

Editorial

Sustainable Smart Cities and Smart Villages Research: Rethinking Security, Safety, Well-being, and Happiness

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Received: 14 December 2019; Accepted: 23 December 2019; Published: 26 December 2019



Abstract: This Special Issue of Sustainability was devoted to the topic of “Sustainable Smart Cities and Smart Villages Research: Rethinking Security, Safety, Well-being, and Happiness”. It attracted significant attention of scholars, practitioners, and policy-makers from all over the world. Locating themselves at the expanding cross-section of the information systems and policy making research, all papers included in this Special Issue contribute to the debate on the exploitation of advanced information and communication technologies (ICT) for smart applications and computing for smart cities and rural areas research. By promoting a thorough scientific debate on multi-faceted challenges that our villages, cities, urban and rural areas are exposed to today, this Special Issue offers a very useful overview of the most recent developments in the multifaceted and, frequently overlapping, fields of smart cities and smart villages research. A variety of topics including well-being, happiness, security, Open Democracy, Open Government, Smart Education, Smart Innovation, and Migration have been addressed in this Special Issue. In this way they define the direction for future research in both domains.

Keywords: smart cities; smart villages; smart urban applications; data mining; analytics; cloud computing and open source technologies; sustainability; entrepreneurship; economic growth; international migration; forced migration; smart technologies; ICT; open democracy; open government; smart education; smart innovation

1. Introduction: Overview of the Edited Volume

It was a pleasure to have delivered a special issue on smart cities and smart villages research in Spring 2018 (https://www.mdpi.com/journal/sustainability/special_issues/Smart_Cities). Building on our earlier work, drawing from our field research, and driven by a genuine concern about the process and the implications of the rapid depopulation of rural areas, we introduced the concept of ‘smart village’ in the academic debate in Summer 2017 [1]. At the time of the launch of this Special Issue, we were convinced that through the adoption of comprehensive integrative strategies geared toward socio-economic development and employing recent advances in information and communication technology, ways of navigating the challenge of rapid depopulation of urban areas will be identified [2,3]. Indeed, papers included in this Special Issue not only contributed to the opening of new avenues of research, but also triggered a lively debate on diverse aspects of well-being in urban and rural areas as they evolve [4]. The excellent contributions from all over the world included in that Special Issue allowed us to disseminate the latest high quality interdisciplinary research in the domains

of urban computing, smart cities, and, most importantly, smart villages [5]. Thanks to the Special Issue, the concept of smart villages has been firmly established in the academic and practitioners' debate. As significant streamlining of research focus and delineation of the subject matter took place as well, a major breakthrough was attained in the nascent field of smart villages research. To capitalize on that work, today, the imperative is to move to the next stage of the debate.

To this end, the Editors of this volume initiated a new call for contributions that address (but are not limited to) the following issues and aspects related to the diverse aspects of socio-economic processes as they unfold in rural and urban areas and have a bearing on individuals' security, safety, well-being, and happiness:

- Policy-design and policymaking for sustainable development in urban and rural areas
- Public-private partnerships and the development of strategies for sustainable rural and urban development
- The role of multilateral forums, international organizations, and other in streamlining the debate
- The role of the European Union (EU) in the debate on smart villages
- Comparative aspects of smart village and smart city research
- Comparative approaches
- Regional strategies
- Smart city technologies
- Smart village technologies
- Smart services' provision in rural and urban areas
- Revitalization of rural areas through digital and social innovation
- Case-studies
- Conceptual approaches
- Micro-, mezzo-, and macro-strategies, incl. applications, tools, and systems
- Innovation networks in the context of smart village research
- Clusters in the context of smart village research
- Smart specialization in the context of smart village research

After a rigorous review process that took place in 16 months, we finally selected 15 research studies for inclusion to this volume. All of them represent progressive, high quality research that promote the literature in the smart cities and smart villages research. The final selection of papers includes 15 research studies organized in three sections:

1.1. Section A: Sustainable Smart Cities and Smart Villages Research: Foundations

- Lytras, M.; Visvizi, A.; Sarirete, A. Clustering Smart City Services: Perceptions, Expectations, Responses. *Sustainability* **2019**, *11*, 1669.
- Lin, C.; Zhao, G.; Yu, C.; Wu, Y. Smart City Development and Residents' Well-Being. *Sustainability* **2019**, *11*, 676.
- Mora, H.; Pérez-delHoyo, R.; Paredes-Pérez, J.; Mollá-Sirvent, R. Analysis of Social Networking Service Data for Smart Urban Planning. *Sustainability* **2018**, *10*, 4732.

1.2. Section B: Sustainable Smart Cities and Smart Villages Research: Case Studies on Rethinking Security, Safety, Well-Being, and Happiness

- Tillie, N.; Borsboom-van Beurden, J.; Doepel, D.; Aarts, M. Exploring a Stakeholder Based Urban Densification and Greening Agenda for Rotterdam Inner City—Accelerating the Transition to a Liveable Low Carbon City. *Sustainability* **2018**, *10*, 1927.
- Hwang, J.; Park, J.; Lee, S. The Impact of the Comprehensive Rural Village Development Program on Rural Sustainability in Korea. *Sustainability* **2018**, *10*, 2436.

- Rahman, K.; Zhang, D. Analyzing the Level of Accessibility of Public Urban Green Spaces to Different Socially Vulnerable Groups of People. *Sustainability* **2018**, *10*, 3917.
- Alao, B.; Falowo, A.; Chulayo, A.; Muchenje, V. Consumers' Preference and Factors Influencing Offal Consumption in Amathole District Eastern Cape, South Africa. *Sustainability* **2018**, *10*, 3323.
- Lopez, L.; Nicosia, E.; Lois González, R. Sustainable Tourism: A Hidden Theory of the Cinematic Image? A Theoretical and Visual Analysis of the Way of St. James. *Sustainability* **2018**, *10*, 3649.
- Wu, S.; Guo, D.; Wu, Y.; Wu, Y. Future Development of Taiwan's Smart Cities from an Information Security Perspective. *Sustainability* **2018**, *10*, 4520.
- Bednarska-Olejniczak, D.; Olejniczak, J.; Svobodová, L. Towards a Smart and Sustainable City with the Involvement of Public Participation—The Case of Wrocław. *Sustainability* **2019**, *11*, 332.

1.3. Section C: Sustainable Smart Cities and Smart Villages Research: Technical Issues

- Rojek, I.; Studzinski, J. Detection and Localization of Water Leaks in Water Nets Supported by an ICT System with Artificial Intelligence Methods as a Way Forward for Smart Cities. *Sustainability* **2019**, *11*, 518.
- Xu, L.; Chiou, S. A Study on the Public Landscape Order of Xinye Village. *Sustainability* **2019**, *11*, 586.
- Burian, J.; Macků, K.; Zimmermannová, J.; Kočvarová, B. Spatio-Temporal Changes and Dependencies of Land Prices: A Case Study of the City of Olomouc. *Sustainability* **2018**, *10*, 4831.
- Sultana, S.; Kim, H.; Pourebrahim, N.; Karimi, F. Geographical Assessment of Low-Carbon Transportation Modes: A Case Study from a Commuter University. *Sustainability* **2018**, *10*, 2696.
- He, M.; Guan, Z.; Bao, L.; Zhou, Z.; Anisetti, M.; Damiani, E.; Jeon, G. Performance Analysis of a Polling-Based Access Control Combining with the Sleeping Schema in V2I VANETs for Smart Cities. *Sustainability* **2019**, *11*, 503.

2. Conclusions: Contribution of the Edited Volume

The overall collection of research studies provides an integrative discussion for the key issues and challenges related to Smart Cities and Smart Villages Research, and several soft issues associated to this scientific domain including Happiness, Well-being, Security, and Safety. Below, we provide a partial discussion on key findings and ideas communication in this edition:

- The research on Smart Cities and Smart villages requires multi-disciplinary studies: the integration of sophisticated technology enabled services for social services requires better understanding of user clusters and preferences. The perceptions of users and their expectations from the use of smart cities and smart villages services need documentation and in-depth analysis. Various research tools need to be deployed for this purpose and furthermore significant contribution is required on social dashboards for the aggregation and exploitation of visual analytics related to smart cities data.
- Soft issues in Smart Villages and Smart Cities research such as well-being and happiness must be considered as core issues in any smart city development plan. Towards this direction, the measurement with objective metrics for these factors is a key priority for the sustainability of any smart city development plan.
- The evolution of data in the context of smart cities and smart villages and the development of a smart cities data ecosystem requires strategizing of data provision in social networks and advanced exploitation of micro-contents. The aggregation of data in a single, open, cloud-based data warehouse will permit advanced sentiment analysis for updating indexes related to happiness and well-being.
- Various best practices promote the idea and the experience of happiness and well-being in Cities and Villages. For example, the case study on Greening Agendas for Rotterdam Inner City—Accelerating the Transition to a Low Carbon City.

- The Impact of the Comprehensive Rural Village Development Program on Rural Sustainability in Korea is a good lesson for similar initiatives worldwide.
- The key issue of Accessibility of Public Urban Green Spaces to Different Socially Vulnerable Groups of People summarizes another key direction towards sustainable villages and cities and promotes socially aware policy making and actions.
- The integration of location-aware services and the integration of geo-spatial for value adding services for smart cities and smart villages is another key direction for safety, well-being, and happiness.
- The issues of Public Participation and Open Democracy are also recognized as key pillars towards happy cities.
- Several technical issues also add to the rich picture of the phenomenon: Detection and Localization of Water Leaks in Water Nets Supported by an ICT System with Artificial Intelligence Methods as a Way Forward for Smart Cities; Land Prices and Management; Geographical Assessment of Low-Carbon Transportation Modes: A Case Study from a Commuter University.

We are happy for delivering this edited collection in the literature. The promotion of smart cities and smart villages research will be a trend for the next years. The understanding that happiness and wellbeing are key targets of any Smart Cities and Smart Villages strategy is a basic step towards sustainable and social inclusive economic growth.

Author Contributions: All authors contributed equally to this paper. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

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