

**Establishing mangrove forest products for ecotourism activity at Kota Kinabalu
Wetland Ramsar site, Sabah. Malaysia**

ABSTRACT

Mangrove forests are found ubiquitously across the global landscape and are known to assume a pivotal role in supporting the surrounding ecosystem. The study purposely estimates the ability of absorption in CO₂ towards the subject area to understand the precautions of visitors in future demand. By leveraging the advanced technology of Geographic Information Systems (GIS) and employing carbon footprint analysis, the study estimated the daily footfall to the area and the resultant carbon footprint. The analysis conclusively revealed a surplus of minus 7,957.65 tons/year, indicating that the area can assimilate more CO₂. This underscores the wealth of natural resources and the potential to accommodate a larger number of visitors in the future.