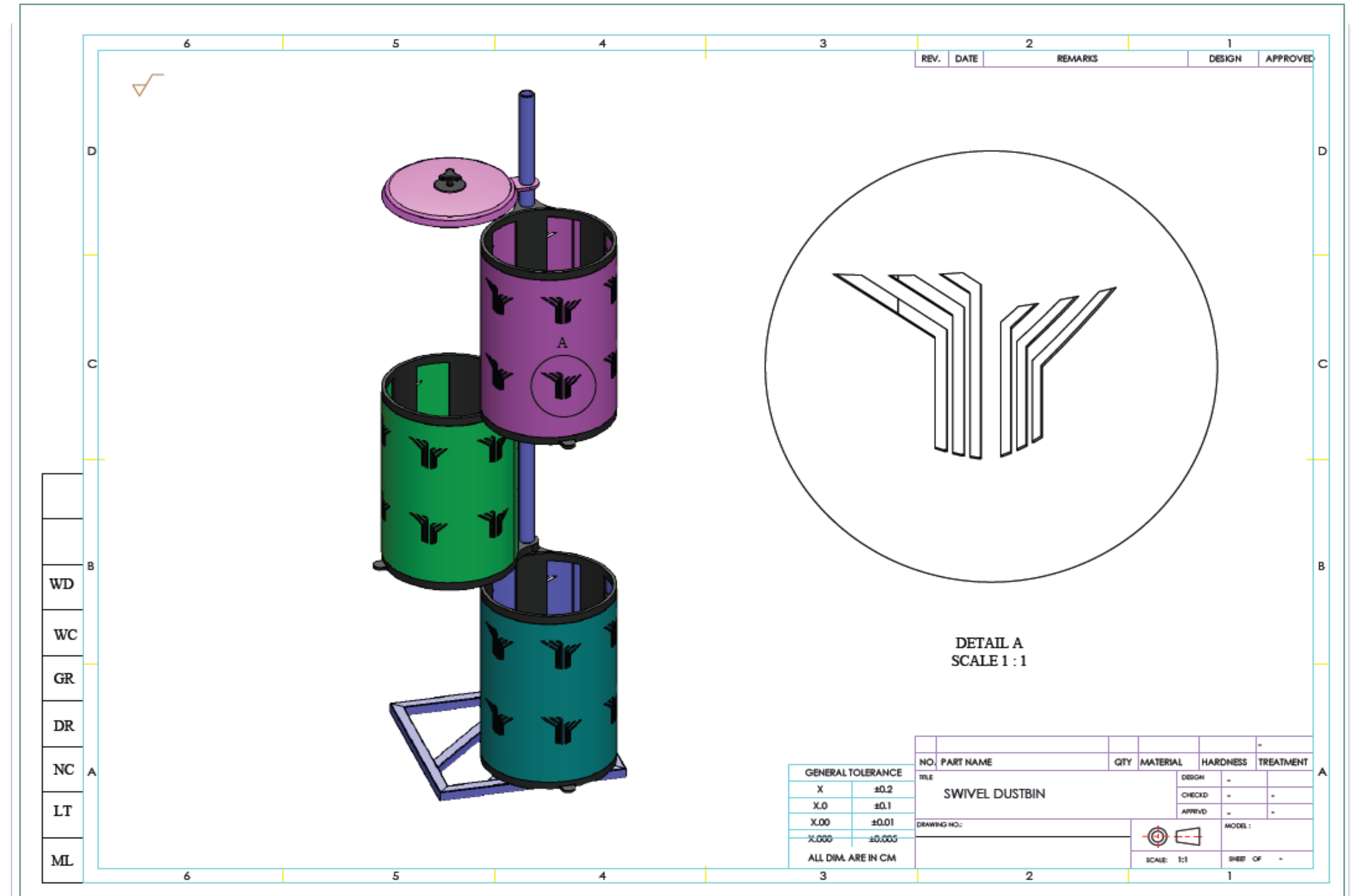
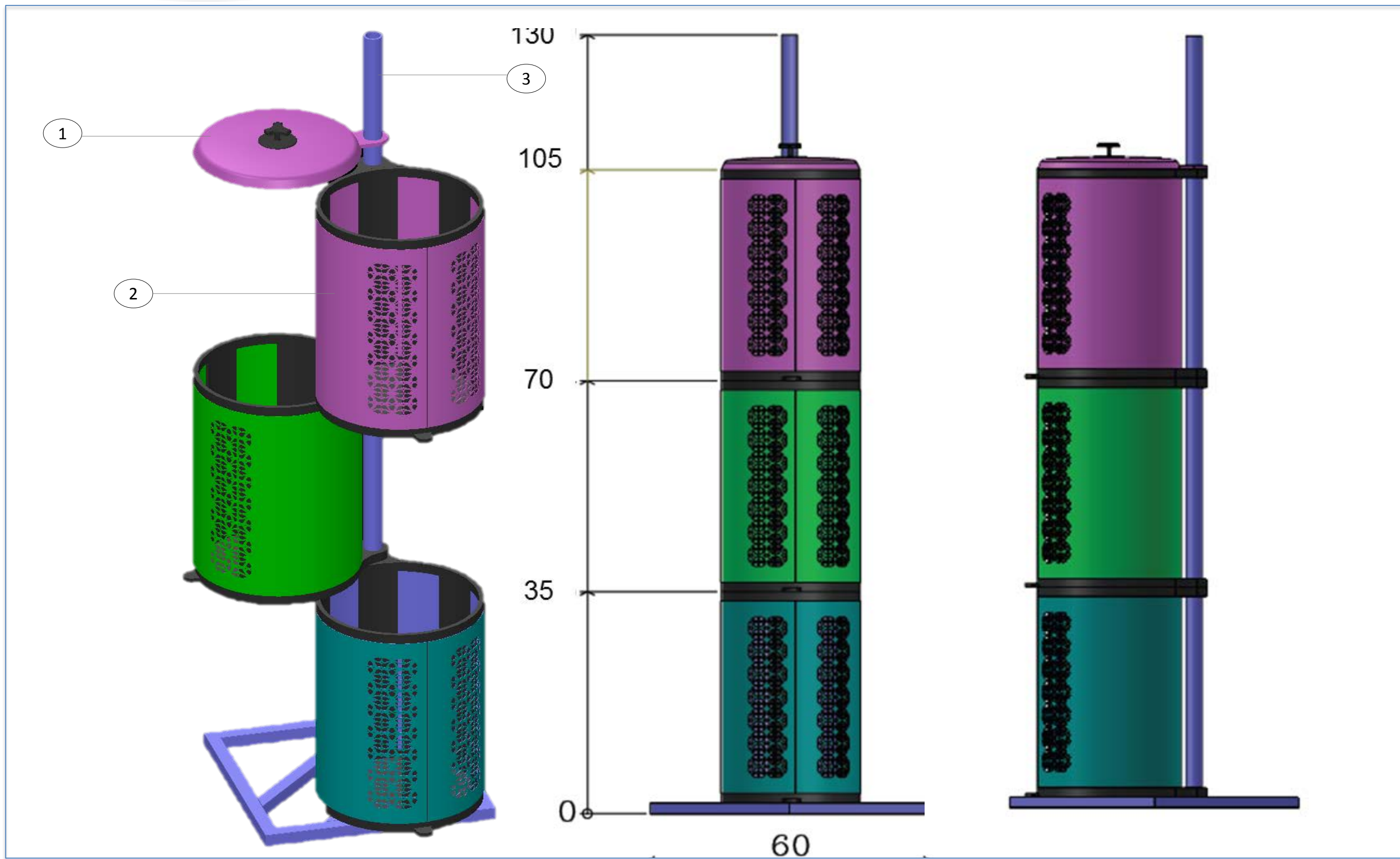


PERFORATED SWIVEL DUSTBIN (PSD)

IPR (PATENT/ID/C) NO. AR2017004148



INTRODUCTION OF TECHNOLOGY

In average, 33,000 tones of solid waste was generated per day in the country, mostly from households which at least **22% of the waste** can be **recycled**. The National Solid Waste Department (NSWD) has aimed to **divert 40% of the waste** disposal from landfill by encouraging **waste segregation approach** to the public.

However, relatively **low recycling rate (10.5%)** at present was observed due to several key factors and one of the factor is the **characteristic of the available waste bin** (Norsyahirah et al., 2015). Several reasons that discourage waste segregation such as **no systematic waste separation unit (94.1%)**, **unsuitable waste bin for waste separation (86.8%)**, **more than one bin is needed (88.2%)**, and **lack of space to keep the segregation waste (80.9%)**.

INVENTION

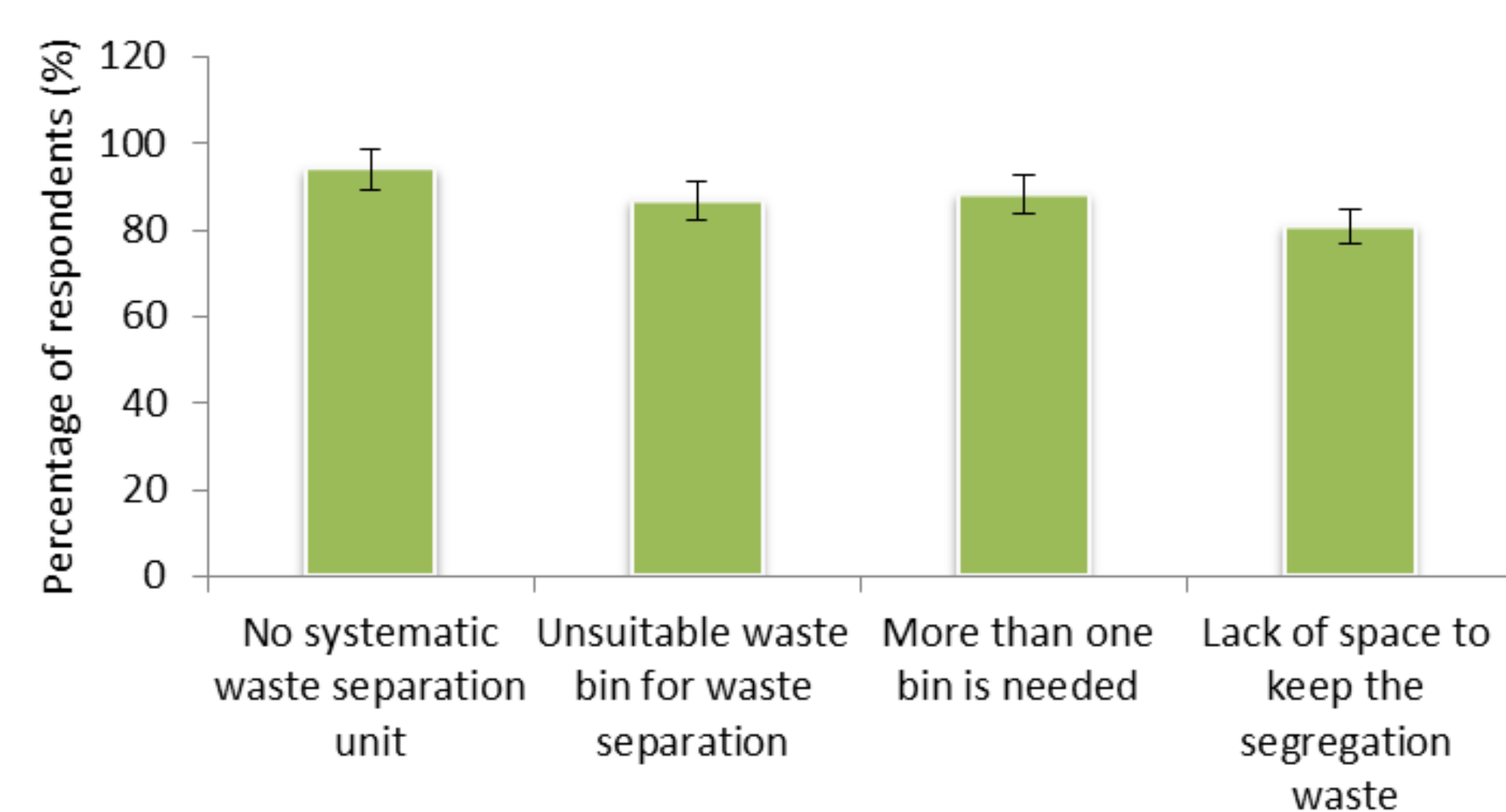
“**Perforated Swivel Dustbin (PSD)**” provides a solution to waste separation activity at home.

The invention is a stackable, swivel perforated waste bin unit with the unique characteristics of a **rigid frame, stackable** (vertical) and **swivel** (360 degree). It has **perforated surface** with three **colour coded compartments**. It is a **detachable unit** with a **safe height** (105 cm).

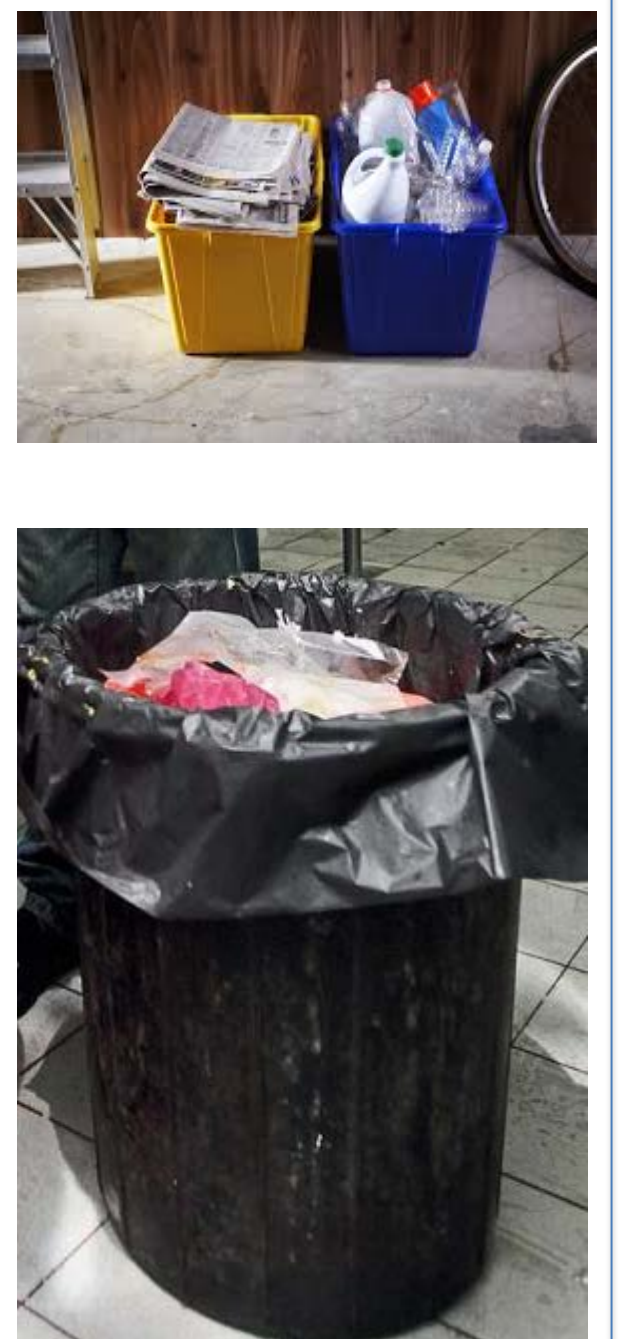
ADVANTAGES

- **Occupied less space** compared to separate bin unit.
- It can be **used in a tiny house** (i.e. apartments, flats).
- Allows **flexibility** to the user to place the waste at any angle as it swivel.
- The **perforated surface** provided **less retention** to the plastic bag so that it can easily pull out to throw out the rubbish.
- Adequate **colour coded compartments** for easy **waste categorization** and to **educate the kids**.
- It is **easy to dismantle** for cleaning and **safe height** and it can **encourage waste segregation at home**

Issues related to the current waste bin



Response of 140 household in Klang valley, on a survey of the current waste facilities characteristics that influence waste segregation behavior (Norsyahirah et al., 2015)



MARKET POTENTIAL

The product has market potential as needed household items. The waste management agencies can use this technique to increase recycling rate.

Consumer/End User

- Potential to be used as waste dustbin and encourage waste segregation
- Potential to be used to store other household items such as onions and fruits.

Industry

- Potential to be market widely for variety used in variety of size. It potentially to be redesign to a smaller size, as a stationary items.



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