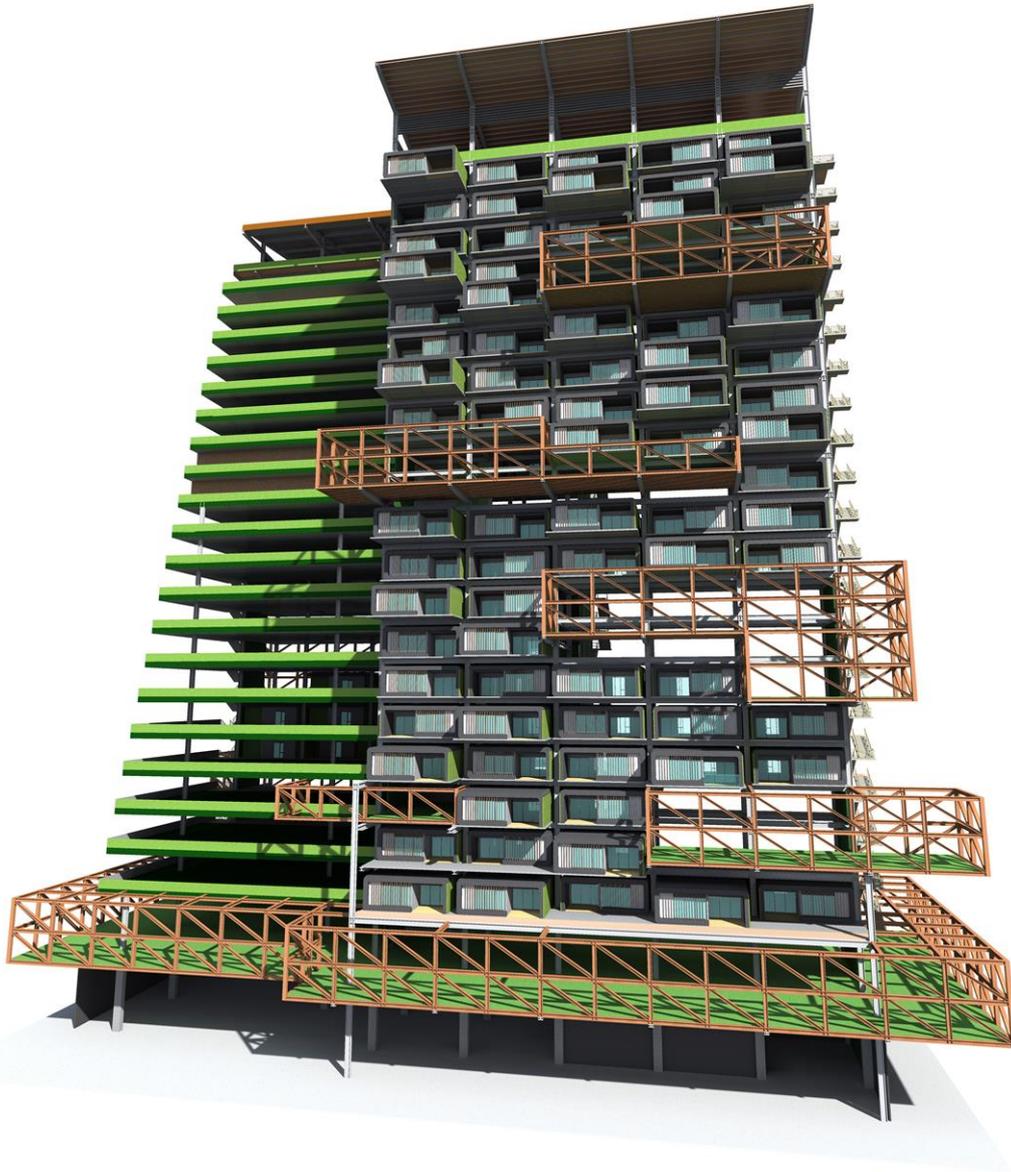


SFHF

SMALL FARMING . HOME FARMING



PROJECT BRIEF

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The SFHF Project is proposed in the metropolitan Jakarta which houses almost 10 million people during the day and 8.5 million people during the night. Jakarta, on the northeast coast of the island of Java, is the capital of the Republic of Indonesia and the centre for national trade, industry and services, including agricultural development. Most of the agricultural products consumed in Jakarta are imported from Bogo, Bekasi and Tangerang, the three satellite cities of Jakarta. However, what is produced in Jakarta itself is difficult to bring into the city on account of congestion and time constraints. Food production in Jakarta had become an issue in the city. However, poverty is an intractable problem in Indonesia for many years. Rapid urbanization has created problems of land and housing scarcity, and as these scarcities increase and housing prices rise, economic constraints force the poor to inhabit land that no one else wants. Hence, a proper housing project should be taken to reduce the poverty rate in the city.

SFHF Project is a bright idea in giving hope to poor people in Jakarta to survive in a better lifestyle. SFHF Project is a combined housing and farming project, where the residents will live, farming and working in the same building. This project encourages citizens to involve in urban farming and produce food to reach the demand of the city. This project is emphasized for the poor people in Jakarta to secure a safe living environment and provide jobs opportunities to the people. How does the building function?

The building consists of 152 units (950 ft² per unit), 20 level of farming area (Hydroponics and Aerobics), outdoor farming area, market and food stall at the ground floor and basement parking. The main concept of the project is to enable residents to live, farming and working together in a same building. This cycle enable them to earn money in order to pay for their rental fees. Working and living within a building help them in saving money and energy which is more economical. The products of the farming will be sold at the ground floor market and food stall.

Eventually, the idea will help in reducing unemployment and urban poverty issue as people are getting jobs.

The design of the building is using prefabricated steel frame structures as the main structure of the building which is to produce a modular residential housing. Each units are prefabricated in a capsule shape and installed into the main prefabricated steel frame. Modular housing idea is implemented due to fast construction, cost efficiency and better quality control. Individual capsules are pre-assembled and plugged into the prefabricated steel frame which is the main structure of the building. The units are detachable and attachable, making the building an example of recyclability and adaptability as it can grow with the growth of the number and allow for future extension. The project is proposed to achieve sustainable purpose.

SFHF Project features sustainability design in where the rainwater harvesting system is emphasized to contribute to the energy efficiency of the building. The rainwater collected at the roof will be channeled to rainwater harvesting tank and distributed for the farming irrigation and toilet flushing after treatment. Farming within the building helps to lower the temperature and provide better thermal comfort to the residents. PV Panels are installed at the roof and will contribute up to 8% electricity of the building. The prefabricated steel frame design enables cross ventilation within the gap of each units which is advantageous for farming activities.

The main purpose of SFHF Project is to provide a better living place for the poor people in Jakarta and eventually lower the unemployment and poverty rate. Besides, encouraging urban farming that is beneficial for a developing city like Jakarta.