

# ARE GREEN WALLS OF COLOMBO MEANINGFULLY GREEN? THE SINCERITY OF VEGETATED BUILDING FACADES AND THEIR CONTRIBUTION TO ENVIRONMENTAL SUSTAINABILITY

**Buddhi Chathuranjeli De Silva\***, Nihal Perera,  
Nandika Denipitiya

City school of architecture, Colombo, Sri Lanka

## ABSTRACT

The number of people who are affected by urbanization has radically increased. However, the economic boom over the past decades has escalated potential environmental problems among other solutions, environmentalists have proposed vertical greening. Vertical greening refers to a structure that allows vegetation to grow on the vertical surface of a building. With other sustainability-oriented strategies, vertical greening is thought to help fight current environmental issues, as well as current health issues. It may prevent the cities from being unbearable during locked downs which impacts human's mental health due to social distancing measures. Green walls are an option for cities for people to engage with Nature. Known for their pleasantness to the senses and earthy qualities, they boost human health and improve air quality. Plants can thrive on walls, making it a popular trend globally and also welcomes antidotes to stress and isolation. Plants which contain day-to-day supply of nutrition and anti-germ characters, could be incorporated with green walls. However, more knowledge is needed to reap the potential benefits from it.

With the demand for sustainability, green walls are increasingly appearing on clients' requirement lists but mostly as a visual and aesthetic representation of sustainability. This sensibility of clients, what architects provide, and what is eventually built, questions whether the true representation of vertical garden delivers the intended benefits. Are these walls environmentally-friendly or are they just a trend that takes advantage of the concern for the environment and human fondness to Nature?

However, there is a gap between what is actually proposed and what is practiced in Colombo in green walls. Certain measurements have been used to assess the above gap. During observation periods, for an example, number of utility bills were gone through and thermometer had been used

---

\*Corresponding Author: Buddhi Chathuranjeli De Silva; E-mail- [buddhichathuranjelidesilva@gmail.com](mailto:buddhichathuranjelidesilva@gmail.com)

frequently. Moreover, structured interviews were taken place with list of prewritten questions to learn about these gaps. The study identified the gaps, such as no adaptation to local environment, and what each individual needs to improve to curtail the shortcomings.

**Keywords:** Environmental Sustainability, vegetated façades; green walls; plant scraping. Colombo, Sri Lanka.