

The impact of COVID-19 on solid waste generation in the perspectives of socioeconomic and people's behavior: a case study in Serdang, Malaysia

ABSTRACT

Malaysia has enforced several phases of Movement Control Order (MCO) as a quarantine period since 18 March 2020 with the intended purpose of containing the coronavirus disease (COVID-19) outbreak. The quarantine has affected people's daily lives with frequent job dismissal and retrenchment due to the struggling economic conditions of particularly small and medium businesses. This study aimed to understand the impact of MCO on solid waste management in Serdang, Selangor from the aspects of socioeconomic and people's behaviour. Solid waste generation data in Serdang, Selangor was collected by KDEB Waste Management through waste weighing daily throughout 2019 and 2020. The collection was conducted according to different housing areas of Serdang. The quantitative findings have recorded a decline of 9.94% in solid waste data generation subjected to COVID-19 lockdown. In conjunction with that, an online questionnaire participated by 310 respondents was conducted on understanding the effect of the lockdown on people's behaviour and socioeconomic aspect with respect to solid waste management. This study revealed that June onwards (after MCO Phase 1) generated the most solid waste. Indeed, solid waste generation due to MCO according to the waste refusal behaviour is the consensus in favour of Malaysia's appropriate need for stricter policies.

Keyword: Solid waste generation; Socioeconomic; People's behaviour; Movement control order; Coronavirus disease