

CONCLUSION

In this research work, three kinds of water sample site 1 (Mayanchan), site 2 (Gaw Wein) and site 3 (Chawseith) were collected from Ayeyarwaddy river before and after flood. The physicochemical parameters of selected samples were investigated by the help of Public Health Center, Mandalay Region.

Moreover, three selected samples from Ayeyarwaddy river in which some parameters such as pH, color, Total Solids, Total Hardness and Total Alkalinity were measured and compared by graph that indicates Total Solids and Total Alkalinity of site 2 are higher than that of other two sites. In addition, Cl^- , SO_4^{2-} , Ca, Mg and Fe contents of above three samples were also contracted and SO_4^{2-} content of site 3 is distinctly higher than other two sites.

Similarly, the measurements of physicochemical parameters of other three samples collected in June 20, 2018 (after flood) that were done and compared by the graph. From these comparisons, total Solids and total alkalinity of site 2 are higher than that of other two sites as well as SO_4^{2-} content of site 3 is distinctly higher than other two sites. The bacteria, Coliform and *E. coli* present in the water sample in all sites in the Ayeyarwady river that is the presence of human discharges in water and pointing out the river water should not drink directly. So, the Ayeyarwady river should be boiled for drinking as well as for household use. But it can be directly used for agriculture.

