ABSTRACT

A fairly high population growth and increasing number of urbanisation in the city became a major factor in dwindling land for settlements. This is causing the massive number of suburban neighbourhood that have a high density such as Kampung Ngampilan which located in the riverside of Kali Winongo, Yogyakarta. Suburban settlements or "kampung" is synonymous with the impression of slum and poor, because its density and level of waste disposal problem in the area of the neighbourhood is less adequate. In this area, there are also many communities that dump their household waste directly into the river. The aim of this undergraduate final project is to design a vertical housing with self-management garbage system in response to the limited availability of land while also reducing household waste in Kampung Ngampilan, Yogyakarta. Vertical housing is considered to be a very efficient in accommodating high amount of resident in such a narrow area. Thus, the concept of this vertical housing is by emphasizing the atmosphere of "kampung" as residence that can connects the interaction of social community through waste treatment facilities, with an approach on environment adaptive architecture. The methods that used to collect the primary data in this are consist of survey and observation directly in-site, while secondary data obtained from the literatures study, journals, theses, articles and supported regulations. The result of this project is design solution proposal of vertical housing in Ngampilan riverside which could change the paradigm of urban slum caused by household waste. The design itself are manifested in the spatial arrangement between housing unit that have its own garbage separation terrace. And also providing household waste recycling and composting area as a communal space that can accommodate the participation of its residents. Whereas the architecture adaptive approach is being applicated in building mass arrangement which consider the overlapping shadow of neighbourhood building and its impact to the building orientation.

Keywords: Vertical Housing, Kampung, Waste Management, Adaptive Architecture, Environment.