



#### Urban Agenda Platform

*The global platform for sharing progress, action and knowledge on the implementation of the New Urban Agenda to achieve sustainable urban development.*

# Rangika Halwatura

Region	Asia and the Pacific
Award Scheme	Habitat for Humanity
Start Year	2019
Sustainable Development Goals	Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable

## Summary

Mud Concrete Block is a cost-effective and eco-friendly walling material specifically developed and patented by Professor Halwatura for the hot and humid climate in Sri Lanka. A model unit has been built, and discussions are underway with various development agencies to use MCB to build affordable and resilient homes in war-affected regions in north and northeast Sri Lanka.

## Gender and Social Inclusivity

The solution is attractive for low-income households because it reduces the cost of constructing, maintaining and operating a house. Engagement of local community members helps to keep building costs low by minimizing the need for professional construction workers, as the technology to manufacture the Mud Concrete Blocks is relatively simple. In addition, maintenance costs of the house are low due to the high resistance of the block against extreme weather conditions, and the use of soil base painting used to finish the homes are locally made and repairs can be easily performed by the local community. Finally, the MCB acts as a structural cooling agent, thereby promoting indoor comfort. MCB hopes to bring not only affordable housing, but also community-led economic returns and comfort in the midst of climate conditions in Sri Lanka

## Innovative Initiative

MCB is a locally patented technology that has proven to be low-cost and sustainable, compared to other walling materials used in affordable housing in Sri Lanka. MCB offers a viable solution to address the affordable housing gap given that over 120 thousand families remain without quality housing following the 30-year civil conflict which caused displacement and extensive damage to the local infrastructure. MCB is extremely affordable and the production of blocks offers economic opportunities to small and medium-sized entrepreneurs based in local communities, empowering them with skills that will lead to long-term financial security.