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TITLE

Regions On-Demand: New resource-wise urban planning strategies for integrated urban-rural development in Finland

ABSTRACT

Despite the ongoing urbanization process, Finland is a regionally large and sparsely populated country. According to the WWF Living Planet report (2014), Finns have the 15. largest ecological footprint in the world. There is urgent need to produce new knowledge on integrated local resource-wise solutions for the utilization of the entire country's resource potentiality in a sustainable manner. The paper reflects the role of 'secondary cities' and other smaller rural (parish) towns in their particular regional contexts, and highlights the need to support such places as part of regional smart specialization and networking. We define integrated urban-rural development as coordination between policy areas (horizontal integration), and between different levels of government (vertical integration). Additionally, it addresses the issue of resource-wise development at different geographical scales, such as neighborhood, municipality or region. Furthermore, 'resources' are understood from the overall ecosystemic perspective as material (e.g. natural resources, built infrastructure) and immaterial assets (e.g. human capital, wellbeing, social cohesion).

The structure of the paper is twofold: Firstly, we contemplate the opportunities and obstacles for 1) resource-wise transportation, 2) food production and 3) housing development from the perspective of on-demand solutions, such as Demand-Responsive Transit, On-Demand local food supply and On-Demand zoning. Our approach is closely intertwined with participatory urban planning, co-creation and new digital innovations for lay expertise involvement and user-driven innovations for e.g. promoting circular economy. Secondly, we identify the need to analyze the implications of strategic regional plans and structural models to lower level land use planning, such as municipality level strategic planning. This work has been launched by Oulu School of Architecture on February 2016 with a case study in the provincial city of Mikkeli and settlement of Ristiina. Another case study area is the new city of Lahti combining the former city of Lahti and the municipality of Nastola. Analysis of the new villages of Lahti has started in 2015 in Lahti University of Applied Sciences. This work will be followed by a corresponding case study in autumn 2016 in Northern Savo. Concurrently, we aim to chart and compare our findings with Regional Smart Specialization Agendas in the European level.

On the long run, the team of researchers are opting for developing a Regional Resource Optimization and Scalability model, a tool for assessing and optimizing the regional network potentiality. This will create the necessary information base for resource-wise urban planning, and is particularly usable for decision-makers in justifying the development priorities and allocating (scarce) resources. Fostering an integrated strategy, which is balancing economic, infrastructural and human needs, resource-wise urban planning will take widely into consideration different resource networks and their coverage and accessibility. Such strategies do not immediately have to intend to create physical and economic growth, but instead promote local change management linked with local stakeholders and their wellbeing. Ultimately, we seek to understand the paradigm shift from a static to a dynamic perspective in land use planning and regional development.

KEY WORDS

resource-wise urban planning, scalable models, on-demand solutions, urban-rural ecosystem, co-creation