

April 15
2019

Affordable **S**ustainable **H**ousing **A**ggregator

ASHA

Team members:

Uday | Akshay | Amit | Harveen

Indian Smart City Fellowship-2019

Team

Team ASHA constitute of four people who have experience in diversified fields.



EMPATI UDAY KUMAR



AKSHAY ATREJA



AMIT VARMA



HARVEEN KAUR

Expertise of the team members

M.URP, SPA Vijayawada, B. Tech , JB university

B.Tech (Electrical Engineering, NIT Jaipur)

B.Arch. and M.Plan (Housing), SPA Delhi

M.Sc, PGD in Environmental Law and Management, Pursuing PhD from DU

How they add unique value

Experience in project management, feseability, Smart city projects..

He is an electrical engineer. He has experience in industrial energy management and execution of renewable energy projects.

He is architect and housing planner. He has experience in planning inclusive housing and related infrastructure for various urban development projects.

She is a doctoral research scholar. She has research experience in waste management sector and policies concerning same.

Mentor



Prof. Dr.P.S.N. Rao

Prof. Dr. P.S.N. Rao is an eminent personality in the real estate, housing and urban development sector in India, playing a proactive role as an academician, consultant, policy advocate and industry advisor for over 32 years. He trained as an architect, civil engineer and town planner. He is a recipient of the SPA Gold Medal, Indian Buildings Congress Medal, the AICTE Young Teachers' Award, Shiksha Rattan Puraskar and Best Citizens Award. Presently, he is Director, School of Planning and Architecture (SPA), New Delhi, (Ministry of HRD, Government of India), Chairman, Delhi Urban Arts Commission and Board member Ujjain smart city limited.

Expert Consultation

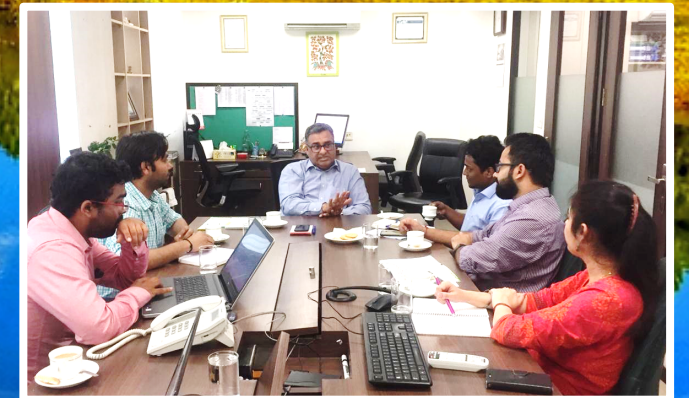
Dr. Shailesh Kr. Agrawal



Prof. Dr.P.S.N. Rao



Mr. Sanjay Seth



- Problem statement
- Overview of Project
- Defining Sustainable Housing
- Existing Scenario of various systems
- Aim & Objectives
- Output
- Limitations & Target stakeholders
- Methodology
- City Selection



Contents

Problem Statement

- A range of countries use indicator systems for housing, which may include so-called green labels and housing safety rating systems. These tools develop standards for safe and energy-efficient buildings. However, assessment of the full range of sustainability impacts, beyond basic evaluations, is often incomplete or absent.
- Assessment of housing quality that includes energy efficiency, affordability, waste management, health, safety, Security, accessibility can provide a more robust basis for decision making, policy development, compliance monitoring, implementation and research

Overview

- ASHA is a tool which aggregates various indicators which has impact on housing sector like Air Quality Index, Residex and Third party building rating systems.
- Tool inputs various index data sets into a common point and analysis produce a knowledge based decision making online tool in Housing sector

Sustainable Housing

Understanding sustainability and sustainable Housing

Sustainable Housing by GDRC

Global Development Research Centre, Japan defines sustainable housing as a property designated as holding particular status as “environmentally friendly”. The term “sustainable” is often applied interchangeably with the green building designation. Sustainable design refers to such characteristics as a lowering of demands on the environment as a result of certain building characteristics: Low energy usage; reduced water usage; carbon neutral (i.e. no carbon dioxide emissions result from property operations – either directly, or indirectly)

Sustainable Housing by UN_HABITAT

- UN_HABITAT (2012) defines Sustainable Housing as “shelter that is healthy, safe, affordable and secure within a neighbourhood with provision of piped water, sanitation, drainage, transport, healthcare, education and child development. It is also a home protected from environmental hazards, including chemical pollution. Also important are to meet needs related to people’s choice and control, including homes and neighbours which they value and where their social and cultural priorities are met

Existing Scenario of various systems

Indices/Rating system/Assessment Tools

Indices

- Liveability, MoHUA
- Residex, MoF
- Air Quality Index, MoEFCC

Green Building Rating systems

- IGBC, CII
- GRIHA, TERI
- BEE, MoP

Assessment Tools/Frameworks

- Climate Smart Cities

Aim & Objectives

Aim — To create an online aggregator tool for sustainable housing which integrates various indices for guided decision making

Objectives —

1. Define sustainable housing in Indian context.
2. Standardizing of various indices for common data sets.
3. Developing a digital tool for decision making.

Output

To develop sustainable Housing Index tool(App or Online Platform) which evaluates sustainability in Housing sector for cities.

1. Aggregator tool with a confluence of various existing tools and indicator's related to Housing sector.
2. Culminating the complete data mapping and analysis to a single platform
3. Generates data for decision making.



Limitations & Target Audience

Project Limitations

1. The project only takes into account and analyses sustainability of housing sector for cities based on existing indices sustainable rating systems, and various other indexing tools and their indicators in Indian context.
2. The proposed aggregator Index first pilots to selected 10 smart cities out of 100 cities listed.
3. The project only takes into account for the creation of aggregator Index and, only the existing and completed housing projects in cities are to be analyzed.

Target Audience

1. Citizens
2. City Administrators
3. Property investors
4. Property Developers
5. State and Central government

Methodology



Cities Selection

Methodology of city selection

1. Listing of coverage of various indices.
2. Identifying the convergence of common cities.
3. Smart City Rankings and Proposals.

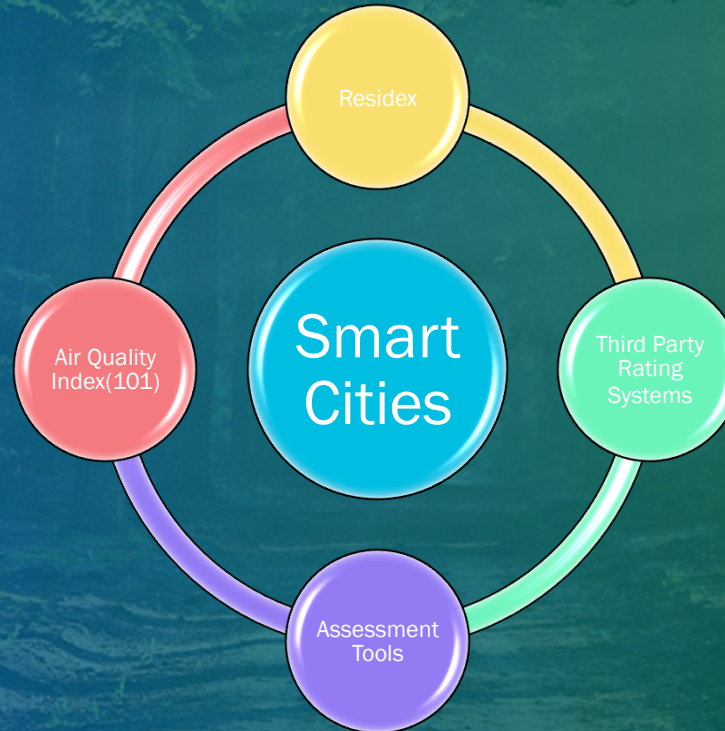


Table showing draft cities for pilot

Sl.no	City
1	Guwahati
2	Bhubaneswar
3	Bengaluru
4	Thiruvananthapuram
5	Ahmedabad
6	Ludhiana
7	Visakhapatnam
8	Jaipur
9	Pune
10	Lucknow



THANK YOU!

India Smart City Fellowship,
Smart Cities Mission.
Ministry of Housing and Urban Affairs,
Government of India