



## Evaluation of acceptance of a composting toilet prototype for people in slum area in Indonesia

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### ABSTRACT

To install a system of the sanitation value chain, a composting toilet is an important alternative technology for providing value as it produces fertilizers from waste. A survey on the current practices regarding toilets, the assessment of a new protocol for operating the prototype toilet, and the evaluation of the interface design was performed with 20 people at the Indonesian Institute of Sciences (LIPI), Indonesia. Concurrently, an assessment of the interface design was performed at a mosque in Sapporo, Japan. Half of the people answered that the bad smell is a point to be checked, and 70% of respondents worried about excreta sticking to the toilet bowl. The problem of smell can be solved by installing a ventilation system. The new operation protocol was acceptable, and the impression of the toilet on the body was good and acceptable. 70% was unsatisfied with its size, and the yellow color of the cover brought to mind garbage or something polluted. 40% felt discomfort in terms of the impression of sitting on the toilet seat, feeling like they might fall into the hole. Many said that the space was too small for washing their body with their hands. Modification of the toilet was discussed.

*Keywords:* Muslim; Feces–urine–water separation; Solid–liquid separator; Acceptance; Interface design

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