for looking too	Awareness should be created.	
24-09-22 Day - 6 Sat	people getting joint pains and some long term diseases due to low water quality.	Awareness should be created and quality of water should be increased	

WEEKLY REPORT

WEEK - 4 (From Dt. ⁵19-09-21 to Dt. 24-09-21)

Objective of the Activity Done:

Detailed Report:

In Durgalavanipalem colony. They are not using Municipal water and they are getting water from outside like bore water, Mineral water and some quality water.

The quality of water is not good. Some pollutants are mixed with drinking water. It is also in found that some residential areas NAD junction Buhiraju palem including a couple of slum areas like potina Market area contains aquifers with high degree of hydrogeologic vulnerability.

Most of the sectors of the NAD colony and other residential areas in the study area have a high degree of vulnerability in the range $120 < \text{DRASOTIC} < 160$. Due to this people are getting some health diseases.

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.
- ⇒ Factories affecting the quality of drinking water wastage of drinking water.
- ⇒ No proper storage for saving 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.

While there are many things that need to be done in order to protect the environments are highly important method of maintaining the health of the environment to reduce water pollution of which there are many effective solutions that can exist with this goal. Water pollution results from harmful substances containing 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 house
- * Septic Tanks
- * Avoid using the Toilet as a wastebasket
- * Stormwater Management
- * Green Agriculture
- * Denitrification

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 with its scarcity and ensure sustainability. The aim is to change citizen attitudes and behaviours to improve water use efficiency.

Awareness programmes.

S.No	Name of program	Mode	Date
1.	Awareness program on water conservation	prajwani news paper, phone in programme	
2.	Community based water resource Management	krishidarshan (chandana vakini) phone in programme	
3.	On occasion of world water day Talada moulya Jagada kartarya	krishidarshan (chandana vakini) phone in programme	

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 ~~qua~~ aquatic pollution) is the contamination of water bodies usually as a result of human activities, so that it negatively affects its uses water bodies include lakes, rivers oceans, aquifers, reservoirs and groundwater. 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 tested waste water 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 is the result of may take the form of toxic substances (e.g., oil, metals, plastics, pesticides, persistent, organic pollutants, industrial waste products) stressful conditions (e.g., changes of pH; hypoxia or anoxia, increased temperatures, excessive turbidity, unpleasant taste or odor 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 waste water treatment, agricultural waste water treatment.

Erosion control, sediment control and 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 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 fossil ecosystem diesel fuel, jet, fuels, and fuel oil and lubricant motor oil and fuel combustion by product 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, ~~for~~ per and polyfluoroalkyl 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 clean and cause harmful effects there.

NUTRIENT POLLUTION:-

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

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 raise 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 fish, coastal and ocean waters.

→ PUBLIC HEALTH AND WATER BORNE DISEASES:-

polluted water spread gastrointestinal diseases and parasitic, infections and killed 1.8 million people: These are 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 world'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 groundwater. This type of water pollution can also occur naturally due to the presence of a minor and unwanted constitution contaminant or impurity in the groundwater in which case it is more likely referred to as contamination rather than pollution.

When these groundwater supplied to people,

they get diseases like cholera, diarrhea, joint pains, kidney problem, liver diseases and throat diseases, 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.

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 climatic 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 environment and by extension to human factoring these environmental protection policies into 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 ameliorating water pollution.

PHOTOS AND VIDEO LINKS

