ANALYSIS OF HOUSING TYPOLOGY

Analysing houses constructed with composite material, for EWS community people constructed in a rehabilitated dump yard.

INTRODUCTION

The proposal is to research the suitable Housing Typology for the EWS community and the migrants working in the Vellalore dump yard, where housing is a part of the urban development. The Design implementation over the dump yard is a decade of the development process, where the design takes place after the rehabilitation of the landfills. The rehabilitation process starts from the clearing of landfills which is carried out by composite material production which enhances the reduction of plastic waste and can be used as a raw material along with the unfertile soil in the landfills. Based on the age of plastics they can be segregated and used in many ways.

The major part of the architectural design will be the housing and its typology, and the area that is going to be provided inside the urban development programme. Each housing module will be analysed according to the shape, spatial organisation, orientation, climatical aspects, materials, Window to Wall ratio (WWR), lighting, ventilation, shading analysis, thermal comfort etc. To prove the best house module from multiple strategies, options, and aspects. The best housing layout can be enhanced as the housing layout for the whole area and can be organized in various forms to provide row house, apartments etc. where these layouts can also be evaluated and proved accordingly. So based on the results, the housing layout will be designed with various housing typologies according to the site analysis.

Later, the composite material can be converted into essential building materials and can be used for the urban development program, which will clear the landfills initially and creates a vast area for development. The design starts from the implementation of the industrial area which is separated into 2 industrial zones with different work schedules, along with a research institute to monitor the entire industrial zone, as the industry is based on plastic. The next will be Constructing Apartments, Rowhouses, and individual dwelling to accommodate the workers and officials inside the industrial zone. To the development of education, a higher secondary school will be provided and to keep track of the community. a government building compound is provided, with a primary health care centre and also a commercial zone.

OBJECTIVE

- Analysing the housing typology modules made up of composite material.
- Rehabilitation possibilities of dump yard and risk mitigation of dump yard clearance.
- Providing urban development scheme in a dump yard by clearing the landfills.
- Designing a sustainable urban settlement for the EWS community and migrants working in the industrial zone.
- Integrating various renewable sources of energy for instituting self-sufficiency for the considered area.

LITERATURE REVIEW

A literature study has been performed according to the necessity of the proposal; the various scope of the project has been incorporated as one to get a wide scope of knowledge through the literature study.

Material study

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Vellalore dump yard MSW and studies

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METHODOLOGY