

Heavy Metals In Water And Sediment From Liwagu River And Mansahaban River At Ranau Sabah

ABSTRACT

The Liwagu River is one of the most reliable river systems in Ranau which had experienced a mudflows event due to massive landslide of Mount Kinabalu. The aim of this study is to determine the water quality and compare the level of heavy metals in water and sediment of the Liwagu River and a non-impacted mudflows of Mansahaban River. Water and sediment were collected from four sampling stations on each river. Water samples were filtered with 0.45 μm membrane filter and acidified to pH 11.0 mg/kg and >0.02 mg/L, respectively. The correlations coefficient shows that there were significant relationship between heavy metals in water and sediment from Liwagu and Mansahaban River ($0.413 < r < 0.888$, $p < 0.05$). For conclusion, the quality of water from both river are fairly the same but not for the sediment. However, further in depth investigation is needed to identify a wider perspective towards the behavior of heavy metals prior to mudflows event in Ranau, North Borneo of Malaysia.