

**RESEARCH PROPOSAL OF PHD THESIS ENTITLED
“SUSTAINABLE HOUSING FOR SUSTAINABLE CITIES”**

SUBMITTED TO

**KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION,
SRIVILLIPUTTUR (VIA); VIRUDHUNAGAR (DT.), TAMIL NADU,
INDIA**

**ADMISSION PROPOSAL FOR THE DEGREE OF
DOCTOR OF ARCHITECTURE (PHD)**

BY

RAVUTULA SAI CHAND

HYDERABAD

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Provisional title: Sustainable Housing for Sustainable Cities

This academic research aims to develop solutions for the built environment (Urban Housing challenges, resources, energy efficiency, environmental, ecological and health safety and resilience to natural disasters). Research will also deal with the housing affordability, social justice, cultural and economic impacts of housing, and contribute to making healthy residential neighbourhoods and sustainable cities.

The key aspects of the research are as follows:

- Lifecycle of houses;
- Residential densities in neighbourhoods and Urban forms;
- Mitigating environmental hazards and improving green spaces in neighbourhoods;
- Sustainable, affordable building materials and practices;
- Integrating housing into low-carbon community infrastructure;
- Pedestrian friendly neighbourhoods.

Research Background:

Sustainable development is becoming an agenda for the sectors such as environmental, social, and economy, all over the world. Sustainable projects are coping up in urban areas specially in the housing sector aimed at sustainable regeneration. Housing today plays a crucial role in achieving sustainable development – as envisaged by the idea of sustainable housing.

In a rapidly changing and urbanising world, the provision of adequate and affordable housing remains a key priority for all governments. However, the concept of Sustainable cities and sustainable housing requires a new understanding to effectively and synergistically address the pressing issues slums, increasing population, the urban divide, economic and human development, and climate change.

By 2030, according to the projections of the United Nations (UN) Population Division, each of the major regions of the developing world is estimated to hold more urban than rural dwellers; by 2050 fully two-thirds of their inhabitants are likely to live in urban areas. By 2050, India is likely to be the most populous country with a projected population of 1.69 billion. It is estimated that over 70 million new urban housing units will be needed over the next 20 years in India.

Hence in order to balance environment with urban growth, we shall have to draw on multiple branches of knowledge and concepts including Sustainable communities, sustainable cities, inclusive cities, liveable cities, green cities, prosperous cities, eco-cities, healthy cities and resilient cities.

Sustainable Housing for Sustainable Cities outlines key concepts and considerations underpinning the idea of sustainable housing and provides a comprehensive framework for designing sustainable housing policies and practical actions.

Aims:

To provide a comprehensive framework for designing sustainable housing policies with respect to neighbourhoods and to propose the typical land use plan which will contribute to making healthy residential neighbourhoods and sustainable cities.

Objectives:

- To Study the existing Housing policies in urban areas
- To Study the Existing Residential Neighbourhoods in urban areas with respect to housing related issues.

- To study the existing and proposed land use plans of the residential neighbourhoods
- To Study the Characteristics of a Sustainable City
- To Study the Characteristics of Sustainable Neighbourhoods and Housing
- To Suggest a Comprehensive framework for designing sustainable housing policies.
- To Suggest some modifications to existing housing policy
- To Suggest and propose changes in proposed land use.

Limitations:

Present Study is limited to Sustainable housing policies and land use zoning.

Proposed Methodology:

The first step will be an extensive review of general and India specific literature on Sustainable Development policies and land use. Study of archival documents will also be of great help to the researcher to understand the historical background of the research topic. These might include press releases, press interviews of key individuals, and minutes of various meetings with stakeholders. It is also a matter of equal importance that multiple techniques are adopted in the collection of data to facilitate multiple level analyses. The research mainly depends on primary and secondary sources of data. Below **Figure-1** shows the detail step by step proposed methodology in different stages of research.

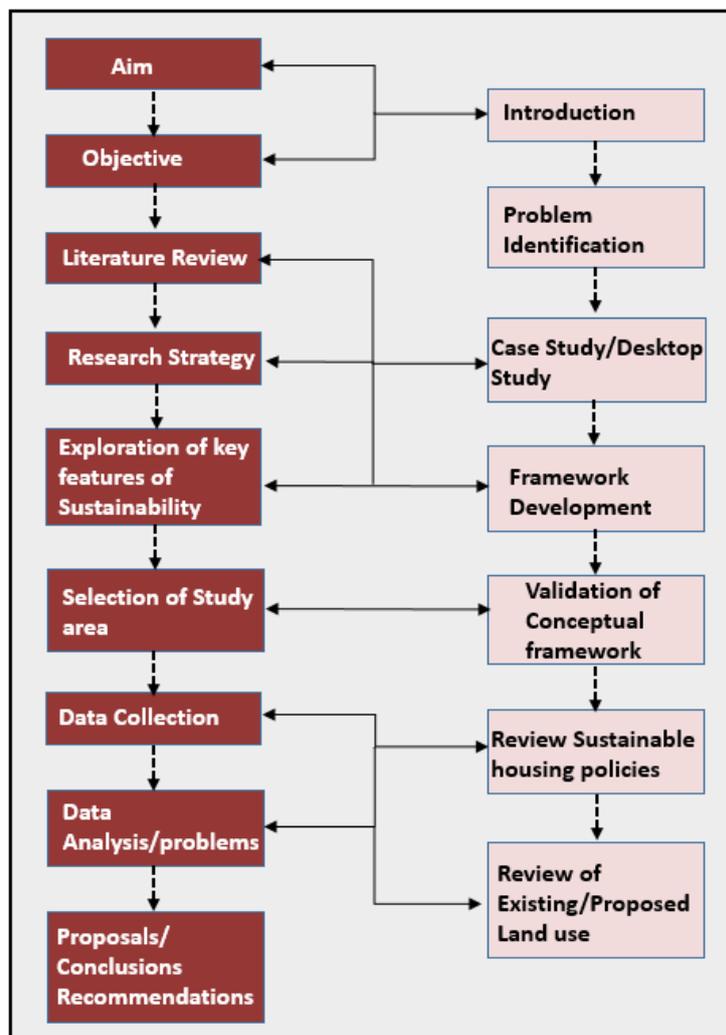


Figure-1: Proposed Methodology

Work Plan and Implications:

Activity/ Task	Activity/Task Name	2020 October- December	2021 January-June July- december		2022 January-June July- december		2023 January-June July- december	
Activity-1	Project Initiation/ Course work	■						
Task-1	Finalise project description	■						
Task-2	Course work	■						
Task-3	Oral examination		■					
Activity-2	Selection of Study Area		■					
Task-4	Literature study		■					
Task-5	Reasearch Strategy		■					
Task-6	Confernce article-1			■				
Task-7	Journals article-1			■				
Activity-3	Literature Review on Sustainable housing policies				■			
Task-9	Confernce article-2				■			
Task-10	Journals article-2				■			
Activity-4	Literature Review on Sustainable land use zoning					■		
Task-11	Literature study					■		
Task-12	Data Collection					■		
Task-13	Confernce article-3					■		
Task-14	Journals article-3					■		
Activity-5	Thesis Submission						■	
Task-16	Synopsis submission						■	
Task-17	Viva-Voce Examination							■

Conclusions

The aim of the research on sustainable housing is to ensure the minimal negative effect of buildings and their operations on human wellbeing and conditions as well as the environs by means of better design, positioning, construction, functioning, upkeep, and the entire life cycle of the building. Affordability, social and environmental suitability are other criteria for sustainable housing which help to aid sustainable housing development.

I would like to ascertain by this research, the role of sustainable housing policies and sustainable land use in protecting the environment, while looking at the interest of urban municipal corporations in terms of Sustainable Development.

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