ASHA
Affordable and Sustainable Housing Aggregator

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Current Scenario

A house is one of the most basic human needs. It is regarded as the initial unit of society and the primary unit for human habitation. For a majority of population, a house represents the largest investment of their lives. Thus, in general housing is one of the major components of social and economic development of society, and is a result of multiple process that may be social, physical or economic involving majorly issues like location, construction quality, cost, financing and personal household preferences as maybe. Traditional housing development projects mainly concentrated on the design, technical and financial feasibility. They lacked an understanding of sustainable development at the inception and implementation phase.

Researches show that many are still struggling to combine or adapt their strategic plans to incorporate the sustainability aspects (Dekker et al., 2012). Recently, attitudes have changed and housing developers believe that the application of sustainable technologies and strategies can contribute to reputation gaining, reduction in construction and operation cost, receiving favourable land prices, and more channels available for financing (Tupenaite et al., 2017).

To measure sustainability of housing sector, a number of countries are using rating systems and indices to rate residential buildings/commercial buildings. Such tools help in identification and development of standards for energy efficient build-up, waste management, health, safety, accessibility and security. However, assessment of full range of sustainability beyond basics is uncovered or absent. India too has developed a number of indices and rating systems like RESIDEX, GRIHA-Teri, IGBC-CII, Liveability Index and Air quality index (Sameer app) at city level yet no compressive tool exists which can provide city level understanding of sustainability in housing sector in the country. There is lack of data in housing sector with specific reference to affordability and sustainability for stakeholders or users which can promote better decision making. The proposed tool will help various decision makers w.r.t investment, selling property, air quality, water availability, waste management in housing sector at city level on one common platform.

Idea

Project ASHA (Affordable Sustainable Housing Aggregator) is an aggregator tool that would include relevant and available indices, rating systems and assessment tools to measure sustainability of housing projects at city level. It will serve as a common umbrella of database for sustainable housing and will push the data updation mechanism of all relevant databases aggregated on the common platform (quarterly or half yearly).

References

1) Dekker, S., Jacob, J., Klassen, E., Miller, H., Thielen, S., & Their, W. W. (2012). Indicators for Sustainability: How cities are monitoring and evaluating their success. Canadian International Development Agency, 1–84. doi:10.1016/j.landusepol.2008.02.010
2) Tupenaite, L., Lill, I., Geipele, I., & Naimaviciene, J. (2017). Ranking of Sustainability Indicators for Assessment of the New Housing Development Projects: Case of the Baltic States. Resources, 6(4), 55. doi:10.3390/resources6040055