

## Chapter 24

# A Smart City Initiative: Urban Greens and Evaluation Method of the Sport and Recreation Potentials (SEM)

**Anna Pawlikowska-Piechotka**  
AWF University, Poland & Warsaw Technical  
University Poland

**Natalia Łukasik**  
AWF University, Poland

**Anna Ostrowska-Tryzno**  
AWF University, Poland

**Karolina Sawicka**  
WSTiJO University, Poland & Royal Wilanów  
Museum, Poland

### ABSTRACT

*This chapter presents theoretical base for the creation of the Smart Evaluation Method (SEM) and an attempt to use this scoring method in practice for measuring environment, sport and recreation potentials of urban greens. A multi-item questionnaire instrument was used to assess selected urban parks: environment quality (air, soil, and water), natural resources (greens, water, and landscape), socio-cultural resources (as public safety), recreation and sport facilities (as children playgrounds, tennis courts, pathways), and park visitor's satisfaction. The survey was carried out in eight selected urban parks in Warsaw and Madrid. With the use of correlation, factor and graphic analysis of their quality, a number of subjective and objective factors which might determine urban greens potentials were identified. They include strong and weak points of the sport and recreation programme of urban parks which were identified. The SEM method was developed with a goal of responding to the challenges of smart city, helping to create sustainable environment and reduce negative consequences of climate change, improve information about public space programme and promote active lifestyle. The knowledge acquired on the base of the SEM innovative scoring method and its outcomes analyse could help to develop smart planning and management of urban greens, enhance the quality of life, provide healthier environment and improve the use of public space.*

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## INTRODUCTION

Due to economic and technological changes caused by globalisation and integration process, cities must meet the challenge of combining both competitiveness and sustainable development. This challenge has an impact on many factors which influence the quality of urban living, such as:

- Housing,
- Economy,
- Culture, and
- Environmental conditions.

Most would agree that sport and recreation possibilities in outdoor areas should be part of important segment of governance the urban greens in the smart city. Urban greens are present in everyday life, valuable for all society members. In European civilization since Ancient Greece, due to the specific advantages of environment, public green areas have been seen as the most favourable grounds for recreation and physical exercises. By modern urban society active recreation and relaxation possibilities in a healthy environment are considered as basic human needs. Hence, searching for places for both practicing favourite sports and passive leisure, most residents of overgrowth and overcrowded cities, choose public green areas, such as:

- Urban parks,
- Pocket gardens,
- Squares,
- Green areas in housing estates,
- Boardwalks over the rivers,
- Coastal beaches.

However, an important prerequisite for the efficient use of outdoor sport and recreation area is the question of social expectations and appropriate resources enabling them to practice favourite sport disciplines. As many scholars underline, the Smart City initiative casted light on the current and future status of urban governance policy. (Albino, 2015; Bakici, 2013; Ching, 2015; Clawson, 2011; Goodspeed, 2014; Lee, 2014; Leysdorff, 2011; Neirotti, 2013; Shelton 2015; Townsed, 2013; Vanolo, 2013, Zygaris, 2013). Albino, Berardi and Dangelico (2015) underline, that the term ‘smart city’ is difficult to be precisely defined as this meaning in the context of urban planning might be very complicated and wide. Furthermore the different metrics of urban sustainability (its smartness) might be used. The crucial role of the high quality environment to improve health conditions of urban residents was reported by many scholars (Bull, 2003; Librett, 2007; Pigram, 2003; Spink, 1999; Stoneham, 1994; Thompson, 2007; Torkildsen, 2007; Vael, 2002; Welch, 1991). Most of these scholars (Thompson 2007, Vael 2002, Welch 1991) highlighted the specific role of urban greens. As one should agree, among other issues, clear information about environment quality and recreation possibilities at outdoor green areas should be the basic right in twenty first century metropolis. Ergo, it seems obvious that use of clear information and communication innovations, important to enhance the rational governance of urban greens, should be a part of Smart City strategy. The authors undertook this research issue, because of very limited – so far – knowledge on the subject. As far as they are neither concerned, neither any similar method has been developed and used in practice nor has been described in the literature.

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