Groundwater is a vital source of water for domestic and agricultural activities in the Tefenni plain. Therefore, groundwater quality, seasonal variations and its suitability for drinking, irrigation and industrial usage were evaluated. In this study, 56 water samples were collected from springs, wells, and lake in dry and wet seasons. Ca–Mg–HCO₃, Mg–Ca–HCO₃, Na–CO₃–Cl, and Na–HCO₃–Cl water types are the dominant water types in the investigation area. Parameters, which are controlled to chemical variations of groundwater, were analyzed with R-mode factor and correlation analysis. According to R-mode factor analysis, total dissolved solids, Na, Cl, HCO₃, and NH₃ are the most important parameters. In addition, Water Quality Index (WQI) was applied to suitability for drinking purpose and to investigation of groundwater quality. Quality of groundwaters are suitable for drinkable both dry and wet season in study area. In terms of the irrigation and industrial usage, generally groundwater is suitable in dry season but is not suitable in wet season. Groundwater chemistry is affected with water–rock interaction and densely agricultural activities.