Chapter 7 Unveiling the Experience of IZTECH: Critical Overview of GreenMetric Measures

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ABSTRACT

Izmir Institute of Technology (IZTECH), a university campus located in a rural area, establishes a different social and spatial relationship with the city and its immediate surroundings. This chapter focuses on assessing the socio-spatial sustainability of the campus before and during the pandemic, together with the evaluation of UI GreenMetric World University Rankings (GreenMetric). The study has the basis of the content analysis of IZTECH GreenMetric evaluations and a critical review of sustainability issues through questionnaire technique applied to campus users, including administrative, academic staff, and students at IZTECH. The multidimensional survey has been designed to grasp the perspectives of the campus users on the sustainability performance of the campus, and to gather some intangible data on the COVID-19 period and its impacts on the use of campus spaces. In conclusion, this chapter is going to suggest a road map to guide sustainability measures of campuses for more adaptable and resilient solutions under unexpected circumstances.

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INTRODUCTION

In the 21st century, universities and their campuses are conceptualized as 'small cities' due to their size and the impact of campus activities on the environment and society (Alshuwaikhat & Abubakar, 2008). An increasing number of studies conceptualized university settlements as small-scale models of cities, as well as 'living laboratories', where new applications and technologies are tested on issues such as energy efficiency, transportation systems, and waste management (Schewenius et al., 2017; Guerrieri et al. 2019; Ugo and Walter, 2019; Rivera and Savage, 2020). Due to their role in society, they are also considered as places where future generations are prepared for sustainability transformation. In this regard, the role of universities in advancing sustainable development has been widely recognized. As places where universities are spatially embodied, campuses are expected to offer an ideal setting for exploring and practicing sustainability and they are thought to have the capacity to anticipate change through education and practice (Lauder et al., 2015). Today, universities are expected to foster the incorporation of sustainability principles into research and education, as well as into their spatial development. Supporting these processes with comprehensive and participatory campus governance also seems essential.

Since March 2020, the COVID-19 pandemic has affected almost every sector of society, while higher education and campus governance have been radically challenged by the outbreak (Izumi, et al., 2020). As the severity of the pandemic increased, higher education was affected by the epidemic controlling strategies; face-to-face education was closed, education plans were paused, and all face-to-face activities and field studies were postponed. As the situation severely affects the characteristics of campuses as public spaces, it is necessary to rethink their sustainable spatial development. In this respect, it is important to develop sustainable and resilient decision mechanisms into account that is able to face unexpected situations—such as epidemics as natural disasters in campus governance.

In this context, the UI GreenMetric World University Rankings (*GreenMetric*) emerges as a free platform to evaluate the sustainable development performance of universities. Following a measurement based on numerical data on the basic criteria including demographic, educational, physical, and infrastructural assets, *GreenMetric* ranks the universities applied and provides a performance evaluation in terms of sustainability (UI Green Metric, 2021). However, global epidemics, which are thought to seriously affect the public spaces of universities, have not been addressed in the comprehensive sustainability criteria in question. Following this issue, questions such as "how can the resilience of the university be ensured in global epidemics?" and "to what extent can new tools provide a transparent and collective decision-making institutional mechanism?" come to the forefront.

Having focused on the campus experience during the pandemic period, this chapter aims to unveil new approaches in the decision-making mechanisms for the sustainability strategies of universities. Focusing on Izmir Institute of Technology (IZTECH), located in the urban periphery of İzmir, a leading Aegean province in Turkey, the study examines the effect of the current pandemic period on the use of campus space, while targeting to improve both the *GreenMetric* ranking and other global campus sustainability rankings of campuses in terms of uncertain situations such as epidemics. As a campus located in a rural area, IZTECH establishes a different social and spatial relationship with the city and its immediate surroundings. Besides, how this form of relationship has changed with the pandemic and how the publicity of the campuses has been affected will be discussed. In this regard, the study tries to understand the effects of the pandemic on campus space use and to make speculative projections for the future by applying a questionnaire technique to the administrative, academic staff and students working at IZTECH. The research questions are related to participation in activities related to sustainability before

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