



# Policy Forum Guyana

## Aqua Voice

“World Water Day 2023”



Location: Smith Memorial Primary School

Date: 14<sup>th</sup> & 21<sup>st</sup> March, 2023

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## **Introduction**

Humans depend on freshwater to survive, freshwater provides us with drinking water, agriculture, energy and supports ecosystems. Although freshwater is vital for life only 3 percent of the earth's water is freshwater. Human activities have had a detrimental effect on the availability of freshwater. Therefore, it is imperative to educate children and young people about how their lifestyle affects the environment around them. Climate Change has caused unpredictable weather patterns that result in prolonged dry seasons and prolonged wet seasons. Consequently, this leads to flooding and droughts. Droughts affect approximately 55 million people globally every year. Droughts are the most serious hazard to livestock and crops. It also increases diseases, deaths and migration. Water shortages impact approximately 40 percent of the world's population. Due to the increasing impacts of climate change, resources and ecosystems could be lost, affecting the next generation. In spite of the fact that youths are victims of climate change, they are also future innovators and agents of change.

For World Water Day Policy Forum Guyana aims to bring awareness about freshwater by conducting two sessions at Smith Memorial Primary School. Moreover, Policy Forum Guyana conducted a questionnaire with the objective of collecting data on youths' perspectives on climate change, how it impacts them, and solutions to alleviate it. By having these data available it can help policy makers when creating policies to consider factors that would affect citizens and the data will be used in the wellbeing for Future Generations Manifesto. While adults' perspectives and opinions are significant, youth's opinions are also important, since they are the next generation.

## **Project Description**

Policy Forum Guyana revised the freshwater PowerPoints that were used in conducting sessions in the River Guardian Project into two PowerPoints. With the use of this PowerPoint, we brought awareness about the importance of freshwater resources and how we can protect them. The PowerPoints offered topics such as the definition of freshwater, types of freshwater, freshwater regions, water pollution, negative impacts of water pollution and solutions to water pollution. These sessions were conducted by two of Policy Forum Guyana's staff and lasted a duration of two weeks, March 14<sup>th</sup> to 21<sup>st</sup>, which allowed a total of 15 grade six students to benefit from these freshwater sessions for World Water Day.

Moreover, a questionnaire was conducted during the two weeks session to evaluate the students' understanding of freshwater and how their lifestyle influences climate change and freshwater resources.

## **Objectives**

The objectives of this project were to:

1. Educate youths about climate change (specifically the importance of freshwater).
2. Include the perspectives of future generations in policies concerning the environment.
3. Collect data concerning youths' opinions on climate change in Guyana.

## Lesson 1

This was the first lesson conducted at Smith's Memorial Primary School on the 14<sup>th</sup> March 2023. The lesson began with an introduction into what Freshwater is. (See figure 1)

Figure 1: Definition of freshwater

### What is Freshwater ?

- ▶ Fresh water is salt free water or it is not sea water.
- ▶ Freshwater is found inland and away from the sea.




Figure 2: Percentage of Freshwater found on Earth

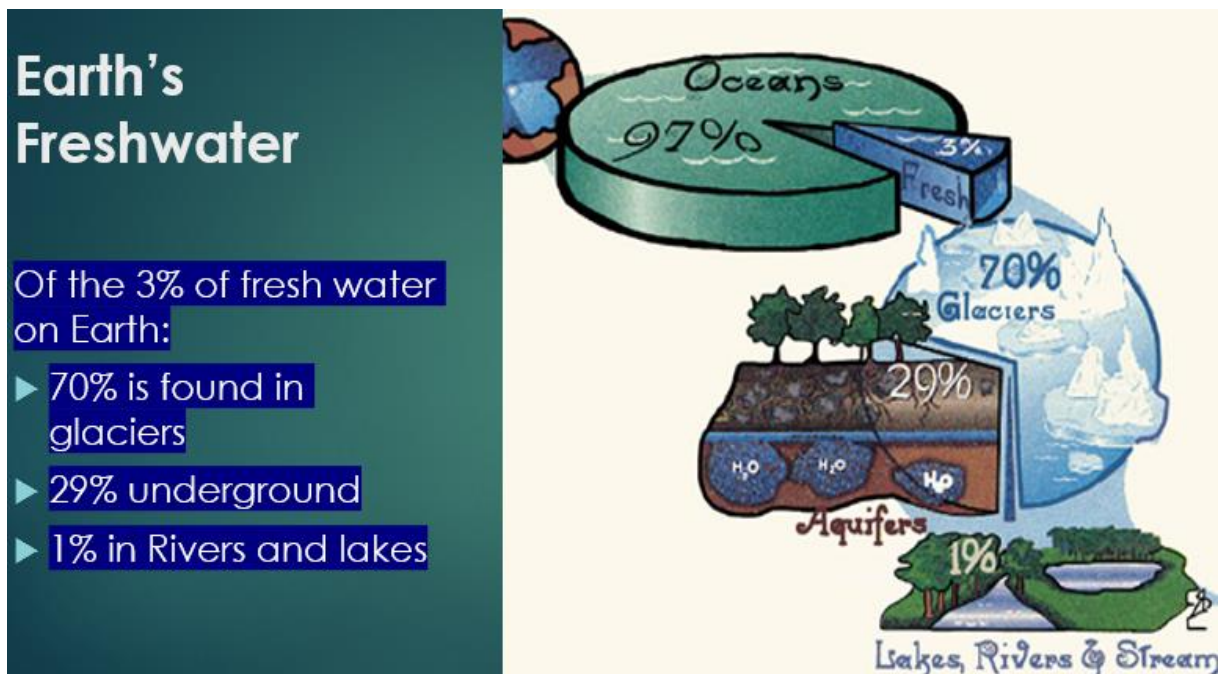


Figure 3: Freshwater regions and their examples

## Freshwater regions

- ▶ Stagnant Water

Some freshwater regions are known as stagnant water because the water stays still.

Stagnant water are:

- ▶ Ponds
- ▶ Lakes
- ▶ Puddle of water left from a rainstorm
- ▶ Marshes
- ▶ Swamps

- ▶ Flowing Water

Other freshwater regions are known as flowing water because the water is constantly moving.


Flowing water are:

- ▶ Rivers
- ▶ Streams

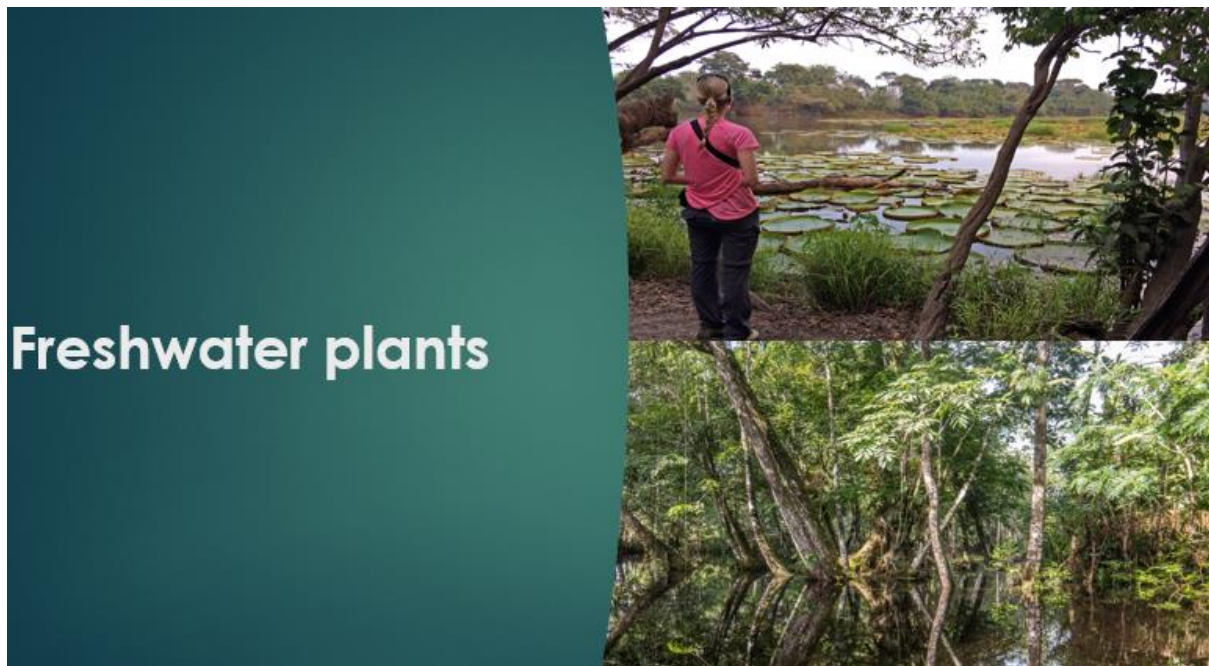


Figure 4: Freshwater Animals

## Freshwater animals



**Figure 5:** Freshwater Plants



**Figure 6:** Importance of Freshwater

**Importance of freshwater**

**Freshwater is essential for the survival of plants, animals and human.**

**Uses of freshwater:**

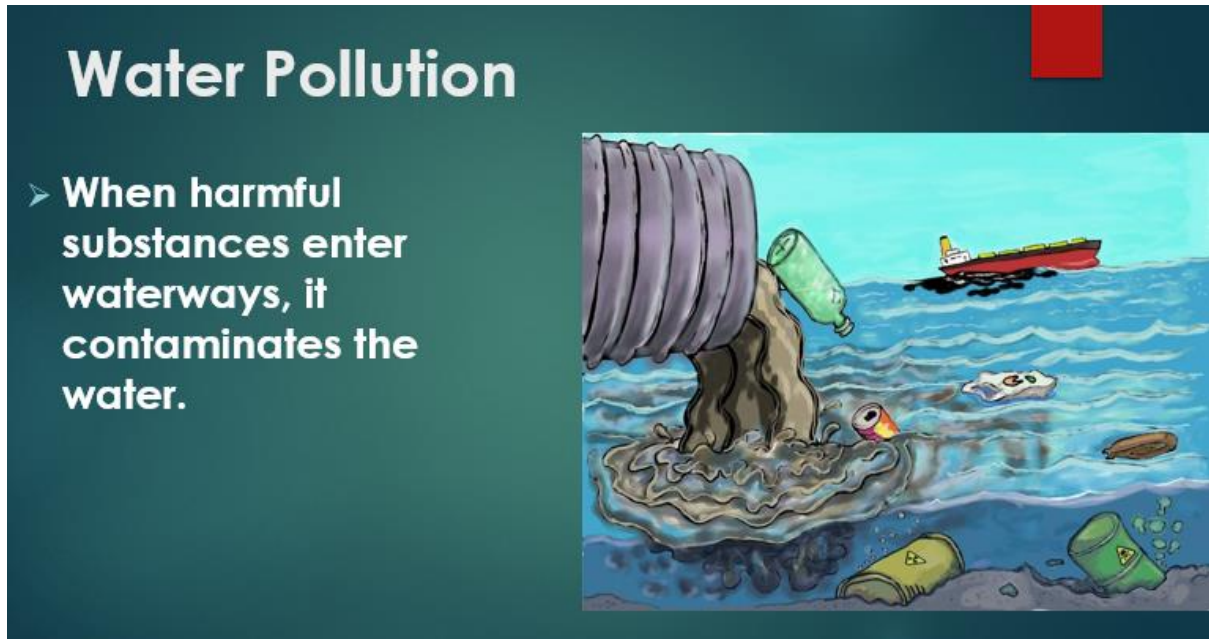
- ▶ For domestic purposes-drinking, washing, cleaning
- ▶ Agriculture- irrigate crops and for livestock
- ▶ Used in industrial factories
- ▶ For recreation

Additionally a question and answer segment was done at the end of lesson one to help clarify any concepts the students may not have understood during the lesson. (see

## Lesson 2

This was the second lesson conducted at Smith's Memorial Primary School on the 21 March, 2023. This lesson covered water pollution and the different aspects of it. Also, how we can protect freshwater resources. Lesson 2 covers the following information:

**Figure 7:** What is water pollution?



**Figure 8:** Causes of water pollution



## Cause of Water Pollution

Oil – occurs when oil from roads and parking lots is carried into waterways. Oil spills from oil rigs and ships.



*Figure 9:* The effects of water pollution

## Effects of Water Pollution



Destruction of ecosystems



**Figure 10:** Ways to protect freshwater resources

## How can we protect freshwater resources?

- Reduce the amount of water being used

A close-up photograph of a person's hand turning a silver faucet handle to the right, stopping the flow of water from a white sink. The background is slightly blurred, showing green foliage.

## How can we protect freshwater resources?

- Avoid buying plastic bottles or containers

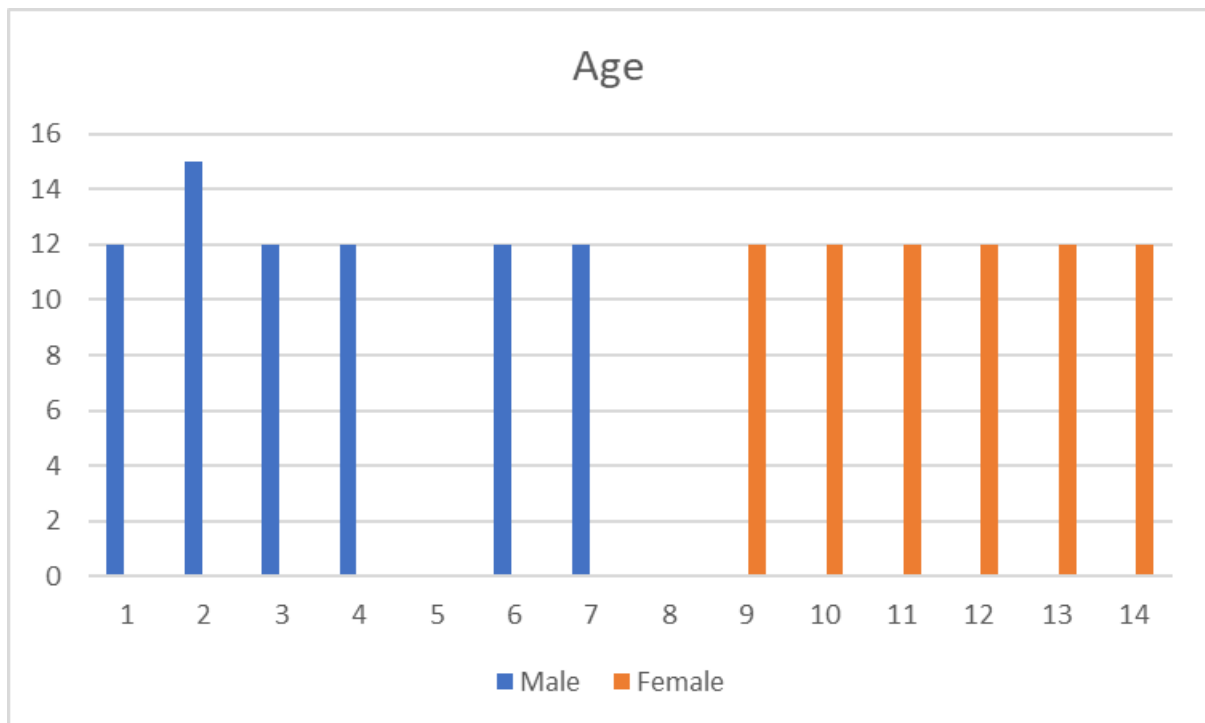
A photograph of a store shelf filled with many rows of plastic water bottles. A hand is visible on the right side, reaching for one of the bottles. The bottles are arranged in neat rows on a metal shelf.

At the end of this presentation students were given a story book called Kyle Learns about freshwater. This story book gives a local setting that educates students about the importance of freshwater, also highlighting threats of freshwater in Guyana and then recommending what youths can do to protect freshwater resources. (See *Figure 22*)

## Questionnaire Data

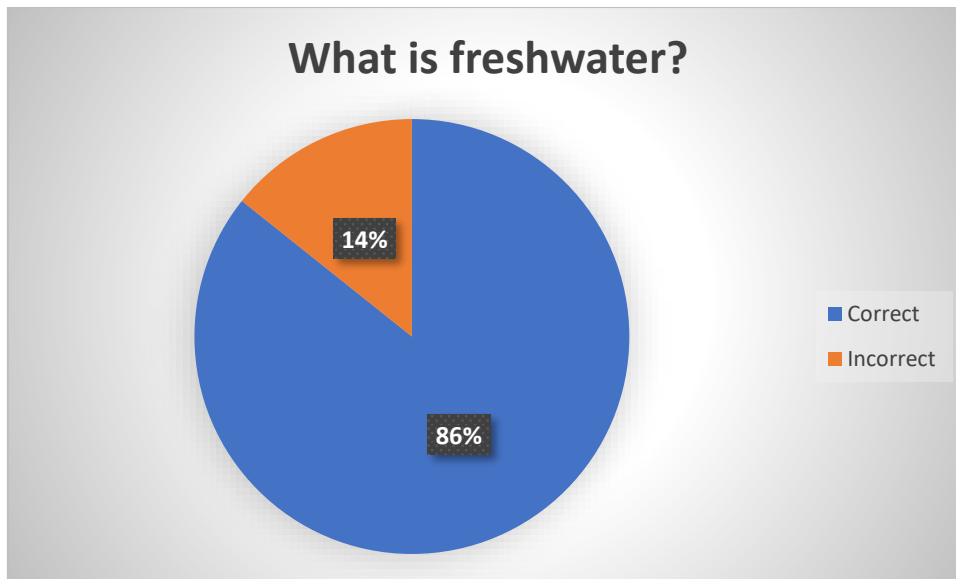
Environmental awareness is important to assess and minimize pollution. It is noted that the present generation will face more extreme climatic events than other generations. Therefore, it is imperative to educate youths about climate change and how their actions affect the environment if we are to mitigate the adverse effects of climate change. Policy Forum Guyana distributed a questionnaire to fifteen (15) students in which the previous lessons were taught. The questionnaire focuses on the students' understanding of climate change, freshwater, pollution, solutions and its influence on the students' daily lives. Out of the fifteen questionnaires distributed one was missing, therefore the data was taken from fourteen questionnaires.

**Figure 11:** Age



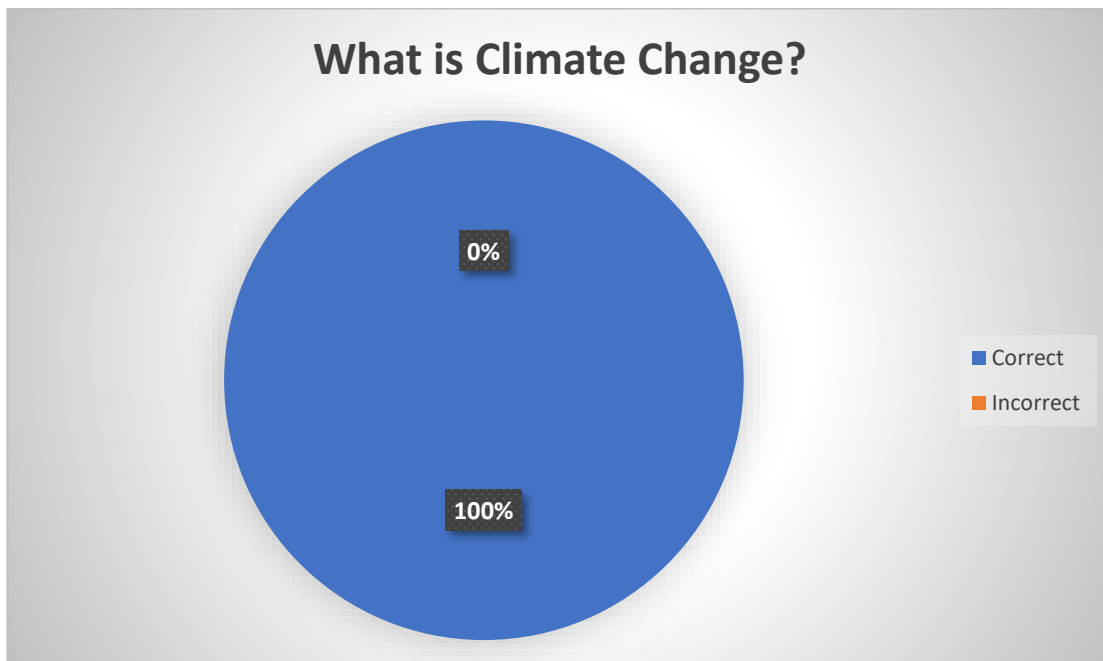
The figure above shows the ages of the students that took part in the questionnaire. It is noted that of the 6 males represented in blue, five were within the 12-13 range while one was within the 15-16 range. It is noted that the six females represented in orange are in the same age range as 12-13. The two outstanding students did not indicate in the questionnaire their gender but both were within the 12-13 age range.

**Figure 12:** What is freshwater?



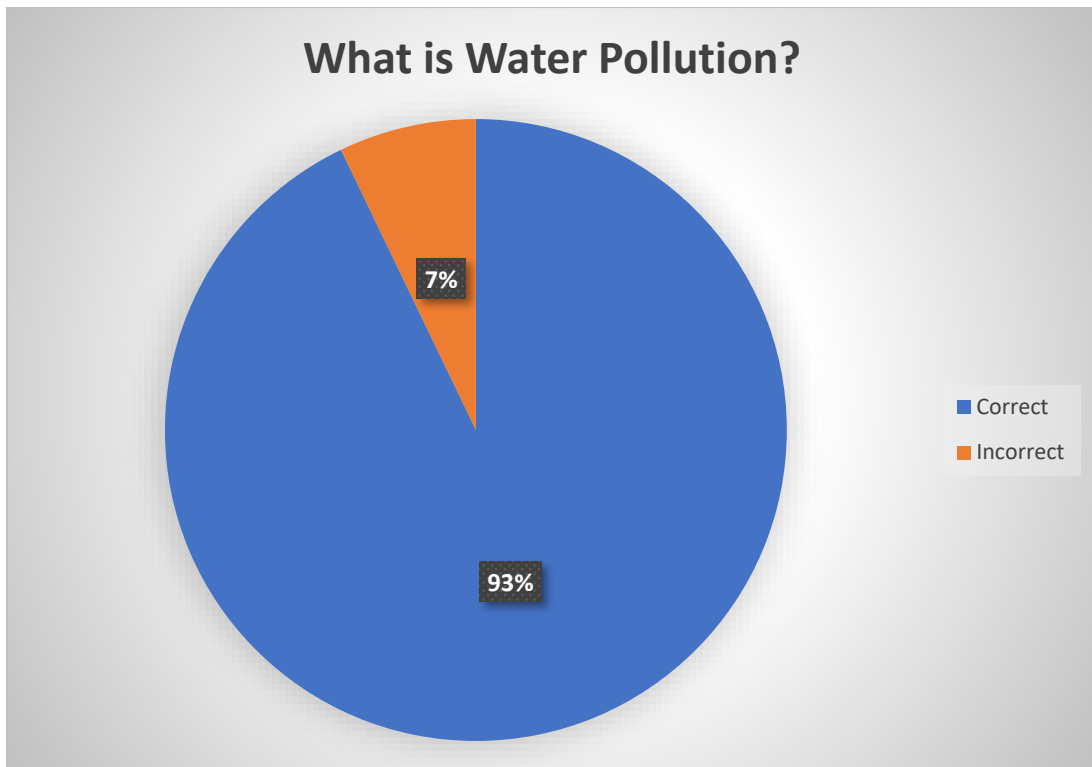
The diagram above shows the percentage of students' response to freshwater definition. 86% (12 students) of the focus group understood what is freshwater while 14 percent (2 students) did not.

**Figure 13:** What is Climate Change?



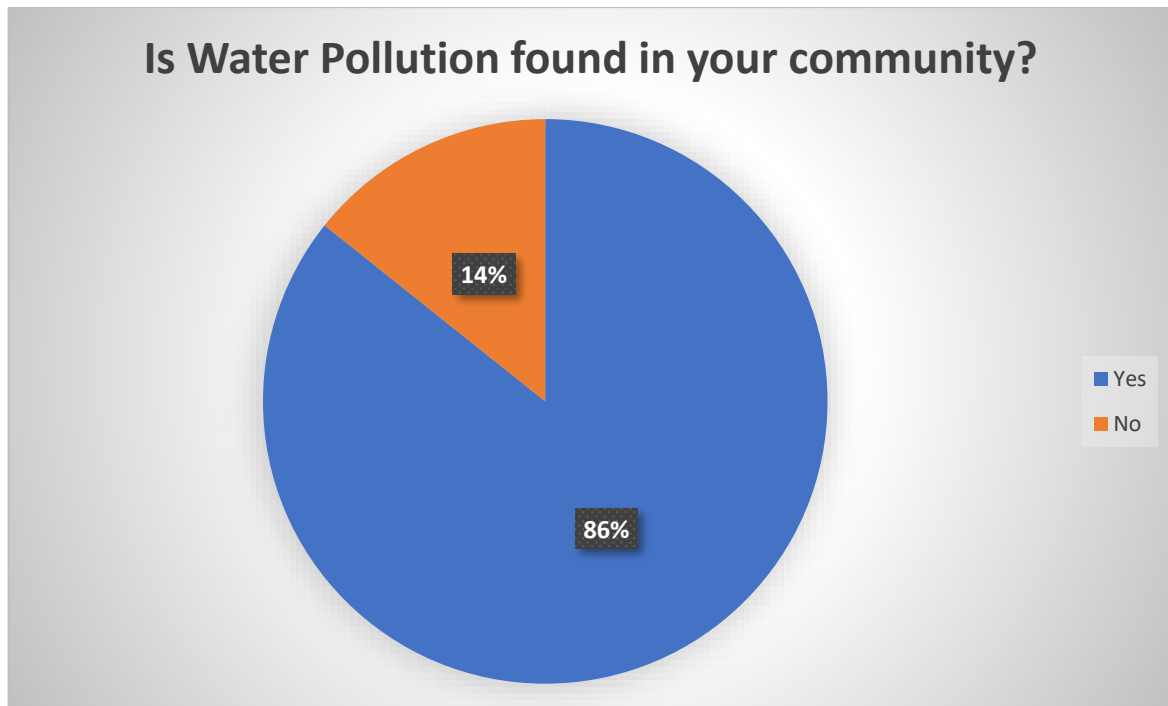
The diagram above shows the students' responses to climate change definition. It is noted that all 14 students understood what climate change is.

**Figure 14:** What is water pollution?



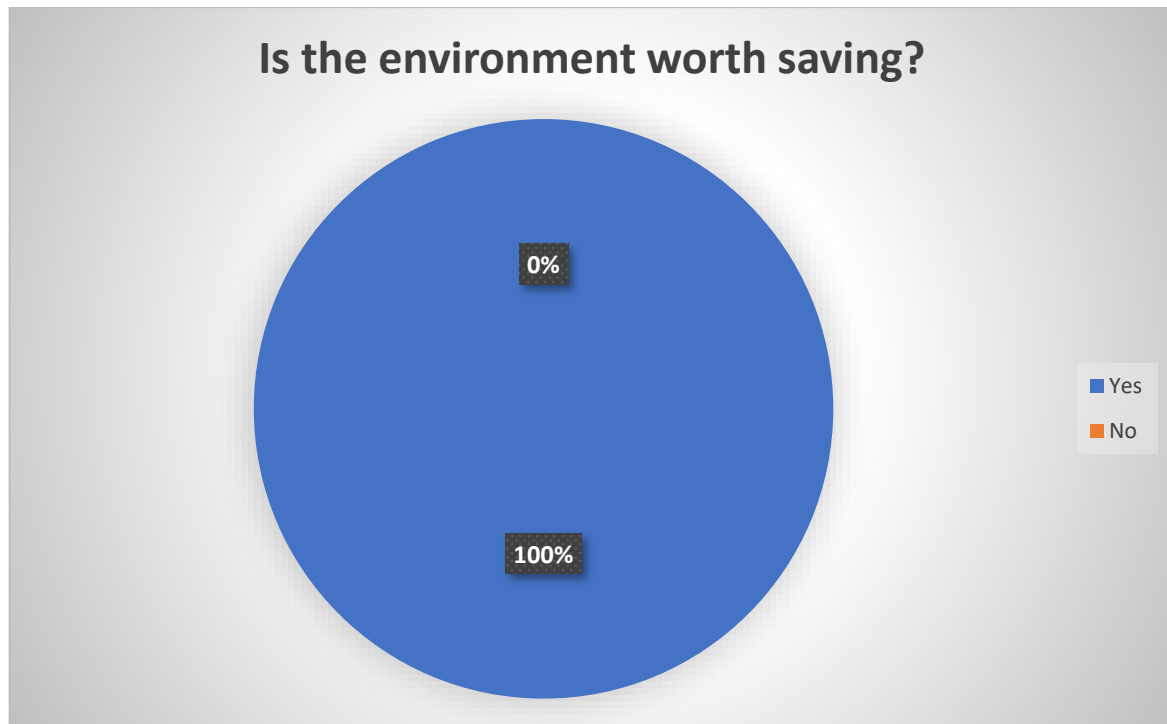
The diagram above shows the students' responses to the definition of water pollution. It is noted that 93 percent (13 students) understood what water pollution is. While 7 percent (1 student) did not.

**Figure 15:** Is water pollution found in your community?



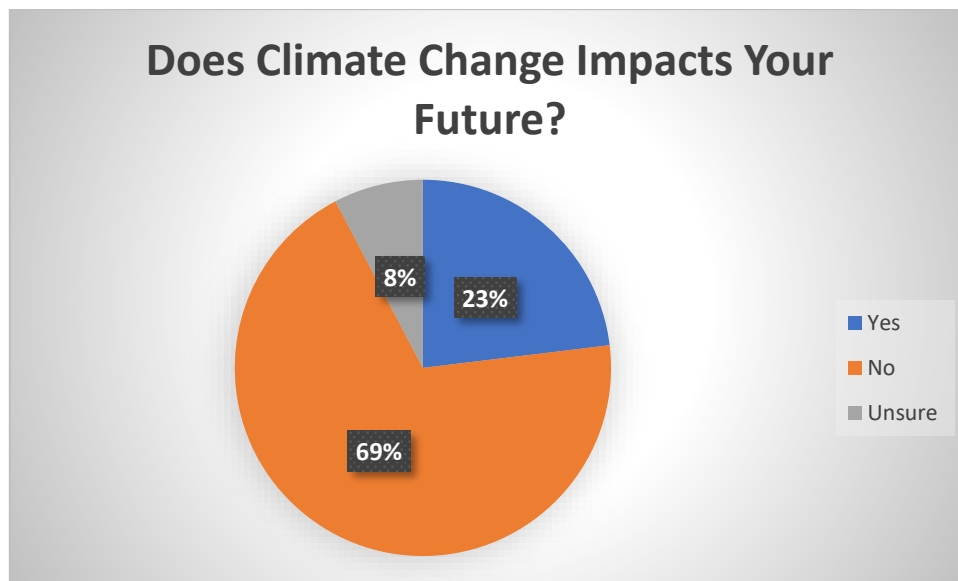
The diagram above shows the students' responses to if water pollution is found in their community. It is noted that 86 percent (12) of students answered yes, meaning that some form of water pollution is present within their communities. While 14 percent (2) of students answered that no water pollution exists within their communities.

**Figure 16:** Is the environment worth saving?



In the pie chart above, you can see the percentage of students who responded that the environment is worth saving. It is noted that 100 percent (all students) answered yes, meaning that students know that the environment is worth protecting.

**Figure 17:** Does climate change impact your future?



The diagram above shows the students' responses to climate change impacts on their future. It is noted that 69 percent (9 students) responded no. While 23 percent (3 students) answered yes, and 8 percent (1 student) answered unsure. It is important to note that one student did not answer this question in the questionnaire. Therefore, the data taken for this question is from 13 students rather than 14.

Additionally, it was noted in the questionnaire that the students were capable of thinking of environmental solutions to combat water pollution. There were several solutions such as:

- Cleaning the school compound or
- Community drainage,
- Placing more bins in communities,
- Recycling
- No littering.

## **Conclusion**

In conclusion, it is imperative for youths to be conscious and involved in environmental issues. Since the effects of climate change would be more severe and rapid, and affect the future generation. From the questionnaire conducted it showed that the majority if not all the students understood the definitions of freshwater, climate change and water pollution. Also all the students agree that the environment is worth saving. This indicated the students are aware of these environmental issues. Due to the school's curriculum and Policy Forum Guyana environmental sessions. From the study conducted it is noted that the majority of students are affected by water pollution in their community. It was also noted that the majority of students didn't think climate change affected their future or was unsure, this states that students are not aware beyond the surface level about the effects of climate change. This would suggest that more environmental education needs to be conducted in schools.

# Appendix

## First Session

Figure 18



Figure 19



Figure 20



[Link to the Facebook post](#)

In observance of World Water Day 2023, Policy Forum Guyana was able to have a session with Smith Memorial Primary School on the importance of freshwater.

Policy Forum Guyana would like to thank the school for giving us this opportunity to educate youths about freshwater.

#freshwater #environmental #ecosystem #educational



This post was able to reach 178 accounts and have 5 engagements

[Instagram Post](#)



This post was able to reach 93 accounts and have 24 engagements

## Second Session

Figure 21



Figure 22

Students reading Kyle Learns about freshwater booklet



Figure 23

[Link to Facebook Post](#)



This post was able to reach 101 accounts and have 10 engagements

[Instagram Post](#)



This post was able to reach 89 accounts and have 20 engagements