

The analysis noted that yield values were in kilograms and area was recorded in meters. These were converted to Megatons and hectares respectively to compute for megatons per hectare. Prior to conversion of units analysis involved data cleaning.

Data was cleaned as follows: Missing yield values made up less than 40 percent of the data and were filtered out. Secondly, it is logical that dry weight should be lighter than wet weight measurements. Values that proved to be converse to this were masked out. Finally, the formula using interquartile range was used to mask out extreme values.

The total dry weight values for both box1 and box2 were taken and divided by the total area. Total area was a sum of the area of all boxes with clear dimensions. This resulted to a mean of $8.2725e-07$ Mt/Ha for average yield per hectare.

Some enumerators were suspected for not entering correct data especially when dry weight and wet weight values were compared. Enumerators with username nig099 and nig098 had numerous counts of erroneous entry putting the integrity of data of their work to question. The counts were really high when compared to the counts of errors from other enumerators.

In conclusion, the main objective of the work was to find mean yield per hectare per district. The steps for mean yield per hectare above was replicated and a further step of grouping the data by state districts. The results show that Bauchi had a significantly high mean yield per hectare.