



CUNY India Study Abroad Program

(July 30 – August 15, 2019)

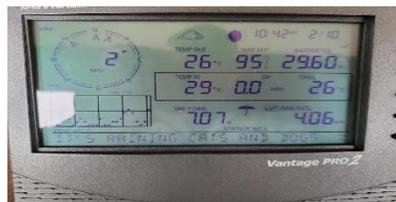
A Collaboration between the New York Consul General Office and the Govardhan Ecovillage and the City University of New York, Bronx Community College/CUNY, LaGuardia Community College/CUNY, York College/CUNY, and Medgar Evers College/CUNY

A sustainability focused study abroad program with 15 City University of New York students at the Govardhan Ecovillage (GEV) in Maharashtra, India led by Bronx/CUNY Faculty Dr. Neal Phillip, Prof. Paramita Sen and Dr. Dereck Skeete of Medgar Evers College/CUNY under the governance of Bronx/CUNY President Thomas Iskenegbe along with Mr. Greg Bruce, Principal Sustainability for the City of Townsville, Australia and in collaboration with India Consul General Hon. Sandeep Chakravorty and Hon. Shatru Sinha.

Program Highlights

- ⊗ Installed a Davis Vantage Pro2 Plus solar powered/wireless weather station at the Govardhan Ecovillage in Galtare, Maharashtra, India. The station provides temperature, relative humidity, wind speed and wind direction, rainfall, solar radiation, UVB intensity data which is sent immediately to the WeatherLink (www.weatherlink.com) web site for all to utilize. A WeatherLink app for iphones and Android phones is also available to view the weather data. Was amazing to be able to catalog rainfall amounts during a monsoon event. Rainfall rate was as high as 4in/hr and rainfall total for one 24 hr period was approximately 18 inches.
- ⊗ Used our NOAA-CREST/BCC/Townsville backpack weather stations to monitor temp, humidity, carbon dioxide and UV radiation on a micro-scale at GEV, Mumbai and New Delhi. The analysis of the data is continuing and will be published in various forums and could help in designing a more sustainable Mumbai, New Delhi and GEV. Similar studies was done previously in Manhattan, Palma de Mallorca, Spain and in Townsville, Australia by CUNY students which showed wide differences in the variables within blocks
- ⊗ Built low cost sensors to measure temperature, humidity and potentially carbon dioxide and had the data sent automatically to the internet through wifi connectivity on the sensor - Mr Greg Bruce from Townsville, Australia ran this workshop.
- ⊗ Participated in a GEV led Sustainable Cities workshop led by Mr Nimai Lila of the Govardhan Ecovillage. Students walked away with a great appreciation for all required components in a sustainable city and the personal ways they could contribute to the sustainability and resilience of a city.
- ⊗ We participated in Collective Social Learning (CSL) Workshops run by Mr Greg Bruce, Principal Sustainability for Townsville, Australia on how to make NYC a more sustainable, smart and resilient city. Townsville, Australia won an IBM Smarter Cities Challenge Award in 2012.

- ⊗ Students each planted a tree at the Govordhan Ecovillage.
- ⊗ Students visited the various award-winning sustainability initiatives in the Govordhan Ecovillage to learn about the operations: Wastewater Treatment Plant, Pyrolysis Plant to convert plastic waste
- ⊗ Presented on Sustainable, Resilient and Solar Cities to graduate and undergraduate engineering students and faculty at the Indian Institute of Technology, Mumbai.
- ⊗ Presented on Sustainability Focused Study Abroad to graduate/undergraduate engineering students and faculty at the Indian Institute of Technology, Mumbai.
- ⊗ Students collected and analyzed water samples from Lake Powai using our own equipment in the Environmental Science lab at the Indian Institute of Technology, Mumbai campus. They worked collaboratively with doctoral students from IIT to accomplish this task. Samples were found to have low pH, and to contain high level of ions (i.e, high conductivity).
- ⊗ Participated in an Insect Repellent manufacturing workshop led by Iris of the Govardhan Ecovillage. Students had a chance to make insect repellents in a completely eco-friendly manner using natural products. Students were able to bottle the product and take it back to CUNY.
- ⊗ Established positive and meaningful connections with the children of the Gurukul Orphanage on the Govardhan Ecovillage compound:
 - ✓ Paid for a special dinner for all 68 children and the staff at the orphanage
 - ✓ Bought umbrellas for all 68 children
 - ✓ Donated two helicopter drones to the children.
- ⊗ Donated 25,000 Indian Rupees to Helpage India non-profit organization to help purchase medicine for elderly civil servants in Mumbai, India.
- ⊗ Held an hourlong meeting with Mr Vinod Tawde, Maharashtra Minister for Education, Culture and four other Portfolios to discuss on our activities in India including the weather station donation/installation and on ways CUNY could further collaborate with Maharashtra. Also discussed bringing a group of 20 Indian students to NYC for one week in April 2020 to learn on sustainability initiatives in CUNY and NYC.
- ⊗ Visited an ISKCON run meal preparation facility to observe and assist in operations. The facility prepares mid-day meals for 27,000 per day.
- ⊗ Visited a local elementary school facility that is served by the ISKCON meal preparation facility and helped served meals to the students at lunchtime. We also donated pencils/eraser and pens to 4 class rooms of students in the school and had very positive interactions with them. The entire school took a group photo with us.
- ⊗ Visited and interacted with an award-winning local farmer to understand how he diversified his crop from just rice and how he also increased his crop yields.
- ⊗ Hiked up to the one of the summits in the Western Ghats plateau (1500 ft) and collected rock samples for use in Earth Science classes in CUNY. Professor Paramita Sen had provided the students with a short lecture on the Geological History of the Western Ghats before the ascent.



Govardhan Ecovillage

Galtare, MH, IND

83 °F

Today Hi/Lo Temp:
Hi: 83 °F @ 3:39 PM
Lo: 83 °F @ 3:39 PM

Feels Like 94 °F

Today: Light rain shower

Hum 89%	Pressure 29.57 inHg	Sunrise 6:24 AM
24 hr 3.21 in	NNW 5 mph	Sunset 6:47 PM

