BUILD

BUILDING URBAN INTEGRATED LAND USE DYNAMICS

Archit Nishant | Jash Goswami | Joydip Datta | Pritam Patnaik

External Mentor: **Saswat Bandhyopadyay**
Internal Mentor: **Nilesh Rajadhyaksha & Kanak Tiwari**

India is on the forefront of urbanization and it is set to accelerate with India's rapid growth, but there's still inadequate understanding of the need to plan for urbanisation and translate these plans into action. **India's Population will Be 1.52 Billion by 2036, with 70% of Increase in urban areas and urban planning will be critical to ensure success of cities (National Commission on Urbanisation & MoHFW, 2020).**

Static Land use planning approach fails to address the complex challenges posed by rapid urbanization in which the **cities not only expanding in size but are also turning to be more complex.** Additionally, unusual changes are expected take place due to drivers such as Climate changes and local social and economic tensions are anticipated to be miraculous in both the speed and scope. The outcome of static land use planning approach is haphazard city growth and the rigid land use plans. The root cause for lack strategic decision making is lack of data. It is observed that Cities do not grow as per their proposed rigid land use plans. Land uses are constantly changing which are not captured and hence not updated frequently. Often, cities grow beyond their boundaries before the completion of horizon year causing urban sprawl. So the planning for the next horizon year is mostly the mapping of these changes in land use and further proposing land use plans for the next horizon year. All this has made the **Decision-making process in Urban Land use Planning: subjective, outdated and cyclic** which fails to address the growing complex needs of the city. The traditional tools restrict the decision makers to examine the range of complex scenarios rapidly with the periodic assessment.

The idea is to catalyse a transformation for an evidence-based data driven dynamic land use database wherein the information will be updated periodically from Day-to-day operations such as Building permission, Trade licences and Crowd sourcing. It also envisages undertaking a Use case in the pilot city displaying the strength of the developed database and potential analysis which could be undertaken. The intent is to develop an indigenous digital tool and thereby laying the foundation stone of not just culture of data-driven urban planning along with taking a step towards becoming **'Atma Nirbar' in the Urban ecosystem.**This will provide opportunity for Urban Planners to practice stimulations and further anticipate the impacts of various Urban Development programs to facilitate an informed decision. Adoption of such modern tools possesses a significant potential to enable the city to act more sustainably and strategically, along with augmenting the inclusion aspect in the planning process.