SPATIAL ANALYSIS OF ROAD NETWORK IN MONGOLIA

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Abstract: Mongolia is connected by paved roads from Ulaanbaatar to aimag centers, in the western and central verticals, and from some mining sites to nearby ports as part of joint domestic and international projects and programs. These road networks are not developed in accordance with certain theoretical approaches to the transport network and are not economically viable. For example, the intensity of the road network is declining as we move away from Ulaanbaatar. Therefore, it is important to analyze and evaluate the current road network and identify opportunities for further development. The purpose of this study is to analyze the Mongolian road network based on the methodology of spatial analysis of the transport network and to identify opportunities for further development. The road network has many inefficient connections, transportation costs are high in the western part of the country due to surface roughness, and Ulaanbaatar and its surrounding hubs are more likely to develop, but the further away from Ulaanbaatar, the less likely it is to develop.

Keywords: Network analysis, Road network, Link, Node, Accessibility