

Harnessing the Economic Power of Data in the Middle East and North Africa project

Thematic Study

Non-Traditional Approaches to Data, Transport and Urban Planning in MENA Region

Overview of Transportation Sector and its Challenges both Globally and in MENA

Global expenditure on transportation systems has been one of the most prominent investments sponsored and advanced by national governments worldwide, however it is important to ask: how efficient, sustainable and socially conscious are these constructions? As Sustainable Transport professor John Whitelegg mentions in his book *Mobility: A New Urban Design and Transport Planning Philosophy for a Sustainable Future*, we have experienced 200 years of growth in mobility which is “fed by eye wateringly large subsidies, a persistent bias in politics and planning for more speed and more distance” but the negative consequences of planning are hardly taken into account. It is thus important to shed light on the gravity of a “global transport crisis”, where 3,000 people are killed on a daily basis in road-traffic accidents and respiratory disease are proliferating at an alarming cause due to the pollution of air from vehicles ([Whitelegg, OpenDemocracy](#)). Nonetheless, as pointed out by the International Association of Public Transport (UITP) in a report on public transport trends published in 2015; “globally, some 1,000 cities of more than 500,000 inhabitants are already facing major mobility problems, due to the near impossibility of providing adequate infrastructure to keep pace with the ever increasing popularity of the private car.”([UITP, 2015](#)). Traffic accidents are also one of the biggest challenges global transport faces; according to WHO, the main cause of death for young people (25-29 Years) is road traffic accidents, especially in developing countries; as “each year up to 50 million people are injured in traffic accidents globally”.

The problems that transportation faces mentioned above are only exacerbated in the context of the MENA region. The transportation sector and its organizational structure is one of the problems that are specifically linked to the MENA region given the growing context of informality of routes, the lack of data concerning the sector and the need for infrastructural reform in the public transport sector. The quality of transportation, specifically public transport needs to be improved in order to increase and promote the right to mobility in different rural and urban cities in the region. In this study, we will be mainly focusing on two MENA countries, Egypt with potential for partners in other MENA countries, it is therefore important to outline the challenges and complications facing the transport sector in these contexts.

Egypt

The Transport sector and its configuration in Egypt are one of the most prominent challenges it is facing, with significant costs incurred due to lack of management on both macro and micro levels. In 2010, a study made by the World Bank has shown that " the annual cost of congestion in the greater metropolitan area amounted to around 50 billion Egyptian pounds a year: 4 per cent of Egypt's entire GDP"(CityMetric).

Furthermore, on an average, "12% of the cost of living for an individual in Cairo is spent on transportation" (Tadamun). As mentioned in an [article](#) by Tadamun titled 'the Right to Public Transportation and Urban Mobility in the Egyptian Constitution; the public transportation system in Egypt fails to address the transportation needs of the city's million residents, given its lack of capacity. In a city like Cairo where only 14% of residents own a private car, there has been a significant neglect of public transportation and the need for it to be "accessible, sustainable and affordable" ([Tadamun](#)). This is a matter, as the article elaborates, that is ignored by public policies over the decades, which therefore leaves "people at the mercy of informal – and sometimes unsafe – forms of transportation that are not monitored or regulated by the state".

Thus, in this context, the need for urban planning becomes crucial in order to prevent railway and road accidents which have become increasingly common in the last decades, such as the famous accident known as "the train of Sa`eed (Upper Egypt)" in 2002, which led to 373 deaths. More recently, the deadliest railway accident being in November 2012 "where a school bus collided with a train killed 69 people, including the 52 students onboard"([Tadamun](#)).

On another note, it is also important for this case study to examine initiatives taken by governments that have failed in providing a solution to accessibility of public transport and congestion. This leads us to looking into 'the Mostafa Nahas Project' that aimed at reducing congestion through the construction of a bus corridor; we will thus assess the reasons behind its failure, which as mentioned did little to reduce congestion but on the contrary might have contributed to it ([Tadamun](#))

Survival Tactics vs. Long Term Solutions

The infrastructural and traffic related complications highlighted above in Egypt have led to the proliferation of data-driven solutions intending to extend mobility and safety to commuters. Whether it is in terms of collecting data in order to avoid congested areas, encourage carpooling, provide public transit options or to avoid "death spots", applications and initiatives in Egypt like Bey2ollak, Raye7 and Transport for Cairo seem to be providing short-term solutions that serve as a survival tactic. However, in this study we aim to explore the role of data in examining the roots of challenges facing the transport sector (traffic management for instance) by taking into play the dynamics of urban planning and pressing need of

infrastructural developments. This is given that, while determining “black spots” and enabling drivers to avoid traffic jams, these main problems need shifts in infrastructural design and planning. The important question to raise is therefore **how could data lead to the development of a long-term structural plan for traffic related problems?**

On the other hand, whether it is a short-term or long term solution, gender as a lens considered for design is a prominent theme and will continue to be so. For instance, data-driven applications serving as mentioned above as a survival tactic like Raye7 have shaped their initiative in a sense that outlines the comfort and safety to women who prefer not to ride with males. Nonetheless, infrastructural planning for metro cars has also been shaped by gender, where Cairo Metro established ‘women only’ cars on the trains to help combat the problem of sexual harassment, which has become endemic ([Tadamun](#)).

Building on this thought, civil society initiatives like Tadamun would be crucial for this cross-country study in the sense of the importance of their urban databases and studies concerning urbanism and right to the city.