



# BFIS Forest Emission Factor Database Module

<http://bfis.bforest.gov.bd/bfis/>



## About the Forest Emission Factor Database module:

An “emission factor” is a representative rate of emission or removal for a Greenhouse gas (GHG) of a given source. The Forest Emission Factor Database is a repository of this information to support the land use, land-use change and forestry (LULUCF) sector in Bangladesh and national GHG inventory. This platform allows users to find representative tons carbon per hectare values for specific tree species. The database can be considered a Tier 2 and 3 source of information that complements the Emission Factor Database of the Intergovernmental Panel on Climate Change to improve the quality of the Green House Gas (GHG) inventories.

There are over 700 allometric equations that estimate volume, biomass, and carbon stocks of trees and their components from tree diameter and other field measurements. Additionally, almost 200 wood density data, raw data collected from field measurement are available in the database as well as a list of tree species descriptions. The Forest Emission Factor Database is the result of contribution from

## This module contains:

**Species List:** A comprehensive database of all known tree species grow in Bangladesh, including photos and characteristics.

**Raw Data:** This is a compilation of data specific to individual studies that some users will find useful for research purposes.

**Wood Densities:** This is a dataset of wood densities, expressed as the mass of wood per unit volume in g/cm<sup>3</sup>.

**Allometric Equations:** These equations are statistical models that estimate the volume, biomass, or carbon of trees or their components, usually based on tree diameter and tree height.

**Emission Factors:** This dataset is a compilation of emission factors for a number of individual tree species, forest types, and land classes.



## Functionalities:

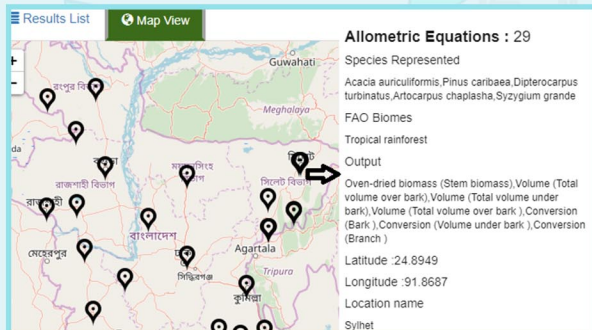
**Search option:** The data tab contains search functionalities for all datasets. Datasets can be filtered by selecting components, taxonomy, location and reference. By typing a keyword the desired result can be found in result list area.

**Allometric Equation Search**

Search allometric equations by keyword. This searches across several text fields. Example searches: Log Green Biomass =  $-1.5851 + 2.4855 * \text{Log (DBH)}$ , Volume

Keyword:  Select component:  Select taxonomy:  Select location:  select year, author and reference:

Division:  Bangladesh Agroecological Zone:



**Map view:** There is a map view section to show geographic location of each record.

**Export result:** From the export result button anyone can download full datasets or selected records in .csv or JSON format. Additional documents are available in .pdf format.

Result count: 14 Search criteria: Keyword:

Export Results

How 10 entries

**Allometric Equation Data**

Allometric Equation 41

Equation:  $\text{Volume} = -0.0049 + 0.00035 * \text{DBH}^2(2)$   
Output: Volume (Total volume over bark)  
Reference: Latif, M.A., Das, S., Rahman, M.F., Chowdhury, J.A., Latif, M.A., Das, S., Rahman, (Avicennia officinalis L.) in the coastal plantations of Bangladesh. In: Latif, M.A. (ed) (Avicennia officinalis) in the coastal plantation of Bangladesh, Bulletin 8, F

**Post Detail**  
*Allometric Equation*

Dear Admin,  
Can you please share with me the acronym file.  
Written by | September 23, 2018

Admin Sunday, September 23, 2018 - 15:51:24  
Please see the font page "definition of acronym" link.

**Community:** Anyone can share feedback, post comments, or ask questions in the community section after registering.

**Library:** All referenced documents are listed with links to the published site and option to download.

**Documents Search**

Search Documents by Title, Author, and Keyword. Example searches: Title: Chittagong university campus, Author: Barua, S. and S. Haque, Keyword: Barua

Keyword	Title	Author	Year
Carbon	organic carbon storage	Alamin	2007

Organic carbon storage in trees within different Geopositions of Chittagong (South)  
[Click here to get the document](#)  
Alamgir, M. and M. Al-Amin (2007). Organic carbon storage in trees within different Geopositions Journal of Forestry Research 18(3): 174-180.

## Highlights:

- This is Bangladesh's first online data access tool for information regarding emission factors, allometric equations and other tree and forest resource information.
- Quick and easy search functions allow users to quickly find information for their specific needs.
- No account is needed to find or download data.
- You can post comments in the community section after login.

This module was developed by BFD with technical support from the Food and Agriculture Organization of the United Nations with financial support from the UN-REDD Bangladesh National programme and USAID.

### Contact

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