ABSTRACT

Urbanization and environmental challenges have significantly affected coastal communities, including Timbulsloko Village, Sayung District in Demak, Indonesia. The community faces socio-spatial transformations due to tidal flooding and urban pressure from Semarang City. In response, local innovations and participation have emerged as adaptive strategies. However, the role of community motivations and perceptions in shaping knowledge production and participation remains underexplored. This study aims to analyze how motivations and perceptions influence community knowledge production in the context of spatial transformation in Timbulsloko, Sayung, Demak, Indonesia.

This study employs a quantitative approach that analyzed these relationships systematically. Snowball sampling is used to identify respondents, ensuring the inclusion of relevant community members. Utilization of crosstab analysis is also used to explore connections between variables such as political economy, interdisciplinary knowledge co-production, and social capital/socio-economic characteristics as key factors influencing participation. Additionally, in-depth interviews are also carried out, providing qualitative insights that complement the statistical findings.

The results findings reveal the drivers for community participation from agency and spatial cognition, transformation discourse (knowledge co-production), highlighting the need for local champion and effective technocrats to produce niche innovation. Factors of socio-economic status, social conditioning and survival needs, also show their impacts on participation patterns. Further, the study shows how local knowledge and community participation are integrated into planning processes, enhancing community empowerment and adaptive capacity, contributing to more inclusive spatial transformation. Through the investigation of the factors, the research highlights the potential for community-driven approaches in addressing socio-spatial challenges to produce niche innovation towards spatial transformation.

Keywords*: Community Participation, Knowledge Production, Niche Innovation, Spatial Transformation, Timbulsloko*