



COMMUNITY SERVICE PROJECT

ON

WATER POLLUTION

KOPALLE VILLAGE OF KALLA
MANDAL, W.G.Dt

BY

U. SOWMYA

I B.sc (MPCS)

Under The Guidance Of
DR. 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 Dr. 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.

x U. Sawya
Signature


Regd.No. 223127102008

CERTIFICATE

This is to certify that the Community Service Project- Socio Economic Survey and main project entitled "Water Pollution" was submitted by U.SOWMYA with Regd. No...223127102008.... 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.
HOD Dept of Telugu




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

ACKNOWLEDGEMENT

I owe a deep debt of gratitude to Dr. 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 of 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.

x U. Saanya
Student Signature

Regd. No.

22312710 2008

PART-A

AREA OF THE STUDY

PART-A

About the Village

- **Kopalle is a large village located in Kalla Mandal of west Godavari district, Andhra Pradesh with total 1252 families residing. The Kopalle village has population of 4431 of which 2155 are males while 2276 are females as per Population Census 2011.**
- **In Kopalle village population of children with age 0-6 is 401 which makes up 9.05 % of total population of village. Average Sex Ratio of Kopalle village is 1056 which is higher than Andhra Pradesh state average of 993. Child Sex Ratio for the Kopalle as per census is 1005, higher than Andhra Pradesh average of 939.**
- **Kopalle village has higher literacy rate compared to Andhra Pradesh. In 2011, literacy rate of Kopalle village was 67.62 % compared to 67.02 % of Andhra Pradesh. In Kopalle Male literacy stands at 70.38 % while female literacy rate was 65.01 %.**
- **As per constitution of India and Panchyati Raaj Act, Kopalle village is administrated by Sarpanch (Head of Village) who is elected representative of village. Our website, don't have information about schools and hospital in Kopalle village.**

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COMMUNITY SERVICE PROJECT

Abstract of Socio-economic Survey

Name of the Students : U.Sowmya
 Group : B.sc (Mpcs)
 Registration Number : 223127102008

Habitat	Kopalle	Panchayat	Kopalle	Pin code	534206
Post office	Kopalle	Mandal	Kalla	District	W. Godavari

➤ No. of Families surveyed :70

1. Social Status of families details:

- (i)Caste: SC-1 ST-0 BC-A-0 BC-B-25 BC-C-2 BC-D-00C-42
- Religion : Hindus-69 Cristian's: 1
- Number of males - 200 Females- 100
- Number of literates: 20 Number of illiterates- 50
- Number of graduates- 30
- Number of Job holders-20
- Number of PH People- 00

2.Economic Status of the sample households

- Category. of Houses : Hut- 0 SemiPucca- 3 Pucca- 67 Apartment-0 Bungalow- 0
- Own houses- 59 Rented-11
- Source of Drinking Water Govt taps - 65 own taps-5
- Agricultural holding families -4
- Major crops grown in the habitat – 5
- Houses have own toilet -70
- Cooking fuels LPG- 70
- No of DWACRA groups in the habitat-8
- NO of Ration Card holders - 70
- Number of houses having vehicles Two wheelers- 65 Auto-5
- Average monthly earnings of the household Rs. 15000/-
- No.of families having banking transactions Govt Banks - 70 Private banks- 0
- No.of families take loans from : Govt.bank- 70 Pvt.bank- 0
- Indigenous bankers- 10
- No.of Persons covered under insurance -80
- No.of persons having driving licences- 50

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- 40 Private Hospital—10 Traditional Medicine-20
- Families having Aarogya Sree Cards:64

4. Other details

- No. of Families have TV - 68
- No. of Families having Mobile- 63
- No. of Families have Laptop/computers- 20
- No. of Families have internet; 60 (Mobile data)

5. Name of the Govt. Schemes received

- Jagananna Vidhya Deevana -30
- Jagananna Vasathi Deevana- 30
- Rythu Bharosa -20
- Others- Ammavodi

Major problems faced in the village

- Road problems
- Drinking Water
- Plastic pollution

Place:

Date:



Signature of the Mentor

Dr. K. Srinivasa Rao

M.A. M. P.L.D. P.D.

RCO, D. S. S. S. S.





Signature of the Student

WEEKLY REPORT

Week-1 (From Dt 8-5-2023 to Dt 15-5-2023)

Objective of the Activity Done: Socio Economic Survey

Detailed Report: I am U. Sowmya, studying in IB.sc(MPCS). I am a part of community service project in Kopalle village. I survey successfully 70 houses this week. With in 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 building are mostly pucca and kutcha 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 U.Sowmya, studying in IB.sc(MPCS) In this second week, continued surveying the houses in Kopalle 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 into the drains. Due to this skin diseases are prevalent.

WEEKLY REPORT**Week-3 (From Dt 23-5-2023 to Dt 30-5-2023)****Objective of the Activity Done: surveying and collecting water pollution questionnaire**

Detailed Report: : I am U.Sowmya, studying in IB.sc(MPCS) In this Third week, continued surveying the houses in Kopalle village. In this week surveying and collecting water pollution questionnaire.

In our village all the people facing issues with water pollution due to this the drinking water is also not suitable to consume.

Problems in our community

1. The roads are 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 traffic.
5. No proper sewage disposal.
6. Mobile network issues.

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 OUT COMES

Community awareness program conducted on various topics to bring awareness among the people to leave quality life.

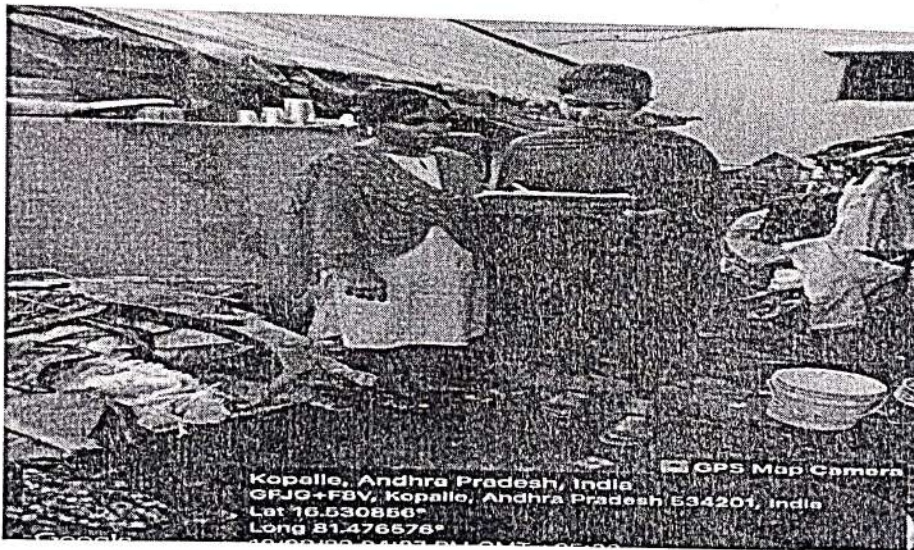
THE TOPICS COVERED

1. WATER POLLUTION
2. HEALTH AND HYDIENE
3. IMPORTANCE OF EDUCATION
4. GREEN VILLAGE
5. CLEAN AND GREEN

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COMMUNITY SERVICE PROJECT

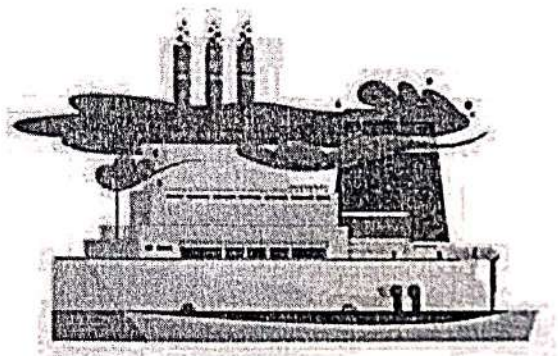
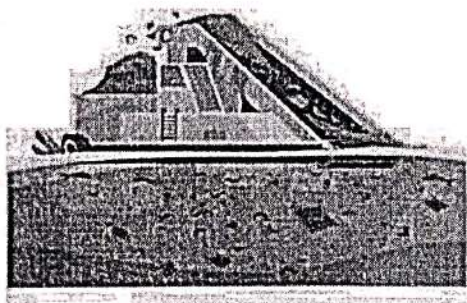
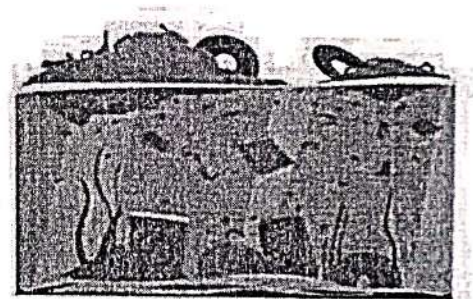
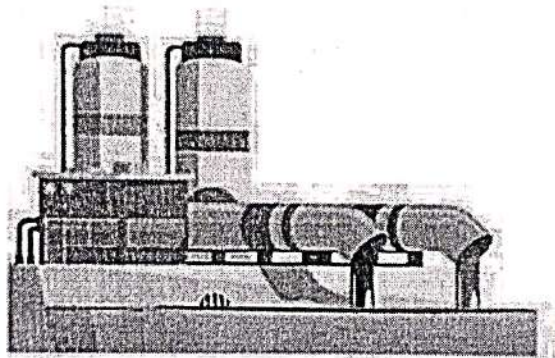
1ST WEEK socio economic survey



PART-B

A STUDY ON WATER POLLUTION IN KOPALLE

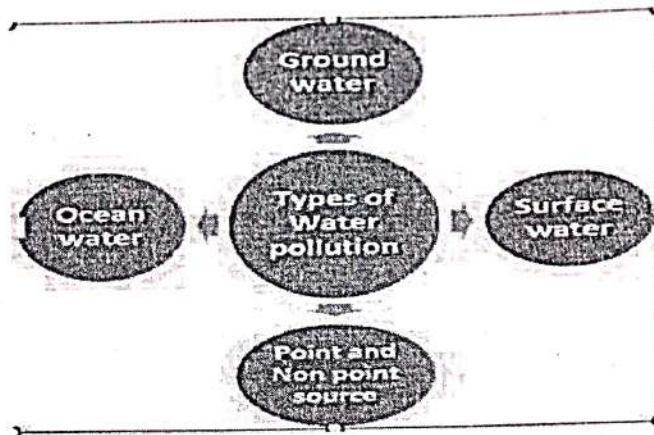
- One of the most essential natural resources that are present on this planet is water. Water plays a major role on the earth. Water covers more than 70% of the earth's surface. It is essential in human, aquatic, and animal life. Water covers the everyday essentials of humans. About 60 to 70% of the human body covers with water. The water cycle is a process that continues naturally in the nature of the earth. Today's water pollution is the most devastating condition that concerns the world. The disturbing aquatic life is the first effect of water pollution. Contaminated water leads to many disease-causing elements such as bacteria and viruses and also other harmful diseases. All the toxic wastes that are dumped in the water bodies cause a great threat to life, slowly killing animals and plants life. It also supports the growth of harmful organisms which destroys biodiversity. Certain algae growth decreases the quality of oxygen in the water, killing anything living in it.



- Water pollution is defined as the contamination of water bodies by pollutants. This causes the water unfit for drinking, cooking, washing, bathing, and other activities.

Pollutants include chemicals, bacteria, plastic, parasites, etc. All types of pollution gradually take their route to water causing water pollution.

Types of Water Pollution:



Groundwater : During rainfalls some of the water enters the earth, filling the breaks, cleft, and permeable spaces of a surface, it becomes groundwater. The vast majority of them depend on groundwater, siphoned to the world's surface, for drinking water. For certain people in provincial regions, it's their main freshwater source. Groundwater gets contaminated when pollutants from pesticides and composts to squander filtered from landfills and septic frameworks, delivering it perilous for human use. Freeing groundwater of pollutants can be challenging to unimaginable, as well as exorbitant. When contaminated, spring might be unusable for a really long time, or even millennia. Groundwater can likewise spread defilement a long way from the first dirtying source as it saturates streams, lakes, and seas.

Surface water : Covering around 70% of the earth, surface water fills our seas, lakes, streams, lakes, and so on. As per the latest reviews on public water quality from the U.S. Natural Protection Agency, almost 50% of our waterways and streams and more than 33% of our lakes are contaminated and unsuitable for swimming, fishing, and drinking. Supplement contamination, which incorporates nitrates and phosphates, is the main sort of tainting in these freshwater sources. Civil and modern waste releases contribute their reasonable portion of poisons too.

Ocean water : A lot of sea contamination begins ashore, whether along the coast or far inland. Pollutants like synthetic substances, supplements, and weighty metals are conveyed from ranches, processing plants, and urban communities by streams and waterways into our narrows and estuaries from that point they head out to the ocean. In the meantime, marine material particles and floating substances especially plastic quickly passed up the breeze or washed in through storm channels and sewers. Our oceans are additionally some of the times ruined by oil spills of large and fewer leaks and are reliably absorbing carbon contamination from the air. The sea ingests as much as a fourth of man-made fossil fuel by-products.

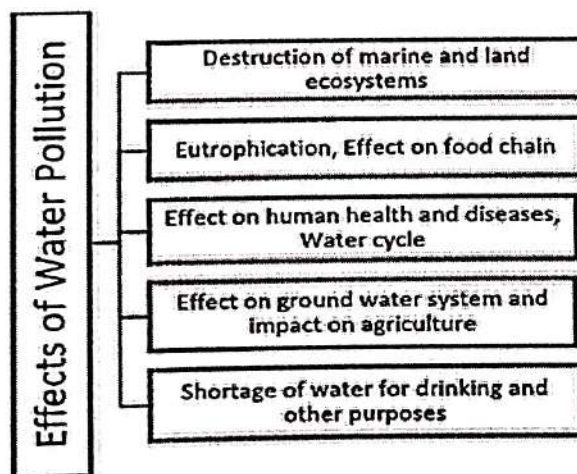
Point and Non-point source : The point when contamination comes from a solitary source is called a point source. Models incorporate wastewater released lawfully or unlawfully by a producer, petroleum processing plant, or wastewater treatment office, as well as pollution from releasing septic frameworks, synthetic and oil slicks, and unlawful unloading. Nonpoint source contamination will be pollution gotten from diffuse sources. These may incorporate horticultural or running of rainwater or trash blown into streams from land.

Sources of Contamination

Human activities and their wastage account for the major cause of water pollution. Water contamination and loss of water due to overuse of growing population. Some of the major pollutant sources of contamination are as follows:

- **Industrial Waste:** Industrial exercises discharge gigantic measures of harmful chemicals like lead and mercury. It likewise influences the biodiversity of the water body.
- **Sewage Waste:** Tons of sewage squander is unloaded into water bodies. This causes contamination as well as deliveries of hazardous sickness-causing microorganisms.
- **Mining:** Mining brings out hurtful synthetic compounds that are covered profoundly under the earth's surface. At the point when this interacts with water can cause significant lake and stream contamination
- **Marine waste:** Wastes created in the ships are unloaded into the ocean. People's trash produced consistently is unloaded into the oceans and seas venturing leading to trash islands.
- **Horticultural Activities:** The utilization of substance manures, pesticides, and different overflows during water system streams into the water bodies. These synthetics make contamination water bodies with a limited capacity to focus time.
- **Radioactive Wastes:** All the radioactive materials that are utilized for atomic carts or as an energy source, are generally unloaded into water bodies or in glaciers that will promptly blend in with water when the temperature elevates.

Effects of Water Pollution



Water pollution and Diseases

- Water toxins might cause infection or go about as poison. Microbes and parasites in ineffectively treated sewage might enter drinking water supplies and lead to stomach-related issues like cholera and lose of bowels. Dangerous synthetic compounds, pesticides, and herbicides from industries, ranches, homes, and fairways can cause intense harmfulness and quick passing, or constant poisonousness that can prompt neurological issues or malignant growths. Many water poisons enter our bodies when we use water for drinking and food readiness. The poisons enter the gastrointestinal system and arrive at different organs in the body and cause different diseases. Synthetic compounds that interact with the skin from washing garments, or from swimming in contaminated water might prompt skin itchiness. Dangerous synthetics in water systems can likewise influence the environmental elements of creatures and plants that live there. In some cases, dangerous microbes will leave within the synthetics in the water system. when it is used for drinking purposes people become sick which leads to harmful side effects.

OBJECTIVES OF THE CSP:

1. To explain and represent water pollution condition and causes of the study area.
2. To discuss how it effects on human being as well as all the living organisms and natural environment.
3. To develop inner strength and invent solutions to social problems.
4. To develop a holistic life perspective.
5. To study the awareness towards conserving water among the people.

SCOPE OF THE STUDY:

- Present status of people hygiene and health.
- Identification of problems of society
- Utilization of govt scheme for better living conditions.
- To overcome the water pollution issues.
- To know the necessary actions to take for better life.

- To identify the effects of the pollution in people.

Details of the project area:

Village surveyed : KOPALLE
Mandal : KALLA
District : WEST GODAVARI
Latitude and longitude : 16.447441° , 81.865143°
Village population : 4431
Number of families : 1252
Methodology followed : Simple random sampling
Main topic of the project : Water Pollution in Kopalle

WATER POLLUTION QUESTIONNAIRE

Name of the student : U.SOWMYA
Regd No : 223127102008
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?
 - Marine dumping.
 - Sewage and waste water.
 - Industrial 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.

Signature of the student

Signature of the Respondent

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COMMUNICATION SERVICE PROJECT

2ND WEEK awareness campaign



ANALYSIS

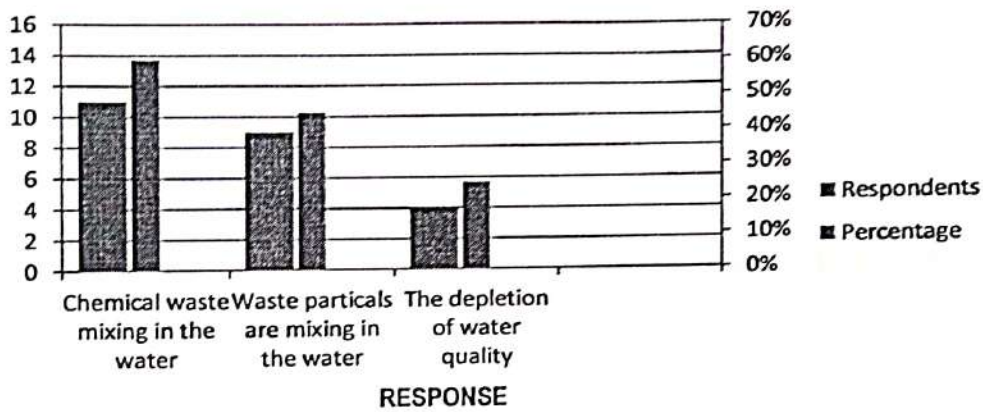
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DATA

1. What do you mean by water pollution?

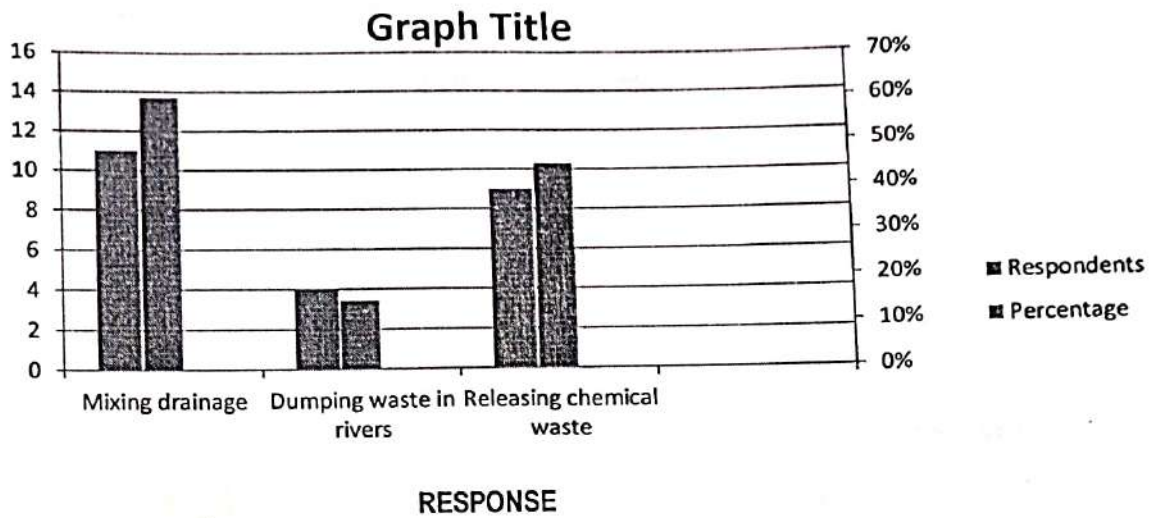
Response	Respondent	Percentage
Chemical waste mixing in the water	11	60%
Waste particals are mixing in the water	9	45%
The depletion of water quality	4	25%

Graph Title



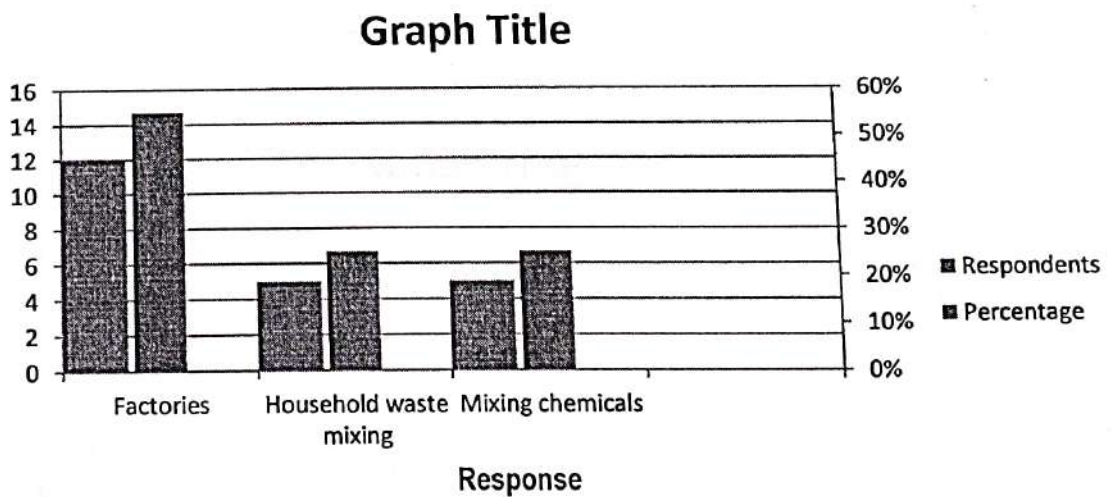
2. What is the main cause of water pollution?

Response	Respondents	Percentage
Mixing drainage	11	60%
Dumping waste in rivers	4	25%
Releasing chemical waste	9	45%



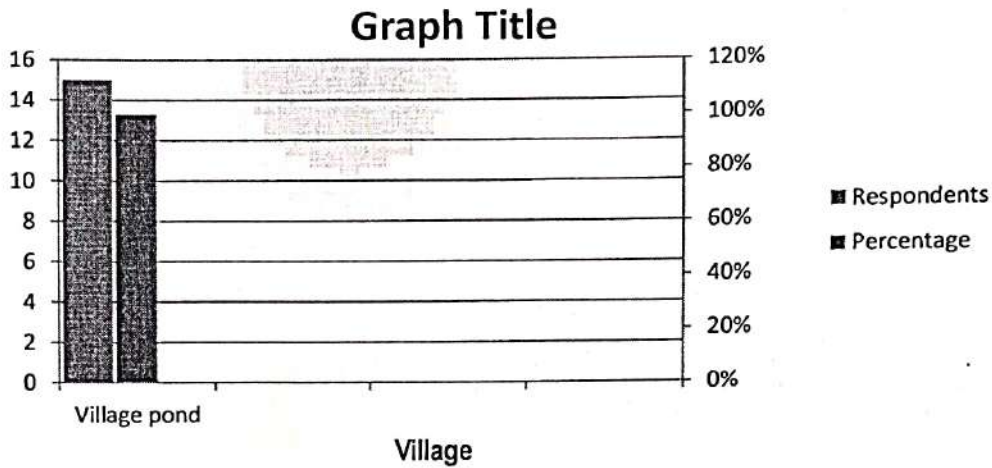
3. How do you people cause water pollution?

Response	Respondent	Percentage
Factories	12	55%
Household waste mixing	5	25%
Mixing chemicals	5	25%



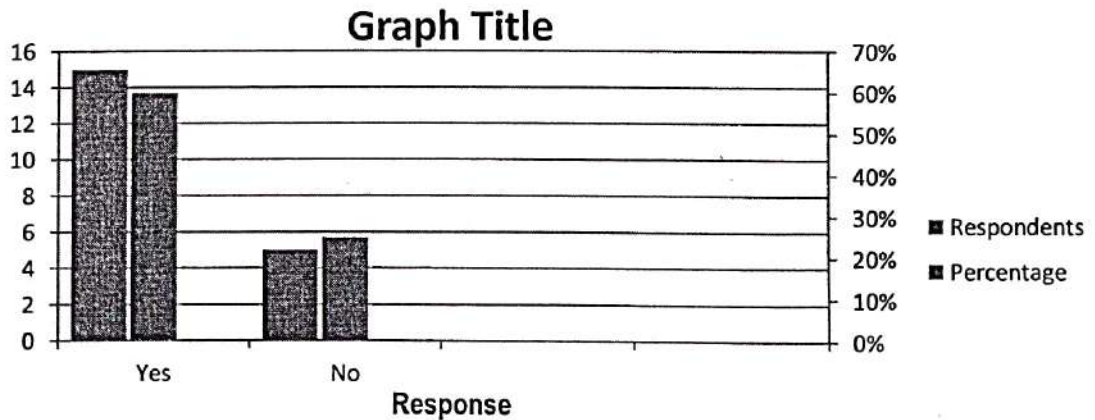
4. Where is your drinking water supplied from?

Response	Respondents	Percentage
Village pond	15	100%



5. Do you testing the drinking water daily?

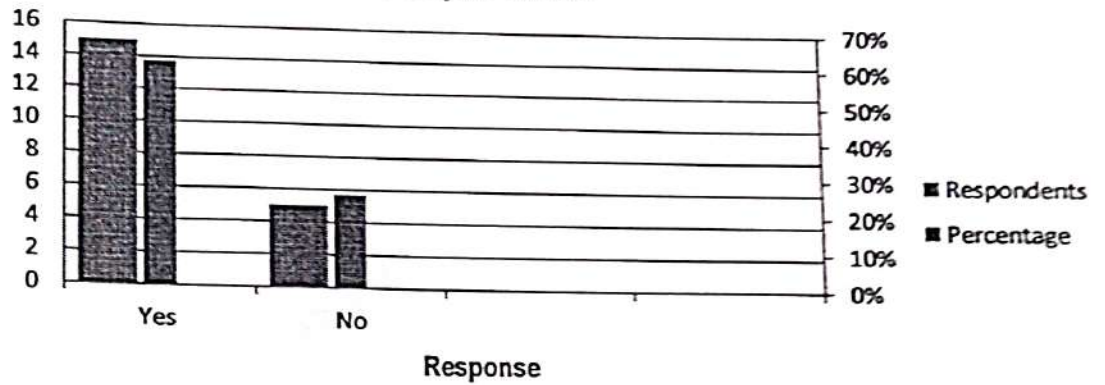
Response	Respondent	Percentage
Yes	15	60%
No	5	25%



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

Response	Respondents	Percentage
Yes	15	60%
No	5	25%

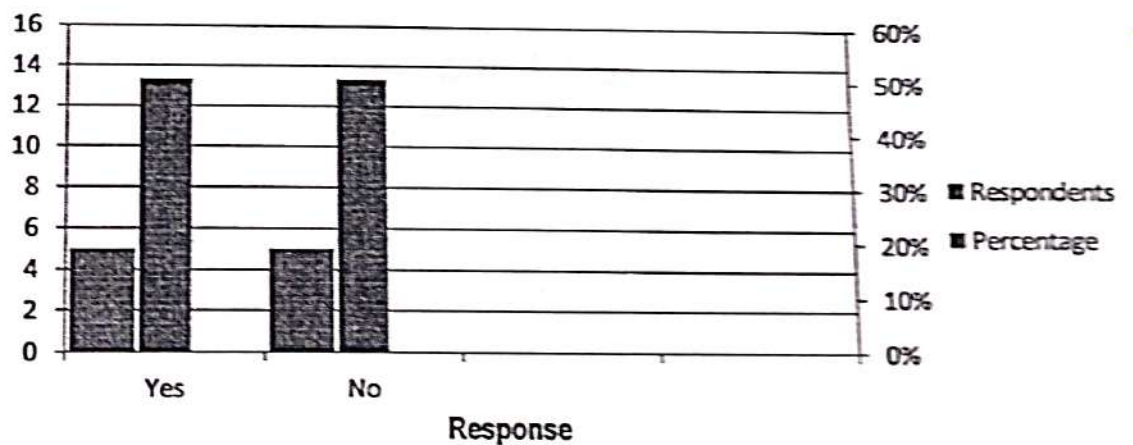
Graph Title



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

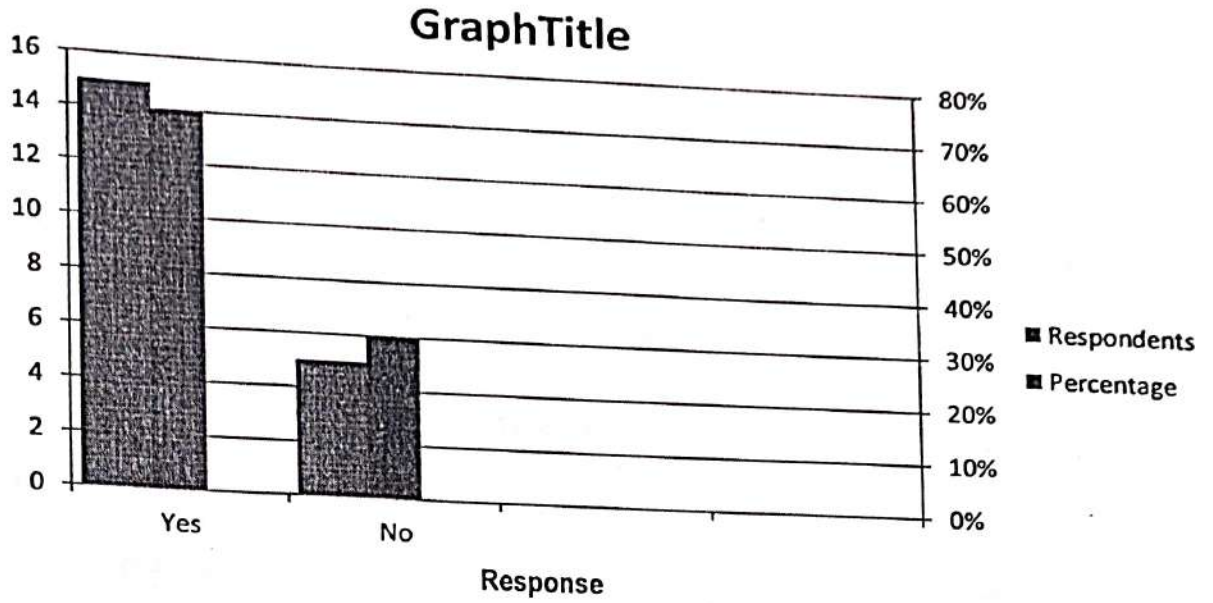
Response	Respondents	Percentage
Yes	10	50%
No	10	50%

GraphTitle



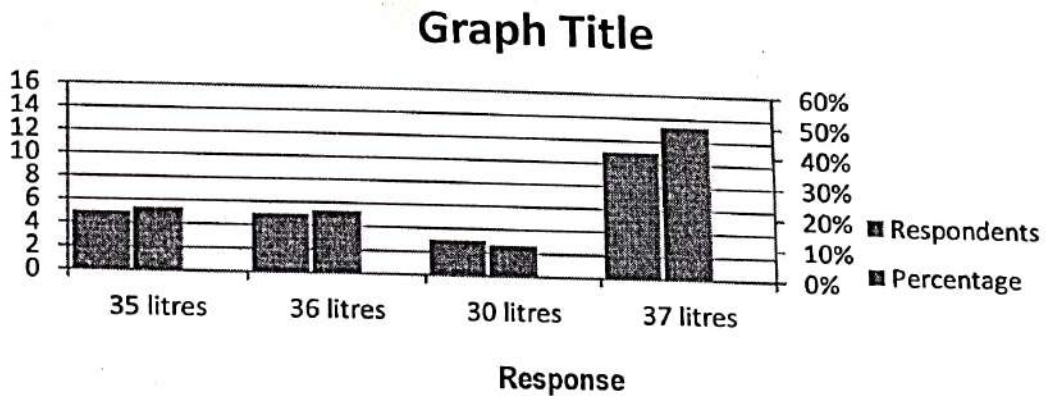
8. Are there any problems with your tap water usage?

Response	Respondents	Percentage
Yes	15	70%
No	5	30%



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

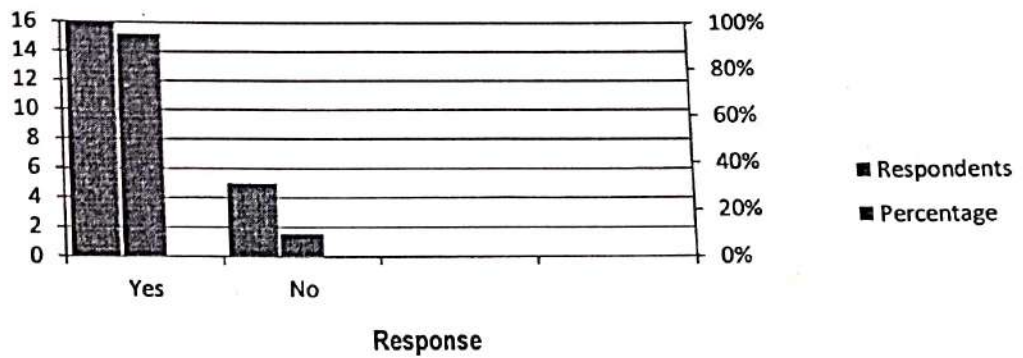
Response	Respondents	Percentage
35 litres	5	20%
36 litres	5	20%
30 litres	3	10%
37 litres	11	50%



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

Response	Respondents	Percentage
Yes	16	95%
No	5	10%

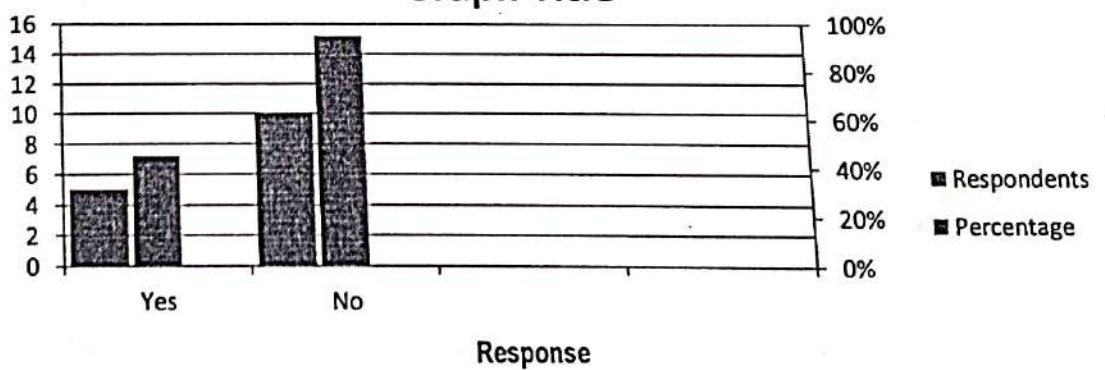
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11. Are the workers cleaning the drainage once a day?

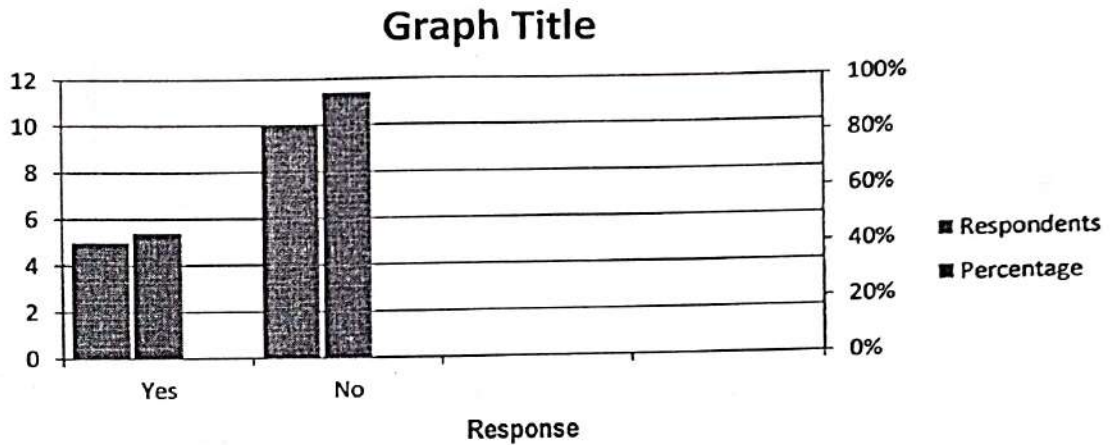
Response	Respondents	Percentage
Yes	5	45%
No	10	95%

Graph Title



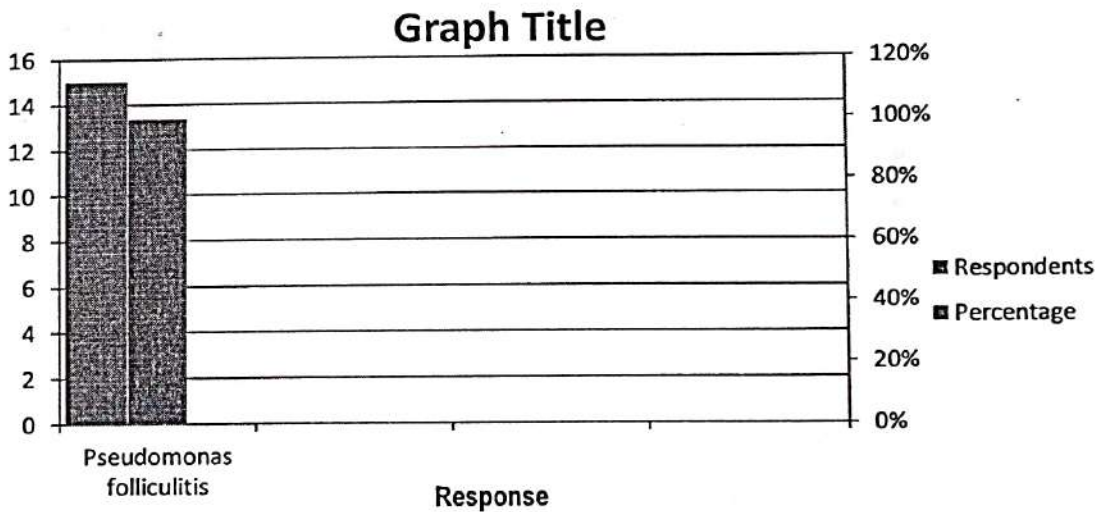
12. Are you satisfied with the tap water quality?

Response	Respondents	Percentage
Yes	5	45%
No	10	95%



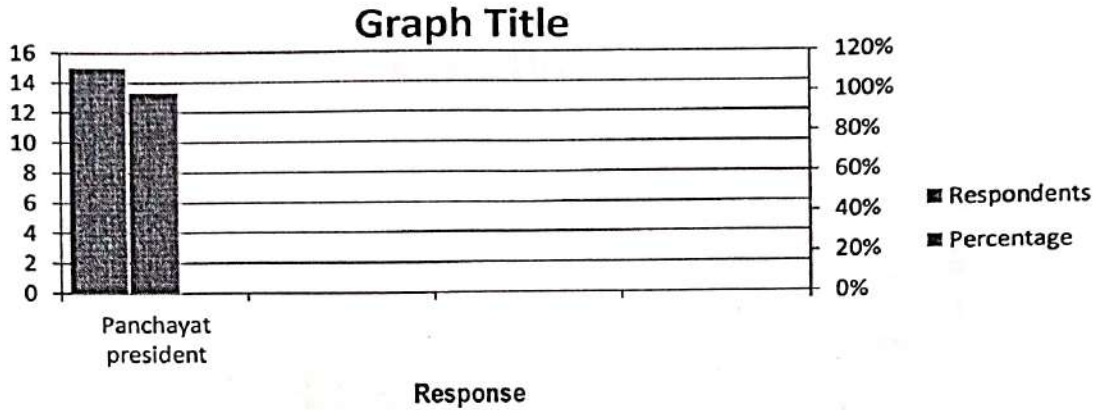
13. What are the rashes and itching on the extremities due to the use of water?

Response	Respondents	Percentage
Pseudomonas folliculitis	15	100%



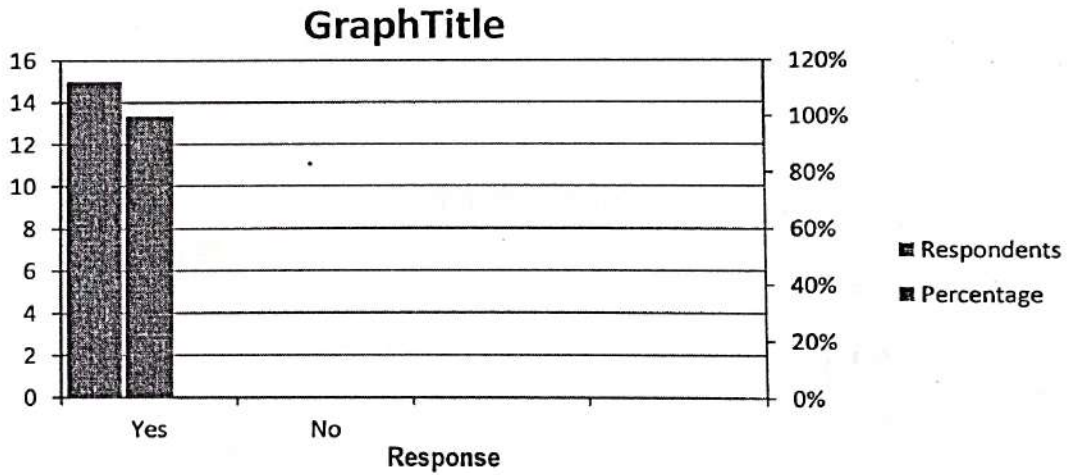
14. To whom are you complaining about water pollution?

Response	Respondents	Percentage
Panchayat president	15	100%



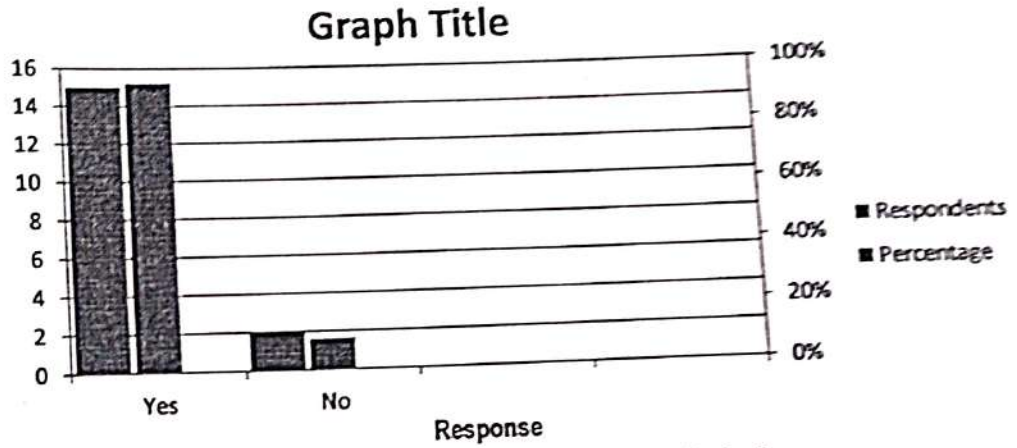
15. Shrimps and Prawns tanks cause water pollution?

Response	Respondents	Percentage
Yes	15	100%
No	0	0



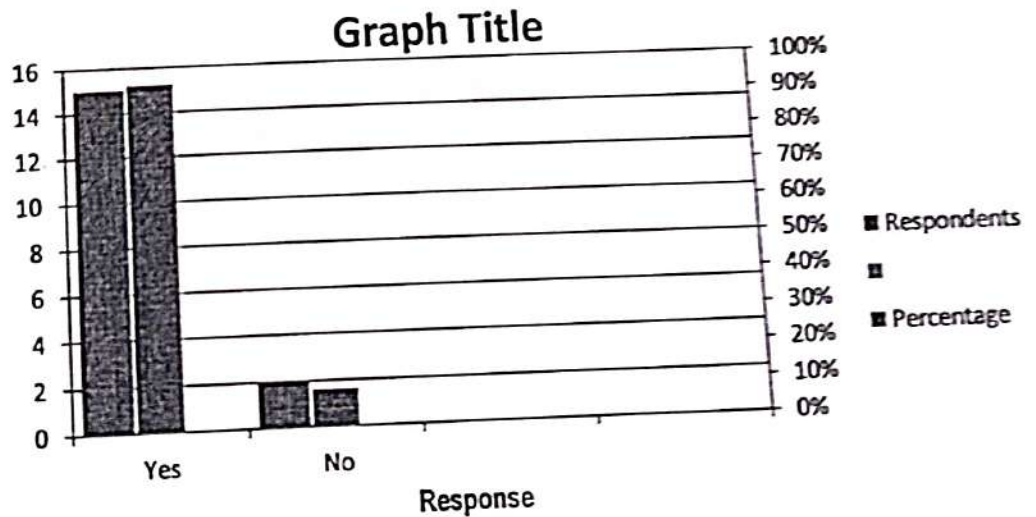
16. Is there any danger to animals and birds due to water pollution?

Response	Respondents	Percentage
Yes	15	95%
No	2	10%



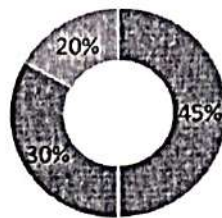
17. Are you watching the headlines on TV and newspapers about pollution?

Response	Respondents	Percentage
Yes	15	95%
No	2	10%



18. What are the diseases caused by water pollution?

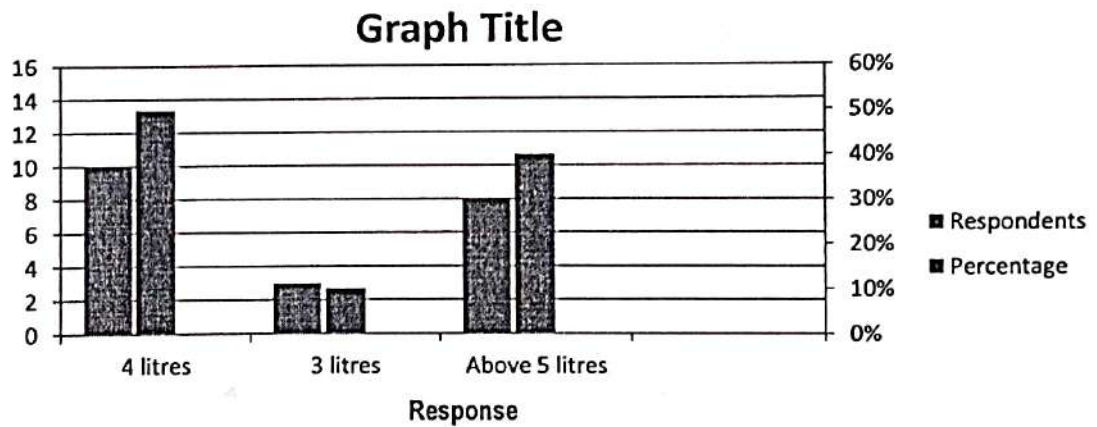
Response	Respondents	Percentage
Skin diseases	9	45%
Fever	6	30%
Kidney problems	3	20%



- Skin diseases
- Fever
- Kidney problems

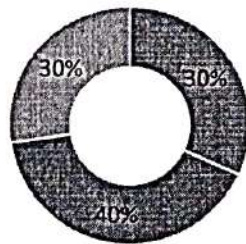
19. How many litres of drinking water does a person need per day?

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

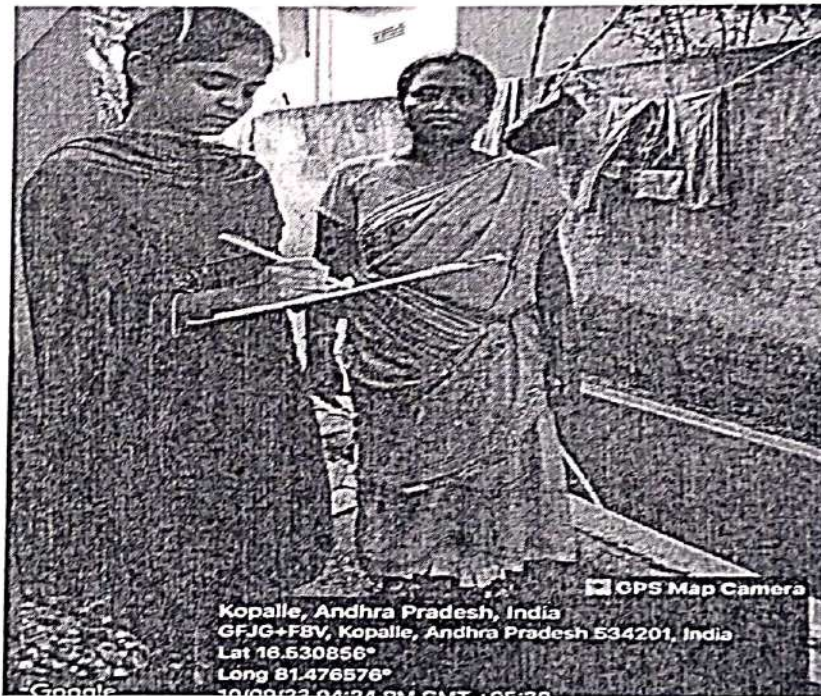


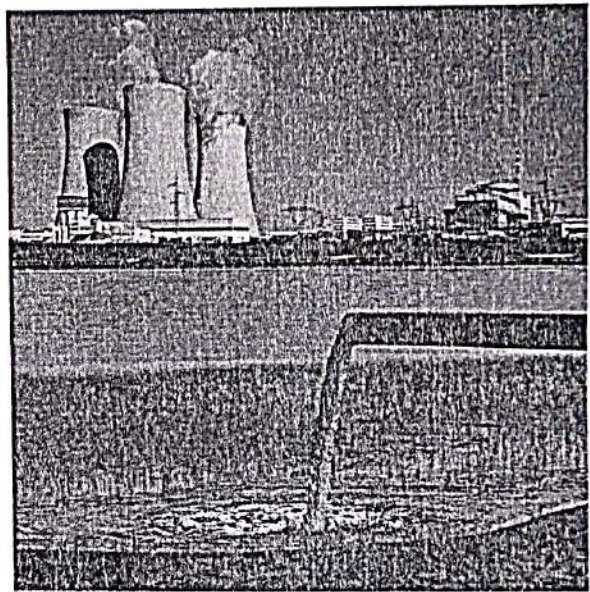
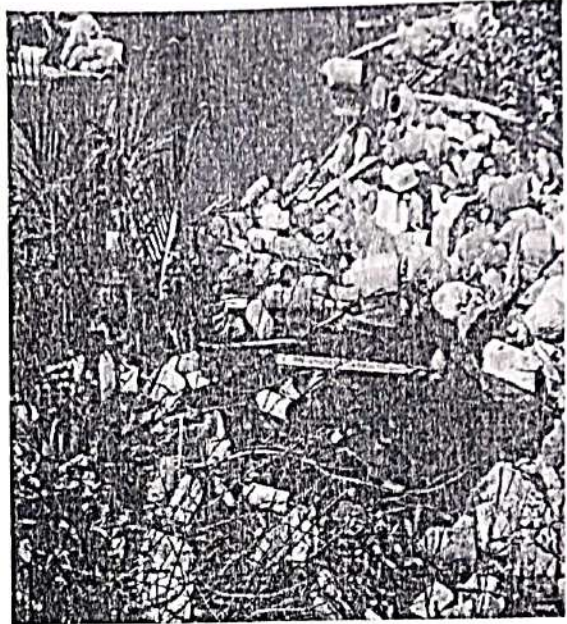
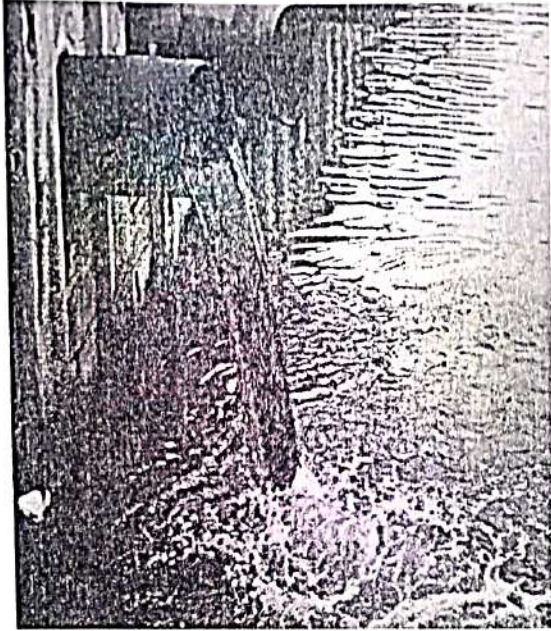
20. What are the practical steps you can take to prevent water pollution?

Response	Respondents	Percentage
Creating awareness among people towards protecting water resources	7	30%
Preventing the mixing of waste in water bodies	9	40%
Clean Ponds rivers and canals yearly	6	30%



- Creating awareness among people towards protecting water resources
- Preventing the mixing of waste in water bodies.
- Clean Ponds rivers and canals yearly





PART-C

RECOMMENDATIONS AND CONCLUSIONS :

- ❖ *Water is one of the precious resource of the nature. Without water survival of living organisms is not possible. Therefore it is very essential for our life. And its our responsibility to preserve this precious resource of nature*
- ❖ *So, water pollution is indeed a very serious concern because it is not only has an impact on health but also on various industries and agriculture. It is therefore highly important to follow the method of saving water and to reduce.*
- ❖ *Water pollution has effects on the general economy and prevention methods should be initiated. Prevention strategies should involve strict policies that govern the discharge of untreated wastes into water bodies and the development of adequate sewage systems. The government should also look into the issue of water security and ensure that there is adequate water for all citizens through effective planning and management.*
- ❖ *Industries must purify there waste water before releasing into natural water bodies*

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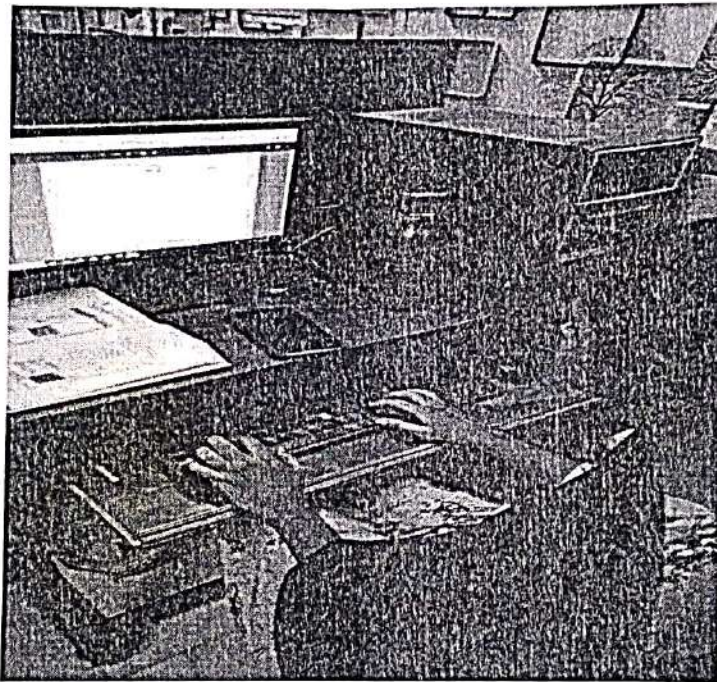
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