

# SURINAME ANNUAL REPORT



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## INTRODUCTION

Suriname joined the GLOBE program in 1997 and after a good start became somewhat dormant in the early 2000s. In 2008 Green Heritage Fund Suriname was asked to support the implementation of the GLOBE Program in Suriname and since 2010, Monique Pool, Director of Green Heritage Fund Suriname, has held the Country Coordination for the GLOBE Program in Suriname. This position was accepted out of the conviction that GLOBE has the potential to teach children the scientific method from an early age and make them into citizens that are able to think for themselves and investigate and explore the world around them. It takes them out of the school banks into the world around them and connects them to the natural world.

In the past years, although progress has been slow, the GLOBE Suriname Program is starting to get a foothold in education and participation is increasing. This is without a doubt a result of the translation of the materials in Dutch - which is the official school language - the enthusiasm of the teachers, students and the assistant country coordinator, as well as the financial support by the Alcoa Foundation, Tullow Oil and the American Embassy.

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## EDUCATION

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The GLOBE project was implemented during school year 2017-2018 in 13 schools in 7 Districts. This project was implemented at least once per month in the schools during regular school hours or after school and was financed by Tullow Oil. Approximately 334 students participated in this project.

### **O.S 2 Abina**

O.S 2 Albina is a primary school located in the district of Marowijne. At this school the atmosphere and biosphere protocols were implemented. The activities were conducted with a group of 22 students of the 5<sup>th</sup> grade over the past school year.

### **O.S. 4 Meerzorg**

O.S. 4 Meerzorg is a primary school located in the district of Commewijne. At this school only the atmosphere protocol was implemented. The activities were conducted with a group of 8 students of the S.O. group.

### **Mulo Geyersvlijt**

Mulo Geyersvlijt is a junior secondary general school in the district of Paramaribo. The atmosphere and hydrosphere protocols were taught at this school. The activities were conducted with a group of 23 students from the 2<sup>nd</sup> grade.

### **Kangoeroe Community School**

Kangoeroe Community School is located in the district of Paramaribo. At this school protocols on atmosphere and biosphere were taught. The activities were conducted with a group of 53 students from group 7a and 7b.

### **Het Gouden hart**



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The Gouden hart school is primary school located in the district of Paramaribo. At this school only the atmosphere protocol was taught and the activities were conducted with a group of 10 students.

## **Marie Le Fevre Mulo School**

Marie Le Fèvre Mulo School is a junior secondary general school located in the district of Paramaribo. At this school atmosphere and pedosphere protocols were taught. The activities were conducted with a group of 19 students from class 2A.

## **Anton Resida Mulo School**

The Anton Resida Mulo school is a junior secondary general school in the district of Wanica. Atmosphere and hydrosphere protocols were taught. The activities were conducted with 8 students from class 2A.

## **O.S Von Freyburg**

O.S. Von Freyburg is a primary school in the district of Saramacca. The past months we engaged with 38 students of the 5<sup>th</sup> and 6<sup>th</sup> grade. The ages range from 10 to 13 years. Atmosphere and pedosphere were taught at this school.

## **Mulo Mathoora school**

Mulo Mathoora school is junior secondary general school located in the district of Saramacca. Atmosphere and hydrosphere protocols were taught to the students. The activities were conducted with 25 students from class 3B.

## **EBGS Salem school**

The EBGS Salem school is a primary school in the district of Coronie. The past school year we taught students from the 5<sup>th</sup> and 6<sup>th</sup> grade respectively 11 and 13 students atmosphere protocols.

## **Tata Colin Mulo school**

The Tata Colin Mulo junior secondary general school is in the district of Coronie. The past months atmosphere, pedosphere and hydrosphere protocols were taught to 14 students of the second class of the Tata Colin Mulo school. The ages of the students ranged from 12 to 15 years.



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## **O.S. van Pettenpolder school**

The O.S. van Pettenpolder is a primary school in the district of Nickerie. In the past months we worked with students from the 5<sup>th</sup> and 6<sup>th</sup> grade, respectively 33 and 23 students. The ages of the students ranged from 10 to 13 years. The atmosphere and pedosphere protocols were taught at this school.

## **O.S. Groot Henar school**

De O.S. Groot Henar school is a primary school in the district of Nickerie. The past months we taught 21 students from the 5<sup>th</sup> grade atmosphere and hydrosphere protocols. The ages of the students ranged from 10 to 14 years.

## **Advanced Teacher Training Institute (IOL)**

A good collaboration is also maintained with the Advanced Teacher Training Institute. From 21-23 March a North-South field excursion was attended during which biology student teachers for junior secondary general school (MOA-1) were taught atmosphere and hydrosphere protocols (see Appendix 1).

From 28-30 June a Tonka Island field excursion was attended during which biology student teachers for junior secondary general school (MOA-3) were taught atmosphere and biosphere protocols (see Appendix 1).

## **Natuur-Technisch Instituut (NATIN)**

This year we had for the first time interns from the NATIN meteo-hydro stream who did a 6 week internship with our organization during which they had to focus on hydrology. The four students learned the hydrology protocols through the e-learning modules and then were brought into the field to pursue practical measurements in the field.

## **GLOBE Student Poster Presentation Day**

On Wednesday, November 15, 2017 we had a successful "GLOBE Student Poster Presentation Day". The students who participated in the GLOBE vacation project from the districts Nickerie,





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Coronie and Wanica were given the opportunity to present their poster to the main sponsor "Tullow Oil".

## **Webinar 10 may 2018 North meets South webinar**

At a webinar on 10 may 2018 GLOBE teachers and students from Argentina, Suriname and the US told us about the investigations they had done to learn more about water in their environment. At this webinar the students of Anton Resida school in the district Wanica told more about 3 water bodies in their environment.

## **Survey on the use of GLOBE education in Schools**

Roshnidevi Ajodhia, one of the GLOBE teachers, is currently conducting a survey among a number of schools to assess how teachers view nature education and whether they would be willing to implement GLOBE protocols in their schools.

## **List of Schools**

As a result of the use of the GLOBE observer app for both cloud observations and the mosquito habitat mapper a better overview is obtained of the different institutions that have become involved in GLOBE in Suriname.

## **Suriname educational institutions**

1. Advanced Teacher Training Institute IOL
2. Anton de Kom University, departments of Environmental Science, Forestry, the Zoological Collection
3. Anton Resida MULO school
4. EBGs Salem school
5. G. Sewrajsingh School
6. Goudenhart school
7. Kangoeroe Community School
8. LTO Reeberg
9. Mathoora school
10. Marielle Le Fevre Mulo School



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11. Mgr. Wulfingschool
12. Ministry of Education, Science and Culture
13. Mr. Dr. J. C. de Miranda Lyceum
14. MULO Brokopondo
15. Mulo Geyersvlijt
16. NATIN/ICT
17. O.S.Brownsweg
18. O.S. Groot Henar Polder
19. O.S. 4 Meerzorg
20. O.S. Reynsdorp
21. O.S. Van Petten Polder
22. O.S. Von Freyburg
23. Petrus Claver School
24. Tata Colin school
25. University of Applied Science and Technology
26. O.S.2 Albina
27. O.S. III Meerzorg
28. Nabawischool
29. MULO Noordpool
30. O.S. Sophia's Lust

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## SCIENCE

### Mangrove Protocol

As the Green Heritage Fund Suriname is working a lot in the marine environment and the coastal plain where the larger part of our population is located, a need was felt to work on a biosphere protocol that would study an ecosystem important in mitigating the effects of climate change. For that reason we have started to develop a biosphere protocol fit for our tropical region. We have worked on elaborating a mangrove protocol of which the draft will be presented to the regional meeting for feedback.

Blue carbon is simply the term for carbon captured by the world's ocean and coastal ecosystems. You have probably heard that human activities emit (or give off) something called carbon dioxide, which contains atmospheric carbon. You have also heard that these gases are changing the world's climate, and not in a good way. What you may not have heard is that our ocean and coasts provide a natural way of reducing the impact of greenhouse gases on our atmosphere, through sequestration (or taking in) of this carbon.

Sea grasses, mangroves, and salt marshes along our coast "capture and hold" carbon, acting as something called a **carbon sink**. These coastal systems, though much smaller in size than the planet's forests, sequester this carbon at a much faster rate, and can continue to do so for millions of years. Most of the carbon taken up by these ecosystems is stored below ground where we can't see it, but it is still there. The carbon found in coastal soil is often thousands of years old!

The bigger picture of blue carbon is one of coastal habitat conservation. When these systems are damaged, an enormous amount of carbon is emitted back into the atmosphere, where it can then contribute to climate change. So protecting and restoring coastal habitats is a good way to reduce climate change. When we protect the carbon in coastal systems, we protect healthy coastal environments that provide many other benefits to people, such as recreational opportunities, storm protection, and nursery habitat for commercial and recreational fisheries."

Source: <https://oceanservice.noaa.gov/facts/bluecarbon.html>

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## Adaptation of the Green-up Green-down Protocol

A collaboration is pursued with GLOBE Netherlands to develop an adaptation of the Green-Up Green-Down protocol to include tropical trees. A project proposal is currently being developed together with them. This will also include the use of the GROW app developed in Europe.

## TECHNOLOGY

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In the past year no specific steps were taken to work on the technology component of the GLOBE program.

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## COMMUNITY

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The GLOBE Mosquito protocol has played an important part in the awareness-raising about the GLOBE program. Through the implementation of “Fighting Mosquito-Borne Illnesses through STEM Education” project funded by the US Embassy in Paramaribo many community organizations have become involved in the GLOBE Mosquito habitat mapper project. In total three country mosquito trainings (CMTs) were organized of which the first was held on the 16-17<sup>th</sup> of March, the second on the 27<sup>th</sup> of July and the third on the 11<sup>th</sup> of August. During the first CMT 27 people were trained from 6 different districts. During the second training 25 people were trained from 4 different districts. During the third training 21 persons were trained from 3 different districts. Due to a problem with the registration on the website we were not able to record all participants on the GLOBE website.

As part of the “Fighting Mosquito-Borne Illnesses through STEM Education” project, follow-up presentations were given at the different schools that had participated as well as three public meetings were held to raise awareness about Mosquito-Borne Illnesses and how to fight their spread.

### List of Community Organizations

1. Buurt Organisatie Pont
2. DA 91
3. I Speak
4. Medical Mission Suriname
5. Pater Anton Donicie Ranger/Boy/Girl Scouts Group\*
6. Suriname Red Cross
7. Vrienden van de bloedbank Nickerie
8. Vrouwenvereniging Palisadeweg en omgeving (GLID3P85)
9. Youth Advisory Group
10. Climate Change Awareness Group

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11. Buurt organisatie Ramgoe

12. Leo Club Gado Tjo

As a result of the CMTs and public meetings about the GLOBE mosquito project Green Heritage Fund Suriname was asked to participate in several events:

23 February: Stichting Healthy Root Wealthy Fruit - Launch song for the "Stop Waste Incineration project"

1 July: Lions Club - Emancipation day celebration in the Royal Palm Garden

13-15 July: Stichting Jongeren Welzijn- Youth Information Fair

31 August: Edunet Suriname & Women and Girls Empowerment Network - Kennisontwikkeling & nieuwe inspiratie Summer school

## March for the Ocean

For most of the Surinamese people, the ocean is a place that is very far away and that they may never see. Through "the March for the Ocean" we wanted to bring the ocean closer to the hearts of the Surinamese people. This event was mainly about the love for the ocean and all the precious lives inside it. In addition, the goal of "the March for the Ocean" was also to raise awareness about how we deal with our ocean; especially about how our waste ends up in our ocean. Various organizations discussed the impact of plastic that ends up in the sea. Visitors were also informed about minimizing plastic use. Furthermore, we had a life-sized whale kite and fun activities for the children such as face painting, coloring, origami.

The students of O.S 2 Albina had a special message for the people of Suriname: "Do not throw anything into the sea ... think about the fish!". Even though they couldn't attend the event itself, they contributed by creating beautiful artworks which were used in the selfie booth. The students of Tata Colin from the district of Coronie contributed to this event by cleaning their seawall.



## COMMUNICATION

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Several articles were published in the newspapers about the GLOBE mosquito trainings organized by the Green Heritage Fund.

### Newspaper

9 July- Newspaper article in De Ware Tijd “Suriname doet mee aan strijd tegen muskieten”

10 July- Newspaper article in De West “Wetenschappelijke educatie hulpmiddel voor bestrijden muskietenplaag”

23 July - Newspaper article in De Ware Tijd “Broedplaats van muskieten ontdekken via app”

### Radio

20 July Action News Nickerie - Interview about GLOBE Mosquito public meeting

### TV

3 July - Youth Journal Item on the Globe Mosquito Training <https://youtu.be/YNgY3WchXKM>

10 July - ATV- Network item on the GLOBE Mosquito Public meetings  
<https://www.youtube.com/watch?v=ec7G77rg2Q4>

28 July - ATV- Network item on the GLOBE Mosquito Habitat  
[https://www.youtube.com/watch?v=aeX\\_gvhKEJg&t=10s](https://www.youtube.com/watch?v=aeX_gvhKEJg&t=10s)

25 July- The Su Late Night Show I= interview about GLOBE Mosquito project

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## STAFF

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The country coordinator of Suriname is Monique Pool, assisted by Meriam Kalloe, assistant country coordinator, both employed by the Green Heritage Fund Suriname. Cheyenne Samson is a Globe teacher and trainer also working at the Green Heritage Fund Suriname who has focused her attention on the Mosquito protocol.

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## APPENDIX

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