## The Bangladesh Soil Salinity Database

## Variable Description

## Version 1.0

This document describes each of the variables in the Bangladesh Soil Salinity Database, which can be found at www.soilsalinity-data.org. For more details on the construction of this database, please see "The Bangladesh Soil Salinity Database," Patel, Dev, Roshni Islam, and S. M. Shahriar Zaman (2024). We ask that you please cite that paper if you use this database in your work.

- 1. **obsid**: This variable gives a unique identifier for each observation in the database.
- 2. **siteid**: This variable denotes a unique site identifier that can be used to track a panel of salinity measurements
- 3. date: This variable captures the date on which the measurement was taken.
- 4. salinity: This variable gives the salinity reading in dS/m.
- 5. **measurementtype**: This variable denotes the type of soil salinity measurement.
- 6. **sampletype**: This variable describes the type of site.
- 7. **unionid**: This variable denotes the ID of the union in Bangladesh to which the sample belongs. The union ID corresponds to the code from the fourth-administrative level shapefile from GADM.
- 8. **union**: This variable gives the name of the union from GADM corresponding to the site from where the sample was taken.
- 9. **upazila**: This variable gives the name of the upazila from GADM corresponding to the site from where the sample was taken.
- 10. **district**: This variable gives the name of the district from GADM corresponding to the site from where the sample was taken.
- 11. **division**: This variable gives the name of the division from GADM corresponding to the site from where the sample was taken.
- 12. **unioncentroid**: This variable is an indicator equal to one if the latitude and longitude for this observation correspond to the centroid of the union polygon according to the GADM shapefile from where the sample was taken and equal to zero if the latitude and longitude denote the true coordinates from where the sample was taken. Due to privacy concerns, in some cases, only the union identifier is available.
- 13. **latitude**: This variable gives the latitude of the sample (subject to the caveat captured by the unioncentroid indicator).
- 14. **longitude**: This variable gives the longitude of the sample (subject to the caveat captured by the unioncentroid indicator).
- 15. **source**: This variable cites the original source of the data.