# 1.1 Ground water resource dataset description:

Data is taken from two South East Asian country, Vietnam and India. The eastern Indian state of Odisha is the main subject of this study. The Ground Water Yearbook Report [1] examines and illustrates this data further. As a result, the data is taken from the 2018–20 published report and appropriately translated to a CSV file. There are 14 Parameters in the dataset. The data set used in this study, which includes 1241 rows and 17 columns with sample values for each, was gathered from the Indian state of Odisha. Fourteen of the seventeen columns—SL No., District, and Village—belong to physicochemical characteristics. There are 2 categories and 15 numerical variables. The dataset does not include any null values. The first (25%), second (50%) and third (75%) quartiles of data for the Carbonate column are found to be zero when a statistical distribution is performed on the dataset. Therefore, we have determined that the majority of the values in the Carbonate column are zero; if there is a value, it may be an anomaly. It is determined to remove the Carbonate column from the dataset as a result. Hence, there are now just 13 physicochemical characteristics in all.

The dataset from Vietnam was acquired through the water resource monitoring network in the Northern Delta and the North Central Coast as a component of the national water resource monitoring network in particular and the environmental resource monitoring network in general. The national underground water resource monitoring network is uniformly implemented nationwide according to the Circular 19/2013/TT-BTNMT dated July 19, 2013, of the Ministry of Natural Resources and Environment providing technical regulations on water resources monitoring. In which, underground water quality monitoring is one of the main contents of the task "National monitoring of water resources".

In the case of Vietnam dataset, 12 parameters are inclusive; thus, the data is extracted from the national water resources planning and inspection centre federation for planning and investigation of water resources in the North.

# References:

1. Ground Water Year Book 2018-19, <http://cgwb.gov.in/Regions/SER/Reports> .