

“A STUDY OF AWARENESS OF WATER  
CONSERVATION AMONG STUDENTS”

PROJECT REPORT

Submitted to the Mumbai University  
In partial fulfillment of the requirements

For the degree of  
Bachelor of Education

By

Soumya Varghese

Roll No: 40

Under the guidance of  
Mrs. Pradnya Jadhav

Pillai College of Education and Research,  
Khanda Colony New Panvel,  
Navi Mumbai  
2020-2021

## CERTIFICATE

This is to certify that the project report entitled “a study of awareness of water conservation among students” has been prepared by Soumya Varghese in partial fulfillment of the requirements for Bachelor Degree in Education of Mumbai University. It embodies materials collected and analyzed by the candidate under my guidance and it is hereby approved as indicating the proficiency of this candidate.

Mrs. Pradnya Jadhav

## DECLARATION

I Soumya Varghese, hereby declare that this project report written and submitted by me under the guides of Mrs. Pradnya Jadhav is my original work.

I have not reproduced any parts from any report submitted to Mumbai University or any other Universities this year or any of the previous years.

I understand that such reproducing is liable for punishment in any way, the university may deem fit.

Place: Navi Mumbai

Date:

Soumya Varghese

## ACKNOWLEDGEMENT

Action Research is a golden opportunity for learning and self-development. In the accomplishment of this research successfully, many people have best owned upon me their support, this time I am utilizing to thank all the people who have concerned with this project.

I would like to express my deepest appreciation to almighty and all those who provided me the possibility to complete this report.

A special gratitude I give to my guide teacher Mrs. Pradnya Jadhav, whose contribution in stimulating suggestions and encouragement, helped me to coordinate my research specially in writing this report.

I would like to express my special thanks of gratitude to my principal Dr. Sally Enos and my internship coordinator Dr. Bhavna Dave for providing me this opportunity.

Furthermore I would also like to acknowledge with much appreciation the crucial role of the staff of Mahatma International School, who gave the permission to use all required and the necessary materials to complete the awareness project.

Then I would like to thank my family and friends who have helped me with their valuable suggestions and guidance has been very helpful in the completion of this project.

Last but not the least I would like to thank my students who have helped me to complete the project.

Thanks again to all who helped me in this project.

## INDEX

Sr.no:	Contents	Page No:
1.	Introduction	<a href="#">1</a>
2.	Statement of the Problem.	<a href="#">3</a>
3.	Need of the Study.	<a href="#">3</a>
4.	Objectives of the Study.	<a href="#">3</a>
5.	Operational Definitions.	<a href="#">4</a>
6.	Importance of the Study.	<a href="#">4</a>
7.	Scope of the Study.	<a href="#">5</a>
8.	Sample size	<a href="#">5</a>
9.	Tools employed for the study	<a href="#">5</a>
10.	Methodology Used	<a href="#">6</a>
11.	Analysis and Interpretation of Data	<a href="#">7</a>
12.	Major findings of the Study	<a href="#">23</a>
13.	Suggestions	<a href="#">23</a>
14.	Conclusion	<a href="#">24</a>
15.	Appendix	<a href="#">26</a>
16.	Bibliography	<a href="#">28</a>

## LIST OF TABLES

Sr.no:	Name of the table	Page No:
1.	Table:1	13
2.	Table:2	14
3.	Table:3	15
4.	Table:4	16
5.	Table:5	17
6.	Table:6	18
7.	Table:7	19
8.	Table:8	20
9.	Table:9	21
10.	Table:10	22
11.	Table:11	23
12.	Table:12	24
13.	Table:13	25
14.	Table:14	26
15.	Table:15	27
16.	Table:16	28

## INTRODUCTION

Action research means a scientific search which is conducted for the solution of various problems which come across the day to day activities of the pupils, teachers, schools and educational officers. Action research is used in real situations, rather than in artificial, experimental studies, since its chief emphasis is on problem solving.

It is a reflective process which helps teachers to explore and examine aspects of teaching and learning and to take action to change and improve. The main purpose of an action research projects is to take action and bring about positive educational change in the specific institutional environment that was studied. The aim of action research is to solve immediate, specific, practical and localized problems and bring about a change or improvement in a specific context.

### Water conservation:

Water is essential for all living beings. There can be no life without it. To your knowledge, 97% of our planet is covered in salt water that we cannot use for drinking. The left side of 3% of the water is cool but the 2% is also blocked by glaciers and ice caps. So, we only have 1% left. So, now, feel something that explains why water conservation is important to us. We only depend on a small percentage of water, so it is our responsibility not to pollute and abuse it. Each of us must know how to save water.

Water conservation means making use of water in an appropriate and judicious manner. Since our lives depend entirely on water, it is our duty to think about water conservation and how we can contribute to it

### Water conservation methods:

A variety of methods can be used to keep water inside and out. Here they are:

- By protecting the water against pollution, we can contribute to the conservation of water.
- Water conservation can be done using water for redistribution.

- Consider the rational use of groundwater.
- By renewing traditional water resources, especially in the country like India, its method can help water conservation.
- The use of recent or modern irrigation methods in the agricultural sector can also help save water.
- By making changes in the culture model as if the crops are grown by farmers under agro-climatic conditions, there will be no need for excess water.
- Saving water in industries.
- With the help of management of the floods, water can also be saved.
- Water can also be saved by guiding municipal agencies.
- Water can also be conserved through the collection of rainwater. For example: digging lakes, canals, ponds to collect water, and then installing filtration systems to use it can be a great help. This water can easily be used for gardening, lawn irrigation or for toilets. You can also use stored water through rainwater harvesting for small-scale farming.

#### Water conservation at home:

- Turn off the faucet while brushing your teeth. This can conserve a lot of water. In addition, educate your children to do the same. By following this practice, you can at least keep more than 150 gallons of water each month.
- Try to buy energy-efficient appliances for your daily needs such as bathtubs, sink systems, dishwashers etc.
- Continue to check for leaks. A small leak in the sinks or toilets could result in the use of extra water. Plus, this will add to your water bill too. So, next time, be careful for such small leaks as this can help conserve water.
- While washing clothes and kitchen appliances make sure you do not waste water by half charging your washing machine or dishwasher. Keep them full before washing.
- You will be surprised to know that just by taking short showers; you can help conserve gallons of water. Next time, promise to take a shower for a short time.
- Remember to use brooms or rags to clean rather than using water.



## STATEMENT OF THE PROBLEM

A study of awareness of water conservation among students and to suggest measures to conserving water at home/neighborhood.

## NEED OF THE STUDY

Humans depend on freshwater for drinking as well as for domestic, agricultural, and industrial uses. Careless and wasteful use of this renewable but high-demand natural resource contributes to water depletion. The demand for water is increasing day-by-day. The number of people using water is increasing with rising population. The water available for use is very limited and is decreasing with over usage. It is very important that water is used carefully. We should take care of conserve water.

In this research, students and also parents understand where they waste water; how humans are polluting water and how to solve that problem and how to save/conserves water.

Learning the value and importance of conserving the earth's resources should be practiced from the childhood days. School level is the base of any kind of social and mental development of a student. Learning the water harvesting process at this age will definitely be inherited in their future life. It helps in planning for the conservation of water. It helps to take responsible action on save our water resources. It also helps to give and spread this awareness to others about water conservation.

## OBJECTIVES

- To study the awareness of water conservation among students.
- To understand the difficulties facing due to water scarcity.
- To find out the importance of water conservation.
- To suggest strategies for conserving water at home.
- To give and spread awareness of conservation of water in neighbourhood.

## OPERATIONAL DEFINITIONS

- Study - To find.
- Awareness - means being informed about water conservation.
- Students - The students of 5th STD CBSE, Mahatma International School.
- Water Conservation - Save and protect water.

## IMPORTANCE OF STUDY

Water is a long-term problem. Educating children can really go a long way. The importance of this study are teach children the importance of water conservation is the first step in promoting a deeper understanding of the need to safeguard water supplies for the future. Increasing water literacy is important to make students aware of how best to use it and become more efficient in their water use practices.

The United Nations is celebrating March 22 as World Water Day to stress the importance of conserving water resources and spreading awareness about the challenges we face today. So this study is very important in nowadays.

In this research, researcher discussed the students' awareness and attitude towards water conservation. In this research, students and also parents understand where they waste water and how to solve that problem and how to save/conserve water. Therefore, parents, together with their children, should do everything they can to save water. The children are more likely to spread the message to their family and neighbors and encourage a whole lot more people to save and reuse water.

## SCOPE OF THE STUDY

The scope of the study is limited to students of CBSE 5th STD English medium only.

The scope of the study is limited to students of Mahatma International School, New Panvel only.

## SAMPLE SIZE

The sample size is a term used in market research for defining the number of subjects included in a sample size. By sample size, we understand a group of subjects that are selected from the general population and are considered a representative of the real population for that specific study. To determine the sample size needed for an experiment or survey, researchers take a number of desired factors into account.

Sample size is an important feature in research. In reach the goal is to makes an inference about the population for the sample. Sample size used in the study to determine base on the expense of data collection and need to have sufficient forward. Sample size is the act of choosing the number of observations into in a statistical sample.

The total sample size of this study from class V is 41 students.

## TOOLS EMPLOYED FOR THE STUDY

Research tool may be defined as:

“Anything that becomes a means of collecting information for the study is called a research tool or a research instrument. For example, observation forms, interview schedules, questionnaires, and interview guides are all classified as research tools.”

Tools need to be strong enough to support what the evaluations find during research. Depending on the nature of the information to be gathered, different instruments are used to conduct the assessment forms for gathering data.

Questionnaire is instruments used for collecting data. The Questionnaire usually includes a set of standardized questions that explore a specific topic and collect information about demographics, opinions, attitudes or behaviors."A questionnaire is a systematic compilation of questions from specific units or chapters that are submitted to a sampling of the population from which information is desired".

In this present study the researcher prepared the questionnaire including 16 questions on the bases of study of awareness of water conservation among students and the responses were recorded in the form of Yes/No. The questionnaire has been attached along with this report last.

## METHODOLOGY USED

Methodology in research is defined as the systematic method to resolve a research problem through data gathering using various techniques, providing an interpretation of data gathered and drawing conclusions about the research data. Essentially, a research methodology is the blueprint of a research or study.

A survey is a research method used for collecting data from a predefined group of respondents to gain information and insights into various topics of interest. They can have multiple purposes, and researchers can conduct it in many ways depending on the methodology chosen and the study's goal. Surveys are easy to develop, especially when using the advanced survey software solutions available today. Online surveys and mobile surveys tend to be the most cost-effective modes of survey research.

For the purpose of this study the researcher has used Survey Method to collect the information from fifth standard students.

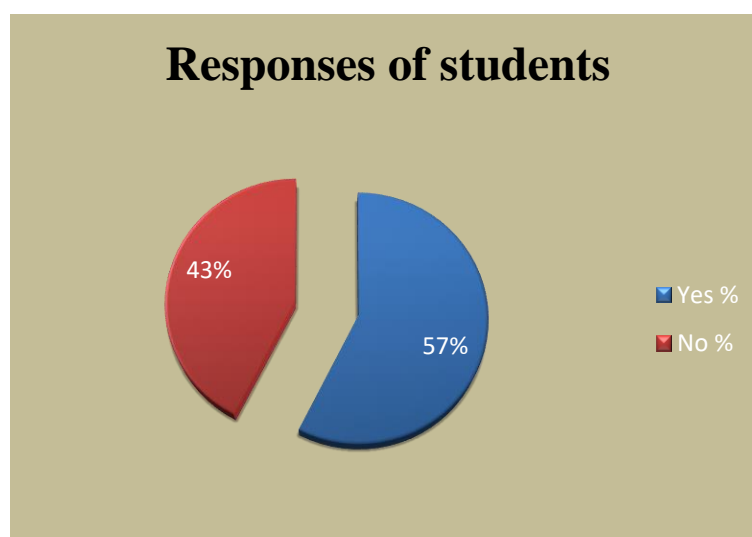
## ANALYSIS AND INTERPRETATION OF DATA

Q1 Do you face shortage of water at your home?

Table:1

Responses	YES	Percentage	NO	Percentage
Students	23	57.5%	17	42.5%

Fig:1



### Interpretation:

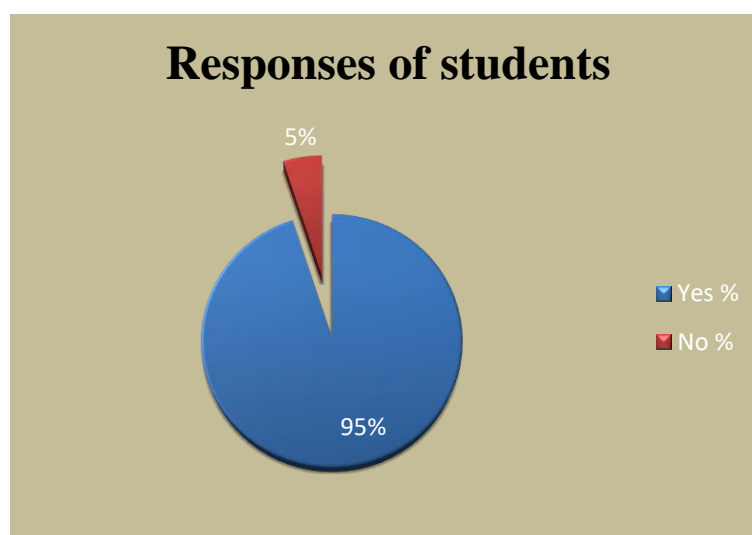
From the above figure, it is observed that 57% of students face shortage of water at their home whereas 43% students do not face shortage of water at their home.

Q2 Do you have tendency to waste the water?

Table:2

Responses	YES	Percentage	NO	Percentage
Students	38	95%	2	5%

Fig:2



Interpretation:

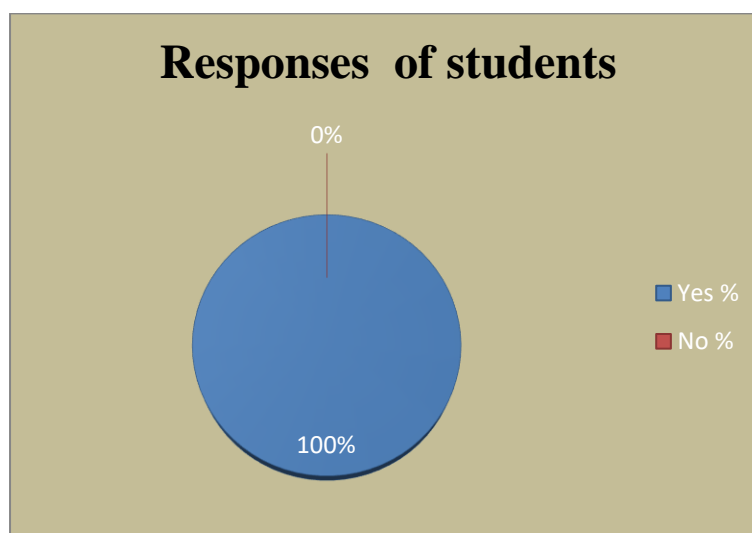
From the above figure, it is observed that 95% of students have tendency to waste the water whereas 5% students do not have tendency to waste the water.

Q3 Do you use the water carefully?

Table:3

Responses	YES	Percentage	NO	Percentage
Students	40	100%	0	0%

Fig:3



Interpretation:

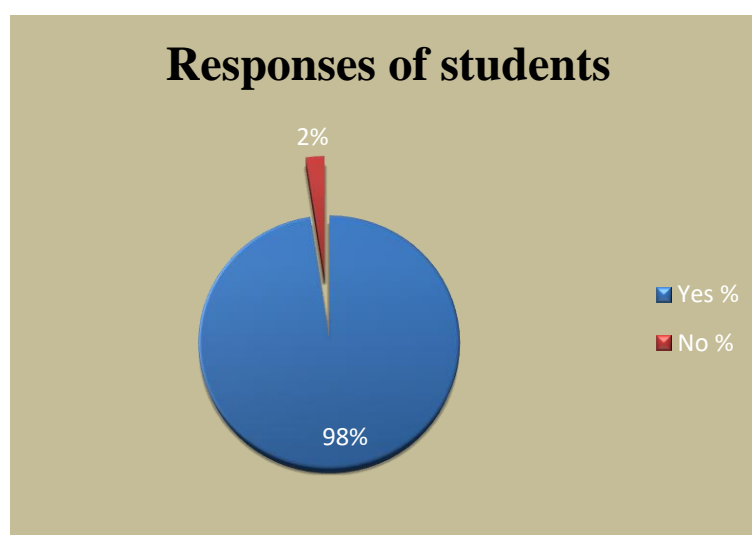
From the above figure, it is observed that all students use the water carefully.

Q4 Do you turn off the water while you brush your teeth?

Table:4

Responses	YES	Percentage	NO	Percentage
Students	40	97.6%	1	2.4%

Fig:4



#### Interpretation:

From the above figure, it is observed that 98% of students turn off the water while you brush your teeth whereas 2% students do not turn off the water while you brush your teeth

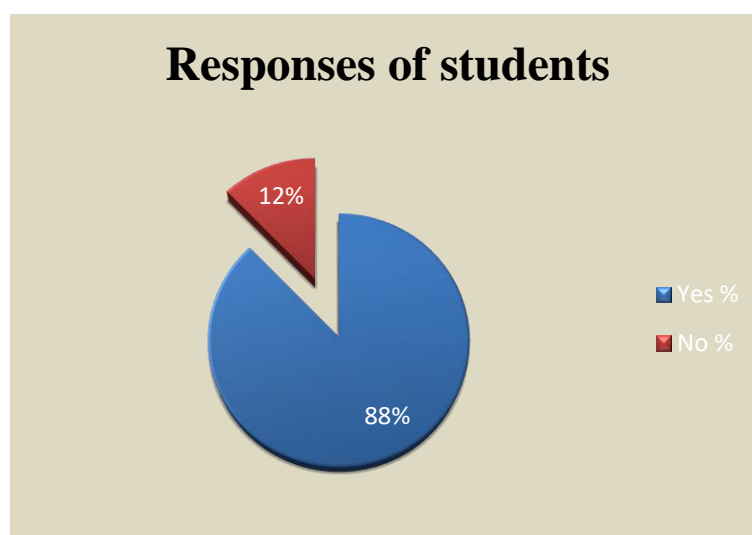


Q5 Do you take showers instead of baths?

Table:5

Responses	YES	Percentage	NO	Percentage
Students	36	87.8%	5	12.2%

Fig:5



#### Interpretation:

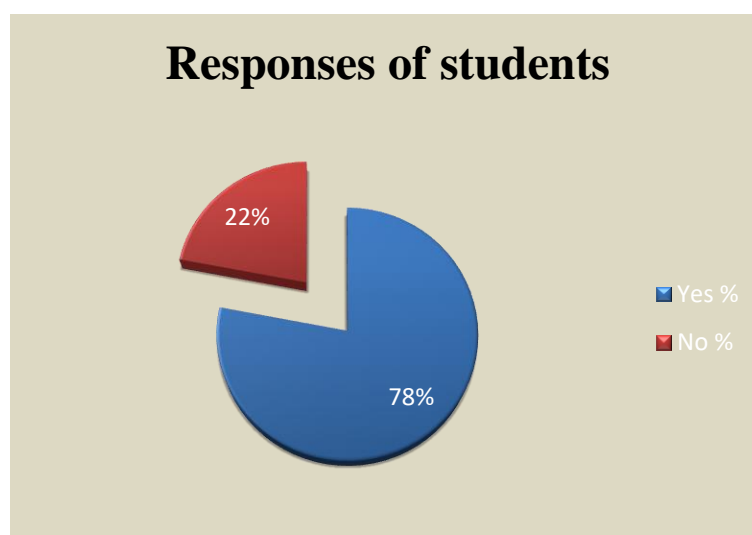
From the above figure, it is observed that 87.8% of students take showers instead of baths whereas 12.2% students do take showers instead of baths.

Q6 Do you let the water run continuously while washing fruits and veggies?

Table:6

Responses	YES	Percentage	NO	Percentage
Students	32	78%	9	22%

Fig:6



#### Interpretation:

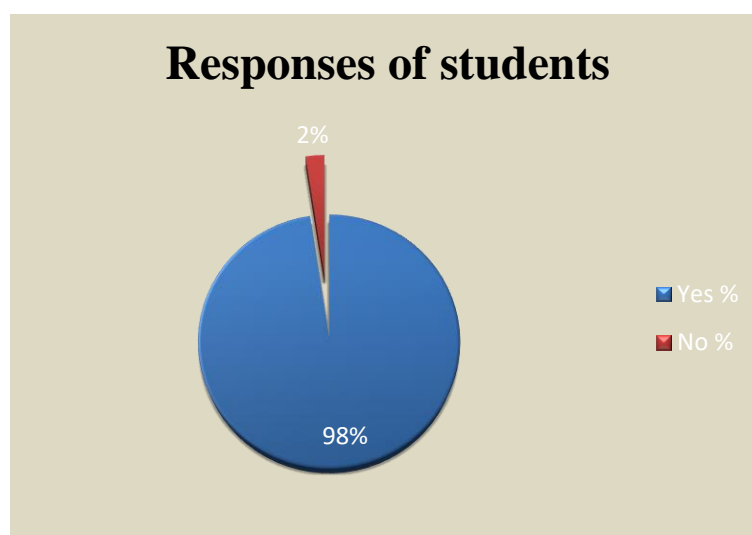
From the above figure, it is observed that 78% of students let the water run continuously while washing fruits and veggies whereas 22% students do not let the water run continuously while washing fruits and veggies.

Q7 Do you always turn off all taps tightly?

Table:7

Responses	YES	Percentage	NO	Percentage
Students	40	97.6 %	1	2.4%

Fig:7



#### Interpretation:

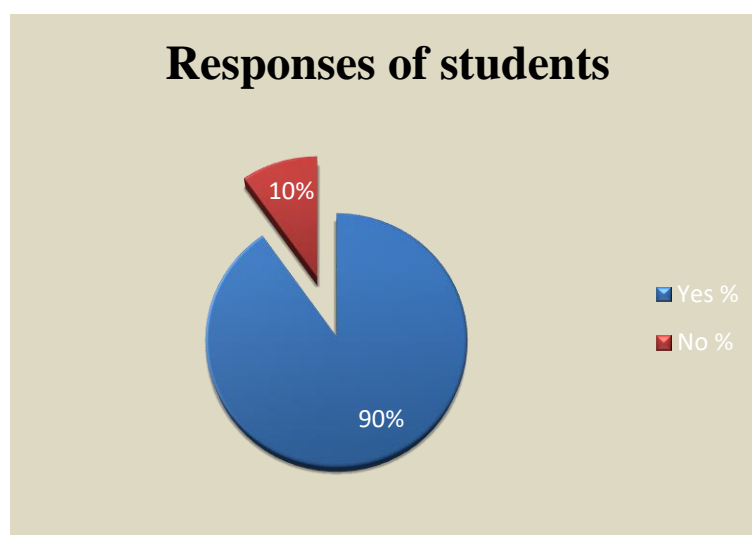
From the above figure, it is observed that 98% of students always turn off all taps tightly whereas 2% students do not always turn off all taps tightly.

Q8 Do you pay attention when the tap is dripping at home?

Table:8

Responses	YES	Percentage	NO	Percentage
Students	40	90.2 %	1	9.8%

Fig:8



#### Interpretation:

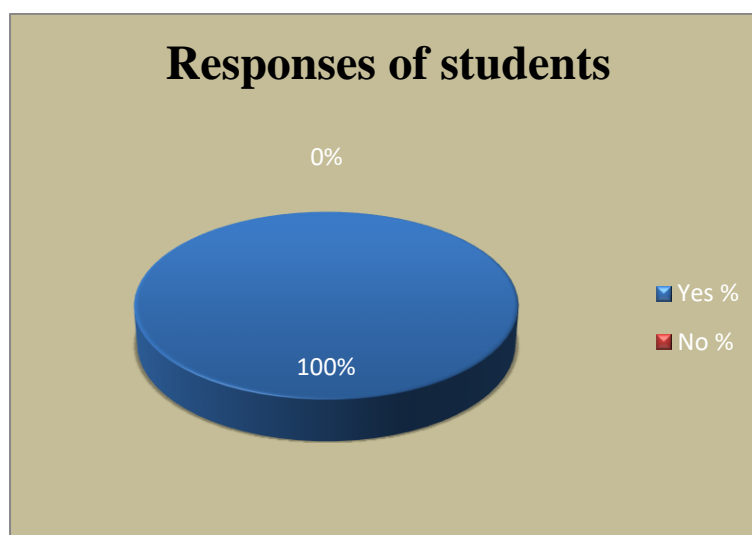
From the above figure, it is observed that 90% of students pay attention when the tap is dripping at home whereas 10% students do not pay attention when the tap is dripping at home.

Q9 Do you know water is precious?

Table:9

Responses	YES	Percentage	NO	Percentage
Students	41	100%	0	

Fig:9



Interpretation:

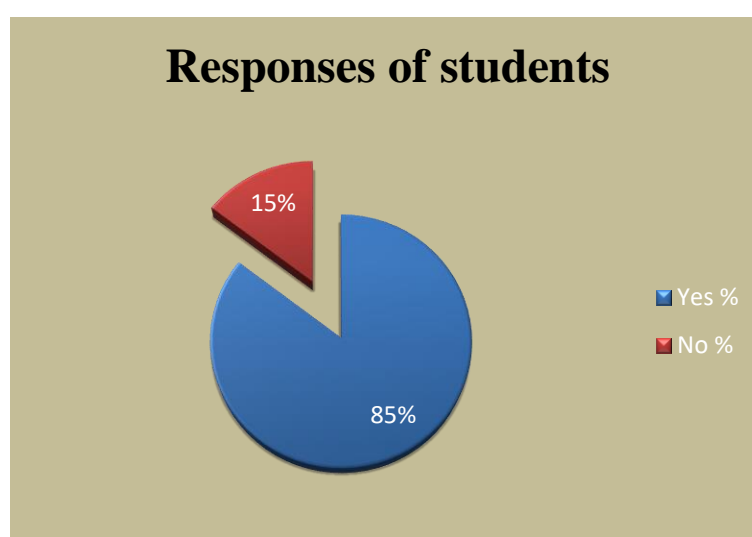
From the above figure, it is observed that 100% of students know water is precious.

Q10 Do you know we have limited fresh water?

Table:10

Responses	YES	Percentage	NO	Percentage
Students	35	85.4%	6	14.6%

Fig:10



#### Interpretation:

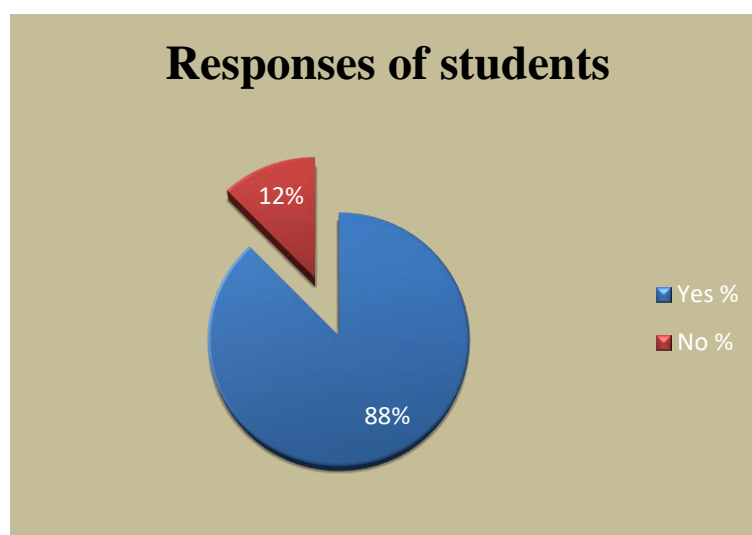
From the above figure, it is observed that 85% of students know we have limited fresh water whereas 15% students do not know we have limited fresh water.

Q11 Do you know our water sources are pollute?

Table:11

Responses	YES	Percentage	NO	Percentage
Students	36	87.8 %	5	12.2 %

Fig:11



#### Interpretation:

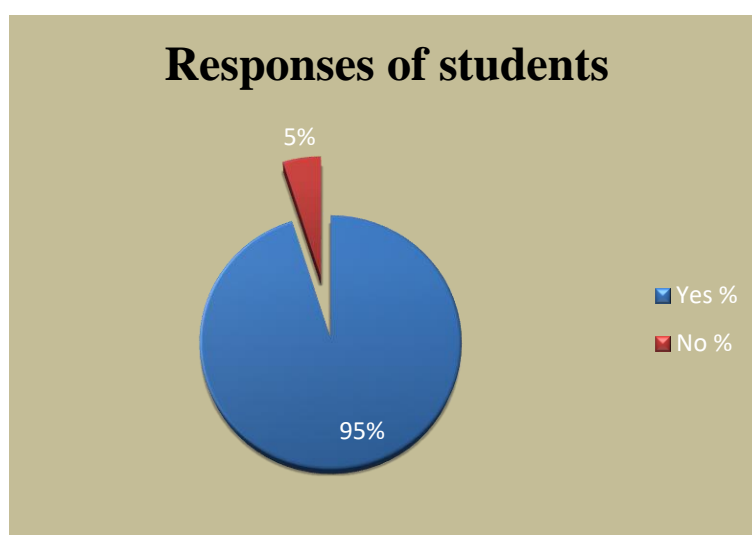
From the above figure, it is observed that 88% of students know our water sources were polluted whereas 12% students do not know our water sources are pollute.

Q12 Do you know we are responsible for water pollution?

Table:12

Responses	YES	Percentage	NO	Percentage
Students	39	95.1%	2	4.9 %

Fig:12



#### Interpretation:

From the above figure, it is observed that 95% of students know we are responsible for water pollution whereas 5% students do not know we are responsible for water pollution.

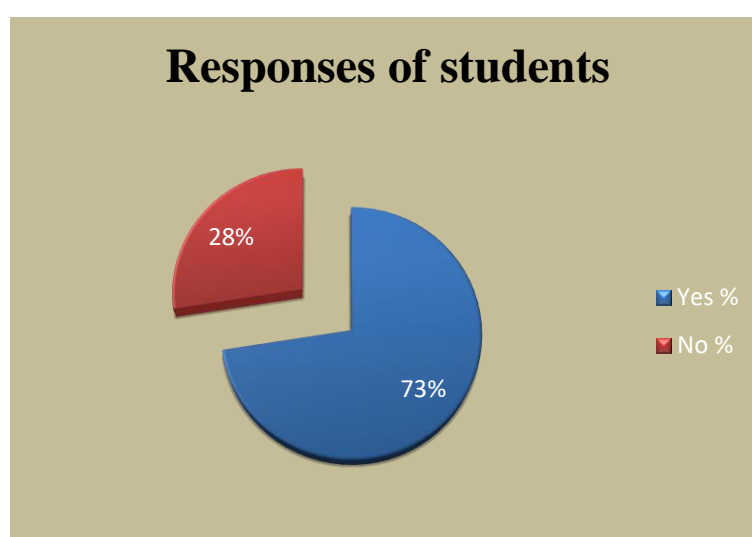


Q13 Do you know deforestation is one of the causes of water scarcity?

Table:13

Responses	YES	Percentage	NO	Percentage
Students	29	72.5%	11	27.5%

Fig:13



Interpretation:

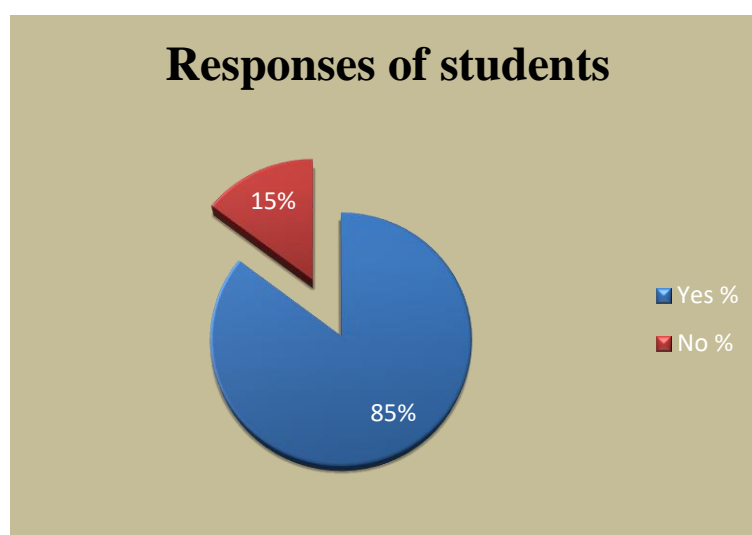
From the above figure, it is observed that 73% of students know deforestation is one of the causes of water scarcity whereas 28% students do not know deforestation is one of the causes of water scarcity.

Q14 Do you hear about water conservation?

Table:14

Responses	YES	Percentage	NO	Percentage
Students	35	85.4%	6	14.6%

Fig:14



#### Interpretation:

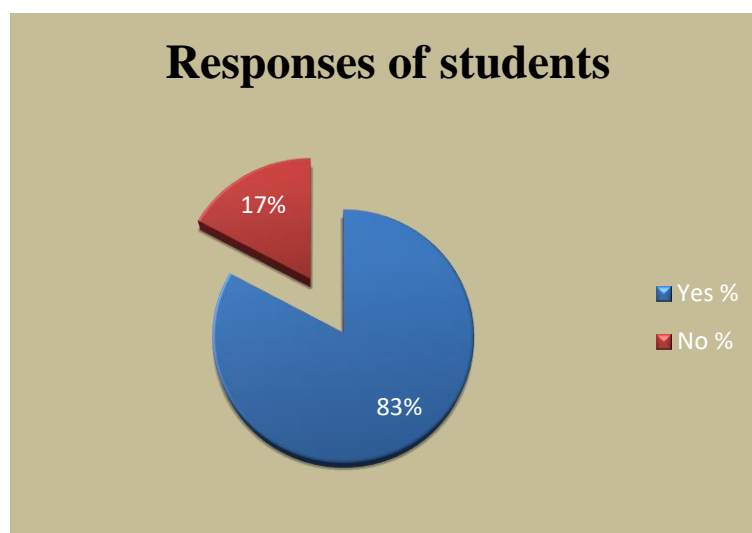
From the above figure, it is observed that 85% of students hear about water conservation whereas 15% students do not hear about water conservation.

Q15 Do you know water conservation is good?

Table:15

Responses	YES	Percentage	NO	Percentage
Students	34	82.9%	7	17.1%

Fig:15



Interpretation:

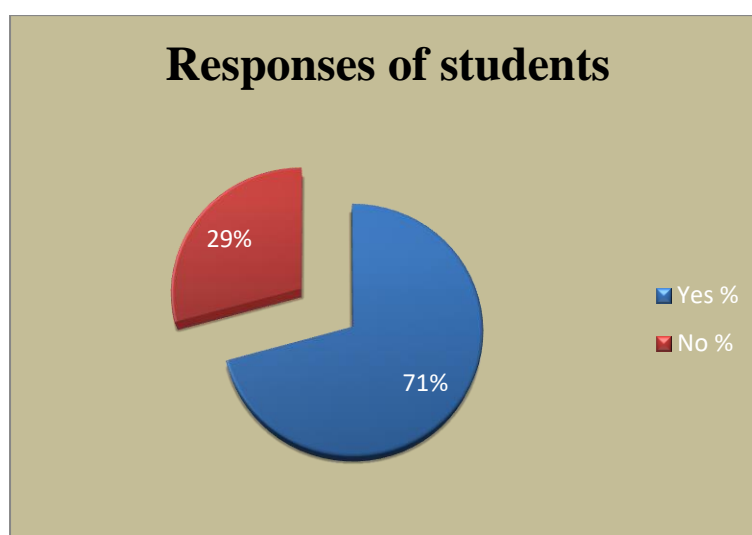
From the above figure, it is observed that 83% of students know water conservation is good whereas 17% students do not know water conservation is good.

Q16 Do you participate in any water conservation program?

Table:16

Responses	YES	Percentage	NO	Percentage
Students	29	70.7 %	12	29.3 %

Fig:16



**Interpretation:**

From the above figure, it is observed that 71% of students participated in water conservation program whereas 29 % students do not participate in any water conservation program.

## MAJOR FINDINGS OF THE STUDY

Majority of students facing shortage at their home and also they have tendency to waste water. All the students like to use water carefully. Majority of students turn off their taps while brushing their teeth and also take showers instead of baths. Majority students always turn off taps tightly and also pay attention when the tap is dripping at home and also know we have limited fresh water. All the students know water is precious. Majority students know our water resources are polluted and also we are/humans are responsible for water pollution. Majority of students heard about water conservation and know water conservation is good. Majority students participated in water conservation program.

## SUGGESTIONS

According to this study, researcher has some suggestions to teachers, parents and administration of school.

The major students know water is precious and use water carefully, so teachers and parents encourage the students to don't waste water because some students are wasting water while brushing and washing fruits and vegetables.

If students save water in their home, school or their society then give positive reward to them so it will increase to conserve water and also this was an encouragement and inspiration of other students also.

In school, celebrate water day and arrange some activities to give awareness to water conservation and also implement some water conservation methods, so it will helpful for students to understand the water conservation methods and the importance of water conservation.

Encourage student and families to conserve water with tips, tricks, and pledges for school and home.

Teachers, parents and school management are role models of the students so they use water carefully and teach their children to use water carefully and conserve the water for the future.

## CONCLUSION

Action research as its name suggests, is about research that impacts on, and focuses on, practice. The purpose of action research is not merely to understand situations and phenomena but also to change them. It seeks to emancipate the participants. The goal of action research is both diagnostic as well as remedial. There are many uses for action research. It is used in curriculum development, as a strategy for professional development, as part of pre-service and in-service programs, and in systems planning for schools and districts.

This action research is based on “the awareness program of water conservation among students”. Before doing this study the researcher studied the problems of water scarcity, water shortage is a problem faced by humans and also how this research was useful for the society. The researcher thought it was very useful to the society because the large quantity of water used in household actions and students are the future of the world so to teach children the importance of water conservation and also take some actions to teach students to the importance of conservation of water.

This study researcher use questionnaire method to collect the data. According to the study the researcher concludes that all the students know water is precious and can't waste water but some students don't save water they have tendency to waste water.

According to study, some actions will take in school and home to conserve water.

Hosting a Water Awareness and Action Campaign at school is a great way to learn about water issues that directly affect your community. It is an excellent way to educate students, teachers, and families about the environmental impacts of their actions and provide them with the tools needed to conserve and preserve water both at home and at school. Encourage student and families to conserve water with tips, tricks, and pledges for school and home. Celebrate your school's participation in your Water Awareness and Action Campaign via your newsletter, website, or blog. Track student participation in the campaign, individually or as classes, and announce the winners. Use water wisely and personal tips helpful suggestions to conserve water at

home. Teach students to the importance of conservation of water through different water related lessons. Celebrate world water day with effective campaigns, quiz programs and different activities.

There are many things which come through action research. In this action research researcher also studied different strategies to conserve water and also practiced in their daily life. Any action research helps the researchers who conduct the research to find out their short comes and also has provided opportunities to develop them for their professional development. These action research programs are very helpful for the teachers, students, parents and also society to understand the different problems and get the measures to solve the problems.

But the action research has some limitations also the main limitation of this research was it conducted in small sample size and it conducted only in one school and one class. So the researcher can't generalize the problems. To conduct this action research the researcher has been found some problems. During the internship period, action research has done. So the researcher doesn't have the time to explain the topic for the study and the covid pandemic situation researcher created the Google form and distributes the questionnaire in between the online class. Some students don't answer the questionnaire only 41 students participated in the research.

## APPENDIX

1. Do you face shortage of water at your home?
  - a. Yes
  - b. No
2. Do you have tendency to waste the water?
  - a. Yes
  - b. No
3. Do you use the water carefully?
  - a. Yes
  - b. No
4. Do you turn off the water while you brush your teeth?
  - a. Yes
  - b. No
5. Do you take showers instead of baths?
  - a. Yes
  - b. No
6. Do you let the water run continuously while washing fruits and veggies?
  - a. Yes
  - b. No
7. Do you always turn off all taps tightly?
  - a. Yes
  - b. No
8. Do you pay attention when the tap is dripping at home?
  - a. Yes
  - b. No
9. Do you know water is precious?
  - a. Yes
  - b. No
10. Do you know we have limited fresh water?
  - a. Yes
  - b. No
11. Do you know our water sources are pollute?



- a. Yes
  - b. No
12. Do you know we are responsible for water pollution?
- a. Yes
  - b. No
13. Do you know deforestation is one of the causes of water scarcity?
- a. Yes
  - b. No
14. Do you hear about water conservation?
- a. Yes
  - b. No
15. Do you know water conservation is good?
- a. Yes
  - b. No
16. Do you participate in any water conservation program?
- a. Yes
  - b. No

## BIBLIOGRAPHY

<https://www.toppr.com/guides/science/water/conservation-of-water/>

[https://www.researchgate.net/publication/312525328\\_WATER\\_CONSERVATION\\_STRATEGIES\\_AND\\_SOLUTIONS](https://www.researchgate.net/publication/312525328_WATER_CONSERVATION_STRATEGIES_AND_SOLUTIONS)

<https://www.sciencedirect.com/>

[https://en.wikipedia.org/wiki/Water\\_conservation](https://en.wikipedia.org/wiki/Water_conservation)

Action Research book by Dr. Shefali Pandya, Professor, Department of Education, University of Mumbai. Maharashtra.

<https://www.omniconvert.com/what-is/sample-size/>

<https://www.civilengineeringterms.com/research-methodology/definition-research-tool-forms/>