

**Preliminary study on behavioural responses over Single-Use Plastic (SUP) usage
and plastic waste management practice in island community of Pulau Ketam,
Selangor**

ABSTRACT

Plastic waste management on islands is more challenging compared to the situation on the mainland or the urban areas, given the island geographical limitations and additional costs incurred to address the limitations. Yet, islands are one of the main gateways which poorly managed plastic waste enters the marine environment. A preliminary study was conducted to determine behavioural responses over SUP usage and plastic waste management practice of the Pulau Ketam community. Pulau Ketam is located 20 km off the coast from Port Klang, Selangor, Malaysia. It is an island of mangrove forest situated in the intertidal zone. Unobtrusive direct observation conducted at key areas where SUP usage and plastic waste management practices by local community were observed. A total of 422 observations were recorded for the behavioural responses over SUP usage, while 135 observations were recorded for behavioural responses over plastic waste management practice. More than 98% of the island community used SUP during daily purchases. Littering behaviour and other improper plastic waste management practices were recorded at 73% (on average) at landfill and garbage collection points, instead at recycling centre. Proper plastic waste management system planning, tighter enforcement, and awareness and behaviours intervention improvement could be prioritized at both community and government levels to ensure achievement of zero-SUP movement and environmental sustainability.