

RRDS GOVERNMENT DEGREE COLLEGE, BHIMAVARAM



COMMUNITY SERVICE PROJECT

On

“WATER POLLUTION”

in

Rayalam Village, Bhimavaram W.G.Dt

By

T. SRAVANI

I B. Sc (MPCS)

Under the Guidance of

Mr. K. Srinivasa Rao

Lecturer in Telugu

Declaration

I hereby declare that the Community Service Project work with main Project entitled “**Water Pollution**“ is based on the original work carried out by me at R.R.D.S Government Degree College, Bhimavaram, W.G.Dt, A.P under the supervision of **K. Srinivasa Rao**, Lecturer in Telugu. I also affirm that this work is original and has not been submitted in part or full, for any other purpose to any other institution.

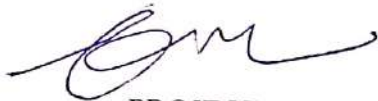
T. Sranani

Signature

Regd. No. 223127102007

CERTIFICATE

This is to certify that the Community Service Project-Socio Economic Survey and main project entitled "Water Pollution" was submitted by **T. Sravani** with Regd. No. **223127102007** to RRDS Government Degree College, Bhimavaram, W.G.Dt., A.P. 534202. This work is original and hasn't been submitted in part or full for any other purpose to any other institution.



PROJECT MENTOR

Dr. K. Srinivasa Rao

M.A. M. Phil, Ph.D.

MOO Dept of Telugu



R.R.D.S. Govt. Degree College
BHIMAVARAM-534 202.

Acknowledgement

I/We owe a deep debt of gratitude to K. Srinivasa Rao, Lecturer in Telugu, RRDS Government Degree College, Bhimavaram for suggesting us this particular Study Project and helping us in carrying out this task.

We are thankful to Dr. V K J Prasuna, Principal, RRDS Government Degree College, Bhimavaram for giving us permission for this Study Project and also for her valuable suggestions to complete this task.

We are thankful to all our faculty members for their guidance and help in completing this field visit successfully.

T. Sravani

Student Signature

Reg. No. 223127102007

PART-A

AREA OF THE STUDY

PART-A

About the Village

Rayalam village in the mandal of bhimvaram in the West Godavari District of Andhra Pradesh. In rayalam village, Goddess Gogulamma jatara is held grandly in this village every year. This village has all facility and many educated people. People tradition is highly valued in rayalam village. In my area of surveying 70 families are there.

Bhimavaram is nearest town to Rayalam for all major economic activities, which is approximately 1km away.

RRDS GOVT. DEGREE COLLEGE, BHIMAVARAM, W.G.Dt, A.P

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gdcbbhimavaram.jkc@gmail.com

COMMUNITY SERVICE PROJECT – 2023

Basic Profile of the Village

Village Overview

Name of the Village	grayalam
Mandal	Bhimavaram
District	west - Godavari
Assembly Constituency	Bhimavaram.
Parliamentary Constituency	Andhra pradesh w.G.Dt
Name of the Sarpanch	-
Name of the MPTC	-
Name of the ZPTC	-
Name of the M. L. A	Grandhi Srinivas
Name of the M. P.	raghu. ramakrishnamraju.
Geographical Area of the Village	16.5381246°
Geographical Coordinates of the Village	81.5091594°
Total number of Households in the Village	2,493

Key Demographics as per Census 2011

Total Population	5,863
Male Population	2,956
Female Population	2,907
Population Density	1402.63/km ²
Sex ratio	983
Children	
Total Literacy Rate	80.77%
Male Literacy Rate	2,222
Female Literacy Rate	2,054

Basic Economic profile

Total Cultivable Land	-
Land under Agriculture	501
Land under aquaculture	19 acre
Industries in the Village if any	1) - 2) - 3) -
Total Number of Workforce in the Village	2,956
Number of Male Workforce	18,56
Number of Female Workforce	11,00
Cultivators	
Agricultural labour	1,007
Household industries	40
Other workers	1,093
Marginal workers	154
Non-workers	3,378

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COMMUNITY SERVICE PROJECT

Abstract of Socio-Economic Survey

Name of the Students : T. Sravani
 Group : B.Sc (MPCS)
 Registration Number : 223127102007

Habitat	Rayalam	Panchayat	Rayalam	Pincode	534202
Postoffice	Rayalam	Mandal	Bhimavaram	District	W.G

1. Social Status of Families' Details:

- No. of Families surveyed: 70
- (i) Caste: SC-03 ST-00 BC-A- 03 BC-B-28 BC-C-00 BC-D-08 OC-28
- Religion: Hindus-65 Christian's:03 Muslims: 02
- Number of males -101 Females-108
- Number of literates: 70 Number of illiterates-20
- Number of graduates- 10
- Number of Job holders-60
- Number of PH People-01

2. Economic Status of the Sample Households

- Category. Of Houses: Hut- 00 Semi Pucca-00 Pucca-40 Apartment-27 Bungalow-43
- Own houses- 34 Rentd-36
- Source of Drinking Water Govt taps -40 Owntaps-30
- Agricultural holding families - 04.
- Major crops grown in the habitat- 04
- Houses have own toilet-70
- Cooking fuels LPG- 70
- No.of DWACRA groups in the habitat-20
- No.of Ration Card holders-50
- Number of houses having vehicles Two wheelers- 40 car-04
- Average monthly earnings of the household Rs.12000/-
- No.of families having banking transactions Govt Banks-60 Private banks- 10
- No.of families take loans from: Govt.bank-14 Pvt.bank-00
indigenous bankers-00
- No.of Persons covered under insurance-12
- No.of persons having driving licences-60

3. Health Details of the Sample Households

- Common health problems in the habitat- sugar and BP
- Number of families suffering from diseases:00

- Source of treatment:
Govt. Hospital- 10 Private Hospital—50 Traditional Medicine-10
- Families having Aarogya Sree Cards:40

4. Other Details

- No.of Families have TV-70
- No.of Families having Mobile-65
- No.of Families have Laptop/computers-07
- No.of Families have internet: 45 (Mobile data):

5. Name of the Govt. Schemes Received

- Jagananna Vidhya Deevena -08
- Jagananna Vasathi Deevena-08
- Rythu Bharosa-04
- Ammavodi-24
- Others-18

Major problems faced in the Village

- Drinking Water
- Plastic Pollution

Place: Gayalam Signature of the Mentor

Date: 3-08-2003

Dr. K. Srinivasa Rao
M.A. M. Phil. Ph.D.
KOD Dept

T. Sraavani

Signature of the Student

WEEKLY REPORT**Week-1 (From Dt: 07-05-2023 to Dt: 12-05-2023)****Objective of the Activity Done:** Socio Economic Survey

Detailed Report: I am T. Sravani, studying in I B.Sc (MPCS). I am a part of community service project in rayalam village. I survey successfully 70 houses this week. Within this week I visited 70 houses of the mentioned families in previous page. They interacted very positively with me. I was able to survey them and able to collect all the required data from them.

Most of the members of the family are not educated. They are dependent on agriculture and business. Most of the people living in the village are having their own houses, rent houses and the buildings are mostly pucca and kutchra houses.

Entire village is with drinking water tap connections provided by Government. In the first week I conducted on these families

WEEKLY REPORT**Week-2 (From Dt: 17-5-2023 to Dt: 22-5-2023)****Objective of the Activity Done:** Socio Economic Survey

Detailed Report: I am T. Sravani, studying in I B.Sc (MPCS). In this second week, continued surveying the houses in rayalam village. In this week I have mainly concentrated on the following issues.

We organized 10 people in a group in our village and made them all aware about drinking water.

1. Water should not be wasted.
2. Do not put any waste material in drinking water.
3. Drainage pits should be constructed so as not to waste rain water.
4. Natural fertilizers should be used for crops, because the use of chemical fertilizers pollutes water. This causes harm not only to humans but also to animals.
5. Contaminated water should not be discharged in to the drains. Due to this skin diseases are prevalent.

WEEKLY REPORT**Week-3 (From Dt: 15-07-2023 to Dt: 20-07-2023)****Objective of the Activity Done: Surveying and Collecting Water Pollution questionnaire**

Detailed Report: I am T. Sravani, studying in I B.Sc (MPCS). In this Third week, continued surveying the houses in rayalam village. In this week surveying and collecting water pollution questionnaire.

The recognition of public awareness level about drinking mental awareness levels. It has been reported that there are limited studies on public awareness about drinking water quality, water contaminants, and the public trust in government-provided information about water pollution accidents. However, analyzing the public awareness about drinking water quality standards and the occurrence of pollution accidents is significant.

Problems in our Community

1. Drinking water is not proper.
2. Farmer are using more and more chemical fertilizers and pesticides
3. There is no proper sanitization and cleaning of streets in our community
4. There are no proper signals for different types of mobile networks

Solutions to the Problems

1. R&B should work with local authorities to develop comprehensive infrastructure development plans that outline short-term and long-term goals for road development. These plans should guide decision making and resource allocation.
2. The government should provide training and resources to farmers about the negative effects of excessive chemical use. They should be shown alternative methods that are equally effective and less harmful.
3. Interact with local government officials and sanitation departments to discuss the problem and potential solutions.
* Resources should be increased and funded for street cleaning and sanitation programs
4. Local government should be involved with authorities for better mobile network infrastructure as a key component of community development.
Obtain support in obtaining permits and approvals for new cell towers or equipment installations.

COMMUNITY AWARENESS PROGRAM CONDUCTED OUTCOMES

Community awareness program conducted on various topics to bring awareness among the people to live equality life.

THE TOPICS COVERED

1. Water Pollution
2. Health And Hygiene
3. Importance of Education
4. Green Village
5. Awareness on Superstition Rural Digitalization

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COMMUNITY SERVICE PROJECT

1st Week Socio Economic Survey



GPS Map
Camera Lite

1, Rayalam Rd Raayalam Rayalam Rural, Rayalam Rd, Raayalam,
Rayalam Rural, Andhra Pradesh 534204, India

Latitude
16.5381246°

Longitude
81.5091594°

Local 05:59:56 PM
GMT 12:29:56 PM

Altitude 6 meters
Sunday, 07.05.2023



GPS Map
Camera Lite

GGQS+GFF, Raayalam, Bhimavaram, Andhra Pradesh 534204, India

Latitude
16.5386173°

Longitude
81.5092145°

Local 05:59:05 PM
GMT 12:29:05 PM

Altitude 5 meters
Sunday, 07.05.2023

PART-B

A STUDY ON

WATER POLLUTION IN RAYALAM

INTRODUCTION

Water is one of the most vital natural resources on earth and has been around for a long time. In fact, the same water which we drink has been around in one form or the other since the time of the dinosaurs.

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.

Water pollutants may cause disease or act as poisons. Bacteria and parasites in poorly treated sewage may enter drinking water supplies and cause digestive problems such as cholera and diarrhea.

SOURCES OF WATER POLLUTION

The key causatives of water pollution in India are:

- Urbanization.
- Deforestation.
- Industrial effluents.
- Social and Religious Practices.
- Use of Detergents and Fertilizers.
- Agricultural run-offs- Use of insecticides and pesticides.

EFFECTS OF WATER POLLUTION

The effect of water pollution depends upon the type of pollutants and their concentration. Also, the location of water bodies is an important factor to determine the levels of pollution.

- Water bodies in the vicinity of urban areas are extremely polluted. This is the result of dumping garbage and toxic chemicals by industrial and commercial establishments.
- Water pollution drastically affects aquatic life. It affects their metabolism, and behaviour, and causes illness and eventual death. Dioxin is a chemical that causes a lot of problems from reproduction to uncontrolled cell growth or cancer. This chemical is bio accumulated in fish, chicken and meat. Chemicals such as this travel up the food chain before entering the human body.
- The effect of water pollution can have a huge impact on the food chain. It disrupts the food chain. Cadmium and lead are some toxic substances, these pollutants upon entering the food chain through animals (fish when consumed by animals, humans) can continue to disrupt at higher levels.

- Humans are affected by pollution and can contract diseases such as hepatitis through faecal matter in water sources. Poor drinking water treatment and unfit water can always cause an outbreak of **infectious diseases** such as cholera, etc.
- The ecosystem can be critically affected, modified and destructured because of water pollution.

OBJECTIVES OF THE CSP

1. To know the leaving conditions of the people.
2. To realize stark realities of the society to develop social consciousness responsibility and accountability.
3. To develop inner strength and invent solutions to social problems.
4. To develop a holistic life perspective.
5. To study the financial literacy among the people.

SCOPE OF THE STUDY

1. Present social and economy status of people Identification of problems of society.
2. Utilization of govt scheme.
3. Utilization of financial services offered by bank.
4. Internet banking facility.
5. Major problems faced by the people in the habited.

Details of the Project Area:

Village surveyed : RAYALAM

Mandal : BHIMAVARAM

District : WEST GODAVARI

Latitude and longitude Lat : 16.5381246°, 81.5091594°

Village population : ~~1,20,000.~~ 5,863

Number of families 3093 2493

Methodology followed : Simple random sampling

Main topic of the project : Water Pollution in Rayalam

WATER POLLUTION QUESTIONNAIRE

Name of the student: T. SRAVANI

Regd.No: 223127102007

Year: 2023

Group: B.SC

Program: WATER POLLUTION QUESTIONNAIRE

Name of the mentor: K. SRINIVASA RAO, Lecturer in Telugu

Program combination: COMMUNITY SERVICE PROJECT

Name of the CSP: Socio-Economic Survey

Water Pollution Questionnaire:

1. What do you mean by water pollution?
 - The depletion of water quality.
 - Chemical waste mixing in the water.
 - Waste particles are mixing in the water.
2. What is the main cause of water pollution?
 - Mixing drainage.
 - Dumping waste in rivers.
 - Releasing chemical waste.
3. How do people cause water pollution?
 - Factories releasing wastage.
 - Household waste mixing.
 - Mixing chemicals.
4. Where is your drinking water supplied from?
 - Village pond.
5. Do you testing the drinking water daily?
 - Yes.
6. Is the quality of drinking water satisfactory? Does the colour and smell change?
 - Yes, sometimes during rainy season the water colour changes and it smells.
7. Do you think the water you drink is safe?
 - Yes.
8. Are there any problems with your tap water usage?
 - Sometimes we get sick because of this water.
9. How many litres of tap water are used per day?
 - 36 litres.
10. Has the water stopped in the drainage canal in your street?
 - Yes.
11. Are the workers cleaning the drainage once a day?
 - No.
12. Are you satisfied with the tap water quality?
 - No.

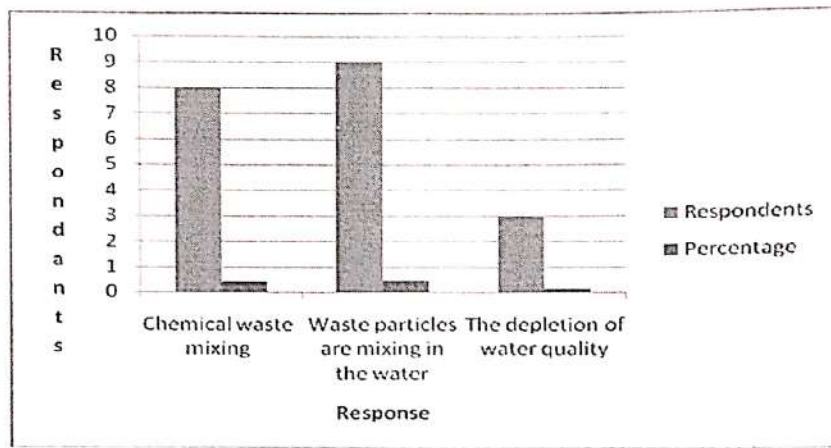
13. What are the rashes and itching on the extremities due to the use of water?
- Pseudomonas folliculitis.
14. To whom are you complaining about water pollution?
- Panchayat president.
15. Do shrimps and prawns tanks cause water pollution?
- Yes.
16. Is there any danger to animals and birds due to water pollution?
- Yes.
17. Are you watching the headlines on TV and news papers about water pollution?
- Yes, I watch the news about water pollution it is so often.
18. What are the diseases caused by water pollution?
- Skin diseases.
 - Fever.
 - Kidney problems.
19. How many litres of drinking water does a person need per day?
- 4 litres.
20. What are the practical steps you can take to prevent water pollution?
- Creating awareness among people towards protecting water resources.
 - Preventing the mixing of waste in water bodies.
 - Clean ponds, rivers and canals yearly.

T. Srawani

Signature of the student

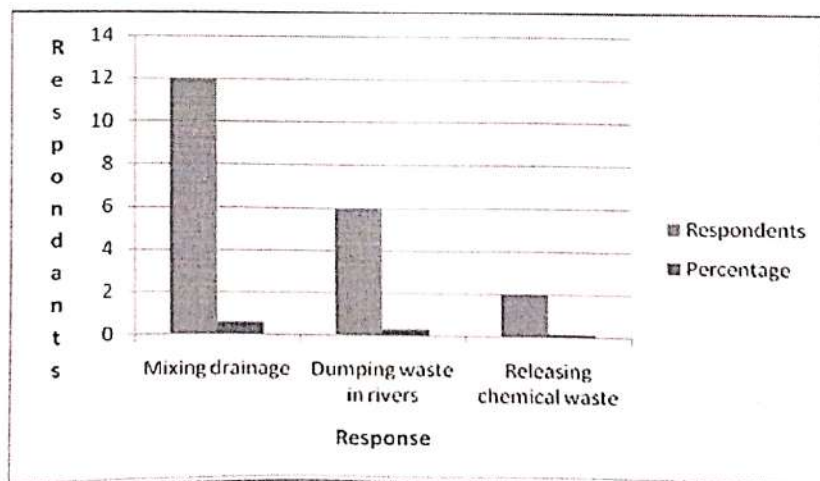
1. What do you mean by water pollution?

Response	Respondents	Percentage
Chemical waste mixing in the water	8	40%
Waste particles are mixing in the water	9	45%
The depletion of water quality	3	15%



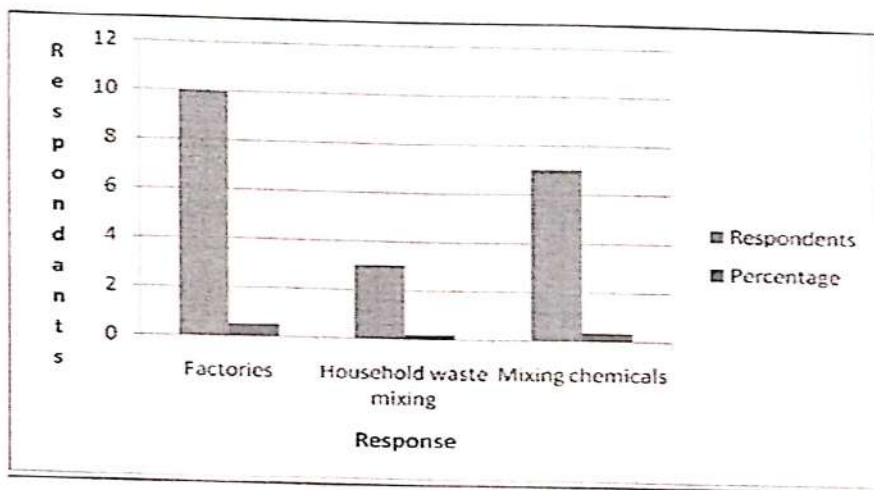
2. What is the main cause of water pollution?

Response	Respondents	Percentage
Mixing drainage	12	60%
Dumping waste in rivers	6	30%
Releasing chemical waste	2	10%



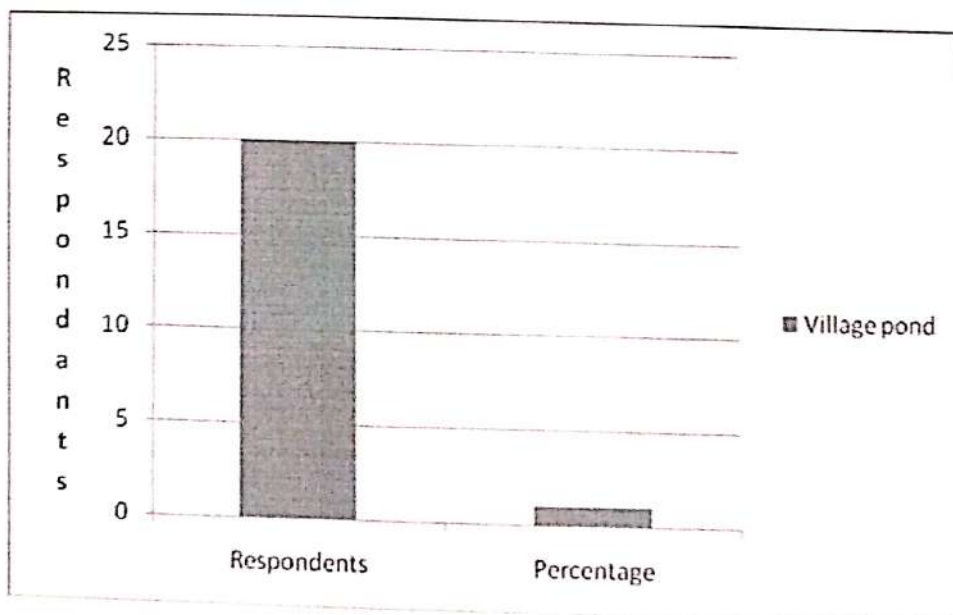
3. How do you people cause water pollution?

Response	Respondents	Percentage
Factories	10	50%
Household waste mixing	3	15%
Mixing chemicals	7	35%



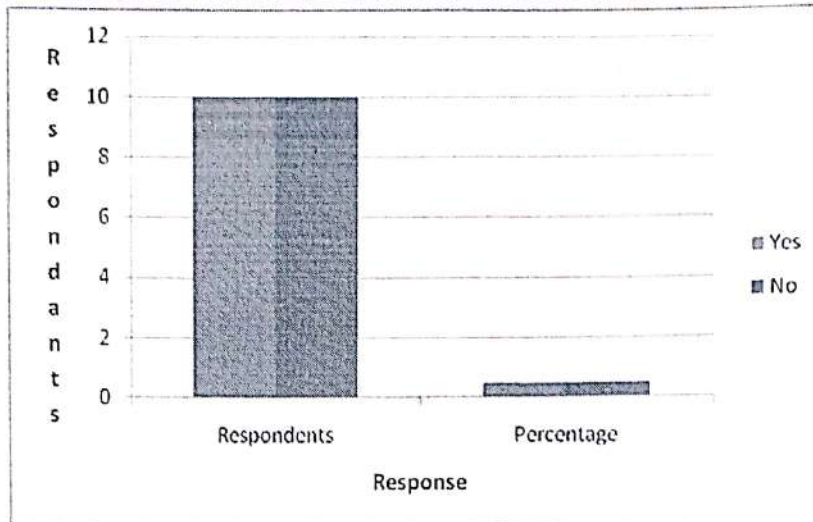
4. Where is your drinking water supplied from?

Response	Respondents	Percentage
Village pond	20	100%



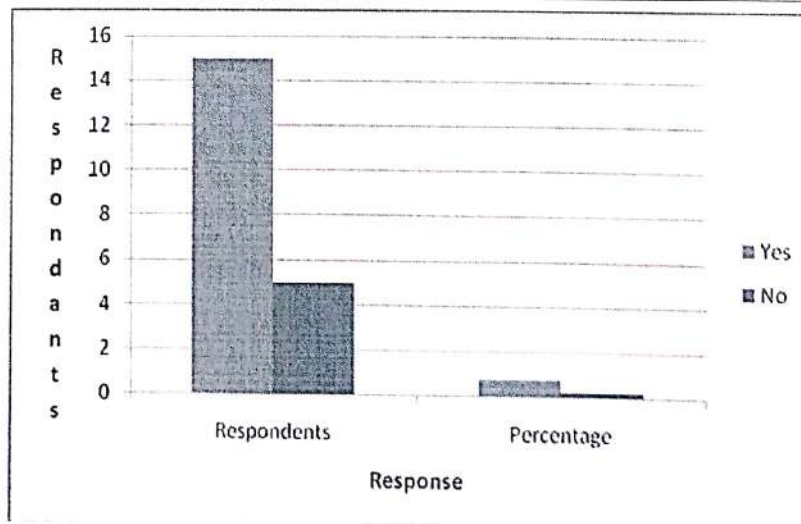
5. Do you testing the drinking water daily?

Response	Respondents	Percentage
Yes	10	50%
No	10	50%



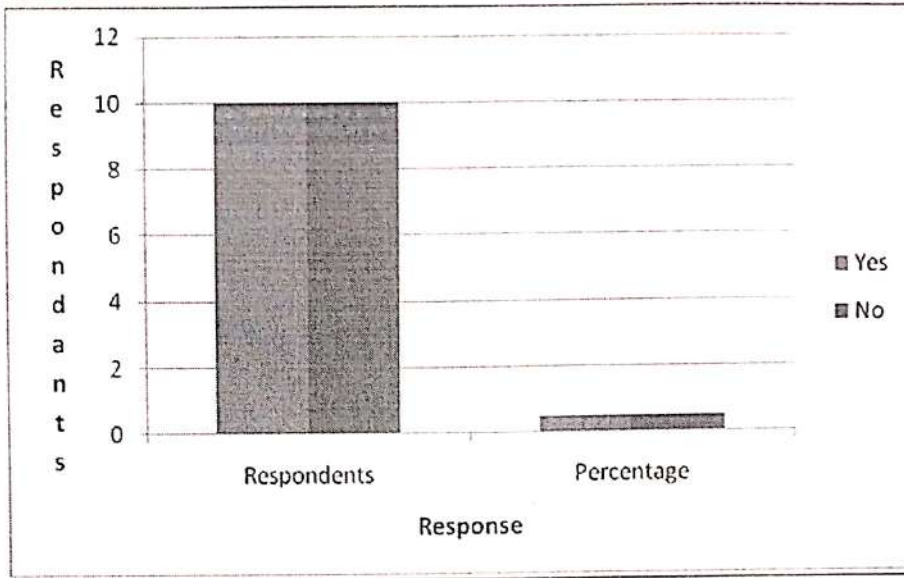
6. Is the quality of drinking water satisfactory? Does the color and smell change?

Response	Respondents	Percentage
Yes	15	75%
No	5	25%



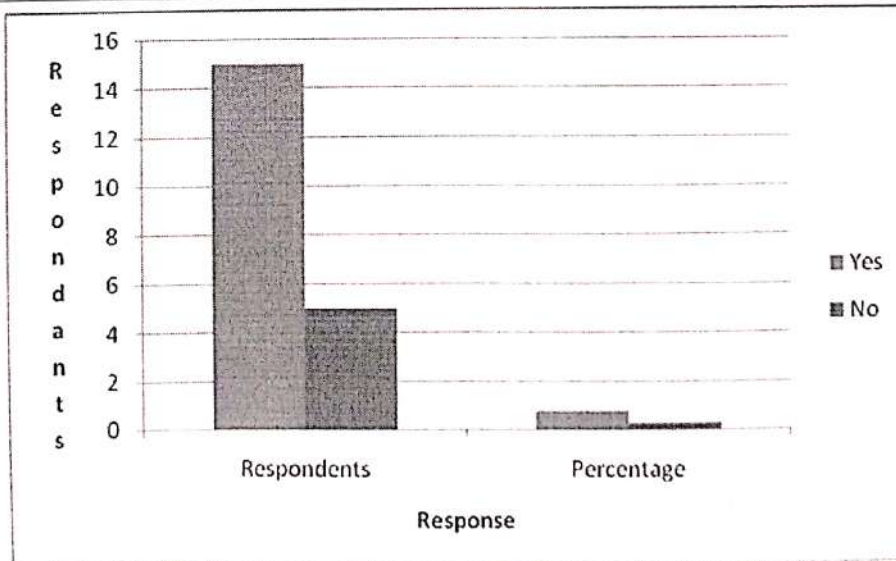
7. Do you think the water you drink is safe?

Response	Respondents	Percentage
Yes	10	50%
No	10	50%



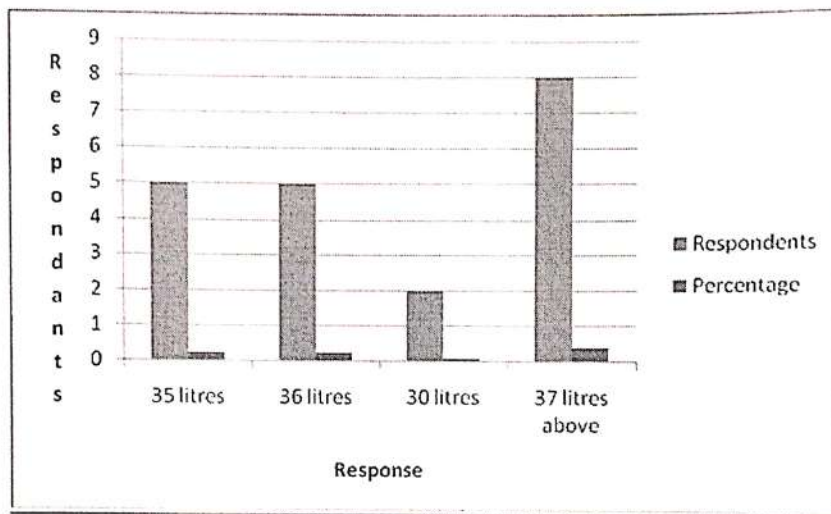
8. Are there any problems with your tap water usage?

Response	Respondents	Percentage
Yes	15	75%
No	5	25%



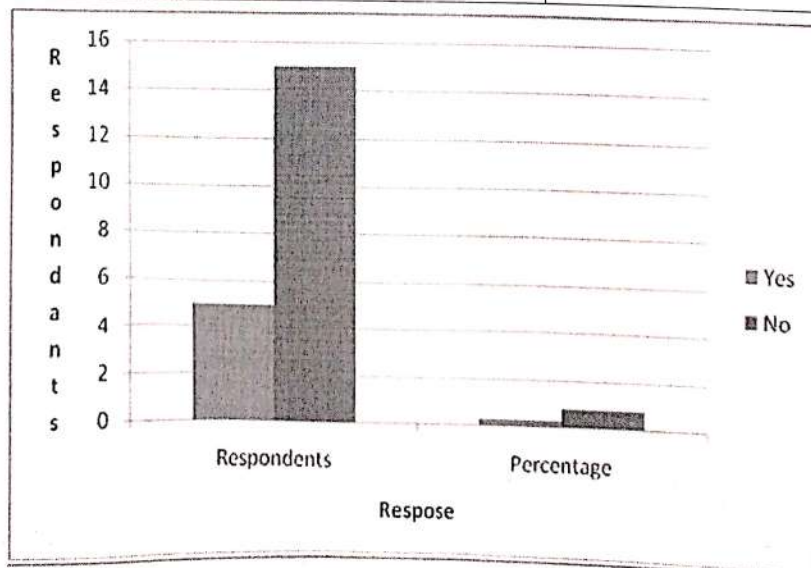
9. How many litres of tap water are used per day?

Response	Respondents	Percentage
35 litres	5	25%
36 litres	5	25%
30 litres	2	10%
37 litres above	8	40%



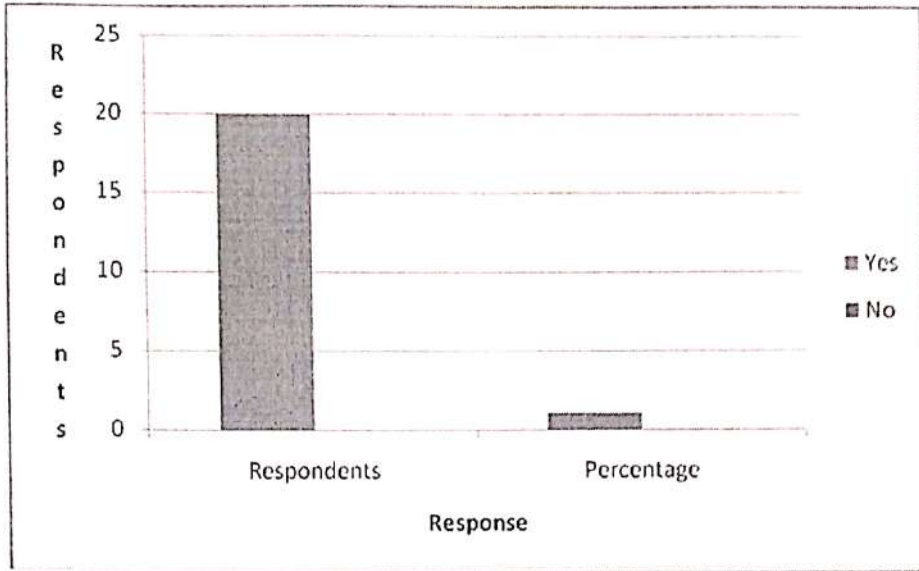
10. Has the water stopped in the drainage canal in your street?

Response	Respondents	Percentage
Yes	5	25%
No	15	75%



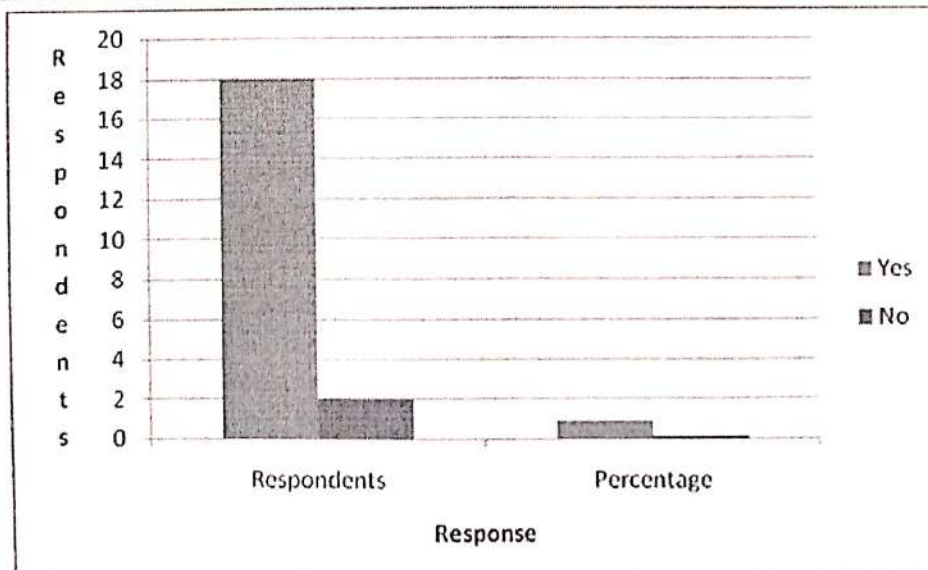
15. Shrimps and Prawns tanks cause water pollution?

Response	Respondents	Percentage
Yes	20	100%
No	0	0%



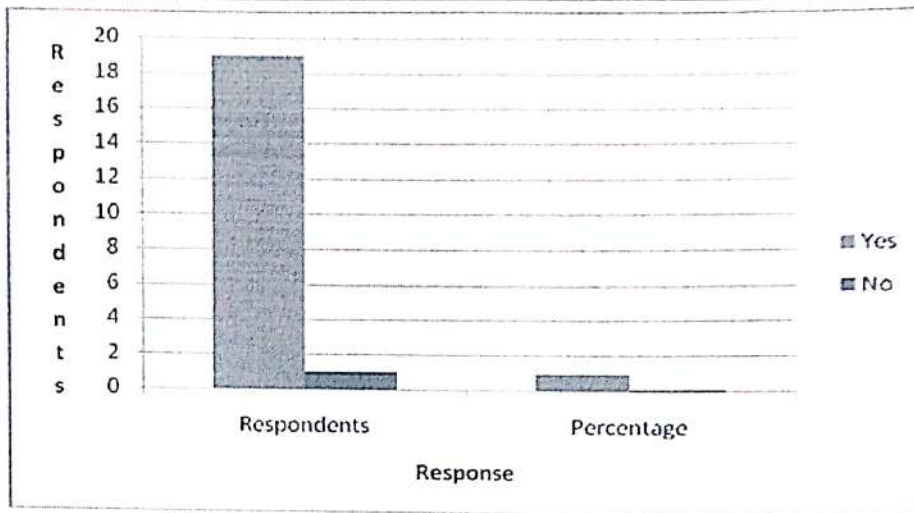
16. Is there any danger to animals and birds due to water pollution?

Response	Respondents	Percentage
Yes	18	90%
No	02	10%



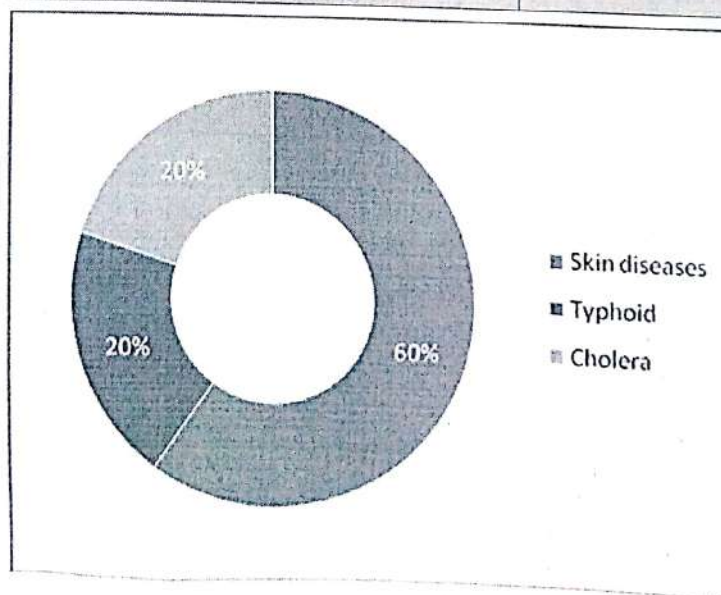
17. Are you watching the headlines on TV and newspapers about water pollution?

Response	Respondents	Percentage
Yes	19	95%
No	1	5%



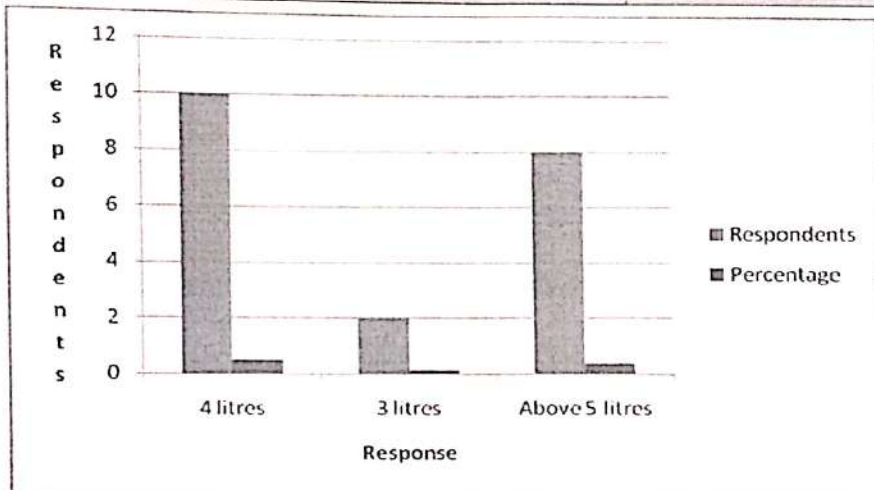
18. What are the diseases caused by water pollution?

Response	Respondents	Percentage
Skin diseases	12	60%
Typhoid	4	20%
Cholera	4	20%



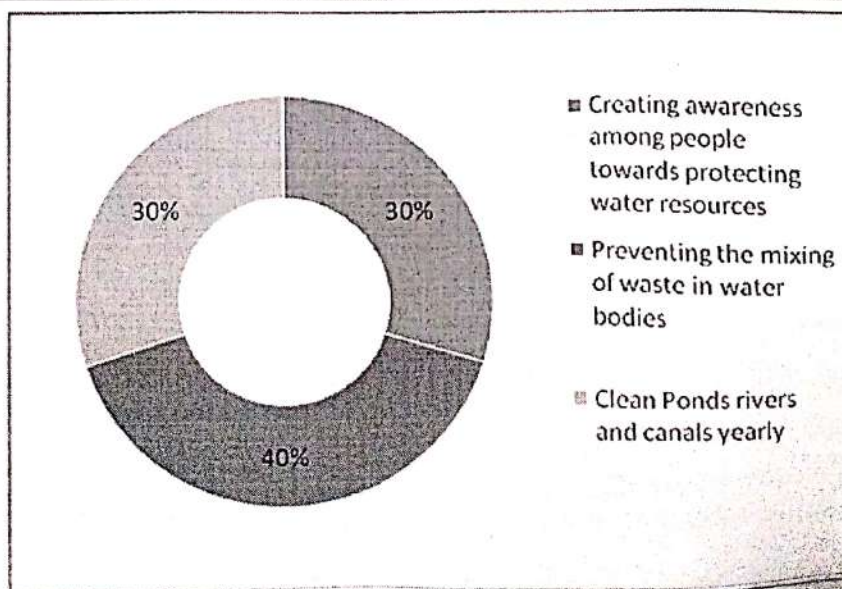
19. How many litres of drinking water does a person need per day?

Response	Respondents	Percentage
4 litres	10	50%
3 litres	2	10%
Above 5 litres	8	40%



20. What are the practical steps you can take to prevent water pollution?

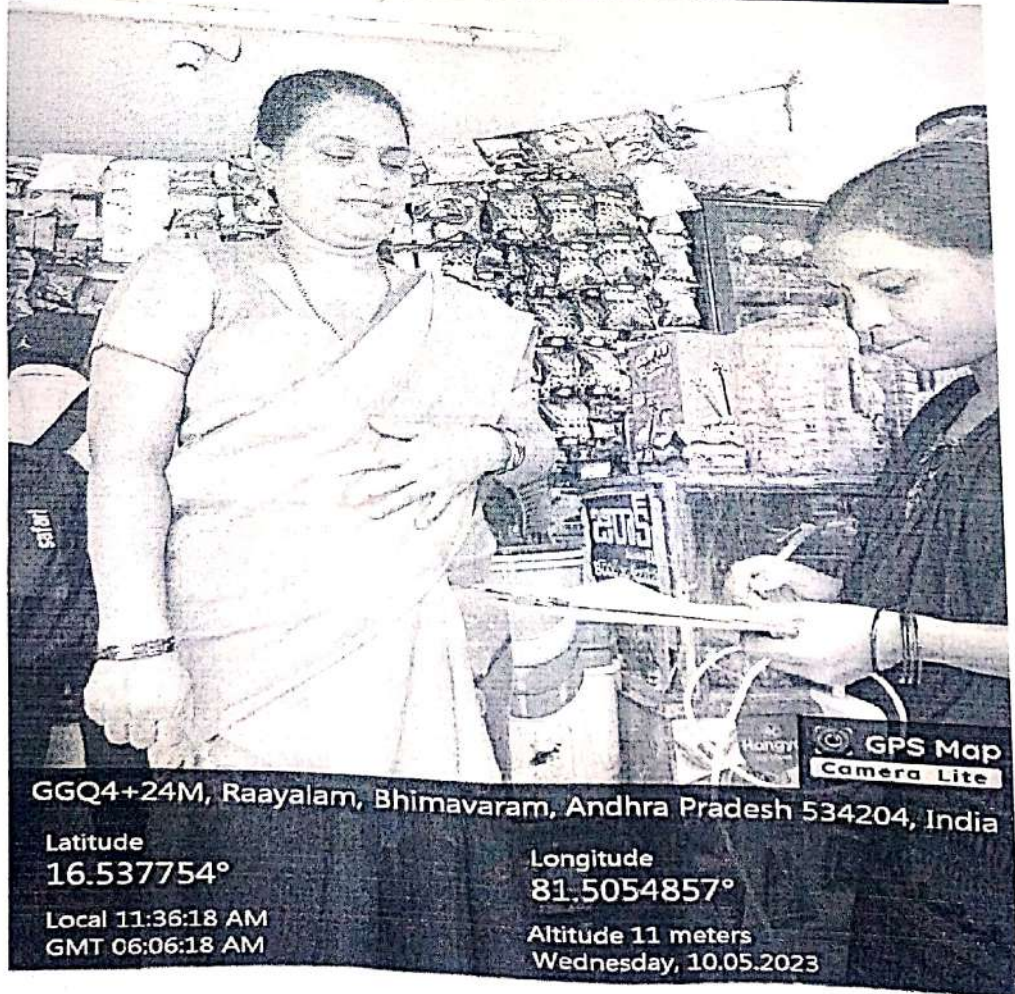
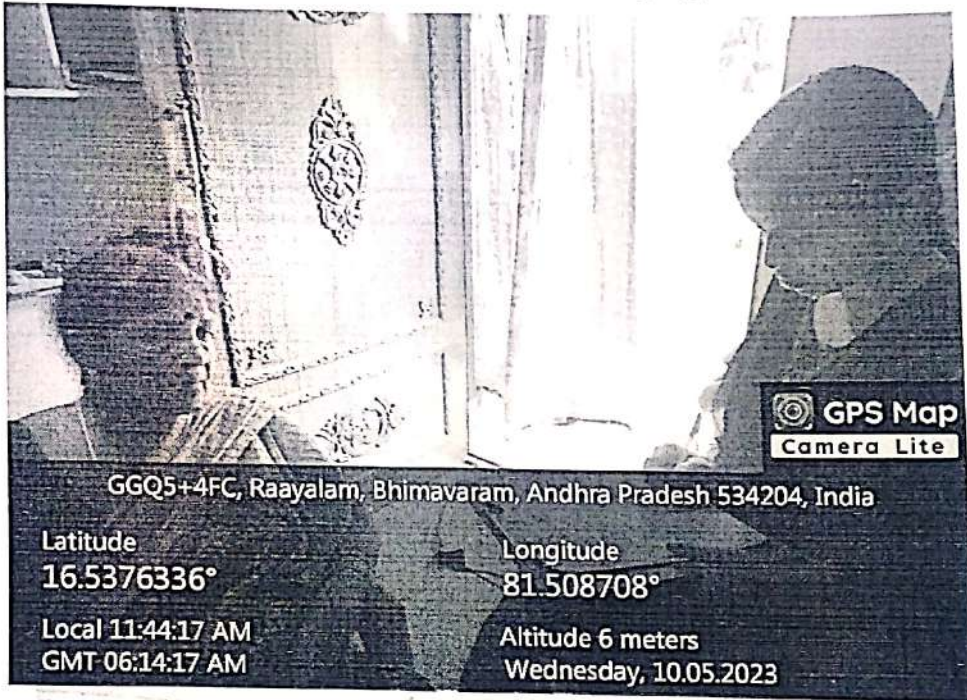
Response	Respondents	Percentage
Creating awareness among people towards protecting water resources	6	30%
Preventing the mixing of waste in water bodies	8	40%
Clean Ponds rivers and canals yearly	6	30%



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COMMUNITY SERVICE PROJECT

2nd WEEK Awareness Campaign



PART-C

RECOMMENDATIONS & CONCLUSIONS:

Recommendations:

1. **Implement Strict Regulatory Frameworks:**
 - Governments and regulatory bodies should establish and enforce stringent water quality standards and pollution control regulations. Regular monitoring and assessment of water bodies are essential to ensure compliance.
2. **Promote Sustainable Agriculture Practices:**
 - Encourage farmers to adopt sustainable agricultural practices that minimize the use of chemical fertilizers and pesticides. Promote crop rotation, cover cropping, and precision agriculture to reduce runoff into water bodies.
3. **Improve Industrial Effluent Management:**
 - Industries should invest in wastewater treatment facilities to treat and purify effluents before releasing them into water bodies. Encourage the reuse and recycling of water within industrial processes.
4. **Manage Storm water Runoff:**
 - Implement green infrastructure solutions, such as permeable pavements, rain gardens, and vegetated swales, to manage storm water runoff and prevent contaminants from entering water bodies.
5. **Enhance Municipal Wastewater Treatment:**
 - Upgrade and modernize wastewater treatment plants to remove contaminants effectively. Promote advanced treatment technologies, such as biological nutrient removal and membrane filtration.
6. **Reduce Plastic Pollution:**
 - Implement policies to reduce plastic waste and promote recycling. Encourage the use of alternatives to single-use plastics and support cleanup efforts in rivers, lakes, and oceans.
7. **Raise Public Awareness:**
 - Conduct educational campaigns to raise public awareness about the importance of clean water and the consequences of water pollution. Encourage responsible water use and disposal of waste.
8. **Support Research and Innovation:**
 - Invest in research and development of new technologies and solutions for water pollution prevention and remediation.

Conclusions:

1. **Interconnected Ecosystems:**
 - Water pollution affects not only aquatic life but also terrestrial ecosystems and human communities. It underscores the need for an integrated and holistic approach to environmental protection.
2. **Long-Term Commitment:**
 - Addressing water pollution is an ongoing process that requires long-term commitment from governments, industries, and individuals. Quick fixes are often insufficient to mitigate the impact of pollution.

3. Global Collaboration:

- Many water bodies cross international borders, necessitating international cooperation to address pollution effectively. Treaties and agreements should be strengthened and adhered to.

4. Health and Economic Benefits:

- Preventing water pollution leads to healthier populations, improved quality of life, and economic benefits through sustainable fisheries, tourism, and agriculture.

5. Prevention is Key:

- While remediation efforts are important, preventing pollution at the source is more effective and cost-efficient. Proactive measures can help avoid the need for expensive cleanup efforts.

6. Resilience and Adaptation:

- In the face of climate change, building resilience in water ecosystems is crucial. Adaptation strategies should be integrated with pollution prevention efforts.

References:

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<https://www.nrdc.org/stories/water-pollution-everything-you-need-know>

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Report Preparation



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