Impacts of International Trade and Logistics Industry on Land Use

The progress in logistics industry is highly dependent upon international and domestic trade performance of a city. In the literature various studies deal with economic development and its influence on urban growth and land use. Agglomeration theory and cluster theory try to identify the factors of physical concentration and networking characteristics of an specific industry at regional and local scale. This study deals with logistics industry, its relation with international trade and impacts on urban development. Logistics industry is dependent to certain transport infrastructures (port, highway, railway), investment areas (warehouses, truck terminals, delivery center, transport terminals), social capital (skilled labor), operational capacity (fleet size, sub-contracting companies) and land uses (availability of land, land prices, accessibility).

This study deals with the role of international trade and logistics industry on urban land use formation in Mersin, Turkey. In Turkey, international trade figures show a gradual growth and hence logistics industry is one of the leading activities of regional economy. Logistics industry in Mersin showed remarkable developments both in terms of variety and scale of activities; therefore, it may refer to a distinct category of economic development of the city. In the last decades both domestic and international trade showed notable growth and geographic concentrations of logistics firms and specialized labor are interrelated to dynamics of trade activities. This study investigates spatial distribution and hierarchal classification of logistic centers, terminals and activities in the city. Urban development and land use of the city at eastern edge are mostly dominated by logistics industry. Location strategies and concentration patterns of 64 logistics companies and their relative influence on urban land use are investigated. Location criteria for the companies are: availability of physical infrastructure, logistics service capacity and possibilities of development. Logistics terminals, truck arks and warehouses are concentrated on the eastern part of the city. Compared to other factors, land availability, accessibility to highway are regarded as most significant factors of location. Finally, companies are classified into three groups according to capacity utilization performances, improvement strategies and location preferences. Land use and location of logistics activities are related to firm strategies. Research findings show three strategies: increasing rates of capacity utilization, technology and capacity improvement and new investment.

**Key words:** international trade, logistics, urban land use, location criteria

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