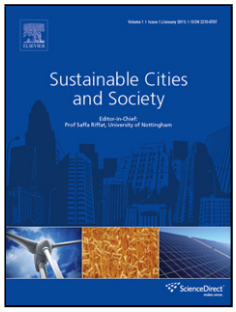

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Sustainable urban freight transport in megacities in emerging markets

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Abstract

Megacities in emerging markets are a relatively new phenomenon. The size of these cities combined with the high growth rates provide substantial sustainability challenges. Urban freight transport (UFT) contributes to these challenges. Despite its relatively low share as part of total traffic, the negative impact of UFT is disproportionate. Improving the sustainability in this context is inevitable in the light of further prospected urbanization. To study this topic, a theoretical framework is developed which is subsequently applied on literature. This allows characterizing the UFT system in a city. Such a framework is currently lacking. The framework is developed around the components of a UFT system (demand, supply and context) and the factors influencing these components. Factors include the different supply chains (demand), vehicles used (supply) and traffic measures (context). It is applied to analyse the UFT system in megacities in emerging markets. Results show that demand in different supply chains is fragmented as well as the transport. Uncontrolled sprawl and the existence of an informal economy further contribute to the complexity to regulate UFT. Based hereupon, we discuss efforts to move to more sustainable UFT in this context.

Keywords: Urban freight transport, Sustainability, Megacities

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