



SilvaCarbon-NASA Fellowship Program 2018

About SilvaCarbon

SilvaCarbon is a US technical cooperation program aimed to enhance the capacity of partner governments to measure, monitor, and manage forest and terrestrial carbon. Drawing on the expertise of eight US government (USG) agencies, academia, industry, and non-governmental organizations, SilvaCarbon assists countries to develop and implement national forest monitoring systems that are robust, transparent, sustainable, and tailored to their particular needs and circumstances. SilvaCarbon is global in geographic scope with a focus on high priority tropical forests in the Andean Amazon, Central Africa, Central America, and South and Southeast Asia. The program has engaged 14 countries on a bilateral basis and an additional 11 countries through regional activities. Bangladesh, a key bilateral country partner, began working with SilvaCarbon in 2014 to collaborate on the development of its National Forest Monitoring System. The primary agencies and partners supporting SilvaCarbon activities in Bangladesh are the U.S. Forest Service (USFS), the U.S. Agency for International Development (USAID), the National Aeronautics and Space Administration (NASA), and the University of Maryland (UMD). US Forest Service has collaborated with the Bangladesh Forest Department since 2009. SilvaCarbon Bangladesh's current focus is to provide technical assistance to the Bangladesh Forest Department (BFD) in the design and effective implementation of the National Forest Inventory (NFI) – a key component of the National Forest Monitoring System.

About SilvaCarbon-NASA Fellowship Program 2018

As an active partner of US Forest Service and the SilvaCarbon Program, the National Aeronautics and Space Administration (NASA), has been recently using remote sensing tools to conduct research on the Sundarbans of Bangladesh. In order to build the technical capacity in remote sensing for Bangladesh, the SilvaCarbon Bangladesh Program is sponsoring the 'SilvaCarbon-NASA Fellowship Program 2018'. The program would place a highly qualified Bangladeshi national as 'Visiting Fellow' at NASA for approximately two to three months followed by a six to eight week follow on internship in a technical placement at Bangladesh Forest Department. The objectives of the program are to- 1) Build national capacity in Remote Sensing and GIS technology; 2) Generate data sets for the National Forest Monitoring System using remote sensing to measure trees outside of forests and mangroves in Bangladesh, and 3) Provide insight and expertise on Bangladesh to NASA colleagues.

While based at NASA, the visiting fellow would conduct remote sensing research alongside NASA scientists on potential research projects. All tasks of the potential research projects will require some knowledge and understanding of remote sensing and image processing, and further techniques will be gained by the fellow, within a well-defined and constrained goal. Depending on the expertise and interests of the applicant, the potential research projects will be selected from one of the topics mentioned below. The interested applicants should clearly indicate a specific topic (from the following topics underneath) for their research project and explain a precise research plan in the application form. The topics identified for potential research projects are:

- A. Satellite image based monitoring of coastal plantations for the period of 1995 to 2017. This project would focus on two spectrally distinct land cover types – water and trees. Data will be integrated from different space-borne sensors over this time period.
- B. Monitoring forest of Chittagong Hill Tracts (CHT) with optical and microwave sensors with a focus on forest reserves namely Kasalong, Raingkhing, Sangu-Matamuhuri and Rampahar-Sitapahar
- C. An urban forestry assessment in the major cities of Bangladesh to evaluate urban tree cover extent and changes in Bangladesh

Deliverables

The Visiting Fellow would be required to complete the following deliverables by the end of the program:

- o Individual trip report
- o Research report of findings, including information on data sets generated
- o Research presentation to the Biospheric Sciences Laboratory of NASA
- o Research presentations to the Bangladesh Forest Department and other relevant agencies
- o Submission of research abstract to scientific conference

Timeline & Location

The proposed SilvaCarbon-NASA Fellowship Program 2018 is two-fold. In the first phase, the visiting fellow would be placed at NASA (USA) for approximately two to three months, starting in March 2018. After completing the collaboration with NASA, the fellow would return to Bangladesh and partake in a technical placement with SilvaCarbon Bangladesh partner agencies tentatively for four-six weeks, starting in early July 2018.

Selection Criteria

Following are the key qualifications, skills, experience, knowledge and other attributes that an applicant must possess to be considered for the 'SilvaCarbon-NASA Fellowship Program 2018' (not in order of importance):

- o A proven record of academic and/or professional work using remote sensing
- o Graduate degree in a relevant field is preferred
- o Demonstrated knowledge, interest and professional experience in remote sensing and the use of other geo-spatial tools
- o Authored or co-authored relevant journal publications
- o The ability to work cooperatively in diverse groups and respect the opinions of others
- o Strong social and communication skills
- o An energetic and positive attitude
- o A commitment to return to Bangladesh and apply skills and training to benefit the country

Eligibility Requirements

The 'SilvaCarbon-NASA Fellowship Program 2018' is open to Bangladeshi citizens who meet the following criteria (applicants not meeting the eligibility requirements mentioned below will not be considered):

- o Are not U.S. citizens or permanent residents of the United States of America
- o Are eligible to receive a United States J-1 visa
- o Possess a valid Bangladeshi passport, with an expiration date on or after October 2018
- o Ability to participate in all components of the fellowship program
- o Are proficient in reading, writing, and speaking English

Application Instructions

Interested candidates are requested to submit the following documents through e-mail at: info@silvacarbon-bd.org

- o Completed 'SilvaCarbon-NASA Fellowship Program 2018' Application Form (Download the Application Form from this [link](#))
- o A Cover Letter explaining applicant's interests, qualifications and background in relation to the fellowship program
- o An updated Resume or Curriculum Vitae (3 pages maximum)

The completed Application Form along with the aforesaid documents must be submitted in pdf or word file format as attachments with the application email. The applicants must mention 'Application for the SilvaCarbon-NASA Fellowship Program 2018' in the subject line of the email. For any further information feel free to contact at info@silvacarbon-bd.org and/or +88-02-8181049 (available from 9.00 am- 5.00 pm on working days)

Application Closing Date

07 January 2018, at 11.59 pm Dhaka Time (GMT+6)

Disclaimer/s

- o Applicants will not be discriminated against on the basis of race, color, gender, religion, socio-economic status, disability, sexual orientation or gender identity.
- o The SilvaCarbon Bangladesh Program reserves the right to verify all of the information included in the application. In the event that there is a discrepancy, or information is found to be false, the application will immediately be declared invalid and the applicant ineligible.
- o This program is for the Visiting Fellows only. Any costs associated with dependents that choose to travel (spouse, unmarried children under the age of 21) will need to be fully covered using personal funds. Proof of personal funding availability will be required. Travel, accommodations, meals, and logistical support will not be provided to dependents.
- o This announcement does not obligate the SilvaCarbon Bangladesh to make any award.

