

GREEN HERITAGE FUND SURINAME



**GLOBE SURINAME:  
1997 – 2011**

A Report



## 1. INTRODUCTION

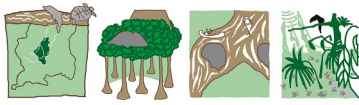
The following documents the GLOBE Suriname program and the activities and projects that it accomplished through its 13 year tenure (1997 – 2010). The document will then go into some depth over the steps being taken in order to relaunch GLOBE Suriname in 2011 through the Student Climate Research Campaign (SCRC).

### 1.1 The GLOBE Program

The Global Learning and Observations to Benefit the Environment (GLOBE) Program is a worldwide hands-on, primary and secondary school-based science and education program that was introduced by Vice President Al Gore in 1994 and came into practice on Earth Day 1995. Its vision promotes and supports students, teachers, and scientists to collaborate on inquiry-based investigations of the environment and the Earth as a whole system working in close partnership with NASA, NOAA, and NSF's Earth System Science Projects (ESSP's) in study and research about the Earth's environment.

Presently, the GLOBE network includes representatives from 111 participating countries that coordinate GLOBE activities, which are integrated into local and regional communities. Due to the efforts of the country coordinators, there are more than 54,000 GLOBE-trained teachers representing over 23,000 schools around the world. Since the program began in 1995, over 1.5 million students have participated in GLOBE, contributing to more than 21 million measurements to the GLOBE database for use in their inquiry-based science projects.

GLOBE also encourages a global community of collaboration through the GLOBE Schools Network, which brings together students, teachers, and scientists in support of student learning and research. Parents and GLOBE Alumni are also encouraged to support students' participation in GLOBE.



## GLOBE SURINAME

### 1. BACKGROUND

In December 1997 the Ministry of Education signed an agreement that allowed Suriname to participate in the GLOBE Program. Due to logistical and financial challenges, the GLOBE Program was only feasible to be implemented into five schools in Suriname. These schools showed the most interest in the GLOBE Program and were the AMS school, the VWO school at Nieuw Nickerie, the Lyceum II in Paramaribo, the Wim Bosch Verschuur Kwatta high school and the Johannes Vrolijk school in Lelydorp.

The startup costs to implement the GLOBE Program in these school it s ± \$8,000 US. The two Mulo schools require computers with Internet capability in order to participate in the GLOBE activities, while the three other schools already have computers and need only color printers.

### 2. PURPOSE

The overall objective of GLOBE Suriname is to give primary and secondary students the opportunity to collect information about each environment, understand the meaning of the data, and thus to become acquainted with environmental differences, and similar environments in other countries.

In particular, the program aims to give Surinamese children/students the opportunity to participate in international projects to maintain a livable earth and to fight against environmental destruction.

### 3. NECESSITIES

In order to insure that there was enough support available to implement the GLOBE Program the following conditions were identified as being necessary for implementing the program:

- a. Adequate space for equipment in the participating schools.
- b. Provide at least one teacher per school, who is GLOBE-certified.

- c. The designation and provision of a program coordinator in order to train teachers and provide support for the program.

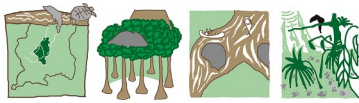
## **4. PROGRESS OF THE PROGRAM**

### **4.1 General Summary**

In anticipation of the formal cooperation in GLOBE, two teachers, Mr. G. Berenos from AMS and Mr. M. Hubard from Lyceum II, with financial assistance and support from the U.S. Embassy, had the opportunity to attend a GLOBE Teacher Training Workshop in Miami, FL in the United States of America from November 17 – 22, 1997. At this workshop Mrs. Berenos and Hubard were certified to teach the GLOBE lessons and activities.

On December 23, 1997 a collaboration agreement signed between the National Oceanic and Atmospheric Administration of the United States of America and the Ministry of Education, where mutual rights were expressed and written down (see Appendix 1). Following the confirmation of the agreement, the Minister of Education stated, in a letter, that Mr. R. Lala and Mr. G. Berenos would serve respectively as the GLOBE Suriname Point of Contact and the GLOBE Suriname Country Coordinator (see Appendix 2).

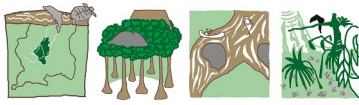
As the GLOBE Suriname Country Coordinator Mr. Berenos succeeded in drawing up interest in several schools and teachers about the GLOBE Program, specifically, the following schools and teachers, Mr. Hemai from Wim Bos Verschuur School teachers and Mrs. Angoelal from Havo I, and Mr. Leming from AMS. For the few years that Suriname was actively involved in the GLOBE Program, students were able to implement Atmospheric, Perspiration and Hydrology protocols. Mr. Berenos also made every effort to include the Dutch Ambassador the Ministry of Education, and the media in the activities of the GLOBE Program. However, due to lack of support, lack of funds, and an attrition rate of GLOBE-certified teachers, the GLOBE Program in Suriname came to a halt.



## 4.2 Report Operations from Mr. Berenos

Following attendance at the GLOBE International Training Workshop in Miami (17 to 21 November 1997), Mr. Berenos being the following activities in Suriname:

- a. A meteorological service in Suriname was contacted in order to provide advice and service regarding some of the protocols. In particular, assistance in the formation of the thermometer drop box at the right place. Mr. Brewster, from the meteorological service, visited the AMS in order to speak with teachers and students.
- b. Two thermometers and a Six Station Thermometer received by the Meteorological Service.
- c. The AMS school newspaper, "The Pennewippertje", compiled a report on the GLOBE International Training Workshop in Miami.
- d. There is an information day organized for the students of the school and the students who were interested in becoming GLOBE registered.
- e. Under the direction of the U.S. Embassy a letter containing the written request for sponsorship by the Japanese charge d'affaires in Suriname. However, no formal response was received. Informally, however, it was understood that at present it is not possible to receive support from the Japanese Charge d' Affaires for such a project.
- f. With the support and direction of the U.S. Embassy, a letter of introduction and explanation of the GLOBE Program was drafted and sent to the Dutch Embassy in Suriname. Initially it was not responded to this letter.
- g. The coordinator of the AMS borrowed a GPS from the Vernon Trading company for use on the established "water site", the "soil site", the "Atmosphere site", the "land cover site" and "soil site".
- h. Starting in March data about the temperature and the atmosphere began to be collected simultaneously with data over the clouds using the thermometer and the thermometer cabinets.
- i. The collected data is uploaded to the GLOBE website and becomes part of the global database archive. Unfortunately, the specific characteristics of the thermometers provided by the Meteorological Service had some issue and could not be added to the GLOBE database.



- j. Again the Dutch Ambassador was tapped for sponsorship of GLOBE Suriname (vide Annex 3 and 4). The application for funds was granted, resulting in a total of \$ 8,733.22 to help get the program off the ground.

## 5. CHALLENGES

For the most part, according to Mr. Berenos, all parties (government administration, schools, teacher, students, etc) often appeared to be very interested in participating in the GLOBE Program. The schools, teachers, and students were excited to implement the protocols and the government had officially supported the program. However, in practice, this was not always the case. There was not enough support for Mr. Berenos or GLOBE Suriname in terms of manpower for monitoring the program or funds. In terms of teachers who were interested in GLOBE, participation in the program meant spending extra time outside of their regular duties going to training workshops as well as raising the funds to attend these workshops and planning lessons around the protocols. There was an overall lack of available time for the teacher to accomplish all that they needed to do in order to participate in GLOBE.

## 6. RECOMMENDATIONS

Given the summary and issues stated above, the following recommendations are suggested for the continued participation of Suriname in the GLOBE Program:

- A. In order to support teachers who are willing and interested in participating in GLOBE activities, it is necessary for their schools to provide them with two free hours a week in order to ensure that they can properly perform their GLOBE duties.
- B. As GLOBE is heavily reliant on its online community for communication, collaboration, and disseminating and showcasing data, it is necessary for participating schools to have access to computers and the Internet. It is also recommended that these schools utilize the benefits of an extra phone line, which is mainly used for this purpose.





C. The GLOBE Program has received little attention in Suriname, partly because of the late start of the program, the lack of (media) materials, and other incidents that prevented media events to occur. This is a very simple change recommendation. To obtain the necessary publicity, it is recommended that GLOBE Media Materials be utilized (other media material created by the GLOBE Suriname office can also be utilized). It might also be useful to hold a ceremony for the official launch of the GLOBE Program in Suriname.

## **7. THE FUTURE OF GLOBE SURINAME**

After many years of inactivity, the GLOBE Program in Suriname began to move forward when in April 2010, Mr. Gregoir Berenos, the GLOBE Country Coordinator asked the Green Heritage Fund Suriname (GHFS) foundation to become the GLOBE implementing organization for Suriname. Mr. Lala, the GLOBE Government Point of Contact in Suriname, sent a formal letter to the US Embassy requesting financial support for Ms. Monique Pool's, the Chairman of the GHFS, introduction to the GLOBE Program by participating in the GLOBE Annual Meeting in Calgary, Canada during the summer of 2010. Through participation in this annual meeting Ms. Pool was able to get a better assessment of the GLOBE Program, GLOBE partners, and upcoming GLOBE projects.

After Ms. Pool's participation in the 2010 GLOBE Regional and Annual Meeting, the following activities took place; a meeting was organized with the American Embassy with Ambassador Nay and Mrs. Dena Brownlow to discuss Suriname's intentions in the GLOBE Program and the support that the American Embassy can provide, and creating a list of goals and objectives that GLOBE Suriname will strive for.

Ms. Charissa Jones, the Assistant Country Coordinator, will be traveling to the 2011 GLOBE Regional and Annual Meetings occurring 15 – 22 July 2011 in Bethesda, MD (a suburb of Washington D.C.). This meeting will give more information on the Student Climate Research Campaign and the various activities being created to aid in climate data collection.