

# **The Contribution of Forest Ecosystem Services Toward the Local Community Living Vicinity to The Forest Protected Area: The Case of Kawang Forest Reserve, Sabah Malaysia**

## **ABSTRACT**

Kawang Forest Reserve covered an area of 1,551 ha, located in the eastern part of Sabah, Malaysia. The Kawang forest was gazetted as a forest reserve since 1957 and was reclassified in 2014 from Class III (Domestic Forest) to Class I (Protected Forest). The reclassification of the forest area is an effort to preserve the main function of the area to sustain the immense amount of biodiversity of the protected area. Therefore, this study aims to evaluate the community perceptions' on the contributions of Kawang Forest Reserve to support their livelihood. The ecosystem services that are provided by the forest are categorized into three main services namely provisioning, regulating, and cultural services. The study was conducted using structural administered questionnaires in a Likert scale (scale of 1.00 – very low to 5.00 - very high) settings. Local community living vicinity to Kawang Forest Reserve were selected as the research respondents using convenient sampling. A total of 102 respondents were selected from villages located around the forest reserve namely, Tanaki, Mook, Tampasak, Kaiduan, Bisuang and Bolotikon to assess their perceptions on the forest ecosystem services contributing to their livelihood development. The regulating services based on soil fertility and erosion control shows the highest value with an average of 4.58 min score, followed by the provisioning services based on the 'source for clean water supply & filtration' sub-services with a min score of 4.48 and cultural services based on 'provides tourism area (interesting area, climbing, hiking and waterfall' with an average min score of 4.42. Hence, the conservation of Kawang Forest Reserve is vital to support the welfare of the local community residing within the protected area as well contributing to a more sustainable forest management by the decision makers.