National Institute of Technology Rourkela

Synopsis Seminar

Seminar Title : A Framework for Understanding Population Mobility by Rural Accessibility Measurement Approach

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Supervisor : Prof. Basudatta Sarkar Venue : Seminar room PA Date and Time : 14 Feb 2023 (4:15 pm)

Abstract : A framework of the alternate set of rural accessibility measures with essential components and dimensions is proposed,

formulated and aggregated at the district level and validated with the relevant strategy and data sets. Accessibility to major development parameters, health, education, and communication infrastructure measured and validated with cross-sectional data. Further, a linkage was established between measured rural accessibility and commuting length by non-motorised and public transport modes. To understand the distributed varied opportunities within a, range of rural habitations and to bring the equity of resources to remove inequality, proper distribution of essential services (health amenities, education institutes, transportation infrastructure, and services) is a major challenge. However, the major challenge is quantifying these in spatial terms and better understanding rural accessibility as the policy goal and instrument. Further applying the measures at the district levels as the independent variable to understand the determinants of the commuting patterns in rural India. The study provides evidence from the Indian rural context that transport infrastructure, transport services, and information infrastructure are significant rural accessibility components. The study provides the framework of rural accessibility measures that can be measured and monitored spatially as the district and the region's spatial unit. Another significant component is that the proximity of any of these components improves rural accessibility. The measure is positive in nature so provides the policy instrument and further scope for establishing the goals towards integrating land use and transport for the planning practitioners. For the policymakers, the measure would provide a tool to analyse and formulate the national-level sustainable rural mobility plan with a concrete base. The contribution to the literature addresses the research gap in the rural literature context (in addition to existing knowledge about accessibility, commuting, and the association) in policy significance.