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# EUROPEAN SPATIAL RESEARCH and POLICY

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**Guest editors: Katarzyna LEŚNIEWSKA-NAPIERAŁA,  
Iwona PIELESIAK, Giancarlo COTELLA**

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## IN MEMORIAM

### KONRAD CZAPIEWSKI (1979–2022)



Konrad Łukasz Czapiewski was born on 24 April 1979 in Warsaw, Poland. He was a human geographer and an associate professor at the Department of Rural Geography and Local Development at the Stanisław Leszczycki Institute of Geography and Spatial Organization, Polish Academy of Sciences. His scientific interests were focused on rural geography (mainly success areas, sustainable development of rural areas, functional structure of rural areas, and local development), socio-economic geography (human capital, education, knowledge transfer, endogenous potential, and intra-regional differentiations), and the methodology of geographical research.

In 2003, he graduated from the Faculty of Geography and Regional Studies at the University of Warsaw, specialising in socio-economic geography. His master's thesis supervised by prof. M. Durydiwka was entitled *Living conditions of rural population in Poland in the period of socio-economic transformation*. In 2010, he defended his doctoral thesis in geographical sciences in the field of economic geography. The thesis was titled *Concept of socio-economic successful rural areas and their identification in the Mazovia Region* and it was supervised by prof. Jerzy Bański. In October 2021, he was awarded the degree of habilitated doctor.



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Konrad Czapiewski, thanks to his scientific and organisational activities, was well known both in the Polish and international fora. He was one of the most active members of the Polish Geographical Society, a national representative of the Association of Geographical Societies in Europe EUGEO; he was known by many and liked in the international geographic community. Since 2003 he has been an active member of the Main Board of the Polish Geographical Society and its Commission for Rural Areas. Since 2019 he has been a member of the Main Board of Committee for Spatial Economy and Regional Planning, Polish Academy of Sciences. In 2013, he became editor-in-chief of *Studia Obszarów Wiejskich* (Rural Studies journal), published by the Polish Geographical Society in cooperation with the Institute of Geography and Spatial Organization, Polish Academy of Sciences. He was a partner leader in the ‘SPOT – Sustainable Spatial Planning of Tourism Destinations’ project.

He published more than 100 scientific publications, participated in nearly 120 conferences (including 25 as a guest or keynote speaker), and was involved in the implementation of 57 research projects (including 10 international).

Konrad was a very good friend to numerous researchers. He was always cheerful and optimistic about life. He talked a lot and beautifully about traveling, which was his greatest passion. Nothing was impossible for him, so he willingly offered advice in many spheres of daily life and work. We will all remember his brilliant comments in ongoing scientific discussions during our meetings. Konrad was a person with an extraordinary geographical sensitivity to the surrounding world, which he was able to observe closely. He died during a trip to Mexico on 25 August 2022.

We have shared dreams, ideas, already started publications, projects, and initiatives that we will have to implement and develop, unfortunately, without his participation.

Rest in peace our dearest Friend!

Konrad Ł. Czapiewski is the author of numerous articles and books, including:

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## PART I

# SUSTAINABLE SPATIAL PLANNING OF TOURISM DESTINATIONS

Guest editors: Katarzyna LEŚNIEWSKA-NAPIERAŁA <sup>\*</sup>,  
Iwona PIELESIAK <sup>\*</sup>, Giancarlo COTELLA <sup>\*\*</sup>

## FOREWORD

### DEFINITIONS AND ASSUMPTIONS

Tourism and its related dynamics and activities are, by definition, a spatial complex of processes that shape landscapes and affect the social, economic, cultural, and political relations that characterise a specific place or territory (Shaw and Williams, 2004). To be sustainable tourism should, through its cross-sectoral

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and multi-scalar nature, contribute to promote economic growth and development, create jobs, spur sustainable agriculture, promote social inclusion, engage excluded people, promote investments in clean energy sources and regeneration, preserve cultural and natural heritage, adopt sustainable consumption and production modes, play a leading role in the global response to climate change, and foster multicultural and interfaith tolerance and understanding (UN-WTO, 2019).

In this light, the essence of sustainable tourism (and, consequently, of any activity aiming at the sustainable spatial planning of tourist destinations) inherently concerns the social and educational value of natural and cultural heritage, which needs to be considered as equally relevant to their potential to produce economic development. More specifically, the sustainable spatial planning of tourist destinations requires the promotion of civic and social responsibility for tourist destinations among decision-makers, policy-makers, and practitioners, as well as among the civil society, market actors, and the research community in its broadest sense. To be sustainable tourism planning needs to be developed as a participatory, inclusive and intercultural activity, in so doing contributing to economic development while keeping in mind the EU's overarching objective of social, economic and territorial cohesion (DE Presidency of the European Union, 2020). Thus, European values of gender and age equality, non-discrimination, promotion of diversity, and counteracting violence and racism should be included, together with more market-oriented logics aiming at the valorisation of tourist destinations, as well as approaches focusing on the protection and conservation of the natural, landscape, and cultural heritage they host on their territory.

While the above assumptions and objectives are largely shared among EU institutions and countries (Leslie, 2010; Estol *et al.*, 2018), in practice the tourism commons frequently experience problems of mismanagement, including a lack of strategic planning, and excessive and inconsistent investments (Briassoulis, 2002). On the contrary, local natural and cultural assets should be investigated thoroughly, individualised and effectively incorporated into a coherent sustainable development project. This applies to prominent works of nature, appreciated elements of tangible and intangible heritage, but also to less obvious objects, which are, therefore, particularly prone to sustain irreversible losses. Those include 'ordinary' heritage, remaining in the background of everyday life – industrial sites, barns, fences, etc. (Pielesiak, 2015). Additionally, on the one hand, appreciation and active participation of the local community in the valorisation and management of said assets is vital, as it enables one to preserve 'a sense of place' more than relying solely on the most promising, though completely external investment visions (Rama, 2012). On the other, investments should serve the purpose of raising local communities' environmental, cultural, social and economic awareness (Leśniewska-Napierała and Napierała, 2017). Hence, a European approach to innovative, sustainable, and inclusive tourism planning should be developed and matched to the objectives of a more sustainable and cohesive Europe that aims at ensuring a prosperous future to all places (DE Presidency of the European Union, 2020).

To add further complexity to this framework, the concept of sustainable spatial planning of tourist destinations implies also that (i) a specific set of institutions and instruments exists, and they are dedicated to sustainable spatial planning, and (ii) these institutions and instruments include, more or less explicitly, tourism and the related dynamics and activities in their scope of action. Although this condition may appear tautological to some, recent comparative studies focusing on spatial governance and planning systems around Europe have shown that it is not necessarily the case, with tourism issues constituting the explicit focus of spatial planning activities only in a few countries or regions, while in all remaining contexts these issues are encompassed by planning activities in an implicit manner at best (ESPON COMPASS, 2018). In these terms, the role of regional and local tourism planning institutions, actions, and practices cannot be overstated, and the same stands true for recent, more innovative yet episodic “smart” tourism spatial planning activities that incorporate the latest technology to effectively manage tourist flows and all the resources that tourist destinations offer (Leśniewska-Napierała *et al.*, 2020).

Considering the above-mentioned issues, it seems clear how any analysis of the spatial planning of tourist destinations should engage with multiple complexities. On the one hand, the characteristics of the overarching regional development multi-level governance framework, and spatial planning systems that characterise the different countries and regions should be considered (Berisha *et al.*, 2021; Cotella *et al.*, 2021). On the other, additional, more nuanced aspects ought to be studied, as the actions of destination management organisations, regional and local authorities, various tourism enterprises, NGOs, and chambers of commerce related to tourism need to be included.

## **RATIONALE AND OBJECTIVE**

Aiming to shed light on how the sustainable spatial planning of tourist destinations is pursued in different countries and regions in Europe and beyond, this special issue brings together the introduced scales of analysis, from the framing of spatial planning activities dedicated to the management and regulation of development dynamics in tourist destinations, to the actual action and interaction of public and private stakeholders on the ground, and the impact that the differential sets of relations between the state, the market, and the civil society that characterise each local context may have on them. This special issue is an outcome of the ERASMUS+ KA2 SPOT – Sustainable Spatial Planning of Tourism Destinations research project that, conducted by a consortium of six education and scientific research institutions, focused on the collection of empirical evidence on how, in different countries and regions of Europe, a heterogeneous set of processes and

actions are in motion aiming at a more sustainable spatial planning of tourist destinations. On the basis of the collected materials, the project aimed to develop an innovative teaching method of sustainable tourism spatial planning and to implement the method within the educational organisations involved in the project. This objective was affected by the larger context of the development of the European paradigm of spatial planning for innovative, sustainable, and inclusive tourism. As the awareness of the need for innovative, sustainable and inclusive tourism spatial planning is expected to increase in the long-term perspective in Europe as well as in other regions of the world, the ambition of the SPOT project team was to develop a set of teaching materials and methods concerning tourism spatial planning that could also provide a contribution in this direction (SPOT. Sustainable Spatial Planning of Tourism Destinations, 2022).

The interdisciplinary approach of the project was ensured by the varied research and educational focus of the consortium partners. Tourism geography and spatial economy are the educational and research fields of the leading project institution – the University of Lodz. Tourism economics and tourism management are the fields of contribution of the Inland Norway University of Applied Sciences. The research and teaching focus of the Mersin University team lies in the field of tourism sciences and city planning, and tourism sciences is also the main focus of The Politécnico de Leiria, with particular attention to coastal areas. Territorial, urban and environmental planning and heritage management are the main scientific and educational interests of the Politecnico di Torino staff involved in the project. Finally, the research fields within the scope of the Institute of Geography and Spatial Organisation of the Polish Academy of Science are mostly related to geography and spatial economy. At the same time, the involvement of partners located in five different countries have ensured access to direct, first-hand information in relation to tourist activities and dynamics, to the policy and planning attempts put in place to influence these dynamics in a more or less explicit way, and to the stakeholders involved in one way or another in the latter. In order to further complement and enrich the disciplinary perspectives and geographical coverage of the special issue beyond those of the SPOT consortium, the special issue has also reached out to the larger academic environment through an open call for proposals, which were then thoroughly assessed by the editors in relation to their quality and pertinence to the scope of the volume.

## **OUTLINE AND CONTENTS**

The special issue consists of a mix of contributions developed by the partner of the SPOT research consortium and of selected papers presented to the attention of the editors following an open call for proposals.

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The volume opens with an article by Sylwia Kaczmarek and Jacek Kaczmarek which approaches the challenges of urban tourism practices through the multiple dimensions that compose the sustainability paradigm, in so doing shedding light on the emerging spatial and social relations that characterise this activity. The authors conclude with a number of critical reflections and recommendations on how to pursue sustainability in urban tourism activities, highlighting the role that interactive education models and a closer relationship between residents and visitors may play. With the aim to further substantiate this introductory content, a multi-author team led by Tomasz Napierała presents the results of a bibliometric analysis focusing on the actual understanding of sustainable tourism within tourism studies, with a particular focus on the contributions published by a recognised scientific journal devoted strictly to the topic, namely the *Journal of Sustainable Tourism*. While rather limited in its scope, the article highlights a number of key theoretical and empirical aspects of contemporary scientific research within the field under investigation.

The next three papers provide the reader with a number of sustainable tourism planning perspectives and practices from the Italian context, highlighting both good practices and challenges, and reflecting on the possible roads ahead. Giancarlo Cotella and Elisabetta Vitale Brovarone reflect on the potentials that tourism offers for the development of remote rural areas, at the same time emphasising the necessity to acknowledge local specificity and to adopt more holistic approaches to tourism development strategies, characterised by a mix of top-down and bottom-up initiatives and by the engagement with multiple scales, actors, and funding sources. Francesca Taormina and Sara Bonini Baraldi provide interesting insights into the relationships between governance and participation in a tourist area, focusing in particular on the empirical experiences of two UNESCO world heritage sites located in the Sicily region. Finally, Vanessa Assumma and her co-authors draw on the exemplary case of the UNESCO Landscape Heritage Area of Langhe-Roero and Monferrato to reveal the undesirable effects of a rapid growth of tourist attractiveness without prior adjustment of the material base to accommodate the increased demand, and reflect on how a multi-level integrated territorial governance framework is crucial for triggering more sustainable development dynamics.

The Norwegian partners of the SPOT consortium, in turn, focused their interest on mountain tourism, and in particular to the (un)sustainable development dynamics that often characterise mountain areas. Even Tjørve and his co-authors first discuss the results of poor planning and implementation of the neoliberal approach to frame land management practices, and the construction of second homes in particular. This thread is developed further in the following contribution, showcasing the existing clashes between the discourses and agendas of the local and national levels, and once more indicating the wicked side of neoliberal planning in terms of a reduced role of the public sector in influencing development and transformations.

The paper from Tomasz Napierała and collaborators shifts the attention to the Polish context, exploring the co-evolution of tourism and industrial sectors. The authors analyse the case study of the Bełchatów industrial district to discuss the co-evolution of tourism and heavy industries, two phenomena that are often seen as mutually exclusive but which, in the context under investigation, have developed a number of synergies that are expected to be further valorised by the introduction of the EU Just Transition Mechanism. The last contribution produced by the SPOT team draws on regional data on tourist arrivals across 297 NUTS2 regions in Europe to explore the spatial concentration of tourist inflow in Europe and the relative position of the tourism economy in the various regions. On that basis, the authors develop a useful regional typology weighting the intensity and spatial concentration of tourist inflow.

The final part of the special section includes three additional contributions developed by scholars that have not been involved in the SPOT project and that approach the issues under investigation from the perspective of their own countries – India, the Netherlands, and Lithuania, respectively. The first of them, authored by Tagore Sai Priya Nunna and Ankhi Banerjee, proposes a quantitative approach to the sustainability of tourism dynamics. More specifically, taking the examples of different tourist destination across the subcontinent (i.e., natural, heritage or religious), the authors assess the sustainability of various types of tourism through the measures of land consumption and efficiency. Peter Nientied and Rudina Toto focus on the sustainable aspects of tourism and planning in Dutch cities, with particular attention to real-world practice. The article is based on an analysis of policy and local council documents and media reporting, visits and (street) interviews, through which it examines the tourism dynamics and reflects upon the policy visions developed in Amsterdam and Rotterdam. Finally, the last paper included in the special issue, authored by Gintarė Pociūtė-Sereikienė *et al.*, proposes a timely reflection on the impact of the COVID-19 pandemic on the tourism sector and the instruments that were appointed to mitigate the pandemic's detrimental effects in the context of Lithuania.

Overall, the collected contributions, far from pretending to constitute a comprehensive account of the policies and actions put in place to enhance the sustainability of tourism and dynamics, provide the reader with an insightful portfolio of case studies and a multi-faceted set of practices, in so doing enabling them to reflect on the institutional and geographical context dependence of the sustainable spatial planning of tourist destinations.

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## INVITED ARTICLES

Sylwia KACZMAREK , Jacek KACZMAREK 

### URBAN SUSTAINABLE TOURISM – REALITY OR UTOPIA?

**Abstract.** The essence of the city's existence is its function of exchange, the subjects of which are products and goods, knowledge, information, capital, impressions, experience, and the participants of this process are residents and newcomers. Tourists in the city's exchange space are part of the newcomer community, interact with residents, share city amenities, but have different needs and expectations than residents, leading to conflict. Based on research conducted in several cities, the article presents critical considerations regarding the concept of sustainable development and sustainable urban tourism, and then proposes a new formula for its planning and implementation focused on education as a trigger for positive action.

**Key words:** city, space of exchange, urban tourism, sustainable urban tourism.

#### 1. INTRODUCTION

From its very onset, cities as a spatial formation have been a meeting place of different groups of people (residents and newcomers) who engage in the exchange of products and goods, knowledge, information, capital, impressions, emotions, and experience.

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The space of exchange as an essence of urban life is culture-bound, its visibility within the structure of different cities across the world is linked with the distribution of architectural objects representing specific functions, existing institutions, urban planning composition, form and arrangement of public space, as well as people's conduct. The history of urban planning explicitly suggests that anything that is urban (space development and organisation, objects, institutions, services and leisure activities, and the possibilities to satisfy various needs) has for ages been attracting newcomers to cities. The latter become integral components of a given urban population even though they often stay in the city for a short period of time and only some of them settle there for longer or decide to live there permanently. An urban community is thus a group made of different people dominated usually by permanent residents (inhabitants), yet other temporary users (newcomers of diverse extraction) play a significant role. The number of both the above-mentioned groups comprising urban communities in different centres across the world and their mutual relations directly impact space organisation, institutional infrastructure, capabilities to meet numerous needs, and the comfort of those who use these spaces. At the same time, we need to note that expectations vis-a-vis resources and the arrangement of the space for exchange, as well as the ways in which both groups (residents and visitors) typically use it, are not always conducive to harmonious coexistence and may generate conflicts.

The global cultural legacy of urban communities represents an unusually rich resource which is tangible and intangible. The presence of original cultural heritage in cities and its cognitive potential are a vital stimulant for urban growth. The future of cities is linked primarily to a gradual intensification of the role played by highly specialised services rendered by the tertiary and quaternary sectors in economic and social urban life. Today, these services dictate the rate of progress, contribute to growth, and improve the space of exchange which, as we have already stated, is the essence of urbanity. In the approach to the growth of cities applied to-date globally, tourism excellently fits into the realm of services typical of the tertiary and quaternary sectors since from the late 20<sup>th</sup> century the scope of the notion has got significantly expanded. The term *tourist* covers all those who travel voluntarily for diverse cognitive reasons without stating precisely whether their trips are motivated by leisure or family purposes. Some see people whose profession entails frequent domestic or international travels as tourists, others use the term to describe those who travel for religious (pilgrimage) or health-related purposes (stays at spas). According to Bauman (1996) the principal division in the postmodern society occurs through the distinguishing of two opposite notions: a *tourist* and a *vagabond*. The former can be described by the following attributes: perfection, being well-organised, detailed planning of subsequent stages of travel but, at the same time, restricted choices of lifestyle and the place of living while the latter is a synonym of complete freedom in this regard. Both above-mentioned categories can be seen among those who visit cities. In addition, behaviour patterns specific of them in the space of exchange differ substantially. In the postmodern society, the hierarchy reflects the

possibility to make independent, unrestricted choices. Thus an unequivocal and precise designation of a modern tourist is far from easy. Hence, the currently applied definition assumes that the notion of *tourism* covers all types of travels linked to temporary short-term displacement of people to specific destinations outside of their domicile or workplace, as well as activities conducted in these destinations. People involved in such displacements generate tourist movement which emerges in geographic space equipped with diverse natural and anthropogenic attractions.

The goal of studies discussed in this work was to identify and examine relationships between the equipment, organisation and functioning of urban space of exchange and the ways in which it is used by tourists (in a broad meaning of the word) and residents striving to arrive at a harmonious coexistence of both groups within a given area. Thus, the research problem can be reduced to the following question: Can we achieve sustainable urban tourism today? What conditions must be met for the formulated planning ideas concerning a rational use of the resources of urban space of exchange to favour harmonious coexistence in it of residents and tourists and bring the expected benefits to both of these groups? The principal aspect of the analysis is: to what extent the organisation/arrangement of the space of exchange, cultural values, and territorial management condition their sustainable use and, by the same token, help minimise conflicts in this space.

Although the concept of sustainable tourism development has been used in science and practice for many years (Kowalczyk, 2010; Zawistowska *et al.*, 2014), many issues remain to be clarified. Relevant comments were formulated in the study *Premises and determinants of sustainability of local tourism development* (Mika, 2014):

[...] Factors and developmental mechanisms presented in the study only indicate a *path* to better understanding of structural processes occurring in tourism. The interweaving of economic, social and cultural phenomena and the involvement of tourist activities in various forms of conflict situations, create a reality I which it is difficult to reach clear solutions and generalizations. Such a situation cannot remain without influence on the scope and direction on geographical studies in tourism, including the formulation of new research of problem and solutions. The functional approach, created and anchored in the theory of geography, based on subject-object relationship between a tourism and geographical space, is no longer a sufficient plane for analyses. The dynamic socio-economic reality in the sphere of tourism calls for the development of theoretical foundations for a *new* functional concept in tourism geography, in which the basic considerations focused around the relationship tourist – tourist space in the context of its utilization will be enriched with content relevant to structures and system interactions, such as: integration (actors, cooperation, partnership networks), interdependence (competition, rooting, global context), or added value (synergy, creative reality) (Mika, 2014, p. 227).

Similar conclusions appear in many publications written by different authors. Saarinen, Rogerson, Hall (2017) have noticed:

[...] Development and planning issues have a long and chequered research history in tourism geographies. Nevertheless, there are transforming research needs and evolving dimensions in geographical studies on tourism development and planning. These new frontiers call for

deeper social and economic theorization with a focus on a broad spectrum of socio-spatial development and planning situations and contexts from peripheries and amenity-rich landscapes to urban and metropolitan environments.” (Saarinen *et al.*, 2017, p. 313).

Returning to the past in this context one can recall Butler’s work from 1999, which features the following statement:

[...] The key problem, in my mind, is the current inability to define to the satisfaction of all, or even most, of the stakeholders in tourism, exactly what is meant by ‘sustainable tourism’. As noted above, this remains a major problem and, because ambiguity exists, almost any form of tourism can, and often is, termed sustainable. Related to this fundamental issue is the question of how sustainability might be monitored and measured if and when a satisfactory definition of sustainable tourism is established and accepted. It is clear that current research in all disciplines involved with tourism has not really tackled the problem of monitoring the effects of tourism in any context. (Butler, 1999, p. 19).

Detailed analyses also searched for appropriate theoretical concepts. In many countries, e.g. France, researchers have tried to show the sense of sustainable development for different places (D’Hautesserre, 1999, 2005). In the analysed examples, the sustainable development of tourism was never a priority. Therefore, consistency was sought between the social, economic and natural spheres in the difficult conditions of a development conflict. Case studies are an extremely popular and fruitful research method for many areas and issues, e.g. social problems in small spaces (Leśniewska-Napierała *et al.*, 2019). After many years of academic discussions and economic activities, the discussion about the foundations of sustainable development continues. There are studies that summarise the last decades of the struggle with sustainable tourism. An interesting study devoted to this issue includes an initial argument:

[...] A conceptual paper published twenty years ago concluded that sustainable tourism development is an unviable objective. Specifically, it argued that environmentally sound tourism development (sustainable tourism) is essential; sustainable development through tourism, however, is unachievable. Despite continuing alignment between tourism and sustainable development in both academic and policy circles, not only have the intervening two decades proved this argument in practice to be correct, but also there is little evidence of a more sustainable tourism sector. This paper, therefore, returns to the theoretical relationship between tourism and sustainable development, considering more recent transformations in understandings of the concept of development as well as contemporary approaches to sustainable development. Highlighting the controversy surrounding the continuing adherence to economic growth in development policy in general and tourism development in particular, it discusses sustainable de-growth as an alternative approach to development and, in the context of increasing concerns over climate change, the specific implications for tourism.” (Sharpley, 2020, p. 1932).

Recently published studies also do not bring any innovative solutions or significant terminological and theoretical solutions. The considerations primarily mention the importance and complexity of sustainable tourism development. Richardson has underlined:

[...] The role of tourism in sustainable development has been studied extensively, and with a variety of perspectives, including the conceptualization of alternative or responsible forms of tourism and the examination of economic, environmental, and social impacts of tourism development. The research has generally concluded that tourism development has contributed to sustainable development in some cases where it is demonstrated to have provided support for biodiversity conservation initiatives and livelihood development strategies. As an economic sector, tourism is considered to be labor intensive, providing opportunities for poor households to enhance their livelihood through the sale of goods and services to foreign tourists.” (Richardson, 2021).

Therefore, we engage in a discussion on social and educational issues related to sustainable development in tourism also regarding the concept of sustainable urban tourism, and then propose a new formula for its planning and implementation.

## 2. DATA SOURCES AND METHODOLOGY

The research during which the empirical material was collected was conducted in two ways. The first consisted in conducting a critical review of the available Polish and foreign literature (published in English and French) on sustainable development, the essence of sustainable urban tourism, as well as presenting ideas with a view to control the number of tourists and plan their behaviour in urban areas. The second part of the data consists of empirical studies focused on the identification of regularities typical of the exchange space and ways in which tourists use this space. The basic data set used comprised *in situ* observations made during the authors’ stay in various places around the world between 2014 and 2019. The visits were conducted as part of the fulfilment of research grants devoted to urban regeneration, ruining and demolition of cities or while on vacation. During the authors’ visits to the cities given as examples in the article, a basic urban inventory of the visited sections of exchange spaces was made, identifying the features of the existing architecture and urban layout, institutional equipment, and the behaviour of people staying in these areas. Photographic documentation of the analysed sections of urban exchange space was also successively developed, and autoethnographic notes were taken. Thus gathered material formed the basis for an analysis of the relationship between how urban space is arranged and how it is used by tourists in the context of the rational use of the existing resources, which brings benefits to both groups of users: residents and visitors. The layout of the text reflects the stages of the analytical procedure. It begins with a discussion of the basic notions of sustainable development and a sustainable city, followed by a description of tourism in urban areas in general and selected examples of cities illustrating the identified types of spatial and social relations. In the conclusion, critical reflections on the concept of sustainable urban tourism are presented, followed by a new formula for its planning and implementation in modern cities.

### 3. SUSTAINABLE DEVELOPMENT

As a concept, sustainable urban tourism makes direct references to the concept of sustainable development, i.e., such an approach to the use of existing resources which, while meeting the needs of contemporary societies, will not limit the development possibilities of future generations. It assumes a parallel development of the economy, society and environment. The term *sustainable development* was first defined in 1987 in the report of the World Commission on Environment and Development entitled *Our Common Future*. The concept of sustainable development in legislative and declarative terms has been specified in two documents adopted in 1992 at the United Nations Conference on Environment and Development in Rio de Janeiro: Declaration on Environment and Development and Agenda 21 (Earth Summit Conference). Reference to the above-mentioned documents can be found in the following paragraph: "According to the World Commission on Environment and Development, which popularized the term in its 1987 report, sustainable development is the *development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*" (The Dictionary of Human Geography, 1994, p. 611).

In the term 'sustainable development', we see two equivalent concepts. The first one is development. The second one comes from the word sustainability and entails an aspect of balance. Although this observation may seem banal, a careful analysis reveals an internal inconsistency in the commonly used notion. Development is sometimes the effect of an impulse, which introduces instability, disturbs the equilibrium. Stability leads to stagnation rather than development. What lies at the heart of the 'marriage' of *development* and *balance*? Undoubtedly, we can assume, on the one hand, that development involves qualitative changes (transition from simpler to more complex forms, more refined in a given respect) leading to a harmonious arrangement of the internal and external space of a place (city, region or territory). In the context of internal space, the living conditions of the inhabitants and the spatial order should be considered. The organisation of the external space of a place is determined by its exogenous functions. The concept of balance, on the other, focuses on the harmony of relationships between elements that have come together to form a given single unit. On this basis we should consider that an equilibrium is a periodic state between destabilisations of the system. This instability is usually an impulse to reach a state of harmonious relations again, but at a higher level of organisation of the space of a place. In this context, the occurring imbalances should be considered a necessary condition for the development of any place. The task of space managers should be to strive to curb the emerging states of unstable relations between the elements that form the spatial whole. On the basis of the considerations presented above, we have come to the conclusion that the core of the concept of sustainable development is the

periodically appearing imbalance. Overcoming instabilities, in turn, should lead to successively higher levels of complexity in organisational territorial systems. Researchers could unravel the mechanisms of these processes by constructing the foundations of ‘spatial civic science’. Their essence would be to engage dynamic social systems to actively respond to periodic instabilities. Recurring periods of equilibrium constitute a time of reproduction, i.e., continuous transformation (renewal) of relations between the elements of a given whole. The state of disequilibrium may be called the time of creation, i.e., the time of constructing a new quality in the organisation of spatial, social, economic, and natural relations in the city. Of course, the instability of spatial systems should not occur too often. Obviously, recurring instability is a developmental impulse and there is no doubt about that, but permanent instability inevitably leads to degradation of a given place. It is worth underlining here that in the hitherto achievements in understanding the meaning of sustainable development, researchers’ attention was usually drawn to the category of balance or sustainability. However, it seems that in urban studies and strategic planning, instability, which generates the need for change, is of key importance. Therefore, we propose to introduce the term ‘creative imbalance’, which covers the phase(s) between ‘relational stability’ or the already-mentioned definitional state of equilibrium. The measure of the efficiency of territorial systems is their ability to regain equilibrium. It is a transitory state, and the goal of development processes is sometimes to overcome growing conflicts and oscillate around some hypothetical stability. Hence the ‘creative imbalance’, which brings the necessary and needed changes. The essence of ‘sustainability’ thus becomes, in the presented approach, ‘imbalance’, which requires intervention in the process of exchange space management and planning of its organisation.

#### **4. SUSTAINABLE CITY**

A sustainable city in a global approach is defined as a settlement unit that is planned and managed considering the social, economic, and environmental contexts for the well-being of the existing population without endangering the ability of future generations to experience the same. The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart there are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries – developed and developing – in a global partnership. They recognise that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change

and working to preserve our oceans and forests. The United Nations' Sustainable Goal 11, which official mission is to "Make cities and human settlements inclusive, safe, resilient and sustainable", recognises the fact that an action in one area affects the outcomes in other areas, and that development must balance social, economic and environmental sustainability.<sup>1</sup> The New Urban Agenda was adopted at the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) in Quito, Ecuador, on 20 October 2016. It was endorsed by the United Nations General Assembly at its sixty-eighth plenary meeting of the seventy-first session on 23 December 2016. The New Urban Agenda represents a shared vision for a better and more sustainable future. If well-planned and well-managed, urbanisation can be a powerful tool for sustainable development for both developing and developed countries.<sup>2</sup>

The above discussed global documents provide a framework for drafting national sustainable development programmes for urban areas anywhere across the world. This aspect is of special relevance to Europe, in particular to EU Member States where over two-thirds of the population live in cities and generate up to 85% of the EU's GDP. In the European Union, cities play a major role in developing innovation and creativity that is later reflected in the Cohesion Policy. The 2014–2020 period put the urban dimension at the very heart of the Cohesion Policy. More than EUR 115 billion of ERDF resources have been invested in urban areas and around EUR 17 billion from the ERDF were directly allocated to integrated strategies for sustainable urban development. More than 900 cities were empowered to implement these integrated strategies for sustainable urban development. Cohesion Policy in the 2021–2027 period will continue investing in all regions and the European Commission has put forward a simpler and more flexible framework to better reflect the reality on the ground.<sup>3</sup> The URBACT programme that has been existed for over 15 years is dedicated to the effective implementation of the assumptions of sustainable urban development in the EU. URBACT is a European exchange and learning programme promoting sustainable urban development, which integrates economic, social, and environmental dimensions. It enables cities to work together to develop new, pragmatic, and sustainable solutions to major urban challenges, reaffirming the key role they play in facing increasingly complex societal changes. URBACT will continue enabling European cities to work together in 2021–2027 through transnational networks, capacity building, and knowledge sharing activities.<sup>4</sup> In 2016 the European Union launched the International Urban Cooperation Programme (IUC) programme to promote international urban cooperation, and decided to launch a second phase in 2021 to extend the programme

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<sup>1</sup> <https://sdgs.un.org/goals> [accessed on: 01.05.2022].

<sup>2</sup> <https://habitat3.org/the-new-urban-agenda/> [accessed on: 01.05.2022].

<sup>3</sup> [https://ec.europa.eu/regional\\_policy/en/policy/themes/urban-development/](https://ec.europa.eu/regional_policy/en/policy/themes/urban-development/) [accessed on: 01.05.2022].

<sup>4</sup> <https://urbact.eu/> [accessed on: 01.05.2022].



to regional authorities and to additional countries. The International Urban and Regional Cooperation Programme entails cooperation on common urban and territorial challenges, with particular attention to green and digital transitions and the inclusive post-pandemic recovery, namely by pairing up EU with non-EU partner cities or regions in order to share knowledge and best practices. Cities and regions will cooperate in three thematic networks: the ecological transition and green deal; urban and regional renewal and social cohesion; and innovative sustainable and carbon-neutral ecosystems and strategic sectors.

In view of the above-mentioned global documents and programmes, sustainable urban development is an extremely capacious term, combining many elements describing the well-being of inhabitants, respect for and protection of the existing anthropogenic and natural resources and considering actions leading to environmental protection and the minimisation of unfavourable phenomena in the field of climate and environmental protection. It should be noted, however, that there are no more precise indications in the available materials concerning the parameters describing the city in the stage of sustainable development and indications as to how this state can be achieved in practice. The general nature of the statements formulated in the discussed documents and programmes undoubtedly causes many difficulties in their practical implementation. The reason for that may be a rather trivial conclusion that each city is different due to its location, history, population, economic performance, cultural context in which it operates, and other factors identifying it. Despite the fact that in many cases we group cities according to accepted criteria, it is difficult to formulate a universal procedure enabling efficient and most of all effective delivery of sustainable development policy goals and, above all, setting concrete parameters that this policy is supposed to achieve.

## **5. TOURISM AND SUSTAINABILITY IN URBAN AREAS**

Cities are nowadays becoming an increasingly important destination in world tourism. Some, such as Paris, Rome or London, have always attracted differently motivated groups of visitors, but in others tourism was not treated as an important economic activity (Law, 1993). Visiting cities is a complex, multi-faceted manifestation of tourism that changes rapidly over time. Classical, traditional urban tourism activities of visiting historical sites, viewing monuments or participating in religious and cultural events occurred only in those few centres with adequate resource potential, while other cities remained virtually uninteresting to large numbers of visitors. Travelling to cities was in the past also integrally connected with the class division of society. A particular manifestation of the tourist use of cities in the nineteenth century was the custom at that time for the wealthy inhabitants

of northern and western Europe to spend winters on the Mediterranean coast. Aristocrats and representatives of the English or Russian bourgeoisie would move for a few months to cities such as Nice, Cannes or Menton. Their presence stimulated the development of service, housing and communication infrastructures appropriate to the needs of this social group and shaped the organisation of urban space in a way that was not always fully controlled. Until the emergence of mass tourism in Europe and other industrialised and economically developed regions of the world after the Second World War, the proportion of visitors to permanent residents in cities was rather fairly balanced, with only some locations experiencing imbalances due to the number of visitors. Contemporary urban tourism, as one of the most dynamically developing fields of economy since the mid-1980s, is above all changing rapidly, becoming an important component of the functional structure of cities and is commonly perceived as a new opportunity for their development. The rapidly growing mobility of people, development of communication, and facilitation of movement intensify tourist use of cities with diversification of forms. Stays in cities are usually short (the so-called 'short breaks'), lasting 2–3 days, up to a week, and their programme includes, apart from cognitive (sightseeing) or educational elements, an equally important group of behaviours, such as shopping and entertainment. Motivations for spending a weekend in a city are, therefore, very often of a primarily entertainment and pleasure nature. To satisfy such needs, e.g. shopping (often of luxury goods), participation in entertainment events (theatre performances, cinemas, concerts, clubs), it does not require particular natural or landscape values, resources of historically or architectonically valuable objects, but rather a well-organised and interestingly designed urban space located mainly in the centre, but not only, also in other parts of cities. In the highly developed countries of the world, for several decades we have witnessed a consistent relocation of the industry outside the inner-city area with simultaneous stimulation of the development of services, which nowadays provide new jobs in cities. The development of inner-city post-industrial areas takes place through revitalisation, i.e., a sequence of planned actions aiming at the economic recovery and transformation of the spatial structure of degraded areas by locating broadly understood services there (administration, science, banks, insurance agencies, culture, art, education, and leisure). New service facilities emerging in the revitalised urban space are to a large extent 'open', and their purpose is universal access and ease of use. This group includes shops, shopping complexes, museums, exhibition halls, cultural centres (cinemas, theatres, concert halls), and sports facilities (swimming pools, gyms, etc.). An important element in the revitalisation of post-industrial areas is the preservation of their spatial identity treated as historical heritage. The adaptation of former industrial sites to the needs of visitors takes a variety of forms. The object of exhibition – visiting may be both buildings – factory halls preserving their original function (manufacturing), and technical and communication equipment (railway lines, viaducts, pumping stations, canals, sluices, etc.).

Another way of presenting industrial heritage is through adaptation, i.e., using factory buildings for new functions, attractive to visitors. A post-industrial area becomes a place for leisure activities, attractive and desirable, which definitely changes its image and perception. The new image of the city with post-industrial areas treated as a tourist attraction is identified by an increasingly large group of recipients, which is perfectly confirmed by British examples (London, Manchester, Glasgow and others). At this point it is important to address the aspect of cities as tourist attractions. A city is a concentration of humans within a compact, better or worse organised spatial structure. It is characterised above all by a considerable concentration of services in a relatively limited, easily accessible (by public transport) space. This gives the people arriving and living there the opportunity to relatively easily satisfy their higher order needs in the field of culture, entertainment, science or the widely understood cognition. The element of interest can be not only the ‘equipment’ of the city, but its material substance itself (buildings, streets, squares, and urban composition) and its history, as well as the events that took place there or the history of the people connected with it. Thus the motivations which bring ‘visitors’ to cities differ, as does the way in which they spend their time there. This diversity depends above all on the size of the city and its geographical location and thus the cultural heritage of which it is a product. The great diversity of urban exchange spaces and their ambiguity attracts groups of visitors who are guided by many kinds of motivations. We can, therefore, assume that contemporary urban tourism is made of a set of relations between the local community (the natives) living permanently and the group of newcomers using them temporarily. Although the former is permanently integrated with the city, while the latter visit it only temporarily, both groups exert significant impact on the image of the city.

Contemporary urban tourism is a series of very diverse activities including: getting to know objects, gaining knowledge, entertainment, shopping, cultural activities, artistic events, and visiting places commemorating important local, regional or even global events or persons. Cities with a well-developed, rich programme of services become attractive tourist destinations for different groups of people visiting them for what are assumed to be short stays of a few days. Too many tourists travelling and visiting cities are not really motivated by any special interest in particular historical epochs and characteristic architectural monuments. People come to these places because they know that this is what others do, because seeing them is part of a certain ‘pattern’, an item that must be ‘ticked off’ because it is typical of the country or region. At the same time they use the attractions that are available in each city (hotels, restaurants, shops) just to nicely spend some of their free time. Tourist stays in cities are usually perceived as a positive economic factor, increasing the income of entrepreneurs and stimulating development of the local economy. The analyses emphasise the financial inflows generated directly by participants of tourist traffic, consolidation of a favourable

image – of the destination city recognised by visitors. A positive image among tourists also influences the interest of investors who are willing to locate their new undertakings in places frequented and recognised by numerous potential and actual receivers and products. However, is intensive tourist traffic always a benefit for the city in which it occurs? Research on the spatial and social consequences of tourism have shown repeatedly the negative effects of intensive tourist use of historical places, sometimes even threatening further existence of valuable objects, leading to gradual degradation of existing cultural heritage resources. Venice or Acropolis in Athens, urban sites visited every year by millions of tourists, are excellent examples of the degradation of valuable historic urban tissue. Another aspect of the constant presence of a large group of tourists in the urban exchange space is the existing conflicts between visitors and residents. The latter regard the numerous visitors as intruders who disturb their rhythm of life. Negative elements such as congestion, noise, pollution, undesirable behaviour such as alcohol abuse or acts of violence and crime, increased the prices of goods and services due to increased demand as a consequence of the presence of a large group of visitors, often with relatively large financial resources, are particularly indicated here. These negative consequences of the presence of a large number of visitors often lead to conflicts with local residents, which generate among them resentment or even aggression towards tourists, an excellent example of which is Barcelona, a city repeatedly cited in the literature as an example of degradation of material resources and social conflicts caused by mass tourism (Koens *et al.*, 2018, 2019; Ashworth and Page, 2011; Lane, 2008; Maxim, 2015; Sustainability, 2014, Special Issue: 'Reframing Sustainable Tourism'; Sustainability, 2014, Special Issue: 'Planning, Development and Management of Sustainable City'; Sustainability, 2019, Special Issue: 'Sustainable Urban Tourism').

Sustainable tourism is defined by the UN Environment Program and the UN World Tourism Organization as “tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities.”<sup>5</sup> The generality of the definition is clearly visible when we try to use it in relation to urban tourism in order to formulate precise guidelines for a practical urban management policy on its basis. Therefore, when analysing documents and scientific publications approaching the discussed issue both from the theoretical and practical points of view, we can find above all references to the issue of rubbish and other pollution, rational energy management, and actions aimed at limiting climate changes, as well as a postulate to create urban tourism that would be inclusive, sustainable, ensuring the well-being of inhabitants and protecting the existing cultural resources. Unfortunately, the proposed guidance for (desirable) conduct lacks not only practical indications as to how it is to be implemented but also contains no concrete measures

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<sup>5</sup> <https://www.unep.org/>, <https://www.unwto.org/> [accessed on: 01.05.2022].

that would make it possible to decide whether the desired status has been achieved in a given settlement unit. This approach is excellently illustrated by the Porto Declaration signed on 9 July 2021. The representatives of the cities of Athens, Braga, Brussels, Bruges, Budapest, Dubrovnik, Florence, Ouagadougou, Podgorica, Porto, Prague, Rome, Samarkand, São Vicente, Skiathos, Tirana and Venice; of the Ministry of State, Economy and Digital Transition of Portugal, UN-Habitat, the European Committee of the Regions, the Unión Ciudades Capitales Iberoamericanas, Expedia, CLIA Europe, Must Travel & Tech and Airbnb met in Porto, Portugal, on 9 July 2021 on the occasion of the UNWTO Mayors Forum for Sustainable Urban Tourism.<sup>6</sup> The main mission of the document mentioned above is “to establish target goals on the umbrella objective of attaining a sustainable urban tourism. The world representatives of local government committed to work towards the establishment of an inclusive and more sustainable tourism sector in the cities’ agendas, while fostering job and wealth creation, social inclusion and cultural preservation. Moreover, the Mayors that gathered in Porto also committed to ensure that urban tourism policies are aligned with the New Urban Agenda and the 2030 Agenda, especially as regards the objective of making cities more resilient, inclusive, safe and sustainable.”<sup>7</sup>

## 6. EXAMPLES OF CONTEXTS IN STRIVING TO ACHIEVE GLOBAL SUSTAINABLE TOURISM

As it has been shown, sustainable urban tourism is a desirable condition which has not been precisely defined. In this part of our deliberations we will present cases of selected cities analysed *in situ*, where we can observe positive effects, which, however, not always resulted from planned activities and occurred due to local conditions and cultural traditions. The examples chosen are the European city of Porto (Portugal), the North American city of Toronto (Canada) and the Caribbean city of Havana (Cuba). Each of them has a different geographical location, history, size, urban layout, functional structure, and population; they also find themselves in different political, social, and cultural contexts and have different resources that are their tourist assets. Detailed *in situ* studies were conducted in selected cities in the following periods: in Havana during two week-long holiday stays (2014, 2015), in Porto during a week-long study stay (2017) under a research grant from the National Science Centre allocated for studies on urban regeneration

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<sup>6</sup> <https://www.porto.pt/en/news/world-mayors-sign-the-porto-declaration-on-tourism-and-the-future-of-cities> [accessed on: 02.05.2022].

<sup>7</sup> <https://www.porto.pt/en/news/world-mayors-sign-the-porto-declaration-on-tourism-and-the-future-of-cities> [accessed on: 02.05.2022].

and demolition in European cities, and in Toronto (2018) where the authors spent a week of their holiday trip to Canada. The aforementioned research resulted in articles, published in Polish and English in scientific journals and in a book (Kaczmarek, S., 2018, 2019, 2020; Kaczmarek, J., 2020; Kaczmarek and Kaczmarek, 2015, 2021), to which references are made in this paper. The selected publications deal with the issue of urban regeneration and demolition in the studied cities, varieties of urban tourism occurring there, however, they do not directly address the problem of sustainable tourism, which is why we refer again to these three examples. They illustrate the complexity of planning and implementing sustainable urban tourism, especially at the social level.

### **6.1. Havana (Cuba)**

The capital city of Cuba, Havana, like many Caribbean cities, is visited by large numbers of tourists, who started arriving here in the 1920s. The main advantages of the Caribbean region, and, therefore, of the island in question, are the following: an intermediate climate between tropical and subtropical, with minor differences in temperature throughout the year (the highest average recorded in August approx. 28.7°C and the lowest approx. 21°C in January) and a lot of sunshine, lush vegetation, vast sandy beaches, but also interesting architecture (especially in the capital city) from different periods (colonial times and later). In the city we can also find many entertainment facilities (casinos, music and dance clubs, discos, theatres, and concert halls), which since the 1930s have been the main motivation attracting people to Havana, mainly American and Canadian tourists. The significant number of North American tourists was the reason why new Vedado district was constructed in Havana designed on a grid plan structure typical of American cities and intended to host facilities targeting tourists (hotels, restaurants, and entertainment venues). The prestigious character of this zone was emphasised by numerous elegant villas and multi-storey apartment buildings erected in the Art Déco style, for the wealthy representatives of Cuban society (Kaczmarek, 2018).

Urban tourism in Havana has gone through different phases, above all as a consequence of the political and social changes that occurred after the Second World War. After the outbreak of the Cuban Revolution in 1958 under the leadership of Fidel Castro, which introduced a communist regime in the country, the economy (industry, agriculture, and services) got under the control of the government. Those who opposed the new rule gradually left the island. As a result of the government policy striving to build a system of social justice in the meaning of the communist ideology, the influx of visitors to Cuba was stopped practically leading to the elimination of any tourist traffic, which, in turn, produced a gradual degradation of the existing structures. The stagnation of the tourist function in Cuba and especially in the city lasted until 1994, i.e., over 35 years (Henthorne, 2018). An

important moment for bringing Havana's urban space back to tourist use came in 1982 when the zone of the old colonial city, which was built in the 16th century (Habana Vieja), was included in the UNESCO World Heritage List. At that time, a new socio-economic policy was introduced, which viewed tourism as a source of additional income to the national budget. The measures adopted at this stage (financed by the state budget and foreign funds) resulted in the creation of a zone in the centre of the capital city almost entirely devoid of permanent residents (they were resettled to other areas of the city), whose users became tourists (Reynolds and Wolfe, 2000).

In the case of Havana, we can observe a particular interest of tourists in its demolished quarters, which are seen as a peculiarity and a kind of tourist asset, an original feature of the substance of the city, consistently perpetuated in the popular, widespread perception also thanks to nostalgic feature films and documentaries. Thus, in Havana we can observe clearly 'two worlds' using the urban space of exchange: the inhabitants, who struggle with the still annoying lack of products and services necessary for everyday life, and the tourists, who move along completely different trajectories, live in good or even luxurious hotels, eat in expensive restaurants, visit different parts of the city looking for entertainment and unusual experiences, especially willing to penetrate degraded sites, which they consider to be a special and unique value of this city. In addition, both groups are linked through economic relations, as the inhabitants often run private enterprises (brought back to life several years ago) providing tourist services (food, accommodation, transport, and production of souvenirs). Nevertheless, there are still some ethical doubts, especially in the social context of sustainable tourism: is it moral to consider a degraded city and the very poor living conditions of its inhabitants the elements of a tourist asset? (Kaczmarek, J., 2020; Kaczmarek, S., 2018). An attempt to solve this undoubtedly difficult issue was made in the new policy designed to transform areas adapted for tourists that was launched at the end of the first decade of the 21st century by city and national authorities. Revitalisation projects conducted in Havana since 2008 have targeted equally residents and tourists, as evidenced by the programme for the new use of the former port waterfront and the active involvement of local communities in its implementation. This balanced approach is also confirmed by the way in which the urban public space in this zone has been arranged, with a very clear emphasis on the historical heritage of the post-industrial area as a fraction of the history of the city and its inhabitants. Thus we can assume that the presented new approach to the shaping of the urban exchange space bears the signs of sustainable tourism at the social level, above all because it assumes the harmonious coexistence of both groups of users where previously we could observe a clear domination of visitors as the zones of the city which they visited (especially their development and service facilities) were subordinated to the needs and requirements of tourists.

## 6.2. Toronto (Canada)

Situated in the province of Ontario, Toronto was founded in 1793 by the British, on the site of the French defensive settlement of Fort Rouille (which existed between 1750 and 1759) and as a result of the Franco-British War abandoned by the founders. The British are, therefore, the authors of the spatial and functional concept of the city, which developed as a dynamic economic centre using a regular, rectangular grid layout of streets, where similar-sized quarters were filled in the 19th century with brick buildings of several storeys. It was not until 1834 that the name Toronto (derived from the aboriginal language of the region) became the official name of the city. In the 19th century, the city grew rapidly by dint of the presence of a port, a railway line connecting different areas of the country, and many industrial plants of various industries employing a large number of immigrants from Europe. Today, it is the strongest economic centre of the country, with the largest population in Canada. In 2016, 2.732 million residents were registered there (National Census of Canada, 2016) while the metropolitan area was inhabited by 6.472 million people. The population is made up of more than 200 ethnic groups speaking around 140 languages, making the place unique globally, for which reason the United Nations awarded Toronto the title of *World's Most Multicultural City* in 2001. The economic potential fuels a vibrant cultural life, which in turn stimulates the influx of visitors. In 2018, Toronto reported a total of over 27.5 million visitors of whom 9.5 million stayed overnight in the city while the remaining approximately 18.1 million were one-day visitors. Urban tourism resources in Toronto are typical of the offerings that modern, dynamic, large cities offer to tourists (theatre performances, music shows, festivals, museum exhibitions, art galleries, shopping, restaurants, entertainment, etc.) An important category of resources is the extremely diverse and original modern architecture of public buildings designed by outstanding, famous, internationally recognised architects of the 20th and 21st centuries, including Mies van der Rohe, Daniel Libeskind, Frank Gehry, and Will Asop. A separate category of tourist resources in Toronto are post-industrial areas of the former port on Lake Ontario, where the revitalisation process has been conducted successfully (Distillery District area). As a result, this area underwent a spectacular functional and spatial transformation, one of the deepest in the city. It became a European-style walking district full of restaurants, cafes, boutiques, and galleries, which offers many attractions to residents and visitors. The city welcomed approx. 27.5 million tourists in 2018, which means more than 10 visitors per a permanent resident, making Toronto the leading destination in Canada (Kaczmarek, S., 2020). Inevitably, residents and visitors simultaneously use the same institutions and facilities that make up the exchange space in this city, but, notably, it all happens without generating conflicts. The explanation to this smooth coexistence should be sought in the behavioural pattern of the Canadian society and the peculiarities of the spatial structure of the



city. The population of contemporary Canada is predominantly of immigrant origin. The indigenous inhabitants of these areas constitute today only about 4.9% of the country's total population. Thus, Canadians are newcomers, often first generation. According to data for the period 2000–2019, about 390,000 migrants from all over the world settled here each year. The migration policy of the country has been in place for many decades and the main characteristics of the Canadian society is multi-ethnicity and multiculturalism. Thus, there is a general acceptance of diversity among people and a lack of negative attitudes towards newcomers. Tourists as temporary strangers are treated with sympathy not only by those who manage space but also in everyday contacts with the representatives of local communities who are hospitable and open to interpersonal relations. It is, therefore, possible to conclude, in the light of the presented findings, that a set of specific characteristics such as: social approval for diversity and the presence of newcomers, a rational urban tourism policy and the characteristics of the organisation of the urban exchange space in Toronto result in the harmonious coexistence of newcomers and inhabitants, which is the most essential attribute of sustainable tourism.

### **6.3. Porto (Portugal)**

The city of Porto with approx. 240,000 inhabitants located on 41 sq km is situated on the hills of the north bank of the estuary of the Duoro River, which flows into the Atlantic here. Its valley stretching east-west hosts an important agricultural region of the Iberian peninsula, where the tradition of wine production dates back to the Roman times. On the south bank of the river, facing Porto, lies the city of Villa Nova de Gaia with about 320,000 inhabitants living in an area of about 170 square kilometres, widely known as the location of the cellars producing, collecting and selling port wine, a beverage characteristic of the region and unique in the world. According to 2019 figures, Portugal was visited by some 27.9 million foreign tourists, of which more than 3 million came to the northern region, visiting the cities of Porto and Villa Nova de Gaia during their stay. The central area of Porto, with the bridge over the Duoro and the monastery of Serra do Pilar, was included in the UNESCO World Heritage List in 1996 as a unique urban landscape with a 2000-year history, where we find architectural monuments from different eras. A particularly picturesque part of this protected urban landscape is the waterfront development zone, the Ribeira district, whose unrestricted, irregular spatial layout dates back to the Middle Ages. Situated on a fairly steep slope marking the river valley, it is a unique element in the urban space due to its narrow, winding streets, many of which take the form of stairs, and the multi-storey, structurally fragmented buildings, often centuries old, located on narrow, irregular plots. The architectural, urban and social specificity of the historic centre of Porto and the legal restrictions that were in place in Portugal for several decades, freezing rents

in order to protect tenants' rights, favoured degradation and destruction that can commonly be observed in this housing substance. In order to counteract the demolition of inner-city zones, a problem which is common in Portugal, the central authorities (government and the parliament) decided unanimously in the early 21st century to adopt a programme for their regeneration as one of the priorities of state policy. The Urban Revitalisation Association created in Porto in 2004 was called Porto Vivo, the area of its jurisdiction corresponds to the areas that needed remedial action, amounts to 1,000 ha, and is thus the largest urban revitalised area in the country. It is also worth remembering that among the users of Porto's central zone, besides the city's inhabitants, visitors, especially tourists are a very large group (Kaczmarek, S., 2019).

The extensive demolition zone in Oporto, which undergoes regeneration as a UNESCO World Heritage Site, is a very important tourist asset. Thus, another aspect that requires detailed consideration is the relationship between the cultural value that the demolished area represents currently and the impact on it of the proposed transformation. The demolished area is now commonly perceived as authentic material evidence of cultural heritage, documenting the passage of time and the history of the place. It is, therefore, necessary to consider the following complex issue: to what extent is it acceptable to transform what has been recognised as an asset common to all mankind? Will a modern, revitalised spatial and functional structure, filled with new or significantly modernised buildings which will provide better conditions for the people living in it, also be as important as before as a tourist attraction for visitors to the city? This aspect, too, cannot be ignored in assessing the relationship between regeneration and demolition in Porto, since tourism-related income is a very important component of its budget (Kaczmarek, S., 2019). For we are dealing here, as has been shown, with a paradox consisting of the following sequence of links: demolition triggers revitalisation, which in turn should be conducted in such a way that the demolished substance subjected to it does not lose its originality and uniqueness, resulting from the fact that it is dilapidated ('picturesque ruins', inhabited and used) which at the same time constitutes its unique qualities for tourists visiting the city. This raises very difficult questions: is it at all possible to conducted such a revitalisation? What will a sustainable approach to tourism entail in this particular situation at the social level? The solution to this situation for space managers and decision-makers is neither easy nor clear-cut. The identified paradox of demolition and revitalisation taking place in the most interesting and valuable historical and landscape parts of this city viewed in the context of tourism does not make the situation any easier. Understanding sustainability in this location only as rational energy consumption, reduction of pollution, etc. fails to eliminate the potential of social conflicts between residents and visitors.

These examples confirm the complexity of planning and delivering sustainable tourism in cities. The effectiveness of its programming depends on many

tangible and intangible factors. Each city is different due to its location, origins, history, urban layout and architecture, spatial and functional structure, and, above all, the composition and characteristics of its population. The examples discussed above show that planning and effective delivery of sustainable urban tourism is an exceptionally contextual process, and that sometimes it is impossible to achieve the desired situation where the well-being of residents and the satisfaction of tourists coexist harmoniously.

## 7. COCLUSION: EDUCATION AS THE NEW APPROACH TO URBAN SUSTAINABLE TOURISM

The approach presented here sees planning as a form of managing the future of an area. In light of this argument, can we conclude that planning and implementing sustainable urban tourism patterns are indeed possible – or is it utopia, which seems to be a perfect yet unachievable state? The history of cities around the world clearly shows that in an exchange space the dynamics of change is more important than the stability achieved. Sustainability is desirable, but not sufficient to create development challenges. Tourists can also be agents of destabilisation, but in certain situations and stages of development tourists also help to achieve sustainability. They become significant agents in bringing order to the organisation of the space of the visited places. This is the reason why we need ‘social understanding’ instead of proliferating ‘greedy egoism.’ Perhaps the concept of ‘citizen science’ rooted in the reworking of previous debates on sustainable development is worth incorporating into spatial thinking. No doubt we seek to achieve a kind of *equilibrium* between economy, society and nature. Typically, the debates raise issues of pollution, waste management, cities filled with concrete structures, carbon footprint, excessive economic growth, etc. However, issues concerning internal relations in the social environment that are linked to economic development programmes and guidelines are discussed to a much smaller extent. Typically, living conditions and social discrimination come first. In this approach it is commonly assumed that sustainable development should minimise social differentiation. In the last few decades, however, it has been difficult to observe significant progress in equalising living standards around the world. St Matthew’s Syndrome is still going strong, i.e., the rich are getting richer and the poor have fewer and fewer resources at their disposal. Under these circumstances, the paradigm of sustainable development should be reconsidered, but from the perspective of social relations and *asset* management policies. A return to the ‘geography of morality’ left on the margins of scientific research (Smith, 2000; Kaczmarek and Kaczmarek, 2011) would not be out of place. Morality treated as a social relation should be

a significant thread in research and concrete practical solutions for social aspects of sustainable development. Special attention should be paid to social inequality in cities. Urban spaces like a lens focus the problems of the quality of the life of modern humans in urban areas. However, social relations of goodness are marginalised. Better spaces are occupied by economically and politically privileged groups. However, the concept of social justice in urban areas is still a fiction. So, it is worth the effort to make sure that recommendations for the segregation of waste are balanced by a dialogue about social segregation and its effects. The 'social waste' that should be eliminated includes hatred, greed, selfishness, terrorism, etc. There is, therefore, an urgent need to find ways to bring about a state of social equilibrium based on relationships of goodness. In formulating the problem of our deliberations, we posed the question: is it likely that the principles of sustainable development will be respected in contemporary urban tourism? Let us take a closer look at the relationship between city dwellers and tourists. In recent years the ghost of *overtourism* has circulated around the world. Overtourism is crushing many destinations. Successful territorial marketing is becoming a curse for tourist space managers around the world. Residents of tourist towns look around for quiet, idyllic places to live. But let us look with the cool eye of the researcher at the disruption of the social balance in urban tourist spaces. It will be necessary at this point to recall the definition of tourism commonly used in social sciences proposed by K. Przeclawski - "... all spatial mobility phenomena associated with voluntary, and temporary, change of place of residence, rhythm and environment of individual life, and entering into a personal encounter with the visited environment (be it natural, cultural or social)" (Kowalczyk, 2014, p. 10). In the definition, the concept of encounter plays a key role. For we are dealing with the encounter of two cultures, i.e., the culture of the visitors and the culture of the residents. In this aspect, the problem of balance in tourist spaces manifests itself. Bearing in mind Przeclawski's suggestions, we should analyse the number and quality of this "entry into personal contact."

We can, however, turn towards a more revolutionary thinking. Abundance should be of secondary importance. The 'quality' of incoming tourists and the value of the relationship between visitors and residents should come first. The problems of sustainable tourism in cities should not be attributed to excessive numbers of incoming tourists. First of all, we need to improve the behaviour patterns and attitudes of not only the visitors, but also the hosts. We should not administratively restrict the volume of tourist traffic. It is a human right to be able to travel freely around the world. Thanks to modern communication and transport technologies, we are overcoming the barriers of time and space. The world has become accessible, and travelling is also an authentic source of knowledge; it enriches us, refines our perception of the world. Thanks to travelling, contemporary humans better understand the culture of the visited places. The encounter of cultures mentioned by Przeclawski undoubtedly carries educational values. The one who gains is the

local community. Not only does it receive income for the tourist services provided but it also enriches its understanding of the world embodied by the visitors. In turn, tourists may experience a different everyday life and may acquire a valuable perspective on the surrounding reality. The presented features of a tourist encounter of cultures are conditioned by the quality of personal and social capital, which shapes mutual relations of both parties. A lack of adequate educational resources shallows and trivialises the sense of meetings in tourist spaces of cities. Tourists are often treated as not very smart individuals with fat wallets. They are a source of above-standard income from the tourist services. The quality of these services is of marginal importance. Similar behaviour can be observed among tourists who exhibit neo-colonial attitudes and feel like conquerors rather than partners of the communities they visit. According to the authors, the attitudes presented above result from the lack of appropriate preparation for travelling.

In order for the meeting in urban and non-urban spaces to have a deeper meaning and be treated as sustainable tourism we need a well thought out and well-conducted education aimed at tourists as well as inhabitants. Both sides should learn the principles of a partnership meeting taking place in a shared space. Then there is hope that sustainable urban tourism is possible and not just a pipe dream. The pre-condition for the meeting of cultures is the presence of well-educated and well prepared newcomers and residents of the visited places. The meeting of cultures becomes real in hospitable spaces, the creation of which depends on the hosts and the visitors. Both groups should consequently learn tolerance, acceptance of differences, showing empathy, and at the same time patience. This is not an easy process, but rather a challenge for both city managers and tourism organisers, the media, schools, and universities. Education aimed at different age groups, properly prepared and delivered, is a way to mitigate imbalances, and it can make planning and implementing sustainable urban tourism feasible in any location.

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## SUSTAINABILITY OF STUDIES ON SUSTAINABLE TOURISM: A BIBLIOMETRIC APPROACH

**Abstract.** The core values of sustainability should be emphasised: economic development, social inclusion, equity as well as diversity, and environmental protection. Those values should be reflected in various characteristics of studies on sustainable tourism. And this is the question we ask in our paper: are the studies of sustainable tourism sustainable? To address that question, we applied a bibliometric analysis of papers published within the last ten years in the *Journal of Sustainable Tourism*, the most influential scientific journal strictly focused on sustainable tourism issues. The analysis has revealed some doubts related to financial support for the research presented in the papers published,

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open access to the investigated articles, the differentiation of scientific disciplines whose achievements are presented, the expected methodological triangulation applied in the investigated papers, spatial volatility of case study areas in empirical works presented in the journal and, finally, the Anglo-American domination in the discourse on sustainable tourism.

**Key words:** sustainability of science, sustainable tourism, bibliometric analysis, tourism research, Journal of Sustainable Tourism.

## 1. INTRODUCTION

The modern understanding of sustainable development was introduced by the United Nations (1987) in the Report of the World Commission on Environment and Development called “Our Common Future.” It stated that sustainable development “meets the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations, 1987: 24). In 2015, a plan of action for the world in a 2030 perspective, “The 2030 Agenda for Sustainable Development” (United Nations, 2015), was adopted by the United Nations to trigger actions towards environmental protection, social inclusion and reduction of poverty, and economic prosperity.

The first definition of sustainable tourism was given by the World Tourism Organisation in 1996. According to the definition, sustainable tourism manages all areas in such a way that economic, social, and ecological needs are met along with cultural integration, environmental processes, protection of biodiversity, and supporting the development of society, in relation to the concept of sustainable development. It is concluded that sustainable tourism is also a process that considers the needs of current tourists, as well as the needs of future generations of travellers (UNWTO, 2018).

The core values of sustainability include economic development, social inclusion and equity, environmental protection (Fleurbaey *et al.*, 2014; Williams and Millington, 2004), and both biological and cultural diversity considered in parallel (McNeely, 2005). We assume that all these values should be reflected in various characteristics of studies on sustainable tourism, namely: financial support for the research, open access to articles presenting its achievements, differentiation of scientific disciplines involved, methodological triangulation applied, as well as the spatial volatility of case study areas in empirical studies.

The modern understanding of the core values of sustainability has reshaped the relations between nature and the social and economic activities of people. Nature rights require no justification and lead to the rejection of anthropocentrism (Williams and Millington, 2004). As thus, in terms of sustainable tourism studies, the need for an increase of interest in natural sciences in tourism research should be emphasised. Sustainable tourism should no longer be an exclusive domain of social sciences. As we see the need for a cooperative approach when discussing equity as the core value of sustainable development (Fleurbaey *et al.*, 2014),

a similar argument should be raised in the discussion on the issue of publishing the results of sustainable tourism studies. Journals are expected not only to be more open to authors representing various countries, but mostly to stimulate contributions from different research traditions. The goal of equity is to assure legitimacy of sustainable development (Brown and Corbera, 2003). A similar outcome is expected in studies on sustainable tourism.

The expected epistemological and sociocultural changes in sustainable tourism studies should occur over time and be influenced by the increasing contribution of non-Anglo-American research traditions. Through the discussion in this paper we wish to address both authors and readers of scientific papers presenting the results of sustainable tourism studies. However, the main expected audience includes the management and publishers of tourism journals, as well as agencies funding research on sustainable tourism.

This paper is organised as follows. First, we discuss the expected change in sustainable tourism studies. The following section considers bibliometric studies in sustainable tourism research. Then, the methods applied in this study are described. The following section presents the results of the research and a discussion on the contemporary issues of sustainable tourism studies. The paper ends with conclusions.

## **2. EXPECTED CHANGE IN SUSTAINABLE TOURISM STUDIES**

From the moral point of view, tourism studies must go far beyond the simple questions about tourism phenomena, their determinants and consequences. Tourism studies, especially those dealing with sustainable tourism, are expected to contribute to the development of tourism, which is demanded from the perspective of both nature and human relations (Caton, 2012). The way we discuss the tourism research traditions we follow, and the ethics of tourism research we accept, are extremely significant from the perspective of future tourism in general, not just future tourism studies. It constitutes the responsibility of tourism scholars, research institutions, including research-financing institutions, as well as the responsibility of tourism scientific journals, which is the main focus of this paper.

Sustainable tourism is criticised as promoting particular behaviours and practices only, with no substantial discussion on the moral and ethical justification for those behaviours and practices, especially those receiving significant critique in practice (Caton, 2012). First, the definition of sustainable development does not reject capitalist mainstream fundamentals when suggesting economic growth as a goal of economic development. As Williams and Millington have suggested (2004), the concept of sustainability is weakened by both human-centred and growth-oriented approaches, and the consideration of nature as an economic asset. Such an understanding of

sustainability does not create a need for a radical change. Thus, the focus of sustainable tourism is, by definition, still on economic growth as well. It corresponds to the fact that sustainable tourism originated in the Anglo-American tradition and then was localised into various national contexts (Bao *et al.*, 2019).

It is argued that only the diversity of research traditions, methods applied, geographical contexts of research conducted, as well as the interdisciplinary approach, lead to an increase of contributions from tourism studies to solve the issues resulting from the dominance of neoliberal capitalism in tourism economies, namely: poverty, social and spatial inequalities, immigration, consumerism, degradation of bio and geodiversity, climate change, etc. (Causevic *et al.*, 2018). Significant risks related to the domination of Anglo-American traditions in research on tourism have been already identified. The preference for just one, neoliberal ideology should be emphasised (Butowski *et al.*, 2021). The mentioned focus of the 'sustainability' concept on economic growth is a direct result of that Anglo-American domination. This affects the discourse on sustainable tourism as well. In this study we hypothesise that the increasing contribution from non-Anglo-American traditions to trigger the investigated changes in research financing, open access, diversity of fields of studies, methods applied, research areas, and spatial scale of studies is expected.

Research-financing agencies are expected to understand the problem of Anglo-American dominance in the scientific discourse. Thus, national financial support for conducting research and publishing papers in open access should become a priority in non-Anglo-American countries. However, the problem of attracting research funding appears complicated in the world of commercialised academia. On the one hand, an increase in the financial support for studies on sustainable tourism seems promising, as research-financing agencies become aware of sustainable development goals for tourism. On the other, though, that commercialised approach to research might result in a decrease of ethics and quality of research granted, including delivering results expected by financing agencies or time pressure (Harvey, 2020).

Liburd (2012) indicated the subscription-based model of publishing scientific papers as unsustainable, be it in tourism research or other scientific fields of study. She has argued that the rapid increase of knowledge results in substantial increase of papers published. Compared to fixed financial resources of libraries subscribing to scientific databases, the model increases social inequalities of various stakeholders of the knowledge shared through the papers published while tourism research, like any other field of study, is expected to be sustainable and contribute socially, culturally, environmentally, and economically to the community, rather than raise profits for the owners of or shareholders in the industry and more prosperous academic centres (Chopin, 2018). As thus, open-access models of publishing research should be prioritised as much more sustainable. This is meant to make everyone able to use, enhance or challenge the knowledge we have (Liburd, 2012).

Unlike other industries, tourism research is relatively rarely funded by the industry or public agencies (Vaugeois *et al.*, 2017). Tourism studies typically have ex-

tremely limited financial resources, which makes them, or rather the agents offering them, important selectors of research projects, determining orientations, techniques, methodologies, etc. The tourist sector has a serious problem with trustworthy research and data, due to inadequate financial assistance. Richins (2000) has argued that local authorities can deal with development and tourism challenges when they make choices involving professional advice and research, which require funding.

Iaquinto (2018) complained that quantitative methods have dominated empirical tourism studies for most of its history. Fortunately, in the last decade, an increase in the variety of methodologies can be seen. This is the consequence of the fact that tourism is identified as a complex social phenomenon, and as thus it may be explored by the application of mixed methods (Molina-Azorín and Font, 2016). A mixed-method approach enables researchers to study various dimensions of the same research problem, and enrich the results (Hesse-Biber, 2010). However, methodological triangulation is still less popular than the mono-method approach (Iaquinto, 2018).

The increasing focus on top-ranked scientific journals, followed by limited opportunities to publish in those journals, lead to decreasing the impact of authors representing non-mainstream traditions (Causevic *et al.*, 2018; Poria *et al.*, 2015; Tokić and Tokić, 2015). It leads to a lock-in situation where only the contributions from a limited number of researchers representing the most influential scientific traditions, investigating selected issues in particular geographical contexts matter the most. Consequently, the loss of 'locality' is increasingly probable. An in-depth understanding of social, cultural, economic, and political realities rooted in places or regions becomes nearly impossible (Bao *et al.*, 2019). Higgins-Desbiolles (2022) promotes the 'truth-telling agenda' in tourism research. She argues against the ideas of imperialism and supremacy to support the values of sustainability. This kind of research approach refers to a better understanding of different stories embedded in various places. As thus, the sustainability of tourism research requires spatial volatility of research areas and a differentiation of geographical contexts.

### 3. BIBLIOMETRIC STUDIES IN SUSTAINABLE TOURISM RESEARCH

The bibliometric analysis has become an effective tool for understanding the key research topics in tourism studies (Lima Santos *et al.*, 2020). As Ruhanen *et al.* (2015) have noticed, we can observe the evolution in theoretical and methodological approaches, as well as the subjects and themes employed in the subfield of sustainable tourism research. The research in the field of sustainable tourism with the use of bibliometric analysis is gaining supporters and is discussed in the literature on a large scale (Table 1).

Table 1. Selected research on sustainable tourism using bibliometric analysis

Authors	Data sources	Main conclusions
Hasana et al. (2022)	Scopus	<ul style="list-style-type: none"> <li>• <i>Journal of Sustainable Tourism, Journal of Ecotourism, Sustainability, Tourism Management, Environmental Management, Wit Transactions on Ecology and the Environment, and International Journal of Sustainable Development and World Ecology</i> are the leading journals in the field of ecotourism.</li> <li>• In terms of the authors' collaboration, there were no associations among developing countries.</li> </ul>
Niñerola et al. (2019)	Scopus	<ul style="list-style-type: none"> <li>• The literature related to sustainability issues in the field of tourism is significantly growing.</li> <li>• In terms of documents and citations, the United States is the leading country in research on sustainable tourism.</li> <li>• Sustainability is widely evidenced as a strategic approach for companies and tourist destinations.</li> </ul>
Ruhanen et al. (2015)	Annals of Tourism Research; Journal of Travel Research; Journal of Sustainable Tourism; Tourism Management	<ul style="list-style-type: none"> <li>• While the theoretical and methodological approaches appear to have matured over time, the subjects and themes in sustainable tourism research have remained constant, with some exceptions.</li> </ul>
Garrigos-Simon et al. (2018)	Web of Science	<ul style="list-style-type: none"> <li>• The leading journals in sustainable tourism are <i>Journal of Sustainable Tourism, Sustainability, and Tourism Management</i>.</li> <li>• 'Sustainability', 'tourism', 'sustainable tourism', 'sustainable development', 'ecotourism', and 'climate change' are the most frequent keywords in terms of sustainable tourism research.</li> <li>• The co-citation network indicates the existence of 4 groups of journals: journals oriented on the management of organisations, journals mainly associated with the analysis and management of destinations, journals with mainly environmental/ecological orientation, and journals associated with a geographical perspective.</li> </ul>
Liu and Li (2020)	Science Citation Index (SCI); Social Science Citation Index (SSCI); Arts & Humanities Citation Index (A&HCI); Index to Scientific & Technical Proceedings (ISTP)	<ul style="list-style-type: none"> <li>• The United States was an important contributor to ecotourism literature with the highest proportion of single country-authored publications and the largest number of publications of first authors, as well as co-authors' affiliation.</li> </ul>

Authors	Data sources	Main conclusions
Liu and Li (2020)	Science Citation Index (SCI); Social Science Citation Index (SSCI); Arts & Humanities Citation Index (A&HCI); Index to Scientific & Technical Proceedings (ISTP)	<ul style="list-style-type: none"> <li>• The research perspective changed from ecotourism resources to management and subsequently expanded to multi-stakeholders' involvement, showing that the study of ecotourism tended to be more specific.</li> <li>• Sustainable tourism was the main goal of ecotourism, which was reflected in the consistency between the ecotourism research and the aim and principles of sustainable tourism.</li> </ul>
León-Gómez <i>et al.</i> (2021)	Web of Science	<ul style="list-style-type: none"> <li>• The studies dedicated to sustainable tourism development and economic growth are increasing in quantity and quality, however, they are still not highly influential.</li> </ul>
Cavalcante <i>et al.</i> (2021)	Web of Science	<ul style="list-style-type: none"> <li>• 'Sustainability' and 'sustainable development' are the keywords most used to refer to tourism studies on sustainability. However, notions like 'perceived sustainability' were incorporated into the recent mainstream discourse on sustainable tourism.</li> <li>• Sustainable tourism is considered mainly by marketing studies on consumer behaviour variables, such as satisfaction, perceived image, experience, loyalty, and behavioural intentions.</li> </ul>
Della Corte <i>et al.</i> (2019)	Web of Science	<ul style="list-style-type: none"> <li>• The period between 2015 and 2019 was the most productive time in the field of sustainable tourism, especially topics connected with eco-tourism, community involvement, and environmental issues. Moreover, a wider emphasis on marketing was given in that period.</li> <li>• Sustainable tourism was also considered in specific contexts, such as hospitality or environmental conservation and preservation.</li> <li>• <i>Journal of Sustainable Tourism</i> had the highest number of published articles on sustainable tourism research.</li> </ul>
Khanra <i>et al.</i> (2021)	Annals of Tourism Research; Journal of Travel Research; Tourism Management; International Journal of Contemporary Hospitality Management; International Journal of Hospitality Management; Journal of Sustainable Tourism	<ul style="list-style-type: none"> <li>• Identification of 4 thematic areas of research relating to sustainable tourism: ecological preservation of tourist destinations, protection of residents' interests in tourist destinations, the carbon footprint of tourist mobility, and tourists' attitudes and behaviour toward sustainability.</li> <li>• Sustainable tourism and ecotourism were the most often used keywords.</li> </ul>

Source: own work.

The main research problems of bibliometric studies on sustainability and tourism are: a) the identification of the most popular topics and research problems (Davidescu *et al.*, 2022; Iqbal *et al.*, 2022; Khanra *et al.*, 2021; León-Gómez *et al.*, 2021; Serrano *et al.*, 2019; Singh *et al.*, 2022; Trip *et al.*, 2021); b) the geographical volatility of studies (Garrigos-Simon *et al.*, 2018; León-Gómez *et al.*, 2021; Shasha *et al.*, 2020); c) the geographical distribution of authors (Jiménez-García *et al.*, 2020; Pahrudin *et al.*, 2022; Sánchez-Cañizares *et al.*, 2018); and d) the changes in the number of articles related to sustainable tourism over time (Mihalic *et al.*, 2021; Seguí-Amortegui *et al.*, 2019). There is definitely a lack of bibliometric studies on the moral and ethical issues of research on sustainable tourism. The additional purpose of this study is to fill the diagnosed research niche.

The conducted bibliometric research on sustainable tourism is largely based on the Web of Science (Franceschini *et al.*, 2016; Jiménez-García *et al.*, 2020; León-Gómez *et al.*, 2021; Pahrudin *et al.*, 2022; Rosato *et al.*, 2021; Serrano *et al.*, 2019; Trip *et al.*, 2021) or Scopus (Hasana *et al.*, 2022; Iqbal *et al.*, 2022; Niñerola *et al.*, 2019; Yoopetch and Nimsai, 2019). The analyses of detailed databases or individual journals are less frequent (Khanra *et al.*, 2021; Liu and Li, 2020). The most popular software used for bibliometric analysis are *VOSviewer* (Iqbal *et al.*, 2022; Khanra *et al.*, 2021) and *R-package bibliometrix* (Della Corte *et al.*, 2019; Pahrudin *et al.*, 2022).

#### 4. DATA SOURCES AND METHODS

This study aims to identify whether the expected epistemological and socio-cultural changes in sustainable tourism studies occur over time and are influenced by the contribution of non-Anglo-American research traditions. Changes that signify the evolution of a research field are complex processes. As thus, applying only two determinants (time and non-Anglo-American research traditions) constitute the main limitation of this research. These changes include: an increase of financial support for research on sustainable tourism, an increase of open access to articles presenting the achievements of the research, a progressive differentiation of scientific disciplines involved in the research, development and popularisation of methodological triangulation applied in the research, and the increase of the volatility of case study areas in empirical studies.

To address the mentioned goal, a bibliometric analysis of empirical papers published in the *Journal of Sustainable Tourism* was conducted. The journal was selected deliberately, based on conclusions from previous studies indicating the *Journal of Sustainable Tourism* as the most prestigious and impactful



compared to other journals discussing the issues of sustainable tourism (Della Corte *et al.*, 2019; Hasana *et al.*, 2022). 710 research articles were published in the period between 2012 and 2021, along with 16 editorial notes and 174 theoretical papers. The focus on empirical articles is in line with the findings of Ruhanen *et al.* (2015). They show that theoretical and methodological approaches, as well as the subjects and themes studied in the subfield of sustainable tourism research, have evolved over time, with a clear shift away from definitional and conceptual reviews towards empirically-driven theory testing and development.

All the data was collected manually as metadata available in popular databases like the Web of Science or Scopus were not sufficient from the perspective of the study objective. The introduction sections of the investigated papers, as well as acknowledgements and notes on funding were reviewed to identify whether the studies were financially supported or not (see Fig. 1). Information on open access was presented directly on the journal's website (see Fig. 2). Methodological sections were investigated to identify the main field of study according to the OECD classification (see Fig. 3), methods applied (see Fig. 4), the countries of research areas (see Fig. 5), and the spatial scale of research (see Fig. 6). To address the issues resulting from Anglo-American dominance in the discourse on sustainable tourism, data on first authors' countries of affiliation was collected (see Fig. 7). According to Butowski *et al.* (2021), the Anglo-American affiliation was defined for all institutions located in countries with English as the official language, namely Australia, Canada, Ireland, New Zealand, United Kingdom, and the United States. A double-check procedure was applied to avoid issues resulting from possible errors in manual review and classification.

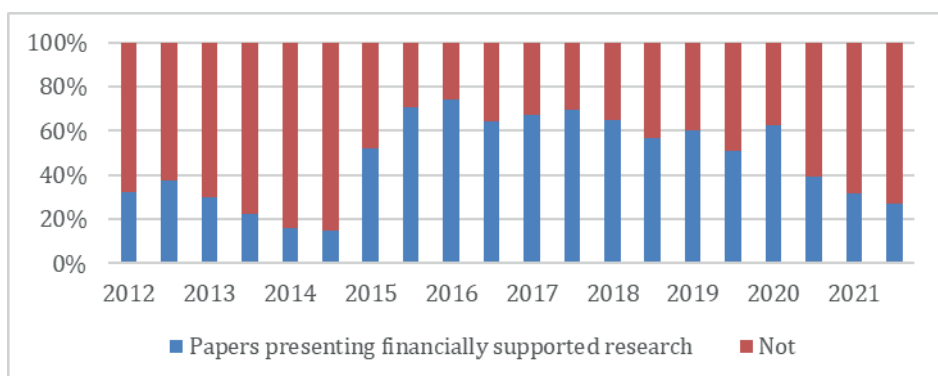


Fig. 1. Financial support for the research presented in papers published in the *Journal of Sustainable Tourism* in the years 2012–2021

Source: own work based on data retrieved from the *Journal of Sustainable Tourism*.

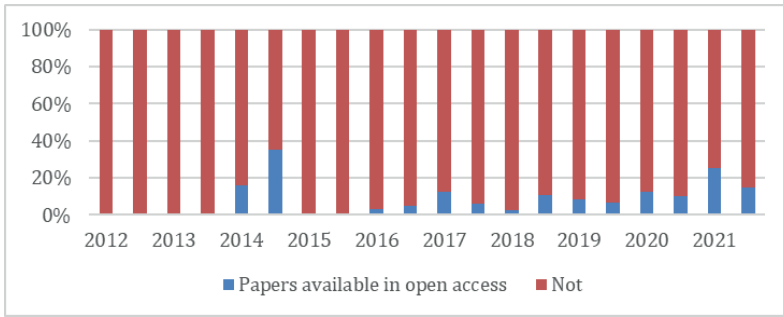


Fig. 2. Open access to papers published in the *Journal of Sustainable Tourism* in the years 2012–2021  
Source: own work based on data retrieved from the *Journal of Sustainable Tourism*.

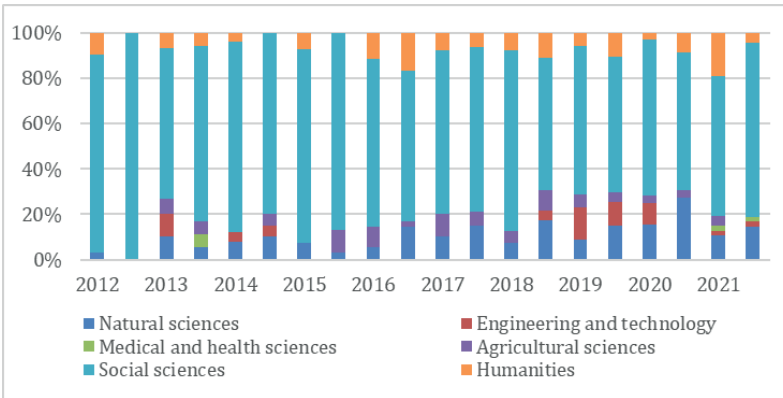


Fig. 3. OECD's fields of study of papers published in the *Journal of Sustainable Tourism* in the years 2012–2021  
Source: own work based on data retrieved from the *Journal of Sustainable Tourism*.

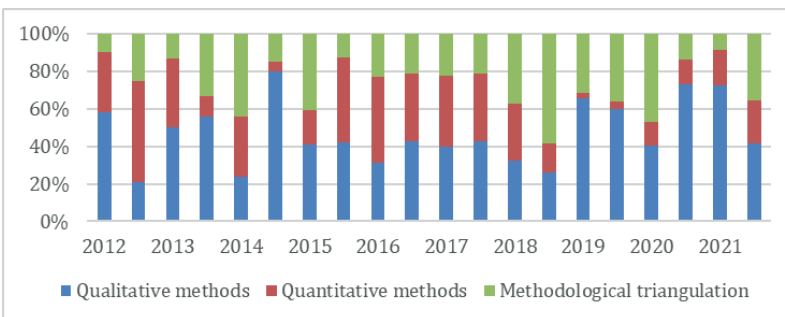


Fig. 4. Methods applied in papers published in the *Journal of Sustainable Tourism* in the years 2012–2021  
Source: own work based on data retrieved from the *Journal of Sustainable Tourism*.

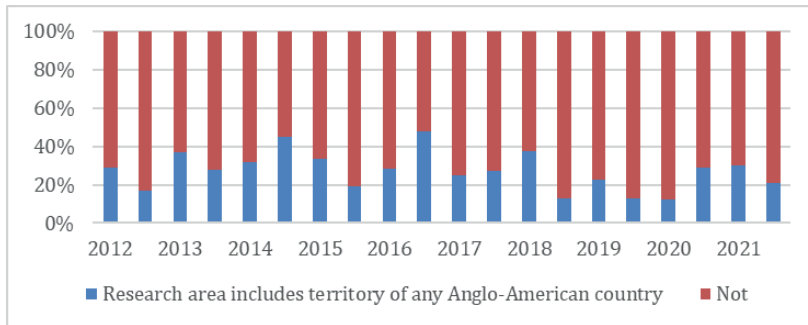


Fig. 5. Case study area of research presented in papers published in the *Journal of Sustainable Tourism* in the years 2012–2021

Source: own work based on data retrieved from the *Journal of Sustainable Tourism*.

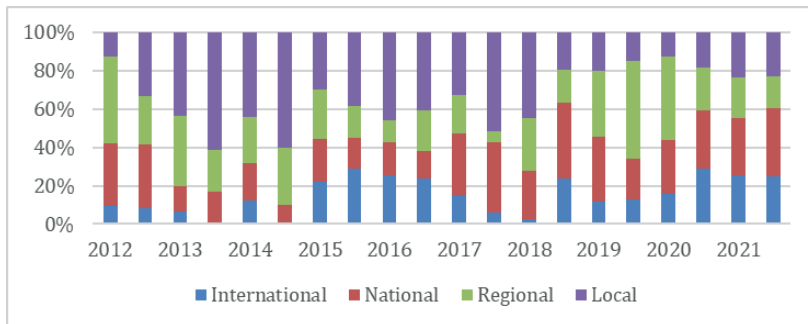


Fig. 6. Geographical scale of the research presented in papers published in the *Journal of Sustainable Tourism* in the years 2012–2021

Source: own work based on data retrieved from the *Journal of Sustainable Tourism*.

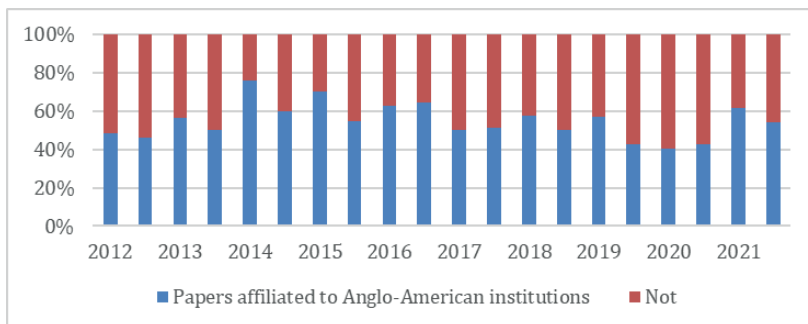


Fig. 7. Affiliation of the first authors of papers published in the *Journal of Sustainable Tourism* in the years 2012–2021

Source: own work based on data retrieved from the *Journal of Sustainable Tourism*.

To address the goal of the study, six linear models were estimated. The following variables were considered separately as dependent ones: the percentage of articles presenting financially supported research, the percentage of publications in open access, the relative standard deviation of the distribution of scientific fields, the relative standard deviation of the distribution of the methods applied, the percentage of studies in Anglo-American territories, and the relative standard deviation of the distribution of the spatial scale of research. The values of the variables were calculated for each six months of the period between the years 2012 and 2021. The time and share of papers whose first authors were not affiliated with Anglo-American countries were considered as independent variables in each estimated linear model.

## **5. CONTEMPORARY CHANGES OF SUSTAINABLE TOURISM STUDIES: RESULTS AND DISCUSSION**

The question of this study is whether the expected epistemological and sociocultural changes in sustainable tourism studies occur over time and are influenced by the contribution of non-Anglo-American research traditions. We hypothesised that both time and an increase of the number of non-Anglo-American contributions should trigger an increase of the following variables: the percentage of articles presenting financially supported research, and the percentage of publications in open access, while the following dependent variables were expected to decrease: the relative standard deviation of the distribution of scientific fields, the relative standard deviation of the distribution of methods applied, the percentage of studies on Anglo-American territories, and relative standard deviation of the distribution of the spatial scale of research (see Table 3).

Significant changes over time occurred in three out of six investigated dependent variables (see Tables 2 and 3), namely those describing the increase in open access, more equal interest of various scientific disciplines in sustainable tourism (the lower the relative standard deviation of a distribution, the better), and a more equal distribution of the spatial scale of research (neither local, regional, national, nor international studies were neglected). However, the scale of these changes over time, although statistically significant, was small. Despite the critique of the subscription-based model of publishing (Liburd, 2012) which is applied by the publisher of the *Journal of Sustainable Tourism*, increasing authors' interest in open access across time should be emphasised. This seems promising in terms of the future equality of access to knowledge disseminated through the investigated journal.

Table 2. Linear models estimating the impact of time and non-Anglo-American research traditions on the expected changes of sustainable tourism studies in the years 2012–2021

Dependent variable	Intercept	Time (semi-annual)	Share of papers whose first authors are not affiliated to Anglo-American countries
The percentage of articles presenting financially supported research	0.3043 (0.229)	0.0088 (0.008)	0.1692 (0.510)
The percentage of publications in open access	0.1388 (0.101)	* 0.0072 (0.004)	-0.2860 (0.225)
Relative standard deviation of the distribution of scientific fields	*** 1.9271 (0.257)	*** -0.0303 (0.009)	-0.0752 (0.572)
Relative standard deviation of the distribution of methods applied	0.1437 (0.290)	0.0027 (0.010)	0.6723 (0.646)
The percentage of studies in Anglo-American territories	*** 0.5747 (0.094)	-0.0031 (0.003)	** -0.5919 (0.210)
Relative standard deviation of the distribution of spatial scale of research	0.3812 (0.240)	** -0.0192 (0.008)	0.6437 (0.535)

Source: own work based on data retrieved from the *Journal of Sustainable Tourism*. Standard errors in parentheses. Codes of statistical significance: 0.00 ‘\*\*\*’ 0.01 ‘\*\*’ 0.05 ‘\*’ 0.10

This research confirmed the expected increase of interest from different scientific fields. This is in line with Laws and Scott’s (2015) findings who have stressed that tourism as a research field is a mosaic of the interests of various disciplines. Although the evidenced change is in accordance with the expected one, it must be said that both science and education on tourism are still mainly embedded in business and management (Laws and Scott, 2015). Both disciplines are parts of social sciences. However, Xiao *et al.* (2011) have suggested that tourism research conducted in the field of geography and environmental studies is characterised by the largest potential for multidisciplinary, and includes the achievements of not only geography and environmental studies, but also such disciplines as psychology, sociology, political science, behavioural science, economics, econometrics, statistics, business, marketing, management, methodology, humanities, etc.

Interestingly, the influence of the expected changes triggered by the contribution of non-Anglo-American traditions were evidenced only in the increasing volatility of the case study areas in empirical studies (decreasing percentage of studies in Anglo-American territories). This is in line with the postulates from

Higgins-Desbiolles (2022) who suggested increasing the differentiation of geographical contexts and research areas towards more sustainable tourism studies facing the issues of imperialism and supremacy of the Anglo-American tradition. The situation of grant-financed research on sustainable tourism and methodological approach did not significantly change over time, or under the influence of non-Anglo-American traditions.

Table 3. Expected and evidenced changes of sustainable tourism studies in the years 2012–2021

Dependent variable	Changes over time		Impact of non-Anglo-American traditions	
	Expected	Evidenced	Expected	Evidenced
The percentage of articles presenting financially supported research	+	N/s	+	N/s
The percentage of publications in open access	+	+	+	N/s
Relative standard deviation of the distribution of scientific fields	–	–	–	N/s
Relative standard deviation of the distribution of methods applied	–	N/s	–	N/s
The percentage of studies in Anglo-American territories	–	N/s	–	–
Relative standard deviation of the distribution of spatial scale of research	–	–	–	N/s

Source: own work based on data retrieved from the *Journal of Sustainable Tourism*. Codes: ‘+’ for directly proportional change; ‘–’ for inversely proportional change; ‘N/s’ for statistically non-significant change.

It must be emphasised that the concepts of ‘sustainability’ in general and ‘sustainable tourism’ in particular are mainly rooted in the Western Anglo-American tradition (Bao *et al.*, 2019). This should relate to the limited access of non-Anglo-American traditions to the most prestigious journals like the *Journal of Sustainable Tourism* confirmed by this research (54.1% of the first authors represented Anglo-American institutions within the investigated period of the last decade). In addition, a potential conflict of interests between the commercial publisher, whose values are rooted in neoliberal capitalism, and researchers affiliated to non-commercial universities representing non-Anglo-American traditions should be mentioned. Moreover, contribution to the most prestigious tourism journals is facilitated by the cooperation with Anglo-American authors rather than exclusive cooperation between other traditions, especially the cooperation of researchers from various developing countries (Hasana *et al.*, 2022).

As a consequence, the chance for any substantial change is seen as very limited. Non-Anglo-American authors, when submitting papers to journals like the *Journal of Sustainable Tourism*, are somehow expected (or they feel expected) to match their research concepts with the Anglo-American tradition. The consequences of this were confirmed by this research, as no significant expected change of discourse on sustainable tourism was evidenced by the contribution of non-Anglo-American traditions.

## 6. CONCLUSIONS

The present study was based on the bibliometric analysis on data extracted from the *Journal of Sustainable Tourism*. Six linear models were estimated to identify whether the expected epistemological and sociocultural changes in sustainable tourism studies occur over time and are triggered by the contributions from non-Anglo-American research traditions. The scale of the investigated changes over time, although statistically significant, is small, and refers only to an increase in open access, more equal interest of various scientific disciplines in sustainable tourism, and a more equal distribution of the spatial scale of research. The impact of non-Anglo-American traditions resulted only in an increasing volatility of case study areas in empirical studies. We recommend that future research should be conducted using multiple journal data sets and include a qualitative analysis as well, in order to compliment and further expand the research findings. The results should be considered by both authors and readers of scientific papers presenting the achievements of sustainable tourism studies. However, the real change towards the sustainability of sustainable tourism studies depends on the policy of the agents influencing the research strategies of authors (research-financing institutions) and responsible directly for publishing (the managements and publishers of journals).

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Giancarlo COTELLA , Elisabetta VITALE BROVARONE 

## TOURISM AS AN OPPORTUNITY TO EFFECTIVELY COUNTERACT MARGINALISATION: THE CASE OF THE ITALIAN NATIONAL STRATEGY FOR INNER AREAS

**Abstract.** Remote rural areas are often rich in natural and landscape assets, which are in turn used as the main focus of tourism development strategies aiming at reverting their decline. However, mono-functional strategies hardly manage to achieve this goal, as in order to restore those structural conditions that are essential to liveability and local development it is necessary to engage in a more comprehensive approach. Acknowledging this challenge, the paper reflects on the possibility to include tourism within multi-level development strategies aimed at tackling marginalisation, drawing on the case of the Italian National Strategy for Inner Areas. More in detail, the authors analyse how the latter enables the integration of tourism-related actions into more comprehensive, place-based development strategies that act upon the peculiarities of the territories they focus on through a mix of top-down and bottom-up logics.

**Key words:** tourism, remote areas, EU cohesion policy, Italy, place-based approach.

### 1. INTRODUCTION

Tourism is often the main focus of strategies aiming at enhancing the development of remote rural areas, for which natural and landscape resources constitute in most cases the main asset. However, various analyses have demonstrated that

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the adoption of this approach in isolation may not be sufficient to tackle marginalisation effectively (Nguyen and Funck, 2019; Bohlin *et al.*, 2020). The negative trends that characterise remote rural areas are often rooted in decades of endogenous and exogenous erosions of those structural conditions that are essential to liveability and local development, and their inversion requires more complex, integrated actions.

Aiming at providing evidence of how tourism can be integrated within multi-level development strategies tackling marginalisation, the article discusses the case of the Italian National Strategy for Inner Areas (SNAI). Running in parallel to the 2014–2020 EU cohesion policy programming period, the latter has been used to combine European and national resources to trigger development in the country's remote rural regions, and it has been relaunched for the programming period 2021–2027. More in detail, the authors analyse, both quantitatively and qualitatively, how tourism has been integrated within 72 SNAI project areas' strategies that have been launched during the programming period 2014–2020, to then discuss the challenges and opportunities that emerge from this experience.

After this brief introduction, section two sets the context for the contribution, discussing the causes of rural marginalisation, and how tourism has often been presented as a *panacea* for inverting negative development trends, although with controversial results. Then, after a brief reference to the methodology adopted in the study, the nature of the SNAI and its functioning are introduced to the reader. Section five constitutes the core of the analysis, exploring how and to what extent tourism has been integrated within the SNAI's comprehensive, multi-fund local development strategies. The concluding section completes the contribution, discussing the outcomes of the analysis and bringing forward future research avenues.

## 2. RURAL AREAS, MARGINALISATION, AND TOURISM

With industrialisation and the increasing attractiveness of urban areas, many European rural areas have undergone intense processes of marginalisation (Camarero and Oliva, 2016; Küpper *et al.*, 2018; Vitale Brovarone *et al.*, 2022). Especially those rural areas that are not close to (or part of) functional urban areas, have been progressively emptied, as urban poles attracted their population. The ageing index has increased, leading to a process of natural decline in population size and composition. Together with depopulation, a number of social, economic and cultural interrelated factors come into play. For instance, de-anthropisation of natural and open spaces, the weakening of social ties, and the loss of cultural values and identity are key aspects of the impoverishment of rural areas.

These processes reflect – and are paralleled by – a thorough permeation of the urban society into the rural, also as a consequence of the increasing globalisation. Second homes and accommodation facilities proliferated with very loose planning control (Gallent and Tewdwr-Jones, 2018), especially in deep rural areas and mountains, for the exploitation of rural assets for tourism and leisure. Moreover, the local values, identities and ambitions of rural dwellers have been increasingly influenced by urban models. Decade after decade, rural areas gradually lost their value as places of production, while their attractiveness as places for consumption, for tourism and leisure, prevailed (Gallent and Gkartzios, 2019). All these processes induced a progressive rarefaction of the rural *civitas*, that is, the set of elements such as social ties, services, institutions, and functions offering residents the conditions for civilised life (Dematteis, 2009). The dependence of rural dwellers on urban nodes is both a cause and a consequence of this decline: services and amenities have progressively decreased, as the number of potential users needed to ensure their provision diminished, generating severe impacts on accessibility and social justice (Oliva and Camarero, 2019).

The mentioned challenges are widely acknowledged; nevertheless, they are still mostly overlooked by the policy arena, where urban issues have been dominating planning theory and practice (Cotella, 2019). In spite of the emergence of the city-regionalism paradigm, a city-centric approach has continued to prevail, reinforcing existing centralities and hierarchies and further marginalising rural areas (Urso, 2021). Local actors often remain distant from the decision-making arenas responsible for developing wide-ranging, long-term development policies and rural development remains grounded on decision-making centres that have limited knowledge and understanding of the needs of rural areas (Harrison and Heley, 2015; Cotella and Vitale Brovarone, 2020a, 2020b). To add further complexity to the picture, the COVID-19 emergency challenged rural areas in many ways, to a large extent exacerbating existing criticalities, such as their higher exposure to severe illness due to high old-age index, the digital divide, limited access to health services, the lack of local services and opportunities, etc.

However, as every crisis, COVID-19 has also brought opportunities, to re-think rural areas and urban-rural relations (Cotella and Vitale Brovarone, 2020b, 2021; Luca, Tondelli and Åberg, 2020; OECD, 2020). Beyond simplistic claims for a return to the rural, the pandemic has unveiled once more the complex inter-relations linking several factors at play, hence calling for comprehensive action on the roots of rural marginalisation. On the contrary, most strategies continue to pivot on the notion of the “rural idyll”, a widespread social representation in developed economies, especially among young people (Halfacree, 1995; Rye, 2006), and continue to regard leisure and tourism as the main leverage of the development of the rural.

### 2.1. Tourism as a leverage for rural development: quick win or palliative solution?

Many strategies aimed at the development of rural areas focus on tourism as leverage for counteracting marginalisation through the enhancement of their natural and cultural resources. Although rural tourism is not a new phenomenon, its development has accelerated in recent years, by virtue of a renewed interest for remote and uncrowded places (further emphasized by the consequences of COVID-19), nature, unspoiled landscapes, and cultural traditions (Greffe, 1994). Moreover, literature on rural tourism has been substantially growing, especially since 2010 and in the disciplines of tourism and rural studies, and often mentions rural tourism as a means to revitalise and regenerate marginalised rural areas (Rosalina *et al.*, 2021; Singhania *et al.*, 2022). Especially in declining territories facing “post-productive” challenges, tourism is considered as a key factor for development, with significant economic impacts, also in terms of supply chain (Kauppila *et al.*, 2009; Brouder, 2012; Rogerson and van der Merwe, 2016). Moreover, areas with a strong tourist vocation and subject to significant flows often feature a more positive net population change than non-touristic ones, as well as a younger population and a better gender balance (Möller and Amcoff, 2018).<sup>1</sup>

Despite the role it can play as development driver, tourism is not, however, always representing a quick win (see also Assumma *et al.*, 2022). While in some areas investments in tourism have been successful, in others they had a limited impact (Nguyen and Funck, 2019; Bohlin *et al.*, 2020) or even generated negative externalities. The complexity of the rural environment is often overlooked by mono-dimensional strategies focusing only on tourism (Brouder, 2012), with the transition of rural areas from places of production to places of consumption that is overshadowed by the mentioned discourse on the rural idyll, which identifies the rural as a utopia of harmony, tranquillity and safety (Rofe, 2013). Warnings against the challenges of rural tourism and nature-based tourism development in marginal areas date back to the mid-1990s, their main concerns relating to the actual capacity of rural territorial systems to generate endogenous development rather than falling into overdependence on external markets exploiting their natural and cultural assets (Bramwell, 1994; Hall and Boyd, 2004). The effect of this so-called “staple trap” can be summarised as being (i) primarily based on natural resources, (ii) dependent on government mediation, and (iii) highly susceptible to external market fluctuations (Schmallegger and Carson, 2010) and, overall, warns against the negative impacts of sectoral development initiatives based only on tourism.

In order to develop rural tourism in ways where the supply of tourist facilities and experiences is appropriate to the needs of the host community, the environment and local suppliers, rural tourism should not develop as a hapless outcome

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<sup>1</sup> The authors also reported a higher population turnover.

of inexorable, external forces, and prominence should be given to the role of local communities and local businesses in shaping rural tourism (Bramwell, 1994). In the remainder of the paper, the way in which this issues are framed within the local development strategies launched within the SNAI framework will be presented.

### 3. METHODS

The analysis adopts a mixed methodology, which relies on both quantitative and qualitative sources. The document analysis is based on official documents and datasets of the SNAI, made publicly available by the Italian Agency for Territorial Cohesion.<sup>2</sup> Qualitative insights on the implementation of the strategy have been gained through participant observation (Kawulich, 2005) in three working tables of the SNAI process in one of the project areas (Valle Arroscia) and seven semi-structured interviews collected during the ESPON URRUC project<sup>3</sup> (Bacci *et al.*, 2022; ESPON, 2019; Cotella and Vitale Brovarone, 2020a). The interviews concerned both general questions on the development of the SNAI, and questions more specifically related to accessibility, mobility, and their integration with the other axes, including tourism. Relevant stakeholders were interviewed, including in particular: the regional contact person responsible for the coordination of SNAI, mayors of the municipalities involved in the local strategy, officers involved in the development of the mobility axis of SNAI at the national level, and contact persons of local associations. In participant observations, the researchers joined the meetings as observers and intervened only when asked to give their opinion (on rare occasion). Participant observation enabled them to engage with a wider and more varied set of stakeholders (5–20 participants, depending on the meeting) and observe their interactions, detecting information and dynamics that would hardly have emerged from the analysis of official documents or interviews.

The analysis focused on the general purposes of the strategy, its structure, and the process for implementation (Barca *et al.*, 2014; Cotella and Vitale Brovarone, 2020c), when possible relating it to the disciplinary debate briefly presented in the

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<sup>2</sup> The Agency for Territorial Cohesion is an Italian public agency supervised by the President of the Council of Ministers, established in 2013. The Agency's aim is to support, promote, and assist territorial development and cohesion, play a key role in the management of cohesion policies, and provide support for the implementation of European and national programmes.

<sup>3</sup> The URRUC project (Urban-rural connections in non-metropolitan areas; [www.espon.eu/URRUC](http://www.espon.eu/URRUC)) is a Targeted Analysis organised in the framework of the European Territorial Observatory Network (ESPON), developed during the period 2018–2019. It analysed the urban-rural connections and development challenges of four European non-metropolitan areas: Scarborough Borough Council (UK); Marina Alta (ES); Valle Arroscia, Regione Liguria (IT), and Västerbotten County (SE).

previous paragraph. The overall orientation of the strategy was explored through the analysis of the official general and guideline documents, interviews and participant observation. Subsequently, the analysis focused on 72 local strategies, and in particular on the absolute and relative importance of tourism, in terms of financial allocation and strategic orientation. These aspects were extracted from the following sources: annual reports of SNAI, summaries of the financial allocation of framework program agreements, final documents of area strategies, and existing literature. Qualitative insights from interviews and participant observation helped to triangulate and interpret the results.<sup>4</sup>

#### 4. THE ITALIAN NATIONAL STRATEGY FOR INNER AREAS

Launched in 2012 by the then Minister of Territorial Cohesion Fabrizio Barca, the SNAI is aimed at promoting the development of the so-called ‘inner areas’, i.e., those territories that are located at a significant distance from the centres providing essential services (Barca *et al.*, 2014). Typically characterised by small centres with a low settlement density, these areas are affected by the phenomena of ageing, depopulation, and impoverishment, and at the same time they are the depositaries of considerable environmental and cultural resources. The general objective of the SNAI is to reverse the decline of these areas, intervening on the phenomena behind their socio-economic and structural fragility.

Importantly, the SNAI overcomes the traditional north-south dichotomy that has characterised the Italian regional development policies since the country’s unification (Felice and Lepore, 2017; Tulumello *et al.*, 2020), recognising that also the northernmost and central regions of the country feature the presence of remote territories that are lagging behind in social and economic terms due to their territorial marginality. In so doing, it also goes beyond the EU cohesion policy approach that pivots the distribution of resources at NUTS2 regions, adopting a more granular scale to read territorial unbalances (Cotella, 2020; Cotella and Vitale Brovarone, 2020a, 2020c; Cotella and Dąbrowski, 2021). By recognising access to services throughout the territory as an essential precondition for development, the strategy recognises the potential value of Italy’s polycentric settlement structure also in relation to remote rural and mountain areas (Urso, 2016). More in detail, it sets three interrelated objectives for inner areas: (i) to preserve and secure territories, (ii) to promote the natural and cultural diversity of places, and (iii) to enhance the potential of underused resources. To achieve these objectives, it op-

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<sup>4</sup> A detailed report on the results of interviews and participant observation would not fully match the scope of this manuscript. Some details on qualitative aspects are provided in Cotella and Vitale Brovarone, 2020a; Bacci, Cotella and Vitale Brovarone, 2022.



erates on the one hand on essential services of citizenship (health, education, and mobility), and, on the other, on local development processes (Barca *et al.*, 2014).

The selection of areas is based on a method defined by a central Technical Committee, drawing on a definition of ‘inner areas’ as territories that have limited or inadequate access to essential services.<sup>5</sup> Then, in line with the EU cohesion policy’s principle of concentration, a limited set of identified inner areas is selected as ‘project areas’, through a process of negotiation between the CTAI and each region. In total, 72 areas were selected (2 to 5 areas per region), comprising more than a thousand municipalities and home to more than 2 million people (Fig. 1).

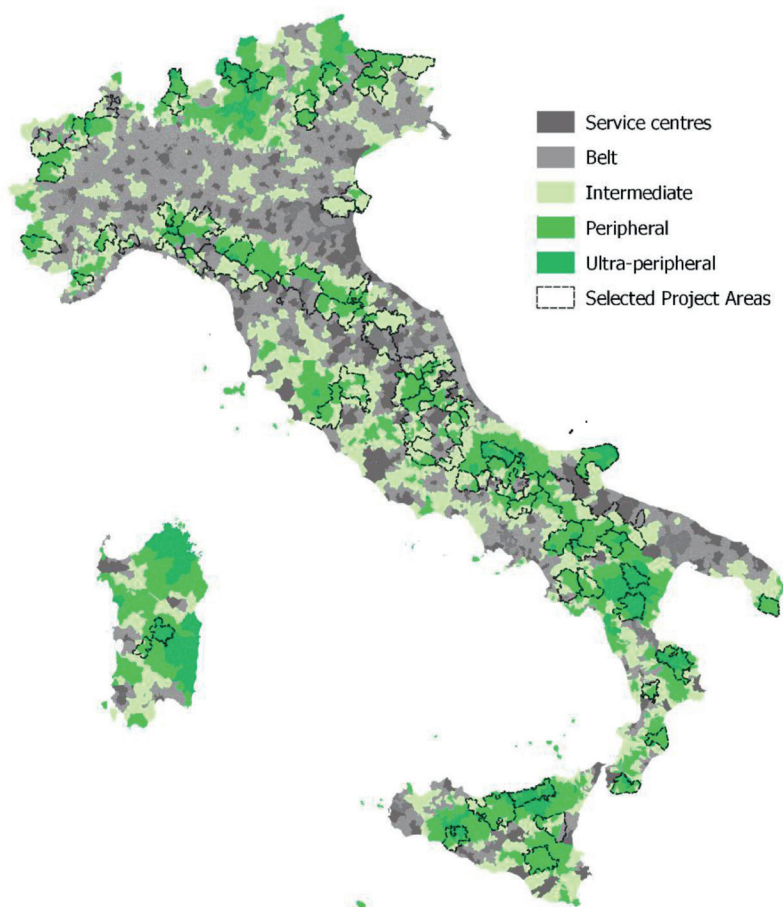


Fig. 1. The 72 areas targeted by the SNAI over the total of inner areas  
Source: own work based on data provided by CTAI (the SNAI technical committee).

<sup>5</sup> For more detail on the criteria for the definition of inner areas, see Barca *et al.*, 2014.

The SNAI method involves a number of key actors (different levels and sectors of public administration, associations, companies, service providers, etc.) in defining local development strategies for each area, which identify the guiding principles for territorial development and then translate those into objectives and concrete actions. Once a strategy is approved, a framework agreement is signed between the national bodies involved in the CTAI and respective regions, provinces and local authorities. The agreement contains specific interventions to be implemented, the implementing subjects, the financial resources and their respective sources, the time schedules, the expected results and result indicators, and the sanctions for non-compliance.

In the selected areas, the SNAI acts as a coordination platform between domestic (mainly national and regional) and European resources.<sup>6</sup> Its governance puts local actors (public administrations, the third sector, and private actors) at the heart of the process. More precisely, local authorities are asked to organise themselves into formal supra-local entities (e.g. Unions of Municipalities) aimed at the associated management of services. At the same time, the SNAI recognises the need for coordination and supervision by regional and national actors. The SNAI is, therefore, a multi-level, multi-actor and multi-fund process which, by combining top-down and bottom-up logics, recognises that the national level is the most suitable for the provision of the prerequisites for development (health, education, and mobility) and the local level as the best one for defining development potential. Examples of interventions aimed at the endowment of development prerequisites concern the reorganisation of the school offer with the creation of new schools in barycentric positions, the replacement and relocation of inefficient services spread throughout the territory, the reorganisation of the health offer to improve access to diagnostic and emergency services, and the adaptation and improvement of transport services also through flexible and innovative solutions (Barca *et al.*, 2014). At the same time, local development projects are defined at the local level and financed mainly with European funds programmed at the regional level. They may concern various spheres and sectors (e.g. digital accessibility, economic development, social cohesion, energy efficiency and environmental protection, etc.) Among them, tourism plays a relevant role, as it will be further discussed below.

## 5. TOURISM IN THE SNAI

The SNAI explicitly recognises tourism as one of the main factors potentially underpinning territorial development, through the enhancement of local, often unexpressed potential. In particular, tourism is one of the five categories into which local

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<sup>6</sup> European Regional Development Fund (ERDF), European Social Fund (ESF), European Agricultural Fund for Rural Development (EAFRD), and European Maritime and Fisheries Fund (EMFF).

development projects proposed by local actors in each area should fall,<sup>7</sup> namely: (i) active territorial/environmental sustainability protection, (ii) valorisation of natural/cultural capital and tourism, (iii) valorisation of agriculture and food systems, (iv) activation of renewable energy supply chains, and (v) know-how and crafts.

Through this selection, the SNAI framework acknowledges the extraordinary value of Italian inner areas' biodiversity, and natural and cultural resources, as well as the dual nature of this diversity, both natural and man-made, with diverse linguistic, cultural, and traditional specificities, which are increasingly considered as key assets, opposed to the standardisation effect of globalisation. At the same time, it underlines the importance of combining market orientation, job creation and maintenance of heritage keeping a view to sustainability. To this end, natural tourism is suggested as a way to support place-based local development, creating alternative and integrative sources of income, and a greater awareness of territories that have much to offer but have long remained off the tourist map. A second keystone is the local cultural identity, which needs to be enhanced, and sometimes recovered.

Specific guidelines were provided by the Ministry of Culture and Tourism (MIBACT, 2016), aimed at the integration of tourism into SNAI local development strategies. These guidelines highlight a number of important elements that should be considered, such as the importance of the 'industrial component' of tourism, which needs specific skills, the natural hazards to which inner areas are exposed, that are also determined or worsened by deanthropisation, and external factors of economic instability, such as changing conditions of territorial competitiveness and changing consumer preferences.<sup>8</sup> The document also suggests to frame initiatives aimed at bolstering territorial development through tourism in a logical model combining different elements, such as: natural resources and architectural and cultural heritage; transport, infrastructures and accessibility; existing and potential offer; skills and competences of local operators; socio-economic conditions; governance and management; and the presence of production chains that contribute or have contributed to determining local identity.

According to MIBACT, "[t]he result must be the creation of an articulated product where, for example, not only a touristic route is designed, but the set of actions necessary for it to become a tourism product is proposed: intermodal services, reception, food and wine, luggage transport, and so on" (MIBACT, 2016, p. 4). At the same time, the guidelines also warn that tourism is not the *panacea* to tackle underdevelopment and marginalisation, and urge that the sector should not be seen as the only possible development alternative, since in many areas, despite being a relevant option, it often lacks the critical mass to serve as the cornerstone

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<sup>7</sup> Importantly, each area must choose its focal points among the above, focusing on only some of them and not on all five.

<sup>8</sup> Sanitary COVID-19-related, that was not mentioned in the MIBACT guidelines as they were drafted in 2016, is undoubtedly an emblematic example of an external instability factor.

of local development. Therefore, a rigorous assessment must be made to decide whether or not an area has real potential for tourism development that justifies new investments. Aspects of governance and management are also recognised, urging local areas to seriously consider aspects such as the coordination of initiatives, animation and information dissemination, local promotion, and linkage with wide area (regional and national) planning and promotion.

Finally, the guidelines emphasize the importance of paying attention to the fact that activities and services related to the enjoyment of tourism can intercept and coincide with the needs expressed by the resident population (e.g. broadband availability or sustainable mobility infrastructure). The presence of demand from the resident population can in fact ensure greater financial sustainability for the proposed initiatives, but also open possible forms of partnership and support from sectors not directly related to the tourism supply chain.

### **5.1. Tourism in SNAI local strategies**

When closely examining the SNAI's 72 project areas, a number of common elements and peculiarities emerge in relation to how they encompass tourism as a leverage for development. First of all, it is possible to highlight a great differentiation between the areas in terms of tourist attractiveness, ranging from areas where tourism is already mature to areas with good tourism potential but rather modest flows (SNAI, 2018). More in detail, only six areas (all located in northern Italy, especially in the Alps) are classified as major tourist attractors, with more than 500,000 annual presences. Fifteen areas (mostly located in the centre-north, with two exceptions in the South, in Apulia) feature flows of more than 100,000 presences, while all other areas are characterised by lower values, with about a third having less than 20,000 presences per year. Overall, areas located in mountainous marginal and socio-economically fragile contexts display a more limited potential for tourism development than others. They also often suffer from poor visibility and connectivity, being excluded from territorial tourism supply systems and are not characterised by a defined tourism identity (Conti, 2018).

Regardless of the level of tourist attractiveness, a common trait of all the 72 area strategies is the attempt to organise a heterogeneous and articulated tourist offer, combining many of the segments classifiable under the common label of 'sustainable tourism' (or slow tourism). More specifically, one may witness the emergence of a differential offer aimed at conveying the authenticity of the area and the historical traditions in a simple way, with direct involvement of visitors in arts and craft activities (visits to artisan workshops that process agri-food goods, wood and leather, production of textiles, etc.) (SNAI 2018).<sup>9</sup>

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<sup>9</sup> For a more detailed discussion on the meaning and implications of sustainable tourism, see: Leśniewska-Napierała *et al.*, 2022.

Tourism-related issues are also very relevant in terms of the budget: on average, they weigh 18% of the total budget for the area strategies, with values up to 56% (Fig. 2). Although all of the areas decided to invest in tourism, different approaches and intensities have emerged, also in relation to the existing levels of tourism development. For instance, some areas (especially in the centre-north of Italy), where tourism is already a key asset in the local economy, decided to further invest a high share of the total budgets of their respective strategies in this sector, while others decided to maximise investment in other sectors, considering the tourism sector as either already sufficiently covered by other funding programmes or dependent on other sectoral interventions to increase its potential (Cuccu and Silvestri, 2019; Bernabei, 2021). More in detail, as discussed by a number of interviewees, many remote rural areas have only limited tourism potential mostly related to the fruition of their natural resources and, in order to better exploit this potential, it would be more important to intervene in terms of accessibility of these areas as a whole and their digital interconnectedness (see also Vitale Brovarone and Cotella, 2020).

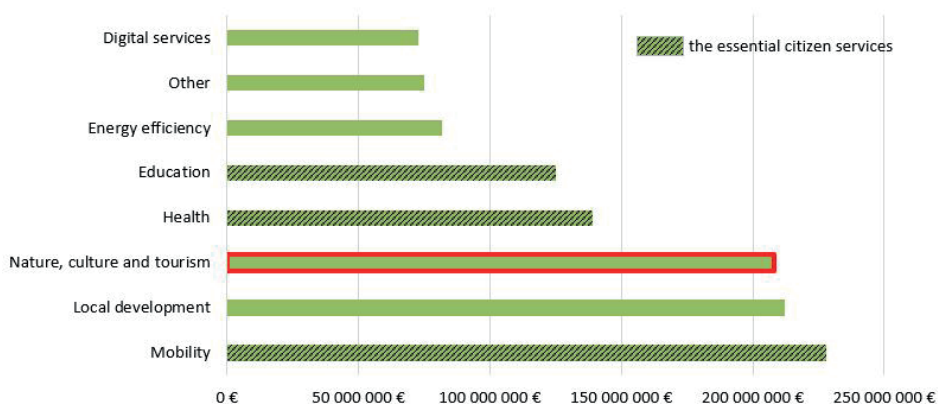


Fig. 2. Total budget of SNAI area strategies per category

Source: own work based on SNAI summaries of the financial allocation of framework program agreements.

Actions aimed at improving the touristic offer are listed in the “nature, culture and tourism” category, which in itself has a higher budget than education or health (11% and 12% respectively), and only slightly lower than transport and mobility (20%). The “nature, culture and tourism” category is directly related to tourism development, having as its main theme the enhancement of natural and cultural heritage and, as a result indicator, the objective to “Increase the number of tourist presences and visitors to the area’s cultural and natural heritage” (SNAI, 2018, p. 68).

However, as several local and national stakeholders have also highlighted, it must be noticed that the relevance of tourism in the SNAI is not only limited to this category. Actions that are inserted in other categories are also aimed at improving and increasing tourism. For instance, in the mobility category one of the main target groups are tourists, and a significant number of areas decided to invest in “slow mobility” (cycle and hiking routes) or in improving public transport on non-working days, to offer a better service to tourists (Vitale Brovarone, 2022). Other sectors with which the most frequent connections and interdependencies emerge are education and agriculture, with the aim of enriching the linguistic and digital skills of tourism workers and increasing the consumption of typical and traditional local food products (Bernabei, 2021).

When exploring how tourism is dealt with in the 72 strategies, and how many resources it can use (Fig. 3 and 4), a number of interesting considerations may be formulated. For example, the “nature, culture and tourism” category shows a relatively high mid-spread (IQR) and a positive skew (Fig. 3). The mean and median values are very close (EUR 2.9 million and EUR 2.5 million, respectively), with more coherent values than the other categories (only one outlier, at EUR 25 million). These data confirms not only the absolute relevance of tourism in the SNAI, but also its significant and constant presence in all the areas, as a strategic leverage for local development.

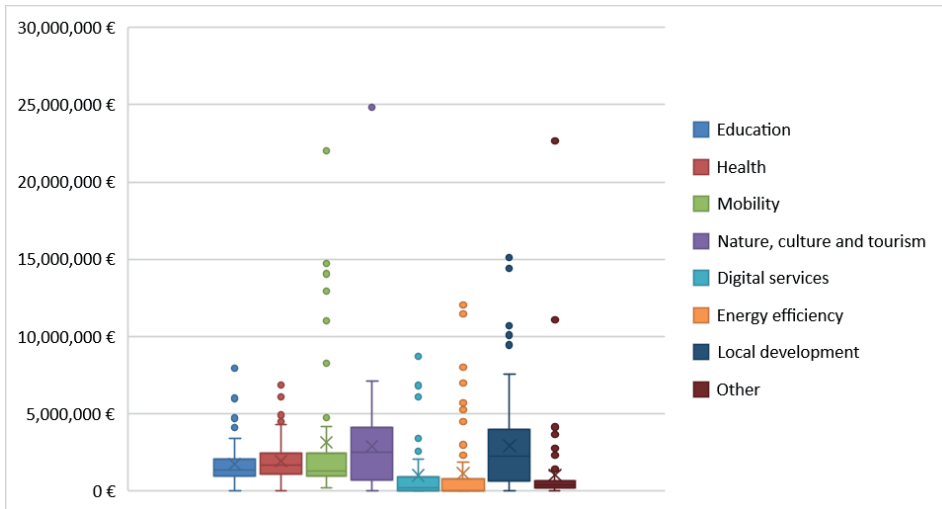


Fig. 3. Distribution of financial allocation in the 72 areas, by category

Source: own work based on SNAI summaries of the financial allocation of framework program agreements.

The relevance of tourism is also clear in terms of distribution, as shown in the scatter chart presented in Fig. 4. In particular, beside the highest value of EUR

24.8 million, the concentration of values in the upper part of the chart shows that tourism plays a key role not only in absolute terms but especially in terms of percentage on the total budget of strategies. For instance, while for the “nature, culture and tourism” category there are many values above 30% and below EUR 10 million, for the mobility category, which on average has similar percentages to tourism, the highest percentages correspond to very high absolute values, related to infrastructural investments (mostly in southern areas, Vitale Brovarone, 2022).

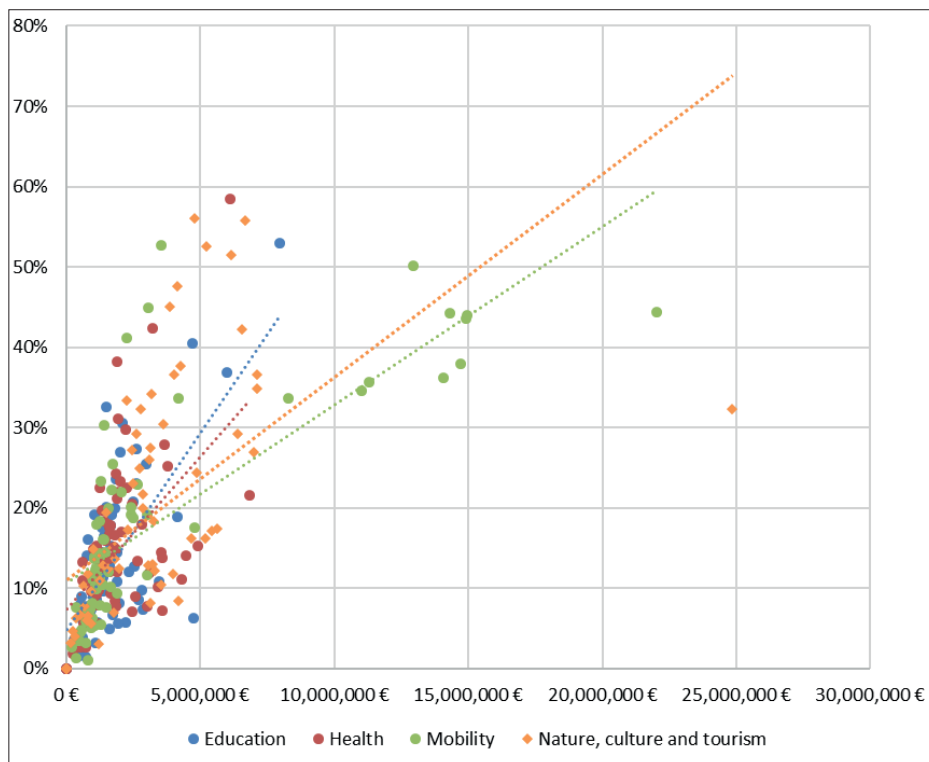


Fig. 4. Absolute amounts and percentages of resources allocated to three essential services (health, education, and mobility) and tourism in the 72 areas, with linear trend lines

Source: own work based on SNAI summaries of the financial allocation of framework program agreements.

Overall, the 72 SNAI area strategies clearly show how rural spaces are no longer associated purely with agricultural commodity production but are seen as locations for the stimulation of new socio-economic activities, often incorporating tourism, leisure, speciality food production and consumption, etc. Instead of looking at tourism at a sector upon which to develop mono-dimensional development strategies, the peculiar multi-level and multi-fund nature of the SNAI architecture

has allowed the various actors' coalitions responsible for the local development strategies to think of tourism as explicitly linked to the economic, social, cultural, natural, and human structures of the localities in which it occurs. In so doing, the adopted strategies promote a highly integrated and sustainable approach to tourism, which aims at consolidating powerful network connections between social, cultural, economic, and environmental resources (Saxena *et al.*, 2007). In addition, the multi-level governance that characterises the SNAI enables local rural actors to receive support and engage in a dialogue effectively with regional and national authorities, which is often very difficult due to limited opportunities and capacities for discussion. As argued by a representative of one project area during an interview, the SNAI process “[...] has mostly served a purpose so far: not only to encourage more constructive dialogue among local actors, but to gain access to a constructive dialogue with those in higher authority. There is no doubt that this will be a turning point for our area in the dialogue with the region and other institutions.” (authors' own translation).

## 6. DISCUSSION AND CONCLUSION

The paper analysed the extent to which tourism has been included in the Italian National Strategy for Inner Areas as one of the cornerstones of local development strategies aimed at reverting the marginalisation trends that very often concern remote rural areas. Overall, the SNAI represents an innovative approach to the governance of regional development in Europe (Cotella *et al.*, 2021), as it complements the traditional EU approach pivoted on NUTS2 regions with a higher attention to intraregional disparities. In doing so, it aims at promoting the development of selected remote rural areas of the country through a multi-level, multi-fund and multi-actor approach that enables the development of local development strategies integrating multiple elements, among which tourism certainly plays a relevant role.

The case of Italy's inner areas represents an interesting example of how areas that are not traditionally considered tourist destinations attempt to enhance their natural and cultural resources in order to untap their unexpressed potential. While areas featuring mature tourism used this occasion to renew their offers (focusing on new segments or on the de-seasonalisation of flows), for those aiming at entering the tourism market the SNAI offered the opportunity to better define the boundaries and goals, and to improve the quality of the offer (Bernabei, 2021). At the time of writing this paper, it is too early to attempt an analysis of the impact of the 72 strategies, as most of them have only reached the implementation phase last year and most interventions still have to be delivered on the ground. In the me-



dium-long term, the main expected results are the improvement of the standards of the local heritage offer conditions and their placement on the tourism market as more competitive, recognisable, and attractive destinations.<sup>10</sup>

Importantly, when considering the area strategies and annual reports on the SNAI implementation, a number of criticalities emerge, which the Italian inner areas have encountered when planning their tourism development. First of all, the vision of tourism is often traditional and local actors find it hard to identify management and governance models suited to the characteristics of the local heritage. With regard to this, a number of interviews has have indicated how often the local coalitions proposed the creation of territorial brands for territories that, however, were not autonomous tourist destinations and lacked the strength, size, and critical mass to compete on a globalised market (see also Vanhove, 2010). In these cases, it would have been more profitable to focus on the integration in the closest regional tourist destinations, aiming at grafting into existing tourist organisations and gaining visibility within them. The same effort of interaction should be made with regard to other sectors (such as health, education, mobility, agriculture, etc.), favouring permanent effects of the consolidation of tourism development useful to rural development and connected to local and regional resources and communities (Bramwell, 1994; Saxena *et al.*, 2007).

Overall, the analysis presented in this paper has shown that shifting from a mostly rural economy to a more tourism-oriented one is not an easy process, as it involves multiple aspects and sectors, and requires skills and capabilities that cannot be taken for granted (Salvatore *et al.*, 2018; Mantegazzi *et al.*, 2021; Rosalina *et al.*, 2021). Until recently, tourism emerged as a relevant sector in the Italian peripheral areas through a hierarchical core-periphery model, which generated tourism enclaves serving as extended leisure resorts for urban hubs and metropolitan areas. It is only through the implementation of place-based, integrated development policies that focus on the emergence of new cultural trends that these areas could reconsider their positioning in the tourism offer. To this end, private and public actors should cooperate at all territorial levels and build partnerships aimed at resolving the conflicts between the desire for development and the protection of fragile environments and economies (Jamal and Getz, 1995; Roxas *et al.*, 2020). In fact, the development of the SNAI's local development strategies is indeed the result of a collaborative effort between the local administration, local actors, and stakeholders, with technical assistance, and with the support of the regional level and of the SNAI's committee. The differential ability of the areas to adopt the advised place-based development approach contributes to explain why some places succeeded more than others in drawing their development options and will, in turn,

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<sup>10</sup> The result indicators associated with the objectives pursued refer to: the increase in tourist demand and the number of visitors to sites of natural and cultural interest; the growth of employment, enterprises, and networks; the upgrading of the accommodation offer and the growth in the number of beds.

influence the successful implementation of the strategies. Be that as it may, however, the innovative and inclusive approach that characterises the SNAI process had contributed to opening new spaces of possibility and paving the way for a bottom-up, place-based valorisation of local development potentials (Mantegazzi *et al.*, 2021). This is particularly relevant when considering that the SNAI experience has been recently relaunched within the framework of the EU 2021–2027 programming period, in so doing enabling reflection and capitalisation on the experience matured so far and to incrementally solve the mentioned drawbacks.

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## UNVEILING FORMS OF PARTICIPATION IN THE GOVERNANCE OF UNESCO WORLD HERITAGE SITES

**Abstract.** This paper focuses on the issues of governance and participation of World Heritage sites. It inquires how decision-making structures to locally managed World Heritage sites may encompass public participation. Through an in-depth qualitative approach, the paper analyses the World Heritage Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale serial site (Italy). By examining the participatory dynamics that occurred during the creation and development of the selected World Heritage serial site, this paper reveals three coexisting forms of participation in WH-site decisions: inter-institutional agreement, social aggregation, and multi-actor collaboration. The main findings suggest that although formal decision-making arenas may be participative weakly, the unpacking of participatory practices in urban spaces uncovers a vibrant scene, as it emerges from the Cassaro Alto and Danisinni districts in the city of Palermo.

**Key words:** World Heritage, participatory governance, decision-making, Palermo.

### 1. INTRODUCTION

The alignment of the World Heritage (WH) program (Labadi, 2007; Meskell, 2013) with the sustainable development agenda (UNESCO, 2015) is conferring increasing relevance to the issue of participation in the governance of WH sites (Li *et al.*, 2020; Rosetti *et al.*, 2022). As the policy acknowledges, this novel

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orientation implies the involvement of several stakeholders (Millar, 2006), adding complexity to decision-making processes concerning the management of WH sites. This paper aims to reveal some of the forms that such complexity could take. More specifically, it focuses on participatory practices occurring during the creation and development of the WH Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale serial site (Italy). It is structured as follows: the first part deals with the theoretical background; the second highlights the research gap; the third discusses the adopted methodology; the fourth illustrates the most relevant findings emerging from the fieldwork; and, lastly, the fifth part concerns general reflections for fostering further investigations on the topic.

## 2. THEORETICAL FRAMEWORK

The paper leverages two academic streams concerning both the global mechanism ruling the WH program and the topic of participatory governance in political, social science, and heritage studies debates.

Considering the definition of regimes as “social institutions that influence the behavior of states within an issue area” (Levy *et al.*, 1995), the first section reviews the principles and mechanisms found at the base of the international WH program, including the more recent alignment with the UN 2030 Agenda and the 17 Sustainable Development Goals (UNESCO, 2015). Generally speaking, the notion of a *regime* as a precursor of global governance (Stokke, 1997) attempted to re-position the debate on international politics from idealism to realism, querying the effects and constraints produced on state behaviours. From this perspective, since its foundation in 1972 by the UNESCO General Conference, the WH regime can be interpreted as a formal global arena to guide state parties in creating and preserving cultural and natural WH sites of Outstanding Universal Value (OUV), under agreed standards (Ferrucci, 2012; Schmitt, 2015; Bogandy *et al.*, 2010). The WH regime exerts its influence on state parties through tools of persuasive and soft powers, such as listing and delisting mechanisms, and confers to every state the autonomy for undertaking any decision depending on national socio-political contexts, the nature of the site, and administrative traditions. This flexibility is reinforced by the principle of state sovereignty within the convention concerning the Protection of the World Cultural and Natural Heritage (UNESCO, 1972). The latter confers a certain degree of autonomy to state parties, allowing them to adapt international regulations established by the WH regime to national socio-political contexts, depending on a site’s nature and administrative traditions. Furthermore, state parties are crucial mediators between multi-scalar relations that distinguish the WH regime (Wang, 2019; Bogandy *et al.*, 2010, p. 753). They select heritage



sites from the national Tentative List to compete for the WH nomination and can decentralise responsibilities concerning the protection and enhancement of WH sites to other entities acting at the territorial level of the WH site (Coombe and Weiss, 2015, pp. 43–49).

In a nutshell, the principle of state sovereignty can determine a two-fold effect: the heterogeneity of local governance structures responsible for managing a WH site and the dependency on the WH regime's success in achieving protection and sustainable development objectives for WH sites from local strategies.

The second part of the theoretical section deepens the concept of participatory governance. Despite the vastness of meticulous literature emerging, the establishing of an exact definition of *participatory governance* is still challenging both in theory and in practice (Bevir, 2007; Fischer, 2006, 2010, 2012; Fung and Wright, 2001; Gustafson and Hertting, 2017; Heinelt, 2010). As highlighted in Bevir's definition, the expression itself hybridises the two terms *governance* and *participation*.

While the term *governance*, in its generic connotation, signals a shift from centralised steering of society by the state to decentralisation of power among a plurality of actors (Peters and Pierre, 1998), the adjective *participatory* emphasises the need to encourage citizen engagement within decisional processes. As stated by Fisher (2010, p. 2): "Participatory governance is a variant or subset of governance theory that puts emphasis on democratic engagement, in particular through deliberative practices [...] governance, as such, tends to refer to a new space for decision – making, but does not, in and of itself, indicate the kinds of politics that take place within them [...]" (see also Fischer, 2006, 2012). According to the definition, participatory governance represents a valid response to the democratic deficit of representative political systems. This system expands the range of actions of citizens who, apart from voting for political representatives, can be directly involved in solving social problems, in the delivery of public services, and in more equitable forms of economic and social development (Fisher, 2010, p. 3). The author has also stressed how participatory governance is grounded on specific principles and methods, such as "fairer distribution of political power and resources", and methods, from the "establishment of new partnerships to greater accountability" (Fischer, 2012, p. 2). It can follow diverse patterns, from top-down actions by policymakers to bottom-up processes implemented by civil society (Gustafson and Hertting, 2017).

In the field of heritage studies, participation is considered a crucial condition to ensure good and fair forms of governance both for tangible and intangible cultural heritage (Li *et al.*, 2020). The Convention on the Value of Cultural Heritage for Society (CoE, 2005) in the European context has already affirmed the importance of interpreting cultural heritage as a common good, socially constructed, and considering the active participation of civil society decision-making levels a pillar for the process of heritage democratisation. Concerning the WH program, participatory governance deals with balanced participation of a wide variety of

stakeholders and rights holders (UNESCO, 2019) and is indicated as a precondition for inclusive and sustainable management of a WH site in the long term. However, policy documents tend to idealise its effects, overlooking the issue of divergent interests among multiple actors and the risk of obtaining reverse outcomes such as the de-responsibilisation of the political class instead of a shared responsabilisation of civil society or new impetus for exclusion rather than inclusion (Fischer, 2012). In order to overcome this weakness, recent studies have suggested looking in greater detail at the local “pragmatics” of participatory practices (Beeksmma and De Cesari, 2019), understanding how the *who*, *why*, and *how* take part in the process. Applying a similar approach to the study of a WH site could unveil how the participation of wider public evolves and interfaces with technical experts and political forces required by the WH Convention at several institutional levels: international, national, regional, and local.

### 3. RESEARCH GAP

When referring to the issue of governance within the framework of the WH Convention, attention is often turned towards the mechanism that regulates the WH regime at the global level. This interest has mostly led to research on power relations between the General Assembly of State Parties, the WH Committee, and Advisory bodies (Schmitt, 2015), and on the risk of political manipulation of the WH List (Meskell, 2013). Instead, few investigations focus on the governance structures created at the local level to manage a WH site and on how they can encompass forms of public participation (Ercole, 2017), often coming from the bottom and closely intertwined with strategies of territorial development (Pettenati, 2019). This paper aims to contribute to filling this gap, understanding how activities directly and indirectly tied to WH sites may reshape interactions among local institutions, civil society, and further players, generating mutable spaces for collaborations or further grounds of contestation within local socio-economic and political systems. For this purpose, the research refers to the conceptualisation of participatory governance as a “performative” process (Turnhout *et al.*, 2010), which refers to the knowledge, interests, and needs of the involved actor, which emerge and evolve during the participation process itself.

#### 3.1. Approach and methods

The paper discusses some findings related to the WH Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale serial site located in the south of Italy (Sicily). A serial site entails two or more unconnected areas that might extend across regional, trans-regional, and transnational boundaries (Haspel, 2013).



Fig. 1. National and regional maps (A) indicating both location and extension of WH Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale serial site; provincial map of Palermo (B) showing the distribution of the seven WH properties in the city

Source: <https://arabonormannaunesco.it/la-nomina/protezione-e-gestione-del-sito-unesco.html>, modified [accessed on: 20.07.2022]



Fig. 2. Overview of the monuments included in the serial World Heritage Arab-Norman Palermo, the Cathedral Churches of Cefalù, and Monreale serial site

Source: own work.

Normally, governance structures for WH serial sites present a higher level of organisational and operational complexity (Wang, 2019), which, by reflection, influences participatory processes. This mainly occurs due to a wider geographical extension, the encompassing of diverse legal frameworks, and the incorporation of heterogeneous ownerships and management systems related to multiple heritage properties. Out of a total of 55 WH sites in Italy, about 13 are serial sites of various extent and nature. The selected serial site gathers nine buildings, six of which are monumental catholic churches and cathedrals, considered sophisticated expressions of multicultural Western-Islamic-Byzantine syncretism (Andaloro *et al.*, 2018). It extends between three different municipalities (Palermo, Cefalù, and Monreale) with a prevalent concentration of buildings in the city of Palermo (seven out of nine) (Fig. 1 and 2).

The investigation is grounded on a qualitative and constructivist approach (Creswell, 2009; Yin, 2003). It interprets reality as a changing social construction and has enabled the researchers to tackle participant perspectives through a wide repertoire of methods (such as interviews and field observations). Furthermore, it embraces a spatial conceptualisation of participatory processes (Cornwall, 2002, 2008; Lefebvre, 1991), by recognising the relevance of grasping interactions of individuals in the physical sites where they unfold and uncovering participation's social space, intended as "the outcome of a sequence and set of operations" (Lefebvre, 1991, p. 73). The findings presented in this paper are part of a broader doctoral program, the research design of which has been articulated into three main steps from 2019 to 2021. The collected qualitative material has been extrapolated from multiple sources. Parts of this material already existed (such as official documents, minutes of meetings, etc.) while an additional part is being constructed through the interactions between the researcher and the investigated reality (Yin, 2003), by including a total of 34 semi-structured interviews, 6 informal meetings with both officials and local actors, and non-participant observations.

### **3.2. Main findings**

The empirical investigation concerning the in-depth analysis of a single case study (Yin, 2003) highlights three interesting perspectives to tackle the topic of participatory governance for WH sites:

1. Participation as a regulated form of inter-institutional collaboration;
2. Participation as a spontaneous form of social cohesion among actors operating in the same urban area;
3. Participation as a new form of collaborative interactions between actors operating in different sectors.

The first perspective emerges from the analysis of the governance structure established for managing the WH Arab-Norman serial site. The structure appears

articulated due to the fragmented ownership and scattered managerial responsibilities among a plethora of authorities and organisations. It mainly consists of a permanent Steering Committee (SC) that collects representatives from over ten different authorities (public administrations, regional boards, national government, etc.); an Operational Structure (OS) in charge of guaranteeing the implementation of the WH management plan activities; and the religious authorities who participate on the SC to supervise the religious functions. Such an arrangement is requested by WH Advisory bodies (ICOMOS) and follows the national guidelines provided by the Italian Ministry of Culture and Tourism. Other than formally responding to an international requirement, this structure comprises collaborative relations between national, regional, and local authorities who actively participated in preparing the WH nomination. In terms of participation, such relations were significantly extended from 2011 to 2013 during the development of the management plan of the WH serial site. At that time, some decision stages were opened to further local actors belonging to the third sector and civil society, spreading awareness regarding the significance of the WH status.

Namely, the Sicily World Heritage Foundation and the Regional Council of Cultural Heritage and Sicilian Identity, working as promoting entities of the candidacy, arranged 4 decisional arenas differentiated by subject (Andaloro *et al.*, 2018, pp. 14–26). The first arena dealt with technical decisions such as the definition of the Buffer Zones system (Andaloro *et al.*, 2018, pp. 56–80); the state of conservation and risk factors of the heritage properties; and the requalification and protection measures to be conducted. Advisors of the scientific-technical committee were the main participants.

The second arena aimed to define the objectives and activities of the 4 action strategies included in the WH management plan, i.e., knowledge, protection and conservation, social and cultural enhancement, and communication and promotion (Ernst and Young, 2006). Participants included institutional players, experts from the scientific-technical committee and several representatives of cultural and economic associations operating in the three municipalities.

The third and fourth arenas covered the WH site governance topic, gathering representatives of regional officials, local authorities (mainly the city councils of Palermo, Cefalù, and Monreale), religious bodies, and managers directly responsible for the protection and use of the WH serial site.

The second perspective was conceived prior to the acquisition of the WH status. It has arisen from a contrast between the Municipality of Palermo, part of the SC, and some residents and traders operating in the Cassaro Alto area. Cassaro Alto is one of the main urban axes that cross the city centre of Palermo and connect several monuments included in the World Heritage serial site. Here, the municipality intended to gain consensus from the local community to create a new pedestrian area that could improve the monument's preservation from vehicular pollution, before the WH Committee ruled on the nomination outcome (Andaloro

*et al.*, 2018). However, some business people and residents objected to the decision. Although being generally in favour of the WH candidacy, they contested the permanent closure of the axis, being concerned with the negative impacts on their commercial activities and lifestyles. In this case, participatory mechanisms significantly evolved during the process: from conflict-ridden town meetings between public administrators and citizens to discussing alternative pedestrianisation solutions, to the spontaneous creation of a cultural association (called Cassaro Alto) that still collects almost all the business people of the areas today (historical bookstores, tobacco shops, bars, etc.) Initially, they considered the association a formal vehicle to gain greater credibility in front of the municipality in claiming their interests. More recently, the association has turned into a tool of cooperation between the business people themselves and a collaboration with local authorities to revitalise the cultural interest of the historical road, especially in light of the acquired WH status. The La Via Dei Librai cultural initiative arranged by the association along the pedestrian axis on the occasion of the UNESCO's World book day reaches today its fifth edition, proving a stable alliance between the Cassaro Alto association, non-profit entities, and the municipality. The event is a form of active citizen participation that has grown over the years in terms of public attendance, organisational structure, and networks of public and private partners.

The third perspective follows the acquisition of the WH nomination. It is related to the sustainable tourism development that the SC aspires to achieve (Andaloro *et al.*, 2018) by creating complementary routes to the WH itinerary. This is the case of the Danisinni historical neighbourhood, which connects two iconic monuments included within the WH serial site: the Royal Palace and the Zisa Castle (Fig. 3).

Despite its historical relevance since the Arab domination, the district still suffers from socio-economic marginalisation due to a long-lasting institutional void that has led to the dismantling of essential services, and to increasing isolation from its surroundings (Giubilaro and Lotta, 2018). The same void has triggered a significant form of grassroots activism nestled in the Danisinni community that groups third sector actors, a religious garrison, and some residents. Danisinni's community had already committed to participatory projects in order to collect resources needed for the district regeneration. Being part of an international WH site, the community has increased its self-esteem, strengthening its position within forthcoming projects. Indeed, the interest of the municipality to boost tourism circulation within the district creates a fertile ground for the start of new collaborative initiatives, including the participation of further local (Academy of Fine Arts; Biondo Theater, etc.) and non-local players (Airbnb, Wonderful Italy, etc.) The two projects for tourist development (Rambla Papireto and Intransito) led to different results than expected, due to partial shifts of interest and the affirming of the Danisinni community's willingness and needs. Indeed, the accomplishment of the WH route as the Municipality of Palermo expected following the two

projects, was temporary shelved. The Danisinni community is attempting to affirm its development vision for the neighbourhood. Such conception of development is always based on slow tourism and leverages on the historical connection with the Arab-Norman WH serial site. However, it prioritises the creation of new job opportunities for residents. For this purpose, the Danisinni community focuses on the realisation of a mobile kitchen – labelled *I Sapori di Danisinni* – rather than on the materialisation of the WH route, in order to bring a new entrepreneurial mindset to the neighbourhood. Residents, especially women, may get involved in cooking traditional dishes for visitors, becoming key players of a social transformation in the district.

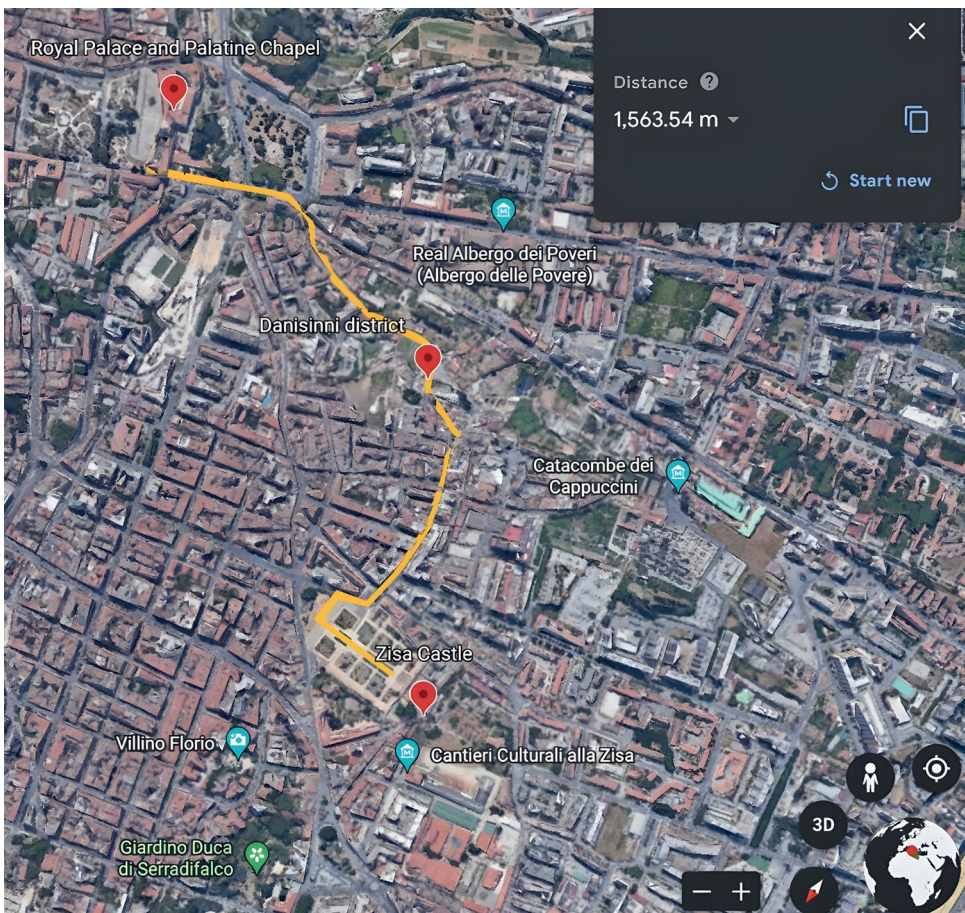


Fig. 3. Overview of the Danisinni district and its position between three WH properties: the Royal Palace, the Palatine Chapel, and the Zisa Castle

Source: own work and based on Google Earth images.



#### 4. CONCLUSIONS

The presented investigation put forward some worthy reflections for the advancement of the debate on WH sites and participatory governance. The results stress how participation in WH site decisions may adopt heterogeneous forms, even within the same site, consequently resulting in the need to advance knowledge on this poorly explored issue. To further clarify, it suggests two main perspectives in the advancement of both debating and empirical studies.

The first consideration refers to the issue of participatory governance and practices (Beeksmas and De Cesari, 2019). The maximum expression of participatory governance should imply a systematic opening of decision-making areas to influence a broader public. However, it is likewise reasonable to consider that participation may be performed at different levels and in different forms (Arnstein, 1969) through various and parallel stages of contestation, negotiation, and coordination among popular actors. The selected case study shows how decisions can be negotiated both in formal and institutionalised areas, and in informal arenas. Despite formal consultations of civil society for drafting the WH management plan, the unpacking of participatory practices uncover a vibrant scene where new civic associations could emerge directly from a contested process of the WH site creation. Specifically, the analysed WH Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale serial site has highlighted three different forms of participation: a ruled inter-institutional collaboration concerning the SC and the OS, a spontaneous social aggregation that emerged for the Cassaro Alto association, and a network of multi-actor initiatives as seen for the tourist development of the Danisinni district. The three detected forms are not necessarily exhaustive. Nevertheless, they stress the importance in the field of heritage studies, and more specifically for WH sites, to grasp participatory dynamics starting from local practices, unveiling social actors, and correlated strategies that affect and reinforce WH sites' significance in contemporary society (Dormaels, 2016).

Secondly, there is a need to deepen knowledge of the organisational and operating mechanisms of local governance structures in charge of managing WH sites (Ercole, 2017). In fact, the mere consideration of them as formal arrangements may result an anachronistic approach to contemporary scenarios. Indeed, the increasing recognition of WH sites as key assets for sustainable development makes the understanding of the relationships and interests of the ever-growing numbers of involved local authorities a key element in decoding territorial transformations directly or indirectly influenced by the creation of a WH site.

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## PLANNING SUSTAINABLE TOURISM IN UNESCO WINE REGIONS: THE CASE OF THE LANGHE-ROERO AND MONFERRATO AREA

**Abstract.** Tourism may be an important leverage for local development. At the same time, it may trigger unwanted effects, ranging from the congestion of services and infrastructures to the progressive deterioration of the assets that they plan to valorise. The article sheds light on this tension, discussing the multiple implications that increasing tourism fluxes generate in the vineyard landscape of Langhe-Roero and Monferrato, included in the UNESCO World Heritage List since 2014. The case study highlights the need to coordinate and enhance coherence among the existing planning and management instruments, towards the consolidation of a multi-level integrated territorial governance framework aimed at the sustainable spatial planning of tourism in the area.

**Key words:** UNESCO, wine regions, landscape planning, spatial planning, sustainable tourism.

### 1. INTRODUCTION

Tourism is often identified as the cornerstone of territorial development strategies by local and regional authorities, motivated by the added value that increasing flows of visitors may bring to local economies. At the same time, tourism activities may

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trigger unwanted effects, ranging from the congestion of services and infrastructures to the progressive deterioration of the assets from which they extract value. These challenges have recently gained prominence in the international arena, also as a consequence of the high level of uncertainty raised by climate change and the COVID-19 pandemic (Dodds and Butler, 2019; Cotella and Vitale Brovarone, 2021a, 2021b). Among the 17 Sustainable Development Goals (SDGs) launched by the 2030 Global Agenda (UN, 2015), SDG 11 aiming at “Building sustainable and resilient cities and communities” devotes particular attention to inclusive and sustainable urbanisation (Target 11.3), the strengthening of cultural and natural heritage (Target 11.4), the reduction of disaster-related human and economic losses (11.5), environmental quality (11.6 and 11.7), and regional development and climate change adaptation (11.a and 11.b) (Berisha *et al.*, 2022). Similarly, the European Union’s (EU) “Green Deal” and the so-called “New European Bauhaus” support sustainability, aesthetic, and inclusion principles through integrated spatial planning and the implementation of cross-sectoral strategies that also include tourism (CEC, 2019).

While the main urban areas are better positioned to capitalise on the emerging development paradigms and the strategic and financial opportunities that they will bring (Evans *et al.*, 2019), small and medium-sized cities and rural areas are only recently reaching out to these issues, due to their lesser engagement in knowledge exchange networks and a common perception as ‘idyllic locations’ that do not yet suffer from the negative impacts of overdevelopment (Rye 2006; Cotella and Vitale Brovarone, 2022).<sup>1</sup> However, accelerating globalisation has progressively also increased their visibility as tourism destination (Assumma and Ventura, 2014); while the more virtuous contexts have seized this opportunity to synergistically integrate tourism within multi-dimensional development trajectories, in various cases the implementation of quick-win enhancement strategies has led to the consolidation of “mono-functional seasonal showcases”, often disconnected from their spatial surroundings.

Overall, the development of a touristic offer that provides an outstanding experience to visitors without overexploiting the existing resources and assets or worsening the quality of life of residents remains a tangle that still needs to be unravelled (Adie *et al.*, 2020; Bohac and Drapela, 2022). The conundrum is even more complex in relation to UNESCO Heritage sites (Di Giovine, 2008), where the cultural values, both tangibles and intangibles, that contribute to the uniqueness of a given context have to be valorised and at the same time preserved for future generations (UNESCO, 2003). As a matter of fact, while several studies have shown a positive correlation between tourism specialisation and long-term economic growth (Arezki *et al.*, 2009), the results in relation to preservation are often less encouraging, as it emerges from multiple UNESCO areas from around

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<sup>1</sup> For a thorough overview of the main challenges that characterise rural areas in Europe see: Vitale Brovarone *et al.*, 2022

the world (Lo Piccolo *et al.*, 2012; Caust and Vecco, 2017; Tesfu *et al.*, 2018; Tien *et al.*, 2019; Krájčková and Novotná, 2020). Of course, selected virtuous examples also exist, where the attractiveness of tourism destinations has been enhanced and managed through systemic and balanced sustainable development models that satisfy tourists and local stakeholders' expectation (Loulanski and Loulanski, 2011; Liburd and Becken, 2017; Saarinen and Gill, 2018; Panzer-Krause, 2019; Del Baldo and Demartini, 2021; Trišić *et al.*, 2022). As these experiences show, the reconciliation of environmental, economic, and social aspects is most often effectively pursued through the establishment of a coherent and integrated territorial governance framework (Lesniewska-Napierala *et al.*, 2022).<sup>2</sup>

Acknowledging the above, with this paper we aim to contribute to the ongoing academic and policy debate on how to plan more sustainable tourism dynamics within UNESCO Heritage areas (see, e.g.: Di Giovine, 2008; Arezki *et al.*, 2009; Lo Piccolo *et al.*, 2012; Caust and Vecco, 2017). In particular, we argue that the multi-level integration and coordination of different instruments – spatial strategies, landscape plans, territorial management plans, etc. – is essential to define, steer and manage territorial development dynamics in areas of outstanding landscape beauty, both considering the logics of tourism-driven economic development, as well as ensuring their sustainability. Our argument is detailed with particular reference to a specific UNESCO World Heritage area – the vineyard landscape of Langhe-Roero and Monferrato (Italy) (WHL, 2014). Case studies are used extensively in tourism research and teaching as they can, among others, illuminate general issues through the examination of specific instances (Beeton, 2005) and support the evaluation of ongoing policy processes (Yin, 1992).<sup>3</sup> In particular, the case at stake has been investigated through a mixed methodology composed by document and policy analysis, as well as by focus groups involving selected local stakeholders. The policy analysis had a twofold use: on the one hand, it enabled us to understand the main characteristics of the area and to reflect on the challenges and potentials surrounding tourism development therein; on the other, it has helped us to outline the governance and policy framework through which the development of the area is currently managed, as well as to identify the main contents of the instruments that have been put in place. Once a preliminary understanding of the case study has been consolidated, its main elements have been discussed in a focus groups, organised to test, validate and enrich them with additional governance nuances that only actors that deal with tourism dynamics in the area could provide.<sup>4</sup>

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<sup>2</sup> It is important to stress that the shape and functioning of these frameworks is strictly dependent on the specific characteristics of the spatial governance and planning systems that characterise the different countries and regions (Berisha *et al.*, 2021).

<sup>3</sup> For an overview of the employment of case studies in tourism research see: Urioste-Stone, 2018.

<sup>4</sup> The focus group saw the participation of six local stakeholders, respectively representing selected municipalities, private businesses (hotel and wine-making sectors), a consultancy company supporting tourism activities, and a regional body responsible for the sustainability of air quality.

The results of this activity is presented in the text below, structured into four sections. After this introduction, section 2 presents the case study of the Langhe-Roero and Monferrato wine region. Section 3 focuses on the territorial governance framework that has consolidated through time to steer, regulate, and manage the development of the area at stake, with particular reference to the Regional Landscape Plan and the UNESCO site management plan, and to the challenges that still persist. Finally, section 4 completes the contribution, summarising its main arguments and paving the way for future research on the matter.

## **2. WINE REGIONS AND TOURISM: THE LANGHE-ROERO AND MONFERRATO AREA**

A general premise on the main characteristics and challenges that characterise wine regions and tourism activities therein is provided here, to subsequently focus the attention on the Langhe-Roero and Monferrato wine region.

### **2.1. Wine regions: strong and fragile territorial systems**

Wine regions are complex territorial systems usually covering large surfaces, which concern different administrative levels (e.g., various municipalities as well as wide area bodies as provinces and regions). They often feature polycentric systems composed of small and medium-sized settlements that depend on selected larger municipalities for the access to primary services. Due to their nature, they are characterised by both strengths and fragilities (Assumma, 2021). On the one hand, their local economies are rather strong and focussed on production of wine and other certified gastronomic excellences, which are sold nationally and exported internationally. Property values are generally high, due to the proximity to cultural and environmental assets and services. Moreover, the presence of a high share of forestry contribute to reducing the risk of natural hazards and mitigating their impact when they occur. All these aspects contribute to the economic attractiveness of wine regions (Tyrväinen and Miettinen, 2000; Van der Heide and Heijman, 2013; Gottero and Cassatella, 2017; Gullino and Larcher, 2014; Assumma *et al.*, 2019), which are increasingly subject to recognition and strategies at the international level (Cassatella *et al.*, 2021).<sup>5</sup>

On the other hand, however, wine regions face a number of socio-economic, climatic, and environmental challenges (Jones and Webb, 2010; Mozell and Thach, 2014). In some regions, for example, local communities have moved to main cities

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<sup>5</sup> Apart from the several candidates to the UNESCO World Heritage List, see, for instance, the International Alliance of terraced landscapes, the FAO GIAHS Program, etc.



in search of higher quality of life, in so doing favouring the acquisition of agricultural lands by foreign investors and their transformation into vineyards. While the resulting increase in vineyards certainly generates a high economic return, it also contributes to a severe alteration of the landscape characteristics and value of these areas, which are very often rapidly turning to monoculture landscapes (Basso and Fregolent, 2021). At the same time, this substitution also occurs to the detriment of local cultural values as, although vineyards represent the structural factor of wine regions, this should not necessarily imply the exclusion of other permanent crops and their economies (e.g., olive groves, almond trees, etc.), which have in the past characterised the area. Additional challenges have been raised by climate change dynamics, which caused considerable losses in terms of vine plants and soil damages due to temperature and weather variations (e.g., heavy storms, strong winds and hailstorms, and low run-off performance) (Moriondo *et al.*, 2013).

Be that as it may, the environmental and landscape value of wine regions is acknowledged by many entities, including various international organisations aiming at their management and preservation. As evidence of this incremental recognition, the UNESCO World Heritage List (WHL) counts several cultural landscapes characterised by the presence of the wine-growing areas, of which many are located in Europe: the Alto Douro wine region in Portugal (2001), the Tokaj region in Hungary (2002), the Langhe-Roero and Monferrato area in Italy (2014), the Champagne, Caves et Coteaux de Champagne in France (2015), etc. According to UNESCO, wine regions are the result of the wine-making process as a relationship between man and environment (“continuing landscapes,” in UNESCO’s words); as a consequence, they have developed a tourism offer that, drawing on multiple forms of attractiveness (from food and wine to wellness, from sports activities to cultural events, among others) had progressively managed to attract non-seasonal tourism flows (Lourenco-Gomes *et al.*, 2015; Bruwler and Rueger-Muck, 2019). However, wine regions are increasingly endangered by climate-change related issues and the required adaptation measures may prove to limit tourism’s potential economic benefits in order to prevent the deterioration of environmental and landscape values. The challenge for spatial governance and planning is here to combine planning and management instruments at various scales in order to balance these trade-offs, to the benefit of tourists, local communities, as well as the overall territorial quality of the area.

## **2.2. The UNESCO Vineyard landscape of Piedmont: Langhe-Roero and Monferrato**

The “vineyard landscape of Piedmont: Langhe-Roero and Monferrato” is a famous wine region located in South Piedmont, between the provinces of Alessandria, Asti and Cuneo (Fig. 1). Asti is the closest large city, located a 52-minute car ride from Turin. This context has recently been included in the UNESCO World

Heritage List (WHC, 2014) as a “living cultural landscape,” according to specific cultural criteria, and integrity and authenticity requirements. The importance of this context exceeds regional and national boundaries, due to its Outstanding Universal Value (OUV). It is famous for excellent wines such as Barolo and Barbaresco, as well as for a variety of truffles and hazelnuts of Alba. The UNESCO candidacy begun in the early 2000s, involving a variety of public and private partners, and has been concluded in 2014.

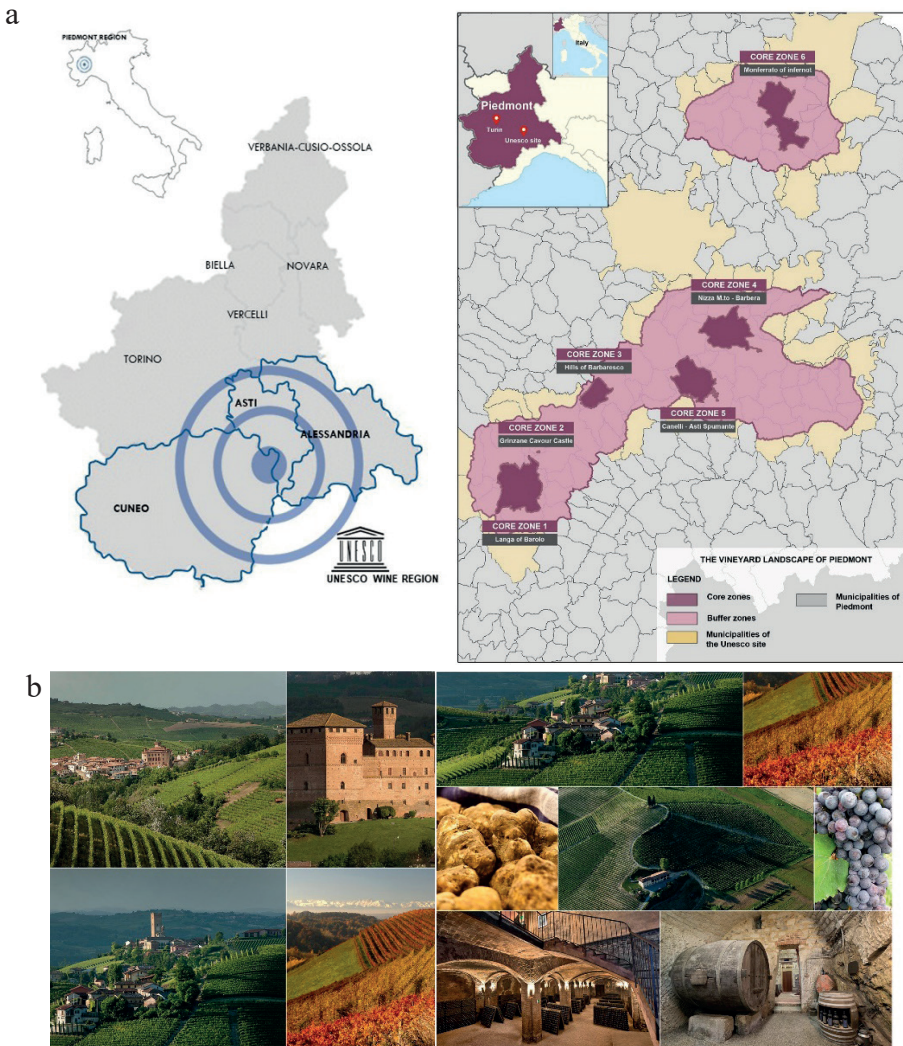


Fig. 1. Case study localisation: (a) the vineyard landscape of Langhe-Rocero and Monferrato  
 Source: authors' own elaboration on Assumma 2021 and Geoportale Piemonte data (a); authors' own elaboration on Assumma, 2021 on Google Images (b).

More in detail, the vineyard landscape of Langhe-Roero and Monferrato encompasses six OUV core zones, included within 2 buffer zones that serve a protecting function:

- The Langa of Barolo is the land of the famous Barolo wine. Its landscape is characterised by fortification and medieval boroughs spread among the vineyards;
- The Grinzane Cavour castle. The Count of Cavour ancient residence and houses that currently host a famous ethnographic museum and a wine research centre;
- The Hills of Barbaresco. An area devoted to the Barbaresco wine production, also hosting Neive that has been awarded the “Most Beautiful Boroughs” qualification;
- Nizza Monferrato and the Barbera. A core zone hosting medieval boroughs with commercial vocation and wine-making cooperatives that are the result of the strong cooperation between local wine producers;
- Canelli and the Asti Spumante. Canelli is the capital of Muscat wine and Spumante, hosting the so-called “Underground Cathedrals,” particular wine cellars aimed at sparkling wine conservation;
- Monferrato of the *Infernot*. The *Infernot* are wine cellars directly excavated in stone by local communities.

The present local economic system that characterises the Langhe-Roero and Monferrato area has developed and consolidated in the last thirty-fourty years and was further boosted by its inclusion in the UNESCO WHL list. Even if the area had been severely affected by depopulation after World War II, the role of local entrepreneurs would have been pivotal for the valorisation of local resources and know-how as a powerful engine of growth.<sup>6</sup> Wine culture has incrementally consolidated as the main socio-economic asset of the region: on the one hand, this has contributed to consolidate the sense of belonging and the territorial identity of the local communities; on the other, it triggered in the main actors and stakeholders innovative perspectives in terms of production, communication, and branding.<sup>7</sup> Through the years, emerging opportunities and investments for the valorisation of local culture and products have increased the national and international visibility and competitiveness of the area, thus creating new professional figures actively involved in the production process.<sup>8</sup>

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<sup>6</sup> Fondazione CRC, 2014. I quadri della Fondazione della Cassa di Risparmio di Cuneo. Langhe e Roero. Tradizione e Innovazione, n.22. <https://fondazioneerc.it/wp-content/uploads/2021/10/Q22.pdf> [accessed on: 22.02.2023].

<sup>7</sup> Rete Rurale Nazionale, 2011. La Governance dello sviluppo locale nelle Langhe. <https://www.reterurale.it/flex/cm/pages/ServeAttachment.php/L/IT/D/8%252F2%252Fd%252FD.f63599ce0e6b91dacdf5/P/BLOB%3AID%3D6090/E/pdf> [accessed on: 17.07.2022].

<sup>8</sup> For example, EU resources distributed throughout the EU that funded Rural Development Plan and the Leader programme were crucial in finding and disseminating an integrated local development represented by agriculture and tourism sectors (Santeramo *et al.*, 2017).

### **2.3. Tourism: opportunities and challenges**

Importantly in the framework of this contribution, the inclusion of Langhe-Roero and Monferrato in the UNESCO WHL list resulted in a conspicuous rise in tourists flows as well as in an increase in the number of cultural and enogastronomic events. This phenomenon mainly concerned the “fly by” flows of those people who live nearby the area and in the neighbouring regions. At the same time, it has been accompanied by growing episodes of religious tourism, made possible by the presence of architectures and religious assets enhanced by the restoration of historical itineraries and paths, as well as by more sustainable forms of tourism like cycle-tourism and family outdoor experiences aiming at a “slower” fruition of the area landscape value.

Whereas these increasing tourism fluxes undoubtedly constitute an important economic asset for the area, they also open up a set of challenges that need to be tackled carefully, in order to preserve the cultural, environmental and landscape quality of the area. The UNESCO site attracts every year an increasing number of tourists from all over the world, and this has raised the need for managing tourism flows starting from a more integrated and sustainable mobility. More in detail, these tourists are in most cases from abroad and with little capacity for independent mobility in the area. Hence the need to understand how to address innovation in tourist mobility, going beyond the private-car model. The limited availability of tourist-friendly transport in an area where inhabitants and tourists travel by their own means due to the scarcity of an adequate public transport system constitutes a serious challenge. The impact of private motorised means of transport on an area that is unique in the world and needs to be preserved and developed sustainably is indeed a challenge, that needs to be weighted *vis-à-vis* tourists’ mobility needs and the quality of their experience. At the same time, the attractiveness of the various places of the UNESCO area is differential, leading to an uneven concentration of tourists that favour selected locations – e.g. the municipalities of Barolo and Barbaresco, and the city of Alba. This generates infrastructure congestion problems, as well as a non-homogeneous distribution of the economic benefits of tourism, while also unevenly concentrating the negative impact of tourism pressure on the territory.

In order to face these and other challenges that the increasing tourism fluxes are bringing along with them, a number of planning and management instruments have been developed through time. As it will be further detailed in the section that follows, despite their apparent fragmentation, it has been possible to develop a number of synergies between them, and to consolidate them within a more or less coherent, multilevel governance framework aimed at the sustainable spatial planning of the area.

### **3. TOWARDS AN INTEGRATED MULTILEVEL GOVERNANCE FRAMEWORK**

As mentioned above, the increasing tourism pressures that have characterised the Langhe-Roero and Monferrato area since the turn of the new millennium and, in particular, since its inclusion in the UNESCO World Heritage List, require to be tackled through an integrated, multi-level governance framework devoted to this task. However, despite the long tradition boasted by the country in relation to tourism and the fact that, with 94 million tourists per year (2018), Italy is the third most visited country in international tourism arrivals,<sup>9</sup> the country's spatial governance and planning system does not include instruments or regulations specifically dedicated to the development, management, and regulation of tourism or of the impact of this activity over its cultural, environmental, and landscape heritage.<sup>10</sup> As a consequence, traditional spatial planning activities appear generally ill-equipped to deal with tourism challenges. The land-use regulation approach that has characterised the country through time has mostly focused – especially outside the main urban areas – on the provision of increasing land-use and development rights (Cotella and Berisha, 2021), and does not seem to be able to either promote tourism in those inner area that would benefit from increasing tourism dynamics as an engine for development or to strategically re-orient tourism activities in those areas that are endangered by overtourism.

Despite the lack of explicit attention to tourism, however, a number of instruments exists that, when coordinated and fine-tuned, may represent an asset in this concern. Firstly, each Italian region is required to produce a Regional Territorial Plan (RTP), an instrument that should present the main orientation for socio-economic and spatial development, as well as address environmental protection, infrastructural development, and other sectoral issues. The RTP is legally binding for sub-regional levels, which have to develop their plans coherently. At the same time, municipalities (alone or joined in unions) are obliged to prepare Municipal General Regulatory Plans (PRGC), i.e., instruments that define land-use prescriptions for the whole territory that they concern. The PRGCs are legally binding for public and private actors, they indicate the main communication routes, public areas, areas for public buildings, protection for the environment and landscape, etc.,

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<sup>9</sup> According to estimates by the Bank of Italy in 2018, the tourism sector directly generates more than 5% of the national GDP (13% considering also the indirectly generated GDP) and represents over 6% of the employed (Bank of Italy, 2019). Italy also contains more World Heritage Sites than any other country in the world.

<sup>10</sup> As the Italian spatial governance and planning system is highly regionalised, some regions constitute an exception in this concern, e.g., Valle d'Aosta and its Tourism Development Programmes, the Provincial programme for Tourism Development of Alto Adige, or the Tourism Strategic Plans produced by some large cities affected by overtourism (e.g. Rome).

and prescribe, through implementation regulations, the physical and functional status of the individual zones of the territory.

Through the relation between regional and municipal planning, there exists a possibility to approach tourism challenges from a multi-level perspective, with the Regional Territorial Plan that may approach them from a territorial, wider scale standpoint, to then either suggest guidelines on how to tackle them or enforce specific prescriptions on the matter. Importantly, the country is also provided with a consolidated system of Landscape planning that, at the regional level, runs in parallel and establishes synergies with the spatial planning activity. This occurs through the Regional Landscape Plans (RLP) that, since their introduction in 2004, have constituted the essential step for the conservation, planning and management of the regional landscape. RLPs extend to the whole regional territory, with the provision of different degrees of protection in relation to the recognition of landscape values and the consequent assignment of landscape quality objectives, as well as recovery interventions in degraded areas. These objectives imply that the protection of landscape should not be restricted to mere conservation and preservation, but should extend to the regulation of all human interventions intended to affect landscape. More specifically, RLPs have two main purposes: (i) a cognitive purpose, focusing on the analysis of regional landscape features (natural, cultural, property) and transformation dynamics in order to identify the risk factors and vulnerabilities of the landscape, and to address other acts of programming, planning and land protection; (ii) a directive purpose with legally binding measures, requirements for adaptation measures and simple recommendations for sub-regional and sectoral plans.

In the following subsections the Piedmont Regional Landscape Plan is presented, with particular reference to the attention it dedicates to the Langhe-Roero and Monferrato area. Then, the UNESCO site Management Plan is introduced, followed by a discussion of the future opportunities for coordination and integration of the multi-level governance system aiming at the sustainable spatial planning of the area.

### **3.1. Regional landscape planning: enhancing landscape scenery through a mix of top-down regulation and bottom-up initiatives**

The candidacy of the UNESCO site started in the early 2000s, in parallel to the development of the Piedmont RLP. The UNESCO perimeter was defined following the identification of Landscape Ambits and Units by this Plan. The area was not designated as a protected landscape (which would have implied strong prescriptive regulation), but subject to a special set of rules, agreed with the local authorities, in order to assure the protection of the landscape values and to demonstrate this will to the UNESCO Committee. Interestingly, the municipi-

palties accepted to conduct the revision of their PRGCs on a voluntary basis, in so doing playing a role in the phase of the WHS candidacy. After the nomination, the “Guidelines for the municipal planning and building codes” (Regione Piemonte, 2015) were developed as a focus area of the RLP, anticipating its effective enforcement (2017).

More specifically, the RLP devotes particular attention to the scenic features of the landscape, identifying and regulating viewpoints, panoramic routes, landmarks, skylines, etc. (Cassatella 2015). Guidelines for the management of landscape scenery are also provided, in order to guide local authorities in the process at the local scale.<sup>11</sup> In the UNESCO Site these guidelines were replicated, tested and further developed, thanks to a high local awareness and interest to enhance landscape attractiveness. One of the main tasks of the process is the viewshed analysis through GIS, which provides maps of areas visible from the many vantage points and panoramic routes, in so doing enabling a more accurate design and a thorough control in the phase of authorisation of spatial transformations.

The control of the landscape’s visual impact of interventions in the area is particularly challenging due to two factors: a high degree of intervisibility among centres and landmarks (a special feature of this hilly landscape, which contributes to its charm) and the administrative fragmentation of the territory characterised by very small municipalities, most often counting less than 500 inhabitants, with the consequence that each intervention authorised by a municipality is very likely to impact on others in terms of viewing opportunities. To overcome this issue, the local authorities agreed on creating one map of the cumulative intervisibility for the entire site, which was elaborated by the region, considering all the viewpoints identified and nominated locally by the municipalities, in a collaborative process (Fig. 2). The resulting map is to be used by each municipality in its reviews of visual impact assessment of interventions, enabling them to ensure intervisibility at a wider scale.

The attempt to enhance landscape scenery also resulted in direct interventions aimed at removing detrimental factors: a mitigation of the visibility of industrial buildings and the demolition of obsolete technical structures were conducted thanks to regional funding, and to the funding from private foundations. Landscape scenery here is intended both as an asset for the touristic attractiveness, and as a perceivable expression of local identity. The process experienced in the Langhe-Roero and Monferrato UNESCO Site shows that the enhancement of landscape scenery can be an opportunity for integrating top-down planning regulations and bottom-up initiatives, with landscape planning acting as a catalyst.

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<sup>11</sup> These Guidelines are listed by UNESCO among the implementation tools for implementing the HUL Recommendation. See The UNESCO Recommendation on the Historic Urban Landscape Report of the Second Consultation on its Implementation by Member States, 2019 UNESCO World Heritage Centre.

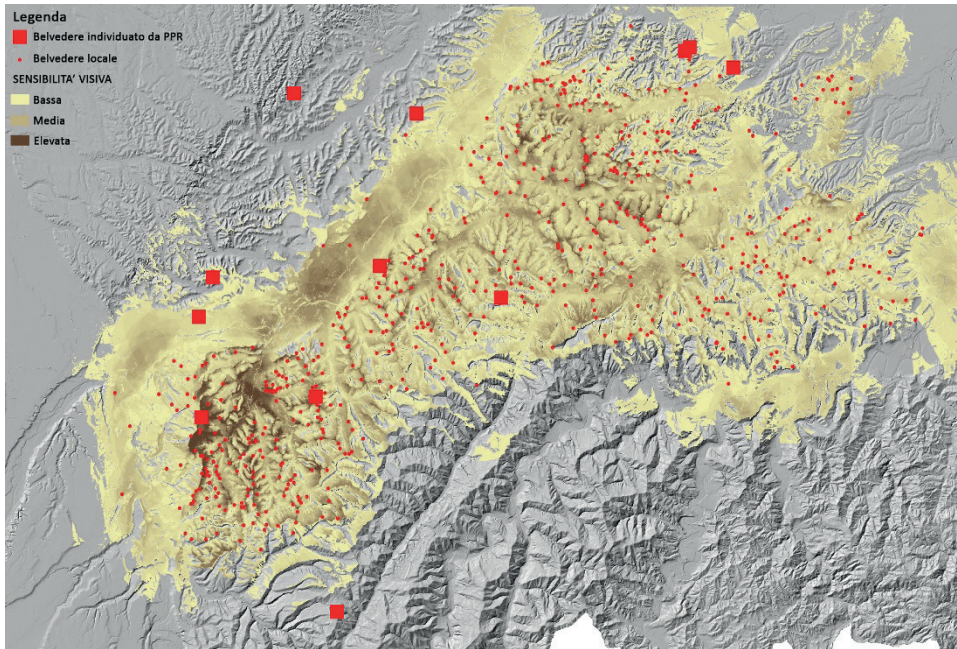


Fig 2. Map of cumulative visibility in the Langhe area. The squares indicate the viewpoints identified by the RLP, the dots those added by municipalities

Source: C. Cassatella and P. Guerreschi on data Piedmont Region, 2015.

### 3.2. Unesco Management Plan

The UNESCO candidacy process of a site requires a Dossier and a Management Plan with the function of protecting and managing the State of Conservation (SOC) of the value over time. The complexity of wine regions management is a widely debated topic, since it must deal with cultural heritage protection, environmental compatibility, as well as spatial planning (Pettenati, 2019). As a consequence, the candidacy of the Langhe-Rero and Monferrato area required a strong cooperation between actors and stakeholders and the mobilisation of cognitive, legal, political, and financial resources all aimed at envisioning a winning strategy of valorisation and management (Fig. 3). The site candidacy led to the foundation of a management body, namely the Association for the heritage of the vineyard landscape of Langhe-Roero and Monferrato (2011), with the purpose of coordinating and implementing the Management Plan, as well as of strengthening governance, cultural promotion, awareness-raising, and the integrated planning action of the municipalities included in the UNESCO site. More specifically, the main objectives



of the Association are: a) to reduce territorial fragmentation through designing large-scale cohesion projects; b) to favour the cooperation between public and private actors according to principles of transparency, accountability, and sharing; and c) to develop marketing strategies that balance tradition and innovation.

The Management Plan also provides a monitoring plan for which Regione Piemonte acts as the main responsible actor, since it must organise and prioritise the projects' executive process, integrate both ICOMOS and UNESCO recommendations within sets of Key Performance Indicators (KPI) (environment, history and culture, and perception), and provide periodic reports to check the monitoring process. As the monitoring activity required the development and consolidation of comprehensive, geo-referenced knowledge, Regione Piemonte collaborates with several agencies and foundations (Sitad, Arpa Piemonte, Links Foundation, etc.) to populate information about the relevant components of the site according to a multidisciplinary approach. Thanks to these efforts, the KPI indicators were integrated in an online GIS tool called the Interactive Visualization Tool (InVito. Valle and Soldano, 2017), then also employed in an Impact Assessment activity by UNESCO.

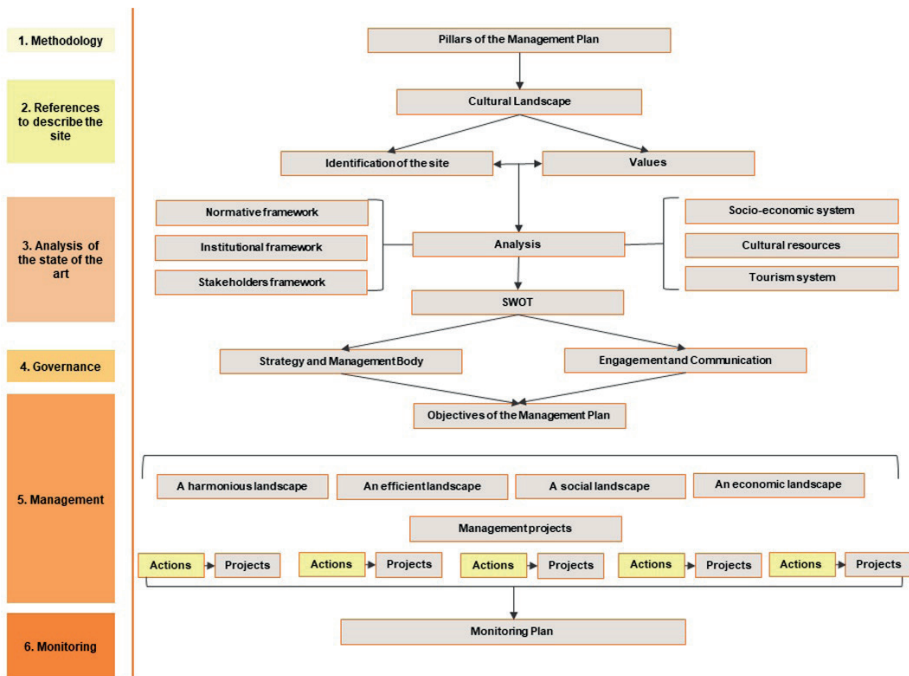


Fig. 3. Structure of the UNESCO Management Plan of the case study  
 Source: authors' own elaboration on Valle and Soldano, 2017.

The Management Plan of the Langhe-Roero and Monferrato area is considered innovative since it deals with both the management of tangible and intangible assets and with the development of all human activities in the area (see Table 1). More specifically, it identifies four strategic objectives to conserve and manage the OUV value: i) harmonious landscape (where to design), meaning that actors and stakeholders have to implement sets of actions for a more conscious spatial planning; ii) social landscape (where to live) refers to the need to preserve the local identity and the sense of belonging to the site, and also attracting new social capital; iii) economic landscape (where to work), which refers to the identification of sustainable solutions that can favour entrepreneurship to contrast economic pressures and with benefits to local development; and iv) efficient landscape (where to manage), for managing effectively resource availability and improving cooperation between institutions and local communities. As each strategy concerns the implementation of specific projects, there is a need for a coordinated governance model to accompany the management process and to integrate its action with that of the other planning instruments active in the area at various territorial levels.

Table 1. Structure of the UNESCO Management Plan of the Langhe-Roero and Monferrato (WHC, 2014)

Objectives	Priority axes
1) Harmonious landscape (where to design)	Processing and systematisation of guidelines for recovery and planning; Rehabilitation and recovery of city centres and their building heritage; Creating lookouts and observation points; Sharing opportunity, training and research institution.
2) Social landscape (where to live):	Landscape protection increases the sense of belonging and identity in local communities, encouraging human capital into the site;
3) Economic landscape (where to work):	Local productive heritage; Creation of museums and tourism centres; Improving and consolidating the local tourist offer; Promotion of cultural and tourist resources; Rationalisation of signage; Viewpoints valorisation;
4) Efficient landscape (where to manage)	Coordination of territorial databases and artefacts and structures census; Strengthening of research and training centres; Research studies on winemaking heritage; Proposing “slow” tourism routes; Dissemination of information between partners at international scale;

Source: authors' own elaboration.

### 3.3. Future opportunities of coordination and integration

The introduced instruments, i.e., the RLP and the UNESCO Site Management Plan, together with the statutory spatial planning instruments, i.e., the RTP and the PRGCs of the involved municipalities, and with other sectoral and/or episodic interventions, i.e., the recent National Recovery and Resilience Plan, the EU Cohesion Policy Programming Period 2021–27, etc. constitute important elements of what could consolidate as an integrated multi-level territorial governance framework aimed at the sustainable spatial planning of the Langhe Roero and Monferrato area. In order for this to happen, however, a number of challenges still need to be faced:

- The revision of the RTP of Piedmont. The Piedmont Region is currently undertaking the revision of its Regional Territorial Plan (RTP).<sup>12</sup> The presently valid RTP was approved in 2011, and did not include any reference to the UNESCO landscape of Piedmont Langhe-Roero and Monferrato, as the latter was officially created only in 2014. The challenge concerns the valorisation of the opportunities offered by the inclusion of the area in the WHL as a “living cultural landscape.” This activity should build on the area’s cultural resources, both tangible and intangible, as well as on its natural and economic specificities. More specifically, it should explicitly aim at the valorisation of food and wine tourism, cultural heritage, and sport and recreational activities. At the same time, it should tackle the challenges concerning tourism pressure in specific places where media exposure is higher rather than the remaining municipalities of this territorial context.

- Update of the PRGCs of the municipalities of the area to the RLP Guidelines. This second issue is tightly connected to the previous one, as both the RTP and the RLP are produced by the Region. In particular, as already highlighted in the presentation of the Italian Spatial Planning system, the Regional Landscape Plan is one of the main instruments through which spatial planning can tackle tourism issues, through the voluntary undertaking of its guidelines by the municipalities. In this sense, the Municipalities belonging to the UNESCO site are required to update their General Regulatory Plans according to regional guidelines specifically designed for the Langhe-Roero and Monferrato.<sup>13</sup> While various municipalities have already undertaken the task, due to the mentioned intervisibility that characterise the area, only the revision of the totality of the PRGCs will ensure a thorough preservation of its landscape value.

<sup>12</sup> Regional Territorial Plan of Piedmont available at <https://www.regione.piemonte.it/web/temi/ambiente-territorio/territorio/piano-territoriale-regionale-ptn> [accessed on: 17.07.2022].

<sup>13</sup> “Linee guida per l’adeguamento dei piani regolatori e dei regolamenti edilizi alle indicazioni di tutela per il Sito Unesco”, approved with D.G.R. n. 26-2131 September 21, 2015. [https://www.regione.piemonte.it/web/sites/default/files/media/documenti/2019-01/linee\\_guida\\_unesco.pdf](https://www.regione.piemonte.it/web/sites/default/files/media/documenti/2019-01/linee_guida_unesco.pdf) [accessed on: 17.07.2022].

– Establish synergies with the National Recovery and Resilience Plan and the EU Programming period 2021–2027.<sup>14</sup> The third issue at stake concerns the delivery on the ground of the EU Recovery and Resilience Facility and, more specifically, of the interventions that have been included in the National Recovery and Resilience Plan. The latter includes a large number of interventions and actions that were proposed by municipalities to the Central Government, through the National Association of Italian Municipalities. The challenge here concerns, on the one hand, the delivery of ground actions that can contribute to valorising the tourism potential of the area in a synergic way, while tackling the main challenges that the increase of tourism pressures brings along. On the other, it also concerns the rather low institutional capacity of small and medium municipalities of the country to efficiently and effectively deal with the unprecedented amount of resources that the NRRP will deliver to the territories. In relation to this last issue, a set of capacity building and accompanying measures should be put in place to ensure that the resources are used to support the implementation of the strategy of the Management Plan.

#### **4. CONCLUSIONS AND FUTURE PERSPECTIVES**

This paper discussed the planning and management instruments that, within the Italian spatial governance and planning system, could contribute to virtuously steering and regulating the development of tourism in a way that both encourages local economic development while preserving environmental and cultural assets in a sustainable way. In particular, this was done in relation to a wine region that has recently entered the UNESCO World Heritage List and has, since then, experienced growing tourism fluxes and related challenges.

As highlighted in the text, despite the absence of any specific instruments in the Piedmont region devoted to tourism planning and management, both spatial and landscape planning have been used to support the design of a more sustainable development of tourism in the analysed area. The fact that in Italy spatial planning competences are jointly managed at the central and the regional levels, has indeed influenced the process, with the Piedmont region acting as the main player. More specifically, the Region has been responsible for drafting both the Regional Territorial Plan and the Regional Landscape Plan, and is currently in the process of producing a renewed version of the former that will consider the provisions of the latter to a full extent. At the same time, these spatial and landscape planning processes have also influenced the candidacy and management of the UNESCO site, with Regione Piemonte that has played a very important role in the coordination and management

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<sup>14</sup> Piemonte Cuore d'Europa <https://piemonte2021-2027.eu/> [accessed on: 17.07.2022].

of all activities ongoing in the vineyard landscape. The strong leadership of the regional government has also manifested through constant attempts to engage with the local municipalities as well as other actors in the territory, belonging to both the private sector and the civil society. This is clear in the UNESCO site Management Plan (and in the structure of the Association), which highlights the importance of cooperation between decision makers, private stakeholders, local associations, and citizens, in order to enhance the visibility of the area at the international level, while at the same time preserving its intrinsic value. On their part, the municipalities belonging to the vineyard landscape had answered to the regions' call with a proactive, flexible attitude, and were keen to territorialise the guidelines received from the region in the review of their municipal plans through specific rules of protection (such as camouflage actions for barns), despite the Italian bureaucratic apparatus is considered very rigid and centralised. At the same time, some limits still persist, as for instance the fact that the employment of these protection rules – as well as the measures of the UNESCO Management Plans – concern only the specific perimeter of the UNESCO site, partially overlaying the municipalities, and in so doing producing differences of regulations and investments between municipalities and within the same municipality (WHC, 2014).

Overall, the presented experience clearly shows how landscape values present a high potential to catalyse the actions of different actors and sectors to collaborate towards its exploitation and valorisation towards tourism-based economic development. In order for this process not to generate a negative impact on the assets that it aims to extract value from, however, there is a need to put in place an integrated, multi-level territorial governance framework that would steer and regulate such development towards a sustainable direction. Despite the absence of dedicated instruments, the integration and synergies established between the Regional Territorial Plan, the Regional Landscape Plan and the planning activities of the involved municipalities has produced promising results.<sup>15</sup> Despite the challenges that still need to be addressed, and which have been discussed in this paper, the case of Langhe-Roero and Monferrato is nowadays considered as a good practice for the entire Piedmontese territory, with “wine roads” that are being promoted in several areas of the region, paying attention to enhancing the linkages between the product and the local landscape and its experience.<sup>16</sup>

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<sup>15</sup> As stated by Pettenati (2019), a positive impact towards this direction may as well have been generated by those actors and stakeholders that build strategies of enhancement and management or even created narratives of cultural landscapes in the context of UNESCO candidacy process and, later on, in the development and implementation of its management plan.

<sup>16</sup> In particular, an international collaborative project (Interreg Vi.A) created the “Road of mountain vineyards”. Maps and Guidelines were produced after a process of consultation, addressing both private actors (farmers, entrepreneurs) and public (local authorities), and then included in the Territorial Plan of the Metropolitan City of Turin (Cassatella and Bonavero, 2020), conveying the interests of the rural development and of the spatial planning departments.

However, the success of these emulation experiences is by no mean granted, as the success of the UNESCO area can hardly be replicated in other areas, such as alpine valleys, which are characterised by valuable landscapes but lack convenient conditions for agricultural production or touristic accessibility. In this concern, a promising avenue for further research could be represented by the exploration of the actual potential for transferability of the identified success case and while the whole process is not possible to transfer as a whole, some elements of it may constitute useful ‘triggers’ of good territorial governance in similar contexts and situations (Cotella *et al.*, 2015).

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## BARRIERS AND CHALLENGES TO SUSTAINABLE PHYSICAL PLANNING FOR MOUNTAIN DESTINATIONS AND SECOND-HOME DEVELOPMENTS IN THE MOUNTAIN REGION OF SOUTH-EASTERN NORWAY: THE REIGN OF GOVERNMENTS OR DEVELOPERS?

**Abstract.** The number of hotels in the mountains of south-eastern Norway has decreased over the last three decades, with a concurrent increase in the number of modern, privately-owned second homes. The growth of second-home villages and associated commercial activity has produced sustainability issues. The shift in the planning and development process from the local government to private developers has resulted in a piece-by-piece process with the loss of sight of long-term consequences. This short review discusses the causes of uncontrolled or poor planning of mountain regions; in particular, the neoliberal trend in physical planning and the problem of small local communities.

**Key words:** neoliberal planning, ski destination, second home, mountain resort.

### 1. INTRODUCTION

In Norway, the industrialisation of the country has mostly occurred in and around cities, as well as in some coastal towns with access to hydroelectric power. However, in the interior, in the valleys and the mountains, the industrialisation process

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has proved difficult. For rural communities in mountain regions, tourism and primary industries constitute the two main export trades, bringing in revenues from the outside world. In both Norway and other Scandinavian countries, tourism has been essential to the local economy in mountain regions for more than a century (Heberlein *et al.*, 2002). With a continued downscaling of the primary industries, agriculture and forestry, the economic importance of tourism has increased even more over the years. In the mountains of southern Norway there are more than a hundred ski resorts or mountain destinations of various sizes, constituting the engine of the tourism-related activity of this region.

The traditional accommodation industry used to be the economic gravitational point of ski resorts or mountain destinations. However, the rapidly increasing number of modern second homes over the last three decades has taken a toll on the number of hotel guests. Thus, the traditional domestic market for hotels and lodges has dwindled, resulting in a large overcapacity of beds (see, e.g., Flognfeldt and Tjørve, 2013). Though causing problems for the accommodation industry, the large number of new second-home tourists creates opportunities for the expansion of ski lifts and alpine slopes, but also other services and trade. This has resulted in large second-home agglomerations with the resulting commerce and infrastructure.

The rapid expansion of second-home villages, ski-lift areas, and other commerce and infrastructure in the mountains have raised growing concerns about the sustainability of all the developments. This is manifested in local resistance and criticism in the media and the literature, and it has also become highly visible in contemporary research literature (see, e.g., Flognfeldt *et al.*, 2017; Arnesen *et al.*, 2018). Several authors have noted that there has been a pronounced shift in physical planning tradition, from planning processes driven and controlled by local governments and their administrations towards a planning system where the role of the governments is weakened and instead private developers have taken over more of the planning process (Davoudi, 2017; Eckerberg and Joas, 2004). This has been described as part of the neoliberal trend that is seen not only in Norway, but also in other parts of the world (Nordregio, 2004; Olesen, 2004).

The current physical-planning regime and legislation may challenge the possibility of more sustainable physical planning. Thus, the purpose of this article is to present the barriers and challenges to the sustainable planning of ski resorts and mountain destinations in small rural communities. We do this as a brief review discussing the rapid increase in second homes in Norwegian mountains in light of present trends in the physical-planning traditions in Norway, which identifies the same liberal trend as commonly observed in other countries. The Mountain Region of south-eastern Norway has been chosen to provide examples of mountain destinations for the discussion. Statistical data for the destination municipalities was harvested from the official statistics of Statistics Norway (SSB) (<http://www.ssb.no>). Simple inferential statistics (t-test) was applied to the data.

Present studies on the sustainability of building and development in mountain areas typically focus on a single or only a few factors: for example, climate or economic sustainability. However, studies with a broader approach to sustainability, seeking to identify and discuss many factors, are missing. Accordingly, this study also aims to describe how a typical planning process proceeds; we will discuss the unwanted sustainability issues caused by scrutinising a typical ski resort/mountain destination in addition to the probable causes and alternatives to current processes and practices. The discussion in this study applies to the resorts or destinations in the mountain region of south-eastern Norway. However, most case study examples have been drawn from the Skeikampen destination, which is situated in Gausdal municipality, a two-and-a-half to three-hours' drive from the main market in the Oslo-fjord region. The Skeikampen case, as a typical ski resort and mountain destination, is easily comparable in terms of size, ownerships and development, to similar destinations with large second-home agglomerations throughout the mountains of Norway. The destination has one strong owner, which is also a city-hotel chain, but there are also a few smaller businesses operating at the site. This makes this destination suitable as a model case to understand the present practices and outcomes of physical planning and development.

## **2. THE MOUNTAIN REGION OF SOUTH-EASTERN NORWAY**

According to Nordregio (2004), 93% of Norway is mostly mountains, meaning most of its land mass. In southern Norway 54% of the land mass (112,937 sq. km) lies above 700 m a.s.l. Here, we define the mountain region of south-eastern Norway as the municipalities where more than 50% of their area lies above 700 m a.s.l. This definition omits, however, some municipalities with important mountain destinations/ski resorts and second-home agglomerations, including those of Sjusjøen (the Ringsaker municipality), Trysilfjellet (the Trysil municipality), and Oppdal (the Oppdal municipality). We have chosen to follow the region used by Flognfeldt and Tjørve (2013), which includes these three municipalities. The resulting region consists of 39 municipalities (Fig. 1) and includes the main ski resorts or mountain destinations: Trysil, Sjusjøen, Hafjell, Kvitfjell, Skeikampen, Beitostølen, Hemsedal, Norefjell, and Hovden, as well as many smaller resorts or destinations. The larger destinations in this mountain region all fall within of the weekend zone of the major cities of Oslo, Bergen, and Trondheim, meaning within a distance that most visitors will find as acceptable for a weekend stay. It is evident that both second-home owners and domestic tourists seem to prefer not to travel more than three to three and a half hours when only staying for the weekend.

Most ski resort or mountain destinations started with summer tourism, though today they are foremost winter destinations (Flognfeldt and Tjørve, 2013). After the Second World War, the mountain hotels and lodges were given a boost by the central government as cheap loans and other benefits, e.g., priority to rationed foods and other goods, were offered. The main purpose of these policies was to attract foreign visitors and consequently foreign currency, much needed to buy goods from abroad. Still, up until today domestic tourists has made up the better part of the market. For example, if we include the use of private second homes, then as many as 96% of ski tourists are Norwegians (Innovasjon Norge, 2019).



Fig. 1. Map of southern Norway where the location of the 38 municipalities in the mountain region of south-eastern Norway are shown in grey

Source: modified from Flognfeldt and Tjørve (2013).

Traditionally, mountain hotels and lodges were the gravitational point of the destinations. Cabins or second homes, mostly built by the lower or middle classes, did not have the same amenities, such as electricity, running water, and sewage systems. However, from approx. 1990 most second-home developments have consisted of high-standard cabins or chalets with all modern amenities (Flognfeldt and Tjørve, 2013). The rise of the modern second home has caused the wealthier classes of Norwegians to abandon hotels and lodges. The fact that the domestic market still being the most important to the accommodation industry has resulted in an increasing overcapacity of beds (Flognfeldt *et al.*, 2017). Nevertheless, some have succeeded to even become four-season destinations or at least to remain open in summer.

## **2.1. The problem of small municipalities**

Some of the municipalities in this mountain region have less than a thousand inhabitants, whereas others have populations of up to almost 35,000. The total population of the region was 156,147 in 2021 (SSB, 2022), and the local populations have been decreasing in most of the municipalities. There are 86,855 permanent dwellings in total, compared to 99,191 registered second homes, thus there are more second homes than permanent homes (see Appendix 1). However, the number of buildings used as second homes may in reality exceed 100,000 as some of the houses registered as permanent dwellings undoubtedly function as second homes.

Most of the growth at the ski resorts or mountain destinations has come as second-home developments and ski-lift areas. Many of the largest ski resorts or destinations but also new destinations lie in municipalities with few permanent inhabitants and, therefore, small municipality administrations. Noticeably, new ski destinations are also being built in these small rural communities as (the Tururfjell destination) in Flå and (the Eifjord resort) in Eidfjord municipalities (whereof the latter is outside our study area). These have a mean population of less than 4,000.

If we look at the number of second homes, the picture of municipalities with few inhabitants becomes even more pronounced. In Appendix 1, we have aggregated the figures for populations, permanent (first) homes and second homes in the 38 municipalities in this mountain region (harvested from SSB, 2022). Of these, 22 municipalities now have more second homes than permanent homes. Many of these municipalities have small populations, about 3,000 compared to about 5,500 for municipalities with fewer permanent homes than second homes (see also Appendix 1). The mean number of second homes is also significantly higher ( $p < 0.05$ ,  $t = 2.427$ ,  $DF = 36$ ) for these 22 municipalities (mean = 1863) than for the 16 with more permanent homes than second homes (mean = 3154).

Table 1. Major destinations in the mountain region of south-eastern Norway

No.	Destination	County (municipality)	Ski lifts	Pistes
1	Trysil	Innlandet (Trysil)	32	69
2	Hafjell	Innlandet (Øyer)	19	64
3	Kvitfjell	Innlandet (Ringebu)	14	36
4	Skeikampen	Innlandet (Gausdal)	11	21
5	Beitostølen	Innlandet (Øystre Slidre)	8	19
6	Norefjell	Viken (Krødsherad)	14	30
7	Hemsedal	Viken (Hemsedal)	20	53
8	Geilo	Viken (Hol)	20	45
9	Rauland	Vestfold og Telemark (Vinje)	14	37
10	Hovden	Agder (Bykle)	8	33

Source: own work.

Table 1 shows a list of ten subjectively more prominent ski resorts in the region. They can be divided into “vacationist destinations villages” and “complete destination villages”. The examples of complete destination villages with a resident population and developed trade and services are (5) Beitostølen and (8) Geilo. The “vacationist” type of village consists only (or predominantly) of tourist enterprises and second homes. Trysil and Hemsedal are typical corporate-owned resorts, both owned by Skistar, which owns a number of resorts in Sweden and one in Austria, while the Skeikampen destination is owned mostly by a city-hotel chain, thus being corporate but also with a number of smaller, independent businesses. However, the hotels at Skeikampen have been struggling, and today just one in three hotels is open, and only during the winter season. Thus, accommodation at Skeikampen has moved quickly from traditional, commercial accommodation (hotels and lodges) to privately-owned second homes. This has been the general trend over the last 20 years for this type of destination (Flognfelt and Tjørve, 2013), though Skeikampen is a rather radical example.

Given the fact that most of the municipalities with large ski resorts and many second homes have small permanent populations, they understandably do not have the same resources to spend on physical planning, and smaller municipalities have smaller administrations and typically do not have any dedicated, full-time physical planners (Thallbro, 2017). The developments, especially of second homes, are typically not proposed as large, joint development plans, but separately by several different actors over time. This requires a strong focus on each separate case, which becomes a challenge for these smaller municipalities with their limited planning resources (Angell *et al.*, 2021).



The corporatisation of destination ownership has also resulted in the dismantling of destination management organisations (DMOs). The disappearance of mountain destination DMOs may also add to the problem. These local DMOs, as that at the Skeikapen destination in Gausdal, functioned as collaboration and network-building institutions, bringing all the actors at the destination together. They also produced master plans, which offered municipalities a coordinated physical-plan proposal for the whole destination. This made it less resource demanding for municipality administrations to control and decide on the development at a destination.

### **3. TOWARDS A NEOLIBERAL PLANNING TRADITION**

Physical planning in Norway is regulated by the planning and building regulations law (Ministry of Local Government and Modernisation, 2011). The physical planning system in Norway, and with it the planning process, has undergone substantial changes in recent decades. There has been a pronounced shift in the spatial-planning tradition from governmental authorities to private actors (Eckberg and Joas, 2004; Saglie and Harvold, 2010). Consequently, most planning for developing areas at tourist destinations is done by non-governmental actors, replacing governmental planning. This is the result of what is described as a shift towards what is described as a ‘neoliberal planning culture,’ where hierarchical governance is replaced by governmental assistance to stimulate development (Fimreite *et al.*, 2005).

We find this trend towards neoliberalism in the strategic planning process in Norway as in most other countries (Olesen, 2014, Davoudi, 2017). This shift has been described first and foremost in urban planning processes, though it is equally valid when considering rural and mountain regions. In recent decades central governments has sought to decentralise power to the local level, particularly towards rural communities. Together with the liberal trend mixed with strains on the economy of the municipality administrations, private planning has gained wider acceptance in mountain regions and especially in the planning of mountain resorts and second-home developments (Lasanta *et al.*, 2021).

Today, it is mostly separate developers that forward their own plans for second-home developments and ski slopes, and the role of local governments is reduced towards that of discussing and deciding on individual proposals. The pressure for local governments to accept each private plan lies of course in the claimed economic benefits, pressuring them to make concessions to attract investments. The result of the loss of strict general physical plans from a municipality or master plans from a collective group of actors at destinations is deregulation, where

short-lived economic gain of the developing interest trumps other considerations. Moreover, such a planning culture results in a piece-by-piece development of the land, where the view of the greater whole is lost (Saglie and Harvold, 2010). With these changes comes a distinct shift towards a stronger influence of private initiatives in the spatial planning of destinations, or rather a lack of spatial planning.

### 3.1. Reformation of the plan and building acts

The liberalisation of the planning process and the weakening of public spatial planning seems not to be on par with the intentions of the plan and building act. It was designed for the public-planning process, meaning for a process towards legally binding spatial plans, and not for a planning process that has been left to the private market (Fimreite *et al.*, 2005). The planning process is currently taken over by new types of plans adjusted to a market-driven planning system, but which does not function well as a strategic tool for managing land use and development (see also Mäntysalo *et al.*, 2015; Lasanta *et al.*, 2021). Consequently, the planning process is dominated by many small plans forwarded by private developers, constantly changing the total plans for a larger area. Thus, as Holsen (2017) has noted, the new market-driven planning has resulted in a planning system outside the planning legislation. The present planning legislation is better suited for strategic planning but is less suited for coordinating a plethora of smaller privately initiated plans and developments (Holsen, 2017). Consequently, long term planning, both urban and rural, has a less significant place, as it is replaced by piece-by-piece decisions resulting from private plans and a market-controlled planning regime.

## 4. THE SKEIKAMPEN-DESTINATION CASE

Skeikampen is a larger destination with about 700 hotel and self-catering (commercial) beds within the traditional accommodation industry, 2,000 private second homes, 2 caravan sites, 9 ski lifts, 21 pistes and about 200 km of prepared cross-country ski tracks. It is situated 20 km from the community centre in Gausdal, about two hours and 45 minutes by car from Oslo, thus within a 'week-end distance' from the Norwegian capital. The spatial plan for the area was developed in 2011 (Gausdal commune, 2010), and a new plan will be in place in 2022 (Gausdal commune, 2021). However, the planning area described in these physical plans does not cover the total, increasing second-home agglomeration around the Skeikampen destination. These are covered by smaller plans and developer contracts. Together there are approved development plans for about 1,500 new second homes, but it is rumoured that there are additional plans for approxi-

mately 2,000 more cabins, though these areas are not regulated for second homes. This could result in a future agglomeration of more than 5,000 second homes. It should be noted that with the uncertainty of the economic situation in Norway and around the world it would not be surprising if the second-home building boom soon ground to a halt.

The expansion of the alpine ski area and fast-growing number of second homes has caused a water shortage. More water is needed for the second homes and to keep the snow canons operating to extend the downhill skiing season (Holø and Røsrud, 2021). This seemed a surprise for the municipality administration and politicians, and their new plan to obtain water for this development includes a suggestion to turn one of the two undisturbed lakes in the upper mountains into a water reservoir (Norconsult, 2021). This would transform a large portion of the undeveloped mountains around the destination, and the lake might also have to be fenced, unless farmers agree to stop letting their cattle and sheep onto the pasture in the mountains. The plans have caused protests from environmental protection organisations and the green political party (MDG) in addition to locals and second-home owners in the area. The municipality is forced to take a large economic risk, gambling on the second-home market not to collapse in the years to come. It has already invested largely in a new sewage pipe from the destination and down through the valley. If these investments cannot be covered by an increased number of second homes, the bill will go to the permanent inhabitants in the Gausdal municipality.

The growing number of second homes has also led to conflicts with local farmers and landowners. Incidents between second-home residents and cattle have resulted in resistance to allowing farm animals into pasture in the mountains. Complaints of sheep soiling terraces and the areas around buildings have also caused some conflict, making the owners want to fence areas around their second homes. To stop using the pastures in and around these former summer-farm areas may be considered a highly unsustainable outcome of the plans and development of this tourist destination.

The above issues of future sustainability warrant a closer look at how spatial planning and growth of a resort results in unwanted issues and what alternatives there are to the current processes and practices. The planning process in Gausdal seems to be characterised by a piece-by-piece planning practice, resulting in an uncontrolled development of mountain areas and no totality in the planning. This is to be expected when it is handed over to private developers, and where the role of the municipality has gone from governance to governmental assistance to stimulate development. This practice may be reinforced by the lack of competence and capacity at the municipal level. Still, it should be possible to influence the attitudes and practices within the municipality administration and with local politicians. However, introducing more restrictive governance is often more difficult within the local setting, where the decision-makers may have closer ties, personal or otherwise, with developers or landowners who may profit from the sales.

The level of conflict has risen steeply, particularly in the last few years. This is illustrated well by the large number of letters and articles in the local newspaper and the media in general. A quick internet search for the last five years (in Norwegian) on ‘second-homes’, with or without the word ‘resort’/ ‘destination’ at Skeikampen or Skei combined with ‘Gausdal’ returned nearly 100 hits in newspapers and television media. Among those about eight in ten presented critical views on the plans and developments at the Skeikampen destination. About one in ten were critical towards the pasturing practices in the area (or reporting attacks by cattle), and one in ten reported on and/or praised plans for new developments. The search also showed a steep increase in the number of articles published in recent years (Tjørve and Tjørve, submitted manuscript). The reactions from the general public are a good illustration of some of the challenges the municipalities face regarding the physical planning of such a destination and seem to warrant further investigation. The issues raised in the letters, articles and other entries found included the loss of nature, the loss of access to nature for recreational purposes, the loss of access to pastures, over-tourism, and the risk of economic burden for the locals.

## 5. CONCLUSIONS AND RECOMMENDATIONS

It is evident that the municipalities have lost much of their will and ability to conduct spatial planning activities for developments in Norwegian mountains. Instead, private developers have taken over the realm of planning, where every private plan is presented as a *fait-accomplie*, where rejection would result in losing the opportunity of large revenues. Most of the larger ski resorts or mountain destinations in Norway are situated in a ‘weekend distance’ for the large population centres in southern Norway, meaning the regions in and around the largest cities, e.g., Oslo, Kristiansand, Stavanger, Bergen, and Trondheim. The weekend distance is here defined as somewhere between two and three hours by car from the permanent homes of second-home owners. Three hours is usually considered the top limit for weekend travel (see, e.g., Arnesen *et al.*, 2002, 2018). We see that most growth occurs at the larger destinations within this weekend distance. This increasingly centralised development means that the negative impacts of a liberal, piece-by-piece planning regime will have a more severe impact in these weekend distance destinations. To be able to give advice on how to improve planning practices, we need to identify possible causes or practices that can bring about challenges. A list of such causes or practices may include:

- Lack of resources allocated for planning purposes at the municipality and county levels, with a loss of perspective and totality;

– Decision-making power moved to the lowest (municipality) governmental level may strain the willingness to decline building or development permissions sought by private initiatives due to close personal relations and family ties with the developers;

– A general neoliberal trend in spatial planning, both domestically and worldwide, lessening the power to control or slow down the pace of new destination or second-home developments.

Much of the discussion can be seen as part of the old conflict between production and nature values. However, mountain tourism has in many ways stood on both sides of this conflict. On the one hand, second-home and destination development demands the consumption of new areas, but, on the other, the attraction “promised” to tourists is recreation in unspoiled nature. Another obvious challenge is the increased privatisation of the mountains. An expanding destination sprawl and second-home agglomerations represent a de facto privatisation of wilderness or nature (Ellingsen and Arnesen, 2018). In most second-home developments, only fixed-point ground leases are offered. This means not only that this a lease with a yearly rent, but also that the second-home owners do not have the exclusive rights to the plot, but also that the farmers still have the right to pasture. Thus, conflicts may develop between second-home dwellers and the owners of pasturing animals, typically cattle, sheep or reindeer, or other agricultural and logging interests (see, e.g., Arnesen *et al.*, 2012). The conflict related to farm animals that feed at destinations and between the cabins is especially acute where second-home developments have grown into big sprawls covering the old summer-farm landscape and far beyond.

With the type of building contracts where second-home owners only receive a fixed-point ground lease, the land still retains the status as outlying land and also the traditional right of way (*Allemansretten*) remains. This means that anybody can move freely between the second homes. This generates conditions for conflict between second-home dwellers, potential second-home buyers, farmers, and locals using the area for recreational purposes, and other locals – and ultimately also private developers and decision-makers within municipalities.

Another challenge seeming to result from the transition to private development plans is that the piece-by-piece planning practice more easily causes the puncturing of continuous wilderness or nature areas. This seems often to be instigated by the fact that the location of land owned by farmers who want to sell to a developer is not necessarily a location most favourable for development. The area can instead be one of greater natural value or be important as a pasture or for recreation. This is a good illustration why municipalities should not merely sit and wait for development proposals, but present their own plans, where other arguments than just land ownership (that is landowners who wants to sell) and short-term profit are considered. In other words, municipalities should not allow the planning of new development only focussing on who owns the land, without considering other

arguments, potentially resulting in spreading or puncturing any large expanses of undisturbed wilderness.

There is much political and financial uncertainty in the world today, which seems to be resulting in a concurrent halting of the construction of second homes. There is even some talk of these huge second home agglomerations becoming ghost towns in the future.

Having acknowledged the deregulation of mountain-destination and second-home planning and the realisation of its negative impacts, it is high time to offer a recommendation for the political implementation of strengthening the planning competence and capacity not only at the local level but also at the county level. The latter should not only entail the strengthening of spatial-planning competence but also the transfer of the decision-making power or strengthening the role of the controlling authority. Strengthening the role of the county level may not only alleviate the lack of resources and competence at the county level, but it may also alleviate the negative effects of the various degrees of prejudice at the municipality level.

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## APPENDIX

Appendix 1. The counties, municipalities, and population of the mountain region of south-eastern Norway. Populations are given as of 01.01.2021, while the data for the number of buildings for permanent (first) homes and second homes is from 2019. All data was harvested from SSB (Statistics Norway /<https://www.ssb.no>). The numbers are somewhat uncertain, as buildings with several units typically are registered as one. The numbers for permanent homes (“homes”) and second homes in municipalities with more second homes than homes are indicated in bold. It should be noted that even though Ringsaker has the largest second-home agglomeration, much of the municipality is more of a lowland, partly with an urban character (explaining the large resident population).

County	No.	Municipality	Population	Homes	Second homes
Innlandet	1	Trysil	6,627	<b>3,946</b>	<b>6,853</b>
	2	Engerdal	1,268	<b>859</b>	<b>1,631</b>
	3	Os	1,891	<b>1,114</b>	<b>1,130</b>
	4	Tolga	1,562	889	708
	5	Tynset	5,578	3,102	1,848
	6	Alvdal	2,432	1,266	752
	7	Folldal	1,545	1,033	532
	8	Ringsaker	34,768	16,790	7,271
	9	Dovre	2,553	1,392	655
	10	Lesja	1,975	1,115	<b>2,160</b>
	11	Skjåk	2,197	1,350	707
	12	Lom	2,228	1,364	271
	13	Vågå	3,570	1,936	1,054
	14	Sel	5,739	3,147	2,080
	15	Nord-Fron	5723	3,302	2,473
	16	Sør-Fron	3,119	<b>1,639</b>	<b>1,861</b>
	17	Ringebu	4,392	2,520	4,203
	18	Øyer	5,100	<b>2,433</b>	<b>3,401</b>
	19	Gausdal	6,106	3,215	2,945
	20	Vang	1,578	<b>915</b>	<b>1,805</b>
	21	Øystre Slidre	3,229	<b>1,766</b>	<b>3,554</b>
	22	Vestre Slidre	2,125	<b>1,268</b>	<b>2,732</b>
	23	Nord-Aurdal	6,413	<b>3,584</b>	<b>4,670</b>
	24	Sør-Aurdal	2,954	<b>1,832</b>	<b>3,519</b>



County	No.	Municipality	Population	Homes	Second homes
<b>Viken</b>	25	Krødsherad	2,212	<b>1,198</b>	<b>1,661</b>
	26	Flå	1,050	<b>712</b>	<b>2,192</b>
	27	Nesbyen	3,273	1,919	3,588
	28	Gol	4,608	2,772	2,563
	29	Hemsedal	2,486	<b>1,376</b>	<b>2,211</b>
	30	Ål	4,674	<b>2,554</b>	<b>2,966</b>
	31	Hol	4,441	<b>2,771</b>	<b>5,720</b>
	32	Nore og Uvdal	2,439	<b>1,527</b>	<b>3,997</b>
<b>Vestfold og Telemark</b>	33	Tinn	5,691	3,729	3,470
	34	Vinje	3,676	<b>2,286</b>	<b>5,493</b>
<b>Agder</b>	35	Bykle	965	<b>657</b>	<b>2,658</b>
	36	Valle	1,164	<b>881</b>	<b>1,376</b>
	37	Bygland	1,162	863	856
	38	Evje og Hornnes	3,634	1,833	1,625
<b>TOTAL</b>			<b>156,147</b>	85,855	99,191

Source: SSB (2022).



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## DISCOURSES REGARDING THE SUSTAINABILITY AND ENVIRONMENTAL CONSIDERATIONS IN PHYSICAL PLANNING OF SECOND HOMES IN NORWEGIAN MOUNTAIN DESTINATIONS: A COMPARISON BETWEEN GOVERNMENTAL DOCUMENTS, RESEARCH LITERATURE AND THE GENERAL MEDIA

**Abstract.** The neoliberal trend in spatial planning seemingly causes the loss of control of spatial plans for destination developments in the mountain regions of southern Norway. The predominant local discourse, as seen in local newspapers and other media, was originally positive to the development of second homes. Changes in development plans have, as in the Skeikampen-destination case, incited strong counter-discourses based on concerns for pasture rights, nature values, and access, in addition to sustainability in general. These discourses create a perception of reality in stark contrast to the central-government discourse, as found in the plan and building act, and governmental documents.

**Key words:** discourses, mountain resort, second-homes, spatial planning, sustainability.

### 1. INTRODUCTION

Currently, most large mountain destinations in Norway are characterised by a fast-growing number of private second homes, as well as an increasing number of ski lifts and pistes (Skjeggedal *et al.*, 2010). As these types of developments

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are both resource and area-consuming, it is easily agreeable that the aim of the physical planning process should be to create a sustainable destination. Further new development should bring about a positive economic and socio-cultural effect on the local community, in addition to causing as little damage as possible to the environment. However, an increasing number of critical voices are raised in relation to the physical planning of destinations and second-home developments; in particular those in the academic literature in addition to those in the general media, including social media (Aasetre, 2021; Kaltenborn, 2018; Kaltenborn, 2021). However, even within local communities one can observe strongly contrasting discourses of land use (Aasetre, 2021).

Today, Norway has almost half a million second homes, meaning that half of the Norwegian population has access to a second home. This is a larger proportion of the population than in any other country in the world, only rivalled by Finland. In the last three decades, most of the new second homes in mountain regions have been built in or in the vicinity of ski resorts or mountain destinations. Most of these destinations are situated in former summer-farm areas. These constitute outlying fields still used for traditional agriculture, mainly as pastures for farm animals, and the surroundings hold important natural values and recreational values for the locals. Consequently, growing destinations, including the expansion of downhill areas and new second-home developments, cause discussions between opposing interests. This invokes incentives for both collaborative management as well as power struggles for access to land and resources. Importantly, different interests or actors differ in strength and in capacity to achieve their goals within local communities and governments. The influence of power becomes an important aspect, as the outcomes of the local planning and decision-processes typically reflect the distribution of power in these local communities.

### **1.1. The tradition and usage of second homes in Norway**

The traditional cabins were cheap to build and maintain and were therefore typically built and owned by members of the working class or lower-middle class. The wealthier classes preferred to stay in mountain hotels, enjoying the same comforts as at home (see, e.g. Flognfelt and Tjørve, 2013). The large migration of workers to the cities during the 20<sup>th</sup> century created a desire to be able to go “home” and spend vacations where one had come from and felt they belonged (Tjørve and Flognfelt, 2013). Only after the First World War, many workers, for the first time, were given paid vacation, as well as shorter working hours. Many locals, especially in the growing towns, also dreamt of a small cabin to where they could spend their newly won leisure time. Together with those who had moved to the cities, they built thousands of small, traditional second homes all over mountains, in forests, and along the coasts. In those days, there were no governmental restrictions or control. The permission

to acquire a plot and build was a matter between you and the landowner. The cabin project and the urge to live there under primitive conditions became the Norwegian way for a stay close to nature, celebrating the newly won freedom.

From the early 1990s most second-home developments in ski resorts and other mountain destinations began to offer plots with connection to electricity, water, and sewage, as well as all year road access. This changed the building tradition, the market and the spatial distribution of new second homes in the mountain areas completely. While the traditional cabins had been scattered throughout natural landscapes, showing up on the map as if somebody had shot at it from a distance with a shotgun, the building of modern second homes became mostly confined to the areas around the resorts and popular destinations. This was all described well by Flognfelt and Tjørve (2013).

Now the wealthier classes quickly moved out of the traditional hotels and lodges and built themselves luxurious chalets (read: second homes) with all amenities, causing a sharp recession for the traditional accommodation industry. These new second-home dwellers most often did not have the same attachment to the area as workers who had emigrated to the cities, and they were not willing to travel far and just use their second home during vacation. They wanted to use their second home also during weekends and extended weekends. Therefore, the market for modern second homes is restricted to destinations that could be reached in about three hours, which is termed the “weekend zone” (Tjørve and Flognfelt, 2013). The new second homes are, therefore, used much more than the traditional cabins, probably typically more than a month per year, equivalent to one hundred guest nights, with an average of three guests (Flognfelt and Tjørve, 2013). An increasing number of second-home owners have wanted to move their permanent address to their second home. However, this is usually not allowed, and there has been an ongoing discussion to whether this is a desired development.

## **1.2. A Neoliberal Trend in Spatial Planning**

The intense construction of second homes, especially in the mountains, has given rise to concerns over the sustainability of the developments. Already in the 1960s efforts were made by the central Norwegian government and its administration to control and direct this building activity. Later, instructions and guidelines from the central Norwegian government have continuously stressed the need for the sustainable development of tourist destinations and second homes, both for local economies and for the environment. In view of recent research literature, describing a liberal planning practice, it is timely to examine whether a disparity exists between the aspirations or intentions expressed by the central government and the perceived reality of the planning and development of second-home agglomerations in Norwegian mountains.

The present planning and construction law is shaped to be a tool for the decentralisation of power from the national to the local level. The aim is to secure local participation and influence, which also strengthens the sense of ownership and legitimacy in the planning process. Moreover, it reflects the political ambition of local spatial planning, land use and resource management as a shared responsibility between governments, private actors, landowners and other stakeholders, or indeed entire local communities (Skjeggedal *et al.*, 2021). Consequently there has been a shift in spatial planning from governmental authorities to non-governmental actors (see also Eckerberg and Joas, 2004; Saglie and Harvold, 2010; Tjørve *et al.*, submitted manuscript), and today the majority of the actual tourist-related spatial planning in the mountain regions of Norway has been driven by private actors. This trend towards a more neoliberal planning culture, where private planning has taken over, has been described as a transition from hierarchical governance to governmental assistance to stimulate development (Fimreite *et al.*, 2005). This has resulted in a piece-by-piece planning with the loss of an overall coherent planning process and the loss of sight of long-term consequences. The rapid, seemingly uncontrolled growth of second-home agglomerations has in turn sparked conflicts between farmers and other locals in addition to established second-home owners on the one hand and developers and local governments and their administrations on the other. The negative or unsustainable impacts of poor or uncontrolled planning that have been voiced, revolve around environmental issues and the loss or deterioration of nature, but also include restrictions to access to nature and over-tourism, the loss of pastures or access to pasture for livestock, increased energy expenditure, and overall negative effects on the environment.

Thus, it is timely to review and compare these discourses addressing or concerning the plans for destination and second-home developments in the mountains. To provide a better understanding of these relationships of power, we compare the discourses in governmental documents and in the general media, particularly in local newspapers. To do so, we have chosen as our case study the Skeikampen destination, which is a mountain (ski) resort in the Gausdal municipality, Inland county, the mountain region of south-eastern Norway. The new physical plan for the Skeikampen destination that was proposed by the municipality in 2021 caused a sharp increase in contributions to the local discourses.

## 2. SKEIKAMPEN, GAUSDAL MUNICIPALITY

The Skeikampen destination in Gausdal municipality is situated at about 1,000 m a.s.l. and has 11 ski lifts and 17 pistes. The destination had three hotels, but only one is still in operation. In addition, there are many rental apartments in the area.

Presently there are about 2,500 second homes in the area, but there are plans for potentially 3,000 more, with planning and development process at various stages. Gausdal municipality has just over 6,000 inhabitants, meaning that during the main vacation periods in winter, when the number of second-home dwellers peaks, the number of inhabitants more than doubles. In 2021, Gausdal municipality had almost as many second homes as permanent homes – 3,215 permanent homes, compared to 2,945 second homes (SSB, 2022). As such, Gausdal with Skeikampen destination serves well as a typical example of a mountain destination with an extensive and expanding second-home agglomeration within a comparatively small community. Looking at other municipalities within this mountain region, Tjørve *et al.* (submitted manuscript) have found that out of 38 municipalities 22 now have more second homes than permanent homes, with an average of just over 7,000 inhabitants.

Statistics from 2016 show that at this destination more than 60% of second home owners have permanent addresses in the Oslo region, 30% live locally or in the region around lake Mjøsa (the central area of the Inland county), which includes the towns of Lillehammer, Gjøvik, and Hamar, and less than 10% of the owners come from other places in Norway (Tjørve, unpublished).

### 3. DISCOURSES OF LAND USE

#### 3.1. Governmental discourses

The message imparted from the central government flags expectations of a sustainable and environmental-friendly planning and development of new second homes in Norway. This discourse is well represented within the spatial planning and building act (Kommunal- og distriktsdepartementet, 2008), the governmental guide for planning of second-home developments (Miljøverndepartementet, 2005) and the guide for the municipality planning process (Miljøverndepartementet, 2012), as well as the government's strategic document for the mountains and the inlands (Kommunal- og moderniseringsdepartementet, 2021).

In the government's guide for the planning of second-home development (Miljøverndepartementet, 2005) the Minister of the Environment writes that cultural relics, reindeer husbandry, landscape, and natural values should be considered. In the guide, the government states that the responsibility rests on municipalities to ensure that the planning and development of second homes is conducted sustainably and according to environmental criteria, and that the plans have to comply with national and regional environmental goals. The governmental guide for the municipality planning process (Miljøverndepartementet, 2012) states the expectation of local (municipality level) planning that promotes sustainability and

that long-term environmental considerations are more important than short-term economic gains. The central government's strategic document for the mountains and the inlands (Kommunal- og moderniseringsdepartementet, 2021) also focuses on sustainability and the environment. It stresses in particular the challenge of climate change and high consumption, and that the government expects the goal of sustainability to underly public management and spatial planning in municipalities and counties. The central Norwegian government has provided comprehensive plans, regulations, and advice on the planning of second-home developments and the building of second homes. Already the first clause of the first paragraph of the planning and building act states that this law shall promote sustainable development and contribute to the protection of resources. The act also flags the expectation of a spatial-planning practice that secures the natural environment and natural resources, including access to nature for everybody.

The strong discourse of governmental expectations of sustainability, environmental considerations, and the protection of resources and nature is heavily contrasted by the official report from 2007 on the sustainability of physical planning in Norway from the Office of the Auditor General (Riksrevisjonen, 2007), where it indicated issues regarding building activity, mostly of second homes, in mountain areas and especially those in the vicinity of protected areas and pasture areas for the red-listed wild reindeer. This report, commissioned by the central government, shows an increase in the rate of building of second homes in buffer zones around the tree line, and close to national parks and other protection areas. Second homes also constitute the main building activity in or close to wild reindeer areas, though developments in these areas also now include a new ski resort. The report concludes that the knowledge about the collective effects of the existing and planned building of second homes is wanting. This strengthens the national nature-conservation discourse, critical to the present planning practice and the number of new second-home developments approved by municipalities.

The national nature-conservation discourse is common in the texts by environmental groups/NGOs and researchers, but also by existing second-home owners and locals. In a feature article in a national newspaper (Kaltenborn, 2018), a researcher at the Norwegian Institute for Nature Research (NINA), describes, in the title, that the building of second homes is beyond all limits. Another researcher, Aall (2017), has written a newspaper article stating already in the title that second-home tourism is unsustainable, not only because of the loss of nature but also regarding energy and resource consumption in general. In statements from the "Friends of the Earth Norway" (Naturvernforbundet) NGO Christensen (2019) and Eriksen (2022) have claimed that the second homes are a threat to Norwegian nature and that it is unsustainable to build new second homes, demanding that no new second-home developments be allowed in pristine nature. Also "Miljøpartiet de grønne" (MDG), the Norwegian green party, wishes to allow new second homes only in already developed areas (MDG, 2021).



A comparison of these national discourses, i.e., the governmental and that of researchers, environmental NGOs and opposition politicians, reveals a disparity between the signals sent by the central government and the perceived reality of present physical-planning practices and the building of new second homes. This could be interpreted as a signal that the legal system is not functioning as intended.

### **3.2. Local discourses**

The construction of second homes constitutes a significant activity in many local communities and was expected to have a major positive impact on local economy and the economy of municipalities (Borge *et al.*, 2015). Local communities are not uniform units where all members are pulling in the same direction. The local community in the Gausdal municipality is, as any local community, shaped by the struggles for power between different interests and from different perspectives. In addition, the disproportionate distribution of benefits and potential negative impacts can result in conflicting interests arising between groups and may cause several and opposing discourses (see, e.g. Hajer, 1995). In the field of political ecology, it is indicated that the management of nature and natural resources has conflicts between actors or interests, and that this struggle for benefits and influence produces winners and losers (Benjaminsen and Svarstad, 2017; Robbins, 2020). Economic gain, for example, typically becomes very unevenly distributed within a community, as only a few landowners benefit from the sales or leases of land for second-home developments while most locals receive little or no economic gain. They may even experience the opposite in the form of increased taxes and charges in order for the municipality to finance the necessary infrastructure for the tourist destination and its second homes. This is clearly visible through opposing discourses in Gausdal regarding new second-home developments. Thus, the purpose of this paper is to identify and discuss key discourses regarding the physical planning and future land use.

## **4. THE MATERIAL AND METHODS – A NEWSPAPER SURVEY**

An “Atekst” internet search was performed aimed at returning media and newspaper articles, editorials, commentaries, and letters to the editor, mainly found in the local newspaper. Atekst is the online archive service of the media company “Retriever Norway”, which offers internet searches in more than 300 Norwegian newspapers and magazines. In addition, a search was made on the webpages of the NRK (the Norwegian Broadcasting Company). The search was performed for the last six years (May 2016 to April 2022) using combinations of search terms

(in Norwegian) as “Skei”, “Skeikampen”, “destination”, second home, development, planning, physical plans, water works, water supply, pasture, cattle, and more. Only publications about developments, physical plans, or conflicts concerning the case destination were gathered, 74 in total. In addition, a few relevant documents from the central government were examined, including the Norwegian plan and building act, as well as guides and strategic documents.

The analysis of these texts leans towards a discourse-analytical approach, but with a somewhat more open analysis of planning choices and possible negative and positive impacts. Thus, the purpose is to provide a pragmatic or open approach that seeks to identify different perspectives on spatial planning decisions for the area in and surrounding the Skeikampen destination.

## 5. THE RESULTS – THE NEWSPAPER SURVEY

Several local discourses can be identified in the search in local newspapers and media. This survey of media contributions is summarised in Table 1. The number of media contributions found (Table 1) has a marked increase in 2021, with 33 out of 74 contributions. This coincided with the municipality’s presentation of a proposal for a new spatial plan for the destination (Gausdal Kommune, 2022) and a new plan for water and sewage (Gausdal Kommune, 2022).

Table 1. Summary of publications retrieved. The columns show the total number of publications found, the number of contributions that were critical to some aspects of the spatial plans for expansions, new infrastructure, etc. The table also shows how many contributions were for the local newspaper and how many or the percentage were written by journalists (rather than politicians, farmers or other locals)

Year	Total publ.	Negative	Main local newspaper	Journalist author	% journalists
2016	6	6	5	5	100
2017	4	3	2	4	100
2018	8	3	6	7	88.5
2019	9	3	7	9	100
2020	7	7	3	3	42.9
2021	33	22	29	9	27.3
2022	8	2	5	3	37.5
All yrs.	74	46	57	40	54.1

Source: own work.

Three different discourses related to physical planning and land use (or management) in the Skeikanpen destination and its surroundings were identified from the media. The picture of positive economic effects of the main expansion of the destination resulting from new second-home development, promoted by developers, landowners, and local governments, is identified as a dominant discourse in the Gausdal community. This first discourse supports new second-home developments, presenting the job creation and economically positive impacts for developers and contractors. The second discourse sees the destination and second-home developments as a threat to grazing rights and agriculture in general. The third discourse views the destination and second-home developments as a threat to nature and access to it. The plans for new water works is a more complex part of the loss of nature discourse because it also criticises the apparent incompetence of the municipality in their physical planning and the prospect of some of the costs of building new infrastructure to support the new development being laid onto residents, without any benefits being returned. The three different discourses are discussed in the following sections.

### **5.1. Second-home destination expansion**

With only one out of three hotels remaining open, the Skeikampen destination fits well the development as observed by Flognfeldt and Tjørve (2013), describing the shift in Norwegians preferences from staying in hotels and lodges to staying in privately-owned second homes. The planning of second homes at the Skeikampen destination, as in many other destinations, is a result of a piece-by-piece type of planning, where typically each new development proposed by a developer or each application for changes to existing plans is considered separately by the municipality. On the home pages of the Gausdal municipality, a large number of proposals, applications and contracts for developments are posted. The municipality presented special spatial plans for the Skeikampen destination in 2010 and in 2021. The developers often apply (and are allowed) to deviate from existing spatial plans passed by local politicians. As many of these permissions were given for second-home developments in the years between these two plans, a number of new developments were granted in pristine nature areas outside the planning area for the destination, as anticipated in the 2010, the size of the planning area for the destination was increased considerably in the 2022 spatial plan from the Gausdal municipality. The total extent of the plans is difficult to oversee, as they are made up of a large number of documents at the municipality's own plan-and-strategy webpages (currently found at: <https://www.gausdal.kommune.no/planer-og-strategidokumenter.423491.no.html>), revealing a massive expansion doubling the destination and second-home agglomeration size from the current one covering in the region of 10 sq. km. These plans may potentially increase the number of second

homes at the destination from 2,500 to 6,000. Still, with the current national (and global) economic prospects, this seems somewhat unlikely in the near future.

Concurrent with the new and rapidly increasing plans for new second-home developments, the number of articles and letters to the editor concerning second homes and land use increased sharply in 2021 (see Table 1). The contributions positive to new second homes dominated before 2021. This discourse typically presented single building or development projects, where developers or landowners tell the public about the size of the investment or the amount of money they will make. A journalist in the local newspaper used the title “Forest turned into gold” featuring 15 landowners who planned to sell land for a development of 400 second homes. Thirteen building plots, at Skeikampen, found at [www.finn.no](http://www.finn.no) (a classified advertisements website) (accessed on: 16 May 2022) were advertised for, on average, in excess of EUR 100,000. The 400 plots, spread over an area of 350 hectares, may then have a total sales price in the region of EUR 40 million or more. It is argued that the building of new second homes creates many jobs in Gausdal. Though not considered a separate discourse, the realisation that profits are exceptionally unevenly distributed adds to the differences of opinion, as represented by a letter to the editor, where the contributor notes that “...some makes a huge profit for themselves, while others are merely asked to yield areas to further increase the earnings for the lucky ones.”

This first “second-home discourse” can be seen as conveying the interests of landowners who profit from the sales of land for second-home developments, as well as actors within property development, contractors, and the business community. This coalition of actors has traditionally had a high level of acceptance within the local community, with very few opposing voices, a situation that has radically changed in a short time. With the proposal for a new spatial plan for an enlarged Skeikampen area, the critical discourse rose to become the dominating one in local media, driven not only by farmers and other locals, but also by existing second-home owners.

A couple who owns a second home at Skeikampen wrote in the local newspaper (Gudbrandsdølen Dagningen, hereafter mentioned as GD): “We were shocked when we heard about the plans for future developments...with about a doubling of what is developed today,” questioning a municipality that wants “to start up developments of this magnitude of investments and encroachments on nature in a time of uncertainty.” It is noteworthy that the letter to the editors and contributions from non-farmer locals are all critical to the new spatial plans; one person wrote “I become sad and ashamed over Gausdal municipality’s onward plan for Skeikampen.”

A member of a local environmental-protection group grants that the contractors and developers in the municipality provide about 14% of local jobs, but holds that continuously developing new areas in the mountains for second homes cannot go on for ever, raising the question of sustainability; mentioning also the issue of pas-

tures for farm animals (loss of food production), biodiversity (loss of nature), and energy consumption. The discussions concerning the loss of pastures and the loss of nature, including access to nature, will here be treated as separate discourses.

## 5.2. Gausdal as a farming community

Historically Gausdal was a farming community with 68 sq. km of arable land (meaning it is among the 10% of municipalities with most farmland) creating about 330 man-labour years (Lerfald *et al.*, 2016). The valley used to be dominated by dairy farms, but today only about 70 dairy farms remain. The dairy cattle was replaced by beef cattle and sheep, with wintering totals of about 10,000 cattle and in the region of 8,000 sheep (SSB, 2022). Still, the production of milk, 14 million l/yr, and beef, 250 tons/yr, is much higher than in neighbouring municipalities (Landbrukskontoret i Lillehammer-regionen, 2019). However, most active farms have animals that are sent to pastures in the mountains in summer. Subsequently, there are many farms that are not actively farmed in a traditional sense: many farms produce only grass (the fields are rented to active farmers or the grass is sold to them), or the farms produce other livestock such as pigs. The production of pork in Gausdal is more than 1,200 tons/yr (Landbrukskontoret i Lillehammer-regionen, 2019). These farms do not require summer pastures or grass for winter fodder.

In discourses concerning the physical planning of second-home developments, second-home dwellers and farmers have been on the same side because by selling or renting plots the farmers benefit from their unused summer pastures and second-home dwellers can build and use a second home. When it comes to pasture rights, however, they become opposing parties. When leases or plots for second homes are sold, it does not include pasture rights. They are retained by the farmer or jointly by the farmers who have pasture rights in the area. Therefore, second-home owners are usually not allowed to put up fences around their second homes, resulting in animals grazing amongst second homes and potentially in dung on terraces and in driveways, which in turn creates tension between farmers and second-home tourists. In a letter to the editor (in GD), a local farmer claimed the new spatial plan was not sustainable, noting that their animals needed food over summer. Another farmer stated that “cows belong in the mountains...farmers have had pasture rights there long before Skeikampen became a city of second homes.” Second-home tourists, however, recount stories where they have been attacked by cattle, and that they have less desire to come back in summer, while there are animals there. One story from Skeikampen about a five-year-old girl who went to “look at” a flock of cattle and was attacked “went viral” and appeared in a number of (we counted seven) newspapers around the country. In a letter to the editor one second-home tourist stated “Cows with calves should not be let loose, that is my opinion, clear and simple.”

Conflicts between second-home owners and farmers with pasturing animals are found in most places with large second-home agglomerations. The central government wants the farmers to utilise outfields more as pastures, noting that this is more sustainable than the use of grain feed (Landbruksdepartementet, 2021). Still, the current minister of agriculture does not want to intervene with national measures or legislation but holds that the municipalities themselves must solve these conflicts (Slåen and Holø, 2021).

The central government has proposed a new “dog law” that shortens the period one has to leash a dog. Farmers feel this would strongly limit old pasture rights. One Gausdal farmer wondered how one could replace pasture rights with a right to walk a dog without a leash. A common argument, as advanced by a second-home tourist in Skeikampen in a letter to the editor, is the fact “that some dogs are a nuisance to others should not befall others.”

Because many if not most farmers do not use pastures in the mountains and other farmers are the landowners that sell land for second-home developments, as actors they represent conflicting interests. Though farmers who sell land for second homes earn comparatively large sums, they constitute a small number of those who own farms. The fact that all the profit from selling land for developments is itself a source for conflict, when other farmers who still have livestock have to provide nature for recreation for second-home residents and at the same time experience a loss of access to pasture and pressure to abandon pasturing.

The pasture-rights discourse shows us that the second-home conflict is also a question of what agriculture we will have in the future. It illustrates that the conflict is more than just one of loss of nature and access to it.

Though farmers with livestock and existing second-home tourists can be united in scepticism to new, large second-home developments, they become adversaries when it comes to pasture rights, fencing, and dog laws. Consequently, farmers with livestock perceive second-home owners as lacking respect for farmers’ pasture rights, whereas second-home owners see livestock as detrimental to the second-home experience, with the sound of bells and manure on the terrace (Aasetre, 2022).

### **5.3. Nature values and access to nature**

Comparing a possibly positive effect on the local economy to nature values and the benefits of access to nature constitute a comparison of incommensurable values. In other words, it is impossible to compare these opposing values. Moreover, this is as much a discourse that is national as one tied to the Skeikampen and Gausdal municipalities. Thus, Skeikampen serves merely as an example of a development where the local community becomes increasingly critical to a seeming unlimited growth in new second-home developments.

The two main mountain areas in the Gausdal municipality are the western mountains, which are largely unspoilt and comprise most of Langsua National Park, and there are the much smaller northern mountains, with the Skeikampen destination. The northern mountains are shared with three other municipalities, though no or very little collaboration exists when it comes to special planning here. Locals and farmers also point to a loss of nature and access to it, though this discourse is mainly promoted by nature-conservation NGOs (“Norges Naturvernforbund”) and politicians from the green party (MDG), both locally and nationally. The local leader of the nature-conservation NGO is critical to further construction of second homes: in a letter to the editor (GD) a call for a decision for a final outer limit for the expansion of the destination and second-home developments was made. He asserted that “...the massive encroachment on intact mountain nature is in violation of the UN’s goals for sustainability.” Also other local voices are critical of the steep growth of second homes and use the argument of the loss of nature and access to it. In a letter to the editor one local considered it “...unfair that we the locals shall lose more and more nature” pledging to “...for once to let nature win.” Another local noted not only the loss of nature but also questioned the sustainability of the physical plans for second-home development, noting that “both the development of second-home areas and the use of second homes inflict environmental- and climatic costs,” asking the politicians to reverse the plans to turn a lake up in the untouched mountains into a water reservoir for the second-home agglomerations.

### 5.3.1. A “water-works discourse” and a lack of governance

A prominent nature-conservation voice has noted in a letter to the editor that market forces govern large decisions leaving only small decisions to the politicians. A local politician in the green party has thus put it: “The politicians dance with the second-home market, but out of step with democracy.” This does not say that the politicians are without power, but rather that they refrain from using it. In a contribution to the local paper, a local senior citizen asserted that the politicians in the local government “in this situation” seemed “totally incapable of acting” in a municipality that was “in reality bankrupt.” In a second letter to the editor, he called for a halt in the construction of new second homes, claiming that the profit did not match the costs, including the destruction of nature and the environment. Another local, in her contribution advocating for the halting of the construction of second homes, called attention to the fact that the second-home owners were prioritised, when a large share of the local population was still without infrastructure such as public sewage or running water.

The need for new waterworks for thousands of new second homes at Skeikampen, where there is already not enough water for snow cannons, and all the second homes together seems to have come as a big surprise to the politicians. Norway’s largest second-home agglomeration with 8,000 second homes,

Sjusjoen, has already experienced the limitation of water supply to the enormous number of second homes. In the light of the plans for new waterworks, a new pressure group for the protection of the northern mountain area in Gausdal quickly attracted more than 400 members, which must be considered substantial in a community with only 6,000 inhabitants. This pressure group demanded a revised proposal for a spatial plan for Skeikampen, where the plans for new waterworks is put on hold.

The Gausdal municipality claim they were forced to increase property tax, which increased by 50-100% with its recent revision, in order to finance water and sewage systems for the second homes at Skeikampen. The municipality now has the highest property taxes in the country. The fact that the permanent inhabitants have to finance the infrastructure for second-home developments that make one of the few and privileged in the community rich has also enraged locals. The cost of new water works may, in addition to property tax, need to be financed by increasing the cost of water, sewage, and renovation for the locals.

The fact that the need for new waterworks come as a surprise and that the locals will have to pay for it, has created a new discourse – that of whether the steering of the municipality is out of control. The plan is to take one of two mountain lakes and turn it into a water reservoir. These fishing lakes lie in the middle of the last mountain areas outside the destination, and new waterworks thus entail a major encroachment on the last undeveloped nature area. The locals are furious, farmers are enraged, the existing second-home owners are angry, and the environmentalists are preparing for battle. Only a single voice, one of major developers and contractors, argues for the new waterworks claiming that more “second-home developments is sustainability in practice” because “if the building of second homes halts, then all carpenters, electricians, plumbers, masons, painters, tanners, machine operators, truck drivers and others who have their work from this, will lose their jobs.” All the while, one of the locals, in her letter to the editor, asked what would happen to the workplaces when the businessmen would have taken out all the profit – or whether “the idea is to continue the development of Skeikampen into eternity.”

## **6. CONCLUSIONS**

It is obvious that the three discourses are not necessarily represented by distinct groups as local residents, or farmers and landowners. For example, farmers and landowners who use the mountains for pasture promote a very different discourse to farmers and landowners who benefit economically by selling land for second-home developments. Other locals also support different discourses, according to their interests as well as their families – or social circles.



Though there are contrasting local discourses in Gausdal, after a rapid change in attitudes, the predominant discourses are now negative regarding the rapid increase in number of second homes, calling attention to the loss of pasture rights, nature values, access to nature, and sustainability in general. The perception of reality conveyed through these local discourses stands in stark contrast to the discourse of the central government, as conveyed through governmental documents, as it describes a planning tradition expected to consider sustainability and the environment, including nature- and resource protection. The changes in local opinion may have been delayed by the fragmented spatial plans with a lack of overview and totality, where the spatial plans for the whole parts of the municipality (as the Skeikampen destination) is constantly overridden by approvals of separate proposals from developers.

The perceived planning and development of mountain areas in south-eastern Norway, the Gausdal municipality in particular, seem to be the opposite of those put forward by government – development occurring piece-by-piece with an apparent disregard for nature, local farmers, and sustainability. Kaltenborn (2018) has concluded that not only are local discourses dominated by a few powerful actors, mainly developers, contractors and landowners, but also local planners typically lacking information about local attitudes towards the developments. The Skeikampen case shows that the prevalent discourses found in local newspapers and media may suddenly experience a turnaround, possibly triggered by new plans for large encroachments on nature, access to it and use, as livestock pasturing. It remains to be seen, though, whether such a change will affect the planning processes or politics of the municipality.

The main argument for the planning of new second-home developments has been the notion that this creates a large number of job opportunities. Looking at municipalities with large numbers of second homes, these typically struggle with a drop in high-competence workplaces, declining primary industries and loss or lower quality of public services. According to Kaltenborn (2021), a researcher at the Norwegian Institute for Nature Research (NINA), the reality of massive second-home developments, as at Skeikampen in Gausdal, creates gigantic profits for a few actors, while local communities experience increased public poverty. It may be seen as a paradox that these gigantic second-home developments do not create more progress or prosperity locally.

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## CO-EVOLUTION OF TOURISM AND INDUSTRIAL SECTORS: THE CASE OF THE BEŁCHATÓW INDUSTRIAL DISTRICT

**Abstract.** The goal of the study is to explore the co-evolution of the tourism and industrial sectors. This paper addresses the concept of inter-path dependency as the theoretical framework for this study. The case study of Bełchatów industrial district is applied to discuss the co-evolution of tourism and heavy industries. Tourism and heavy industries are usually seen as mutually exclusive. However, in the case of the Bełchatów industrial district, tourism (starting from social tourism, through business tourism and educational tourism) is confirmed as being complementary to the industrial path shaped by triggering events (launch of radical industrialisation, and economic transition). Recently, implementation of the Just Transition Mechanism was planned and includes

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development of leisure tourism in the case study area. Some doubts of that intersectoral linkages are discussed in the paper – mainly in the context of the expected sustainable development of the Bełchatów industrial district – and followed by policy recommendations.

**Key words:** path dependency, co-evolution of multiply paths, tourism, lignite mining, energy production, Bełchatów industrial district, Poland.

## 1. INTRODUCTION

This research aims to explore the co-evolution of the tourism and industrial sectors (lignite mining and energy production). It is argued that top-down initiated industrialisation leads to the deterioration of tourism assets and the failure of any initiative to promote tourism development (Hospers, 2003). Heavy industries and tourism are identified as mutually exclusive. Interestingly, in the case of the Bełchatów industrial district, both are confirmed as complementary or substitutive functions of the research area rather than being exclusive. Thus, we have proposed the concept of inter-path dependency by Martin and Sunley (2006, 2010) as the theoretical framework for this study to investigate the interrelations between the industrial and tourism developmental paths. The insufficiency of studies into the interdependencies between multiple paths has been confirmed many times (Martin and Sunley, 2010; Frangenheim *et al.*, 2020; Hassink *et al.*, 2019). Thus, from the methodological point of view, focusing on the co-evolution of the investigated paths might fulfil an specific research niche.

Developmental driving forces, but also relevant actors, nature, the character and effect of long-term economic change, and, finally, the role of regional and national authorities in governing the development of the Bełchatów industrial district are the main contexts of the analysis. Structural changes triggered by supra-local and industry-related political decisions (the launch of radical industrialisation, then economic transition and, more recently, implementing the Just Transition Mechanism), as well as their interdependency with the path of tourism development are the focus of this study. A discussion of structural transformation of the Bełchatów industrial district covers both spatial and sectoral changes (Hospers, 2004).

The roots of tourism development in the Bełchatów industrial district date back to the turn of the 20th century. At that time, a limited expansion of holiday homes was indicated. The first triggering event for the development was related to the discovery of rich and accessible lignite deposits. Since the mid-1970s, the area has undergone rapid and permanent structural changes with unprecedented development of opencast mining and energy production. That included the stimulation of leisure and tourism through organisational and financial support intended for employees and their families, as well as direct investment in facilities for holidaymakers (social tourism). The economic transition is considered as the second triggering

event shaping the co-evolution of the tourism and industrial sectors in the Bełchatów industrial district. In 1990, lignite mining and energy production were marketed in Poland. The Bełchatów Mining and Energy Complex was included in the assets of the company currently known as PGE Polska Grupa Energetyczna (Polish Energy Group). The development of a large enterprise in the Bełchatów industrial district stimulated a significant increase in both demand and supply of business tourism. In 2014, the exhibition of ‘PGE Giganty Mocy’ (PGE Giants of Power) was opened. This event initiated the development of educational tourism in the area.

The future of the Bełchatów industrial district is shaped by the European Green Deal and the implementation of the Just Transition Mechanism. To make the European Union (EU) climate neutral by 2050, the lignite mine in the Bełchatów industrial district will be closed in the 2030s, and the way the power plant operates will be transformed. Regional authorities and the state government have agreed that tourism, leisure tourism in particular, might become a new developmental function of the Bełchatów industrial district.

The paper is structured as follows. The theoretical section begins with a presentation of the inter-path dependency concept, crucial to understanding the co-evolution of industrial sectors and tourism. This is followed by a discussion on structural changes in industrial regions. In the next three sections, the co-evolution of lignite mining and energy production, as well as tourism are discussed. Each section refers to the following supra-local political decisions triggering developmental changes: radical industrialisation, economic transformation, and decarbonisation. The paper ends with a discussion and conclusions. Moreover, policy recommendations were proposed as an additional value of the final section.

## 2. THEORETICAL FRAMEWORK

The concept of interdependence of multiple paths was proposed by Martin and Sunley (2006, 2010) within the theoretical framework of evolutionary economic geography. They have suggested that the most likely scenario of regional development is where developmental paths are interrelated to some extent. Path interdependence is defined as a situation “where the path-dependent trajectories of particular local industries are to some degree mutually reinforcing” (Martin and Sunley, 2006: 17). It is argued that interdependencies might occur between already established paths, as well as emerging paths, and both have positive and negative features (Hassink *et al.*, 2019).

It is also proposed that the linkages between paths depend on the supply side, i.e., the scarcity of local assets used by different paths, as well as on the demand side, i.e., the similarity of markets targeted by the considered paths (Frangenheim

*et al.*, 2020). However, political and institutional sides should be considered as well (Hassink *et al.*, 2019; Hospers, 2004). European and state regional interventions focus on reducing inequalities between regions. Successful support of both European and national actions depends on the efficient cooperation with regional and local authorities. Such cooperation is substantially influenced by the specificity of institutions, which are path-dependent in nature and characterised by relative stability (Kurikka and Grillitsch, 2021).

The role of political actors is not the only significant factor in the process of new path creation. Regional development depends on individual adaptability of all stakeholders, including their ability to network with other actors. This ability might result from those actors' understanding of the significance of cooperation, but also should be supported by top-down initiatives of a change agency (Meekes *et al.*, 2017). Thus, non-hierarchical relations between authorities and other stakeholders of regional development seem crucial (Halkier and Therkelsen, 2013).

The structural change of any region might be and should be viewed from a geographical perspective (Boschma, 2021). Successful regional change depends on the diversification of regional industries, both related and unrelated (Boschma *et al.*, 2017). That process is path-dependent rather than accidental, and results from the history of an area or from decisions made by economic agents (Brekke, 2015). The assessment of the co-evolution of investigated paths depends on the ability of one path to compensate for the deficiencies of another, and to solve the problems of unemployment and poverty, as well as environmental issues (MacKinnon *et al.*, 2019).

It has been empirically confirmed that old monofunctional industrial regions can face issues of over-specialisation and implement the postulates of diversification (Boschma, 2021). The strengthening of learning capability has been identified as the most influential action (Boschma and Lambooy, 1999). Two types of adjusting strategies to solve the issue of lock-in situations of old industrial regions were proposed: (1) path-dependent strategy or path reformation – referring to the increase in adaptability of their inhabitants, established companies and institutions, and (2) pathless strategy or new path formation – focused on deep restructuring of a region when old functions and structures expire and brand-new arise (Boschma and Lambooy, 1999; Breul *et al.*, 2021). Moreover, path creation in mid-sized peripheral regions requires state intervention, including both policy actions and investments, e.g., modernising the knowledge infrastructure, and stimulating innovation and entrepreneurial activity (Brekke, 2015). Interestingly, external shock, similar to a pathless strategy, might also unlock the situation of the region (Simmie and Martin, 2010).

When discussing the triggering events of regional change, both path- but also place-dependence should be mentioned. Path dependence is related to a region's embeddedness in external social, cultural, economic, technological, and political regimes while place dependence refers to localised vested interests and resources, mainly knowledge and institutions (Boschma *et al.*, 2017; Brekke, 2015).



### 3. CASE STUDY AREA AND METHOD

The Bełchatów industrial district in Central Poland is the case study area. It consists of fourteen communes (2nd level of Local Administrative Units, hereinafter LAU): the city of Bełchatów, the Bełchatów rural commune, Dobryczyce, Gomunice, Kamięnsk, Kielczygłów, Kleszczów, Kluki, Lgota Wielka, Rusiec, Rzaśnia, Strzelce Wielkie, Sulmierzyce, and Szczerców (Fig. 1). These units are located in three counties (LAU1): Bełchatów, Pajęczno, and Radomsko. Most of the area belongs to the Piotrkowski Subregion (3rd level of the Nomenclature of Territorial Units for Statistics, hereinafter NUTS), approximately equivalent to the former Piotrkowskie Voivodeship, currently within the boundaries of the Łódzkie Voivodeship (NUTS2). The case study area was delimited based on industrial landscape transformation resulting from lignite mining and energy production, and fitted into administrative divisions at the local level. The area of the investigated Bełchatów industrial district is 1,292 sq. km, populated by 130,594 inhabitants, living mostly in the city of Bełchatów (56,419 inhabitants). Unlike in previous decades, nowadays the region is relatively stable in terms of its population, but net migration suggests a high probability for increasing the outflow of people in the near future. The local economy and labour market remain in a relatively good condition. For this area, however, growing unemployment among women is a distinctive feature (Churski *et al.*, 2022). According to local development plans valid for the case study counties, that is a result of the specificity of the regional economy, as well as of the still popular patriarchal family model. The majority of employees work in the industry and construction sectors. The majority of business operate within the private sector. What is noticeable is the increasing presence of micro-entities, while the medium and large enterprise sector has not changed much in this respect. Among the newly established economic activities, industrial manufacturing, transport and warehouse management, real estate, education, health care, social assistance, information and communications technologies, and commercial and reclamation sectors are registered most often.

The goal of the paper is the exploration of the co-evolution of industrial and tourism paths. Supralocal political decisions shaping interdependent paths are considered as triggering events (Sanz-Ibáñez *et al.*, 2017). According to the empirical concept by Breul *et al.* (2021), the initial analysis concerns the formation processes of the industrial path, followed by inter-path relationships, and finally the reformation of the tourism path. It has been argued that, while theoretical considerations in evolutionary economic geography emphasise the interdependency and co-evolution of multiple competing and complementary developmental paths, empirical studies were mostly focused on individual paths (Frangenheim *et al.*, 2020). Considering each individual path, including tourism, in a multi-dimensional, multi-sectoral and interdependent framework of a region's development enables one to better understand the complex economic structure and forces

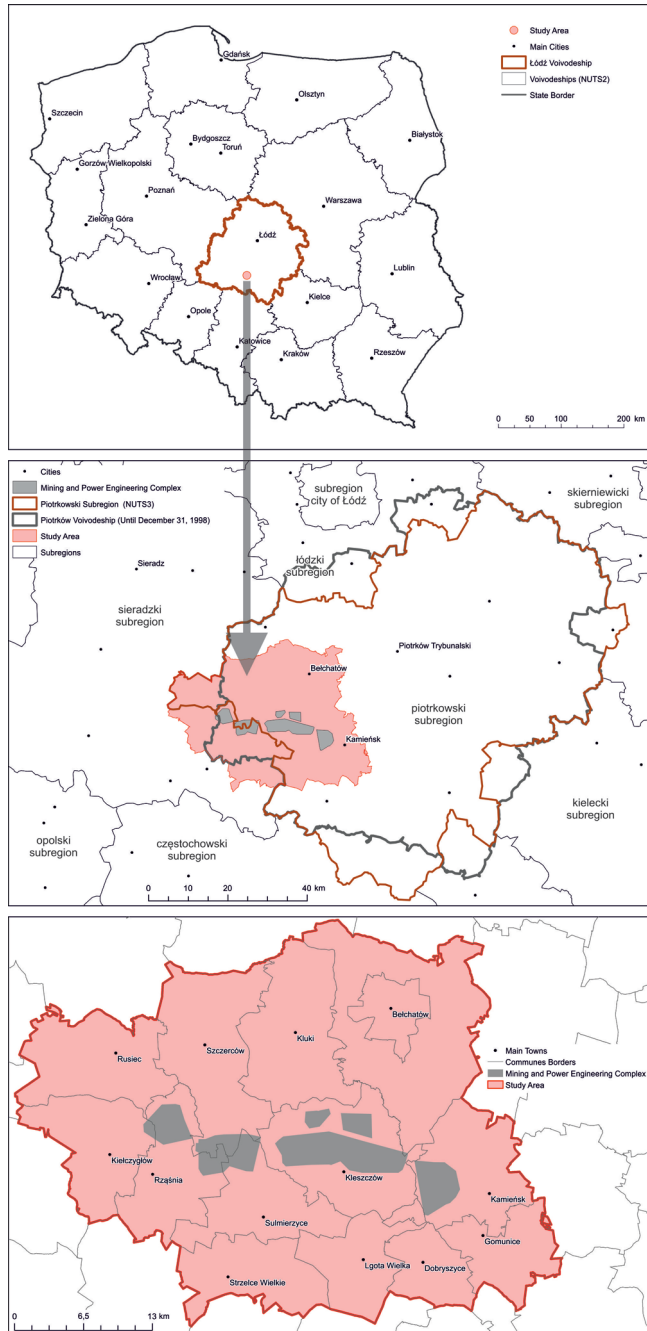


Fig. 1. Case study area of the Belchatów industrial district  
 Source: own work based on the Head Office of Geodesy and Cartography.

determining every investigated path (Ioannides and Brouder, 2016). Therefore, this demands an interdependent and co-evolving approach in empirical research. This study fulfils this methodological niche.

The main method applied in this study is a descriptive case study (Leśniewska-Napierała and Napierała, 2017; Yin, 2018). This method enables one to maintain a holistic perspective in research using varied research techniques (Yin, 2018). The following steps of the method should be emphasised: (1) an analysis of literature related to the case study, (2) desk research on both qualitative and quantitative data in statistical sources, as well as in strategic and spatial planning documents, and, finally, (3) a cartographic analysis. A detailed analysis of existing data should precede each research project. It enables the collection and analysis of data that documents theoretical and empirical knowledge about the research phenomenon. From the perspective of conducting scientific research, it is a time-saving and cost-effective activity (Makowska and Boguszewski, 2013). As part of the analysis of the existing data, the authors searched for qualitative and quantitative data in strategic documents, e.g., *Territorial Plan of Just Transformation of the Łódzkie Voivodeship* (2021) and the *Development Strategy of Łódzkie Voivodeship 2030* (2021). Moreover, the latest studies on the future situation of the Bełchatów industrial district have been analysed, e.g., *Green transformation or collapse. Bełchatów basin on the eve of change* (Burchard-Dziubińska et al., 2020) and *A sleepy revolution: The social situation in the Bełchatów region on the threshold of the energy transformation* (Dańkowska and Sadura, 2021). The authors have also conducted secondary statistical and cartographic analyses utilising the following data sources: the Topographic Sites Database, made available by the Head Office of Geodesy and Cartography, and Statistics Poland. Additionally, the analysis was supplemented with more data obtained from the existing literature, e.g., Szupiło (1982), Drozdowski and Kozłowski (1980), Niżnik and Pączka (1979), and Sobocka-Szczapa (1986).

#### 4. FROM SOCIAL TOURISM TO BUSINESS AND EDUCATIONAL TOURISM

The tourism function of the Bełchatów industrial district has always been related to the core economic activities of this area: lignite mining and energy production. The history of tourism began only at the turn of the 20th century, as holiday villages along the Warsaw-Vienna railway line were developed. However, it was the establishment of the Bełchatów Mining and Energy Complex in the mid-1970s that became the significant trigger of tourism development in the area (Fig. 2).

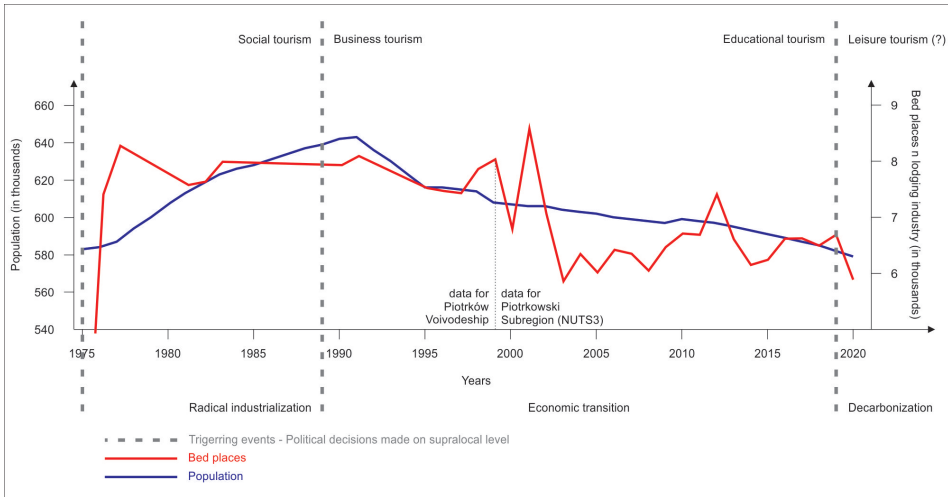


Fig. 2. Triggering events of tourism and industry development in the Bełchatów industrial district<sup>1</sup>

Source: own work based on Statistics Poland.

At the end of the 19th century, agricultural activity was dominant in this sparsely populated lowland (Drozdowski and Kozłowski, 1980). The launch of a railway connection between Warsaw and Vienna, as well as further infrastructural developments, became the trigger moment for the dynamic development of summer second homes. Stylish wooden villas scattered throughout the underdeveloped lands and forests belonging to local landowners. Soon, villages located near railway stations became popular summer tourism destinations for urban intelligentsia and the bourgeoisie (Kuźnicki, 2017).

Radical changes have occurred in the case study area, similarly to other parts of the country and the whole Central-Eastern Europe, after the Second World War. There was a strong pressure to reconstruct the national economy and make advances in competition with more developed Western countries. A new socio-economic and political order was introduced, with heavy industry perceived as the major driving factor. Subsequent long-term plans for economic development were implemented, the industry was seized into state property and underwent further organisational changes. The concentration of employment and production was growing (Blazyca, 1980).

As heavy industry relies on raw materials, excessive exploration of mineral deposits was conducted throughout the country. The search for natural gas de-

<sup>1</sup> Due to the availability of statistical data sources, data on population and the number of accommodations in lodging facilities were obtained for the former Piotrkowskie Voivodeship (until 1998) and the Piotrkowski Subregion (since 1999).

posits in Central Poland revealed a rich and conveniently located lignite deposit (Ratajczak *et al.*, 2009). It stretched a few kilometres south-west from the town of Bełchatów. Soon, extensive analyses and preparation works for the future extraction began. Lignite exploitation was possible after establishing a state-owned enterprise, namely the Bełchatów Lignite Mine. This happened in 1975, along with the foundation of the Bełchatów Power Plant – the second key element of the energy complex (Szupilo, 1982). In 1980, the first lignite portion was extracted (Drozdowski and Kozłowski, 1980; Goździewicz and Kulesza, 2006).

The Bełchatów Mining and Energy Complex is the biggest object of this kind in Europe, and it has an enormous impact on the natural environment in the area, its society, and economy. During the first stage of industrialisation (1973–1981), huge expanses of farmland (3,600 ha) and forested land (2,100 ha) were cleared for excavation and storing purposes, which dramatically transformed the local landscape (Fig. 3). The extraction of deposits and dumping the leftovers created new concave and convex landforms, which disturbed local geological structures and accelerated exogenic geomorphic processes. As for the Bełchatów pit, the difference between the former and contemporary elevations has reached 250 m. The overburden from the first field was stored in the vicinity, creating an enormous hill called Mount Kamieńska. Its peak reaches 405 m above sea level, while the surrounding areas on average slightly exceed 210 m above sea level (Jaskulski and Nowak, 2019).



Fig. 3. Rural landscape transformed by lignite exploitation. Bełchatów Power Plant in the background

Source: own work, August 2021.

As a result of intensive excavation processes, up to several dozens of earth tremors, landslides and cases of subsidence occur in the mine each year. Another threat concerns the possible critical stress changes in the salt dome, which

eventually might affect ground freshwater. Moreover, excavation and transportation of raw materials generate noise and increase air dust content, which may be another local nuisance for both inhabitants and visitors (Flisiak and Rybicki, 1997; Kucharska, 2018; Mirek and Biały, 2009). Such an intensive exploitation requires constant water drainage. As a result, a 285-metre-deep depression cone affecting the area of 756 ha has developed, while previously groundwater table had appeared at depth of approximately 5 m below the surface (Drozdowski and Kozłowski, 1980; Malina and Niezgodna, 2017; Motyka *et al.*, 2007). Another serious threat to the environment comes from the combustion of approx. 40 million tons of lignite annually, which releases huge amounts of toxic heavy metals, gases and particulate matter into the atmosphere. Interestingly, in the case of the Bełchatów Power Plant, no efficient filtering installation has been put into operation until 1990. Moreover, ash and slag from lignite combustion were stored in a dump covering 1,600 ha. Such practices, highly burdensome on the environment, endured for decades (Mierosławska, 1997).

Due to industrialisation, whole villages and their heritage were lost, and their inhabitants were forced to move. Individual objects of contemporary culture were preserved only because they were relocated elsewhere (a church, graves, etc.). There was insufficient time for a detailed exploration of what laid beneath the surface of the entire mining area, even though rescue archaeological excavations, which were organised between 1970s and the beginning of 21st century, revealed numerous artefacts of the Przeworsk, Funnelbeaker and Lusatian cultures (Czepas, 2020).

As for the socio-demographic impact, the average population density of the study area in the pre-investment period was only 60 persons per 1 sq. km. That changed dramatically in the second half of the 20th century, as the population of the area doubled (Niżnik and Pączka, 1979; Sobocka-Szczapa, 1986). The mine and the power plant created thousands of new jobs and stable sources of income, both during the construction works and later – with the mine and power plant already operating. That attracted immigration instead of the earlier outflow of residents (Szupilo, 1982). Migration flows efficiently accelerated the socio-economic and spatial development of the neighbouring city of Bełchatów, which was indicated as an accommodation base for the Bełchatów Mining and Energy Complex. During the radical industrialisation period, the population of the city grew from 10,800 in 1975 to 53,600 in 1988.

Industrialisation created a huge demand for accommodation for builders, and soon after – also for mine and power plant employees (Fig. 4). In the 1980s, approx. 5,200 thousand people worked in the power plant alone (Kaliński, 2017). The area was not ready for such a rapid demographic influx. Housing and related service facilities had to be developed. Employees had to use emergency temporary accommodation facilities, usually overbooked low-standard hotels. Similarly, schools, kindergartens and a hospital were yet to be built to satisfy the demand of the new residents, and that did not progress as fast as the development of the

Bełchatów Mining and Energy Complex. The housing situation only improved to some extent in the mid-1980s (Drozdowski and Kozłowski, 1980; Goździewicz and Kulesza, 2006; Niżnik and Pączka, 1979).

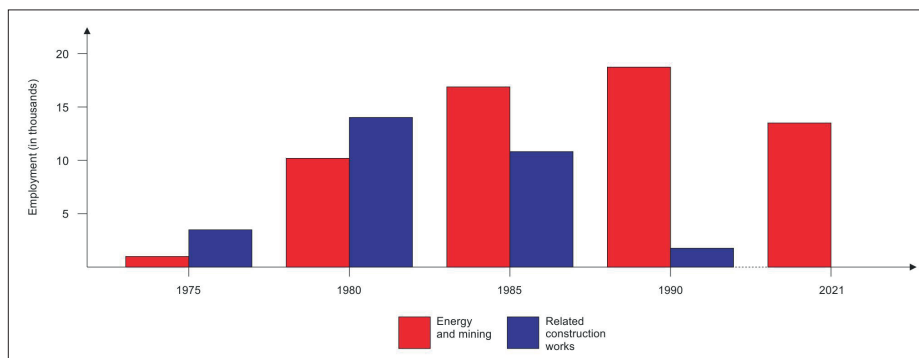


Fig. 4. Employment in the Bełchatów Mining and Energy Complex in 1975–2021

Source: own work based on Szupilo (1982b) and Zarząd Województwa Łódzkiego (2021).

At that time, the development of the Bełchatów industrial district was strictly supported by state social policy focusing on, *inter alia*, the development of the tourism and recreational functions, and infrastructure. That period refers to social tourism and the general change in the attitude towards tourism and recreation. The shift began in 1945, making them a kind of a social benefit offered by the state to the citizens. New legislation enabled all employees, even those working in small plants, to have holiday leaves (Grabowski, 2010). Due to ideological reasons, the focus was shifted more towards the recreational qualities of tourism (Jarosz, 2001; Nowotarski, 2019). For the outline of the institutional setting, it was crucial that already in the 1940s Fundusz Wczasów Pracowniczych (Employee Holiday Fund), a trade union entity, was established centrally. Soon afterwards, company social benefit funds were provided on a local basis nationwide. They subsidised excursions, self-arranged domestic holidays, as well as bed and board offers in local and non-local holiday resorts for employees and their families (Jarosz, 2001). Due to the fact that workplaces required only limited or even none of employees' co-pay, they played "a significant role in socialisation of Polish citizens to tourism and leisure" at that time (Grabowski, 2010).

In the 1960s and 1970s, two main environmental assets were recognised in the Łódzkie Voivodeship as factors determining tourism development: (1) forests, and (2) rivers and water reservoirs, even though the latter were not common in this part of the country. These factors had a significant impact on the development of facilities focussed on mass forms of social tourism. During the 1970s and 1980s, there was a visible development of second homes and family allotment gardens,

especially in forested areas, and then in the 1990s close to rivers and reservoirs. However, contrary to other areas of the Łódzkie Voivodeship, the Bełchatów industrial district has never indicated any significant increases in tourism flows related to the above-mentioned development of second homes and family allotment gardens (Bezowska, 2004). It is noteworthy that the capacities of both these environmental assets, crucial from the perspective of creating the tourism path of the case study area, were significantly limited by the creation of the lignite mining and energy production path of the Bełchatów industrial district. Thus, the supply-based interdependency between both analysed paths is evidenced (Frangenheim *et al.*, 2020).

Facilities for mass leisure in the Bełchatów industrial district relied on the creation of 2 artificial reservoirs, Wawrzkowizna and Słok, with areas of 80 and 18 ha, respectively. Both were located on the Widawka river. To a large extent, Słok was fed with mine water, remaining also the major source of water for the power plant (Lik and Sołtuniak, 2012). Soon after constructing the reservoirs, sport and recreation centres were established in their vicinity, financially and organisationally supported by the mine and the power plant as a part of their prosocial activities.

When trying to characterise the contemporary social and economic phenomena in the Bełchatów industrial district, it is necessary to mention the political changes that have occurred in Poland over the last three decades. The political, social, and economic transitions initiated in 1989 in Poland, and then in the whole region of Central-Eastern Europe, were characterised by the neoliberal so-called ‘shock therapy’ promoted by Western interests (Williams and Baláž, 2000). Changes in tourism at that time were aimed at creating some convergence with Western European countries, mainly through market-creating reforms, privatisation, and a liberalisation of international investments. It should be mentioned that at the beginning of the transformation, tourism was identified as an industry characterised by one of the most substantial capacities for restructuring and privatisation, as well as by less attention to the government (Dumbrăveanu, 2001).

The most important changes in Poland after 1989 directly affecting the development have included: (a) political transformation and the transition from centrally planned economy to market economy, (b) transition from a socialist society to a democratic (civil) society, (c) the decentralisation of the political authority and the rebirth of self-governance, (d) the privatisation and decentralisation of the economy, (e) the adjustment of legal regulations in the scope of spatial planning, pollutant emissions, etc. to EU standards, and (f) the acquisition of access to structural funds and subsidies after joining the EU in 2004 (Dąbrowska-Prokopowska, 2018; Jarmołowicz and Pątek, 2013; Kaczmarek, 2002; Kulesza, 2000). In the second half of the 1990s, initiatives were undertaken to decentralise public administration. In 1999, 49 existing voivodeships were replaced by 16 larger units of the same name (NUTS2), divided into counties (LAU1) and then communes (LAU2) (Wendt, 2001, 2007). As a result of these changes, Bełchatów was incorporated into the Łódzkie Voivodeship, at the same time becoming the capital of



the county (Goździewicz and Kulesza, 2006). After Poland's accession to the EU in 2004, there has been a visible dynamic growth of the largest urban agglomerations, as well as a significant improvement in the condition and provision of technical infrastructure elements. Moreover, several strategic documents shaping the country's spatial development have been adopted (Bański, 2007).

In 1990, the company currently known as PGE Polska Grupa Energetyczna was founded. The company became Poland's largest energy sector enterprise managing, among others, the Bełchatów Mining and Energy Complex. Nowadays, 57.39% of PGE shares are owned by the Polish State Treasury (PGE, 2022). The PGE Capital Group is now the largest enterprise in the power sector in Poland. The Bełchatów Lignite Mine is the leader in the Polish lignite mining industry. The coal from Bełchatów is the cheapest fuel in Poland, from which the cheapest energy in the country is produced.

In 1992, Poland signed the United Nations Framework Convention on Climate Change. The aim of the document is to stabilise greenhouse gas emissions and prevent dangerous interference with the climate system (Dańkowska and Sadura, 2021). It has resulted in the implementation by the Bełchatów Power Plant of a gradual modernisation plan aimed at increasing the efficiency of energy generation and meeting emission standards. Most of the units of the power plant have been equipped with flue gas desulphurisation installations and modern, highly efficient electrostatic precipitators. As a result, the emissions of pollutants have been significantly reduced in recent decades (Bujak *et al.*, 2007).

Since 2000, when the works related to the launch of the Szczerców pit began, enormous changes in land development have been observed, mainly in the communes of Rząśnia, Sulmierzyce, and Szczerców. A total of 3,396 ha of land were obtained for the area of the Szczerców pit, where the mining excavation, external dump and auxiliary facilities of the open-cast were built (Kasztelewicz and Kaczorowski, 2009; Pędziwiatr, 2014). In 2005, the Bełchatów Power Plant became for the first time the largest emitter of CO<sub>2</sub> in the EU. It has maintained this status until today, with the exception of 2007. In 2009, the Bełchatów Power Plant received 180 million euros from the European Energy Programme for Recovery, for the co-financing and preparatory work for the construction of a CO<sub>2</sub> capture and storage installation (Cirkos and Gurgul, 2009; Dańkowska and Sadura, 2021).

It should be noted that the development of the Bełchatów Mine and Energy Complex significantly affected the development of the Kleszczów commune, centrally located in the Bełchatów industrial district. By dint of substantial amounts of local taxes paid by PGE, the commune has been transformed from a poor agricultural area into an industrial one. It has become one of the richest communes in the country. At the same time, the Kleszczów commune has been directly affected by the negative effects of mining and energy production, including soil and air pollution, land drainage, etc. Environmental losses and threats of ecological imbalance are the price Kleszczów pays for its outstanding local economic growth (Kucharska, 2018).

Starting from 1990, the development of a large PGE company in the Bełchatów industrial district has stimulated a significant increase in both demand and supply of business tourism. The growing interest in meetings, incentives, conferences, and events was evidenced. Consequently, in the Bełchatów industrial district, several commercial accommodation facilities, mainly hotels and conference centres, were launched. Business tourism should be indicated as the dominant form of travel to the Bełchatów industrial district in the 1990s and 2000s. PGE's growing corporate social responsibility resulted in the opening in 2014 of an outstanding exhibition entitled 'PGE Giganty Mocy'. This event triggered the development of educational tourism in the area. This unique and award-winning tourism product is an outstanding attraction (Fig. 5). The exhibition presents the processes of lignite mining and energy production in the Bełchatów region and targets pre-schoolers, primary and secondary school students, and families with children (Dronka and Król, 2019).

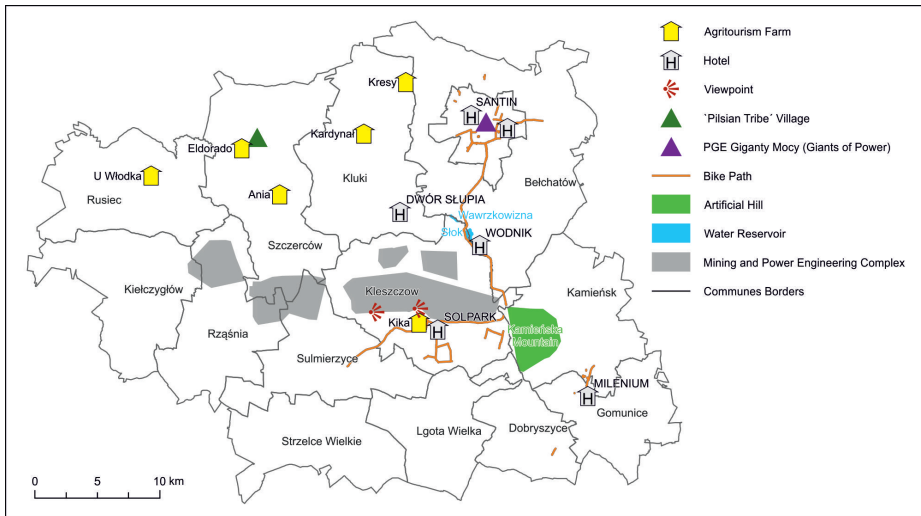


Fig. 5. Selected tourist facilities in the Bełchatów industrial district

Source: own work based on the Topographic Sites Database.

## 5. DISCUSSION

The future of the Bełchatów industrial district has been shaped by the European Green Deal. To make the EU climate neutral by 2050, special support has been provided for regions dependent on fossil fuels and high-emission industries to diversify their economies and create new jobs. Support for areas particularly suffering from

the negative social and economic effects of the transition towards climate neutrality is provided by the Just Transition Mechanism, equipped with 55 billion euros over the period of 2021–2027 (European Commission, 2019; United Nations Climate Change, 2022). As the Bełchatów Power Plant is responsible for the largest CO<sub>2</sub> emissions in the entire EU, a plan for its closure is a necessary step to start the transition (European Commission, 2019, 2020). It forced the authorities of the Łódzkie Voivodeship, along with PGE, to set a schedule for shutting down the Bełchatów Mining and Power Engineering Complex. In the years 2030–2036, the power plant will be shut down and in 2038, lignite mining in the district will end. This will affect the local labour market as the employment in the Bełchatów Mining and Power Engineering Complex is now more than 13,500 people. This may have negative economic effects, such as a decrease in the wealth of inhabitants and an increase in poverty, a decrease in the incomes of individual communes, and a decrease in the investment rate and GDP. That said, the cessation of the extraction and combustion of lignite will improve air quality and reduce the depression cone, which will improve the condition of the natural environment and the quality of life in the region (European Commission, 2019; Zarząd Województwa Łódzkiego, 2021).

In the Bełchatów industrial district, interconnected lignite mining and energy production were identified as a growth pole. Until recently, the case study area matched the stereotypical characteristic of the intermediate industrial territory: with its economy dependent on a mono-structure industry in the last phase of the life cycle (i.e., lignite mining and energy production based on it) and centred on a medium-sized city (i.e., Bełchatów). Recently, such regions have usually been identified as coping with the problems of over-specialisation, over-embeddedness, poverty, and low-educated population (Hospers, 2004). The future of this growth pole is disputable, mainly because of political decisions triggered by negative environmental effects. Tourism industry is proposed as a new growth pole for the region. Interestingly, tourism is usually seen by local and regional governments of peripheral and marginalised areas as a desirable path of development (Meekes *et al.*, 2017; Sechi *et al.*, 2020). However, this way of stimulating development has already been confirmed to be both non-linear and unpredictable (Meekes *et al.*, 2017). Moreover, the innovativeness of the tourism industry is questionable. Thus, the potential for creating a new effective tourism path is limited. As shown by the results of other studies, the development of tourism in industrial regions can be based on the values of the natural environment of regions or on the industrial landscape and facilities as tourism assets, their industrial heritage (Zanko, 2009; Mansfeld, 1992; Jonsen-Verbeke, 1999; Conesa, 2010; Klempa *et al.*, 2016; Abda, 2017; Szromek and Herman, 2019; Józwik and Sieg, 2021). The Bełchatów industrial district does not have any extraordinary natural environment values conducive to the development of tourism. Therefore, recultivation and revitalisation of the areas degraded by open-cast lignite mining is necessary and comprises many actions that target tourism and recreation development directly or indirectly, namely afforesting and creating reservoirs. Two

lakes in the Bełchatów pit accompanied by a recreation, tourist and cultural centre are planned (Zarząd Województwa Łódzkiego, 2021). This is in line with a slightly more diverse concept of recultivation presented by Malina and Niezgoda (2017), focused on afforestation, creating a reservoir in a part of the current Bełchatów pit and, surprisingly, the development of a municipal waste dump (Fig. 6). The planned land-use changes of the Szczerców pit include afforestation and transformation into agriculture. The recultivation plan has already been partially implemented as a 760-metre-long ski route with a ski lift, cycling and off-road vehicle routes, as well as a wind power plant were created on Mount Kamińska – the external dump of the Bełchatów exploitation field (Malina and Niezgoda, 2017; Zarząd Województwa Łódzkiego, 2021). It is expected that the proximity of the ageing agglomerations of Łódź and Warszawa will affect the development of leisure tourism, recreation, as well as SPA and wellness services, which will become one of the core functions of the region (Burchard-Dziubińska *et al.*, 2020; Sejmik Województwa Łódzkiego, 2021; Zarząd Województwa Łódzkiego, 2021).

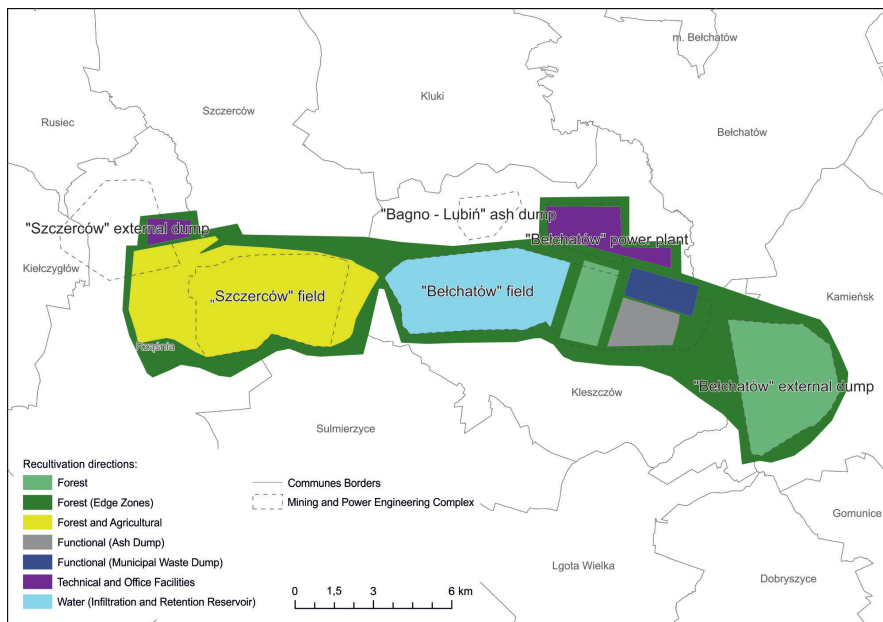


Fig. 6. The concept of the Bełchatów Mining and Power Engineering Complex recultivation

Source: own work based on Malina and Niezgoda (2017).

Interestingly, the presented idea of tourism development is accepted only by the authorities of the communes most significantly transformed by lignite mining, namely the rural communes of Bełchatów, Kleszczów, Szczerców, and Rząśnia. Furthermore, the analysis of local development strategies, as well as the local

studies of land-use conditions and directions have revealed that the majority of communes in the Bełchatów industrial district identify second homes as the preferable direction of tourism and recreational development. The inhabitants do not indicate tourism as the future direction of development intended to ensure employment. Generally speaking, they feel excluded from decision-making regarding the transformation of the case study area and predict that it will lead to an economic collapse. They also do not link the development of tourism with recultivation after the end of lignite mining and indicate agriculture as an old/new developmental function of the area. The example of Mount Kamińska shows that the creation of tourism infrastructure has not led to the development of the accommodation base, and it has not become a recreation area for the residents. If the inhabitants consider tourism as the direction of development at all, it is related to the contemporary function of these areas. The mining landscape as a peculiar tourist attraction is to be the main driving force of tourism development (Dańkowska and Sadura, 2021; Zarząd Województwa Łódzkiego, 2021).

However, in the Bełchatów industrial district, the already planned activities also aim at increasing the role of small and medium-sized enterprises (especially start-ups), the support for entrepreneurship incubators and cluster networks, and the development of economic activity zones. The priority of this transformation is the economic diversification of the case study area towards circular economy and bioeconomy, creative industries, and leisure services, but mainly industries oriented on modern green technologies, especially in energy production, as the energy infrastructure is unquestionably the strength of the Bełchatów industrial district. It is emphasised that the development of investments in renewable energy sources has the potential to generate new jobs and to fill the gap in the national energy balance. The support and development of these activities can protect the Bełchatów industrial district from becoming a peripheral area (Czyżak *et al.*, 2020; Sejmik Województwa Łódzkiego, 2021; Zarząd Województwa Łódzkiego, 2021).

## 6. CONCLUSIONS AND POLICY RECOMMENDATIONS

The concept of inter-path dependency proposed by Martin and Sunley (2006, 2010) was applied to better understand the co-evolution of tourism and core industries of the Bełchatów industrial district: lignite mining and energy production. This has enabled us to contribute to the neglected discussion on the links between new paths emerging in a region (Hassink *et al.*, 2019). Certain triggering moments substantially affected both investigated paths. Interestingly, in line with the findings of Hospers (2003), the industrial path limited the resources for tourism development to some extent only. More importantly, the in-

dustrial path created potentials for tourism. The development of social tourism, business tourism, and educational tourism paths resulted directly from changes in the industrial path.

As plans are underway to substantially reduce the significance of the recent industrial path, the creation of a new tourism path for the case study area has become crucial. In respect to the findings of MacKinnon *et al.* (2019), the question is whether the negative forms of new path interdependence would be dominating. It was explained that the European Green Deal will directly affect 13,500 people in the Bełchatów industrial district. The chances that the emerging tourism path will compensate for this overwhelming economic loss and prevent social and demographic consequences is extremely low in the near future. For now, as has been proposed in local development strategies and spatial planning documents for the investigated area, tourism development should focus on second homes and family allotment gardens. This form of tourism is embedded in the history of the area, already identified and accepted by local authorities, and finally able to keep links to some extent between the Bełchatów industrial district and its inhabitants migrating out of the area after the industrial path deteriorates.

Moreover, the developing of mass and growth-oriented leisure tourism in the case study area seems to be disputable. While the overall objective of regional development is about sustainability, the strategy is focused on the neoliberal idea of fostering competitiveness and growth (Blázquez-Salom *et al.*, 2019; Weck *et al.*, 2021). This hedonistic approach clearly leads to place commodification of a destination (Debbage, 2018), and also negatively influences social and environmental sustainability (Dodds and Butler, 2010). It is necessary to face the above-mentioned risks and to remove the potential barriers of the sustainable transformation of a regional policy oriented on increasing regional cognitive capacity and increase of social awareness of innovations' failure (Chaffin *et al.*, 2016). Brouder (2017) sees the potential economic ineffectiveness of sustainability core values (e.g., engagement of local stakeholders). Growth-oriented governance within the mainstream neoliberal capitalist framework looks much more tenacious. This occurs when growth priorities dominate social and environmental concerns at the supra-local level (Dodds and Butler, 2010). Thus, the very local decisions should be considered in the international discourse on the development paradigm.

It must be stressed that the time perspective of the development of the Bełchatów industrial district with a target of 30 to 50 years should enable planners to include possible shifts in the development paradigm into general and tourism strategies and initiatives for the investigated region, raised in both top-down and bottom-up ways. In line with recent studies, post-capitalism concepts, including degrowth (Fletcher *et al.*, 2021) or green growth (Sandberg *et al.*, 2019), should be considered on the one hand while, on the other, targeting such a far-reaching perspective is definitely out of the political ability of strategic planning targeting periods up to 10 years maximum (Piras *et al.*, 2021). Moreover, the character

of the already proposed strategy for the development of the Bełchatów industrial district intended by the European Green Deal is mainly normative, as it describes only the future conditions demanded (Piras *et al.*, 2021).

New paths for the development of the case study area require the proactive role of an agency towards facilitating, optimising, coordinating or neutralising inter-path dependencies (Frangenheim *et al.*, 2020). This is in line with the findings of Kurikka and Grillitsch (2021), who have suggested the significant role of a change agency in creating regional resilience. Finally, a place-based approach resulting from the European Union's cohesion policy should characterise the process of the creation of a new path for the development of the case study area. Thus, place sensitiveness, social inclusion, spatial justice, and cross-sectoral focus are needed (Weck *et al.*, 2021). A co-evolution of future tourism with brand new core industries of the Bełchatów industrial district is expected. This raises the questions about the future core industries of the case study area, namely: green energy production, circular economy, bioeconomy, or creative industries. The questions should be related to the ability of the investigated region to cluster companies representing new industries, and to create and endow an organisational framework for generating and diffusing knowledge (Isaksen, 2015). Furthermore, the questions should directly refer to the local and supra-local relations between the mentioned industries and future tourism.

Finally, future tourism planning and development requires more advanced research and discussion. The paper presents the results of a territorial and institutional analysis. To follow best practices in the field (Katurić *et al.*, 2021), the research process oriented on delivering actionable policy recommendations should also include in-depth stakeholders analysis, expert interviews, and in-depth discussion on the local, regional, national and European interventions.

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Marcin MAZUR , Konrad CZAPIEWSKI , Denis CERIC 

## THE SPATIAL, TEMPORAL AND STRUCTURAL APPROACH TO INTERREGIONAL TOURISM INFLOWS' SUSTAINABILITY: ON THE EXAMPLE OF FOUR ERASMUS+ SPOT PROJECT CASE STUDY REGIONS

**Abstract.** Based on produced regional data on tourism arrivals across 297 NUTS2 regions of the EU and EFTA countries covering the temporal scope of 2010–2018, the spatial concentration of tourist inflow in Europe, average annual dynamics of tourist inflow between 2010–2018, and a relative position of the tourist branch of the economy in a given region has been determined. An attempt was made to present a typology of regions according to the weighted intensity and spatial concentration of tourist inflow. Special attention has been given to SPOT project case study regions: Piemonte in Italy, Innlandet in Norway, Łódzkie in Poland, and Centro in Portugal.

**Key words:** tourist flows, spatial concentration of tourists, weighted intensity of tourism, Piemonte, Innlandet, Łódzkie, Centro.

### 1. INTRODUCTION

Since the roots of the sustainable tourism concept emerge from sustainable development, which is a term open to a broad interpretation, sustainable tourism is “an exceedingly complex concept with varied definitions due to different

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interpretations of the meaning and use of the concept” (Fennell and Cooper, 2020, p. 23). In general, sustainable tourism takes full account of its current and future economic, social, and environmental impacts, addressing the needs of visitors, the industry, the environment, and host communities (UNWTO, 2022). However, sustainability in tourism interpreted in this way focuses mainly on tourist destinations, i.e., supply, while tourism consists also of tourists’ origin areas, i.e. demand, and connections between these areas and tourist destinations, i.e., transport, and communication. This paper focuses on the sustainability of tourist inflows to different European regions, through the spatial, temporal, and structural approaches.

The spatial patterns of the tourist movement and the concentrations of tourists at preferred destinations is not an accidental process but is shaped by individual or collective motivations and the expectation that by travelling to particular places, those motivations may be realised (Williams and Lew, 2015, p. 11). Tourism can be analysed in terms of supply and demand, where the areas of demand are mainly cities and agglomerations, while the areas of supply have the possibility of using resources for tourism product development and offer. Christaller’s (1963) centre, a periphery concept based on the dependency theory, considers tourism space existing in the peripheral regions described as the coastal and mountain areas usually placed in the periphery of countries, i.e., main destinations for long-term tourism.

However, over the past few decades, tourism has become so globalised, massive, and common that the above-mentioned concepts in which tourists are generated mostly by large cities and received by the peripheries, do not reflect the reality, especially in Europe. Considering the fact that a large number of tourists also originate from rural areas and that big cities are also big magnets for tourists, as well as the fact that tourism is a dynamic but dependent economic branch. In addition, it should be noted that studies of tourist flows to date have tended to focus on inter-country relations or have included analyses of tourism flows in selected countries – thus there has been a lack of analysis on a broader spatial scale and on a regional basis (Prideaux, 2005; Zhang and Jensen, 2007; Garin-Munoz and Perez Amaral, 2000; Song and Witt, 2006; Kádár, Gede, 2021; Shao *et al.*, 2021; Lozano, Gutiérrez, 2018).

In this article we try to determine the spatial concentration of tourist inflow in Europe, average annual dynamics of tourist inflow between 2010 and 2018, and a relative position of the tourist branch of the economy in a given region compared with the strength of other selected branches. Finally, an attempt was made to present a typology of regions according to weighted intensity and spatial concentration of tourist inflow in the period of 2010–2018. The novelty of this research is the analysis of tourism inflow based on the NUTS2 regional level and proposed typology. Special attention was given to four European regions, i.e., Piemonte in Italy, Innlandet in Norway, Łódzkie in Poland, and Centro in Portugal, being the case study regions in the *Erasmus+ Programme* project *SPOT. Sustainable Spatial Planning of Tourism Destinations* (see SPOT, 2022).



## 2. DATA AND METHOD OF ANALYSIS

The spatial scope of the analysis covers all tourist flows across 297 NUTS 2 regions of the EU – European Union and EFTA (European Free Trade Association area) as of 2018 and the temporal scope covers the entire period of 2010–2018. It is worth noticing as well that in it all spatial units have been assessed as tourist destinations, therefore, by considering data on tourists inflow only. Tourist outflow is another interesting insight in the analysis of tourism spatial allocation and its conditions, but it poses a separate problem and exceeds the scope of this paper.

We realised that two basic sources of data on the size and spatial allocation of tourist flow volume among 32 relevant countries could be considered as complex and reliable enough: EUROSTAT (2021) and UNWTO (2021). Unfortunately, both deliver information at the national level of spatial detail and are incomplete in spatial and temporal dimensions to some extent. Therefore, estimating data gaps for the country-to-country matrix and disaggregating it to the region-to-region level of spatial detail was necessary (ESPON IRiE, 2021). The first procedure has a multi-level nature, forced by unequal reliability of the data derived by the use of different possible methods and sources. The following hierarchic order of methods has been implemented, in order of decreasing priority (ESPON IRiE, 2021):

1. Cross-reference of different indexes on tourist movement delivered by UNWTO;
2. Interpolation or extrapolation of temporal rows within UNWTO or EUROSTAT data;
3. Analysis of total tourist movement dynamics based on UNWTO and on EUROSTAT data;
4. Harmonisation of data derived from different sources, by use of the *Relative Level of Detail Ratio* (RLDR):

$$Flow\ est_{j,i} = Flow_{j,i,source\ known} \times RLDR = Flow_{j,i,eurostat} \times \frac{Flow\ total_{UNWTO}}{Flow\ total_{eurostat}};$$

5. Model of gravity analysis, by use of (1) Gross domestic product per capita in purchasing power standards (GDP PPS), (2) the number of arrivals with accommodation, and (3) the orthodromic distance between centroids of regions weighted by their internal population distribution:

$$Flow\ est_{j,i} = 9,179 \times 10^7 \times GDP\ PPS_i \times Pop_j \times 294,233 \times dist_{j,i}^{-0,802}.$$

The formula derived from the general gravity model has been applied not only to estimate the last data gaps in the country-to-country matrix but also for the disaggregation of values from the country-to-country matrix across these cells of the region-to-region matrix, which are related to the international movement. For disaggregation values from the country-to-country matrix across the cells of

domestic movement, regional stocks of domestic arrivals at NUTS 2 have been allocated among regions of origin according to the model of each individual country, which was adjusted to national specificity of the distance function.

It is possible to distinguish three basic approaches to the geographical space of flows (Castells, 2004): spatial, temporal, and structural. They have been assumed as the basic framework for a multi-perspective analysis of tourism sustainability, which has been undertaken in this paper. To operationalise the empirical analysis, one indicator has been proposed as a measure of regions' vulnerability in each of these approaches.

In the first, particular relations can be analysed in a number of aspects. ESPON IRiE (2022) ordered them according to four main dimensions: (1) size – perceived as absolute or relative volume of flowing assets; (2) bilateral balance – the relation between inflow and outflow; (3) spatial concentration – the degree of flow's volume accumulation within particular shares of total spatial units' number, area, population, etc., and (4) distance impact – the remoteness of flow's origin or destination, degree of distance dependency of flow's volume, etc. The dimension of concentration in particular is valuable in the context of the paper's objectives, as it allows to assess dependence of a region on specific origins of inflowing tourists. The index of the spatial concentration of tourists' inflow to the region  $i$  has been calculated according to the following formula:

$$W_{1,i} = \frac{\sum_{j=1}^{296} flow_{j,i} \times \sum_{j=1}^{296} area_j - \sum_{j=1}^{296} ((2 \times (297 - j) - 1) \times flow_{j,i} \times area_j)}{\sum_{j=1}^{296} flow_{j,i} \times \sum_{j=1}^{296} area_j}$$

where:

$$\forall j \in N : \left( j \in \{2, 3, \dots, 296\} \rightarrow \left( \frac{flow_{j,i}}{area_j} \geq \frac{flow_{(j-1),i}}{area_{(j-1)}} \right) \right)$$

The value of 0 means that the distribution of the region's flow volume across all other regions is ideally proportional to their area while 1 means that it is ideally concentrated and the total flow volume of the region  $i$  is covered by its relation with only one point. 1 is only theoretical and not possible to achieve for the empirical set of spatial units, which all have some areas.

In the second approach, the average yearly dynamics of tourist inflow to a region within the 2010–2018 period has been calculated. It has been assumed that the regions of sustainable tourism development are able to maintain growth over a long period. The following formula has been applied for that purpose:

$$W_{2,i} = (m_i - 1) \times 100\%$$

where:

$$\sum_{j=1}^{296} flow_{j,i,year} = reg_i(year) = b_i \times m_i^{year} + \varepsilon_{i,year}$$

The value means y/y change of the inflow's volume in the 2010–2018 period, according to the model of geo-geometric temporal progression, expressed in percentage.

During the implementation of the last approach it has been assumed that a high significance of tourism within the entire regional structure of various functional relations disclosing in a certain volume of flowing assets indicates strong tourism dependence. For that purpose, the share of tourists among all 11 inflowing assets ( $k$ ) analysed under ESPON IRiE (ESPON IRiE, 2022) has been considered. These flows comprise the trade of goods and services, people (migration, tourism, and labour), capital (FDI, remittances, and loans), and knowledge (Erasmus students, H2020 networks, and patents). Equal significance of each of these assets has been assumed and the total volume of all region-to-region matrices has been standardised. Finally, the following formula has been applied in order to assess the dependence of regions on their tourist functional relations:

$$W_{3,i} = \frac{\sum_{j=1}^{296} flow_{Tourism,j,i}}{\sum_{k=1}^{11} \sum_{j=1}^{296} flow_{k,j,i}} \times 100\%$$

In order to synthesise detailed results on the space of flows, in the last step of the research procedure, the method of bi-dimensional territorial typology (e.g. Mazur and Czapiewski, 2016) has been applied. It synthesises quantitative information on the combination of two dimensions, i.e., tourism inflow's size and concentration. For the purpose of tourist inflow's measurement in the dimension of spatial concentration, the index  $W_{1,i}$  has been applied, while for the tourist inflow's size assessment, the following index of weighted intensity has been used:

$$WII_i = \sum_{j=1}^{296} \frac{flow_{j,i}}{population_i}$$

Based on the quantitative values of  $W_{1,i}$  and  $WII_i$ , each individual quantitative value of  $W_{1,i}$  and  $WII_i$  has been compared with the arithmetic mean and each region has been assigned one of two classes in each dimension. The reason for such a rule was to avoid forcing any predefined empirical representation of the classes. These hierarchical values of indexes have been finally generalised by combining the results within two dimensions, reducing the level of measurement, and assigning the qualitative category of tourism to each spatial unit. This category has been selected from the following predefined list: “post-modern”, “supplementary”, “global”, and “specialised”.

### 3. CASE STUDY REGIONS

Five universities from five regions are participating in the Erasmus+ SPOT project. Unfortunately, the data collected in the ESPON IRiE project will make it impossible to perform analyses for the Turkish region, so the following parts of the paper will present results for four regions: Piemonte (ITC1; Italy), Innlandet (NO02; Norway), Łódzkie (PL71; Poland), and Centro (PT16; Portugal). The four regions identified are very diverse in terms of population, with the Norwegian region being the smallest (less than 400,000 people), the Polish and Portuguese regions being of similar size (2.2–2.4 million people) and the Italian region being home to more than 4.3 million people. That said, the Norwegian region is the largest in area (88,000 sq. km) while the other regions remain 3–4 times smaller (24,000–29,000 sq. km).

The analysed regions differ significantly in terms of the number of incoming tourists. An important caveat here is that the values given below do not consider tourists originating from within the analysed regions, so the data refers to inter-regional flows only.

The annual average number of tourist arrivals to the Centro region in Portugal within the period 2010–2018 was 7.1 million. Arrivals to Centro were dominated by the two Portuguese regions to the north and south, namely Norte and Área Metropolitana de Lisboa. In addition, tourists from Spain, the United Kingdom, Ireland, France, and the Benelux countries accounted for a significant share of arrivals. On average, more than 4.9 million tourists came to Piemonte each year – with the vast majority coming from the Lombardy region and some other Italian regions. More than 3.4 million people also visited the Innlandet region – in this case the majority of tourists were from the Norwegian adjacent regions. In addition, the Swedish, Danish, and North German regions featured to a lesser extent. The smallest number of interregional tourists was recorded in the Łódzkie region – just under 2.3 million people. They mainly came from Polish, Czech, Slovak, and German regions (Fig. 1).

In general, it should be noted that there is a concentration of incoming tourists in the surveyed regions within the same country. The highest rate of inbound tourism was recorded in Piemonte, with 60% of tourists coming from Italy (including 43% from Lombardy). For Innlandet it was 53%, Łódzkie 45%, and Centro 29%. Similar correlations can be seen in terms of the average distance from which tourists arrived in the surveyed regions.

In the case of the Piemonte region, in the ERASMUS+ SPOT project, the special attempt illustrates the case study of the “vineyard landscape of Piedmont: Langhe-Roero and Monferrato.” In the past, this territory was poor and marginal, and in recent years it has become remarkably rich and with great potentialities for growth and development. This territory was inscribed into the UNESCO World

Heritage List in 2014. Its introduction into the list has increased the visibility of the Langhe-Roero and Monferrato as “living cultural landscape” globally, thanks to its cultural resources, both tangible and intangible, as well as natural features, i.e., exposition to natural hazards, especially landslides and floods.

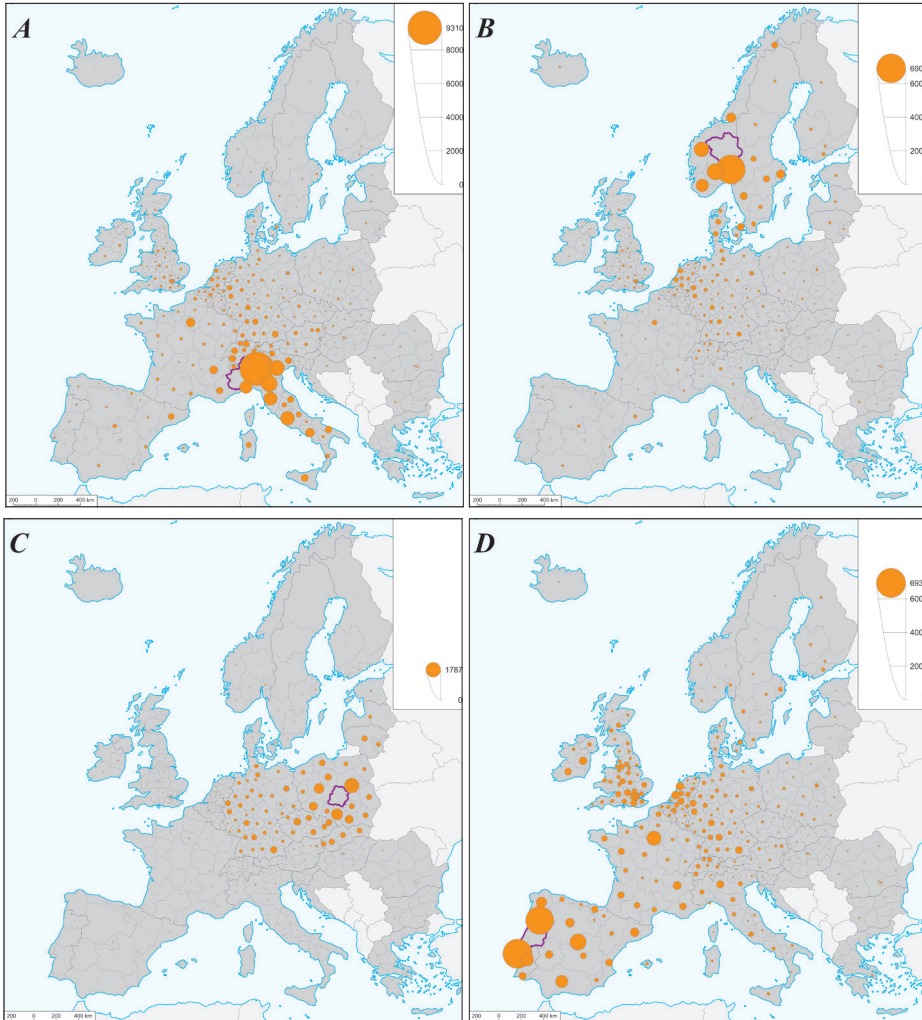


Fig. 1. Spatial distribution of the origins of interregional tourists coming to Piemonte (A), Innlandet (B), Łódzkie (C), and Centro (D) in the period of 2010–2018, in standardised flow units: 100 means an average number of tourists per one cell of region-to-region matrix (per one ordered pair of regions within EU+EFTA area)

Source: own work.

In the case of the Innlandet region, special attention is given to winter tourism. However, the mountains of south-eastern Norway are more than just ski resorts. Today, much owing to the expenditure of second-home dwellers, the summer season has increased the importance of many places, and their managers are working hard to turn their destinations into four-season destinations. However, every important mountain destination has alpine slopes with ski lifts (36 in total).

In the case of the Łódzkie region, the selected case study is the Bełchatów industrial district. Nowadays, that area is facing new challenges related to the expected shutdown of both lignite mining and energy production, resulting from the introduction of the goals of European Green Deal. Tourism, as well as logistics, and energy production based on renewable, is indicated as an industry potentially mitigating all negative social, demographic, and economic effects resulting from the recent decisions.

Finally in the case of the Portuguese Centro region, special attention is paid to coastal zone, treated as a strategic importance in environmental, economic, social, cultural, and recreational terms, which highlights the need for a protection and enhancement policy. Beaches near the town of Peniche require a significant intervention, given the growing tourist demand and the degradation of its urban seafront at an exceptionally beautiful point.

## 4. ANALYSIS

Spatial, temporal, and structural approaches have been applied for the analysis of tourism inflows to NUTS2 regions within the EU and the EFTA area. The results are presented in this section.

### 4.1. Spatial approach

The highest spatial dependency of tourist inflow is displayed by regions located in a consistent zone spreading from Ireland, through Great Britain and Benelux, towards northern France, western Germany, and Switzerland (Fig. 2). This seems to be easily justified if one considers the fact that it can be stimulated to some extent by noticeable population density, high GDP per capita, and a relatively small area of NUTS 2 regions. Therefore, adjacent areas are posing a reach reservoir of potential tourists living in a short range and with good transport accessibility, which makes short but frequent tourist visits possible. Also, the small size of units has some impact itself, which is one of the statistical effects commonly indicated in spatial analyses as the *modifiable areal unit problem* (e.g. Viegas *et al.*, 2009). Some short tourist travels can be evidenced in this part of Europe, while they could be hidden

as intra-regional elsewhere. The second consistent area of high spatial concentration has been identified in these regions of the Balkan Peninsula, which are non-coastal ones, especially in Romania or western Bulgaria. It is more difficult to justify such results in this area going beyond reference to pure regional specificity of tourism.

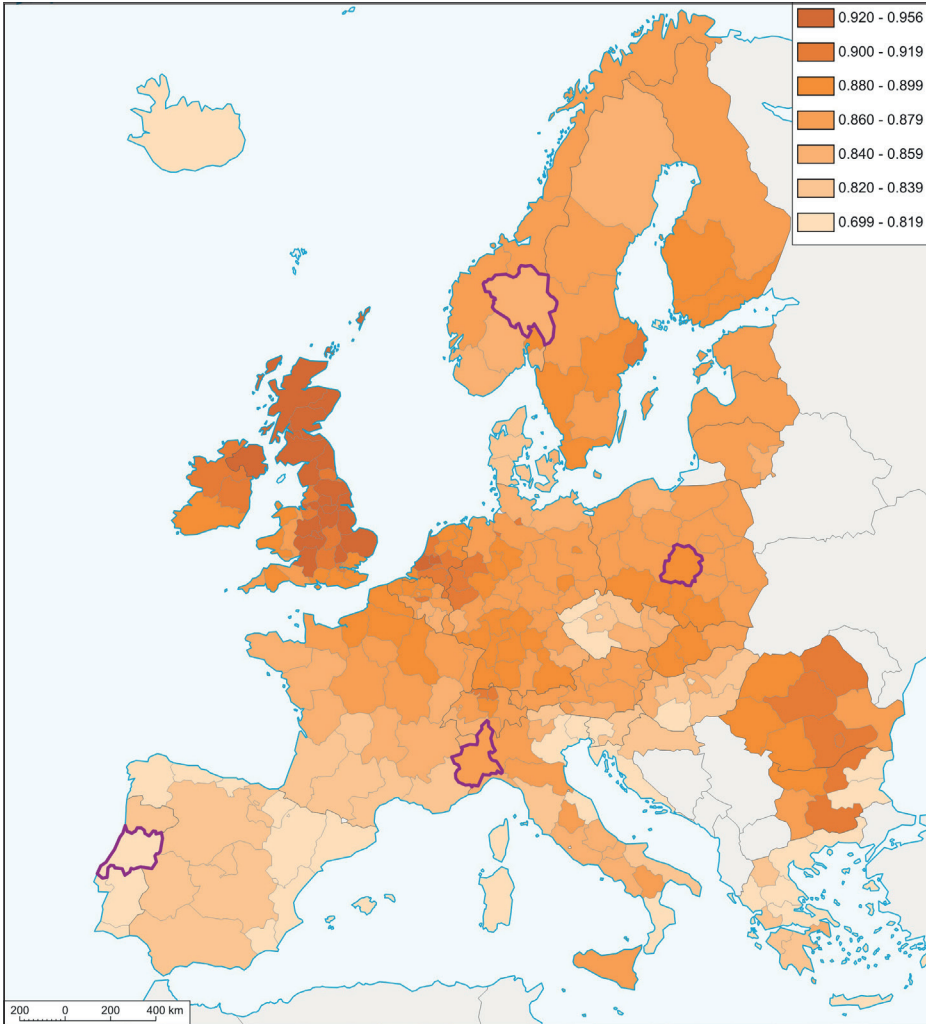


Fig. 2. Regions according to the index of spatial concentration ( $W_{1,i}$ ) in the period of 2010–2018  
Source: own work.

There is also a consistent part of southern Europe where a relatively low spatial concentration of tourist inflow is evidenced. Especially coastal regions of the Mediterranean area can be indicated in this regard. Thanks to their extraordinary

conditions for 3S (Sea, Sun, and Sand) tourism, they can attract many people coming from other parts of the continent, especially from large spatial units of Scandinavia. The places of tourist origin are noticeably spread due to that. Nevertheless, the strong seasonality of this phenomenon, and in turn its temporal concentration on the yearly scale, is another issue to be considered in the context of tourism sustainability. Also, some regions of Scandinavia display a relatively low spatial concentration of incoming tourist origins. They pose quite closed tourist areas, where internal tourist movement within this part of Europe takes the high share of the total (prices, cultural and linguistic proximity, etc.) Therefore, it is rather obvious that the large size of spatial units here and their low population density creates conditions for dispersed tourist movement and spatial concentration below average.

Concerning the four case study regions, the highest spatial dependency of tourist inflow can be found in the Łódzkie region in Poland, which is followed by Italian Piemonte, Norwegian Innlandet, and Portuguese Centro. These results show that the Łódzkie region is the most dependent on surrounding regions, notably Polish ones, so domestic tourists play an important role. The vicinity of the Polish capital city Warsaw only supports the overall interpretation mentioned above. On the other extreme, the Portuguese Centro region's demand is diffused much further away, supporting the assumption of its extraordinary conditions for tourism which attract many people coming from distanced parts of the continent.

#### 4.2. Temporal approach

There is also interesting evidence from the analysis conducted within the temporal approach (Fig. 3). It can be noticed at both, the continental and national levels. In the former, it is clear that the process of convergence is proceeding and the eastern part of the study area attracts much more tourists than a decade before, not only in terms of absolute values but also in relation to the west. Average yearly growth exceeding 5% is not rare there. Considering the results at a more detailed level, the important diversity of the situation at numerous national borders can neither be neglected. One can clearly state that some smaller countries experienced extraordinary growth in the investigated period and they are outstanding from their neighbours in this regard. Iceland, Portugal, Slovenia, Croatia, and Lithuania can be listed here. There are, however, also examples of stagnating countries. Unfortunately, apart from Nordic Europe, there are also such tourism industries of global range as France or Italy among them.

Out of four SPOT case study regions, the highest growth of tourists can be observed in the Centro region (Portugal), slightly smaller in the regions of Piemonte (Italy), and Łódzkie (Poland), while the Innlandet region (Norway) experienced stagnation between 2010 and 2018.



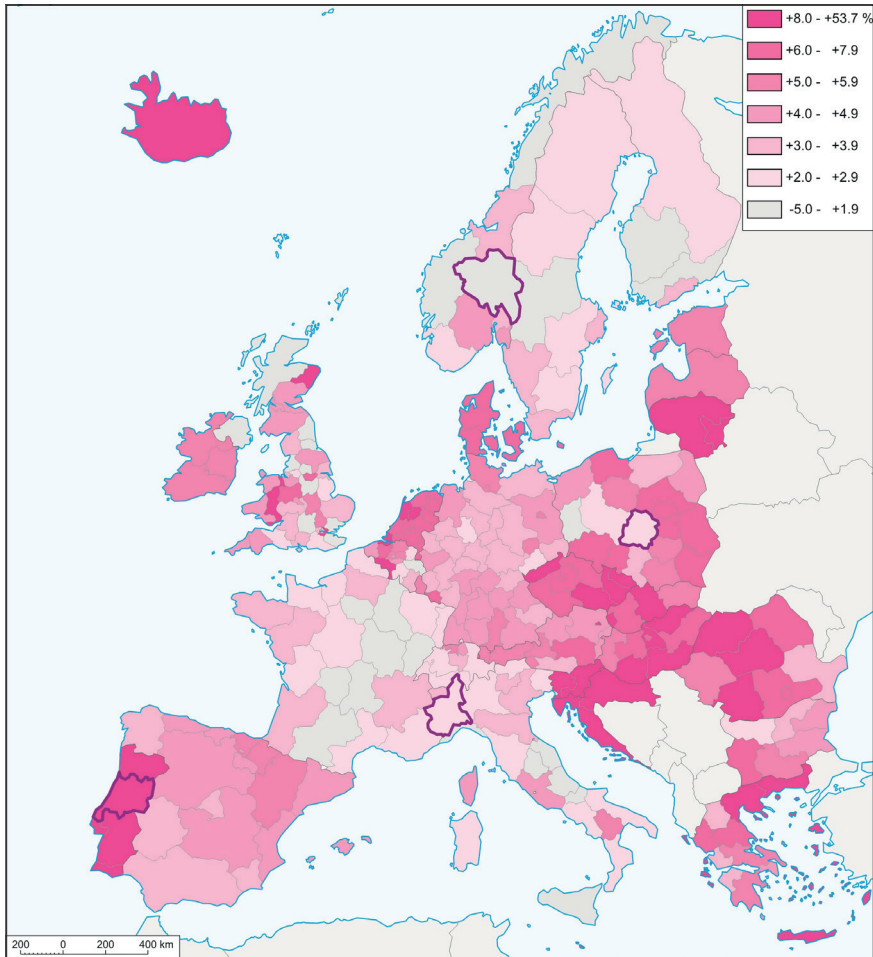


Fig. 3. Regions according to the index of average yearly dynamics of tourist inflow ( $W_{2,i}$ ) in the period of 2010–2018.

Source: own work.

### 4.3. Structural approach

When analysing the results achieved in the structural approach, it is important to notice that tourist inflow has been referred to as other inflows here. Therefore, low or high values not necessarily mean directly such a general position of tourist branch of economy in a region. There are clear examples of the regions of the UK, Benelux or Germany (Fig. 4) where tourism is developed relatively good, but not when compared with the strength of other interlinkages and multi-functional networking in this

part of Europe. Such effect is even clearer in numerous capital regions. Nevertheless, also some areas display a strong position of tourism in relation to other inflows. Generally, three relatively consistent zones can be identified: the entire Iberian Peninsula ranging towards the south and west France, Greece with eastern Bulgaria and Scandinavia (except capital regions, as well as the south of Sweden and Finland) can be indicated here. There are also numerous examples of such situations having more local nature, like e.g. the southern coast of the Baltic Sea with Masurian Lakeland, the mountainous regions of Poland and Czechia, western Austria with the north-eastern borderland of Italy, the Cornwall Peninsula with the coast of Wales, and coastal Croatia. They are predominantly peripheral areas at the national context.

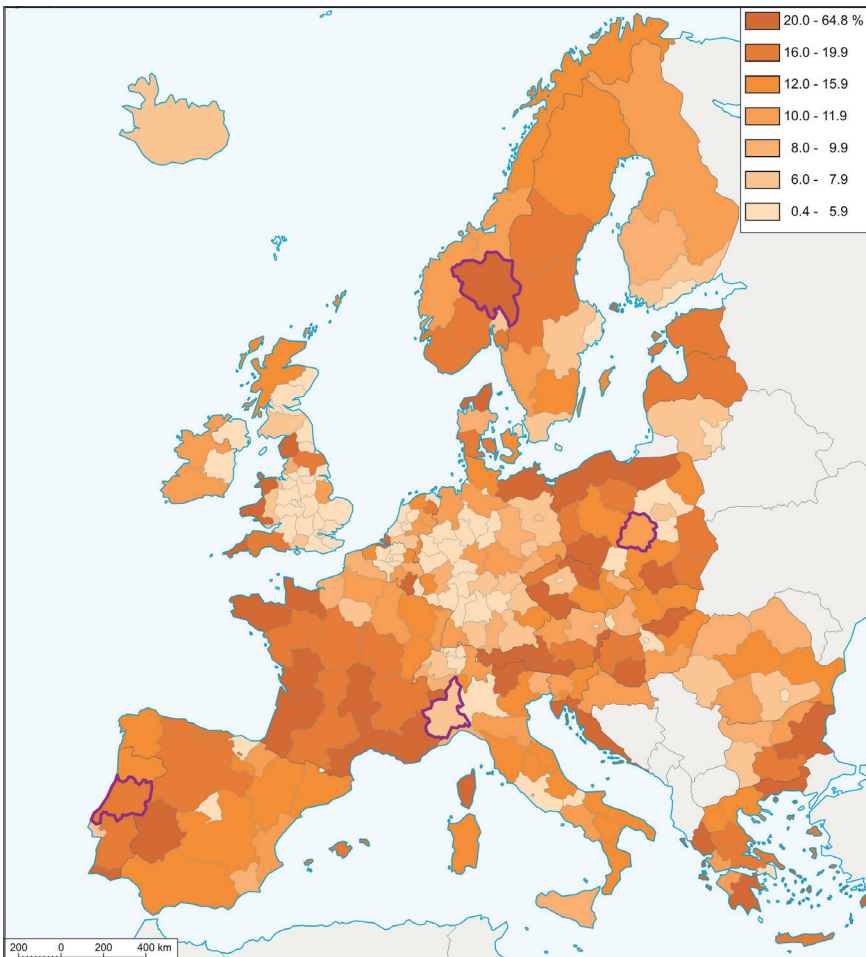


Fig. 4. Regions according to the share of tourist inflow ( $W_{3,t}$ ) in the period of 2010–2018.

Source: own work.

Out of four case study regions, the Norwegian Innlandet region showed the largest importance of tourism in comparison to other flows, i.e., the trade of goods and services, people, capital, and knowledge. Tourism is important also in the Portuguese Centro region, while for the Italian Piemonte and Polish Łódzkie regions tourism is less important, in comparison to other sectors.

## 5. TYPOLOGY

The developed typology is based on two indicators: weighted intensity and spatial concentration. When interpreting the former, it is very important to recognise the significance of the fact that in this indicator the number of tourist arrivals is related to the number of people living in the region. In contrast, the latter dimension was described in great detail in the previous section of the article.

The typology developed quantitatively revealed a division of European regions into four types, which the article decided to name and describe qualitatively. The first type represents regions with a relatively low inflow of tourists in relation to the number of inhabitants and a high level of spatial dispersion of tourist places of origin, i.e., **'post-modern tourism.'** Regions included in this type are overwhelmingly located in Spain, Italy, Greece, the Czech Republic, Hungary, and Iceland. Thus, these are countries generally considered to be tourist destinations with large numbers of tourists. However, if one relates this figure to the number of inhabitants it appears that these regions still have a relatively low weighted intensity. At the same time, the inflow of tourists to these regions is not concentrated from a limited number of directions. It was, therefore, decided to call this type of tourism **'post-modern tourism'** – that is a type of tourism based on individualised travel, the discovery of local resources, and heritage. This type includes the Piemonte region. The SPOT project analyses the vineyard landscapes of Piedmont Langhe-Roero and Monferrato, which fit perfectly into the post-modern tourism type.

Another type was distinguished for regions characterised by high weighted intensity and a great variety of tourist flows – **'global tourism.'** These are regions characterised by a large number of incoming tourists in relation to the number of inhabitants and without a clearly defined direction from which tourists would come. Thus classified regions are found primarily in Portugal, Catalonia, the Balearic Islands, the Greek islands, northern Spain, the Mediterranean and Atlantic coasts of France, the coastal regions of Croatia, Germany, Denmark and Poland, southern Austria, and significant areas of Norway and Sweden. For the most part, these areas are geared towards the mass type of beach-related tourism, characterised by a large number of resorts and private guesthouses. At the same time, they are attractive enough to attract people from

different regions. The Centro region of Portugal is also included in this type. The SPOT project analyses the possibility of sustainable development of mass tourism linked to the excellent surfing conditions around the town of Peniche and the protection of nature, especially the dune communities. Several Scandinavian regions are also included in this type, which requires a slightly different interpretation. These regions are, for the most part, very sparsely populated. At the same time, they are characterised by a relatively high influx of internal tourists due to the widespread custom of second homes in Scandinavia. This type includes the Innlandet region in Norway where the SPOT project investigates the link between environmental sustainability in relation to the pressure of mass ski tourism and the construction of second homes.

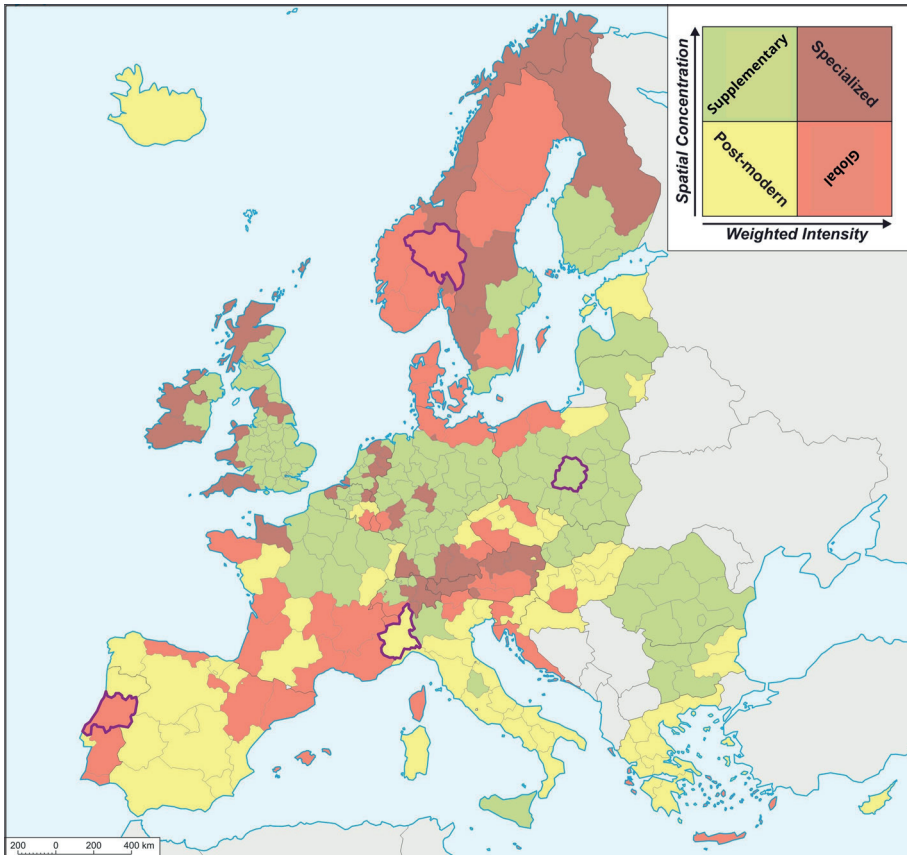


Fig. 5. Typology of regions according to the weighted intensity and spatial concentration of tourist inflow in the period of 2010–2018.

Source: own work.

The third type identified is characterised by a relatively low level of weighted intensity and a high level of spatial concentration – ‘**supplementary tourism.**’ Regions included in this type are mainly located in the UK, northern France, Germany, Poland, Slovakia, Lithuania, Latvia, Romania, Bulgaria, as well as the metropolitan regions of Helsinki and Stockholm. On the one hand, these regions are characterised by a relatively low inflow of tourists in relation to the number of inhabitants and, on the other, by the origin of these tourists from a limited number of other regions. A characteristic feature of regions included in this type is also the relatively lower importance of tourist flows in relation to the other flows analysed in the ESPON IRiE project. Therefore, it was decided to call this type as supplementary tourism – with regard to the number of inhabitants, and other flows, the importance of tourism in these areas is not very significant. Additionally, the high values of the spatial concentration indicator also emphasise the non-mass tourism type dominant in these areas. This type includes the Łódzkie region in Poland. In the SPOT project, the potential for tourism development there is being investigate based on a lignite mine that is still in operation. It is certain that tourism development in this area will be based on people living in only a few of the closest regions in Poland.

The fourth type is characterised by both high values of weighted intensity and spatial concentration. Regions included in this type are, therefore, visited by a relatively large number of tourists in relation to the number of inhabitants, but they come from a relatively small number of destinations – ‘**specialised tourism.**’ The spatial scope of this type includes primarily the Alpine regions of Switzerland, Austria, Germany, and Liechtenstein, as well as Ireland, Wales, Scotland, northern Finland, a few selected regions in Sweden, Norway, and a few German, Dutch and Belgian regions. A characteristic feature of these regions is their low population levels and peripheral location, combined with a high level of tourist attraction but not based on mass tourism – mountainous areas, cold seacoasts, high levels of forest cover, and lakes. These areas receive a relatively large number of tourists who are geared towards enjoying specialised forms of tourism, e.g. skiing, mountain walking, fishing, and hunting, and general contact with nature. In the case of Ireland, the UK, and Scandinavia, these are mainly domestic tourists or those from neighbouring countries. In the case of the Alps, = there is a noticeable concentration of tourists from adjacent regions and some dozen metropolitan regions from across Europe. None of the regions treated as a case study in the SPOT project were included in this type.

## 6. CONCLUSIONS

In conclusion, the three dimensions of interregional tourism inflow sustainability should be addressed again. In the spatial dimension, it can be indicated that the areas characterised by the greatest attractiveness for mass tourism, based primarily

on beach-based tourism offers, are characterised by the greatest level of spatial dispersion of flows. This means that the influx of tourists is observed from many and varied regions. This is particularly the case in Mediterranean countries. The dominant type there is ‘global tourism’, which is based on high levels of tourist flow intensity and multiple spatial linkages.

In temporal terms, tourism flows were characterised in the period 2010–2018 by one of the largest increases in the entire group of 11 flows studied in the *ESPON IRiE* project. This growth occurred primarily in regions hitherto poorly integrated in tourist flow processes, i.e., mainly Central and Eastern European region. On the one hand, this means an increase in convergence in the social dimension, but, on the other hand, it indicates the potential for further growth of tourism in this region in line with economic development. Admittedly, the increase in tourism also resulted in a diversification of tourist destinations in the spirit of post-modern tourism though contributing to an increase in average trip length.

In structural terms, tourist flows are among the most important of all the inter-regional flows analysed. In a relatively large number of regions, their share exceeds 20% of the total volume of flows, and in a few, it is even more than half. The high concentration of tourism flows, in general, should be assessed negatively, due to the low resilience of the region’s economy to possible external shocks – for example, to the tourism crisis in 2020–2021 caused by pandemic austerity. Thus, it should be assessed that tourism flows in Europe in the period between the two crises (the 2008 financial crisis and the 2020 epidemic crisis) were not sustainable in any of the dimensions analysed. The mutual impact of the negative effects resulting from the different approaches only reinforces this overall conclusion. It will be important to conduct similar comparative studies after 2025 when it will be possible to understand the new trends in tourism flows forming after the shocks of the Covid-19 pandemic and the new geopolitical circumstances.

The analyses showed that the four regions selected as case studies in the *Erasmus+ SPOT* project were characterised by very large differences in the characteristics studied. Each of the regions had different conditions resulting from the influx of tourists and thus fell into different types developed on the basis of a comparison of weighted intensity and spatial concentration with each other. Thus, the conclusions and recommendations developed during the detailed fieldwork in the analysed regions have the potential to become more generalised.

Beyond an essential cognitive added value, this paper rises also a very general question about the potential for the application of the space of the flows concept in contemporary geographical studies of dynamic phenomena. The concept of the space of flows is an undoubtedly emerging matter of interest for geographers nowadays and a dynamic increase of infrastructural abilities for big datasets gathering and transforming is not enough to explain that. The reason can be justified from all three perspectives: objective, subjective, and pragmatic. Considering the first perspective, it is possible to encompass and develop a better understanding of our

more and more dynamic world, as the size and importance of the “flows” (the object of this study) is constantly growing. An enormous cognitive potential was triggered and demonstrated as a sample in this paper on the other. From a subjective perspective, the space of flows seems to be an extremely attractive matter of study for geographers because it enables them to address more accurately the question of where the exact places of origins and destinations of flowing assets are (...and, consequently, why there exactly). The last perspective is strictly linked to the symptoms of the growing interest in this concept among institutions implementing spatial policy and financing research activities for higher effectiveness of it.

Nevertheless, while a numerous dynamic, “flowing” phenomena exist and have been analysed as an inherent part of geographical space for years, they are still usually perceived as nothing more than static intersections of this space. The actual empirical recognition of it demands data on individual, bilateral relations between spatial units, in particular temporal intersections, instead of only an overall balance of an area or a time period. Therefore, the space of flows still plays a role of some abstract and intangible theoretical concept rather than a substantial way of empirical description, only superficially recognised sphere in terms of methodological layer and its development seems to be the most desirable objective in this regard.

The paper delivers an initial proposal of some solutions to the methodological discussion on the measurement and description of the space of flows. Three approaches (spatial, temporal, and structural) with four basic aspects (size, balance, concentration, and distance impact) distinguished, as well as an attempt to operationalisation it by means of a substantial set of indexes, can pose some kind of onset. The second significant input is an attempt to converge a traditional quantitative and postmodern approach in tourism geography, as an example of cognitive added value of the space of flows concept application. At a larger scale, tourism used to be researched quantitatively and perceived as a complex system of characteristics, circumstances and consequences, but encompassed overall or by looking at a spatial or temporal intersection. The postmodern shift in the theory emphasises individualism and authenticity as one of the main determinants of postmodernity and contemporary tourists moving away to alternative places. It is mostly investigated by qualitative social methods. Both approaches have inherent constraints in understanding the entire system. The paper provided an example of how a quantitative study of the set of individual bilateral relations enables one to identify some spatio-temporal regularities in individual decisions of tourists.

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## UNDERSTANDING THE IMPACT OF TOURISM ON SPATIAL GROWTH FOR SUSTAINABLE DEVELOPMENT OF TOURIST DESTINATIONS THROUGH THE MEASURE OF LAND USE EFFICIENCY

**Abstract.** Increased visitor arrivals and improved work opportunities in the discussed destinations resulted in infrastructural development and settlement movements, culminating in the urbanisation of the locations. As a result of increased tourist flows and growing economic dependency on the tourism sector, the accommodation and other tourist infrastructure have contributed to a change in built-up areas considerably in tourist areas. Most green spaces in environmentally vulnerable locations are being filled with concrete due to a lack of appropriate spatial development guidelines, while urban areas are losing their authentic aspects. The paper attempts to understand spatial sustainability through the measures of land consumption rate and land-use efficiency in various types of tourist places. As a result, the study concludes that there is a strong link between growing urbanisation and changing visitor arrivals, as well as population change, and tourism has a substantial influence on spatial sustainability.

**Key words:** tourist inflow, built-up, consumption, spatial, sustainability.

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## 1. INTRODUCTION

The travel and tourism industry grew at a faster rate than the world economy, at a rate of 3.9% (WTTC,<sup>1</sup> 2019). It has generated one in five new jobs over the last five years with a 10.4% contribution to the global GDP (WTTC, 2019). Tourism is also represented as a spatial interaction between three regions –tourist generating regions where tourists start their trip, transit regions facilitating travel, food and lodging establishments, and tourist destination regions as places to supply tourism products and serves as the main motivations for undertaking trips (Leiper, 1979). Among those three, tourist destination regions are the places of various attractions and tourism activities that serve as the main motivation for tourists to visit. A tourist destination is considered to be the focal point for tourists for the quality of experience, tourism providers for marketing, and local residents for quality of life. In addition, tourism acts as a catalyst for the development of a destination in generating income, employment, foreign investments, conservation of heritage and eco-sensitive areas, and improving quality of life (Pechlaner *et al.*, 2020). Hence, such destinations are economically dependent on tourism to a significant extent and the development is shaped by tourist flow. By dint of the perceived economic contribution of tourism, countries have adopted tourism development as an important and integral element in their development strategies (Jenkins 1991a, p. 61), which is primarily seen as the symbol of progress and modernisation, especially in developing countries (Roche, 1992; Sharpley, 2019, p. 566).

In developing countries like India, tourism has a vital role in boosting economic, social and cultural development. The travel and tourism sector is considered to be the largest service sector in India with total contributions of 9.2% to GDP and 8.1% to employment (FICCI,<sup>2</sup> 2019). According to WTTC, India moved forward from 52nd rank in 2015 to 34th rank in 2019 in travel and tourism competitiveness, with great performance scores in cultural resources and business travel, business environment, natural resources, and price competitiveness but the lowest performance in tourist service and infrastructure, environmental sustainability, and ICT readiness. A 2018 economic impact report by the World Travel and Tourism Council (WTTC) mentioned that India was expected to establish itself as the third-largest travel and tourism economy by 2028 in terms of direct and total GDP.<sup>3</sup> After the effect of the economic crisis in 2009, many initiatives such as Incredible India, Athithi Devo Bhava, and Swadesh Darshan Scheme have been initiated, maintaining India as an attractive and tourist-friendly destination, in order to boost the economy

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<sup>1</sup> WTTC – World Tourism and Travel Council

<sup>2</sup> FICCI – a business organization working on market trends, and policy recommendations in various sectors in India

<sup>3</sup> GDP – Growth Domestic Product is a standard measure of the added value created through the production of goods and services in a country during a period.

(Jaswal, 2014; Pandey and Mishra, 2017). Additionally, such push factors as an increase in disposable incomes, new forms of tourism, easier means of transport and communication through technological developments, and the desire of people to travel for leisure and recreation has bound tourism to grow rapidly. In 2017, 59.7% of tourist arrivals were for the purpose of leisure, holiday and recreation followed by business and professionals with 13.6% (MoT,<sup>4</sup> 2017). Also, 2017 was a remarkable year for India, with 10.04 million foreign tourists for the first time with a sharp growth rate of 14.7% from 2016 which remained steady until the COVID-19 outbreak. Such growth trends of tourist arrivals pressured the destinations to develop infrastructure such as hotels, restaurants, theme parks, resorts, and other tourism infrastructure in order to accommodate the tourists and boost the economic benefits. In addition, improved work possibilities in the tourist industry have resulted in population movement to the locations. As a result, there was a dramatic increase in land consumption and changes in land cover and land use in tourist areas for the last decade from 2009 to 2019, caused either directly or indirectly by tourism development. Most green spaces in eco-sensitive areas are being filled with concrete, while urban areas are losing their authentic look due to a lack of proper guidelines for planning and monitoring tourist destinations. Furthermore, challenges like congestion, crowding, trash, damage to religious and heritage monuments, pollution, and overburdened infrastructure are visible, resulting in lasting effects on tourism landscapes. The degrading visual appearances may affect the quality of experience for tourists and quality of life of residents as well. As a result, tourism is viewed as a danger to local sustainability with uncontrolled consumption patterns in the tourism sector, which could be a phenomenon of overtourism.<sup>5</sup>

As a result, it is expected that the tourist industry shall consume a substantial amount of land, resulting in additional effects on inhabitants, particularly in places that rely heavily on tourism for economic advantages. Butler's evolution theory of tourist regions (1980)<sup>6</sup> also addressed the relationship between changing tourist arrival numbers and the changing phases of the development of an area, hence the assumption in this study is legitimate. The spatial sustainability<sup>7</sup> of each destination is evaluated using indicators supplied by the Global Human Settlement Layer (GHSL) to quantify land consumption and land-use efficiency, recommended SDG indicators for implementation of 2030 Agenda<sup>8</sup> (United Nations, 2017; UN-Habitat, 2018). Moreover, it is underlined that though tourism is mentioned specifically

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<sup>4</sup> MOT – Ministry of Tourism, Government of India.

<sup>5</sup> Overtourism – Excess tourist inflow beyond the carrying capacity and its impact on the destinations disturbing the quality of life of residents or visitors.

<sup>6</sup> Butler's evolution theory – it explains the six stages of development from exploration to consolidation, and further to the rejuvenate or decline stage, with an increasing number of tourist arrivals.

<sup>7</sup> Sustainability – the optimal use of resources without compromising the needs of future generations.

<sup>8</sup> 2030 agenda – a 15-year-long action plan launched in 2015 with 17 sustainable development goals for a better and more sustainable future for all.

in SDG goals 8, 12 and 14, it has the potential to contribute to other goals of sustainable development (Meuleman, 2020), and, hence, the linkages of sustainable tourism and sustainable development are partial and incomplete (Rasoolimanesh *et al.*, 2020) until they are addressed. One such key issue to address is the influence of tourism on the spatial sustainability of tourist destinations and, therefore, additional indicators are introduced for the case of tourism destinations. In addition, the need of monitoring the spatial sustainability of destinations is stressed in this study under SDG 11 (i.e., Sustainable Cities and Communities) along with its impact on sustainable tourism, in order to achieve sustainable development.

The structure of the paper contains five sections in sequence. The first section is an introduction addressing the concern and needs of the study. The second section discusses the facts and findings from a literature review. The third section discusses the data collection methods, data processing, and quantitative measures used for the study. The fourth section provides results and a discussion of the findings in the study. The fifth section is a conclusion providing a brief summary, recommendations, and the further scope of the research.

## 2. LITERATURE REVIEW

Tourism has a specific potential to protect the environment, shape spatial structures, and improve social challenges along with elevating the economy of a destination. As a result of the growth in tourist arrivals, destinations transform natural spaces into concrete spaces, through the development of tourist facilities such as accommodation facilities, restaurants, information centres, resorts, etc., shaping the built-up area in different stages of development (Gilbert, 1989; Christaller, 1939, Stansfield, 1978; Butler 1980). Evolutionary models such as the resort or destination life cycle models (Gilbert, 1939; Defert, 1954; Christaller, 1964; Plog, 1973; Butler, 1980; Hovinen, 1981; Haywood, 1986; Hovinen, 1982; Young, 1983; Choy, 1992; Getz, 1992; Agarwal, 1992; Goncalves and Aguas, 1997), morphological models (Weaver, 1993; Barrett, 1958; Meyer-Arendt, 1990, p. 40; Stansfield, 196; Lavery, 1971) have proved the existence of a relation between tourist arrival growth and the spatial development in a destination. However, the relationship between tourism and the physical environment is reciprocal. Intensified tourist flow results in an accelerated growth of a built-up area which leads to issues of uncontrolled and unplanned growth (Anbalagan, 1993), which in turn may lead to degrading the attractiveness, which may further affect the visitor experience. Overtourism and overdevelopment, forms of unsustainable and unregulated tourism, are two major phenomena threatening a destination's sustainability (Butler, 2019), which may induce the issues such as water scarcity, land scarcity, pollution, land degradation,

exploitation of forest resources, etc. There has been a considerable discussion on such negative impacts of tourism on the natural and socio-cultural environments since the 1970s. To address all such issues, the sustainable development approach has also been discussed widely in tourism (Lane, 1991, p. 2; ETB, 1991; UNWTO, 1993; Godfrey, 1993; De Boer, 1993; Butler, 1996; Hunter, 1997, pp. 860–862; Adillon, 2019). The sustainable tourism that arose from Agenda 21 (UN, 2000) with the purpose of eradicating poverty mostly focused on the sustainability of tourism as an economic activity. Later, the 2030 Agenda (UN, 2015) highlighted sustainable tourism to combat water scarcity and pollution, strengthen cooperation on desertification, dust storms, land degradation and drought, and promote resilience and disaster risk reduction, reflecting the targets of SDGs 8, 12, and 14 for achieving Sustainable Development. However, the influence of tourism on other goals is rarely discussed. Meuleman (2020) stated that “As a priority, it is convenient to evaluate or formulate metrics for objectives 8, 12, and 14, which have been identified as those in which tourism plays an important role. However, it will be appropriate to address all SDGs because tourism directly or indirectly affects all of them, and in turn, all the SDGs are interrelated.” Specifically, the influence of tourism on SDG 11.3.1 which measures land consumption and population growth pattern is not spotlighted. SDG 11.3.1 is targeted to monitor the utilisation of land in urban areas through a ratio of Land Consumption Rate to Population Growth Rate (LCRPGR). As mentioned in Butler’s theory of destination’s life cycle (1980), the development stage has a huge impact on the transformation of a destination with accommodation facilities, transport network, civic amenities, etc., which greatly influences the built-up area and also may lead to urbanisation with the internal migrant population. Therefore, there exists a strong relation between tourist arrival growth and the utilisation of land. Hence, monitoring land utilisation using the existing indicators recommended in SDG 11.3.1 may not provide the actual idea in the case of tourist destinations. Therefore, this paper contributes to exploring the influence of tourist growth rate on land utilisation rate and its efficiency for achieving sustainable development.

### **3. STUDY AREA**

India is diverse with different cultures, traditions, and many other natural attractions, which creates an interest to make India a destination choice for tourists. It offers a variety of destinations that include heritage sites, religious sites, nature-based sites, and a combination of all of them, with different geographical characteristics such as plain, hilly or mountainous areas that include rural areas, small towns, medium towns, and large cities and metropolitan cities. It is one of the fastest developing

countries with tourism as an important source for the economy, attracting a large number of domestic and international tourists from around the world. The country has witnessed an increasing trend in domestic tourist arrivals for the last two decades with a CAGR<sup>9</sup> of about 26.1% from 1997 to 2017. Foreign tourist arrivals witnessed a CAGR of 8.26% from 1997 to 2017, following an increasing trend except for marginal declines in the years 2002, 2009, 2012, and 2020. International tourist arrivals are expected to reach 30.5 billion by 2028 (MoT, 2020). Tourism contributed about 9.4% to India's GDP in 2017 with domestic tourism alone accounting for 88% of the sector (MoT, 2017). The industry has been recognised as the fastest growing sector in India with emerging tourism segments such as medical tourism, pilgrimage tourism, eco-tourism, adventure tourism, heritage tourism, rural tourism, and luxury tourism. The study selected around 20 popular destination areas with varied topographies and tourism activities for the analysis.

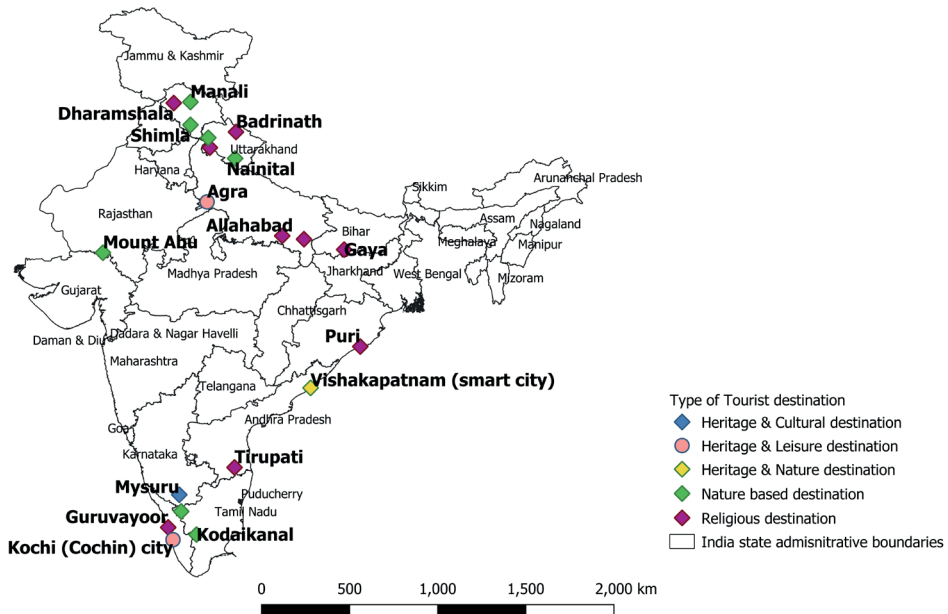


Fig. 1. Location of selected destinations for the study

Source: own work.

The case studies are categorised based on the promoted experiences and attractions in the destination through the Incredible India campaign assuming that majority of the tourists visit to experience the same things in the same destinations.

<sup>9</sup> CAGR – compound annual growth rate is the mean annual growth rate of tourist arrivals over a specified period of time longer than one year.

Also, the destinations are categorised based on the size of the population defined in URDPFI<sup>10</sup> guidelines (2014). Areas with a population ranging from 10 lakh to 1 crore are defined as metropolitan cities, 5 to 10 lakh as large cities, 1 to 5 lakh as medium towns, and 5000 to 50,000 as small towns. Also, there is an exception that any urban area with a population of less than 5,000 may be called a statutory town.

Table 1. Profiles of case studies

Destination	Administrative boundary (State, country)	Type of Settlement	Major Tourism activity	Terrain	Category
Agra	Uttar Pradesh, India	metropolitan city	heritage and leisure	plain	heritage – metro city
Allahabad	Uttar Pradesh, India	metropolitan city	religious and heritage	plain	religious – metro city
Badrinath	Uttarakhand, India	statutory town	religious and nature	mountainous	religious – rural town
Dharamshala	Himachal Pradesh, India	small town	religious and nature, adventure	mountainous	religious town
Gaya	Bihar, India	medium town	religious and heritage	plain	religious – city
Guruvayoor	Kerala, India	small town	religious	plain	religious – town
Haridwar	Uttarakhand, India	medium town	religious and nature	mountainous	religious – city
Kochi (Cochin)	Kerala, India	large city	heritage and leisure, wellness	plain	heritage – coastal city
Kodaikanal	Tamil Nadu, India	small town	nature and leisure	hill	hill town
Manali	Himachal Pradesh, India	statutory town	nature and heritage, adventure	mountainous	hill – a rural town
Mount Abu	Rajasthan, India	small town	nature	hill	hill town
Mussoorie	Uttarakhand, India	small town	nature and heritage, adventure	mountainous	hill town
Mysuru	Karnataka, India	large city	heritage and culture	hill & plain	heritage – city

<sup>10</sup> URDPFI - Urban and Regional Development Plans Formulation and Implementation Guidelines by Ministry of Urban Development, Government of India.

Table 1 (cont.)

Destination	Administrative boundary (State, country)	Type of Settlement	Major Tourism activity	Terrain	Category
Nainital	Uttarakhand, India	small town	nature and heritage, adventure	hill	hill town
Puri	Orissa, India	medium town	religious and culture	plain	religious – coastal city
Shimla	Himachal Pradesh, India	medium town	nature and leisure, adventure	hill	hill – city
Tirupati	Andhra Pradesh, India	medium town	religious and heritage	hill & plain	religious –city
Udhagamandalam (Ooty)	Tamil Nadu, India	medium town	nature and leisure, adventure	hill	hill town
Varanasi	Uttar Pradesh, India	metropolitan city	religious and culture	plain	heritage – metro city
Vishakapatnam (smart city)	Andhra Pradesh, India	metropolitan city	nature and heritage, adventure	plain	heritage – coastal metro city

Source: own work.

## 4. MATERIALS AND METHODS

### 4.1. Methodology

The study adopts an indicator approach to measure the land consumption rate and land-use efficiency of the destinations. The indicator values are plotted to identify the relationship and understand the spatial sustainability of the destinations. The 2030 Agenda goal devoted to sustainable cities and communities, i.e., SDG 11, has listed many indicators to monitor at the city scale. Among them, land consumption rate to population growth is specified as a Tier II indicator (method established with poor data) as mentioned under SDG 11.3.1, which could be improved with satellite data over a broad geographical area. In a way to recover the data deficits, multiple dataset areas are developed to estimate urban expansion such as the Global Human settlement layer (GHSL), Global Urban Land (GUL), and Global Artificial Impervious Area (GAIA) (Liu, X. *et al.*, 2020). However, the estimates from the



mentioned datasets have not established any relationship between the function of a city and spatial growth, which is important for understanding spatial sustainability. Therefore, the indicators have been modified and additional indicators have been introduced with a critical perspective on spatial growth in tourist destinations at a city scale. The overall approach for the study is shown in the Fig. 2. The modified approach is specifically applied to tourist destinations where tourism contributes significantly to economic growth. In this approach, tourists are considered to be as important as the residents for the expansion of the built-up area. In addition, tourists are represented as temporary residents living for a short period creating significant long-term changes in the destination. Finally, residents and tourists are equally important stakeholders in the sustainable development of a tourist destination. Therefore, it is assumed that the changing of a built-up area is related to changing population and changing tourist arrivals in the destination.

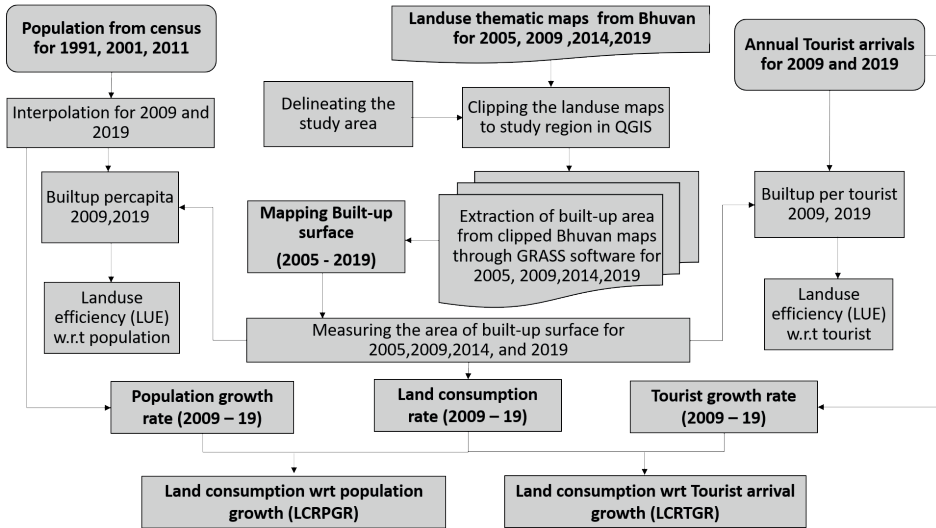


Fig. 2. Methodology

Source: own work.

#### 4.2. Data collection and pre-processing

Land use maps at a scale of 1:250000 for these destinations were collected from Bhuvan<sup>11</sup> (<http://bhuvan.nrsc.gov.in>) for the years 2005, 2009, 2014, and 2019. The tourism activities were either concentrated or dispersed within or beyond the

<sup>11</sup> Bhuvan – a web-based platform launched by the Indian Space Research Organization to provide geospatial data to the users in India.

municipal boundaries of a destination and, therefore, a buffer of 10 km was also considered from the municipal boundary of the destination. Thus, the collected land use images have been clipped to case study areas with a buffer of 10 km. These raster images are reclassified with pixel values representing built-up areas through GRASS to extract only the built-up areas. The area of the pixels coming under the built-up class within the selected regions has been calculated for specific years. Tourist arrival data was collected for each destination from the statistics provided by the Ministry of Tourism, Government of India. The population data was collected for 1991, 2001, and 2011 from the census of India and interpolated for the years 2005 and 2019. The tourist arrival data of each destination was collected from the published sources by the state government, and published reports from the local authorities were available with tourist arrival data for the years 2005, 2009, 2014, and 2019. The missing tourist arrival data is interpolated from the tourist arrival rate trend line per year.

#### 4.3. Built-up extraction method from Bhuvan LULC images

The land use and land cover data from the Bhuvan – Indian Geo platform of ISRO was obtained into QGIS by connecting the dataset as a WMS layer. The data was extracted for the study area in the form of an image in TIFF format at a 1:250,000 scale with fine resolution. An RGB band raster image was obtained, split into three raster images. Among them, band 2 was used to extract the built-up pixels which were reclassified as a binary image with built-up and non-built-up areas. The binary raster was then clipped to the study area and the amount of built-up area was measured in square metres.

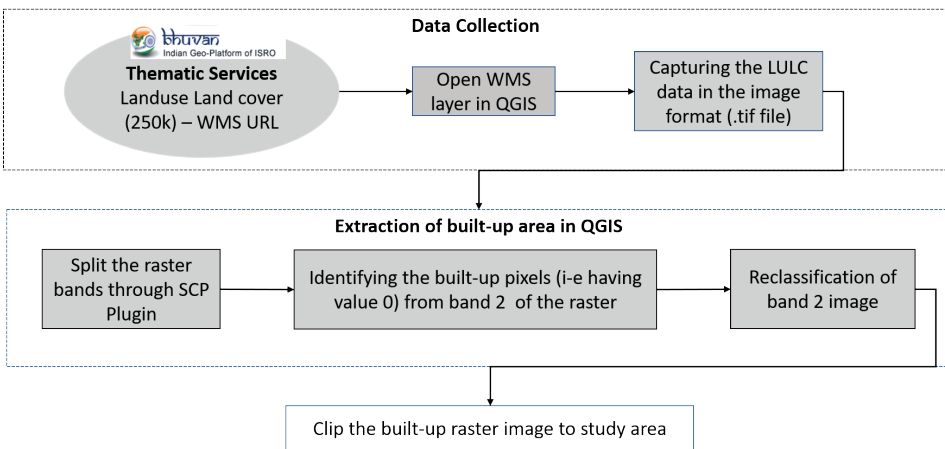


Fig. 3. Extraction of the built-up area from Bhuvan land use maps

Source: own work.

**4.4. Measuring land consumption patterns with changing population and tourist inflow**

To understand land consumption through growing built-up areas in a region with increased intensity of tourism in the area and an increased size of settlement, the study adopted the SDG indicator 11.3.1, i.e., Ratio of Land Consumption Rate (LCR) to Population Growth Rate (PGR) to monitor the land use efficiency as recommended by UN-Habitat. Furthermore, the research includes an external indicator relevant to the situation of a tourist destination, based on the idea that guests leave a footprint that contributes to the use of natural resources (land, water, electricity, etc.) and have long-term effects on the destination. Furthermore, the research includes an external indicator relevant to the situation of a tourist destination, based on the idea that guests leave a footprint that contributes to the use of natural resources (land, water, electricity, etc.) and have long-term effects on the destination.

Table 2. Indicators used for measuring land consumption pattern

Sub-Indicator	Definition	Formula
Land consumption rate (%) (UN-Habitat, 2015)	The land consumption rate is defined as the rate at which land is being utilised for a specific purpos	$LCR = (LN(BU_{t+n}/BU_t))/(y)$ where, $BU_{t+n}$ = Total built-up area in sq. km for past/initial year $BU_t$ = Total built-up area in sq. km for current/final year $y$ = The number of years between the two measurement period
Population growth rate (PGR) (%) (UN-Habitat, 2015)	The rate of change in the number of residents in a specific region (country, city, etc.) over a certain period of time	$PGR = (LN(Pop_{t+n}/Pop_t))/(y)$ where, $Pop_{t+n}$ = Total population within the city in the past/initial year $Pop_t$ = Total population within the city in the current/final year $y$ = The number of years between the two measurement periods
Tourist growth rate (TGR) (%) (UN-Habitat, 2015)	The rate of change in tourist arrivals in a specific region (country, city, etc.) over a certain period of time, which is expressed as the percentage change in tourist arrivals growth per year	$TGR = (LN(TA_{t+n}/TA_t))/(y)$ where, $TA_{t+n}$ = Total no. of tourists arrived within the city in the past/initial year $TA_t$ = Total no. of tourists arrived within the city in the final year $y$ = The number of years between the two measurement periods
*Ratio of land consumption rate to population growth rate (LCRPGR) = $(LCR)/(PGR)$ *Ratio of land consumption rate to Tourist arrival growth rate (LCRTGR) = $(LCR)/(TGR)$		

Source: UN-Habitat (2015); own work.

#### 4.5. Measuring land use efficiency

To understand the spatial sustainability of a region, the study has adapted the approach of land use efficiency proposed by GHSL, in order to support the indicator of SDG 11.3.1 for monitoring the implementation of the 2030 development agenda. For the specific case of tourist destinations, additional sub-indicators are used to understand the influence of tourism on spatial sustainability of the region.

Table 3. Indicators used for measuring land use efficiency

Sub-Indicator	Definition	Formula
Built-up per resident (sq. km per resident) (UN-Habitat, 2018)	The average amount of built-up area available per each resident in the defined area as a destination	$Bu\_R = (Bu/R_t)$ where, $Bu_t$ = Total built-up area in sq. km in the time 't' (year) $R_t$ is the number of residents in the defined area in time 't' (year)
Built-up per tourist (sq. km per tourist) (UN-Habitat, 2018)	the average amount of built-up area available per each tourist in the defined area as the destination	$Bu\_T = (Bu/T_t)$ where, $Bu_t$ = Total Built-up area in sq. km in the time 't' (year) $T_t$ is the number of tourists in the defined area in time 't' (year)
Built-up per capita (sq. km per person) (UN-Habitat, 2018)	The average amount of built-up area available to each person in a defined area (country, city, etc.), which helps to identify the spatial distribution (i.e., densely or sparsely populated) of people (include both residents and tourists)	$Bu\_C = Bu_t/(R_t+T_t)$ where, $Bu_t$ = Total built-up area in sq. km in the time 't' (year) $R_t$ is the number of residents in the defined area in time 't' (year) $T_t$ is the number of tourists in the defined area in time 't' (year)
* Resident land use efficiency = $(Y_t - Y_{t+n})/Y_t$ ,		Where, $Y_t = Bu_t/(R_t)$
* Tourist land use efficiency = $(Y_t - Y_{t+n})/Y_t$ ,		Where, $Y_t = Bu_t/(T_t)$
* Overall land use efficiency = $(Y_t - Y_{t+n})/Y_t$ ,		Where, $Y_t = Bu_t/(R_t + T_t)$

Source: UN-Habitat (2018); own work.

## 5. RESULTS AND DISCUSSION

### 5.1. Decadal change in tourist flow, population, and built-up area in the destinations

With the exception of a few areas, tourist arrivals have doubled or more than doubled as a consequence of heightened campaigning and marketing following the economic slump in most regions, which is evident in Fig. 4. Furthermore, as job opportunities and money creation have increased, the populations of the

destinations' urban areas have exploded. It goes without saying that as the population grows, so does the amount of built-up land. Hill destinations like Ooty, Kodaikanal, and Mussoorie, which are known for their natural scenic beauty, have witnessed remarkable increases in built-up areas, with a larger shift in tourist arrivals as compared to their populations, contrary to popular belief. Even well-known holy cities such as Allahabad and Varanasi have witnessed tremendous growths in built-up areas, as well as increasing tourist traffic and population. Agra, the most popular heritage destination, has seen a surge in weekend visitor traffic since the introduction of the fast route from Delhi, resulting in an expansion in its built-up area. The altering built-up area is a result of both increasing population and increased tourist numbers, according to this study.

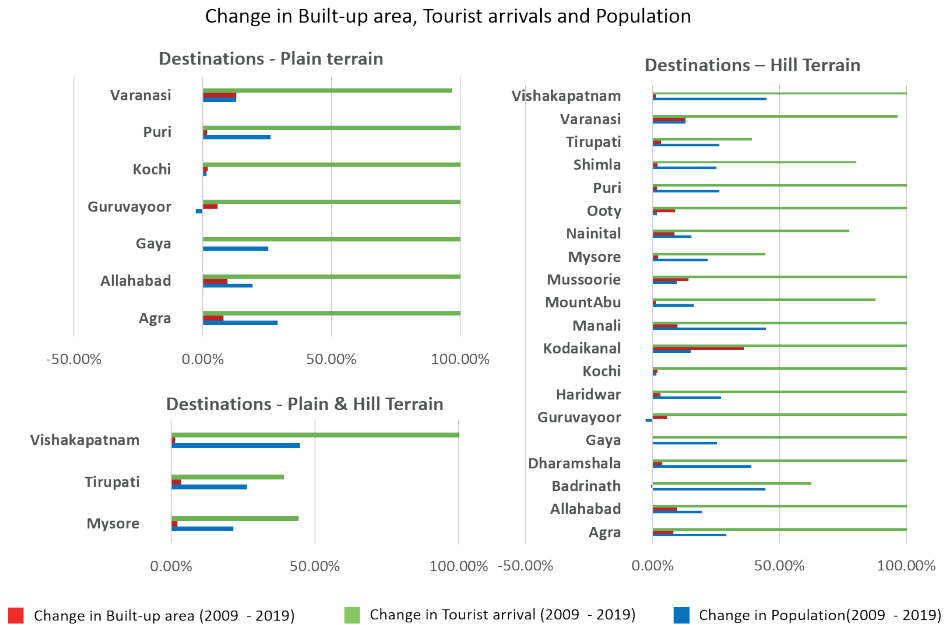


Fig. 4. Changing built-up area, tourist inflow and Population

Source: own work.

### 5.2. Land consumption in tourist destinations

In accordance with the recommended indicator for monitoring SDG 11.3.1, i.e., the ratio of land consumption rate to population growth rate, the study presents the land consumption rate, population growth rate, and tourist growth rate of various destinations located in various geographical locations in Fig. 5. It has been

noticed that sites famous for nature-based tourism, such as Kodaikanal, Mussoorie, Nainital, and Ooty, have high land consumption rates, greater visitor growth rates, and low population growth rates. It supports our hypothesis that tourism is a substantial contributor to the growth of built-up areas in tourist-dependent areas, particularly in hilly areas. Badrinath, however, has a negative land consumption rate, which might be attributable to the loss of built-up land following 2013 floods. However, this distant community has had a faster pace of population growth and a large increase in visitor visits. With such a rapid expansion, the town is under pressure from both tourists and residents, perhaps leading to an increase in built-up space. Furthermore, increased built-up area on such vulnerable ground may increase the region’s exposure to dangers. Except for Badrinath, all places with high hotel density have high land consumption rates. However, locations such as Agra, Allahabad, Kochi, Visakhapatnam, Varanasi, and Tirupati have a higher number of lodging establishments with a lower density. This might be the situation in metropolitan and big cities where tourism is one of the major sources of revenue, alongside other vital economic activities. For example, Kochi and Vishakhapatnam are also popular as industrial cities with port activities, coal and petroleum industries, and IT industries. Similarly, Agra and Allahabad are known as a cantonment board and are organically developed as historical cities. With a few exceptions, our analysis supports the notion that tourism-related built-up area occupies a significant share of the built-up area.

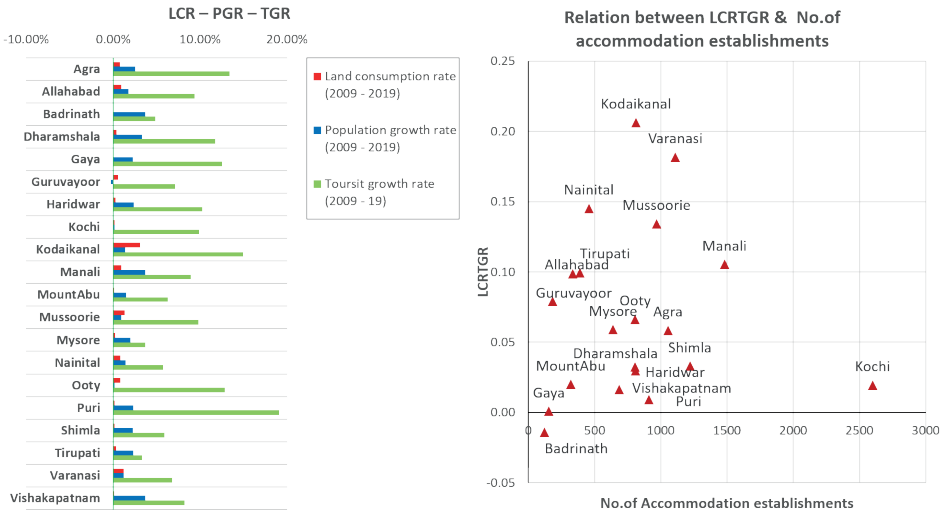


Fig. 5. Land consumption and the relation between the number of accommodation establishments with LCRTGR

Source: own work.

### 5.3. Land consumption with changing tourist arrival and the population

The perfect LCRPGR ratio for achieving sustainable development, according to UN-Habitat, is 1, with positive numbers showing progress towards efficiency and negative values suggesting a decrease in efficiency. The LCRPGR ratio is interpreted in terms of city density to determine land use efficiency.

Table 4. Benchmarks recommended for LCRPGR ratio

City density	LCRPGR <1	LCRPGR >1
10–150 persons per hectare	Efficient land use	Inefficient land use
151–250 persons per hectare	Moving toward efficiency	Moving away from efficiency
> 250 persons per hectare	Insufficient land per person	Moving toward sufficient land per person

Source: UN-Habitat, 2015.

As illustrated in Fig. 6, the LCRPGR and LCRTGR ratios are computed and shown. The study's chosen sites had population densities ranging from 10 to 150 people per hectare. As observed in the graph, Ooty, Kodaikanal, Mussoorie, and Guruvayoor have LCRPGR ratios larger than 1, indicating either inefficient land use or a shift away from efficient land use. Despite their close proximity to the optimal ratio, Shimla, Nainital, Manali, and Dharamshala exhibit evidence of uncontrolled growth. Kochi, a beach city, and Varanasi, a holy heritage city, have proved that they are closer to meeting the right ratio for sustainable growth. The majority of religious and heritage locations are making more efficient use of land having relatively lower land consumption rate.

The study has been the first to plot LCR and TGR data to evaluate the impact of tourist expansion on land consumption rates and to provide a standard for interpreting LCRTGR and LCRPGR for monitoring a destination's spatial sustainability. The LCRTGR standard is assumed to be 0.05, determined from the figure given in Fig. 7, for destinations that have proven a consumptive use of land. The benchmark is set arbitrarily based on the increase of built-up areas in the studied regions. Other indicators established by the Global Human Settlement Layer (GHSL) to measure land use efficiency are also utilised to validate the assumption.

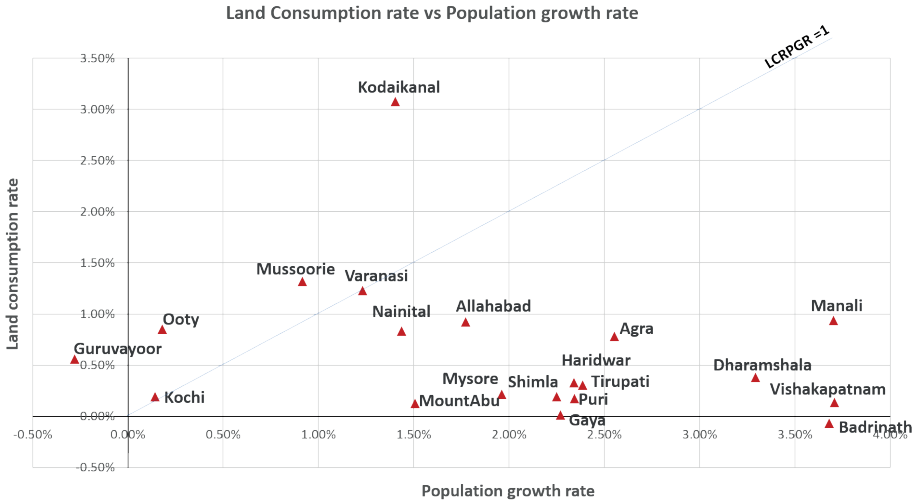


Fig. 6. Land consumption rate versus population growth rate  
Source: own work.

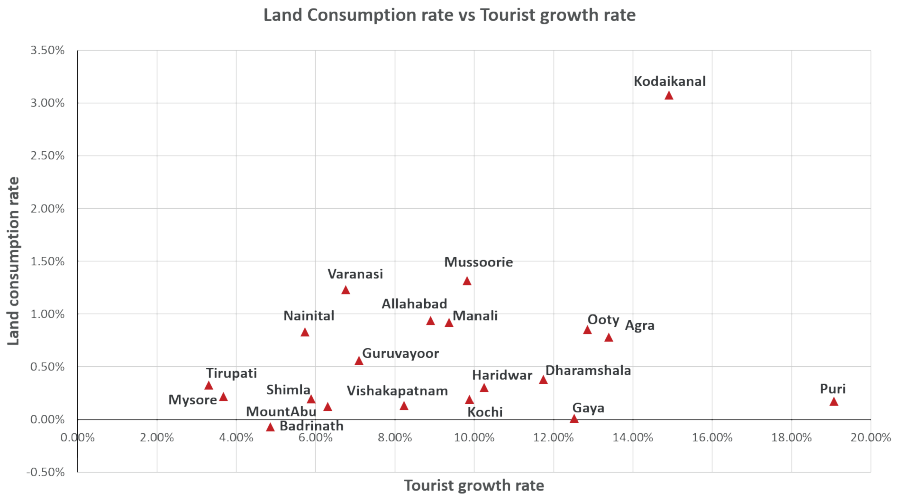


Fig. 7. Land consumption rate versus tourist growth rate  
Source: own work.



**5.4. Temporal patterns of land consumption per resident and land consumption per tourist**

The land consumption per resident or tourist is calculated as the change in built-up per resident or tourist over a period and is expressed as a percentage change in built-up available for residents or tourists. Positive numbers imply more land consumption per person, whilst negative values indicate lower land consumption per person by those percentage points. The changing consumption of land per resident and visitor in the location is presented in Fig. 8. It is obvious from this research that land consumption patterns are shifting in all of the destinations. The decreasing trend in land consumption per capita indicates that some cities are becoming more compact, whereas the growing trend indicates that other cities are becoming more sprawled. It is apparent that, between 2009 and 2014, the destinations grew in size as the demand for land increased for inhabitants and tourists. In highland locations such as Ooty, Nainital, and Mussoorie, land usage per inhabitant climbed dramatically until 2014, but dropped precipitously between 2014 and 2019. Badrinath is an exception, with land loss resulting in a reduction in built-up per capita from 2009 to 2014. However, from 2014 to 2019, there was an upward tendency in land consumption per inhabitant, indicating that the region was going to expand spatially.

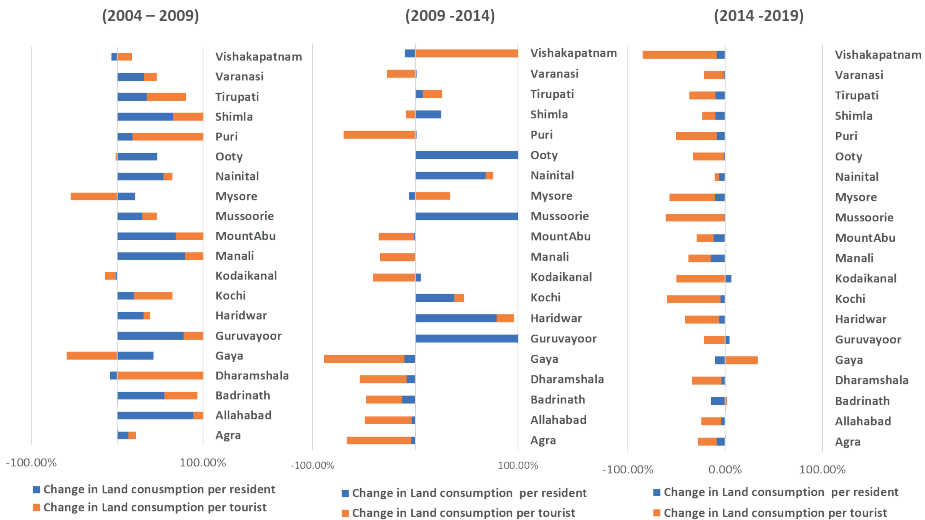


Fig. 8. Temporal patterns of land consumption

Source: own work.

All religious locations with flat terrain are transforming into compact metropolitan areas that can accommodate both inhabitants and tourists. However, due to growing populations and tourist traffic, it is apparent that the built-up area

rose dramatically from 2004 to 2009. Coastal cities such as Visakhapatnam and Kochi were sprawling due to the effect of land consumption patterns brought on by tourist traffic until 2014. The trend from growing land consumption in 2004–2009 to diminishing tendencies in 2014–2019 indicates that all destinations are moving towards a compact urban form or densification. There are a few exceptions, such as Guruvayoor, which has a shrinking population and is spreading, and Badrinath, which lost land due to floods in 2013. Due to the creation of industrial townships such as the BHEL township in Haridwar and IT parks in Kochi, land consumption per inhabitant in Kochi and Haridwar is significantly higher than that of tourists. The reduced trend in land consumption per resident and visitor may also be argued as concerns of land scarcity due to restricted land availability and physical limits within the study’s designated region.

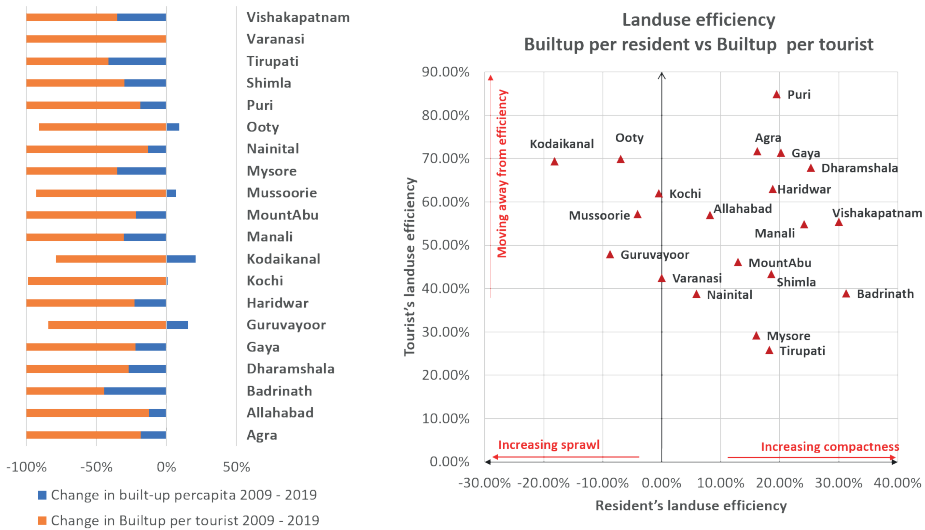


Fig. 9. Resident land use efficiency versus tourist land use efficiency

Source: own work.

The plot of efficiency of land use by inhabitants and visitors from 2009 to 2019 is shown in Fig. 9. Most destinations are becoming increasingly confined, with land usage becoming increasingly constrained. Yet areas like Ooty, Kodaikanal, Mussoorie, and Guruvayoor are spreading over the region, with a substantial increase in built-up space. Kochi and Varanasi have virtually reached the ideal LCRPGR ratio (i.e., 1), indicating that the population and built-up area are rising at the same rate and demonstrating effective land use. However, the rate of land consumption is higher in Varanasi, which corresponds to the increasing trend of visitor arrivals and lodging establishments in the area. This shows that tourism is

a key contributor to the growth of built-up areas in tourist locations. As a result, the assumption that visitors are transient residents who have a long-term influence on a destination’s spatial shape is valid. Furthermore, there is substantial evidence that hill cities in the Western Ghats area are suffering urban expansion and are far from making optimal use of land. An increased expansion in hilly areas may result in the loss of forest land and green cover, causing land degradation and posing serious danger to wildlife and environment. Due to land scarcity and unsuitability, few destinations in mountainous locations are moving towards compact built-up with ribbon expansion of accommodation establishments along the road network in the entire region. The compact type of built-up expansion in such mountainous places increases the vulnerability of such delicate sites, as seen in the case of Badrinath, a holy mass tourist attraction in an eco-fragile zone of the Himalayas.

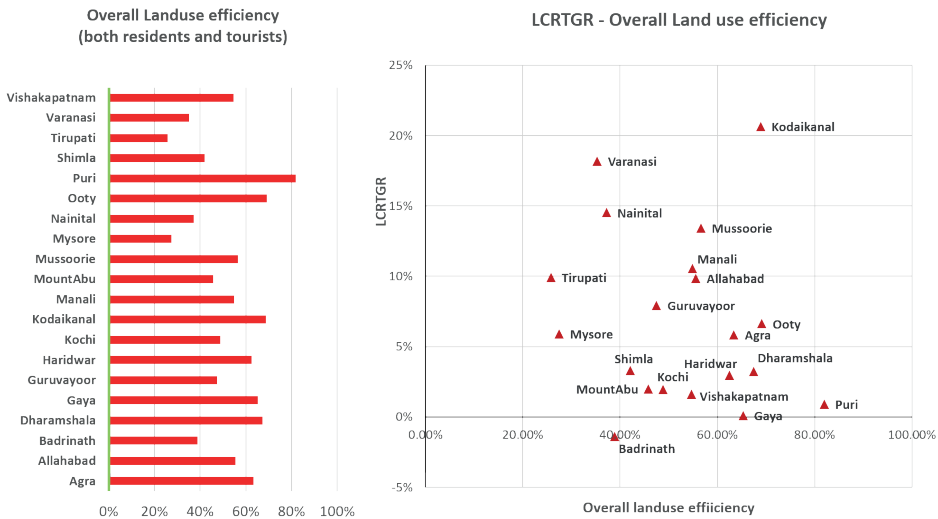


Fig. 10. Overall land use efficiency

Source: own work.

The overall land-use efficiency is estimated and displayed in Fig. 9 using built-up per capita as the built-up area available for the population, which is defined as the sum of the number of inhabitants and visitors in a year. The aggregate land-use efficiency percentage reflects how close the destinations are to achieving spatial sustainability. The influence of tourist flow on overall land-use efficiency is also depicted by a plot linking overall land-use efficiency to the LCTGR ratio. With an estimated LCTGR ratio of  $-0.05$  as a baseline, it is evident that all of the destinations are far from making optimal use of land. Puri, Dharamshala, Badrinath, Kochi, and Varanasi have indicated a change away from the path of

sustainable land use by having reduced land consumption rates with the LCRPGR ratio equal to or less than 1 with almost efficient land use. This is due to the idea that visitors are also transitory inhabitants, which puts pressure on destinations to expand their built-up areas, diminishing the tourism regions' spatial sustainability.

## **6. CONCLUSIONS AND RECOMMENDATIONS**

Tourism is mentioned specifically as a socio-economic phenomenon by UNWTO though it is a spatial phenomenon which induces socio-economic changes in a destination. The geographic characteristics and built characteristics play an important role to draw the attention of the tourists. To boost the arrivals, destination areas facilitate tourism with accommodations, food establishments, information centres, healthcare facilities, and civic amenities, all of which require land. In addition, it results in a large migration of the population into areas in search of livelihood opportunities. Thus, land is an essential resource required for tourism development which is limited in supply but in high demand. Yet with excess tourist flow, there have been massive constructions in fragile areas such as hilly or coastal regions, without any suitability or vulnerability analysis in the name of tourism development. Hence, tourists have become a part of the destination development, and are the consumers of land resources for accommodation infrastructure, which further includes consumption of water resources, energy, etc. Through this analysis we have attempted to provide evidence of increasing sprawls and agglomerations, high land consumption rates with increasing tourist arrivals in tourist areas, that would result in uncontrolled and haphazard growth. Such growth in the destinations is leading to inefficiency in land management due to a lack of proper legislation, and planning and development controls, which may lead to failure in achieving sustainable tourism development. Immediate attention is needed to integrate the components of the tourism system in regional planning with a decentralised system of governance dealing with problems of crowding, congestion, and environmental degradation. The growth patterns of tourism destinations have to be continuously monitored to avoid illegal constructions, and haphazard growth, and spatial carrying capacity of the infrastructure have to be studied considering the natural risks and socio-economic vulnerabilities of the regions. The development of a spatial monitoring system to identify the unplanned growth of built-up resulting from tourism activity is a key challenge in monitoring spatial sustainability. The spatio-temporal growth pattern of built-up areas and its relation to the spatial distribution of hotel investments should be considered further to assess the impact of tourism on spatial sustainability. The study provides a future direction

for integrating spatial planning in tourism development, which would be a strong instrument for achieving sustainable tourism, as well as sustainable development of the tourist regions. It is suggested to include sustainable tourism as a target in SDG 11 for sustainable cities and communities through monitoring land consumption patterns in the destinations and suitable spatial policies need to be recommended for the sustainable development of the destinations.

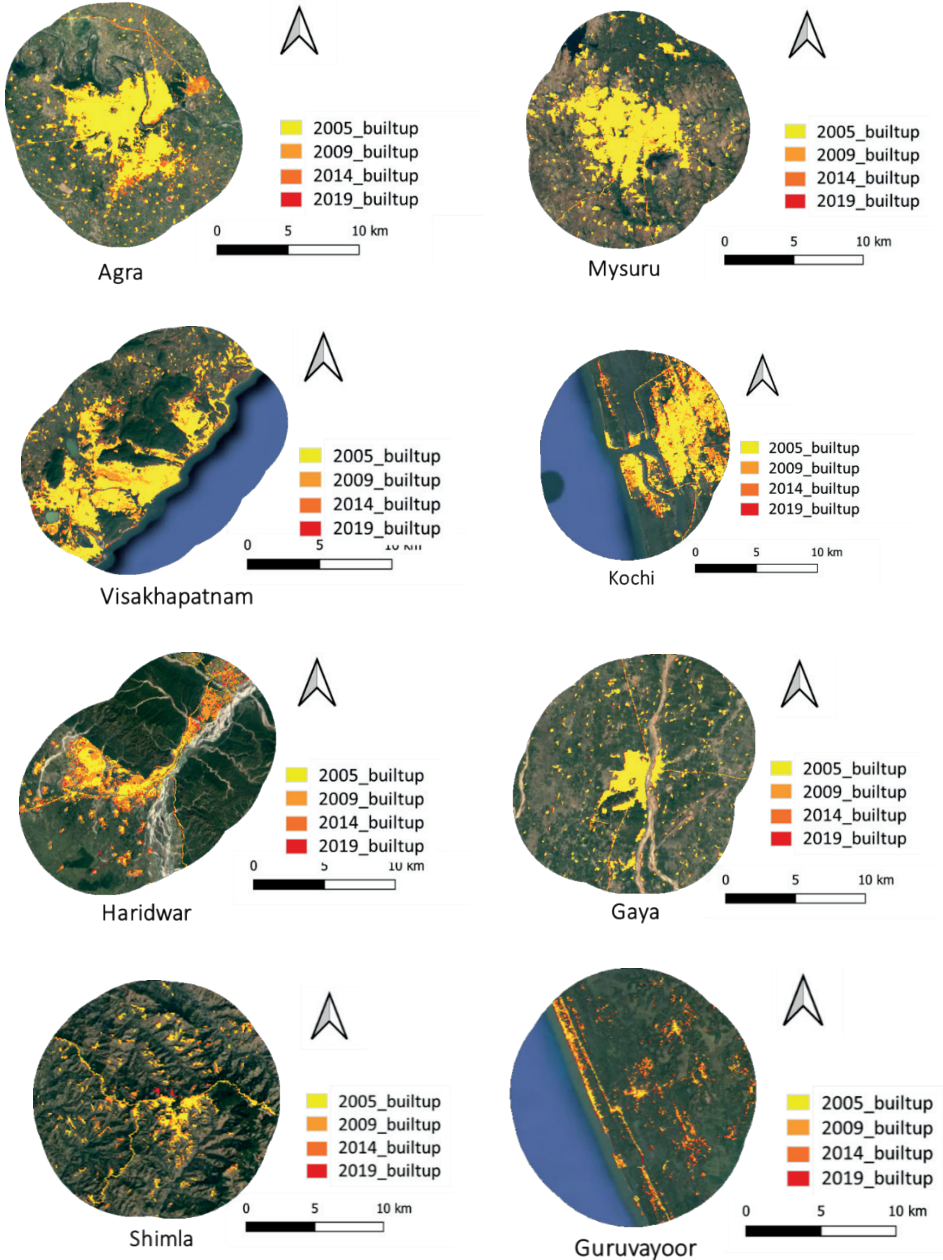
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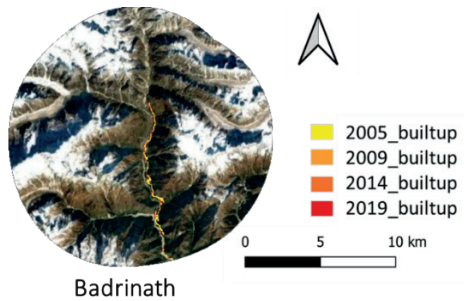
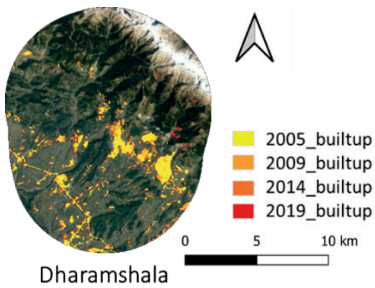
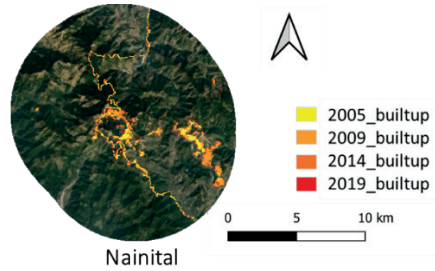
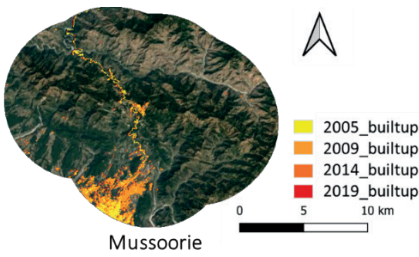
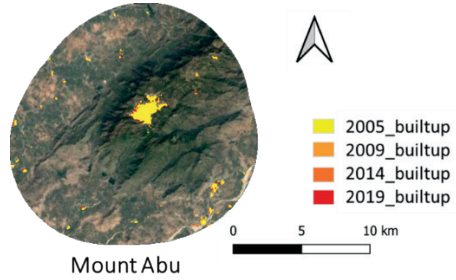
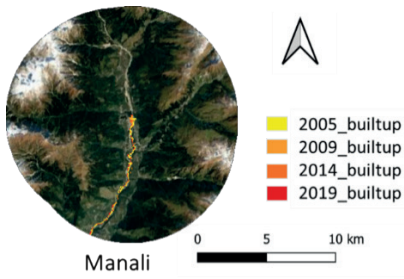
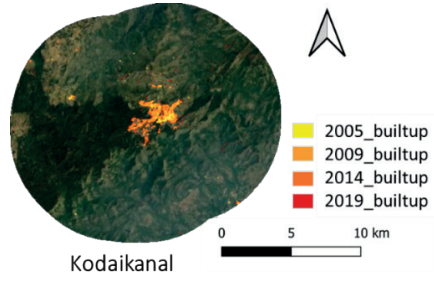
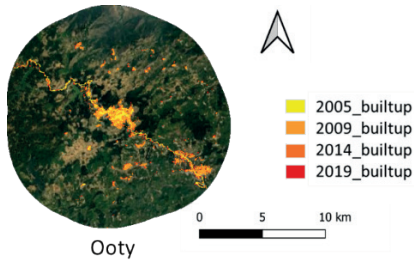
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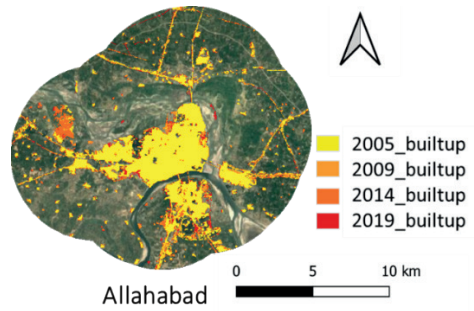
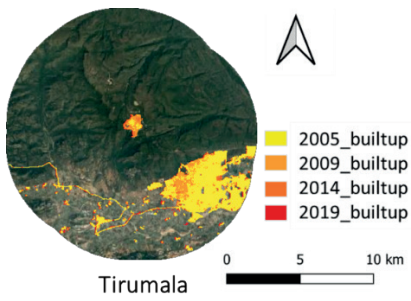
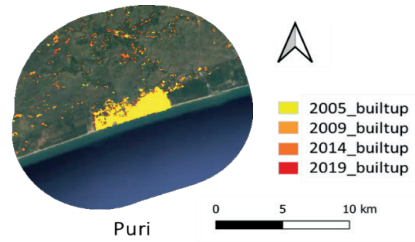
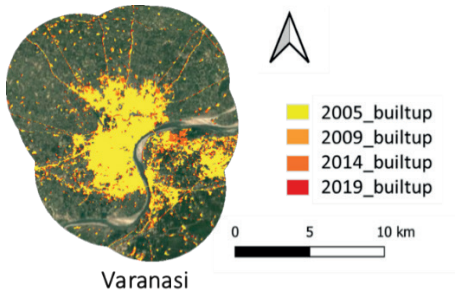
## 7. ANNEXES

### 7.1. Extracted built-up maps of the study areas











Peter NIENTIED <sup>\*</sup>, Rudina TOTO <sup>\*\*</sup>

## PLANNING FOR SUSTAINABLE CITY TOURISM IN THE NETHERLANDS

**Abstract.** The purpose of this paper is to examine policies and planning for sustainable city tourism in Amsterdam and Rotterdam and relate them to the notions of ‘tourism reset’ that emerged during the COVID pandemic period. Amsterdam is a prime European tourist city and has been suffering from problems associated with overtourism. Rotterdam receives much less tourists and can be seen as an emerging tourist city. Both cities have recently adopted new tourism policies, essentially future tourism visions. The case of Amsterdam and to a lesser extent that of Rotterdam show that formulating and agreeing on a tourism policy vision is easier than the decision-making process and implementing a vision. The instruments and powers of local government to manage the quantity and qualities of tourism are limited. Overtourism problems have stimulated carrying capacity thinking, which is considered inadequate for a multi-faceted problem like urban tourism.

**Key words:** tourism, sustainable planning, Netherlands, Amsterdam, Rotterdam, tourism policy.

### 1. INTRODUCTION

Like elsewhere in Europe, COVID-19 has had significant impacts on city tourism in the Netherlands. Very quiet tourist cities in 2020 signified a new citizen experience. Citizens did not have to deal with the problem of overtourism and were

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‘taking over the streets’ again. However, this situation came with a price as vacant hotels and closed tourist attractions led to income losses. Perceived from the simple triple bottom-line (3-P – people, planet, profit, or environmental, social, and economic categories) (Day, 2021), environmental categories were affected positively due to less travel, citizens enjoyed quieter cities, but profit and people involved in tourism-related economic categories were negatively affected.

In 2021, city tourism started to recover in the Netherlands, but remained well below the pre-pandemic levels, especially due to lower numbers of visitors from outside Europe. In 2022, the number of Asian tourists travelling to Europe has been still low due to COVID-19, and due to the war in Ukraine, and fewer American and Russian tourists are entering the country. The Municipality of Amsterdam (2022) prepared a forecast with three scenarios based on various uncertainties. The expectations are that pre-pandemic tourism numbers will be reached again by 2024, and that business travel, important for tourism, too, will be structurally lower due to the practice of doing more business meetings online. In many European cities, especially those with problems associated to overtourism (Koens *et al.*, 2020), citizens, local governments, and researchers concluded in 2020 that a time for a ‘reset’ had come, meaning that a fresh look at (the values of) future city tourism practices was needed and that new sustainable tourism policies should be formulated (Nientied and Shutina, 2020).

The purpose of this paper is to examine policies and planning for sustainable city tourism in Amsterdam and Rotterdam and relate them to the notions of tourism reset. Amsterdam is a prime European tourist city and has suffered from problems of overtourism. Rotterdam receives much less tourism attention and can be considered as an emerging tourist city. Both cities recently adopted new tourism policies, essentially future tourism visions. Amsterdam developed a plan in 2020 envisioning interventions to tackle overtourism problems (Amsterdam & Partners, 2020). Rotterdam learned from Amsterdam’s earlier overtourism challenges and developed in 2019/2020, just before the outbreak of the pandemic, a policy vision stating that Rotterdam’s well-being is the starting point for all tourism actions (Gemeente Rotterdam, 2020). The tourism policies of both cities are related to overtourism and sustainability of tourism; Amsterdam wants to curb overtourism problems, whereas Rotterdam developed a policy vision to avoid the issues of overtourism. In Rotterdam’s case, social and environmental sustainability are leading themes. In Amsterdam, the ‘tourism reset’ discussion was intensive in 2020, in Rotterdam the loss of city tourism had a weaker impact and was accepted as one of the effects of the COVID-19 restrictive measures.

This paper focuses on real-world practice. Planning and tourism development in current times is highly uncertain and it is based on uncertain expectations and interpretations rather than trends, figures or timelines. The article is based on an analysis of policy and local council documents and media reporting, visits, and (street) interviews. Below, we first examine the tourism reset intention and then

offer brief descriptions of the policy visions developed in Amsterdam and Rotterdam. In a subsequent discussion we show that the gap between a positive vision of sustainable tourism on the one hand and the implementation of a vision and the impacting rights and interests of various stakeholders on the other is significant. It also becomes apparent that environmental concerns are secondary to social and economic considerations.

## 2. CITY TOURISM: THE RESET INTENTION

Many scholars, organisations working in tourism, and prominent tourist cities discussed in 2020 the future of tourist cities. Benjamin *et al.* (2020, p. 2) summarised much of the sentiments when they stated that “Now is the time for academics, practitioners, travellers, and humans to take a pause, reflect, unite, then reset the tourism industry.” Most tourism stakeholders understand that some kind of a reset is needed. A ‘reset’ means that cities should plan and manage tourism in a different way, find a better balance between the interest of the tourism sector on the one hand and city liveability and citizen interests on the other. This point of a better balance between tourism and liveability for citizens is the key issue in discussions on the future of tourism, while the triple bottom-line environment category is hardly included. A tourism reset implies that the interests of all stakeholders will be affected, those of the citizens, local tourism businesses, local government bodies, and of the absent stakeholders, i.e., tourists. The reset debate in the Netherlands mainly occurred in Amsterdam, and was between the local government and concerned citizens. It was started before the pandemic by citizens who were disturbed by the volume of tourists and tourist behaviour. Other stakeholders were initially less involved. In the real world, all stakeholders’ rights are affected, like the right to conduct tourism business, the tourism right of free access (Perkumiené and Pranskūnienė, 2019), the resident right to a pleasant neighbourhood, the local government right to attract certain categories of visitors (e.g., higher-paying cultural and business visitors), and discourage other categories such as budget and party tourists (Tourban, 2021).

Tourism is a complex practice and occurs in dynamic situations. Fragmentation is typical for (urban) tourism – there are many suppliers and operators, diverse demands, many intermediaries, many indirect stakeholders, complex chains, etc. Digitalisation adds to the complexity of the sector. Tourism interactions in cities may cause nuisances like crowding and loud noise at night and this affects liveability for residents. Various unwanted social, cultural, and economic developments may occur, which have been extensively described in literature. Some include: crowding, bad tourism behaviour, gentrification and higher rents for locals due to

tourism growth, mono-economic cultures in streets, issues between AirBnB renters and neighbours, increasing prices in bars and restaurants, traffic accidents from inexperienced tourists renting bicycles, etc. Dodds and Butler (2018) identified three types of factors explaining overtourism: agents of growth (tourisms business aiming at short-term profits, tourists with higher purchasing power, and bucket lists), technology (IT, mobility), and power (e.g., airport authorities and large hotel chains have the power and provide employment). Novy and Colomb (2019) categorised the main topics of contention characterising contemporary struggles around urban tourism, through a taxonomy of the most prominent negative effects and externalities. They identified many economic, physical, social, and socio-cultural and psychological impacts of urban tourism on people and urban spaces. Not only problems have been discussed, but also possible solutions. Various reports have dealt with possible policy interventions regarding overtourism. For example, the European Parliament (2018) lists no less than 121 possible policy responses, showing that the issue of overtourism is multi-faceted.

In 2020, many tourist cities, including Prague, Barcelona, Milan, Amsterdam, and Berlin, discussed their tourism futures with their citizens. These debates were ongoing when the outbreak of COVID-19 incited new experiences (the relief of a quiet city) and added a new dimension to the discussions. Governments and international organisations debated more sustainable tourism cities. Some cities, like Berlin or Milan, implemented already in 2020 projects to create more open spaces and more bikeable cities to avoid crowding. One interesting example is that of Dubrovnik (Vladisavljevic, 2021). The small town received 1.4 million foreign tourists in 2019, and 179,000 in 2020. In 2020, people were relieved because citizens had their city to themselves, they could walk their streets again. The mayor promised a plan for a manageable tourism future in which residents would not be alienated from their town. But a year later the town was getting desperate since the economy had collapsed. Dubrovnik depends on tourism for its livelihood and was happy to welcome tourists again in 2021. Larger cities are less dependent on tourism because they have a more diverse economy and more national tourism can compensate to some extent for a loss of international visitors, but segments of the economy suffer.

Various international meetings on tourism futures were conducted. Mayors of some of Europe's leading destinations met in Porto to discuss new tourism policies and projects during and after the COVID-19 pandemic period.<sup>1</sup> At the City Innovators' 2021 event<sup>2</sup> main tourism cities presented their plans and projects. At face value, most plans focussed on curbing problems associated with overtour-

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<sup>1</sup> <https://ftnnews.com/mice/42114-restart-urban-tourism-with-sustainability-innovation> [accessed on: 23.06.2022]

<sup>2</sup> Entitled "Destination Cities: Accelerating Urban Tourism and Economies", see <https://cityinnovatorsforum.com/events/smart-city-events/destination-cities-accelerating-urban-tourism-and-economies/> [accessed on: 23.06.2022]

ism and efficiency, through physical adjustments and selective tourism marketing. Discussions were not about topics such as tourism degrowth, the rights of stakeholders, a clean and green environment as first priority, the role of digitalisation or the limited powers of local government. Tourism degrowth policies, the most effective way to enhance environmental sustainability and curb overtourism issues, are complex because economic interests are huge, and stakeholder rights are affected (Sharma *et al.*, 2021). A critical point is that it is usually very complicated, socially unacceptable, or physically impossible to exclude anybody conducting tourist or non-tourist activities from using resources in a city (Briassoulis, 2002). Cities and their public spaces have fluid boundaries, and multiple, overlapping, and potentially conflicting uses and user groups, volatility in uses and institutional arrangements, and variances between *de jure* and *de facto* property rights.

### 3. TWO DUTCH TOURISM CITIES

Tourism in Amsterdam and Rotterdam varies considerably, as shown in Table 1.

Table 1. Amsterdam and Rotterdam tourism<sup>3</sup>

<i>Amsterdam tourism</i>	<i>Rotterdam tourism</i>
10,4 m. visitors staying one or more nights, (2019), 900,000 inhabitants (2022)	1,3 m. visitors (2019) staying one or more nights, 652,000 inhabitants (2022)
Historical charm and beauty, crowded, culture and ‘free city’	Modern architecture, space, culture, ‘new urban tourism’
Tourism growth, conflicts, petitions, Disneyfication of the city, dissatisfaction, gentrification as a market outcome	Emerging tourism, no serious claims or struggles, gentrification as a quiet local government policy
2021 policy: tackle overtourism problems. Spread, manage crowds. Make tourism sustainable	2020 policy: avoid overtourism, tourism should contribute to the sustainable city and all of its citizens
Appeal: ‘respect for Amsterdam’	Appeal: ‘make it happen, do like locals’

Source: own work.

<sup>3</sup> Figures pertain to tourists spending one or more nights in the city. The total number of visitors in 2019 to Amsterdam was 22.4 million. In 2020, the latter figure decreased to 8.4 m, and 3.3 m tourists spending one or more nights. Sources of the figures: <https://onderzoek.amsterdam.nl/interactief/toerisme-in-amsterdam>. Rotterdam <https://onderzoek010.nl/> [accessed on: 23.06.2022]. Figures are estimates. The VFR segment (Visit Friends Relatives) remains unregistered as tourists, and that also applies to exchange students.

*Amsterdam* is widely known as a tourist city. Tourism growth has been rapid. Nowadays especially overtourism-related issues receive much attention, from researchers and in local debates and various media. The contributions of Geritsen (2019), Noordeloos (2019), and Smith (2020) offer relevant background information on Amsterdam's tourism development. The attractions of Amsterdam are known well: a beautiful and charming city centre with canals and historic buildings, a museum, a party-scene, and coffee shops where soft drugs can be enjoyed. Amsterdam witnessed in 2020 a city almost devoid of tourists, and relieved citizens got 'their' city back.<sup>4</sup> Concurrently, small and large tourism entrepreneurs could not exploit their assets. Like in other prime tourist cities such as Prague or Barcelona, the tourism 'reset' discussion intensified. It progressed and resulted in a document entitled 'Redesigning the visitor economy Amsterdam, Vision 2025' (Amsterdam & Partners, 2020) and a regulation on maximising the number of tourists, named Balanced Tourism (Gemeente Amsterdam, 2021), was discussed by the local government and later adopted. The regulation is the local government's response to the initiative of over 30,000 citizens who demanded in 2020 a discussion at the local council on the maximum number of tourists.

The vision document was made on basis of a consultation of citizens, experts, civil servants, representatives of the tourism economy sector, and others. They are all 'partners' of Amsterdam's municipal tourism office. Young people from the suburbs and tourists were not involved in the vision formulation process. The vision sketches a sustainable visitor economy: "We aim to create a visitor economy that adds value and does not cause disturbance or disruption by 2025" (Amsterdam & Partners, 2021, p. 7). The vision addresses the triple bottom line and states that its aims at reinforcing resident quality of life and the visitor experience, and this should fit within Amsterdam's ambition of sustainable growth. It addresses social issues (quality of life, inclusiveness), ecological issues (commitment to a circular economy through sustainable consumption, sustainable mobility, and waste management), and economic issues (income for entrepreneurs, maintaining facilities). Main lines of thought of the vision include: (i) consciously attract visitors who come for the culture and uniqueness of Amsterdam and add value to the city;<sup>5</sup> (ii) develop more insight into tourism behaviour through centralised data management to attract visitors and guide them effectively through the city; (iii) encourage, facilitate and communicate good business practices; (iv) involve neighbourhoods, strengthen their identities, and give them a say in decision-making; (v) manage

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<sup>4</sup> Deutsche Welle, 22.06.2020, Coronavirus: A fresh start for Amsterdam tourism? <https://www.dw.com/en/coronavirus-a-fresh-start-for-amsterdam-tourism/a-53855534> [accessed on: 23.06.2022].

<sup>5</sup> Tourists adding value to the city is often understood as tourists who spend more. The director of Amsterdam & Partners has asserted, however, that all visitors who respect the city, irrespective of their purchasing power, are welcome. See the debate at <https://dezwijger.nl/programma/een-nieuwe-bril> (Fair Tourism #4, in Dutch) [accessed on: 23.06.2022].



nightlife, especially reduce noise pollution and disruptions; (vi) make the city liveable – design an integrated master plan to restore the balance between living, working and valuable visitors; and (vii) redesign public spaces, with a focus on crowd management. The document contains a long list of proposed actions. Among these there are many spatial planning interventions, such as prohibiting private holiday rentals (AirBnB is increasingly curtailed in some districts in Amsterdam, the vision proposed a complete ban for the whole city); spreading visitors and making lesser-known neighbourhoods more attractive for visitors through, for example, cultural offers; undertaking new spatial planning for tourism businesses avoiding overconcentration; making crowding maps and a forecast dashboard for directing visitors; creating greener space and more blue-green initiatives; and investing in sustainable public transport, smart logistics, etc.

It has been estimated that about 70% of all tourists are the so-called respectful tourists, and 30% are less so, they are ‘consumers’ who create nuisances and they are facilitated by tourism entrepreneurs whose only goal is the ‘exploitation of tourism without caring for interests of other stakeholders.’<sup>6</sup> Amsterdam wants to increase the 70% category at the cost of the 30% ‘disrespectful’ one (sometimes confusingly labelled as ‘budget tourists’). If the estimate of 30% is correct, it means about 2.5–3 million visitors staying overnight (2019).

The 2025 tourism vision was received well by most stakeholders, even though some were somewhat sceptical regarding its implementation. After a debate, the desired maximum number of tourists was discussed at the local council. A conclusion was reached that the 2018 tourism number (including 20 million of day visitors) should be the maximum and a warning system was outlined. However, what the local government can exactly do to maintain this 2018 number is uncertain, because it cannot close hotels or stop visitors at the municipal boundaries.

**Rotterdam** can be labelled as an emerging tourist city. Research interest in Rotterdam’s tourism is fairly recent, namely since tourist numbers started to increase after around 2010 and Rotterdam received international recognition as a ‘cool’ city. The contributions of Nientied (2021), Nieuwland and Lavange (2020), and Nientied and Toto (2020) give a background for Rotterdam’s tourism. Tourists come to Rotterdam to visit the harbour or the zoo, to see the architecture, to experience a ‘cool’ culture, to enjoy festivals and sports, and some because so many people go to Amsterdam and they want something different. Rotterdam has come to be recognised as a progressive city in terms of its architecture and waterfront development, with high-rise residential and office developments and special urban design. Some urban attractions in Rotterdam include the reconstructed Central Station, the new Market Hall, and the Erasmus bridge. This bridge over the Meuse connecting the northern and southern parts of the city was opened in 1996 and

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<sup>6</sup> As discussed in the debate (footnote 5), and mentioned in various newspapers. 70% is a rough estimate (because nobody really knows), sometimes a figure of 75% is mentioned.

soon became the city's most significant landmark for citizens and visitors alike. Favourable reviews of Rotterdam as a tourism city in travel guides such as Lonely Planet, in international magazines, and on social media from influencers have contributed to the increase in visitor numbers (Nientied, 2021).

The case of Rotterdam is in many ways the opposite of Amsterdam. The city is quite different; it lacks the old world charm because the centre was destroyed during the Second World War, and the inner city's layout is much more spacious. Tourism developed only in recent decade, and is still modest compared to that of Amsterdam. Since Rotterdam is not so well-known as a tourist destination, tourism pressure has been lower due to smaller tourist numbers and the city's spatial character. Since Amsterdam has the aura of a 'free tolerant city,' Rotterdam is not a magnet for party goers or coffee shops. In 2020–2021 there was no local mood of 'getting our city back.'

Rotterdam presented a new tourism policy in 2020, just before COVID-19, called 'As a guest in Rotterdam, a new perspective on tourism' (Gemeente Rotterdam, 2020). The policy is meant to better focus Rotterdam's economic, social, landscape, and cultural resources on specific types of visitors that align with Rotterdam's broader policy aims (Nientied and Toto, 2020). The tourism policy, which is a vision document rather than a policy one with a clear implementation strategy, deals with 4 themes, as shown in Table 2.

Table 2. Policy themes of Rotterdam's tourism policy vision document

<p><i>Identity</i></p> <ul style="list-style-type: none"> <li>– In Rotterdam we remain Rotterdam</li> <li>– Rotterdam is more than the inner city</li> <li>– A hospitable city, now and in the future</li> <li>– Valuable encounters between visitors and locals</li> </ul>	<p><i>Liveability</i></p> <ul style="list-style-type: none"> <li>– Unique offer of arts and culture</li> <li>– Balance between liveliness and liveability</li> <li>– Investing tourism income in the city</li> </ul>
<p><i>Sustainability</i></p> <ul style="list-style-type: none"> <li>– Sustainable transport in and to the city</li> <li>– Green innovations in the shop window</li> <li>– Clean, tidy, circular</li> </ul>	<p><i>Local economy</i></p> <ul style="list-style-type: none"> <li>– Space for authentic spots</li> <li>– Attractive business climate</li> <li>– Work for Rotterdammers</li> <li>– A Rotterdam way of overnight stay</li> </ul>

Source: developed based on Gemeente Rotterdam, 2020.

The tourism policy states that the four policy themes are intertwined. "By looking for a balance between the importance of the economy, liveability, sustainability, and identity of the city, Rotterdam can seize the opportunities of tourism and at the same time we stay close to ourselves" (Gemeente Rotterdam, 2020, p. 8 [authors' translation]).

Rotterdam's tourism policy could qualify as a post-pandemic tourism policy, since it starts with the remark that tourism should serve the city, and not the other way around. However, post-pandemic tourism policies have associations with overtourism problems, and that is hardly relevant in Rotterdam. Rotterdam has already learned some lessons from Amsterdam's development and started in an early stage with thinking about future tourism. Rotterdam's marketing channels led by the local government and its partners, now follow two mantras for tourism. Next to the general slogan 'Rotterdam Make it Happen', the new catchword is 'Do Rotterdam' (do like the locals), and subsequently the term 'Do-rist' is used. Due to COVID-19, attention for tourism dwindled, except for some marketing campaigns. In 2021, a policy for new hotels was approved. The policy indicates that new hotels will be spread throughout the city, to maintain an appropriate balance between quietness and livelihood.<sup>7</sup>

#### **4. DISCUSSION**

During the early pandemic period in 2020 there were big debates in Amsterdam about the issues of overtourism. A key question now is whether the new vision and the new Balanced Tourism regulation can enable the local government and partners to manage these issues. In Rotterdam, tourism was not a topic of much debate, but a question for Rotterdam's tourism is whether the new tourism vision can guide the city to achieve for what it aspires, namely attracting the right type of tourists. Our assessment is that in both Amsterdam and Rotterdam, policy implementation will be arduous for three basic reasons.

##### **4.1. Limited local powers to alter tourism**

Amsterdam and Rotterdam both follow a logic that so many tourist destinations employ; focus on 'good' tourists who you would want to receive and thereby try to discourage other tourists from coming. Amsterdam has discussed tourism numbers and interventions to achieve respectful tourist behaviour. Rotterdam aims at avoiding overtourism problems and has formulated a vision about how tourists can help the city achieve its broader economic, social, and environmental objectives. In Amsterdam, interventions have included a new policy for 'shop diversity' (a ban on more tourist shops and 'nutella-bars' in certain streets), a ban on holiday rentals in 3 neighbourhoods in the city centre. Earlier in 2017 a restrictive policy to stop new hotels was approved, but already several building permits for new

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<sup>7</sup> See Gemeente Rotterdam, <https://www.rotterdam.nl/vrije-tijd/toerisme/> [accessed on: 23.06.2022].

hotels were issued before that, enlarging the stock with a few thousand rooms. The interventions also included that large tour groups were no longer allowed, the water and boating policy dealt better with nuisances related to the waterways, and an investigation has taken place into the tourism carrying capacity of the city's various neighbourhoods and districts. Furthermore, plans have been made for spreading tourists over the Amsterdam metropolitan region, to lessen the burden on the city centre.

In Amsterdam, it has become evident that the powers of the local government to control tourism are limited. It is not the local government's actions but cheap airline tickets, online booking platforms, tourism preferences, and continuous marketing that are thought to have been the main drivers of tourism growth. The local government has no say over cheap tickets, only a limited say on renting out rooms via booking platforms, and tourism preferences are outside the sphere of influence. The city can change tourism marketing but one can only wonder about the importance of the local government's tourism office's marketing; social media are like autonomous marketing mechanisms, airlines promote regional cities to sell tickets, big events attract visitors (and refusing festival goers from outside Amsterdam is impossible), and visitors who post nice images and selfies. Local government tourism promotion may be more important for emerging tourism destinations like Rotterdam, but once a city gets the attention, this role is taken over by other agents. Hospers (2019) for example has concluded that "the emergence of Porto as a must-see destination is mainly due to technological factors: without Ryanair, EasyJet and Instagram it would be less popular."

The number of tourists visiting the city cannot be controlled, and to influence the type of tourists and tourism behaviour is far from easy. One example is Amsterdam's intervention regarding cruise ships. Local authorities wanted less cruise ships and introduced a restrictive policy and higher taxes. In 2019, the number of vessels shrank from 180 (2018) to 128 (2019), while in 2020 there were only 11 due to COVID-19. What happened in 2019 was that many of the cruise ships sought the harbour of Rotterdam, with the latter earning a fee for berthing cruise ships. Upon berthing, buses were waiting in line on the quay in Rotterdam to drive the tourists to Amsterdam, a one hour ride. The overall outcome is that there are much fewer big cruise vessels in Amsterdam, making the water quieter and more pleasant for other users, and that Amsterdam still gets the visitors and more buses in traffic.

Both Rotterdam and Amsterdam envisage the spread of tourism. However, spreading to areas without clear tourist attractions in the district is difficult. Moreover, Amsterdam city break tourists want to see the museums or Anne Frank house or the red-light district or the coffee shops for a cannabis joint. They do not come for the Amsterdam beach or parks outside the city centre. In Rotterdam, the tourism plans want to promote the lower-income Southern part of the city, but this part of the city will only attract visitors if there is more to see and experience than

the current reported asset of ‘a multicultural ambiance.’ That is something most Western European cities have. Without special sites or perhaps starting a cool gentrification arts culture, lower income neighbourhoods (multi-cultural or not) do not attract tourism. Rotterdam approved a new policy for hotels in 2021 (Stadsonwikkeling, 2021), considering the guidelines of the tourism vision. Spreading hotels throughout the city and acceptable impacts on the neighbourhood environment are among the criteria for issuing permits for new hotels.

Amsterdam’s case shows that taxing tourism has limits: young visitors from Germany, Belgium, Holland, and France coming for events or night life sleep in their cars just outside the municipal boundaries and remain unregistered. And it is known that expensive tourist cities (like Lucerne in Switzerland) still have issues with tourism. Perhaps increased tourism tax will lead to a modest shift in day visitors, but not much can be expected because tourism tax will remain a small part of the overall tourism expenditures and has limited specific effects (Biagi *et al.*, 2020). Even the limitations set on AirBnB and new hotels will have a limited impact – other municipalities in the metropolitan region do not introduce such barriers, and public transport in Dutch cities is good. In a critical review of Amsterdam’s overtourism approach, the IDS (International Destination Strategies) consultant has concluded that without serious measures like kerosene tax, airport tax, higher tourism tax, a no room rental regulation for the whole metropolitan region, a reduction of the number of festivals, etc., tourism will continue to grow, as will the problems of overtourism.<sup>8</sup>

#### 4.2. Visions appease all, but implementation is critical

In both Amsterdam and Rotterdam, vision development was conducted by coalitions led by former municipal tourism marketing offices. Amsterdam & Partners is seen as the actor that caused overtourism because for many years it just worked on unrelented tourism promotion. The tourism marketing offices of the two cities changed their missions from marketing machines into ‘partnerships serving the cities,’ coordinators for sustainable tourism.<sup>9</sup> For decades their mindsets have been on tourism promotion and tourism growth – not on topics such as urban resilience, sustainability, or tourism degrowth. The new partnership organisations have led the processes of policy vision formulation, but they give advice and have no responsibility for policy implementation. The visions produced are typical Dutch examples of what can be expected from a broad association of stakeholders. All stakeholders have agreed with the vision, and this raises the question of how is it possible that everybody agrees. This point is that a positive vision has

<sup>8</sup> See <https://destination-strategies.com/overtourism-amsterdam/> [accessed on: 23.06.2022].

<sup>9</sup> See <https://en.rotterdampartners.nl/> and <https://www.iamsterdam.com/en> [accessed on: 23.06.2022].

been made, but no major rights or interests were threatened (AirBnB was affected in Amsterdam but was not part of the process).

Implementation is not a partnership concern, but starts as a series of political issues dealt with by the local government at city councils. The outcomes may or may not be in line with the tourism policy vision. For example, local authorities estimate that about 20–25% (or 30%) of Amsterdam's tourists, mainly in the 18–35 age groups from France, Belgium, and the Netherlands, do not show respect for the city. They come for smoking and drinking, and they throw loud parties in AirBnB rentals, or come for festivals combined with a visit to the city. A discussion in 2021 was held about closing coffee shops, where soft drugs are sold and that are supposed to be an attraction point for 'nuisance tourists.' About 3 million mostly young tourists visit the 166 coffee shops in Amsterdam (Snippe *et al.*, 2020). A public debate in 2021 ended in heated discussions about human rights, Amsterdam's traditional tolerance, the risk of illegal drug sales, and related criminality. There was no political majority for regulating the coffee shops and selling soft drugs only to registered citizens of Amsterdam. The mayor of Amsterdam, responsible for city safety, still aims at prohibiting foreigners from entering coffeeshops, closing about a two-third of the coffee shops and tackling the problem of street dealers selling drugs,<sup>10</sup> but the council is blocking her plans. It is expected that the issue of regulating the coffee shops will remain on the political agenda for a long time. The point at stake of this example is that a joint formulation of a positive sustainable tourism vision is one thing but the implementation and thus affecting rights and interests of stakeholders is something very different.

### 4.3. Carrying capacity and sustainable tourism

In Amsterdam, the limits of growth have been reached according to citizens and the local government, while in Rotterdam tourism growth is possible, and desired. Amsterdam wants less nuisance tourists to keep the city liveable, Rotterdam wants to have the right type of tourists who contribute to the city. This thinking in terms of carrying capacity limits perspectives (Buckley *et al.*, 2015). A museum can work with the notion of carrying capacity; allocate time slots, sell tickets and manage the crowds, but local governments cannot fence off an open-access city or stop people from coming to the city. Local governments have only a limited influence on the numbers and types of visitors, and on how visitors behave. New marketing and branding concepts have a limited reach. Tourist decision-making and behaviour is much more complex, uncertain, and ambiguous than ever before. Word of mouth,

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<sup>10</sup> Gemeente Amsterdam, Raadsinformatiebrief Stand van Zaken plannen beheersbare cannabismarkt en aanpak straatdealen, 11 April 2022, <https://www.amsterdam.nl/nieuws/nieuwsoverzicht/maatregelen-cannabismarkt/> [accessed on: 23.06.2022].

many different (social) media (Gretzel, 2021), and many different tourism providers offering new ‘cool things to do’ influence tourist behaviour. Berlin is now ‘cool’ and a place to be, so people go to Berlin. Rotterdam is getting cool (Nieuwland and Lavange, 2020), so tourists who want to be early adopters go to Rotterdam. In Amsterdam one can feel free, and who would not want that? In short, many people visit Amsterdam or Rotterdam irrespective of what tourism marketing suggests. The cities’ tourism partnerships work with branding and marketing as their main instrument, and that has serious constraints. For example, Rotterdam’s marketing campaigns around the desired type of tourists (labelled the Do-rists) have a very limited reach because the number of followers on social media is limited. NB, both Amsterdam and Rotterdam tourism agencies show on their Instagram pages still the typical beautiful city pictures. They focus on desired tourists, but do not send messages about unwanted tourists. This would of course be problematic, discussions about justice and equity would soon arise. Carrying capacity and looking at the role of local government and its partners signify a rather reductionist approach to tourism sustainability issues. In carrying-capacity thinking, the critical variables are the tourist numbers, the types of tourists and nuisance/ liveability levels. But sustainable tourism is much more complex. E-tourism and digitalisation have complicated matters (Gretzel, 2021; Molinillo *et al.*, 2021) as they encourage more interactive relationships among companies, tourists, and destinations, and among tourists themselves, affecting the processes of destination image and visit intention creation. Bergrath (2021) has stated that solving overtourism in Amsterdam is quite a mammoth task. To intervene in the existing situation is not enough; tourists are not the main culprits of the problem either. Virtually every solution will raise new questions, like the example of the cruise ships showed. An approach such as system thinking would be required to look at the whole, acknowledging that implementing sustainable tourism practices is a complex problem, with a large number of actors, different types of rights, and various non-linear changes.

Panasiuk (2020, p. 34) has described sustainable tourism in cities as “a situation where negative consequences of tourism activities are not irreversible for the environment, while bringing positive effects to tourists, communities of reception areas, as well as entities providing tourist services” and concluded that threats are of a diverse nature. Panasiuk concluded that overtourism as result of mass tourism has been analysed, but a less perceived problem related to the functioning of urban tourist destinations are the issues of the condition of the natural environment. Both Rotterdam and Amsterdam have developed environmental ambitions and want to be climate neutral in 2050. The relationship between environmental concerns and tourism is not well elaborated in the tourism visions. Both cities promote public transport, walking, and biking, but the biggest environmental impact of tourism, namely travel (Wood, 2017), is not considered in the cities’ environmental arguments. Aall and Koens (2019) have concluded that environmental concerns are poorly dealt with in sustainable tourism discussions.

## 5. CONCLUDING REMARK

The tourism policy visions of Amsterdam and Rotterdam have positive intentions. Both strategies follow a containment approach and intend to limit the quantity (Amsterdam) and the composition of tourism. The case of Amsterdam and to a lesser extent the case of Rotterdam show that formulating and agreeing on a tourism policy vision is easier than the decision-making process and implementing a vision. The instruments and powers of the local government to manage the quantity and quality of tourism are limited. In Amsterdam, political processes at the city council will address conflicting interests. The state government and powerful players such as the airport, airlines, global tour operators, and global tourism platforms cannot easily be influenced by the local government. The case of emerging tourism in Rotterdam is different. Tourism problems are limited and the policy vision does not receive much attention other than adjusted marketing and branding, and a new hotel policy. The need is not there yet. Urban interventions have been implemented, among others a major urban renewal of the Southern part of the city, but for other reasons than guiding future city tourism.

The cases of Amsterdam and Rotterdam are far from unique, or new for that matter. This article discussed that academic and policy thinking in terms of carrying capacity may be useful for destinations where access can be restricted (a museum, an island, a fenced-off tourism attraction, etc.), but for open access places like cities, carrying-capacity thinking is limited to giving suggestions on the desired quantity and quality of tourism. The origins of the problems, the dynamics and the future of tourism cannot be captured well with carrying-capacity thinking. New approaches are necessary.

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## CHALLENGES OF THE TOURISM SECTOR IN LITHUANIA IN THE CONTEXT OF THE COVID-19 PANDEMIC: STATE AID INSTRUMENTS AND THE EFFICIENCY OF THE TOURISM BUSINESS SUPPORT

**Abstract.** At the beginning of 2020 Lithuania, and many other European countries, introduced quarantine and began restricting movement across the country's borders. The imposed restrictive measures have greatly impacted and led to the stagnation of tourism sector. Due to the COVID-19 pandemic and travel restrictions, the number of international tourist arrivals sharply decreased. In 2021 the majority of restrictions have been eased due to the decreasing morbidity, but it did not reinstate the tourism into the previous level. According to statistics, the decline in tourist flows in Lithuania in 2021 still continued, albeit the decrease was smaller. The increase in the number of local tourists (especially in 2021) has somewhat compensated the loss of international tourism, but has not changed it. The tourism business is still going through a difficult period.

This article emphasizes the issues of local and inbound tourism business in Lithuania in the context of Covid-19 pandemic. The greatest attention is placed on the instruments proposed by the Lithuanian Government to mitigate the negative consequences of the pandemic on tourism service. The research combines secondary and primary data sources. Secondary data was used for the analysis of official Lithuanian statistics in order to introduce general trends of the development of tourism sector during the last decade. Primary data was received using the methods of focus group and survey (a questionnaire to collect data sets from tourism business enterprises in Lithuania). The statistical

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analysis revealed that the difficult situation was noticed in all fields of tourism sector, however, the main losers of the pandemic were those relying on the international tourist. The analysis of official documents disclosed, that even though the tourism business was able to benefit from the variety of offered governmental aid packages in 2020–2021, the quantity and quality of support was not enough and strongly criticized. Our survey results pointed out the instruments that were most effective among the tourism enterprises. Moreover, from the collected answers we noticed, that at least part of tourism enterprises took the opportunity to use the support not only for compensation of pandemic related costs but also to look forward and the received financial support invested in innovative solutions in the tourism business, so pandemic potentially had some positive effects as well. Also, the survey results revealed that there are considerable opportunities for tourism related development of the nature rich, non-metropolitan regions, though at the moment these activities quite often remain outside the market relations and do not produce new incomes and jobs.

**Key words:** tourism sector, tourism business, COVID-19 pandemic, state aid instruments, Lithuania.

## 1. INTRODUCTION

The rapid development of the tourism sector in the 21<sup>st</sup> century was influenced by the general development trends of the society in Lithuania and around Europe. Tourism became one of the most popular leisure activities and the needs of tourists were constantly growing (State Department of Tourism, 2015). For this reason, Lithuania paid strong attention to marketing and promoting the country as an unexplored destination, a kind of ‘terra incognita.’ A lot of effort was made to increase the regional competitiveness of tourism enterprises in Lithuania. The measures that had been taken were rather effective and between 2015 and 2019 the tourism sector was steadily and rapidly growing (Lithuania Travel, 2020a).

The COVID-19 pandemic, which spread worldwide at the beginning of the 2020, affected all fields of life (Abbas *et al.*, 2021; Aldao *et al.*, 2021). The negative influence on the tourism sector was obvious and discussed right at the beginning of the pandemic (Seyfi and Hall, 2020; Škare *et al.*, 2020; Gössling *et al.*, 2021). Different measures were introduced in countries affected by the pandemic to reduce the spread of the virus (Capano *et al.*, 2020; Cheng *et al.*, 2020; Moon, 2020; Hale *et al.*, 2022). One of the measures that influenced the tourism sector greatly was the restriction of the movement not only between countries but also within them (Tian *et al.*, 2020; Dunford *et al.*, 2020; Chinazzi *et al.*, 2020; Shortal *et al.*, 2021). Therefore, 2020 and 2021 became challenging years for many sectors of the economy, especially for tourism (Napierała *et al.*, 2020; Lithuania Travel, 2020a; Abbas *et al.*, 2021). The introduced restrictive measures have led to the stagnation of tourism sector (Yeh, 2021). Travel by air was damaged the most and was partly replaced by travel by car and other land vehicles (Knezevic *et al.*, 2021). Such changes to the modes of available transportation, in combination with various legal restrictions, reduced long range trips and made Lithuania less reachable for tourists from more dis-

tant European and other countries worldwide. Due to the COVID-19 pandemic and travel restrictions, the number of international tourist arrivals decreased in Lithuania in 2020 by 73 percent. The moderate decline of international tourism persisted even in 2021 (Statistics Lithuania, 2022). Though a growing number of domestic trips had some positive impact, many tourism service providers have remained in a very difficult position, as the negative impact of the COVID-19 pandemic was prolonged by the conflict in Ukraine. The conflict involves neighbouring countries and creates uncertainty for the future of the whole region. Tourism destinations and timing of domestic tourism trips differ sufficiently from international ones, so the COVID-19 impacts were different in different regions at different time.

The pandemic has caused a major shock to the global and the European Union's economies in general, and Lithuania is no exception. Therefore, a coordinated and appropriate economic response of all countries is essential to mitigate the negative effects of the COVID-19 outbreak (National Audit Office, 2021). In this paper, the main aim is to pay greatest attention to instruments proposed by the Lithuanian Government to support the tourism business and to the efficiency of the state aid offered as assessed by tourism enterprises. This paper emphasizes the issues of domestic and inbound tourism business in Lithuania. The results of the paper could be used as recommendations for more effective measures for a future crisis.

The paper is structured as follows. The next section concentrates on the introduction of a methodological background, highlighting the theoretical approaches to the tourism sector and COVID-19 pandemic issues. Next, the data and methods used in the analysis are explained. The third section introduces a brief analysis of the main tourism indicators that presents the general trends of local and inbound tourism business development in Lithuania. Further, the paper focuses on the evaluation and explication of legal documents declaring state aid measures, indicating governmental aid instruments and programs issued to support the tourism business. Following this in-depth secondary data analysis, the primary data of the research is presented stressing the results of the comprehensive sampling and emphasizing the answers of respondents concerning the expedience and efficiency of the offered state aid measures. Finally, we provide concluding remarks.

## **2. METHODOLOGICAL BACKGROUND**

### **2.1. Theoretical approaches**

During the pandemic, the tourism sector had become a major beneficiary benefiting from the general economic stimulus and support measures provided by governments. The World Tourism Organization has tried to collect various responses

from countries and international policy to mitigate the effects of the COVID-19 crisis in the travel and tourism sector (UNWTO, 2022c). Most countries have responded with different support measures. The immediate and urgent response consisted of fiscal relief and financial support for SMEs and self-employed workers, another group of measures aimed at the promotion of job retention and liquidity of SMEs, and the final package of measures was related to restarting tourism and the promotion of domestic tourism (UNWTO, 2020). However, UNWTO noticed that a key challenge has been the need to ensure that support reached the actual economy (UNWTO, 2020). OECD (2020) also provided analysis for governments' responses to facilitate recovery in the short, medium, and long terms.

At first, governmental support had been focused on the immediate response and mitigation of the impact of the crisis, e.g., to protect visitors and employees and ensure business continuity following the imposition of containment measures (OECD, 2020). Broad stimulus packages for the economy often included some liquidity injections and fiscal relief (e.g., through loans, tax holidays or postponements, and guarantee schemes). Practical measures and solutions intended for tourism differed from country to country, and the speed of recovery has depended on global health issues and economic developments.

However, beyond the immediate priority of mitigating the impact of COVID-19, there is a need for the tourism sector to re-evaluate resilience strategies and prepare for future crises. On the one hand, the post-pandemic period is the period to examine the efficiency of various crisis management policies applied by national governments and international organisations (Gearhart *et al.*, 2022). On the other, it is a good time to take stock of short and long-term aid measures taken during the crisis. Sharma *et al.* (2021) have indicated that governments have become significant players in the tourism economy by offering various financial support measures. However, governments should strike a balance between economic support and response to public health imperatives preventing the collapse of health systems and mass deaths (Higgins-Desbiolles, 2020).

Various studies related to the impact of COVID-19 on tourism and the possible transformations of the tourism sector started in early 2020. Research can be divided into several areas. The first focus has been research on tourism trends and renewal scenarios after the end of the COVID-19 pandemic (e.g., Zhang *et al.*, 2021, Lew *et al.*, 2022). A second focus is research on tourism adaptation and opportunities during a pandemic (Collins-Kreiner and Ram, 2021; Liutikas, 2021). Another focus is related to studies on the impact of a pandemic on the tourism sector (Hall *et al.*, 2020; Higgins-Desbiolles, 2020; Škare *et al.*, 2020), and the last focus is the analysis of the problems of post-pandemic tourism sector renewal (Sharma *et al.*, 2021; Hussain and Fustè-Fornè, 2021; El-Said and Aziz, 2022). Many authors perceive the COVID-19 pandemic also as an opportunity to change former trends making tourism much more sustainable and resilient in the future (e.g., Benjamin *et al.*, 2020; Brauder, 2020; O'Connor and Assaker, 2021).

A number of studies on tourism have investigated crisis management strategies and tourism resilience (Lew, 2014; Butler, 2017; Prayag, 2018; Cheer and Lew, 2018; Hall *et al.*, 2018; Filimonau and De Coteau, 2020). However, the current COVID-19 pandemic is perceived as having more long-lasting consequences than the previous crises (Higgins-Desbiolles, 2020). The analysis of government response and the evaluation of the measures intended to support the travel and tourism sector during the COVID-19 pandemic could be attributed as the fourth area of the tourism research in the context of the COVID-19 pandemic. Some studies (Volgger *et al.*, 2021; Wong and Lai, 2021) have already tried to fill the gap of testing the effectiveness of various support measures in the tourism sector.

The designed measures used by the government are determined by various factors. Elgin, *et al.* (2021) have noticed that governments seeking re-election tend to respond more aggressively to catastrophic events by adopting expansionary policies to improve the economic situation. However, this motivation could contradict the policies of monetary authorities (Elgin *et al.*, 2021), whereas potential beneficiaries may want even more support.

It is important to pay attention to the regulation of state aid in EU countries. According to the EU, a company receiving government support may gain a distortive advantage over its competitors (European Commission, 2022a). The EU requires prior notification of all new state aid measures. Such exceptions exist as aid covered by a Block Exemption, *de minimis* aid or aid granted under an aid scheme already authorised by the Commission. However, on 19 March 2020 the European Commission approved a State Aid Temporary Framework that made the rules more flexible for companies that needed support because of the crisis caused by the outbreak (European Commission, 2022b).

Tourism stakeholders in various countries have been discussing the future of tourism. Long-term support measures could be related to the transformation of the tourism sector, the application of innovations and investments in new technologies, and the promotion of sustainable or environmentally friendly tourism. From the perspective of effective management, there is a need to ensure that the sector will be ready to resume and continue innovating and transforming (OECD, 2020). Effective support could make structural changes and address expectations of tourism sector. Diversification and a shift to more sustainable tourism models could help shape the recovery from a future crisis.

## 2.2. Methods and data used

The study is based on quantitative and qualitative data analysis. Secondary quantitative sources have helped to indicate major tourism sector development trends and governmental responses (legal documents have been analysed). The analysis of primary data, which has been acquired during a focus group discussion and

a survey of tourism enterprises, provided opportunities to establish the response of tourism stakeholders to ongoing challenges and governmental support.

The secondary source of data for the analysis includes official statistics (Eurostat, 2022; Statistics Lithuania, 2022; UNWTO, 2022a) on tourism business indicators. In order to gain an understanding of the development trajectories of the tourism sector in recent decades, statistical indicators were analysed and presented in the paper in the following chapter. The paper mainly discusses the development trends of inbound and local tourism indicators. Also, apart from statistical data, EU and Lithuanian legal documents were another essential secondary source of information. A review of literature, related to COVID-19 tourism sector policy, was also performed. The detailed analysis of officially available instruments that were proposed and introduced by the Lithuanian government as a state aid measure created a background for further study where respondents provided their opinions about the effectiveness of these support measures.

The primary data was collected using two ways: during a focus group discussion and by completing in-depth questionnaires. The main criterion behind the selection of respondents for the focus group was their expertise (work experience, active involvement in tourism business, and leading position). The focus group discussion occurred at the beginning of February 2022 and involved 10 tourism business experts, including representatives of the Ministry of Economy and Innovation, Lithuanian tourism association, Lithuanian guides union, the head of the tour operator enterprise, guides, and other experts. The data collected is qualitative; it was transcribed and analysed. The focus group discussion lasted for three hours and the representatives shared their experiences, challenges, and problems related to the COVID period, and they named future forecasts, visions, and expectations towards the government.

Another step was comprehensive sampling. The questionnaire survey was implemented in two ways: in-person at the Adventur tourism exhibition (February 2022) and via telephone and e-mail (February and March 2022). The research involved different types of tourism business enterprises (tour operators, specialised guides, walking/ bike-riding/ boating tours organisers, etc.), working in the field of inbound and local tourism. The questionnaire consisted 7 closed, 12 semi-closed and 19 open-ended questions. In total, 95 questionnaires (sample size) were sent to eligible tourism enterprises located in different Lithuanian cities and regions. Some enterprises declined to fill the questionnaire due to its length and comprehensiveness, others refused to answer indicating the intense working period after COVID-19 as the main reason. One more group of rejections was related to suspensions (or bankruptcy) of enterprise activities. Therefore, eventually the sample consisted 52 completed questionnaires (which accounts for 54.74 percent of eligible tourism enterprises), compiled in an Excel spreadsheet, and analysed. The answers of the respondents were grouped and clustered into tables. Such clustering helped us exclude similarities and differences of the mentioned opinion points by



the respondents, and also count the percentages of answer points and present them in tables in further chapters.

The questioners and the focus group discussion were based on the same question groups in order to collect the widest possible range of views and opinions from different tourism experts on similar issues. The questions were structured into five main groups: general evaluation of the situation, state (governmental) aid, innovations, local tourism and regions, sustainability, and climate change. In general, the questionnaire consisted of 38 questions. In this article, the greatest attention was paid to the first two and the fourth group of questions, and especially to the answers to the questions that discussed the governmental aid instruments, their benefits, and efficiency.

The primary data collected enabled us to better understand the situation of tourism business from the inside and the problems that the COVID-19 outbreak caused for tourism enterprises.

### **3. THE GENERAL TRENDS OF THE TOURISM SECTOR IN LITHUANIA**

The tourism sector was among the fastest growing economies during the whole 21st century, but the increase was especially fast during its second decade, when most important tourism indicators increased approximately twofold (Fig. 1) (Statistics Lithuania, 2022). The growing numbers of tourists, trips, and tourism service providers were especially evident in the international tourism sector, while the trends of domestic tourism were mostly stable, which also meant that investments in the tourism sector were growing, a lot of new hotels were under construction when the pandemic struck. The situation changed drastically in 2020, when the COVID-19 pandemic made its decisive impact, first of all, on international travel conditions. The number of foreign tourists in 2020 decreased more than threefold (from 1.74 to 0.53 million). The decrease in Lithuanian tourists was only 15% (Statistics Lithuania, 2022). Naturally, similar trends were evident in tourist trips (Fig. 1).

Such changes in tourism flows have made certain visible though less drastic impacts on the tourism economy. The decrease in the number of accommodation establishments was first recorded in 2020, when the number of accommodated tourists dropped twofold (from 3.64 to 1.89 million). Obviously, the drop was caused by the diminishing number of foreign tourists, whose share among the accommodated persons also dropped twofold (from 52.2% in 2019 to 26.7% in 2020) (Statistics Lithuania, 2022).

As in most countries, in Lithuania the major suppliers of tourists were neighbouring nations: Belarus, Russia, Poland, Latvia, and Germany (Statistics Lithuania, 2022). The new trend of recent years, i.e., the growing numbers of tourist

from Ukraine as growing labour migrations, resulted in much better air connections with this country. The non-EU states of Belarus and Russia constituted more than a quarter of all inbound tourists, which had major consequences in the context of COVID-19-related travel regulations.

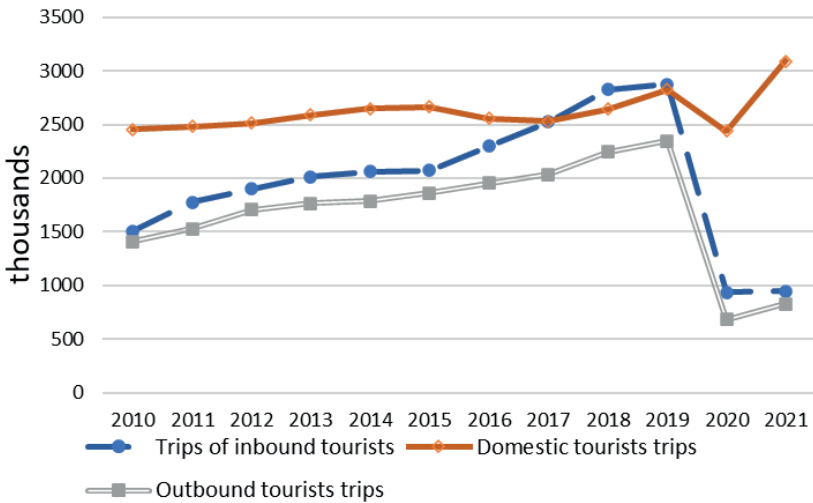


Fig. 1. Number of tourists trips in Lithuania 2010–2021 (2021 provisional data)

Source: authors' own work based on Statistics Lithuania, 2022.

The COVID-19 pandemic has had a clear negative impact on tourism around the world, but the scale of the impact differed between regions. The number of inbound tourist trips decreased by 69% in Europe, while the decrease in North European countries reached 74% (Word Tourism Barometer, 2022). Some recovery of tourism was seen in the EU in 2021 (the number increased by 14%) but this recovery was highly polarised spatially. Southern Mediterranean countries experienced a growth of 57%, while a further decrease was evident in north and west European countries (tourist trips decreased by 30% and 10%, respectively) (Word Tourism Barometer, 2022; UNWTO, 2022). The trends of inbound tourism trips in Lithuania were similar to those in other north European countries (–73% in 2020), though the decrease in 2021 was minimal (–1%). (Statistics Lithuania, 2022; UNWTO, 2022a).

The scale and timing of the decrease could be at least partly explained by the high share of non-EU citizens among foreign tourists because the laxing of travel restrictions has had no effect for tourists from these countries. Vilnius and major seaside and SPA resorts were suffering from the loss of these tourists, while rural tourism was not among important destinations of east European tourists (Kriau-

čiūnas, 2016). The actual disappearance of Russian tourists already in 2020 could mean that the impact of the Ukrainian war would be less negative for tourism economy that it could have been.

The decision to create a “Baltic travel bubble” in the early summer of 2020, which actually freed traveling between three Baltic countries, has had a positive impact as the number of tourists from these countries increased, but growing opportunities for travel around Europe in 2021 meant that Lithuania became a less popular destination for Latvian and Estonian visitors a year later (Fig. 2). The initiative to repeat the Baltic bubble in 2021 was rejected by the Lithuanian government in 2021 (Macius, 2021).

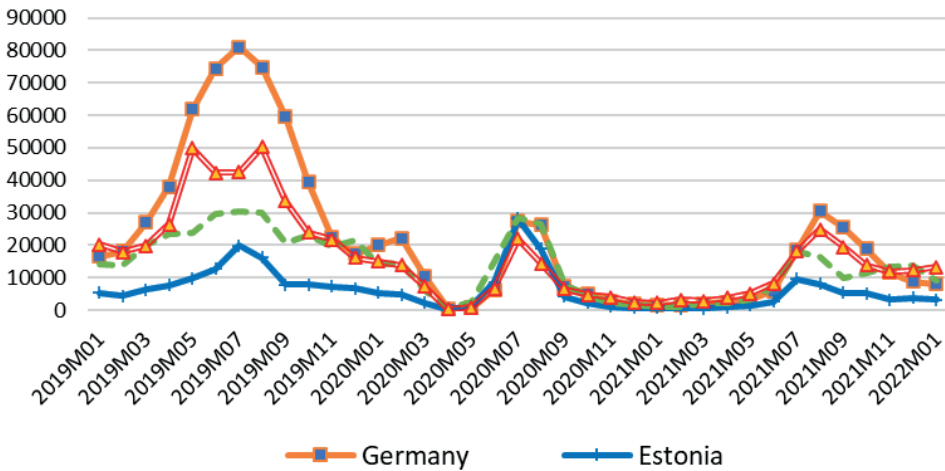


Fig. 2. Nights spent at accommodation establishments in Lithuania 2019–2021. Some key countries  
 Source: authors’ own work based on Statistics Lithuania, 2022.

The major positive impact of the decrease of international tourism flows was related to the increase of domestic tourism, which generally is more sustainable at least due to shorter distance and more environmentally friendly means of transportation. This trend was evident in the whole of Europe in 2020 as the share of domestic trips increased from 55% to 69% of all tourism trips (Knezevic *et al.*, 2021). Not only the share but also the general number of nights spent in tourist accommodation establishments grew in Lithuania during the COVID-19 years even though travel restrictions were sometimes imposed on cross-municipal journeys. Fortunately, these quarantine restrictions occurred during the off-season period. This, however, increased seasonal fluctuations of tourism, which causes additional problems for tourism service providers. The share of Lithuanians among accommodated persons increased from 52% in 2019 to as much as 79% in 2021 (Lithuania Travel, 2022), but the slightly growing numbers of Lithuanian tourists

were not able to compensate for the sharp decrease of foreign tourists in 2020. However, as Figure 3 shows, domestic tourism was the major factor of the growth of accommodation services in 2021 (number of nights spent increase by 13%) (Eurostat, 2022).

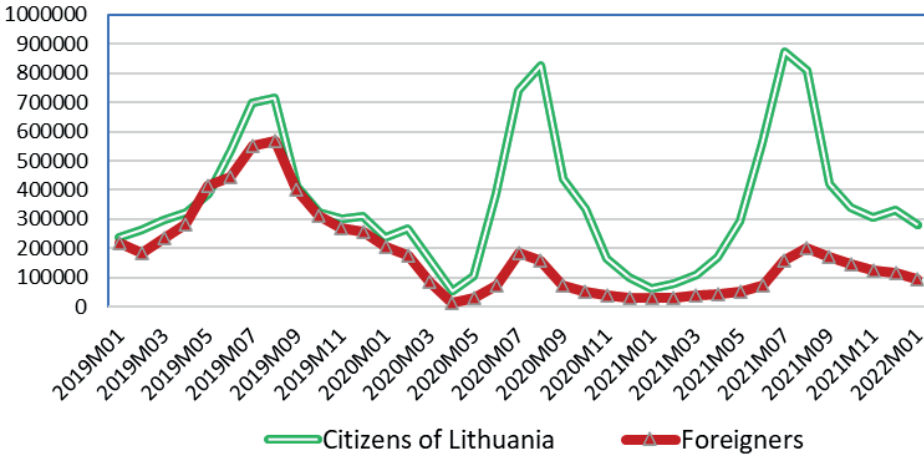


Fig. 3. Nights spent at accommodation establishments in Lithuania 2019–2021

Source: authors' own work based on Statistics Lithuania, 2022.

Finally, while discussing the impact of the pandemic on the tourism economy in Lithuania, we also should mention that the general trends of the sector do not necessarily reflect the trends at the local scale. Tourism enterprises operate in very different regions, and they depend on very different markets. Obviously, the main losers of the pandemic were those relying on international tourism, especially important in the major tourist destinations – metropolitan cities and resorts. While Lithuanian resorts were able to offer their services to Lithuanian guests, big city firms, such as higher-end hotels, had very limited opportunities to shift from their usual customers. Domestic tourism regions, such as rural nature-rich areas, have even benefited from foreign trip restrictions. The data of the state insurance company Sodra on the salaries and employment in hotels around Lithuania confirms this. The employment of the 30 biggest hotels in major cities dropped by 25–30% in March and April 2020 (compared to the same period in 2019), and it remained at that lower level at the beginning of 2022. More than 2,000 employees worked there during the high season in 2019 and this number reached only 1,500 in 2020 and 2021. However, this halted period did not make a long-lasting impact on the salary levels in the sector, which grew at a similar pace as in the whole economy. The spring drop in employment in the biggest hotels in resorts was evident as well but reached the usual level already in the summer of 2020 and grew even more in

2021. The fluctuations in employment in hotels in other Lithuanian municipalities were minimal. A visible reduction in the number of employees was evident only in a short period in the spring of 2020, but in general these hotels have lost less than 10% of their staff. Summarising, we may state that so far the tourism economy of metropolitan areas has experienced more severe consequences of the pandemic and related restrictions, and there have not been any signs of a fast revitalisation of the sector so far (Sodra, 2022).

In order to mitigate the negative pandemic repercussions on the economy (including the tourism sector), the Lithuanian government offered special aid instruments that are further discussed in the following section.

#### **4. GOVERNMENTAL AID INSTRUMENTS ISSUED TO SUPPORT THE TOURISM BUSINESS**

2020 and 2021 became challenging years for many economic sectors in Lithuania, but the negative impacts varied greatly. Tourism was among the most damaged sectors and, therefore, it was included in the “List of restricted and indirectly restricted economic activities during the quarantine” (Minister of the Economy and Innovation, Minister of Social Security and Labour, 2020).

Based on UNWTO estimates, the number of international tourists will reach its pre-pandemic level in only 2.5–4 years (Lithuania Travel, 2020a). The inbound tourism organisers underline that the number of orders from international travellers decreased drastically – by even 95% in 2020–2021 (Statistics Lithuania, 2022). On 16 March 2020, the Lithuanian Government declared a national quarantine in Lithuania. People were obliged to stop travelling to and from the countries and territories affected by the COVID-19 outbreak. In December 2020 even the restriction to travel and move inside Lithuania territory (to cross the boundaries of municipalities) was imposed for those who did not have property or jobs in other municipalities. In response to the pandemic situation and stagnation of economic sectors, the Lithuanian Government implemented the “Plan aimed to promote the economy and reduce the effects of the spread of Coronavirus (COVID-19)” (hereinafter “the Plan”) (Government of the Republic of Lithuania, 2020). The Plan provided instruments to cover five underlined objectives: (1) ensure the resources needed for the healthcare and public protection systems to function effectively; (2) to help preserve the workplace and the income of the general public; (3) to help businesses maintain liquidity; (4) to stimulate the economy; and (5) to ensure the liquidity of the state treasury. Meanwhile, tourism promotion instruments were covered under the third and fourth objectives and will be discussed in this chapter in more detail.

The main legal basis regarding the approval of the instruments issued by the Government of Lithuania was the EU document “Communication from the Commission: Temporary Framework for State aid measures to support the economy in the current COVID-19 outbreak” (European Commission, 2020). The Communication aimed “to lay down a framework that allows Member States to tackle the difficulties undertakings are currently encountering whilst maintaining the integrity of the EU Internal Market and ensuring a level playing field” (European Commission, 2020, p. 4). Also, the legal document indicated the possibilities that states had under EU rules to ensure liquidity and access to financing for undertakings. It is believed that “Targeted and proportionate application of EU State aid control serves to make sure that national support measures are effective in helping the affected undertakings during the COVID-19 outbreak but also that they allow them to bounce back from the current situation” (European Commission, 2020, p. 3). The EU document has introduced several temporary state aid instruments, where four of them are applicable for the tourism business (Fig. 4).

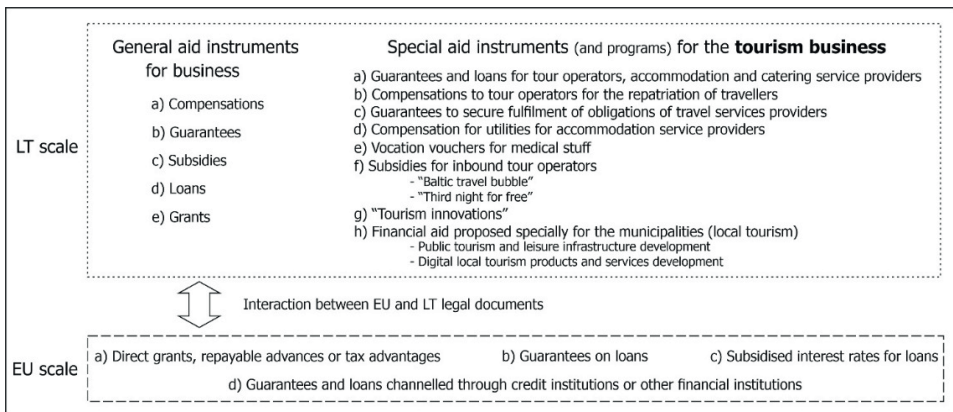


Fig. 4. Aid instruments issued to reduce the effects of the COVID-19 pandemic, ensure the liquidity of the tourism business, and promote the transformations of the tourism sector in general

Source: authors’ own work based on legal documents presented in the chapter.

Even though different instruments offered various forms of aid to support the internal market, the main conditions that enterprises had to meet were rather similar (European Commission, 2020; Minister of the Economy and Innovation 2020a; Minister of the Economy and Innovation 2020a, 2020b, 2020c). The enterprises that applied for the state aid had to meet special requirements. First of all, they were obliged to prove based on official documents and registered financial reports that they were not in difficulty at the end of 2019 (before the pandemic’s outbreak). Also, some instruments were separated and dedicated exclusively to small and medium enterprises (SMEs) or only to big companies. Each form of

aid was granted based on a scheme with an estimated budget, and the maximum amount of the possible aid for the enterprise was defined. Furthermore, the state aid had the official and clearly declared deadlines (that in some cases it could have been extended).

In the Lithuanian case, two of five objectives that were established in the Plan were directed towards business and tourism. The proposed aid instruments were managed and implemented by several governmental institutions (Invega, Lithuania Travel), the Agency for Science, Innovation and Technology (MITA), and administrations of municipalities, where the Ministry of Economy and Innovation played the leading role.

The Plan provided for the loans to be granted as a matter of urgency, deferring, or rescheduling taxes on an agreed schedule without charge. Also, there was the declared intention to suspend the process of recovering the tax arrears, to exempt taxpayers from fines, and to make it possible to defer the payment of personal income tax. Furthermore, in the Plan there were aid instruments involved that enabled one to defer or reschedule the payments for consumed electricity and natural gas to the state company Ignitis (the main provider of gas and electricity in Lithuania). Additionally, the duties for municipalities in accordance with the aid instruments were also mentioned in the Plan. Municipalities were suggested to consider the pandemic situation and exempt businesses from commercial real estate, land taxes, and allow the enterprises to postpone or reschedule payments for the heating and other services (Government of the Republic of Lithuania, 2020).

Most businesses affected by the pandemic could only benefit from general aid instruments offered by the state, whereas the tourism sector had access to both general measures (tax deferrals, loans, compensations, subsidies, etc.) and measures intended exclusively for them (Fig. 4). The general aid instruments could be classified into several main groups which could be subdivided into smaller and more detailed subgroups (Government of the Republic of Lithuania 2020; Invega 2022a, b). The aid instruments could only applied for by those business enterprises that were included in the “List of restricted and indirectly restricted economic activities during the quarantine” (Minister of the Economy and Innovation, Minister of Social Security and Labour, 2020).

As the figure Fig. 4 indicates, the special aid instruments for the tourism business differed in terms of their scales, formats, and budgets. Tour operators could apply for *loans* that made it possible to reimburse tourists for cancelled trips, while the accommodation providers and catering institutions using state offered loans could cover their basic costs (Minister of the Economy and Innovation, 2020a). Another state aid program for the tourism enterprises consisted of offering insurance guarantees (Minister of the Economy and Innovation, 2020b). The purpose of the program was to offer a guarantee for covering a part of the insurance or guarantee benefit paid by the insurance company under a surety

insurance contract. With this aid program, the state sought to maintain the tourism business viability and to share the risk with the insurance and financial enterprises that helped tourism firms. Also, the government proposed an aid instrument in the form of compensations to tour operators for the repatriation of travellers (Minister of the Economy and Innovation, 2020c). With this program, the intention was to help financially the tourism enterprises to transport tourists from abroad after the pandemic situation was announced. The most recent aid programs were provided by the Ministry of the Economy and Innovation in February 2022 and are still under governmental consideration. One of the proposed projects offers partial compensation for utilities for accommodation service providers. This instrument aims to cover actually experienced fixed costs of natural gas, heat, and electricity, while the second instrument provides subsidies for inbound tour operators. Under this instrument, an organiser of inbound tourism is going to be granted a subsidy of up to 30,000 euros (the amount will depend on the number of invited tourists) for foreign tourists brought to Lithuania (Ministry of the Economy and Innovation, 2022).

The Government also launched smaller and more specific aid projects which also were supposed to support the liquidity and viability of the tourism sector. One of such projects was named “Vocation for medical stuff” and offered 200 euros vouchers for Lithuanian healthcare system personnel (Lithuania Travel, 2020b). The project was implemented in the autumn of 2020 and the main idea was to thank the personnel of the healthcare system for their work during the pandemic period and to maintain the viability of the local tourism market. The project was open to tour operators, travel agents, transport, entertainment, accommodation, and catering service providers. The majority of the vouchers were used for accommodation, health, and SPA services in Lithuanian resorts.

The government, together with the Ministry of the Economy and Innovation and the tourism promotion agency Lithuania Travel, suggested a number of marketing initiatives as aid instruments for the tourism sector. The purpose of such marketing projects was to attract and increase inbound tourist flows, to maintain flights and other tourism infrastructure, and particularly to promote domestic tourism. In addition, the marketing instruments were designed to increase Lithuania’s attractiveness in the international context (at least among the neighbouring countries). Following the offered aid concept, the awareness of the state was increased using the special promotional campaigns in target foreign markets and also in Lithuania. Attempts were made to attract potential customers by introducing them to exceptional Lithuanian tourism products, offering special sales, and promotion actions.

One such marketing program was introduced in the summer of 2020 and named the “Baltic travel bubble” when Lithuania, Latvia and Estonia opened their borders to the people of these countries without mandatory self-isolation. Even though the period when the “bubble” was functioning was rather short (it might be also no-



ticed in Fig. 2), it was declared that this aid instrument had greatly helped the accommodation, catering, and other tourism service providers. The program not only allowed businesses to reopen, but also became an example of regional cooperation (Ministry of the Economy and Innovation 2021a; Lithuania Travel 2020c).

In the autumn of 2021, the government suggested another marketing project to help tourism businesses, exclusively dedicated to accommodation providers. The aim of the *Third night* project was to encourage foreign and local travellers to stay in accommodation institutions longer (Ministry of the Economy and Innovation, 2021b). The project offered to cover the cost of the third night up to 65 euros. It was initially an internationally promoted marketing project; therefore, it received some attention from foreign media and travellers. More than 150 articles about the campaign were published in foreign media and travel portals, but the results of this instrument were criticised in Lithuanian media (Brimeris, 2021).

The Ministry of the Economy and Innovation also initiated the *Tourism innovations* aid instrument, the aim of which was to transform the tourism sector by encouraging the introduction of innovations and digital technologies in order to stay competitive during the COVID-19 pandemic, and to offer new experiences afterwards (Minister of the Economy and Innovation, 2021a). A great range of tourism business entities (associations, tourism information centres, tour operators, accommodation providers, and others involved in the tourism business) were able to submit project proposals. With the help of this instrument, new tourism products and services were developed, such as self-service terminals allowing guests to independently check in, thus saving energy and providing user-friendly remote room environment management systems, individual/solo tours and routes using the software. New voice-reading, translation, photography, filming, and communication tools were introduced as well. Travel agencies also developed new travel routes around Lithuania, and purchased innovative guide equipment. As the governmental evaluations and further presented results of our survey show, this aid instrument could be indicated as one of most attractive and successful (Ministry of the Economy and Innovation, 2020).

With the release of the Plan in 2020, the government declared that around 1,424.5 million euros would be devoted to help businesses to ensure liquidity and another 1,418 million euros would cover the fourth objective of the Plan intended for stimulating the economy (Government of the Republic of Lithuania, 2020, National Audit Office, 2021). In general, during 2020 there were around 48 million euros appointed from the state budget to the tourism sector. Meanwhile, as the pandemic situation continued into 2021, the government issued additional payoffs and new aid instruments for the tourism sector (Fig. 4). The Ministry of the Economy and Innovation declared that at the beginning of 2021 a budget of approx. 330 million euros was assigned to business enterprises that suffered the most from the pandemic situation, and tourism service providers were among them (Government of the Republic of Lithuania, 2021).

Additionally, the government allocated more 5 million euros from the Government Reserve fund in the autumn of 2021. The financial aid was directed towards the subjects of domestic tourism and their initiated projects. Firstly, it was aimed to finance public tourism and leisure infrastructure projects. In this case, the initiators of the projects were municipalities and their subordinate institutions (Minister of the Economy and Innovation, 2021b). The winning projects were related to the renovation of manors, parks, chapels, expansion of museums, reconstructions of cultural centres, construction of sport centres, and improvement of tourism infrastructure in general (Ministry of the Economy and Innovation, 2021c). Secondly, because of the previous success, a part of the additionally arranged financial support was used to develop innovative and digital local tourism products and services from domestic tourism service providers. While initiating this instrument, the Ministry of the Economy and Innovation was willing to support the projects introducing new interactive routes, virtual tours, new ways of information presentation about touristic objects or virtual presentations of services (Ministry of the Economy and Innovation, 2021d). Part of the financial support was directed towards managing and advertising these newly proposed products and services in order to encourage Lithuanian residents to travel more actively around the country.

Even though the tourism sector was able to benefit from the state aid packages in 2020 and 2021 (and some instruments are still being implemented), there has remained a major need for continued governmental support and cooperation.

#### **4.1. Critical remarks on the state aid programs**

The instruments that were offered by the government to support the tourism industry were crucial and helpful. However, there were several program points that were declared as doubtful, and also the fairness of the distribution of funds was debatable. First of all, the Plan (Government of the Republic of Lithuania, 2020) was criticised due to its inconsistency and lack of information concerning the planning of the expenditures to cover the consequences of the COVID-19 pandemic (National Audit Office, 2021). In this case it was underlined that there was a lack of criteria that could specify why some instruments were included (or not) into the Plan. Also, the Plan was changed several times. Therefore, the lack of accuracy enables one to assume that the Plan was missing a clear vision. Apart from that, major doubts were raised about the recipients of the state-offered financial support. Even though the EU document (European Commission, 2020) clearly underlined that priority should have been given to small tourism enterprises while providing the aid instruments and financial support, the actual data and reports have indicated that the majority of state aid instruments were opened for the major tourism enterprises (National Audit Office, 2021). As a result, two biggest Lithu-

anian tourism enterprises (trip organisers) Tez Tour and Novaturas received a major portion of all the financial support offered to the tourism sector (Balčiūnaitė, 2021). It has been calculated that more than 80% of all support (approx. 48 million euros) used by tourism enterprises were received by large firms. Meanwhile, travel sales managers, guides, and other small tourism service providers were left out of the funding schemes.

The National Audit Office issued another major complaint against the institutions that were responsible for administration of aid instruments and the distribution of support stressing the problems in evaluation of enterprises that submitted their requests for support (National Audit Office, 2021). The report specified that not enough attention had been paid to launching the criteria for highlighting the enterprises that had already been in difficulty before the pandemic. Following this criticism, it is believed that the part of the tourism industry that applied for the support and received it did not even have to be included in the aid list in the first place. It means that because of negligence of choosing incorrect criteria for evaluating the financial status of applicants enterprises went into bankruptcy or announced restructuring to receive the funding.

The Lithuanian travel business association complained about the offered state aid measures as well (Mačius, 2021). Apart from mentioning the exceptional governmental support for the two biggest Lithuanian tourism enterprises as the main problem (Balčiūnaitė, 2021), the association criticised the Ministry of the Economy and Innovation for the two-month delay in distributing information worldwide that Lithuania welcomed vaccinated tourists in the summer of 2021 (Mačius, 2021). Because of the ‘information vacuum’ the tourism industry lost possible summer tourists in 2021, when the “Baltic travel bubble” was not opened. The vice president of the Lithuanian travel business association underlined that Lithuania was (and still is) missing a vision and substantiated strategy of revitalisation and development of the tourism sector (Mačius, 2021).

The Lithuanian passenger transport association criticised the rules of the aid instrument, which offered subsidies to employers to compensate for salaries of *halt*-time workers (Jakubauskienė, 2021). The association stated that the one-size-fits-all model did not work for this aid instrument. The required 75 workday halt period was unsuitable for passenger carriers because the transport system had to continue its work during the pandemic, but at a slower pace. On average, the employees of passenger transport companies remained at the halt time for approx. 25 days, therefore, in accordance with the instrument’s rules, the companies lost the opportunity to apply for subsidies and cover some losses from the pandemic period.

The presented critical remarks regarding the aid instruments underline only the main problems discussed in papers and official documents, whereas a more in-depth analysis of the efficiency of the proposed governmental aid measures is presented in the next section, which discusses our survey results.

Our team can also note that notwithstanding the fact that the impact of the pandemic had clear regional differences inside the country because different sectors of the tourism economy had often very polarised impacts, none of the introduced measures had any regional dimension. The introduced measures also ignored the seasonal character of the business and this theoretically could have created possibilities to falsify some seasonal halt periods as a consequence of the COVID-19 pandemic (for example, usual low season staff reduction could have been replaced by a formal halt time).

## **5. EFFICIENCY OF THE STATE AID IN PANDEMIC TIMES: THE ATTITUDES OF REPRESENTATIVES OF THE TOURISM SECTOR**

This chapter reveals the attitudes of stakeholders in the Lithuanian tourism sector towards the situation of the tourism economy in the turbulent times of the COVID-19 pandemic and government support actions.

### **5.1. Assessment of the general tourism situation in Lithuania**

In order to assess the effectiveness and importance of governmental support measures, it is important to establish how the representatives of the domestic and inbound tourism firms understand the current situation of the tourism sector and the impact of the pandemic. First, the survey aimed to learn the general impact of the pandemic on the way how domestic and inbound tourism services are provided. The survey revealed that almost half (approx. 48.0% (25 answers)) of the surveyed enterprises had completely changed their activities and another 42.3% (22 answers) had changed their ways of doing business partly. Only 9.6% of the representatives indicated that their businesses remained the same, so we can summarise that the pandemic was a major factor bringing changes to almost the entire domestic and inbound tourism economy.

When assessing the general situation of tourism in Lithuania compared to the pre-pandemic period, respondents expressed their opinion widely, distinguishing which areas were more or less affected (Table 1). 38.5% of the respondents thought that the tourism sector had been hit hard and that tourism was almost at a standstill. A very small proportion (around 7.7%) were in favour of the existing situation (especially those working in domestic tourism), and a very small proportion (around 5.8%) thought that the situation remained the same or was difficult to assess, as each area was affected differently.

Inbound tourism was mentioned as the tourism sphere that suffered the most (46.2% of the respondents' opinions). A significant proportion (approx. 28.8%)

believed that the most favourable and the best situation was for domestic tourism. The same argument was presented by experts during the focus group discussion, even naming the pandemic period as a “domestic tourism renaissance” (tourism business actor, focus group with tourism business actors). One might stress that domestic tourism had partly replaced inbound tourism<sup>1</sup>. Only a small proportion of the respondents (around 7.7%) thought that the situation with outbound tourism was very bad, while a slightly higher proportion (11.5%) expressed a different view stating that outbound tourism was only slightly less affected and it would recover faster because other foreign countries were much more attractive than Lithuania (both for locals and foreigners).

Table 1. Assessment of the situation of local and inbound tourism industries in Lithuania comparing the pre-pandemic and post-pandemic periods

Expressed opinion	Number of mentions in answers (units)	Proportion of answers (%)
Inbound tourism suffered most	24	46.2
The tourism situation deteriorated	20	38.5
The situation of local tourism improved as local tourism replaced inbound tourism	15	28.8
Outbound tourism suffered less and recovering faster	6	11.5
Loss of a large proportion of skilled workers	5	9.6
Too many travel requirements and restrictions	5	9.6
Negative changes in the tourism sector are caused by the lack of a state policy strategy, unclear pandemic management tools, insufficient state support, and a lack of focus on small business	5	9.6
Outbound tourism suffered most	4	7.7
Introduction of innovations for ongoing activities, changed activity direction	4	7.7
The tourism situation improved	4	7.7
People travel more independently, with families, and use less tourism business services	3	5.8
The situation remained similar or it is difficult to assess, as each tourism area is affected differently	3	5.8
Other	5	9.6

Source: authors' own calculations based on a survey of local and inbound tourism industries.

<sup>1</sup> However, some respondents predicted that local tourism demand was likely to decline in 2022 and residents would choose to travel abroad again due to lower restrictions imposed in relation to COVID-19 (opinion from a survey of local and inbound tourism businesses).

Though attitudes stressing the generally negative impact of the pandemic are obvious, the survey has also revealed some specific negative consequences. Some respondents (approx. 9.6%) emphasised the difficult situation in the tourism sector due to a lack of clear public policy strategies, unclear pandemic management tools, insufficient public support, and neglected small businesses. Such negative changes as the loss of skilled workers (especially guides), the unattractive nature of the tourism sector due to travel requirements, and changing restrictions were highlighted. However, it was also mentioned that there was a lot of innovation and even reorientation. The fact that people travelled more on their own and with their families was negatively assessed because they used less tourism business services. The answers in the questionnaires echoed with the experts' opinion presented in the focus group, particularly naming the problematic situation in inbound tourism, a great shortage of communication concerning different levels: the vertical (government and tourism enterprises/associations) and horizontal (tourism enterprises, agencies, and municipalities).

Summarising the results of Table 1, we must state that according to survey results, unsurprisingly, transnational forms of tourism were the main losers of the pandemic restrictions, while domestic tourism could be at least partly so far named as a winner of the turbulent times. Outbound tourism is expected to recover rapidly. The recovery prospects for inbound tourism are less optimistic not only because other countries are more attractive or all pandemic restrictions and travel inconveniences will be lifted, but also because of lost tourists from Russia, Belarus, and Ukraine. The tourism sector is facing new challenges, but the pandemic-related lessons could play a positive role in the future resilience of the sector.

## **5.2. Evaluation of governmental support for the tourism industry**

A separate block of questions was formed for the evaluation of the attitudes of the representatives towards the support provided by the government to the tourism industry during the COVID-19 pandemic. In particular, we aimed to reveal whether local and inbound tourism businesses benefited from the support provided by public authorities during the pandemic period to analyse what support measures were used by business enterprises or if not used, and why. Also, it was aimed to establish what public (governmental or municipal) policy measures were missing, insufficient, and why that was.

The results of the survey revealed that 78.8% of the analysed local and inbound tourism companies (41 of 52 companies) used the support provided by government institutions. The majority of the enterprises that had not received sup-

port indicated that tourism was not the only source of their income.<sup>2</sup> For example, one respondent engaged in domestic tourism did not receive any support because additionally he worked as a lecturer and earned an extra income of 280 euros per month, whereas the loss from his tourism activity amounted several thousands euros. Meanwhile, other answers (45.5% of those who did not use governmental support) covered the following reasons: they did not meet the criteria set by the government; they tried but failed; an excessive bureaucratic mechanism for obtaining support was considered to be in place; there was no need for that, etc. In summary, companies were not able to meet the high (exaggerated) requirements set by state authorities. We may state that though the majority of the enterprises have benefited from the government support schemes, a part of the tourism firms (mainly small enterprises) that were severely affected by the COVID-19 pandemic could not benefit from the government support measures. Almost half (48.8%) of the enterprises which received the support were able to use at least two aid packages (Table 2).

Most of the received governmental support was intended to compensate for the halt period or part of it or part of the salaries (mentioned by approx. 46.3% of respondents). Another effective and popular state aid instrument among tourism enterprises was *Tourism Innovation* that was used by a fifth (19.5%) of the enterprises. Other support instruments were also used by tourism enterprises, but their importance for the whole sector was relatively smaller. A tenth of the respondents utilised the deferral for the payment of personal income taxes and various one-off payments or subsidies (the support varied from 250 to 500 euros). A small group of firms benefited from subsidies for renting premises, loan facilities, and financial aid measures offered by INVEGA (Table 2). Apart from that, approx. 36.6% of the respondents that received governmental support named other measures: support for individual activities, reimbursement of expenses, vocation vouchers for medical staff, etc.

Thus, it could be argued that an absolute majority of the enterprises that applied and received governmental support, benefited even from small assistance, from different support instruments that made life a little easier during the pandemic. We may also notice that at least part of tourism enterprises took the opportunity to use the support not only for compensation of pandemic-related costs but also to innovate and adapt to the new reality and the changing environment.

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<sup>2</sup> According to the criteria presented by the government, tourism had to be the main activity of a company/ person in order to apply for support (Minister of the Economy and Innovation 2020a, 2020b, 2020c).

Table 2. State aid support used to mitigate the consequences of the pandemic

Number of grants received	Number of beneficiaries (units)	Proportion of beneficiaries (%)	Number of non-beneficiaries (units)	Proportion of non-beneficiaries (%)
Received 1 grant	17	41.5		
Received 2 or more grants	20	48.8		
Received grant but did not specify which one	4	9.8		
<b>TOTAL</b>	<b>41</b>	<b>7.8</b>	<b>11</b>	<b>21.2</b>
From them:				
Type of instruments used	Number of recipients (units)	Proportion of recipients (%)	Reasons for not receiving grant	Proportion of non-beneficiaries (%)
Compensation for halt time, reimbursement for full or part salary	19	46.3	Not a core business	54.5
Tourism innovation	8	19.5	Did not meet the criteria	9.1
One-time payout, subsidy	4	9.8	Tried but failed	9.1
Compensation for personal income tax	4	9.8	Bureaucratic mechanism	9.1
Subsidy for renting premises	3	7.3	There was no need	9.1
Loan relief	3	7.3	Other reasons	45.5
INVEGA support measures	3	7.3		
Other	15	36.6		

Source: authors' own calculations based on a survey of local and inbound tourism businesses.



### 5.2.1. Public policy and its limitations regarding the tourism sector during the pandemic

Another important aspect of the survey was to gather opinions from the respondents on the missing policies and measures which could help mitigate the negative consequences of the pandemic. The results of the survey revealed that a quarter of the respondents (25.0%) felt that there was a lack of a strategy for public policy actions, clarity and precision of support, as well as a shortage of logic of various decisions, and too frequent changes (even every week) (Table 3). Also, the negative aspects (received 11.5% each) such as ignoring small business, a lack of a clear separation and understanding of inbound, local and outbound tourism from the authorities (i.e., a lack of awareness of the different directions of tourism, a lack of awareness of the different areas of tourism), the shortage of aid for inbound tourism, avoidance of the tourism sector (in particular it was underlined that “the impression was created at the state level that the tourism sector did not exist at all in the country”) were mentioned. A few (7.7%) respondents said that there had been a lack of targeted support for tourism and that there was too little care for the sector.

The respondents highlighted a number of other important aspects of the problem. A few answers stressed that there was a lack of cooperation and dialogue between the authorities and the tourism industry;<sup>3</sup> additionally, a lack of specific support for the retention of professional staff (guides, long-term staff) was mentioned. Two respondents expressed dissatisfaction with the shortage of moral assistance and support from the government during the pandemic (for local tourism in particular), a lack of transparency in the granting of support, and a late provision of support. Also, it was indicated that the government was too slow to react to the changing situation. More than a quarter of the respondents indicated that there were other shortcomings in the support policy. The variety of responses shows that the tourism companies had a lot of very specific attitudes towards the possible support measures and indeed it would be difficult for the government in such a short time to organise optimal support schemes which would have fit all the need of very different enterprises. The lack of a clear strategy and some ignorance of small enterprises may be highlighted as the main problems of the governmental support policy. This also suggests that better cooperation between the representatives of tourism businesses may have helped to understand and communicate the problems and the possible solution to government institutions. The collected answers and insights of tourism enterprises go in line with the criticisms that have been presented by official Lithuanian institutions, in this case the National Audit Office (2021).

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<sup>3</sup> There were also those who thought that in order to pursue a policy of revitalising the tourism sector, the cooperation should take place involving three parties: state, tourism business representatives, and consumers (customers) (opinion from a survey of local and inbound tourism businesses).

Furthermore, one might underline yet another problem of the tourism policy. Two respondents indicated that the dissolution of the State Department of Tourism under the Ministry of Economy, which occurred in 2019, was a decision that resulted in tourism service providers not being supervised by the State Consumer Rights Protection Service, a mainly public control institution, while the development of tourism is concentrated in the newly established Travel Lithuania state enterprise. These transformations have resulted in reduced government's attention to the tourism sector.

Table 3. Opinions of domestic and inbound tourism enterprises on public policy shortcomings related to the tourism sector during the pandemic

Identified shortcomings	Number of mentions in answers (units)	Proportion of answers (%)
Lack of public policy action strategy, its clarity/ precision and logic of decisions, and frequent changes in decisions	13	25.0
Ignoring small business	6	11.5
Lack of support for inbound tourism	6	11.5
Avoiding and ignoring the tourism sector	6	11.5
Lack of a clear separation and concept of local, inbound and outbound tourism (public authorities are unable to distinguish between different tourism activities)	6	11.5
Lack of targeted support for the tourism sector	4	7.7
Lack of cooperation and dialogue	3	5.8
Lack of importance of retaining professional staff	3	5.8
Transparency	2	3.9
Late support offer	2	3.9
Lack of quick response to a changing situation	2	3.9
Lack of support for local tourism	2	3.9
Lack of moral support	2	3.9
Other	15	28.8
No opinion/ did not answer	9	17.3

Source: authors' own calculations based on a survey of local and inbound tourism businesses.

### 5.2.2. Expectations of tourism business towards national and local authorities

The next part of the survey was devoted to identifying the expectations the tourism enterprises had towards national and local authorities. The main matter expected by the representatives of tourism enterprises from government and municipal institutions was financial support. It was estimated that 40.4% of respondents

expected to receive financial support<sup>4</sup> or partial reimbursement, loan relief or loss relief. Particular emphasis was placed on financial support for tourism exhibitions, fairs, promotional and advertising campaigns of services, reduction of value-added tax on domestic trips, further compensation for halt time, etc. (Table 4). Some respondents (9.6%) mentioned that they expected more publicity of the activities and cooperation. Other respondents expected clearer strategic planning and planning of public institutions over the next few years, as well as better infrastructure development (e.g., road maintenance, accessibility of the infrastructure for the disabled, and maintenance of places and objects of interest).

Others still were completely disappointed and no longer expected anything from the governing institutions. Only a small group of respondents was positive and expected a further increase in the focus on small and medium businesses. About a fifth of the respondents had other expectations among which we would like to mention the wish for the restoration of the State Department of Tourism. It was explained that the State Department, which consisted experienced experts, would better deal with the underlined difficulties.

The results show that tourism businesses still lack the financial support they expect to receive in the future, as the tourism sector has been hit hard during the pandemic and that small businesses expect more attention.

Table 4. Opinions of domestic and inbound tourism business representatives on the expected assistance from local authorities (state or municipalities)

Mentioned expectations	Number of mentions in answers (units)	Proportion of answers (%)
Financial support	21	40.4
Assistance and support activities for publicity and cooperation	5	9.6
More developed infrastructure (i.e., adapted infrastructure for the disabled, road maintenance, maintenance of new attractions, new infrastructure)	3	5.8
Clearer strategic planning	3	5.8
Do not expect anything, disappointed	3	5.8
More attention for small and medium-sized businesses	2	3.8
Other	10	19,2
Did not answer, skipped a question	8	15.4

Source: authors' own calculations based on a survey of local and inbound tourism businesses.

<sup>4</sup> Financial support was extensively described and full wish lists had been indicated by the respondents, and it was mentioned in most cases that various tax exemptions (including public utilities) are the priority (opinion from a survey of local and inbound tourism businesses).

Summarising the results of the survey on the support provided by state institutions to the tourism businesses during the pandemic, it can be stated that some general conclusions can be made. First of all, many enterprises have complained about difficulty of receiving the support, which was especially evident in the cases of the small businesses (especially those engaged in individual activities such as guides). We may state that among the recipients of governmental support, the most common were those who received support for halt time and compensation for part (or all) of the salaries. A significant part of enterprises has managed to use the pandemic and available support for innovative decisions, so the pandemic potentially had some positive effects as well. Representatives thought that governmental policy lacked clear implementation strategy and logic of decision-making. In this case, the results of our research go in line with the officially presented criticisms of the government's issue of the Plan to reduce the effects of coronavirus and its instruments, i.e., evaluation criteria (National Audit Office, 2021). Such a situation seems to have resulted from a lack of understanding of the importance of the tourism sector by public authorities and of the different branches of tourism. The liquidation of the State Department of Tourism, which employed a tourism professional, might be named among the main reasons for such a misunderstanding.

### **5.3. The relationship between local tourism and vitality of a region**

Though the main focus of the paper was to define the situation of the whole inbound and domestic tourism economy sector, the statistical data analysis indicated that the impacts of the crisis had a polarised spatial character and tourism plays a very different role in economies of different Lithuanian regions (Ministry of the Interior, 2018). The development of tourism is planned mainly in the regions with natural and recreational potential, where domestic tourism is of major importance. Though tourism specialisation is assigned to 5 of 10 Lithuanian counties, tourism enterprises constitute a great part only in some rural and resort municipalities, where a failure of this sector can have a very negative impact on the whole municipal economy.

The survey sought to reveal the views of domestic and inbound tourism businesses on the potential of domestic tourism to boost regional development and the ways in which this can be done (Table 5). The results of the survey have shown that a large proportion of respondents (84.6%) believe that domestic tourism can boost regional vitality and that there are many ways to do it. It was considered that the development of active and passive leisure activities in nature could be the main factor in boosting the vitality of peripheral regions (about 43.2% of the respondents said so). The organisation of various hiking or cycling trips was specifically mentioned, though it is uncertain how they could initiate wider development trends, while there are almost no services related to such trips. About a fifth (20.5%) thought that the vitality of regions could be affected by the development of cuisine heritage and

cuisine tourism, where local cuisine heritage could be tasted and launched in local villages and could contribute to food production and so on. A smaller proportion (15.9%) said that the development of various education opportunities and crafts could contribute to the development of vitality, and in turn they would become more acquainted with the local culture, traditions, crafts, as well as food production. 14.3% of the respondents believe that the viability would be boosted by visits to cultural sites (values) and ethnocultural regions. Some respondents (11.4%) stated that the development and adaptation of appropriate infrastructure would be helpful.

The above-mentioned answers show that there is a potential for more intensive tourism development based on local resources in many Lithuanian regions. Better tourism infrastructure is still needed when it comes not only to the arrangement and adaptation of roads, buildings, and environment (for local and especially foreign tourists), but also to the significant shortage of accommodation and catering facilities. Once these shortcomings are addressed, those places will attract more tourists to the regions.

Table 5. Opinions of domestic and inbound tourism businesses on the potential of local tourism to promote regional viability and suggestions for improvement

Expressed opinion	Number of mentions in answers (units)	Proportion of answers (%)
Local tourism can boost regional vitality	44	84.6
Local tourism cannot boost regional vitality	0	0.0
Do not know/ No opinion	1	1.9
Did not answer	7	13.5
In Total	52	100.0
Offered suggestions for improvement (Calculated from positive answers (total 44))	Number of mentions in answers (units)	Proportion of answers (%)
To develop active and passive leisure in nature	19	43.2
To develop cuisine heritage, cuisine tourism	9	20.5
To develop education activities and crafts	7	15.9
To improve the quality of cultural objects (values) and develop visits to cultural regions	6	14.3
To develop infrastructure (accommodation, catering, environment, infrastructure adaptation for foreign tourists)	5	11.4
Other	9	20.5
No opinion, hard to say, did not want to name or issue a trade secret	14	31.8

Source: authors' calculations based on a survey of local and inbound tourism businesses.

In summary, there are considerable opportunities for tourism-related development of the nature-rich, non-metropolitan regions, though at the moment these activities quite often remain outside market relations and do not produce new incomes or jobs.

## 6. CONCLUDING REMARKS

The tourism sector has a significant impact on the economy and social welfare of the country and its regions. Tourism facilitates entrepreneurship, helps develop small and medium-sized enterprises, contributes to the increase of employment, development of infrastructure, encourages the preservation of historical cultural heritage, and it encourages people to search for new creative and innovative technological solutions, which is why the COVID-19 pandemic has threatened not only tourism but all these related fields. The tourism sector creates an added value in major cities and distant regions, but different areas depend on different markets so a pandemic creates different challenges for tourism and other businesses in different parts of all countries.

The growing tourism sector was creating 5 percent of GDP and involved around 55,000 employees at the end of 2019 in Lithuania (Armališ, 2021; Statistics Lithuania, 2022.). The spread of the virus, the announcement of the pandemic situation and the introduced restrictions changed the tourism situation drastically in the spring of 2020. During the pandemic, the prevailing trends in the Lithuanian tourism sector were similar to those in the world but due to its northern geographical position and the surrounding neighbourhood of non-EU countries, international tourism flows in Lithuania did not increase in the second year of the pandemic (unlike in southern Europe) (World Tourism Barometer, 2022; UNWTO, 2022). The growth of domestic tourism helped the tourism sector to survive the pandemic, but it could not completely replace the inbound tourism especially in the places exceptionally depended on it. Gateway cities where businesses and international tourism is of the highest importance suffered the most and this decline has been prolonged by the war in Ukraine. The universal support schemes such as reduced value-added tax for all accommodation sector covers not only those suffering the consequences of the pandemic and the war but also those benefiting from increased local tourism flows.

Being aware of the situation, the government issued the special “Plan aimed to promote the economy and reduce the effects of the spread of Coronavirus (COVID-19)” (Government of the Republic of Lithuania, 2020). The government proposed instruments for which tourism enterprises were able to apply. However, even though the financial support was essential and distributed millions of euros,

the state aid Plan was criticised due to its unclear evaluation criteria and unfair distribution of funds, and uneven opportunities of large and small enterprises (Balčiūnaitė, 2021; National Audit Office, 2021).

Despite those negative tendencies, some positive examples could still be found. Our survey excluded several domestic tourism enterprises that flourished in 2020 and 2021 because of the restrictions in international travel. Usually, these local tourism enterprises offer outdoor activities and tours. Also, it has been noticed that these successful tourism companies are located in remote and not necessarily major touristic regions, but they offer visits to alternative and unexplored places (such as quarries).

The tourism firms that suffered from the crisis had three strategies: to look for support, to innovate, and change radically the nature or scale of their activities or to shut down altogether. Difficult times create not only problems but also opportunities for change. Many international researchers (e.g., Benjamin *et al.*, 2020, Brauder, 2020; O'Connor and Assaker, 2021) have claim that it is an opportunity to make tourism more sustainable. An active use of the state aid instrument named Tourism innovations (Minister of the Economy and Innovation, 2021a) also indicates that at least some Lithuanian tourism enterprises have tried to adapt to new circumstances and, therefore, can have better prospects in the future. The instrument, introduced during the lockdown period (Lithuania Travel, 2020d) was used to create new services such as virtual museum visits, indoor and outdoor tours, solo trips, romantic dinner in hotel rooms, audio guides, interactive games introducing city history, etc. The new products were in demand and boosted domestic tourism. However, it should be mentioned that the respondents evaluated the Tourism innovations governmental aid instrument as one of the best offers' from the State as it had one of the easiest applications to fill, low administrative control, and prompt distribution of money.

The COVID-19 pandemic was a period of transformations. The positive examples enable one to presume that the tourism enterprises that were open-minded for innovative solutions were able to offer new products and to survive the lockdown period easier or even benefit from it. Therefore, maybe the post-pandemic period might become a time to rethink the tourist values, it could encourage the tourism sector to transform, introduce innovative more sustainable products and services, and thus become less vulnerable to unexpected circumstances. This is especially important as turbulent times are not over in Central and Eastern Europe. Of course, the opportunities for adapting were different for different sectors in different regions and many enterprises related to foreign markets will be suffering in the nearest future so governmental support will still be needed, especially having in mind growing energy prices.

While many tourism enterprises are still recovering from the COVID-19 pandemic, Lithuania has another shock. The war in Ukraine has resulted not only in a weaker business relationship with Belarus and Russia, raising prices or

possible economic recession. It extremely reduced tourism trips from these countries, which provided a quarter of all tourists back in 2019. This impact could have been even more severe, but the flow of Russian tourist was under constant decline even before the war in Ukraine. Though the context of the war is not analysed in this article, it should be noted that in addition to tourists from Russia and Belarus, Lithuania is losing tourist flows from Ukraine. The growing political instability is also not a favourable factor for inbound tourism in general. The information about cancelled bookings by Western European tourists in accordance with the aggressive neighbours are already a topic in mass media in Baltic countries (BNS 2022; Alonderyte, 2022). Therefore, the Ministry of Economy and Innovation are preparing an advertising campaigns that would spread the information of safe traveling in Lithuania worldwide; and the main target countries for inbound tourism include Germany, Poland, United Kingdom, and Israel (Juozapaitis, 2022). It is hard to estimate how successful such an effort will be, but we can hardly expect a full revitalisation of inbound tourism until the conflict is over. Having in mind all these circumstances and trends so far it might be forecasted that the recovery of the Lithuanian tourism sector is likely to be slower comparing to other European countries that plan the recovery of the tourism sector in 2022.

The pandemic has made it possible to look more broadly and to design the future of tourism. However, the liquidation of the Tourism Department, which was responsible for the development of the entire tourism sector, may cause additional problems for such a change. It is time to rethink the tourism system, to create premises for rebuilding flight connections, and a diversification of tourism market. It is time to learn from the mistakes of support schemes, which, for example, should not favour bigger businesses, as future challenges will appear. Finally, there are many economic sectors heavily dependent on foreign markets and more strict EU-wide regulations towards local protectionist measures need to be developed.

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## NOTES, COMMENTARIES AND REPORTS

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### DIALOGUE WITH THE COMMUNITY IN THE PLANNING PROCESS: HOW TO USE THE PARTICIPATORY APPROACH AS A PLANNING TOOL FOR THE COMMUNITY'S BENEFIT?

#### 1. INTRODUCTION

The main objective of a case study and a planning process is to develop a community that safeguards common values and good living conditions for all groups, within the framework of sustainable development. Participatory processes and transparency in urban policies and spatial planning have positive effects on the legitimacy of decision-making processes for the well-being of every member of a community. The good and effective facilitation of public participation in planning is vital in securing

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well-functioning and efficient planning processes. However, it is also crucial for public participation to be a constant and recurring process, since it is a complex organisation that requires not only time and resources, but also the willingness of the actors. Therefore, the management and sustainability of a participation process require power, communication, and management skills in urban planning activities.

The case study in question acknowledges that the proposed municipal master-plan for Baleal Beach (Portugal) has resulted in conflicts and disputes between the stakeholders, where the lack of communication was severe. In this report, the authors suggest the implementation of a participatory approach in the spatial and urban planning processes overseen by the municipality as a solution to the problems analysed in Baleal Beach.

The report starts with an analysis of the Baleal case study, which includes a site visit and a stakeholder meeting, as well as a literature review to expand the knowledge about participation and community. Therefore, it is followed by a stakeholder analysis to understand the qualities of the actors involved in the process. Furthermore, a SWOT analysis of the implementation of the participation process led by the municipality is conducted to examine the consequences. In conclusion, actionable policies such as public consultation, grievance redressal, accessible disciplinary and scientific information, and creating minor design interventions in public spaces to start the conversation are suggested for an effective and transparent participation process as a planning tool, where the municipality is the key leader and the responsible actor.

## 2. THEORETICAL AND METHODOLOGICAL FRAMEWORK

A lack of transparency in governance and public participation in the decision-making process is the primary impediment to the implementation of effective planning proposals. According to Jorge *et al.* (2022), in Portugal there is a law that ensures public participation as a principle in public administrative actions and policies concerning land, urbanism, and spatial planning. The practice of the principle of citizen participation in inter-municipal programmes and the municipal master plans is fulfilled by periodic binding public discussions on the proposed plans and programmes. Citizen participation is ensured during the development, modification, alteration, and evaluation steps (Jorge *et al.*, 2022). However, in Baleal, the citizens' reaction to the plan has shown that the current instruments and policies for participation in planning procedure have either not been implemented or have not produced the expected results. This report aims to conduct an investigation and provide recommendations that can help the state apparatus understand the importance of participation. In fact, stakeholder participation is fundamental in planning



service delivery and infrastructure investment with minimal conflict. The inquiry and recommendations proposed have been supported by a literature review of current and best practices, field study, stakeholder analysis, and SWOT analysis.

Participation and community are two words at the heart of the analysis conducted and instrumental in the policy recommendations. Participation is key because it is lacking in the process of spatial planning, but also something that is desired and recommended by international observer bodies (Jackson *et al.*, 2010). Community is of key importance by dint of the conflict it has with the state. More importantly, it must live with the consequences of state actions. The state is sovereign and thus the final authority that decides about whether to implement an agenda either conceptualised by itself or by bodies that give legitimacy to the state.

Participation, on the one hand, has been defined as an action in which there is a sense of sharing or association. It has also been described as an intervention or an instrument to participate in the democratic process of the state (Van Cauwenbergh *et al.*, 2018). It is an indication that a representative democracy operates with the consent of those who elect the representatives. In the case of planning, we can also find examples of people who bring to surface the internal contradiction in the word participation ('part takers') and depart from a process that is deceptive in its conception (Kaika, 2017).

Community, on the other, is the unit through which individuals can claim the liberties that are guaranteed to them in the state framework in which they live (Nancy, 1986). It is necessary for a community to recognise itself beyond the individual and as the subject of the state. It is necessary because through this self-realisation, the community can act as an agent of change to affect state policy.

The Portuguese law requires public participation, in principle. Furthermore, it recommends it on the municipal level for the evaluation and revision of planning documents (Jorge *et al.*, 2022). There is also an educational instrument at the national level that works to inform various stakeholders about planning proposals and mobilise them to action to evaluate development programs. In the Portuguese legal framework the intention is for both participation and community to be active in the governance process. There is also a state portal where people can access policy documents and plans related to specific development proposals.

Participatory planning has also been recommended as a necessary planning tool by international observers. Local Agenda 21 affirmed that the state must involve the community in the decision-making process to ensure sustainable development (Jackson *et al.*, 2010). Although the processes of 'consensus building' and 'community' as mentioned in the UN document have been problematised by various authors, the fundamental conceit has not been questioned (Jackson *et al.*, 2010; Kaika, 2017). The idea of 'community' with respect to territory has been problematised by questioning whether a community can be recognised within a territory. This can then be used to question whether businesses operate within geographical or economic space, while also raising questions related to the effectiveness of administrative

jurisdictions (Jackson *et al.*, 2010). The issues raised relate to the language used in planning documents and the academic literature that analyses them. The chief issue is that of communication, i.e., the inability of the state to communicate with constituents and of disciplinary professionals to communicate with people with highly specific knowledge, but in disciplines other than planning.

Solutions to these problems include better standards of communication, as well as the creation and accessibility of appendices to planning literature, which can help people from different areas of knowledge understand each other. The challenge is for the literature and the planning process itself to become simple enough for everyone to understand (Weston *et al.*, 2013). There are also other means through which communities have intervened in the planning process. This has happened through collective action and an organised and educated citizens. Citizens have participated in the planning process by refusing to participate in it, thus creating a contradiction for the state to resolve. In other cases, people came together to re-examine the legitimacy that they had bestowed on the state. Elsewhere, people chose to collectively become large stakeholders in the state apparatus by buying state resources and becoming investors in the state (Kaika, 2017).

Documented cases of the participatory approach to planning can be found in Spain, where stakeholder workshops were conducted based on stakeholder interest-power dynamic to facilitate a water management project. It resulted in the creation of working groups of stakeholders who would be directly or indirectly affected by the program (Cauwenbergh *et al.*, 2018). Recommendations have been made for the creation of an indicator system that could assess community health and help state actors understand concepts such as belonging and 'social cohesion' (Erdiaw-Kwasie and Basson, 2018). Mapping studies in Zimbabwe and Sweden have been conducted to assess the subjects' perception of a particular space to help planners in a consolatory manner, forming real links between the state and the subjects (Preto *et al.*, 2016).

In conclusion, participatory planning has a legal and principled grounding in the Portuguese law. There is sufficient evidence to suggest that it can be used and it can evolve to work in multiple contexts. In addition, there are examples where people themselves were able to create planning instruments in the absence of state action.

Many research methods were used in the report, enabling a comprehensive analysis. The first and main method used for the research was case study analysis. Crowe *et al.* (2011) argued: "Case studies analysis can be used to explain, describe or explore events or phenomena in the everyday contexts in which they occur." This method was used to identify the main problems in the area. The second method was a literature review. It is used to broaden the knowledge and understanding of an issue. It also specifies which methods can be used in the case and helps to identify, select, and analyse information (Kallet, 2004).

A field visit is a method that requires travelling to the site of analysis. In this method, it is important to take pictures and speak with residents to get an under-

standing of the first-hand experiences at the site of the study (Eden, 2019). During the survey, photographic documentation was collected, which enabled us to prepare a map of the study area. The ‘local talking session’ took place on 10 May 2022 and was a meeting with local citizens. This helped us better identify the problems and learn more about the area from the citizens’ perspective and led to the formulation of the main problems.

A stakeholder analysis is a method that leads to the selection of key stakeholders, i.e., people who will be affected or who are going to affect others. There is a need to identify and categorise them. Power versus interest grids is one of the research tools for mapping stakeholders. They help understand the underlying power dynamics between the state and people, as well as internal contradictions in these groups (Bryson, 2004). A SWOT analysis is a method used to identify strengths, weaknesses, opportunities, and threats. Strong and weak points are identified by examining the aspects of the environment, while opportunities and threats come from outside the environment (Gurel, 2017). These methods were instrumental for the authors in devising policy recommendations. A policy recommendation is a written advice for the authorities or people who are currently considered to have significant influence and power (CARDI, 2012).

### **3. CASE STUDY ANALYSIS**

#### **3.1. Case study area**

Peniche is a tourism destination in the western part of Portugal with 27,753 inhabitants and an area of 77.55 sq. km. It has become a popular surfing destination in recent years. There has also been a growth in foreign population from 3.1% to 6.7% over the last 11 years.

The focus of our case study is Baleal Beach, which is part of the Peniche municipality (Fig. 1). It is a unique place with a beautiful view and, as one local resident said, a good place for people learning to surf. The tourism sector is a fundamental economic area for the generation of wealth and employment in Portugal, contributing to the growth and development of many territories, either on the coast, associated with sun and sea tourism, city breaks and golf tourism, or in the interior, within nature tourism, and cultural and cuisine tourism. The locals are content with the fact that tourism growth is occurring, but they are not interested in mass tourism. They would prefer sustainable high-quality tourism where one can also enjoy pristine nature. Many people come to Baleal Beach in caravans, causing heavy traffic in the city during the holiday season. There are also many problems in the spatial development of public spaces.



Fig. 1: Photo locations in Baleal Beach

Source: own work based on Open Street Map.

The main problem identified in the Baleal Beach area is the lack of communication between the municipality and the inhabitants. Residents want to be heard by the authorities and involved in the development process of their town, but to unite them, they need to find a way that will interest them in this process. As the inhabitants concluded in the ‘local talking’ session, “it is hard to get everyone talking to everyone.” This applies to both relationships: first, between the municipality and its residents; and second, between the residents themselves. There is also a problem with the organisation of spatial planning and transparency of decisions. The conflict was triggered by a new municipal master plan that was launched in 2012. Residents only learned about the planned solutions after it was announced and were not asked about any proposals that they would like to include in the city space. The space should be given to the inhabitants and mostly they should decide what their surroundings should look like. Social participation in this area does not run properly, which creates many misunderstandings.

Considering the proposed plan for Baleal Beach and Ferrel parish, we have also identified the following four issues in this area:

- Conflict related to proposed land use with the relocation of restaurants and parking space by the beach,

- Assignment of land near the beach for the development of hotels and private beaches under their management,
- Issues with dealing with tourists during the high season, such as a lack of infrastructure facilities, or parking and transportation problems between Ferrel and Baleal,
- The inhabitants' fear that the inadequacy of current facilities will put pressure on environmental resources, which are a major selling point for this place.

### **3.2. Stakeholder analysis**

In the Baleal case study, a wide range of stakeholders has been defined and classified into four categories: investors, the government, inhabitants, and civil society. Furthermore, these categories have been divided into subcategories for a better understanding of their power-influence and interest levels on a scale of 1–10. The scores have been assigned based on a socio-economic analysis considering the various groups involved and include the following factors:

- Rights – The participatory planning approach requires that there exist legislative instruments [f] that can facilitate such a process. In their absence, they should be created at the national level and structured into various levels of planning governance. The score here depends on the availability of such rights and their implementation in planning governance. The willingness and know-how of the citizens to be able to intervene in planning governance affects how much the different stakeholders identified are 'interested' in a plan's implementation.

- Capital – Real and fictitious [g] capital affects both the conception of the master plan and its implementation. The score considers how much the interest of the stakeholders can be translated into power where power is not legally defined.

- Knowledge – To be able to intervene in any process, actors must also possess working knowledge of the myriad intricacies of the process itself. Without knowing how one can affect a process, the ability to intervene is significantly reduced. Planning, like any other discipline, has its own vocabulary, which can range from simple to esoteric. It is necessary for actors to be acquainted with it or it must require some education on a community level.

- Culture – The ability of citizens to organise and engage with governance depends on the cultural attributes of the group in question. The score is affected by the question 'what is a community?' If concise answers to this question can be given, it is likely that the community will be able to translate its high interest into an ability to affect state policy. The community must be able to organise and create methods of communication in response to state action which will determine their power to interact with the state.

Considering the above parameters, we have classified stakeholders into categories of investors, the government, inhabitants, and civil society. The grades

given to each member of a category class reflect our perception of the power they hold and the interest they may have in a planning exercise conducted by the state. These are in accordance with the considerations made above.

Table 1. Stakeholder analysis

Category	Stakeholder	Characteristics	Power (1–10)	Interest (1–10)
<b>Investors</b>	Landowners	Agricultural land	5	10
		Second homes	5	7
	Local business owners	Hotels	6	10
		Bars	5	9
		Surfing businesses	7	10
		Supermarkets	5	9
		Restaurants	5	9
		Tourism related	7	10
		Shops (other)	4	8
Real estate	7	10		
Factories		6	7	
Fishing		4	5	
<b>Government</b>	Municipality		10	10
	Regional		10	8
	National		10	6
<b>Inhabitants</b>	Permanent residents	Workers	3	9
	Floating population	Second home owners	3	4
		Home rentals (long-term tourists)	2	3
	Tourists	1	5	
<b>Civil society</b>	Community organisations (local)		6	8
	Community organisations (national / subnational)		7	5
	Community organisations (international)		7	5
	NGOs		7	8
	Academia	Polytechnic of Leiria	8	9

Source: own work.

In addition, the scoring results are shown in the graph and categorised into four groups where each category is represented with a colour. The colour red is used for representing the stakeholders in Investors category, blue for the Government, yellow for Inhabitants, and green for the Civil society category in the matrix.

Most of the identified stakeholders are located on the Manage Closely group, where the stakeholders in the Government category (blue) take the highest scores for both interest and power (Fig. 2). The rest of the stakeholders are mostly located in the Keep Informed group, where the stakeholders in the Inhabitants category (yellow) score the highest interest with the lowest power.

Results of the matrix indicated that Inhabitants and the Government are the key stakeholders for the case study and proposed solutions. Therefore, a broader analysis of these key stakeholders showed that the power and interest scores also vary between these categories. As the result of the analysis, permanent residents from the Inhabitants category and the municipality from the Government category were identified as the final key stakeholders. Lastly, the analysis showed that although these two groups share a similar interest in the proposed project, there is a significant gap in their powers.

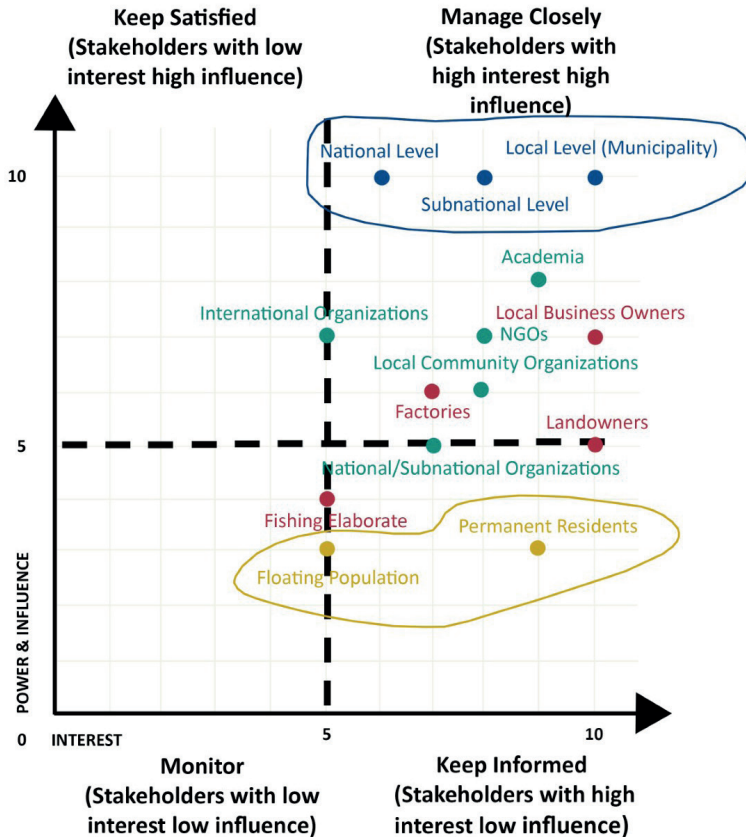


Fig. 2. Stakeholder analysis matrix

Source: own work.

### 3.3. SWOT analysis

A stakeholder analysis showed that focusing on the power dynamics between key stakeholders is crucial for the proposed solution, and, therefore, the municipality, as the most powerful key stakeholder, is suggested to assume the responsibility for the implementation of the participation process to overcome the current conflicts between the stakeholders. Furthermore, the implementation of the participation process as the main strategy in the local government agenda to diversify the power share is seen as the key solution. To understand the benefits and possible consequences of this strategy for the municipality, the SWOT analysis method has been used.

Table 2. SWOT analysis of the participation process for municipality

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>– A good way of showing that the municipality cares for its citizens</li> <li>– Democratic way of decision-making</li> <li>– Predictive tool for conflicts between the stakeholders</li> <li>– Involvement of different perspectives (citizen's perspective)</li> <li>– Strengthening the trust between the authority actors and citizens through collaboration</li> </ul>	<ul style="list-style-type: none"> <li>– A complex organisation</li> <li>– Requires more resources and funding</li> <li>– Requires local authority to share its power</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>– Being a reference / example municipality in Portugal</li> <li>– Funding opportunities for projects from the European Union</li> <li>– Effective tool for implementing social sustainability for the area</li> </ul>	<ul style="list-style-type: none"> <li>– Challenges of changing the current long-term strategies (national / regional)</li> <li>– The opposition could exploit the opportunity to reduce political consensus to the local government</li> </ul>

Source: own work.

According to the analysis, there are various strengths in taking responsibility for leading an effective participation process. Firstly, it is a good way to show that the elected officials care for citizens. It is an indicator of democratic strategic decision-making and can be used as a tool to predict conflicts between stakeholders. It is a useful way for involving different perspectives. Lastly, it is a powerful tool for building trust between the authorities and citizens if the process also involves transparency.

However, there are also multiple weaknesses. It is a complex organisation as the number of actors and the ideas that need to be negotiated increase. Therefore,



the process requires more resources such as time and funding, and the success of the participation process depends on the willingness of the municipality to share its power.

There are also some attractive opportunities for the municipality in assuming the responsibility for the participation process. It has the potential to affect the prestige of the municipality in a positive way and lead to it becoming a reference municipality in Portugal. Therefore, the opportunities for funding from the European Union may increase, and it can be used as a means of implementing social sustainability for the future of the area.

Lastly, there are also threats that can be analysed, namely the challenges of changing the current strategies which are long-term documents and the risk of it being used by the opposition to reduce the political support for the local government.

The SWOT analysis has indicated that municipalities claiming to implement the participation process in urban planning will not benefit their communities but also use their own success in the governing process.

#### **4. POLICY RECOMMENDATIONS**

The stakeholder consultation revealed that the most prominent issue had been the disconnect from the planning and implementation processes. Stakeholders spoke of the municipality being absent from public discussion and having no space or forum to negotiate or discuss the plan. Considering these issues, we have made the following recommendations addressing the municipality:

- Form a working group with the stakeholders to create an action plan that considers the interests of all interested parties. This provides a way for the municipality to establish a line of dialogue with the constituents and creates a path to transparency in the planning process. It will also help elected officials identify stakeholders with joint or mutual interests. It will help the municipality contact willing investors and other private interests. The working group consultation will enable the municipality to moderate the discussion.

- The composition of the working group should accommodate members of civil society, women, and members of socially and politically marginalised communities. It is necessary for working groups to include people who have held public offices in the past so that they are recognised as community leaders, but also navigate through bureaucracy. There should be adequate representation of voices that are not heard or are silenced due to various social factors. They could also include people who are regular yet temporary residents, such as second home owners and surfers who visit in summer.

– Budgeting concerns for a proposal like this could be met with a PPP model or tie-ups with local businesses. Since the proposal requires funds to cover the expenses the municipality will incur, it will be beneficial to investigate Public Private Partnership models that may help local businesses and start-ups use it as a platform to advertise themselves. This will also attract attention from European bureaucrats since it will count as a resource investment in the local community.

– Impact assessment studies (social and environmental) must be made accessible to the public on the local government website rather than having to retrieve them from the APA website. While conducting these studies is mandatory and it is important to incorporate their findings into development proposals, they must also be made available to the public. They will create a level of trust among people about the scientific process, while providing evidence in support of the planning proposal. It will help investors decide about their investments in a particular component of the proposal. The reliability of informed decision-making reduces risks for investors.

– Provide a glossary and/or information on the terms, concepts, acronyms, and regulations that may not be common public knowledge outside disciplinary practitioners. This step will help not only the constituents but also the public officials who are otherwise not required to know various terms in the planning discipline. It will help readers engage with the document without having to worry about not being able to understand it.

– Ensure information accessibility, as well as a grievance registration procedure to avoid exclusion of people with physical or psychological impairments. The more people can engage with the municipality and the development process, the more likely they would be active voters and responsible citizens. Accessibility creates, beyond a sense of trust, a sense of empathy.

– Stakeholder discussions and comments should be addressed and commented on. The same applies to objections raised against the proposal. It is necessary for constituents to feel that their comments are being received by the authorities and addressed regularly. This will also help the state engage with possible investors and stakeholders who may not have the same level of influence as others.

– Create minor design interventions in public spaces to start the conversation, from small issues to bigger structural problems. While this creates a situation for spending funds, it can also serve to attract sponsors and investors who might see opportunities to enter the conversation through this medium. These interventions can serve as points where stakeholders with different levels of influence and interests can meet and engage in conversations that are more social and less official.



Fig. 3. A proposed form of invitation to public consultations

Source: own work.

After analysing all the problems that occur in the area studied and developing some recommendations, we can conclude that participation will play an important role in solving many problems. Authorities must take steps to unite the entire community without excluding anyone. The recommendations are intended for the authorities because their role is to create a space for residents to freely exchange ideas. They also need to encourage people to become more interested in the surrounding space; therefore, we propose to place temporary installations that will spark public discussion about the changes.

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## PART II

## ARTICLES

Agnieszka ROCHMIŃSKA \*

### SUPERMARKET DESERTS IN THE POLISH RETAIL LANDSCAPE IN COMPARISON WITH THE GLOBAL DEVELOPMENT TRENDS IN THIS SECTOR

**Abstract.** The article presents the development of food retail in Poland in comparison with global trends, characterised by the tendency to replace small traditional food stores with large-format stores, such as supermarkets and hypermarkets. This tendency has led to the emergence of retail and food deserts in numerous countries. This is a major problem from the perspective of both practitioners and researchers. In Poland, like in many other countries in the world, similar processes in retail development occur, therefore, researchers should pay attention to the emergence of retail deserts, the so-called ‘supermarket deserts,’ as well as some limitations in terms of access to supermarkets. Many territorial units in Poland, especially in eastern Poland, have no large-format stores. These areas constitute retail deserts and require further micro-scale research.

**Key words:** food deserts, supermarket deserts, supermarket, hypermarket, marketisation, retail landscape, Poland

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## 1. INTRODUCTION

The growth of food retail, especially in developing countries, is characterised by the tendency to replace small traditional food stores with larger stores, such as supermarkets<sup>1</sup> and/or hypermarkets,<sup>2</sup> which is described in literature as the modernisation of food retail. On this basis, researchers began to identify food deserts and retail deserts. This research issue concerning commercially excluded areas is interdisciplinary in nature, as indicated by the interest in the topic not only among geographers, but also sociologists, economists, doctors, politicians, etc. This article focuses primarily on research regarding retail deserts in relation to supermarketisation and hypermarketisation, or phenomena that shape the modern retail landscape of Western European and Central European countries, including Poland. The name 'food deserts' is more suited to areas with no access or limited access to food, while 'retail deserts' describe areas which lack certain categories of retail facilities, e.g., supermarkets or hypermarkets. Obviously, in some cases, the lack of these forms of food stores does not have to cause a limited access to foodstuffs of appropriate quality and price.

An uneven expansion of food retail chains in a country can influence the emergence of retail deserts and food deserts, which may cause difficulties, such as a limited access to some shopping facilities. An uneven development of such individual facilities may lead to the emergence of retail or food exclusion for some social groups. According to M. C. Guy (1998, 2007), major issues include accessibility to shopping facilities and unjust treatment of marginalised social groups, for instance the elderly, the disabled, the unemployed, households with single parents, households with low income, or carless households.

The purpose of the article is to present the development of large-format food retail in Poland (hypermarkets and supermarkets) in comparison with global trends, especially those in Europe. The identification of analogical directions of changes makes it possible to predict further stages of development in this area of the Polish economy. In addition to numerical changes, the article also presents the spatial variation of the phenomenon in question in Poland.

The research on retail also includes studies on food deserts, which are quite extensive in English-speaking countries (USA, Canada, and the UK) but occasional and selective in some European countries (Germany, Sweden, and Slovakia). So far, Polish academic research has not raised the issue of food deserts which cre-

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<sup>1</sup> A store with a retail selling area of 400–2499 sq. m, conducting sales mostly in the self-service mode, offering a wide assortment of frequently purchased food and non-food items (Central Statistical Office of Poland).

<sup>2</sup> A store with a retail selling area exceeding 2500 sq. m, conducting sales mostly in the self-service mode, offering a wide assortment of frequently purchased food and non-food items; usually equipped with a car park (Statistics Poland).

ates a peculiar research gap. Therefore, the additional purpose of this article is to raise awareness of the problem. The article focuses on presenting the trends in the development of large-format food retail in Poland and identifying areas where ‘trading deserts’ could potentially occur. The issue of such deserts is vital from both the practical and academic perspectives.

An in-depth analysis of the academic literature on retail deserts has been conducted mainly on the basis of English literature and statistical data from Statistics Poland (the data of Statistics Poland refers to the number of hypermarkets and supermarkets). The work utilises indices of phenomenon intensity (e.g., the number of people per one market in both supermarkets and hypermarkets), and indices of dynamics (e.g., the changes in the number of hypermarkets and supermarkets in Poland in 2008–2020; the increase in the number of supermarkets in Poland in 2008–2018 per *powiats*<sup>3</sup>).

## 2. WHAT ARE FOOD DESERTS?

The notion of a ‘food desert’ is a relatively broad one and has been defined in different ways. The term was coined in Scotland in the early 1990s (Cummins and Macintyre, 2002: 2115, 2002a: 436). Since then, researchers have been using the term in various ways. For instance, in their research, Hendrickson *et al.* (2006: 372) defined food deserts as “urban areas with 10 or fewer grocery stores and no stores with more than 20 employees.” Cummins and Macintyre (2002a: 436) have defined them as “*poor urban areas where residents cannot buy affordable, healthy food.*” The latter definition focuses on the type and quality of food instead of the number, type or size of food stores available to residents (Walker *et al.*, 2010, p. 876). Guszak *et al.* (2016) reviewed the literature which defined and characterised a food desert. The term was used to describe areas with no food stores (Cummins and Macintyre 1999; Morton *et al.*, 2005), areas with food stores located at a major distance from each other (Coveney and O’Dwyer, 2009; Donkin *et al.*, 1999; Wrigley *et al.*, 2004), areas with a poor selection of fresh and healthy products (Clarke, *et al.*, 2002; Coveney and O’Dwyer, 2009; Gallagher, 2008; Wrigley *et al.*, 2002), as well as areas whose residents have low incomes and therefore face difficulties in accessing suburban supermarkets, due to the lack of cars or non-existent or too expensive public transportation (Coveney and O’Dwyer, 2009; Laurence, 1997; Short *et al.*, 2007). Food deserts are areas (urban or rural) with relatively disadvantageous social and economic conditions, where the problem of the lack of the means of transport increases and residents

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<sup>3</sup> A *powiat* is the second level of local government administration.

are unable to access stores located further away from home and find better retail food sources (e.g., supermarkets) (Apparicio *et al.*, 2007; McEntee and Agyeman, 2010; Walker *et al.*, 2010).

Studies on the occurrence of food deserts are reflected in practice. For instance, during the Australian census of 2001, residential housing was classified as being badly located in terms of access to healthy food, or as food deserts if the census district it was located in had a high percentage of carless households or the distance between the household and the closest supermarket exceeded 2.5 km (Coveney and O'Dwyer, 2009). In the USA, for an area to be classified as a food desert with poor access to foodstuffs, at least 500 people and/or 33% of people in the census must live further than a mile (approx. 1.6 km) from a supermarket or a large food store (in the case of the census in rural areas, the distance exceeded 10 miles, approx. 16 km) (Khalil and Mendelson, 2017; USDA, 2015; Ver Ploeg *et al.*, 2011).

One theory on the emergence of food deserts in the USA was associated with both the development and closing of stores (Curtis and McClellan, 1995; Guy *et al.*, 2004). It is believed that the development of a supermarket network influences the consumers' access to food of better quality, higher diversity, and lower prices. The expansion of these large food stores located outside cities (or on their edges) resulted in the closures of smaller (independent) food stores. The areas where affordable diverse food is accessible only to people with cars or those willing to pay for public transport emerged.

This phenomenon may lead and does actually lead to the emergence of areas with limited access to diverse 'healthy' food. Generally, supermarkets have this type of food on offer at an affordable price. For this reason, some studies associate access to healthy food with access to a supermarket or a large food store. Because of such deliberations food deserts were defined as areas with limited access to healthy and affordable food (Apparicio *et al.*, 2007; Jiao *et al.*, 2012; Križan *et al.*, 2015). Moreover, supermarkets have longer working hours, have better parking facilities, and are attractive to customers (Alwitt and Donley, 1997; Guy *et al.*, 2004). Another approach assumes that the high competitiveness of supermarkets selling general products leads to defining a food desert as an area which creates a retail emptiness (Furey *et al.*, 2001; Walker *et al.*, 2010). This is due to the closure of small local stores which lose against supermarkets and hypermarkets.

Guy and David (2004, p. 223) have identified five characteristics of a food desert:

1. The residents are physically disadvantaged in terms of mobility and accessibility,
2. They are economically disadvantaged, generally low-income earners,
3. As a result, they have poor nutrition/diet as they generally eat cheaper, more filling foodstuffs than traditional meat/fruit/vegetables,



4. They are geographically disadvantaged because of the lack of choice of food stores in their area, and

5. Local stores only supply a limited selection of foods, at higher prices than larger superstores.

From the perspective of researchers, spatial access to large food stores and supermarkets is the precondition for buying and consuming healthy food (Farber *et al.*, 2014). Neighbourhoods with poor spatial and economic access to such stores are colloquially named 'food deserts' (Jiao *et al.*, 2012; Larsen and Gilliland, 2008; USDA, 2014). According to, for instance, Short *et al.* (2007), food deserts are places which converge the transport constraints of carless residents and a lack of supermarkets forcing residents to pay inflated prices for inferior and unhealthy food in small local markets and general food stores (Short *et al.*, 2007, p. 352). There is also an uneven distribution of grocery shops and the presence of disadvantaged neighbourhoods with no access to supermarkets (Walker *et al.*, 2010).

Since the mid-1990s, the concept of an urban food desert has been widely studied in the poor districts of European and North American cities. Food deserts are often characterised as areas with disadvantageous economic conditions, where access to healthy and affordable food is limited due to the lack of modern retail outlets (such as supermarkets) (Battersby and Crush, 2014, p. 143). Even households with cars may not always want to bear the associated fuel costs. In inner city neighbourhoods of developed countries such as the UK, USA, and Canada, the number of supermarkets and large food stores has decreased with only a few independent stores, small supermarkets or discount stores remaining.<sup>4</sup> These stores offer less diverse and cheaper selections of food (Larsen and Gilliland, 2008; Cummins and Macintyre, 2002; Wrigley, 2002). Access to such food is worse for certain groups and it is necessary for people to travel outside their neighbourhoods to purchase cheaper goods (Larsen and Gilliland, 2008). Such city centre neighbourhoods are defined as food deserts and they have become the subject of research on the identification of social exclusion and health-related inequalities in urban areas (Ozuduru, Guldman, 2013, pp. 5–6).

It should be remembered that high-quality food may be delivered by various suppliers, such as large-format supermarkets, corner stores and mobile food trucks, large-format grocery stores, and supermarkets (Block and Kouba 2006). Since spatial access is the precondition for buying and consuming healthy food, these studies focus on the spatial access to large grocery stores and supermarkets (Farber *et al.*, 2014).

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<sup>4</sup> Unfortunately, the article relied on data from the Statistics Poland, where shops are included in the category of supermarkets and hypermarkets because of their surface area. Some discount stores meeting this criterion are included in the supermarket category. The differences between them consist, among other, in the way they are developed and the level of prices.

### 3. TENDENCIES IN THE MARKETISATION OF COMMERCIAL SPACE

Particularly since the early 20<sup>th</sup> century, there have been some changes to the retail maps of individual countries. This was a result of the emergence of new formats of large-format commercial spaces such as supermarkets, hypermarkets, as well as shopping centres of various types and generations. The development of individual facilities was uneven and had different dynamics depending on the country. The term “supermarketisation” is sometimes used to describe the observed increase in the number and market percentage of the modern formats of food retail (e.g., Dries *et al.*, 2004; Reardon *et al.*, 2009).

As a result of the globalisation of the economy, the foreign expansion of trade tycoons has accelerated the process of the concentration of retail chains and resulted in the growing dominance of the biggest retailers in many countries. This expansion mostly applies to emerging markets: Central and Eastern Europe, East Asia, South-East Asia, the Middle East, and Latin America (Kaczmarek, 2010).

The development of modern retail began in the 1930s in USA and soon after in Western Europe. Since the 1990s, this type of retail has become a global phenomenon, spreading throughout all the developing regions. Recognised retail chains from USA and Western Europe have grown on a global scale. At the same time, their business models have been adopted by local companies, many of which have managed to build enormous retail chains and even develop on the international scale. The driving force behind the globalisation of retail was the growing competitiveness between the retail chains from USA and Western Europe (Altenburg *et al.*, 2016).

Reardon *et al.* (2003) have distinguished four waves of supermarket expansion, encompassing different regions and countries in the world. The first wave occurred in the early 1990s mainly in the countries of South America, parts of South-East Asia, Northern and Central Europe (Baltic states, Poland, and the Czech Republic), as well as Southern Africa. The second wave started in the mid-1990s and encompassed parts of South-East Asia, Latin America, South America, as well as Northern and Eastern Europe (e.g., Bulgaria). The third wave emerged in the mid-2000s – supermarkets spread to other parts of Central and South America, South-East Asia, China, India, Eastern Europe, and Russia. The fourth wave encompassed mostly the countries of Sub-Saharan Africa and South Asia.<sup>5</sup>

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<sup>5</sup> More in-depth information can be found in: Reardon, T., Timmer, C. P., Barret, C. B. and Berdegué, J. (2003), ‘The rise of supermarkets in Africa, Asia and Latin America’, *American Journal of Agricultural Economics* 85 (5), pp. 1140–1146. *Making Retail Modernisation in Developing Countries Inclusive. A Development Policy Perspective*, 2016, T. Altenburg, E. Kulke, A. Hampel-Milagrosa, L. Peterskovsky, C. Reeg, Deutsches Institut für Entwicklungspolitik, German Development Institute, nr 2.

In the early and mid-1990s in Africa, Asia, and Latin America, the supermarket revolution began (Reardon and Berdegué, 2006), fuelled mostly by foreign direct investments (FDIs) from renowned American and West European food store chains (Altenburg *et al.*, 2016). At that time (the mid-1990s) various stages of commercial development could be distinguished in Western Europe (Kłosiewicz and Strużycki, 1997):

- stage of traditional development (in Greece and Portugal),
- stage of intermediate development (in Spain and Italy),
- stage of dynamic development (in Belgium, the Netherlands, Denmark and France),
- stage of most dynamic development (in Germany and the United Kingdom).

During the times of the communist regime, Central and East European consumers bought the majority of food products in state-owned retail stores and co-operatives, as well as fresh produce in private shops and at farmers' markets (fruit and vegetable markets). During the transition stage in the 1990s, the retail sector was privatised and supermarket chains with foreign and domestic capital began to emerge. All countries of Central and Eastern Europe have undergone the same three phases of retail transformations, with major differences in the time it took to transition from one phase to another. The first phase, i.e., "the communism era," was the period prior to reforms. The second phase, i.e., "the transition phase," was the first stage of transformation, wherein serious reforms took place, including the privatisation and liberalisation of the market. In the third phase, i.e., the "globalisation era," large investments of international enterprises occurred in the retail sector. All countries of Central and Eastern Europe began the transition phase in 1989–1991. The subsequent phases were much more diverse. For instance, countries such as the Czech Republic, Hungary, and Poland were first wave countries in terms of retail transformation, with globalisation occurring circa 1996. Balkan states, such as Croatia, Romania, and Bulgaria, were part of the second wave, with globalisation of retail beginning in the late 1990s. In the third wave countries, including Russia and Ukraine, the globalisation of retail began only in 2002 (Dries *et al.*, 2004).

The structure of large-format stores in individual European countries is diverse as is the saturation of these retail facilities. On the one hand, there are countries with more than 450 large-format stores per million residents (Norway, Austria) and, on the other, countries with less than 150 such stores per million residents (Turkey, the United Kingdom, Slovakia, Hungary, Poland, and Portugal) (Fig. 1). The list provided by Nielsen (2014) shows that Poland was a market with poor saturation of large-format shopping facilities, which brought on their intense development in the following years.

The natural decrease in retail selling area has resulted in a greater concentration of shopping facilities; currently, it is common that only 3–4 biggest chains control as much as 90% of a market in a country (Geomarketing, GfK, 2017). Despite the facts presented above, further decreases in retail area per person are expected.

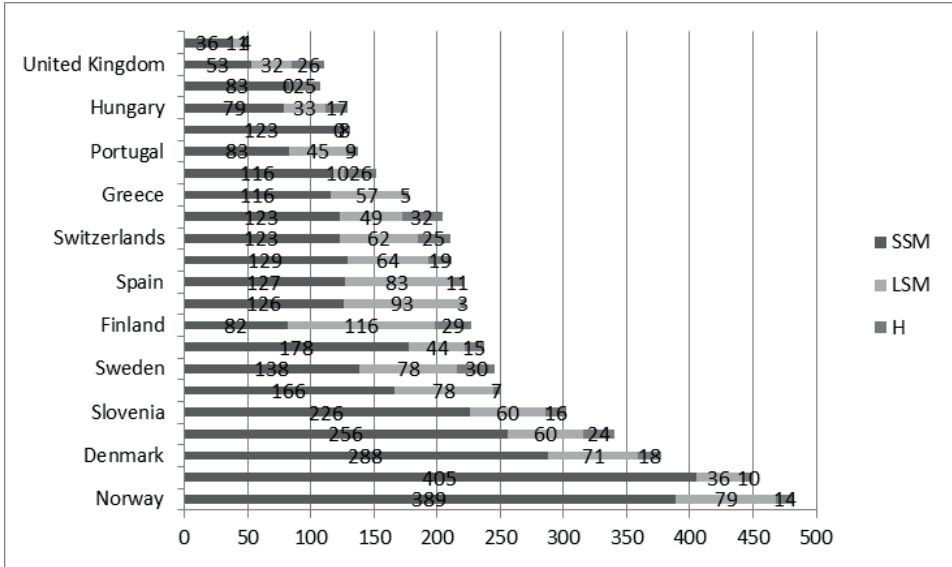


Fig. 1. The number of supermarkets and hypermarkets per 1 million of residents in European countries SSM – supermarkets (400–1000 sq. m); LSM – large supermarkets (1000–2500 sq. m); H – hypermarkets (>2500 sq. m) (Nielsen, 2014) Nielsen, 2014. GROCERY UNIVERSE 2014, Results of the 52nd inventory of retail grocery in Belgium, drawn up by Nielsen

Eastern markets still have some potential to obtain new retail areas. Some of the western chains took advantage of that in order to further their development (e.g., Auchan, Carrefour, the Delhaize Group or the Agrokor Group). Another new tendency is to introduce new concepts which offer customers a better sales culture and customer service, as well as more convenient shopping (usually Lidl, partially also Kaufland) (Kunc and Križan, 2018). In 2016, the retail landscape in individual countries was still diverse. Economies with minor retail trade, with less than 0.8 sq. m per resident (Ukraine, Romania, Bulgaria, and Greece) functioned right next to countries with a large surface area of more than 1.6 sq. m per resident (Austria, Belgium, and Netherlands) (Table 1).

Table 1. Retail selling area per person in 2016 in selected European countries (in sq. m)

Country	Retail area (sq. m)	Country	Retail area (sq. m)
Austria	1.67	Czech Republic	1.04
Belgium	1.64	Italy	1.03
Netherlands	1.61	Hungary	1.02
Switzerland	1.47	Slovakia	1.01
Germany	1.44	Poland	0.95

Country	Retail area (sq. m)	Country	Retail area (sq. m)
Sweden	1.27	Greece	0.74
France	1.23	Bulgaria	0.74
Spain	1.12	Romania	0.70
Croatia	1.10	Ukraine	0.44
Great Britain	1.09		

Source: REGIODATA research (2017): Regional economic data for Europe [online]. Available at: <http://www.regiodata.eu/en/> [accessed on: 12.01.2022]; after: Kunc, J., Križan F., 2018, Changing European retail landscapes: New trends and challenges, *Moravian Geographical Reports*, 26 (3), p. 152.

One of the characteristic features of European retail trade is the possibility of distinguishing two types of its development, the so-called autonomous and colonised markets. Autonomous markets include: German, British, French, and Scandinavian markets. They have a relatively low presence of foreign chains and their native retail is somewhat specific, for instance the native hypermarket chain Carrefour predominates in France, while the discount chain Aldi is most popular in Germany. An unusually strong position of consumers' cooperatives is typical of Scandinavian countries. Southern European markets (Spain, Portugal, Italy, and Greece) as well as Central and Eastern European markets fall into the second category of countries with a predominance of foreign retail chains (Ciechomski, 2010).

#### **4. INTERNATIONALISATION AND GLOBALISATION OF POLISH RETAIL**

After the Second World War, in the Polish People's Republic, in accordance with the law that considered state ownership the basis of the new political system, the so-called battle for retail was initiated midway through 1947. It largely led to the nationalisation of retail trade. In the 1950s and 60s, the construction of large-format department stores became widespread in Poland as one of the instruments in the struggle for trade. The stores included cooperative and common department stores, where state-regulated prices prevailed, and which were to serve as competition for private stores. However, these large-format forms could not be compared to modern markets and shopping centres constructed in other countries at the same time (different architecture, organisation, principles of functioning, and smaller surface areas – the largest had surface areas of approx. 5,000 sq. m).

Polish retail trade began to undergo a dynamic transformations in the late 1980s. Initially, these changes involved only a dynamic growth in numbers resulting from establishing small private shops. As a consequence of these changes, Poland in the early 1990s saw a rapid increase in the number of stores opened by Polish entrepreneurs. Usually an owner established a single store, rarely – two or more. Traditional stores with small surface areas predominated. “Only between 1989 and 1991 did the number of stores in Poland increase more than twofold (from approx. 152,000 to 311,000)” (Cyrson and Kopczyński, 2016). The numbers continued to increase until 2008, when Statistics Poland registered more than 385,000 commercial facilities. Since then, the tendency has reversed, and a gradual decrease in the number of stores has been taking place. In 2020, only approx. 320,000 such shops were registered.

As a result of the growth in shop numbers, the Polish retail trade in the late 20<sup>th</sup> and the early 21<sup>st</sup> century was still largely fragmented. In 2003, there were approx. 12 stores per 1,000 residents. In comparison, in the same year this value was 7.8 in France, 6.2 in Sweden, 5.8 in the United Kingdom, 5.6 in Finland, and only 5.0 in Austria. However, it should be mentioned that Poland was not the only country with such a high dispersion of retail trade. In some European countries it was even higher: Portugal had 13.3 stores per 1000 residents, Italy 15.6, and Greece 17.4 (Cyrson and Kopczyński, 2016).

The 1989 political upheaval caused transformations to all sectors of the national economy, including significant changes to retail trade. Among other things, the Polish market was opened to foreign capital, including one investing in large-format trade. A poor saturation with shopping facilities and a lack of modern retail forms resulted in the new and unfamiliar shopping facilities (supermarkets, hypermarkets, and shopping centres) quickly gaining numerous supporters in the form of Polish consumers, which influenced their development to spiral. In the 1990s, a gradual increase in the wealth of an average Polish consumer occurred, lifestyle was becoming more consumerist, and car ownership increased (which significantly increased access to large-format stores). This encouraged foreign investors to establish new shopping facilities. Those and other factors also determined the development of modern forms of retail concentration, i.e., shopping centres.

In the first transformation years in Poland, there was no large national capital specialising in retail. The gap was filled by foreign capital in the form of direct investments. Foreign capital saw incentives to invest in large-format stores in the form of: favourable tax regulations, low prices of purchasing or leasing real estates, the availability of qualified workforce, as well as a large and absorptive market. Large-format stores developed rapidly also due to the experience of foreign retail companies with global reach, large capital, and modern management (Wrzesińska, 2008).

It has already been mentioned that in the early 1990s, foreign retail chains began to enter the Polish market with large-format stores, including facilities

with fast-moving consumer goods (FMCG): supermarkets (e.g., Billa, Champion, and Rema 1000), discount stores (e.g., Plus, and Biedronka), and hypermarkets (e.g., Geant, Tesco, Carrefour, and E. Leclerc), but also specialist hypermarkets with non-food goods, such as IKEA, Nomi, and Obi. In 1990, the German company Billa (since 2001 known as Elea, taken over by the French Auchan) opened the first supermarket in Poland, while the Belgian chain Globi was the precursor of discount stores with its first shop established in Warsaw (owned by the French Carrefour since 2000). The German HIT was the first hypermarket established in Poland (in 1994), with all 13 stores taken over by the British Tesco in 2002.

J. Dawson and J. Henley (1999), among others, explained why Poland was so attractive to large shopping chains. They enumerated the following factors which attracted foreign retail investors: large internal market resulting from the demographic potential of the country, the increasing wealth of Poles, enthusiastic consumerist attitudes (similar to the habits of western post-industrial societies), stable macroeconomic conditions, and a low competitiveness of native capital in the 1990s.

Yet another crucial change in retail in the early 1990s was privatisation – the number of stores owned by the state was decreasing, while the number of those owned by private entities was rising. In only 4 years, between 1989 (25,000) and 1993, the number of private stores tripled (Cyrson and Kopczyński, 2016). In 2003, there were as many as 456,000. In the following years the tendency reversed (394,000 in 2007). At the same time, the number of retail facilities owned by the public sector decreased drastically from 27,000 in 1989 to approx. 1,300 in 2007 (Gazdecki, 2009).

With the development of market economy, the nature of Polish retail has changed significantly. Aside from the already-mentioned changes associated with the radical increase in shopping facilities, privatisation of retail, and its internationalisation (the emergence of foreign chains), Szromnik (2001) has also mentioned the development of street-market retail, the strengthening of newly made connections between trade and industry, the modernisation of trade techniques and customer service procedures, and the implementation of merchandising experiences in retail.

Ciechomski formulated the model of selective development of retail trade in Poland as early as in 2010, predicting that within 10–20 years the FMCG market would be dominated by the following forms of retail: large-format retail (modern shopping centres), delicatessen (supermarkets with premium grade goods), discount stores (shops based on the cost leadership strategy), neighbourhood stores (convenience stores), and internet retail (online retail with home delivery of highly processed food, substances and household goods) (Ciechomski, 2010).

Despite the existence of certain differences, especially the large percentage of small stores, in the early 21<sup>st</sup> century general European tendencies and trends were

observed in Poland. This is largely due to the internationalisation and globalisation of Polish trade, including (Drzazga, 2016):

- fast development of electronic retail,
- numerous retail companies with base retail facilities also beginning to conduct business online,
- the development of new types of retail units, e.g., convenience stores,
- the emergence of hybrid retail facilities (e.g., supermarkets combined with delicatessen stores),
- the intense development and later the strengthening of the market position of known retail units, such as supermarkets, hypermarkets, and discount stores,
- intense development of shopping centres,
- decreasing number of department stores and trade houses.<sup>6</sup>

## 5. SUPERMARKETISATION OF POLISH SPACE

In Poland, in the first decade of the 21<sup>st</sup> century the percentage of stores with large selling areas (over 400 sq. m) increased rapidly. This was caused by a fast development of the network of supermarkets, discount stores, hypermarkets, and shopping centres, which mostly belonged to foreign retail companies with large capital. The first and the beginning of the second decade of the 21<sup>st</sup> century also saw an intensification in the internationalisation and globalisation of Polish retail. Polish retail became an expansion area for the largest global trade companies: the English Tesco Plc, the French Carrefour SA, and the German Metro Gruppe (Real, Media Markt, Saturn, and Makro Cash&Carry). Aside from the above-mentioned companies, which have remained the largest global retail companies for many years now, a major role in the internationalisation of Polish retail was also played by other foreign retail companies with large shopping chains, such as: Jeronimo Martins from Portugal, Groupe Auchan from France, and Rewe AG, Edeka Gruppe, Schwarz Gruppe, Aldi Gruppe, and Tengelmann Gruppe from Germany. The internationalisation and globalisation of Polish retail have significantly accelerated concentration in this economic area in the country (Drzazga, 2016).

Between 1992 and 2008, the number of retail facilities with a surface area of 400 sq. m or higher increased from 1,973 to 8,634, so the absolute value of the increase amounted to 6,661 (Fig. 2), or 437.6%. The dynamics was the lowest between 1992 and 1994 with 101.1%, but it increased in the following years with an average annual value of approx. 111.1%.

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<sup>6</sup> The number of department stores in 2000–2010 decreased from 137 to 67 and currently (2020) there are 75 department stores in total. The number of trade houses has decreased from 780 in 2000 to 157 in 2020.



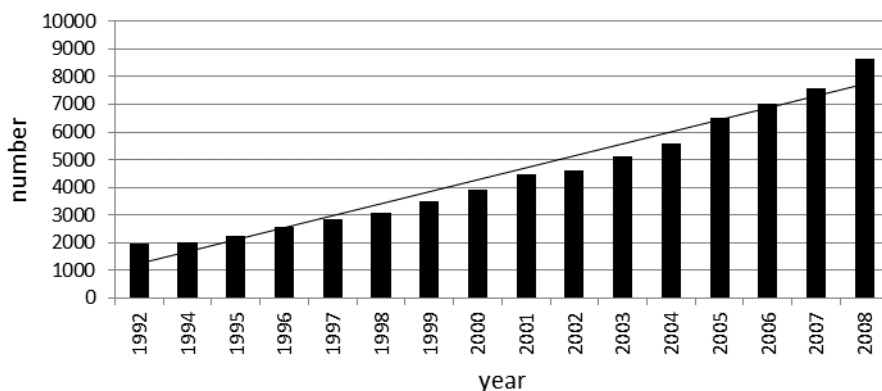


Fig. 2. Changes in the number of stores with a surface area of 400 m<sup>2</sup> in Poland in 1992–2008

Source: M.Gazdecki, 2010, 'Koncentracja handlu detalicznego w Polsce', *Journal of Agribusiness and Rural Development* 2(16), Uniwersytetu Przyrodniczego, Poznań. Dane pozyskane w oparciu *Rynek wewnętrzny z lat 1991–2008*. 2008. GUS, Warszawa.

In 2004, the method of classifying shops changed, with the largest divided into four groups in accordance to their surface area: 400–999 sq. m, 1,000–1,999 sq. m, 2,000–2,499 sq. m, and with a surface area of  $\geq 2500$  sq. m. In terms of organisational forms, those are department stores,<sup>7</sup> trade houses,<sup>8</sup> supermarkets,<sup>9</sup> and hypermarkets.<sup>10</sup>

The first hypermarket in Poland opened in Warsaw in 1994. It belonged to the German chain HIT (taken over by Tesco in 2002). In the following years, other chains appeared. After several years of the predominance of small traditional stores, the expansion of large-format stores, especially hypermarkets, began. The upward trend in the number of hypermarkets lasted until 2014, but after that the trend reversed and decreases have been observed and the number has begun to decrease (546 in 2020).<sup>11</sup>

As Mazurkiewicz (2020) indicated, hypermarkets have continued to take the market by storm from the 1990s onwards. Polish chains were convinced that large

<sup>7</sup> A multi-section store with a retail selling area of 2000 sq. m or more, selling a wide and universal assortment of non-food goods, but often also food; it can also conduct additional catering and services (Statistics Poland).

<sup>8</sup> A multi-section (with at least two sections) store with a retail selling area of 600–1999 sq. m, selling goods of similar assortment to the one offered in department stores (Statistics Poland).

<sup>9</sup> A store with a retail selling area of 400–2,499 sq. m, conducting sales mostly in the self-service mode, offering a wide assortment of frequently purchased food and non-food items (Statistics Poland).

<sup>10</sup> A store with a retail selling area exceeding 2,500 sq. m, conducting sales mostly in the self-service mode, offering a wide assortment of frequently purchased food and non-food items; usually equipped with a car park (Statistics Poland).

<sup>11</sup> This is, among other things, the result of the British TESCO withdrawing from the Polish market.

stores with enormous assortments of goods would dominate the market. In Poland, the retreat from large areas in favour of smaller and medium-sized shops, but closer to home, is noticeable (Mazurkiewicz, 2020).

The situation is different with supermarkets, whose market continues to grow dynamically. In 2008, there were nearly 4,000 supermarkets in Poland, with twice as many (more than 8,000) in 2020 (Fig. 3).

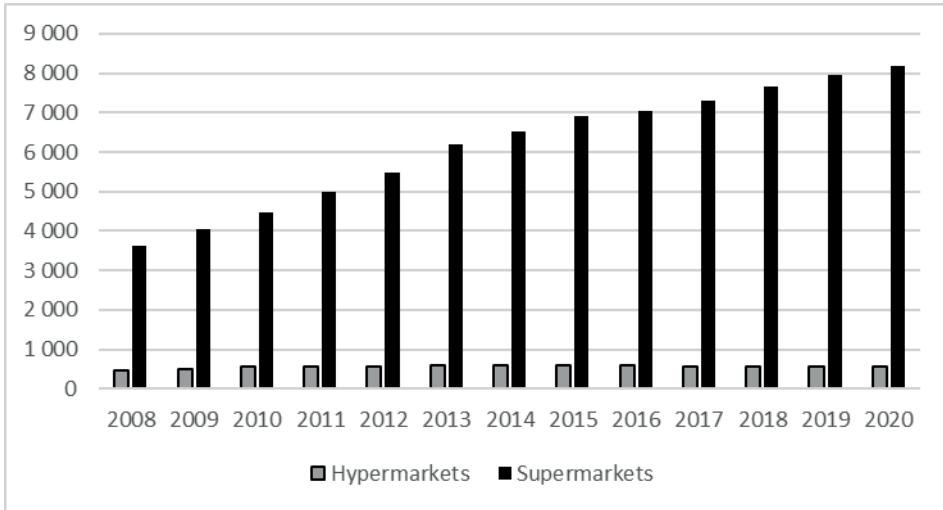


Fig. 3. Changes in the number of hypermarkets and supermarkets in Poland in 2008–2020

Source: Own work on the basis of data provided by Statistics Poland

The spread of qualitatively new trading units has been uneven. The expansion of the biggest ones began in the largest cities and only later crossed into medium and smaller towns. Yet the location strategies of individual companies were diverse. Some focused on select regions of the country, others considered the sizes of settlement units and their consumerist or purchasing potential. Competitiveness also remained a major factor in the adopted location strategies. It should be remembered that the times when individual companies entered the Polish market differed, additionally there were changes in ownership that resulted in the process of rebranding and divestments<sup>12</sup> in retail.

After saturating large urban centres, retail chains began to expand to ever smaller centres, especially main cities of *powiats* that offered better potential for good sales. This saturation is reflected in a denser network of facilities and de-

<sup>12</sup> Divestments are “reductions to the range and scale of an organisation’s functioning which are voluntary, planned or forced by a crisis, and involve relinquishing some parts of the business or discarding the whole business, mostly through sale” (Osbert-Pociecha 1998, p. 11).

creased distances between stores within a chain. Food discount stores are most often the driving force behind such investments, since they win the battle for their clients' wallets. Those were initially facilities with a basic assortment and low prices, but due to the continuous development of their offers they became a predominant form of retail, similar to the concept of supermarkets (Nowakowska and Palicki, 2016). For several years now food retail has been saturated with hypermarkets, but supermarket and discount stores still continue to expand (Cyrson and Kopczyński, 2016).

The development of supermarkets in the country (as seen in Fig. 4) is uneven. The greatest growth dynamics within the period of 10 years was observed in western Poland (even up to 4 stores per 10,000 people) in urban areas, in areas with the highest numbers of tourists, and in borderlands (the western border with Germany and partly also the southern border with the Czech Republic). The weakest development occurred in the south-eastern part of the country with less than 1.3 stores per 10,000 people (Fig. 4).

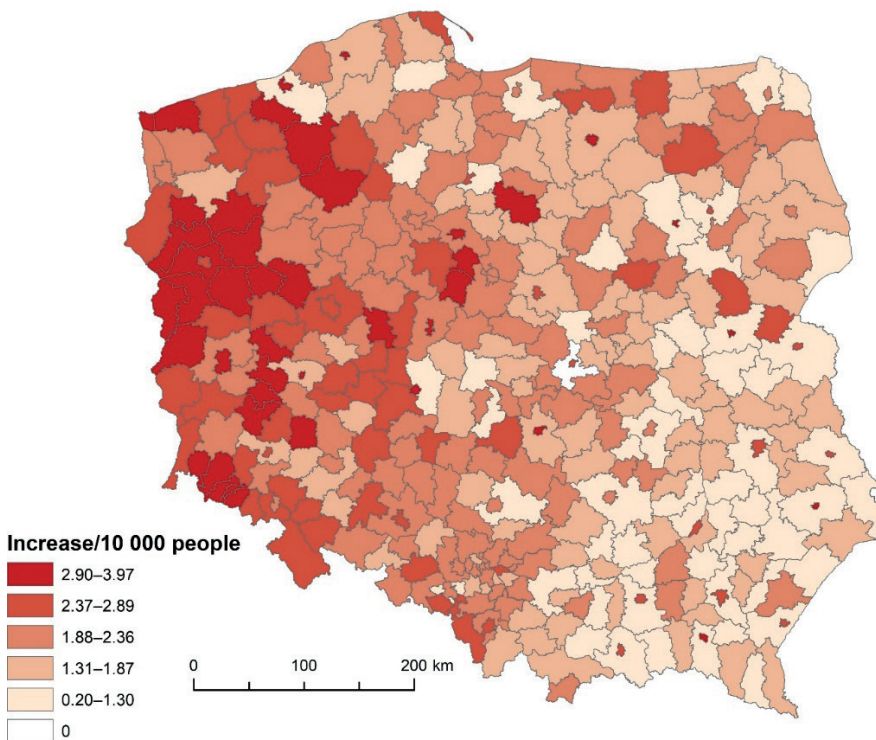


Fig. 4. Increase in the number of supermarkets in Poland in accordance with *powiats* in 2008–2018

Source: own work.

The demand for goods and services offered in retail facilities is generated not only by local or domestic households, but also consumers from neighbouring countries. This is mostly visible in borderlands, where the residents of neighbouring countries frequent retail facilities more often than the residents of the country (city or region). This phenomenon is common in areas where well-developed and weaker economies meet. In case of the latter, both goods and services are competitive in terms of price. The differences in currency exchange rates are also favourable to shopping tourism (Foryś, 2014). In this case, obviously, the possibility of crossing the border is also a factor, due to such obstructions as, for instance, rivers.

For several years now, the tendency to shop in smaller-surface stores has been observed. There are numerous causes of this phenomenon. Discount stores (with smaller surface areas) gain significance and their percentage in the food market continues to grow. Poles perceive them as offering products with a good quality-to-price ratio. More and more often consumers also appreciate the comfort of shopping, choosing stores located closer to home, with no need for additional travel (Cyrson and Kopczyński, 2016, pp. 20–21).

## 6. SUPERMARKET AND HYPERMARKET DESERTS

In studies on food deserts some researchers consider the accessibility to supermarkets as facilities with a diverse, rich assortment, providing healthy and affordable food (e.g., Gay *et al.*, 2004; Apparicio *et al.*, 2007; Jiao *et al.*, 2012; Battersby and Crush, 2014; Križan *et al.*, 2015; Guszak *et al.*, 2016).

The uneven expansion of food store chains in Poland (supermarkets and hypermarkets) may influence the appearance of food deserts and lead to the phenomenon of retail or food exclusion. The lack of such stores in some territorial units may foreshadow the appearance of food deserts there. In such areas, residents may have limited access to a diverse offer of goods, due to, for instance, transportation limits (no car or underdeveloped public transport), economic limits (travel expenses or prices of goods), assortment limitations (lack of retail facilities or small stores without a diverse offer), and health limitations (immobility or difficulty in getting around).

Figure 5 shows the number of residents per one supermarket or hypermarket in 2020 per administrative units. Many areas in Poland have no such forms of retail and are therefore categorised as potential food deserts. The highest number of units without these stores is in eastern Poland (the Lublin and Podlaskie Voivodeships), south-eastern Poland (the Subcarpathian Voivodeship) and north-eastern Poland (the Warmian-Masurian Voivodeship). In territorial units with supermar-

kets and hypermarkets, their index is often relatively high, with more than 9.5000 residents per one shopping facility. The situation is different in the western part of the country (the Greater Poland and Lubuskie Voivodeships), south-western Poland (the Lower Silesian Voivodeship), north-western Poland (the West Pomeranian Voivodeship) and in southern Poland (the Silesian and Opole Voivodeships). Those areas have few units without supermarkets or hypermarkets, and there is more of them in places where they do exist than in eastern parts of the country, which translates into a lower number of residents – often less than 3.9000 – per one supermarket or hypermarket (Fig. 5).

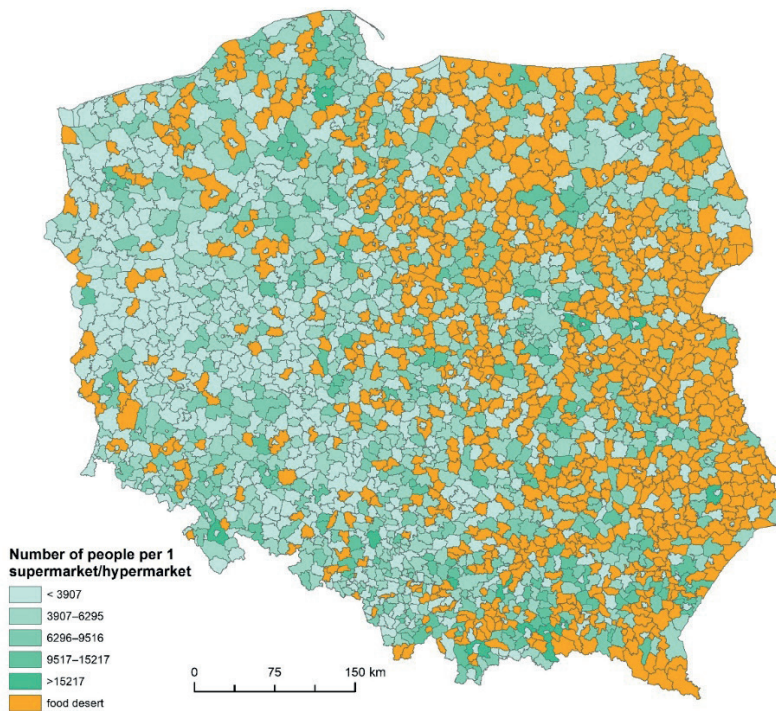


Fig. 5. Number of people per one supermarket or hypermarket in Poland in 2020, per administrative units

Source: own work.

The unevenness of supermarketisation is the result of, among others, the varied levels of social and economic development in individual regions. Eastern areas are largely agricultural, with a lesser density of settlements, and residents with lower income. According to Statistics Poland, the average monthly gross income in relation to the national average (Poland = 100) in 2020 was the lowest

in the Subcarpathian Voivodeship (85.2%) and the Warmian-Masurian Voivodeship (85.3%). The highest was recorded in the Masovian Voivodeship (119.2), although it should be mentioned that it is the largest voivodeship in terms of surface area and contains the Warsaw Metropolitan Area, which boosts the index (which is lower in other parts of this administrative unit). The Lower Silesian Voivodeship (with its capital in Wrocław) also exceeds the value of 100, with 103.1. The differences in the level of social and economic development in Poland stem not only from the differences in environmental conditions, but also historical ones. For more than a century individual areas of the country functioned within different state organisms, during the Partitions of Poland. The eastern and central Poland was incorporated into Tsarist Russia (Russian Empire), the south-eastern Poland (the Subcarpathian Voivodeship) was incorporated into the Austro-Hungarian Empire, and the remaining northern, western and southern areas were incorporated into Prussia. This long period in Polish history to this day impacts the distribution of numerous social and economic phenomena, in many cases showing the preservation of the borders from the era of the Partitions.

The role of national borders was mentioned when describing the dynamics of the development of supermarkets and hypermarkets. Poland is part of the European Union (EU), and therefore it is open in the south and west, allowing for the free crossing of borders. The difference in prices, mostly between Poland and Germany, results in increased shopping tourism in Poland, which contributes to the retail investors' interest in these areas. That is why the number of units without supermarkets is low. The rivers Lusatian Neisse and the Oder constitute Polish borders, therefore, they are a barrier hindering the free crossing – the *gminas*<sup>13</sup> (communities) with no border checkpoints develop more weakly in terms of retail. Eastern and northern Polish borders are simultaneously the borders of the EU with Ukraine,<sup>14</sup> Belarus, and Russia which means there are regulations in place when it comes to crossing them. Additionally, the purchasing power there is weaker and the prices are lower. For these reasons, eastern areas are less attractive to investors in search of locations for future supermarkets and hypermarkets.

When it comes to the retail landscape, urban areas are highly attractive to investors, for example the Warsaw Metropolitan Area, the Gdańsk Metropolitan Area, the Bydgoszcz–Toruń Metropolitan Area, areas with high urbanisation, such as Upper Silesia or tourist locations (mainly mountain towns and the Masurian Lake District).

The research on the locations of food deserts considering only supermarkets and hypermarkets is based on a significant simplification. Areas without such objects do not necessarily constitute a retail desert with limited access to grocery stores offering a non-diverse assortment of goods.

<sup>13</sup> *Gminas* are administrative districts. A *powiat* is usually subdivided into *gminas*.

<sup>14</sup> The analysis is based on the data from 2020, from before the outbreak of the war in Ukraine in 2022.

Subject literature seems to confirm such observations. For instance, Ver Ploeg (2011) has claimed that the lack of access to supermarkets does not necessarily mean the access to products is limited, since they can be purchased in other food stores, such as ethnic stores, specialist stores, and markets. Rose *et al.* (2009) discovered that certain districts (e.g. Village de L'Est, Treme in New Orleans) identified in some studies as food deserts due to the lack of supermarkets could not be considered food deserts, since they had many smaller stores with basic food products.

A state-wide research involving only access to supermarkets and hypermarkets identifies areas where residents have potentially limited access to numerous products. Such analyses should be continued on the microscale and they should consider other retail units to verify the presence of food deserts.

## 7. CONCLUSIONS

On the global scale, supermarkets and hypermarkets are the predominant form of food retail, and in developed economies they have the highest percentage in total sales. In USA, hypermarkets constitute the basic form, but in Western Europe, where urban areas are more densely populated, the space is limited, more people use public transport and there are greater physical limitations to constructing large-format stores (e.g., supermarkets, hypermarkets). Additionally, many regulatory authorities in Europe prohibit the construction of large stores in central locations.

In some countries, especially in Germany, the United Kingdom and USA, hypermarkets and supermarkets are put under pressure by discount stores which develop rapidly and take over many customers of traditional supermarkets. Discount stores offer a cheap, limited and standardised assortment of articles, which lowers their costs (Acker, 2011; Jürgens, 2011).

The emergence of new forms of retail on the Polish market has had an impact on its retail map. The changes have involved a major decrease in retail facilities, which may suggest that numerous stores did not meet the challenge of competing with new retail forms and/or failed to adapt to the new retail reality and meet consumers' expectations. Retail in Poland has also been influenced by an increase in consumer mobility (higher level of car ownership). Some customers were no longer dependent on the location of stores or the availability of public transport. New types of retail facilities had car parks and favourable locations (near transport routes with high traffic capacities), thus becoming attractive to customers. Their attractiveness was further increased through their assortment of goods and their competitive prices, reinforced by numerous special offers.

As it has already been indicated, the development of retail in Poland is similar to that in other parts of the world. In particular, supermarkets, and discount and convenience shops are gaining in importance. This trend in many places may, on the one hand, facilitate access to groceries, but, on the other, it leads to the closure of small local shops. The purpose of the article was not only to present the tendencies in the development of large-format stores in the era of globalisation and internationalisation, but also to identify potential areas of retail exclusion. The research conducted has shown that areas less saturated with such shops are located in the east and south-east of Poland. A more detailed identification of areas in Poland that are in danger of becoming trade deserts may become a valuable tip for investors in food retail, both foreign and – perhaps above all – domestic.

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## ESTIMATING URBAN VULNERABILITY TO FLOOD AND HEAT HAZARDS: A CASE STUDY IN THE MUNICIPALITY OF THESSALONIKI, GREECE

**Abstract.** Continuous urban expansion, the conversion of open land to built-up areas and increased energy consumption have diversified the microclimates of cities. These phenomena combined with climate change hazards increase the vulnerability of cities, in a spatially heterogeneous way. Therefore, cities should become more resilient to those threats, by identifying and prioritising highly vulnerable areas. The main purpose of this study is to develop a spatial-based approach to assess the vulnerability of climate-related hazards in the urban environment of Thessaloniki (Greece). In this context, spatial and temporal patterns of land surface temperature were estimated through the calculation of various spectral indices, to conduct an analytical Urban Heat Island vulnerability assessment. Furthermore, the FloodMap-Pro application was used to identify coastal areas that are vulnerable to sea level rise, while historical floods were digitised in order to identify potential urban (flash) flood zones. The most important outcome of this paper is the creation of an integrated spatial vulnerability index, which identifies the urban areas that are prone to all these hazards. The final vulnerability map illustrates how the city of Thessaloniki is exposed to several climate-related hazards and that many areas/neighbourhoods are prone to one or more risk factors.

**Key words:** urban vulnerability, urban heat island, spectral indices, flood risk, spatial heterogeneity.

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## 1. INTRODUCTION

Emerging climate change risks are particularly relevant for urban areas due to high population density, the concentration of built assets, and economic activities (Buchholz *et al.*, 2016). High temperatures, consecutive heat days, floods, droughts, sea-level rise, and storms are some of the most significant threats that affect cities and generally urban stability (Haines *et al.*, 2006). In the long run, continuous urban expansion, the conversion of open land to built-up areas, and increased energy consumption have diversified the microclimates of cities. One of the best-known effects of the influence of the urban environment on its climate is the ‘urban heat island’ (UHI), which refers to increased temperatures over an urban area as compared to the surrounded rural areas (Kim, 1992; Kumari *et al.*, 2021; Sedaghat and Sharif, 2022). Higher urban heat is mainly caused by anthropogenic heat released from vehicles, power plants, air conditioners, and other heat sources, and by the heat stored and re-radiated by massive and complex urban structures (Rizwan *et al.*, 2008). Many research studies have been conducted to investigate the adverse effects of UHI (e.g., Changnon *et al.*, 1996; Konopacki and Akbari, 1998; Dong *et al.*, 2014; Santamouris *et al.*, 2015), as well as to focus on the UHI effect and to investigate its spatio-temporal distribution with regards to the development of cities or urban expansions (e.g., Memon *et al.*, 2009; Qiao *et al.*, 2014; Zhou *et al.*, 2016).

Furthermore, densely populated coastal cities, with compact urban structure, are exposed to a significant level of (flash and coastal) flood risk due to their inability to drain rainwater from the intense presence of asphalt, concrete and other impermeable materials (Matsa and Mupepi, 2022). Flooding is recognised worldwide as one of the costliest natural hazards (IPPC, 2014). Due to climate change, as well as to socio-economic and urban development, the occurrence of urban flooding is predicted to increase in the future, which is likely to lead to increasing flood risk to people and property in urban areas (Xia *et al.*, 2011; Sharma *et al.*, 2018). Finally, as global average temperatures have risen by 1 degree since the pre-industrial period (due to human activity) and continue to increase, the glacier melt is an expected consequence, which is likely to cause sea-level rise, and thus to negatively affect all the coastal areas of the planet (Boselo and de Cian, 2014; IPCC, 2018). Estimating the potential future exposure of coastal communities to flooding is, therefore, a critical task for long-term planning and risk assessment, thus implying the need for coastal urban areas to cope with climate-related uncertainties (Purvis *et al.*, 2008; Ju *et al.*, 2019). There are several (adaptation) strategies that cities can use in order to reduce their vulnerability to sea level rise and coastal flooding. So far, most of these strategies are reactive (following a specific event), but there is a need for more comprehensive and proactive approaches for planned adaptation of cities and communities to these hazards (Dedekorkut-Howes *et al.*, 2020).

Climate research through modelling and simulation approaches predict a continuing trend of rising temperature that will mainly affect southern Europe and Mediterranean areas/countries (King and Karoly, 2017). According to a WWF report on the short/medium term effects of climate change in Greece, the city of Thessaloniki (i.e., the second largest urban centre in the country) is expected to be one of the most affected cities by climate change. Namely, this report emphasised that during the period 2021–2050 the city would have to deal with unprecedented events. The most significant events refer to the increase of warm days by approx. 15–20 days/year. At the same time, the number of tropical nights are going to increase by about 30 days on an annual basis (WWF Greece, 2009).

One aim of the present study is to examine the level to which the aforementioned scientific findings and predictions for the Municipality of Thessaloniki are confirmed by recent data. The study highlights the scientific gap in the development of methodological approaches that combine the spatial analysis (and visualisation) of surface land temperature (as an indication of the existence of the urban heat island phenomenon) with the flood mapping and the mapping of the sea level rise, aiming to identify urban areas that are vulnerable to several extreme weather hazards. In this context, the study aims to incorporate a spatial autocorrelation analysis to land surface temperatures, as well as to various indices calculated from satellite image-ries (e.g., NDVI, NDBI, etc). However, the main purpose of this study is to develop a novel space-based approach, in the Municipality of Thessaloniki, to assess its urban vulnerability to climate-related hazards. As far as the authors are aware, there is limited relevant research in the study area, mainly focusing on the estimation of surface land temperature and the urban heat island effect (e.g., Stathopoulou and Cartalis, 2007; Stamou *et al.*, 2013) or to the spatial assessment of separate climate related hazards (e.g., Yannakou and Salata, 2017; Pitidis *et al.*, 2018).

In this context we make use of satellite images, which were available in raster format. Once data was collected, statistical and geostatistical approaches coupled with interactive flood mapping tools were used to analyse and visualise the data in order to extract desired information. In this way, all the examined vulnerability indices were spatially visualised and were plotted against each other, as well as against various environmental and land use data in order to: (a) obtain the associated correlation coefficients, (b) examine their variability patterns in space, and (c) identify the most vulnerable areas in the city. The results will reveal the spatial factors that enhance temperature increases and flood intensities in the Municipality, while at the same time they will highlight the urban spatial characteristics which can positively influence the urban climate (i.e., with a strong local effect on urban resilience).

In this study we draw on previous work for vulnerability assessment. Namely, we make use of the basic framework by Alexander (2020), concerning the vulnerability indicators and their statistical analysis. We also consider the processes proposed by (a) Mushore *et al.* (2022) for land surface temperature (LST) estimation based on satellite imageries from Landsat – 8, and (b) by Randhi *et al.* (2021) for

calculating (in a simplified way) the vulnerability indices aiming to make them accessible for GIS software. The strength of this study is that it combines the above-mentioned methodologies to create an integrated spatial vulnerability index (IntSpVI) that is likely to support future decisions about where to implement adaptive measures against three different hazards related to climate change: high temperatures, sea-level rise, and floods.

Hence, the current paper aims to answer the following two research questions:

- Which are the factors that reinforce the temperature increase, the intensity of urban heat island, and flood events, and which factors alleviate these risks in the city of Thessaloniki?

- Which are the most vulnerable urban areas where future planning needs to focus?

The remainder of the paper is organised as follows. Section 2.1. describes the Urban Heat Island effect and its relationship with different spectral indices (NDVI, NDBI, and NDMI), as well as the theoretical framework leading to the development of an integrated Spatial Vulnerability Index. A detailed description of the study area and of the calculation methods used in this paper is provided in Section 2.2. and 2.3., respectively. Section 3 presents and discusses the results of this work, with regards to (a) the spatial distribution of spectral indices (Section 3.1.), and (b) the spatial patterns of land surface temperature (Section 3.2.), (c) the correlation analysis of spectral indices and land surface temperature (Section 3.3.), the flood vulnerability and sea level rise scenarios (Section 3.4.) and the delimitation of the areas vulnerable to extreme weather events (i.e., the results of the integrated Spatial Vulnerability Index) (Section 3.5.). The fourth and final section summarises the findings and draws some policy implications for future urban planning.

## **2. MATERIALS AND METHODS**

### **2.1. Theoretical Framework**

As already mentioned, the objective of this study is to identify (urban) regions vulnerable to extreme weather events, specifically to high temperatures and floods, through mapping tools and statistical analysis. Specifically, we aim to develop an integrated Spatial Vulnerability Index that would be able to identify areas that are susceptible to one or more hazards, and thus, to highlight priority (urban) areas (zones) for future planning efforts and spatial interventions for climate change adaptation. The main motivation of this research is driven by the lack of adequate infrastructure, planning, adaptation or mitigation policies against climate change.

An Urban Heat Island (UHI) is defined as the temperature difference in urban and rural areas with various indicators used for quantifying this difference. Some



approaches quantify air temperature, while other focus on land surface temperatures. In this study we are using the latter, which originate from satellite-borne sensors, and which are also called as surface urban heat island (SUHI) (Voogt and Oke, 2003). An advantage of these approaches is that they can account for the temperature distribution within a large area. The most significant factors that influence an urban climate (and, therefore, the temperature) are: the solar radiation absorption of ground objects, the high ratio of energy consumption on the surface, and the absence of high-rate evapotranspiration (Buyantuyev and Wu, 2010; Kleerekoper *et al.*, 2012; Oke, 1982; Rizwan *et al.*, 2008). The relevant literature emphasises that Land Surface Temperature (LST) is a very important indicator (index) for the study of urban climates and for urban vulnerability analysis (Anderson *et al.*, 2008; Brunsell and Gillies, 2003; Smith *et al.*, 2008; Voogt and Oke, 2003) as LST is also a very important variable for understanding the processes related with energy cycles, ecological system balance, and human environment interactions. Furthermore, to understand the link between greenspace patterns and LST is very important for mitigating the UHI effect, while it is also a powerful tool for planners and decision-makers for providing sustainable design of urban green spaces (Su *et al.*, 2014).

In addition, three other indices are likely to have a major influence on the climate vulnerability analysis of our study area, and strong correlations with the LST index. The first one is the Normalised Difference Vegetation Index, known as (NDVI), which is the most widespread vegetation index, defined as “the difference between the absorbed radiation in the spectral region of Red and the reflectance in the Near-Infrared (NIR) spectral region because of canopy structure” (Tucker, 1979; Tucker *et al.*, 2005). The second index is the Normalised Difference Build-Up Index (NDBI), which refers to urban areas where the near-infrared (NIR) region is compared with the location of typically higher reflectance in the short-wave infrared (SWIR) (Zha *et al.*, 2003). The last index is also a vegetation index, called the Normalised Difference Moisture Index (NDMI), which describes soil’s water stress level and measures soil moisture levels, by using a combination of near-infrared (NIR) and short-wave infrared (SWIR) spectral bands (Ashraf and Nawaz, 2015).

As mentioned earlier, there are significant correlations between the three indicators. The correlation between LST and NDVI is generally positive in the winter period (Kaufmann *et al.*, 2003; Sun and Kafatos, 2007) and during the early spring period (until April) but it is usually negative in the summer period, but also during warm months (May to October) (Nemani *et al.*, 1993; Gorgani *et al.*, 2013). Furthermore, the correlation between NDBI and LST is likely to be positive throughout the year because concrete and other construction materials are expected to increase the local temperature (Chen *et al.*, 2013). Finally, a strong negative relationship is expected between the NDVI and NDBI indices, according to the relevant literature (Li *et al.*, 2017; Malik *et al.*, 2019). Also, the same relationship is expected between the NDMI and LST (USGS, 2022b).

Apart from the spatial and temporal patterns of land surface temperature (*LST index*), which are used in the context of the Urban Heat Island vulnerability, our integrated spatial vulnerability index (IntSpVI), as presented in Fig.1, also includes two other spatially-explicit vulnerability indices: (a) the *Sea-level rise index*, and (b) the *Floods' vulnerability index*.

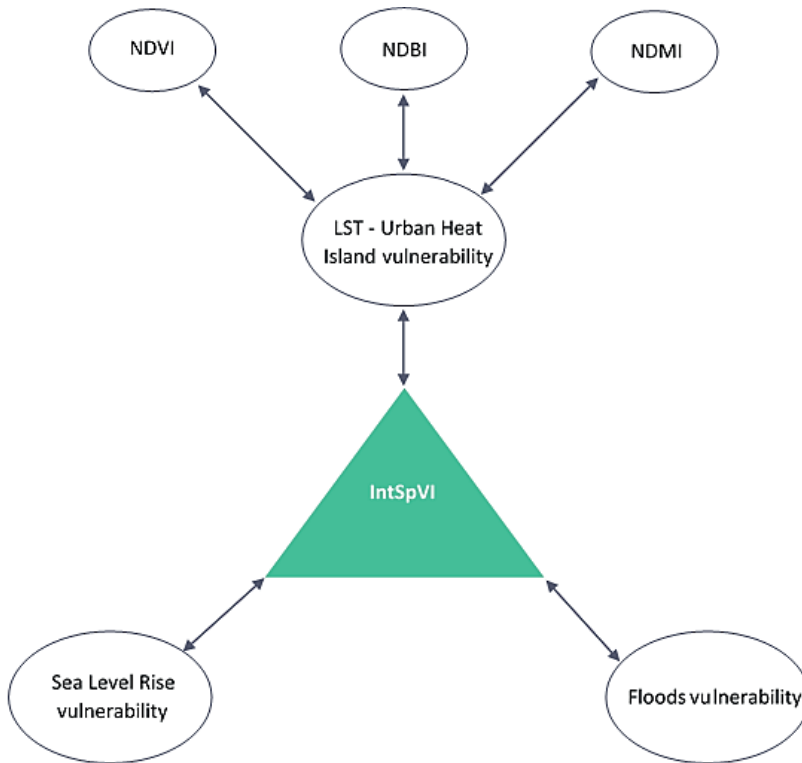


Fig. 1. Flowchart of process followed to estimate the Integrated Spatial Vulnerability Index (IntSpVI)

Source: own work.

As shown in Fig. 1, the first desired outcome is the mapping of the LST index and the estimation of the correlations between the LST and spectral indices, aiming to estimate the high temperature vulnerable areas. Spatial autocorrelations of these indices were explored in the GeoDa 1.8.16 software (Center for Spatial Data Science, University of Chicago, Chicago, IL, USA) (Anselin *et al.*, 2010) in order to facilitate the location identification and visualisation of the urban heat island effect. Then, by using QGIS 3.6 open-source software (QGIS Development Team, 2019) and data related to the Municipality's flood history, a flood map was created, representing neighbourhoods and regions that have historically been most affected by storm surges and heavy rainfall (i.e., areas associated with flash

floods). Finally, the Municipality of Thessaloniki, as a coastal urban area, faces the potential risk of sea level rise. For this reason, with the help of the FloodMap Pro application (<https://www.floodmap.net>), we applied three different scenarios of a rise in sea level and the areas that are prone to severe damage were explored, identified, and mapped. By combining the spatial vulnerability assessment of all three climate-related hazards, a spatial vulnerability index (IntSpVI) was formulated – as the summation of all three individual (spatial) vulnerability indices – to supplement future decision-making associated with urban climate resilience.

## 2.2. Study Area

Thessaloniki is the second largest city of Greece, situated in the Prefecture of Central Macedonia. Its metropolitan area consists of eleven municipalities. The biggest and most populated municipality is the Municipality of Thessaloniki, which is located at 40°37' N latitude and 22°57' E longitude. According to the last population census (2011), the Municipality of Thessaloniki had a population 325,182 inhabitants (Gemenetzi, 2017), while its area is slightly less than 20 sq. km (Fig. 2a).

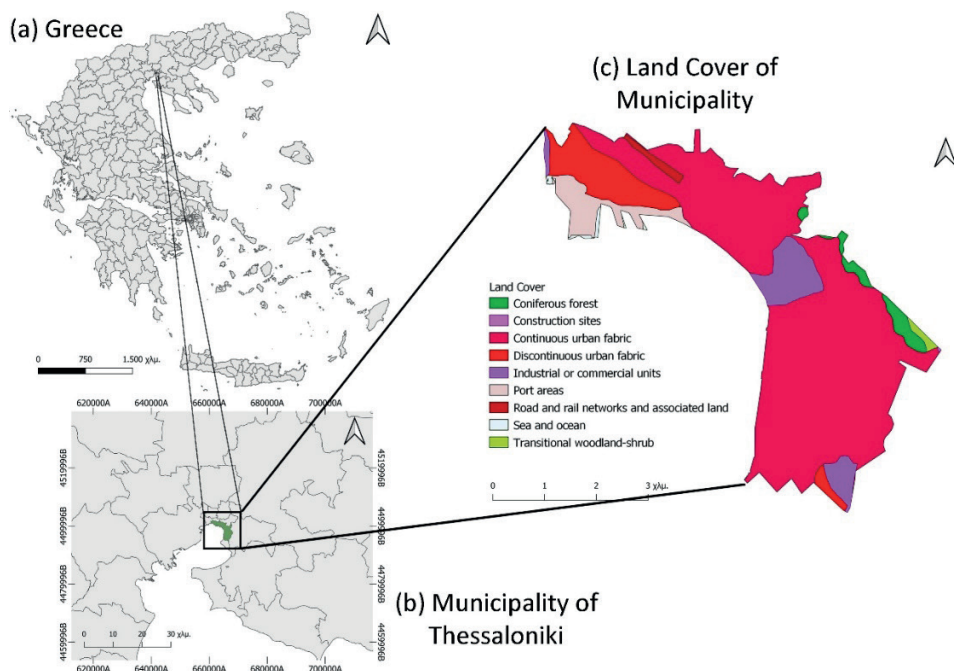


Fig. 2. Location of Study area (a), administrative boundaries of the Municipality of Thessaloniki (b) and Land Cover Map (c)

Source: own work.

The city is built along a large coastline along the northern shore of Thermaikos Gulf (Fig. 2b). The Municipality of Thessaloniki is heavily constructed and only 0.95 sq. km (a mere 5.1% of the area) is covered by green spaces (i.e., parks and green “islands”). Thus, the share of green areas per person is only 2.6 sq. m (Garzillo and Ulrich, 2015; Latinopoulos *et al.* 2016), a figure that is well below any minimum international standards. In recent decades, the ever-increasing city activities have led to bigger energy consumption, fossil fuels emissions, and, therefore, a temperature increase (Kantzioura *et al.*, 2012). Furthermore, the high building density increased the probability of floods. Another important cause of flooding is the fact that most surfaces in the urban fabric are covered by impermeable materials (Fig. 2c). Finally, according to the Corine land cover classification, almost 83% of the area belongs to buildings and artificial surfaces – where 73% is considered continuous urban fabric and 10% discontinuous (based on the third level of the CORINE system) (Fig. 2c).

The climate of the broader city is considered Mediterranean with the summer period being characterised by high temperatures (mainly in the period from July to August). During this period, humidity levels and rainfall are low. The average temperature for July is 27.3 degrees C, while the maximum can even exceed 40 degrees C (Stathopoulou *et al.*, 2004). The increase of global average temperature due to climate change is going to affect the Municipality of Thessaloniki, aggravating the urban heat island effect, but also the sea level rise. Therefore, the implementation of adaptation policies and planning interventions through appropriate projects are considered more necessary than ever.

### 2.3. Data collection and calculation methods

Data collection followed two sequential phases. The first phase referred to the calculation of spectral indices that affect and reflect the temperature levels in the study area (as analysed below). The second phase focused on finding areas that are likely to be most affected by the sea level rise, as well as areas located in high flood zones.

#### 2.3.1. Spectral indices and LST calculation. Estimating areas vulnerable to future temperature increases (UHI effects)

For the first stage, satellite images from the United States Geological Survey of the United States Government were used to collect the survey data. Specifically, the satellite used was the Landsat – 8 OLI / TIRS C1 Level – 1, as it has improved calibration, higher radiometric resolution of 12 bits, and narrower spectral wavebands compared to previous satellite models (Roy *et al.*, 2016). The reason why satellite images were chosen was due to the format of the file being viewed. Image

files in TIFF format are essentially a file raster format which is renowned for its extremely high resolution and image quality (Javed *et al.*, 2016). Based on this kind of data, a specific mathematical process followed, which consisted of seven equations or steps where the first six contributed to the estimation of the important variables for the calculation of Land Surface Temperature in the study area.

*Top of Atmosphere (TOA)* is a unitless measurement that provides the ratio of radiation reflected to the incident solar radiation on a given surface. The use of satellite images contributes to computing this variance and measuring spectral radiance, utilising the solar zenith angle, and mean solar spectral irradiance (Marino, 2017). The TOA is computed according to the following equation:

$$L_{\lambda} = M_L * Q_{cal} + A_L \tag{1}$$

where:

$L_{\lambda}$  = Top of Atmospheric (TOA) spectral radiance, measured in Watts/(sq. m\*s-rad\* $\mu$ m),

$M_L$  = The difference between maximum and minimum of the spectral radiance of the respective Band,

$Q_{cal}$  = Calibration and quantisation of sensor with standard product pixel values,

$A_L$  = Band-specific additive rescaling factor utilising metadata.

Therefore, Equation (1) leads to the following result (Randhi *et al.*, 2021):

$$TOA = 0.0003342 * Band10 + 0.1$$

*Conversion of (TOA) Radiance to Brightness Temperature (BT):* In the next step, the conversion of spectral radiance into satellite brightness temperature contributes to shaping the second equation below (Latif, 2014; Artis and Carnahan, 1982):

$$T_B = \frac{K_2}{\ln\left(1 + \frac{K_1}{L_{\lambda}}\right)} - 273.15 \tag{2}$$

where:

$T_B$  = Satellite brightness temperature in the centigrade scale,

$L_{\lambda}$  = Spectral radiance of TOA (Watts/(sq. m\*srad\* $\mu$ m)),

$K_1$  = Calibration constant 1,

$K_2$  = Calibration constant 2.

According to Rai (2019), Equation (2) has specific values for coefficients  $K_1$  and  $K_2$  (see Table 1). So, the final expression, in order to estimate the Brightness Temperature, has the following form:

$$T_B = (1321.0789 / \ln((774.8853//TOA) + 1)) - 273.15$$

Table 1. Metadata from Landsat 8 Images

	Band 10
$K_1$	774.8853
$K_2$	1321.0789

Source: adapted from: USGS, 2022c.

*Normalized Difference Vegetation Index (NDVI)*: The following steps refer to the estimation of a very important index, known as the NDVI. As already stated, this index is based on the difference between the maximum reflectance in the NIR spectral region (which is a result of leaf cellular structure) and the maximum absorption of radiation in R (as an effect of chlorophyll pigments) (Tucker, 1979). Based on the above elements, the NDVI equation is formulated as follows and its numerical range is between [-1 to 1] (Jones and Vaughan, 2010):

$$NDVI = \frac{(NIR - R)}{(NIR + R)} \quad (3)$$

According to LANDSAT 8 measures and Table 2, the final expression of Equation (3) for further processing in the QGIS software uses the following equation:  $NDVI = \text{Float}(\text{Band } 5 - \text{Band } 4) / \text{Float}(\text{Band } 5 + \text{Band } 4)$

Table 2. Landsat – 8 Operational Land Imager and Thermal Infrared Sensor

Bands	Wavelength (micrometres)	Resolution (meters)
Band 4 – Red	0.64 – 0.67	30
Band 5 – Near Infrared (NIR)	0.85 – 0.88	30
Band 6 – SWIR1	1.57 – 1.65	30
Band 10 – Thermal Infrared (TIRS) 1	10.60 – 11.19	100

Adapted from: GISGeography, 2019.

*The proportion of Vegetation (Pv)*: Pv is known as the ratio of the vertical projection vegetation region on the ground to the total area of vegetation (Deardorff, 1978). Specifically, for the QGIS representation of this specific indicator, the formula obtained is the following (Carlson and Ripley, 1997):

$$Pv = \left( \frac{(NDVI - NDVI_{min})}{(NDVI_{max} - NDVI_{min})} \right)^2 \quad (4)$$

In QGIS software, the NDVI calculation is produced with a broad range of values. The solution in Equation (4) utilises the maximum and minimum values of the previous index.

*Land Surface Emissivity* ( $\epsilon$ ) is a significant element for the final equation and the calculation of Land Surface Temperature (LST). Land Surface Emissivity (LSE) uses the results of Equation (4) and by utilising the PV index it calculates the average emissivity of an element of the study area, based on the values of Equation (3) and the NDVI (Randhi *et al.*, 2021):

$$LSE = 0.004 * Pv + 0.986 \tag{5}$$

where:

$LSE$  = Land Surface Emissivity,

$Pv$  = Proportion of Vegetation (%).

In this case, the 0.986 value is considered as a correction coefficient, while the 0.004 declares the standard deviation, considering a total of 49 soil spectrals from the ASTER spectral library (Sobrino *et al.*, 2004).

*Land Surface Temperature (LST)*: This is the final estimate of the entire aforementioned process, which combines all of the above results (Fig. 3). The variables BT, NDVI and LSE are the most significant factors for the LST calculation (Shah *et al.*, 2018). This index includes a mix of vegetation and bare soil temperature and is defined as the radiative skin temperature of the land surface (Freitas *et al.*, 2013; Kogan, 2001; Martins, J. P.; Wan *et al.*, 1996).

$$LST = \frac{T_B}{1 + \left( \lambda + \frac{T_B}{C_2} \right) * Ln(LSE)} \tag{6}$$

where:

$LST$  = Land Surface Temperature (°C),

$T_B$  = Bright Temperature (BT) calculated from Equation (2),

$\lambda$  = Constant value of 0.00115,

$C_2$  = Constant value of 1.4388,

$LSE$  = Land Surface Emissivity (LSE) calculated from Equation (5).

The final form of the equation is given below for the visualisation of the LST index in the QGIS software (Aryal *et al.*, 2021):

$$LST = (T_B / (1 + (0.00115 * T_B / 1.4388) * Ln(LSE)))$$

*Normalized Difference Build-up Index (NDBI)*: This variance is independent and does not belong to the LST calculation process. Its value ranges between -1 and 1, as in the case of the NDVI. The visualisation of this index reveals the points and/or locations in the urban fabric that are characterised by dense constructions and buildings (values that are close to 1) and areas with a low density of buildings (values that are close to -1) (Zha *et al.*, 2003). Another noteworthy outcome is the expected strong negative correlation that is going to appear compared to the NDVI. Furthermore, the

intense and continuous urban expansion increases the NDBI, and this is an important potential result of this index, in most LST-related studies (Chen *et al.*, 2006). The last equation with regards to the LST index is the equation of the NDBI (Eq. (7)):

$$NDBI = \frac{SWIR - NIR}{SWIR + NIR} \quad (7)$$

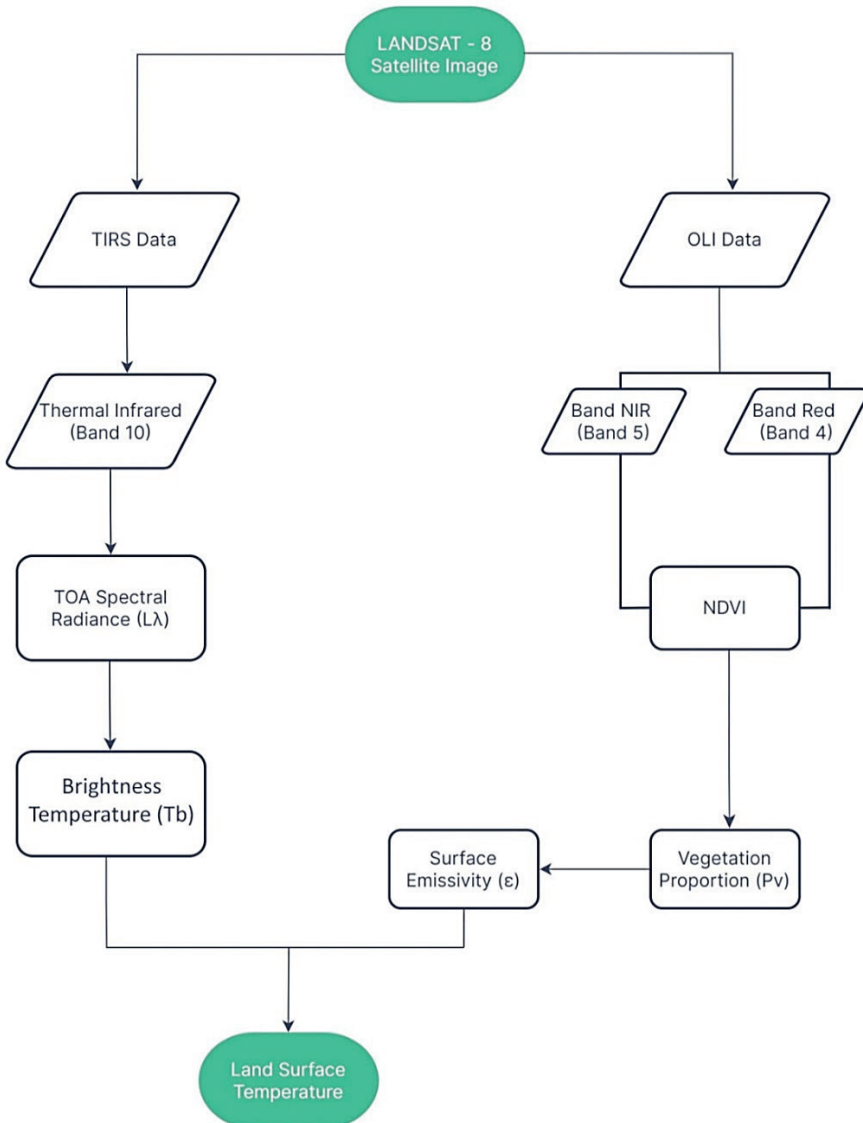


Fig. 3. Flowchart of the process for the Land Surface Temperature (LST) calculation

Source: own work.



Using the values from Table 2 the final expression of Equation (7) for further processing in the QGIS software uses the following equation:

$$NDBI = \text{Float}(\text{Band } 6 - \text{Band } 5) / \text{Float}(\text{Band } 6 + \text{Band } 5)$$

*Normalized Difference Moisture Index (NDMI)*: It is used for vegetation water content determination. Its mathematical formula fits the case of the NDBI, but in this case the terms of the ratio are inverted (USGS, 2022b). Therefore, a significant expected outcome is the negative correlation between moisture and temperature. Moreover, the range value of this index fluctuates between -1 to 1 once again.

$$NDMI = \frac{NIR - SWIR}{NIR + SWIR} \quad (8)$$

According to values in Table 2 the suitable form of Equation (8) using Bands 5 and 6 for the NDMI calculation (in the QGIS software) is the following:

$$NDMI = \text{Float}(\text{Band } 5 - \text{Band } 6) / \text{Float}(\text{Band } 5 + \text{Band } 6)$$

### 2.3.2. Estimating vulnerable areas to future sea level rise

By utilising the interactive FloodMap Pro application, we aimed to accurately identify areas vulnerable to future sea level rise in Thessaloniki. We focused on areas that would be affected by sea level rise at the interval between 1 and 4 meters. For this particular interval there is no computational burden/cost as the FloodMap application provides the user with all the necessary information and results. Furthermore, the upper limit (4 meters) is considered as an extreme worst-case scenario for the study area. By following this method, we aimed to identify those (coastal) areas in the Municipality of Thessaloniki that should focus on climate change adaptation and specifically on enhancing their resilience to rising sea levels.

### 2.3.3. Assessing areas vulnerable to future urban flood events

The third component of the Integrated Spatial Vulnerability Index (IntSpVI) is the Flood vulnerability index. In this context a number of flood vulnerability zones in the boundaries of the Municipality of Thessaloniki have been identified. To do so, the historical and significant floods were used as input data, were digitised through QGIS and were mapped in order to construct the vulnerable flood zones that should be considered in future urban reliance planning.

### 3. RESULTS AND DISCUSSION

In order to identify areas the most vulnerable to climate change several data collection and processing methods were used. As a first step in data analysis, satellite images from the USGS (2022a), using the American Earth observation satellite Landsat 8, were used. More specifically, two satellite images were taken at specific intervals. The first one was taken on 12 Nov 2021 and represents the winter period under consideration with a cloud cover of less than 10%. The second satellite image was taken on 1 Aug 2021 as an indicative date for the summer period, with a similar percentage of cloud cover (Fig. 4a). These raster files were downloaded and analysed in the QGIS software in order to visualise important climatic and spectral indices, as well as geomorphological data related to elevation (Fig. 4b) and slope (Fig. 4c). In addition, by using the FloodMap Pro application it was possible to locate/identify the areas that could be affected by a future sea level rise. At the same time, historical flood data was collected for the study area.

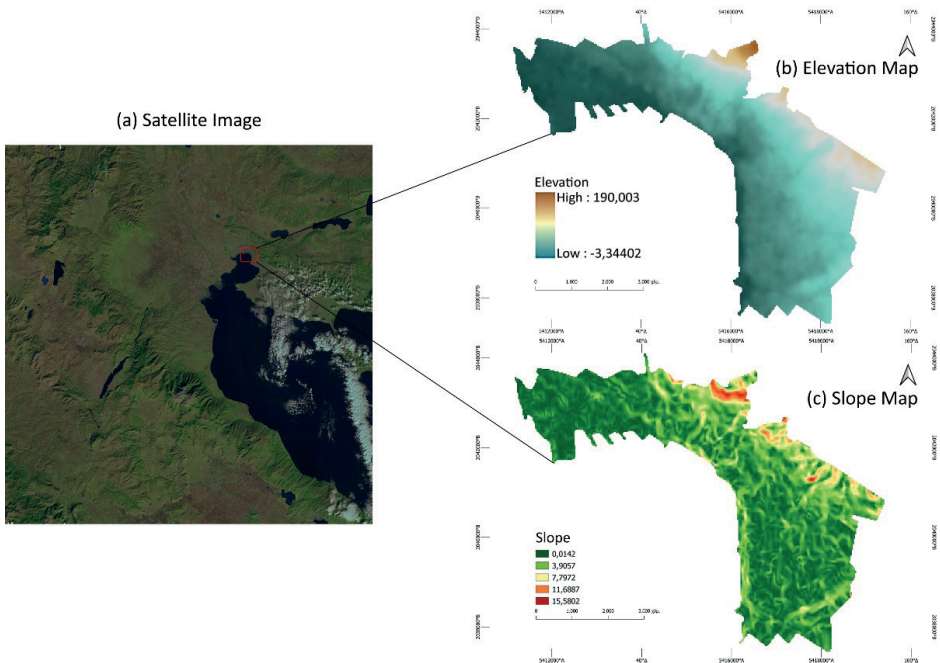


Fig. 4. Landsat – 8 Image of municipality location (a), elevation map of municipality (b) and slope map of municipality (c)

Source: own work.

### 3.1. Spatial distribution of spectral indices NDVI, NDBI, and NDMI

The spatial analysis of spectral indices constitutes the most significant element for the estimation of the temperature variance in the study area. All the maps produced and presented below display a variance of the NDVI, NDBI, and NDMI indices between the winter and summer seasons. According to the selected satellite images, the NDVI has higher and more diverse values in summer (Fig. 5b) than in winter (Fig. 5a). This was actually an expected result due to the fact that during the warm months, the rise of temperature and summer heatwaves are likely to enhance flora growth. NDVI maps are useful for visualising the vegetation of the municipality, giving a general view of the situation, concerning vegetation cover and density that prevails within its boundaries. Green areas tend to be accumulated along a significant part of the municipality's coastline, as well as at the western boundaries. It should be also noticed that a significant part of the study area, at the northern boundaries, is covered by forest. In addition, sparse concentrations of green areas are observed in the heart of the urban area. An interesting conclusion drawn from this analysis is that green spaces are cut off and discontinuous for the most of the study area surface, thus leading to the aggravation of high temperature problems.

The visualisation of the NDBI that follows reveals the intensity of the building stock on the surface of the municipality. The reason that NDBI is analysed both in winter (Fig. 5c) and summer (Fig. 5d) is to indirectly confirm the increase of the vegetation intensity during the summer months and, at the same time, to underline the absence of green spaces and the prevalence of built-up areas in the whole urban space. Finally, the NDMI examines the moisture levels of the surface of the study area. A noteworthy outcome is that during the summer period (Fig. 5f) NDMI values are significantly higher than during winter (Fig. 5e). This result confirms previous relevant studies, according to which the moisture levels are likely to rise on warmer days in coastal urban areas, like Thessaloniki.

### 3.2. Spatial pattern of LST

Figure 6 depicts the outcome of the Land Surface Temperature (LST) model for the winter (Fig. 6a) and the summer period (Fig. 6b) in the study area. Both LST model's results confirm high levels of land temperature in specific urban neighbourhoods. Namely, both maps indicate that the area near the port of Thessaloniki seems to be the area with the highest temperatures in the study area. As shown on the first map, the higher LST (located near the port) during winter is equal to 17.84°C (Fig. 6a), while during summer the higher LST value (also located near the port) rises to 42.05°C (Fig. 6b). Another part of the municipality affected by heatwaves is located at the mid-north of the city, in an overpopulated neighbourhood, which is characterised by an extremely high percentage of residential/build areas and completely sealed surfaces.

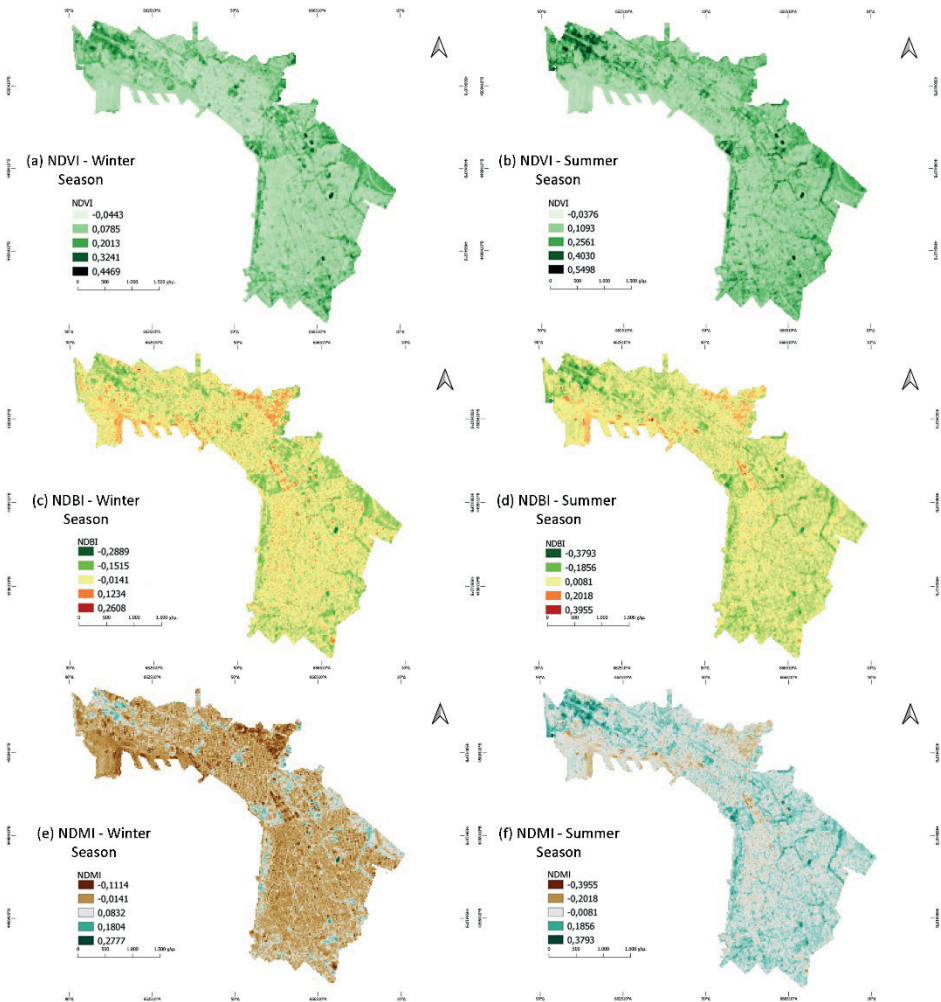


Fig. 5. Normalised Difference Vegetation Index (NDVI) – winter season (a), Normalised Difference Vegetation Index (NDVI) – summer season (b), Normalised Difference Built-up Index (NDBI) – winter season (c), Normalised Difference Built-up Index (NDBI) – summer season (d), Normalised Difference Moisture Index (NDMI) – winter season (e) and Normalised Difference Moisture Index (NDMI) – summer season (f)

Source: own work.

The higher discomfort within the municipality area, due to high temperatures, is partly due to inadequate vegetation cover (as depicted in the NDVI maps) and due to the dense building structures and sealed surfaces (as depicted in the NDBI maps). An equally important indicator that greatly influences the variations of the LST index are the variations of the moisture index (NDMI). It's easily observable

that the regions where the moisture levels are low, the temperatures levels increase (and vice versa). So, temperature variation was found, as expected, inversely proportional to the moisture variation.

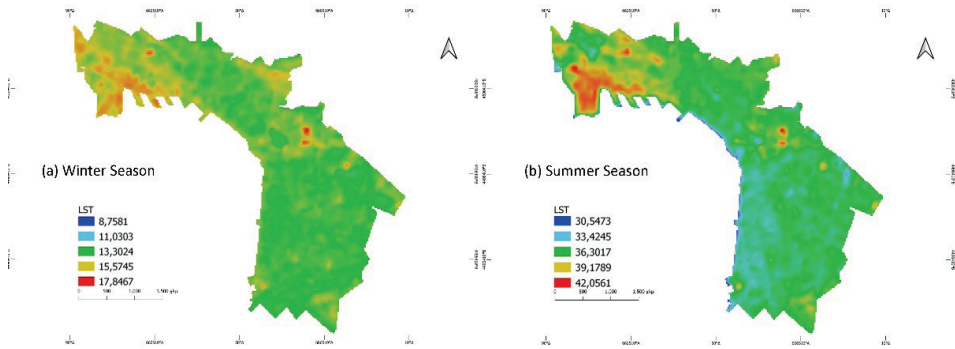


Fig. 6. Land Surface Temperature (LST) – winter season (a) and Land Surface Temperature (LST) – summer season (b)

Source: own work.

In order to compare the land temperature between the highly urbanised study area with the surrounding rural areas, we estimated the LST for the summer period for an extended area (Fig. 7a), including a rural neighbourhood municipality (Municipality of Delta). As observed in the Corine Land Cover map (Fig. 7b), land uses in the Municipality of Delta (in the western part of the map) are typical rural, as the area is dominated by various agricultural and natural land cover types. LST differences between these rural areas and the study area (the city of Thessaloniki) are large, indicating the presence of an UHI effect.

### 3.3. Correlation analysis of spectral indices and LST

A statistical analysis followed the visualisation of spectral indices and LST, with the aim to estimate the correlations between specific measurements/indices. This is considered as an important step in determining the factors that affect soil temperature and consequently the quality of citizens' life (under the assumption that high/extreme summer temperatures are associated with social disutility).

The correlations were estimated by using the SPSS software (IBM-SPSS Statistics Software, Version 27), for both time periods examined (winter and summer). Regarding the winter period (Table 3) the LST index shows a positive correlation with the NDVI and NDBI and a negative correlation with the NDMI. Also, the relationship between temperature and building density is equally proportional, which is due to the large concentration of impermeable materials, pavements, and high-rise

buildings, which accumulate heat and trap the sun’s rays due to low reflectivity. The moisture difference indicator is positively and highly correlated with vegetation levels and, therefore, its role is crucial for the formation of temperature levels in the urban space. The NDVI, in turn, shows a strong negative correlation with the NDBI. All the aforementioned correlations are statistically significant at the 5% level.

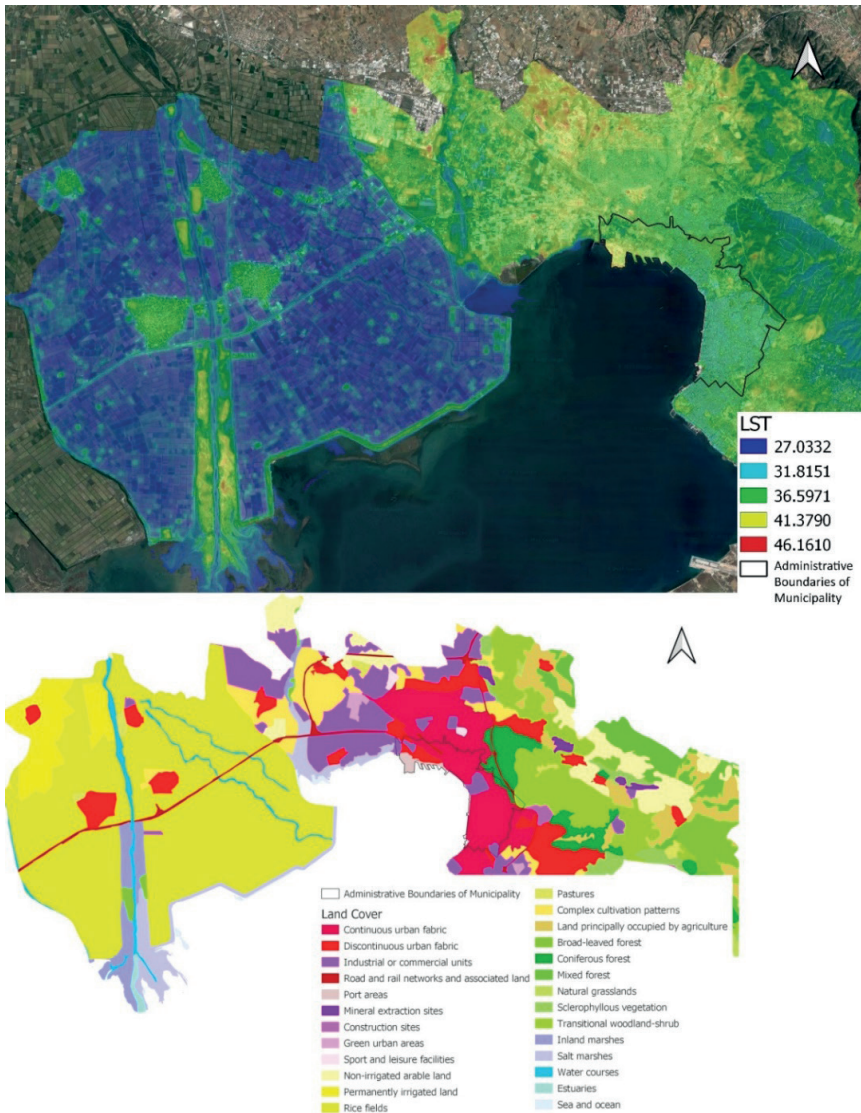


Fig. 7. (a) LST (summer season) comparison between urban and neighbouring rural areas (b) Corine land cover map

Source: own work.

The GeoDa software was then used to generate the scatterplot matrix presented in Fig. 8. The main purpose of this chart was to visualise all the bivariate correlations of Table 3. It is obvious that all bivariate correlations are statistically significant at the 1% level. However, it is also worth noticing that the LST index does not show a particularly strong correlation with the other spectral indices, for a number of reasons, which are going to be explained in the next section.

Table 3. Spectral indices and LST correlation for the winter period

		Correlations			
		LST	NDVI	NDBI	NDMI
LST	Pearson Correlation	1	0.168**	0.094**	-0.094**
	Sig. (2-tailed)		0.000	0.008	0.008
	N	805	805	805	805
NDVI	Pearson Correlation	0.168**	1	-0.679**	0.679**
	Sig. (2-tailed)	0.000		0.000	0.000
	N	805	805	805	805
NDBI	Pearson Correlation	0.094**	-0.679**	1	-1.000**
	Sig. (2-tailed)	0.008	0.000		0.000
	N	805	805	805	805
NDMI	Pearson Correlation	-0.094**	0.679**	-1.000**	1
	Sig. (2-tailed)	0.008	0.000	0.000	
	N	805	805	805	805

\*\* Correlation is significant at the 0.01 level (2-tailed)

Source: own work.

By analysing the bivariate correlations for the summer period, it is worth mentioning that the correlation between LST and NDVI is now negative and statistically significant (Table 4). The correlation between LST and NDMI continues to be negative but higher than during winter, while the same applies to the positive correlation between LST and NDBI. During the summer months, the vegetation index shows a higher (and still negative) correlation value (as compared to winter) with the building stock (NDBI).

The same conclusions as when it comes to the winter period (Fig. 8) can be drawn from Figure 9 (summer period). Namely, the LST index has medium to low correlations with all other indices, which is partly attributed to the small number of observations (N = 805) and the homogeneity in land uses and (micro)climate conditions. The correlations coefficients (as compared to Fig. 8) are increased between the indices NDVI, NDBI and NDMI, while the absolute negative correlation between NDBI and NDMI is almost identical.

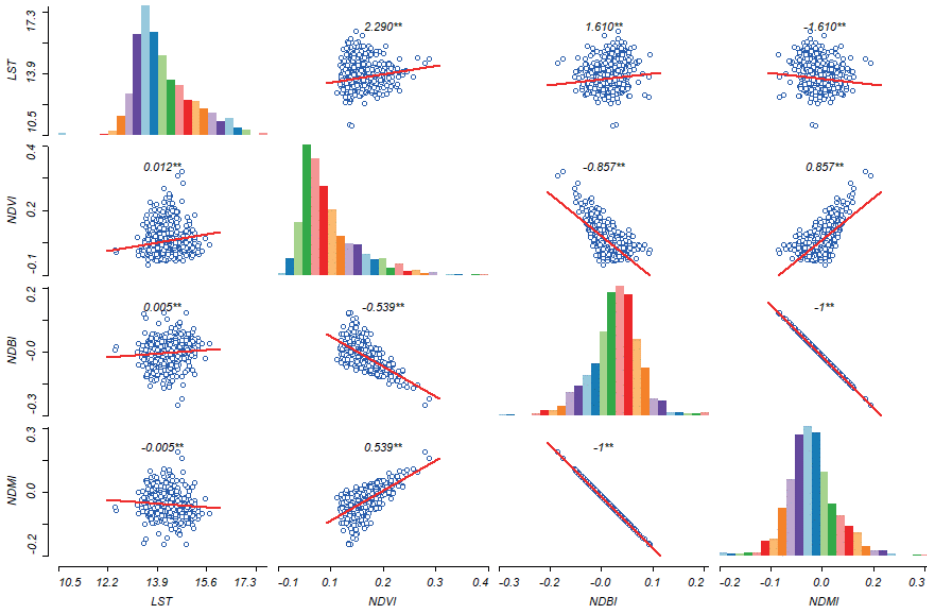


Fig. 8. Scatterplot matrix for the winter period  
Source: own work.

Table 4. Spectral indices and LST correlation for the summer period

		Correlations			
		LST	NDVI	NDBI	NDMI
LST	Pearson Correlation	1	-0.142**	0.238**	-0.226**
	Sig. (2-tailed)		0.000	0.000	<0.001
	N	805	805	805	805
NDVI	Pearson Correlation	-0.142**	1	-0.756**	0.752**
	Sig. (2-tailed)	0.000		0.000	<0.001
	N	805	805	805	805
NDBI	Pearson Correlation	0.238**	-0.756**	1	-1.000**
	Sig. (2-tailed)	0.000	0.000		
	N	805	805	805	805
NDMI	Pearson Correlation	-0.226**	0.752**	-1.000**	1
	Sig. (2-tailed)	<0.001	<0.001	0.000	
	N	805	805	805	805

\*\* Correlation is significant at the 0.01 level (2-tailed)

Source: own work.



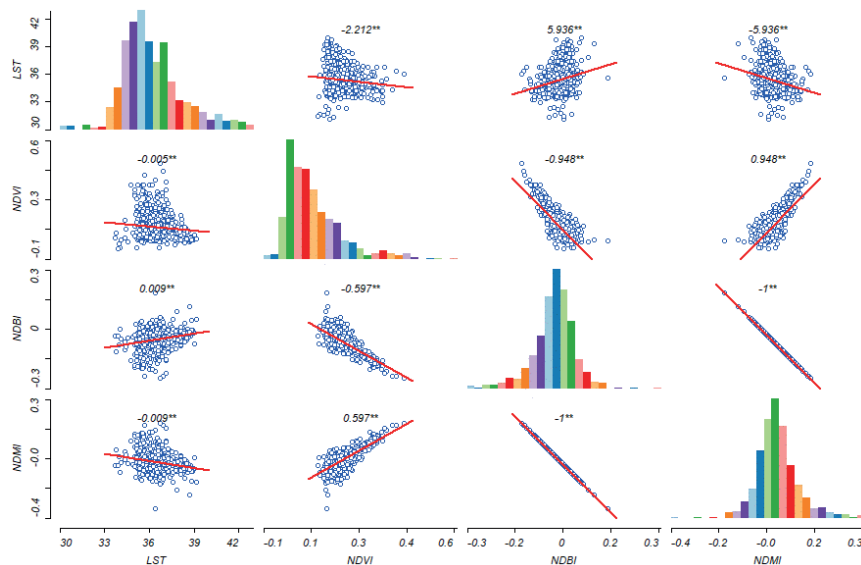


Fig. 9. Scatterplot matrix for the summer period

Source: own work.

The positive correlations found between temperature and vegetation during winter are consistent with the results of previous studies (Kaufmann *et al.*, 2003; Sun and Kafatos, 2007). Concerning the summer period, the negative correlations between LST and NDVI are once again similar to the results of relevant literature (Nemani *et al.*, 1993; Gorgani *et al.*, 2013). However, in contrast to the findings of Malik *et al.* (2019) who estimated a powerful correlation between LST and NDBI, in our study we only found a weak yet still statistically significant correlation. A possible reason for this is the fact that the entire study area is quite homogenous in terms of land-uses and (urban) built-up environment.

Furthermore, our results confirm the findings of Li *et al.* (2017), who revealed a stronger correlation between the LST index and NDMI than between temperature (LST) and vegetation (NDVI). Therefore, our study proves the conclusion highlighted by Li *et al.* (2017), about the greater importance of the moisture difference index (NDMI) than the vegetation index (NDVI) in explaining the spatial variation of surface temperature.

### 3.4. Flood vulnerability and sea level rise scenarios

The lack of urban green areas and the extended waterfront (coastline) are the most important reasons for the presence of an extensive area of potentially high flood risk. Coastal urban communities A, B, and E, but also the inland com-

munity D (Fig. 10) are considered quite vulnerable to urban flooding, which is mainly associated with flash flooding. Some geomorphological and physical factors that increase the flood risk/vulnerability are low altitude (Fig. 4b) and slope (Fig. 4c), as well as the strong presence of (subterranean) streams mainly in communities A, D, and E. Based on the historical and important recorded rainfalls and floods, the area where communities A and E overlap is the most vulnerable to floods, due to its low altitude, and the presence of many streams prone to flash flooding.

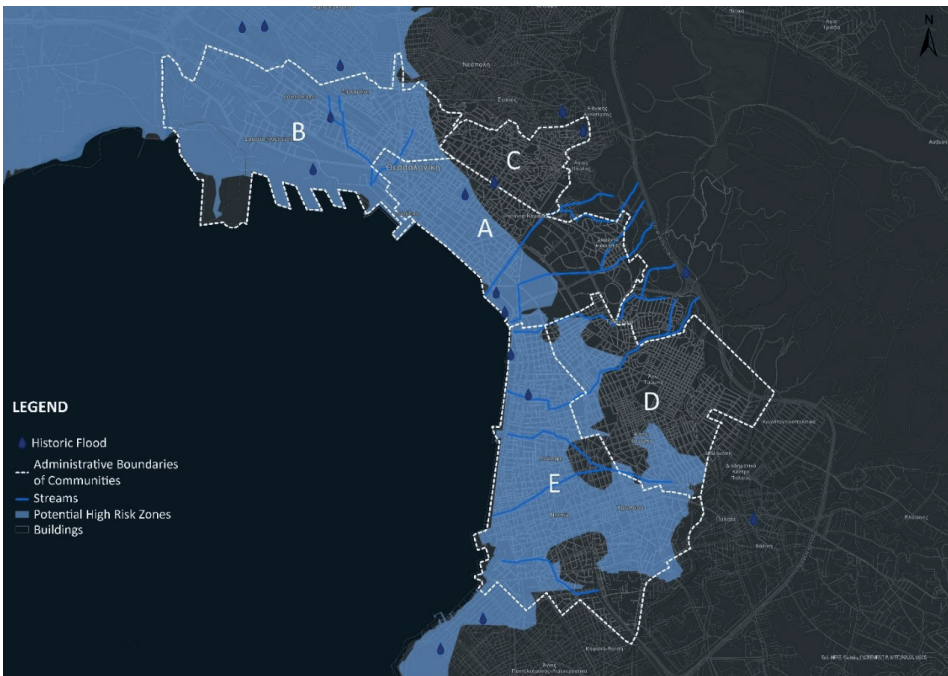


Fig. 10. Potential high-risk zone in floods

Source: own work.

One of the most important reasons for the enhancement of climate change mitigation policies is the melting of ice and the rising sea level. According to scientific research, if humanity follows a sustainable path, the sea level could rise by 30 cm by 2100. In the pessimistic (non-sustainable) scenario the increase of the sea level could reach 2.5 meters (IPCC, 2019). The FloodMap Pro application digitises the coastal areas that are going to be affected by the sea level. The central port area in Community B (Fig. 11b) is going to face the greatest consequences in the absence of any risk/climate resilience planning. In addition, the coastal zone in the historical centre of the city, in Community A (Fig. 11a), may also face

similar consequences, however, in a much smaller and less structured area. Significantly, a quite densely populated area with high real estate values in Community E (Fig. 11c) is also found to be vulnerable to long-term sea level rise.

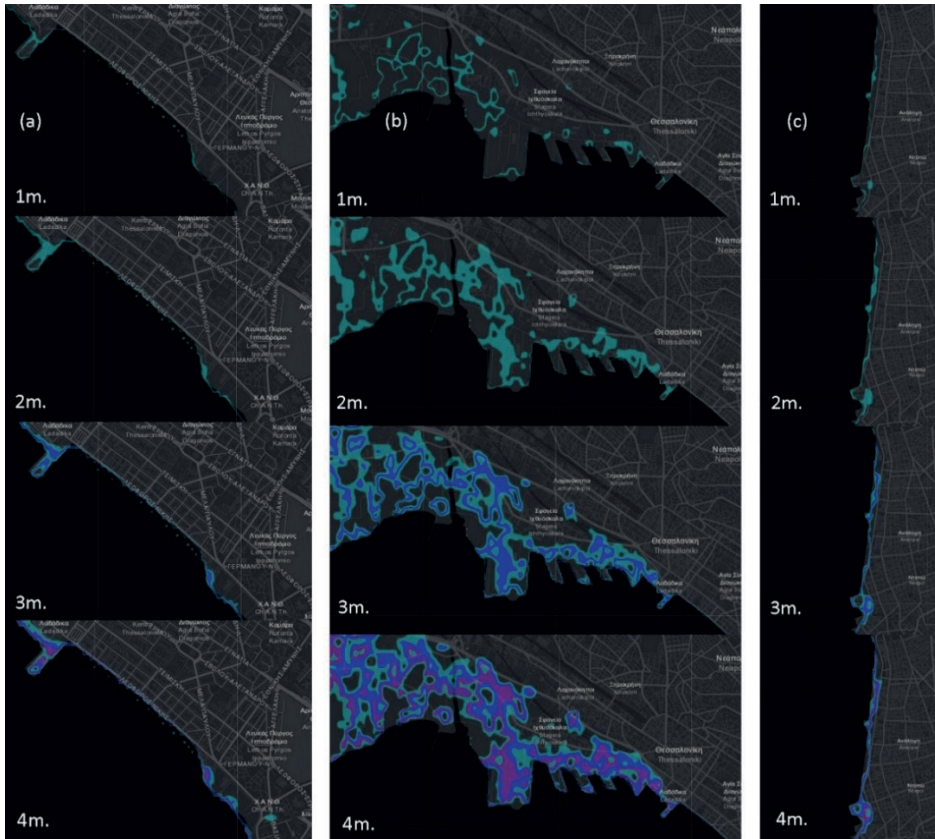


Fig. 11. Four scenarios of sea level rise in the coastline of Community B (a), Community A (b), and Community E (c)

Source: own work adapted from FloodMap Pro.

### 3.5. Delimitation of areas vulnerable to extreme weather events

Moran's I, involving Global (Moran, 1950) and Local (Anselin, 1995) Moran's I, is a commonly used indicator of spatial autocorrelation. In this study, the Local Moran's I index and the GeoDa software were used to delimit areas affected by high temperatures, by implementing spatial autocorrelation analyses. Specifically, a Lisa (Local Indicators of Spatial Association) analysis was used, according to five classes

according to the map's legend (Fig. 12). A high positive local Moran's I value indicates a location which has similarly high or low values as its neighbours. These locations are 'spatial cluster', which may be either high-high clusters (high values in a high-value neighbourhood) or low-low clusters (low value in a low-value neighbourhood) (Zhang *et al.*, 2008), while negative local Moran's I values (low-high or high-low) indicate potential spatial outliers (i.e., locations that are different in terms of their values from their neighbours) (Lalor and Zhang, 2001).

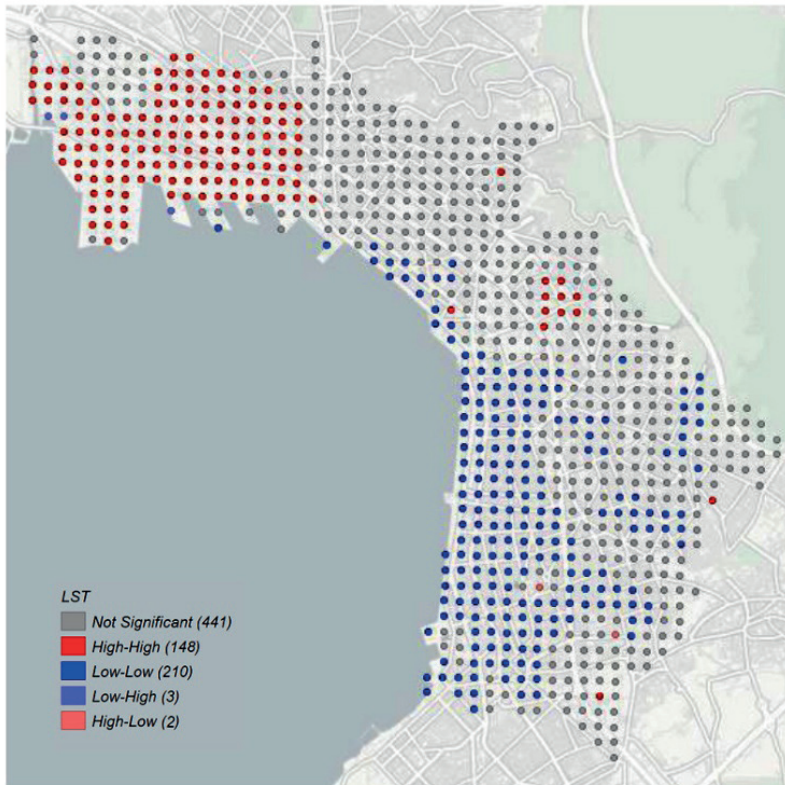


Fig. 12. Spatial autocorrelation of high temperature

Source: own work.

In Fig. 12, the colour classes are attributed to statistically significant clusters/areas which experience greater (red dots) or lower (blue dots) discomfort (as compared to the rest of the urban area) due to high summer temperatures. A large part of the second community and the port area seems to be the most affected, having a high-high positive autocorrelation, while a significant part of communities D and E and part of the historic city centre (community A) close to the waterfront experience lower temperature during the summer period.

The final aim of this paper is to create an integrated spatial vulnerability index. Therefore, the vulnerable regions presented in Figures 6, 10, and 11 have been combined to create a single vulnerability map (Fig. 13). Figure 13 represents all the areas vulnerable to extreme weather phenomena (temperature and floods). In all the red-coloured areas, where temperatures exceed normal levels, the absence of green and open spaces is obvious. These areas are also characterised by dense building structures and impermeable surfaces. Therefore, these areas were found to possess high NDBI and low NDVI and NDMI values. At the same time, the potential zone of high flood risk extends over a very large area due to the low altitude, but also to the small slopes. Also, the total absence of green infrastructure leads to an inability to absorb rainwater (as nature-based solutions), while the dense urban development enhances the risks of urban (flash) flooding. Finally, the sea level rise is going to affect only some small/local coastal (though with significant landmarks) high real estate values and important economic activities.

#### **4. CONCLUSIONS**

In this study, a model was developed through satellite imageries for the estimation of the LST index and other important spectral indicators, which are likely to affect and being affected by temperature spatial variation. With the help of Landsat-8 satellite imagery, our model mapped as accurately as possible the ground temperature and the vegetation spectrum, the intensity of the building stock/structures, and the moisture difference at a spatial resolution of 30 to 100 meters. Based on the statistical analysis developed, the selected indicators revealed a variety of correlations and interactions among them.

Specifically, the LST index and NDVI showed a positive correlation in winter and a negative correlation in summer, while the correlation of the former with NDBI was positive in both cases (periods). All binomial correlations with the LST were found statistically significant but not very strong, mainly due to the relatively small number of observations and the homogeneity of land uses (spatial uniformity). In addition, the correlations between vegetation levels (NDVI) and structure levels (NDBI) as well as the moisture differences (NDMI) are quite satisfactory in both periods.

A few limitations of our study need to be acknowledged. Firstly, a possible limitation of this study is that we did not have time-series data for analysis but only data for a specific year (2021). Furthermore, the use of NDVI as a proxy for vegetation cover may cause some problems due to the fact that it represents an aggregate measure of green vegetation and, therefore, it is not always a perfect proxy for all types of urban vegetation, especially with reference to their cooling

potential (e.g., trees also contributing to local cooling by providing shade). By using the LST it was not possible to consider air temperature, so we could not estimate the effect on ambient air temperature of such factors as the building side walls and/or the ground below tree canopy. Another limitation was that we did not account for population exposure on climate related hazards. The populations at risk and their socio-economic characteristics could provide a more complete picture.

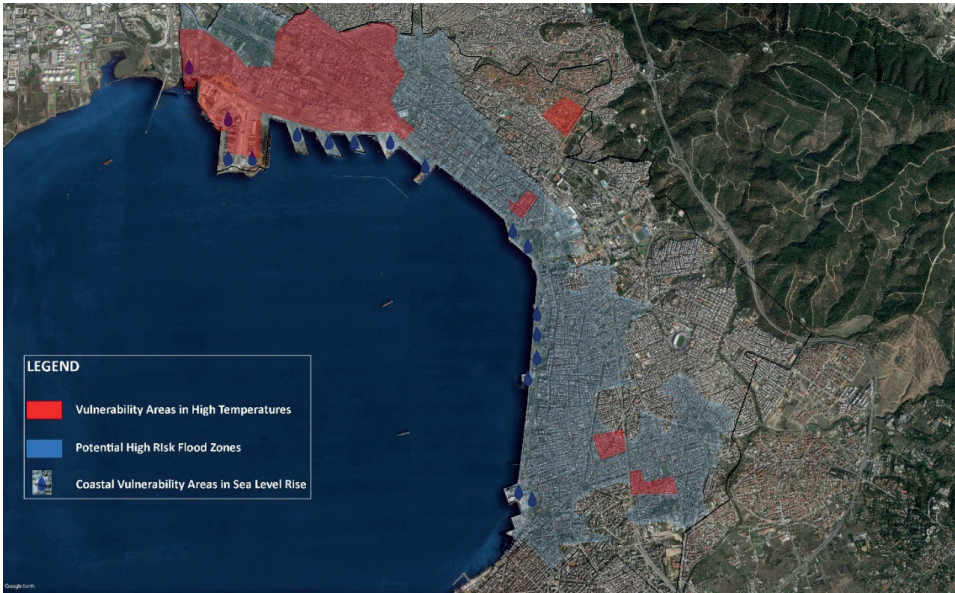


Fig. 13. Regions vulnerable to high temperatures and floods

Source: own work.

Most of the areas that experience higher temperatures in summer have the same characteristics: limited or total lack of vegetation, absence of free open spaces, and a high density of buildings. Furthermore, as the final aim of this study was to provide an integrated spatial vulnerability index to climate change, we also examined the urban areas that are prone to (flash) flooding and sea level rise. Once again, the absence of green spaces, the high building density, and the dominance of sealed/impermeable surfaces are the main drivers for increasing flood-related risks. The final vulnerability map, which incorporates all the above-mentioned climate-related risks, depicts that the city of Thessaloniki is not highly resistant to climate change as many areas/neighbourhoods are exposed to one or more risk factors. Therefore, future urban planning should in general focus on climate change adaptability by ensuring long-term investments in (urban) green infrastructure and nature-based solutions. Furthermore,

the application of the IntSpVi also provides useful information to the competent authorities for identifying areas that are more exposed to extreme temperatures and intense flood events. Thus, it would be possible to prioritise those neighbourhoods/areas where specific future planning interventions (for climate change adaptation) should occur.

A very important element of the urban structure that may help to mitigate the problem of the UHI and urban floods (by using a nature-based solution) is green infrastructure. The planning of urban greenery has been the major tool applied worldwide to mitigate the UHI (Dos Santos *et al.*, 2017), which has also several co-benefits (e.g., supporting urban biodiversity, improving air quality, carbon sequestration, etc.). Unfortunately, as already stated, Thessaloniki is a typical compact city facing a lack of urban green spaces, which are highly fragmented, and their size is usually small (only 30% of them are larger than 0.5 ha). Therefore, local authorities should incorporate green infrastructure into policies and practices where possible to reduce the overall heat stress vulnerability and to provide thermal comfort. In other words, it is necessary to explore the possibility of redesigning and expanding the existing green infrastructure (Kazak, 2018). The effort to unify the fragmented and discontinuous urban green spaces through green corridors and pocket parks will further contribute to the reduction of both thermal stress and flood risks.

The results of the IntSpVi can also be utilised by the insurance sector. Namely, areas with higher vulnerability values prone to more than one climate-related hazard may affect future insurance rates, which incorporate/reflect the level of associated risk. Land values may also be affected in the long term. So, homeowners and landowners in areas with higher vulnerability may have an increased interest in various adaptation (e.g., nature-based) solutions that could reduce future risks and to minimise any negative impacts on their real-estate values. As a consequence, spatial information provision on climate-related vulnerability may force communities and stakeholders to play a role in building urban resilience by exerting pressure on the local authorities to reduce the future impacts/risks of climate change.

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## TOWARDS A SUSTAINABLE MANAGEMENT MODEL OF THE *FESTA DOS TABULEIROS*

**Abstract.** The key goal of this conceptual paper is the creation of a sustainable management model of the *Festa dos Tabuleiros* (FT) event that provides a quality experience to the visitors without threatening the social, cultural and environmental integrity of the territory. Action research methodology has been used to improve the way the Tomar municipality organises and promotes the FT. In order to establish this model, it is necessary to determine the agents and relationships that underlie the production system of this event, aiming to improve the quality of its offer and the experience it provides to visitors as well as the sustainability of its production and consumption processes. In this sense, the development of the model will be based on four tasks: (1) stock-taking, interpreting and exhibiting cultural resources; (2) identifying, involving, analysing and educating stakeholders; (3) benchmarking of good practices in event sustainability; and (4) managing and monitoring the model. Hence, this paper aims to contribute to the safeguarding of the FT and to the sustainable development of the municipality and the region. This intent is

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achieved through the creation of a sustainable tourist-cultural management model that promotes the study, protection, enhancement, and dissemination of this event, as well as the creation of efficient and innovative solutions in an integrated way.

**Key words:** event management, *Festa dos Tabuleiros*, sustainability, action research, Tomar municipality.

## 1. INTRODUCTION

Tourist activity, when related to heritage, highlights and sells it as an iconic beacon of a place, region, country or even a continent (Richards and Wilson, 2004). In this respect competition between cities has been increasing, converting them into “consumer goods” (Remoaldo and Ribeiro, 2017), mainly due to the process of economic and cultural globalisation, when heritage is used as a differentiating factor for territories.

Heritage, tourism and the strengthening of community relations with a territory can be strategic tools (Ministry of Tourism of Brazil, 2010). Events have been seen by official tourism entities as a strategic product, as they allow destinations to differentiate their tourist supply from that of their competitors. The planning and organisation of events make it possible to attract tourists, and can enable urban renewal and improve the image and infrastructure of a destination (Getz, 2008).

Artistic/cultural events were considered one of the ten strategic assets of national tourism by the 2027 Strategy of the Tourism of Portugal, given that the events contribute to “boosting local economies in low-density territories, helping to expand tourism throughout the year and throughout the territory” (Turismo de Portugal, 2017, p. 49). The same document has established “events that contribute to the tourist promotion of the territories, the valorisation of local economies, their endogenous products and their stories and traditions” as priority projects (idem., p. 59).

Therefore, the *Festa dos Tabuleiros* (FT), one of the largest festivals in the world, having received in 2019 more than half a million visitors (IPDT, 2019), is part of this strategy. However, there is a great lack of studies on this event and this paper aims to fill that gap. Accordingly, this paper aims to contribute to the safeguarding of the FT and to the sustainable development of the municipality and the region, through the creation and application of a sustainable management model (Flores Ruiz, 2014), which promotes the study, protection, enhancement, and the dissemination of the referred cultural manifestation. It also aims to create efficient and innovative solutions in an integrated way with the local community and with the different public and private partners that are part of the territory (Silva, 2017).

The FT occurs in a specific social, economic, cultural and environmental context, and like other events it generates impacts. In the wake of the 1987 Brundt-

land Report (United Nations, 1987), it is important to understand the sustainability of development that allows present generations to satisfy their needs for improving living conditions, without compromising the satisfaction of the needs of future generations (Sharpley and Telfer, 2015). The present research, while seeking to recognise, estimate and measure these impacts, will aim to develop a management model that allows to maximise the positive effects and minimise the negative ones (WTO, 1998), helping this event to contribute to the well-being of the local community and stakeholders not only in the short term, but also long-term (Holmes *et al.*, 2015). This paper will combine quantitative and qualitative approaches improving the validity of the research (Finn *et al.*, 2000). This is substantiated in a triangulation (Phillimore and Goodson, 2004) of methods (quantitative and qualitative), an interdisciplinary triangulation (different fields of research, namely tourism, heritage, geography, economics, and marketing) and an information triangulation (using a variety of primary and secondary data sources: document analysis, visual evidence, questionnaires, image-based interviews, the Delphi technique, focus groups, and Geographic Information Systems), directed at the stakeholders of the FT, aiming to improve the quality of the experiences provided by the festival organisation.

## 2. EVENTS AND SUSTAINABILITY

Depending on their scale, events may be classified as mega-events, hallmark events, large events, and regional or local events (Getz, 2008). The number of events and festivals has seen a substantial increase in the last two decades, since these enable destinations to reposition and differentiate themselves from their competitors (Ministry of Tourism of Brazil, 2010). The level and nature of the generated impacts of events vary according to their dimension and the resources involved (Remoaldo *et al.*, 2016). Events can enhance or depreciate critical assets such as the social, financial, natural, and human capital of a destination (Anderson and Lundberd, 2013). The positive and negative impacts can occur in three levels (economic, sociocultural and environmental) (Richards and Wilson, 2004).

Regarding the positive economic impacts, they can consubstantiate themselves in an increase of profits, job opportunities, and investment in infrastructure and equipment. Events can, however, generate negative economic effects through inflation, real estate speculation, and opportunity costs (Marujo, 2015). Socio-cultural benefits produced by events are verifiable in the revitalisation of traditions and preservation of cultural identity, in the increase of local community participation, and the improvement of life quality (Marujo, 2015; Fong *et al.*, 2017). However, in social terms, events can also have detrimental effects for communi-

ties, such as gentrification, criminality, vandalism, harmful changes in values and customs, and the commodification of culture (Backman, 2018).

At the environmental level, events can promote an environment's protection, increase environmental consciousness, and encourage urban renewal. In contrast, they can create a rise in atmospheric, sound or visual pollution, an increase in traffic, problems with accessibility and parking, and overcrowding of the event's enclosures (Fong *et al.*, 2017).

The measurement of the economic impact of events has been conducted by authors referring to methodologies such as an estimate of the direct, indirect and induced multiplier effects of income and employment, as well as cost-benefit analysis methods and models of general balance (WTO, 1998).

But when it comes to socio-cultural impacts, the establishment of cause-effect relations that explain the recorded mutations has proved to be more delicate. According to Getz and Page (2016), the intangible socio-cultural effects and the long-term social and cultural cumulative event legacy still need to be measured and evaluated in an efficient way. In turn, the carbon and ecological footprints are methodologies of the environmental impact that demand to be applied.

The concept of sustainability has been permeating tourism since the 1980s. According to Getz (Dredge and Whitford, 2010), sustainable events are not those that last indefinitely, but those which play social, cultural, economic, and environmental roles that are valued by a community. The same author has called for the development of a sustainable paradigm that is not grounded exclusively in the economic value of events. The concept of sustainable development raised by the World Commission on Environment and Development in the Brundtland report of 1987 (United Nations, 1987) holds the notion of human progress guided to the maintenance and improvement of living standards without compromising the ecosystem, on which life on Earth depends. This paper aims to establish a sustainable management model for the FT that ensures that the negative effects of this event are minimised whilst the social, economic, cultural, and environmental benefits are maximised.

Sustainability has been aggregating value not just to the image of events, but also to their promoters and sponsors. Sustainable events include activities that apply sustainability principles not just in their conceptualisation, but also in their preparation and realisation (Holmes *et al.*, 2015). This typology of events gives special relevance to the safeguarding of three pillars of sustainability: economic, environmental, and social. These same principles are found in the ISSO 20121:2012 standard (APCER, 2012) regarding the certification of companies associated with event organisation. This standard aims to "identify, reduce and eliminate potentially negative impacts of events, as well as [...] maximise its positive impacts through better planning" (Idem, para. 4).

According to Misener and Mason (2006) (as cited in Taks, 2013) events can contribute to social capital formation if they put community values at the centre of decision-making processes, and if they involve various stakeholders, es-



pecially from the community in event-related activities. According to the same authors, events, especially those that are not mega-events and that take place in small towns, should also empower local communities to operate changes. Communication and mutual learning processes are also valued by the same authors. Talavera, Al-Ghamdi and Koç (2019) have also emphasised the development of social capital by mega-events through “initiatives to integrate locals, expatriates, and visitors in a harmonic environment of friendly understanding, respect, and cultural exchange” (p. 18), whereas Gaffney (2013) has considered events to be sustainable when they include “long-term urban planning, post-event venue use, social equity or democracy in their discursive frames” (p. 3929).

### 3. FESTA DOS TABULEIROS

The FT can be classified as a hallmark event, that is, a recurring event which, in a sense, is a synonym of the city of Tomar (Sousa and Ribeiro, 2018; Fernandes and Carvalho, 2018). It is possible to say that there is an overlap between the spirit and philosophy of the event, the place, and the local community. Nonetheless, events are tourism products of ephemeral attraction that cities hold for a limited period (Molina, 2013). Even more in this case, since the FT is only held quadrennially. This circumstance does not invalidate that there is an intensive flux of national and international visitors in the year of the event – as it is perceptible in the number of entrances to a city monument, the Church of Holy Mary, in a festivity year (2015).

Recently, IPDT (2019) calculated 700.000 visitors and 11.9 million euros of direct impact in the 2019 edition of the FT. In this context, the average spending of national visitors was estimated at 49.63 euros and its international counterpart at 118.44 euros. The same document noted that 97% of the residents considered that this event had a positive impact on the region’s dynamics.

The FT presents a unique model within the festivities in honour of the Holy Spirit that occur around Pentecost, the central date of the Christian calendar. The distinctive elements are related to the format of the offerings, the trays, which represent the payment of promises to the Divine (see Figure 1), constituting one of its central symbolic aspects. The cult consists of a wide context of detailed ritual ceremonies, both of religious character and festive expression, beginning with the *Cortejo das Coroas* on Easter Sunday, the *Cortejo de oferendas*, and culminating with the generalised distribution of foodstuffs, the *Pêza*. To this we must add the participation of all the parishes of the municipality and the complementary activities that are part of it – the Boys’ Parade, the Boys’ Games, the Butler’s Parade, Partial Parades, Popular Ornamented Streets, and Popular Games. With its different types of great richness and complexity (for example, from coronations

to banquets and *bodos*, and also parades) it is spread all over mainland Portugal, with particular incidence in the regions of Extremadura and Beira, and also on the islands of Madeira and the Azores (Dionísio *et al.*, 2020).



Fig. 1. Festa dos tabuleiros (festival of the trays)

Source: author's image.

#### 4. MANAGEMENT MODEL TO ACHIEVE THE SUSTAINABILITY OF THE FESTIVAL

The present research intends to deploy the action research methodology to the FT. Action research is an approach in which researchers and participants in the unit of analysis collaborate in diagnosing a problem and developing a solution (Bryman, 2012). In this context, action research is a methodology aimed at promoting change in an organisation (Altinay and Paraskevas, 2008). Hence the model presented here intends to contribute to improving the planning and organisation of the FT event.

Thus, action research presupposes the constant collection and analysis of data gathered within the scope of the FT, as well as the implementation of a management model and the application of the results obtained in the improvement of the action of the event's stakeholders in order to change their operating model (Ritchie and Goeldner, 1994).

One of the general goals of this research will be to develop a management model to achieve the sustainability of FT, through the study and, subsequent-

ly, optimisation of the cultural, social, economic, and environmental dynamics associated with this heritage manifestation (Flores Ruiz, 2014). The challenges associated with this model present an opportunity to provide continuity to a heritage manifestation, which is only experienced and celebrated every four years. It is intended, as such, to aggregate attractiveness to an event that, by its quadrennial periodicity, presents a three-year hiatus which is here intended to be filled (WTO, 2011).

The FT, in its last edition, generated a considerable economic impact and a substantial media outreach, as well as general satisfaction (IPDT, 2019). Nonetheless, this event, which received around 700,000 visitors, also produced some negative impacts, including environmental, visible, for instance, in the accumulation of trash in restaurants, or economic, such as price inflation of food products in some establishments during the period of the event. The sustainable management model that the researchers intend to implement will draw from the shared vision of the key stakeholders of the FT (Martins, Mota and Braga, 2020).

Stakeholders are here understood as the groups or individuals affected by this event. It is intended to obtain their support for the adoption of sustainable good practices. The stakeholders will include sponsors, official tourism entities (at the local, regional, and national levels), tourism entrepreneurs, volunteers, community groups, and the media associated with the event, among others. However, it seems clear that sensibilities and interests are different among stakeholders and unanimity is not always possible. Nevertheless, it is necessary for the goals and intentions of all stakeholders of the event to agree for the success of this model.

Two groups of stakeholders, primary and secondary, can be distinguished. The former can be defined as people and organisations without which the event could not be held. The latter are composed of groups and individuals that are not directly involved in the event but can have a significant impact on it. A key goal of the current research is the creation of a sustainable management model of the event that provides a quality experience to the visitors, without, however, threatening the social, cultural, and environmental integrity of the territory (Braga and Silva, 2022; Fong, May-Chiun, Songan, Nair, 2017).

The achievement of this objective is, however, dependent on the way the event is managed. By aiming to establish a management model that can be replicated in other events, the researcher is aware that this tourism product is particularly complex, since it is transversal and fragmented, and is based on a value chain formed by a diverse group of independent agents (hotels and restaurants, café owners, local communities, the municipality, the organising commission, etc.), and by the territory in which it occurs. The proposed model implies planning, coordination, and articulation of all these stakeholders in search of solutions to improve the economic, social, cultural, and environmental sustainability of the FT. To reach this goal, the researchers and institutions that are involved in this research intend to learn in depth the nature of this tourism-cultural manifestation.

As such, they plan to identify, involve, analyse, and educate the event's stakeholders, that is, the supply and demand of the event (Task 2), the visitors that are willing to engage in an authentic experience, and the tourism trade agents, the set of services that are provided by the stakeholders in the place of the event to satisfy visitor needs. A key aspect of this management model will be the strategic planning of the FT (minimising potential negative impacts and maximising the economic benefits of the tourist destination, as well as encouraging a more positive response from the local community towards tourism in the long term) (Future Trends, 2011). The intention is to provide local and regional promotional agents with sustainable strategic planning of the event (see Fig. 2) that is capable of reaching balance and coherence between the different stakeholder actions.

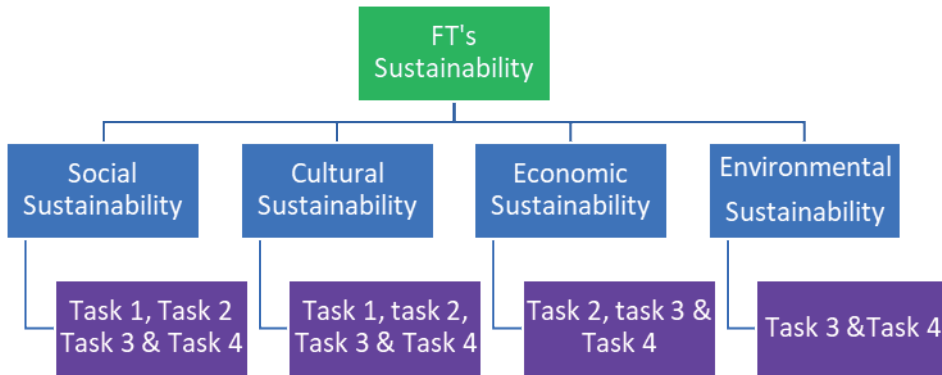


Fig. 2. Operationalisation of the Model

Source: own work.

For that end, an inventory of the cultural resources of the FT will be made (Task 1), emphasising its specificities and characteristics, as well as the attractions that this tourism product offers. The aim is to diagnose the limitations and attributes of the space in which it is held, analysing the positive and negative characteristics of this tourism-cultural manifestation, and ensuring the preservation of the heritage and the physical environment in which it is held.

In order to establish this model, it is necessary to determine the agents and relationships that underlie the production system of this event, aiming to improve the quality of its offer and the experience it offers to visitors, as well as the sustainability of its production and consumption processes, and, finally the improvement of the FT's competitive positioning, but above all the safeguarding its unique and irreplicable Intangible Cultural Heritage (ICH).

Within tourism literature, this conceptualisation falls in the scope of sustainability models (Flores Ruiz, 2014). To reach sustainability of a tourism product, management models need to be based on three fundamental aspects: natural and

cultural conservation, economic viability, and social equity of development, considering that each of these elements follows a different path to reach the same goal (Holmes *et al.*, 2015).

## 5. OPERATIONALISING THE MODEL

In this sense, the development of the current model will be based on four tasks: (1) stock-taking, interpreting and exhibiting cultural resources; (2) identifying, involving, analysing, and educating stakeholders; (3) benchmarking of good practices in event sustainability; and (4) managing and monitoring the model. Each task will include the application of methodologies and will develop action strategies to diagnose the necessities regarding the cultural, economic and environmental sustainability of the FT.

Regarding Task 1, the main goal will be the study, stock-taking and safeguarding of the FT, considering the dynamic dimensions of the past and evaluating the contemporary aspects of this heritage manifestation. To do so, a holistic and democratic approach will be adopted in the definition of what is cultural heritage, applying participative community intervention methodologies and considering the manifestations of the ICH. These are an integral part of the everyday life of individuals and groups that preserve them according to their own ways of evaluation and safeguarding.

Following this, in Task 2, the aim will be to identify and analyse the needs of stakeholders through methodologies such as focus groups, questionnaires, interviews, and the Delphi technique. With the knowledge produced by the focus groups and the Delphi technique, a series of workshops and seminars will be conducted aimed at bridging the gaps identified by the population and analysed as relevant for training, resulting in a change towards the adoption of good practices. Task 3 aims at benchmarking the best environmental sustainability practices in events at the national and international levels. As a result of the application of this methodology and the correspondent transference of knowledge, the application of new digital technologies and geographical information systems is expected, as to improve the experience and satisfaction of FT visitors. A strict articulation with Tasks 1, 2 and 3 is expected when it comes to the identification of stakeholders and surveying strategic priorities by region, municipality and parish.

Task 4 will comprise the management and monitoring of the model activities. The goals of this task will be: (a) accompanying the accomplishment of the outlined actions in tasks 1, 2 and 3; (b) gathering the information produced in Tasks 1, 2 and 3; (c) collaborating in the resources management; (d) writing the necessary reports; and (e) organising general meetings. This task will contribute to a better organisation of the collected information.

### **5.1. Task 1: Stock-taking, interpreting and exhibiting cultural resources**

This task aims to contribute to the study, stock-taking and safeguarding of the FT, considering the dynamic features of the past and evaluating the contemporaneity of this heritage expression.

To this end, a holistic and democratic approach is adopted in the definition of what the cultural heritage is, using participatory community intervention methodologies and considering that ICH expressions are an integral part of the daily lives of the individuals and groups who preserve them according to their own enhancement and safeguarding practices. In articulation with Task 2, the researcher seeks to understand the importance of socio-cultural agents (local notable persons, social scientists, local associations, media, parish councils, and the municipality), who have played a central role in the new dynamics of the FT, placing themselves locally as mediators between reality scales. The task is guided towards three goals: (1) to preserve the legacy of the FT and to develop the community's sense of belonging towards its local history; (2) to safeguard and enhance the FT material, immaterial, and historical-cultural heritage; and (3) to produce pedagogical content to contribute to education and heritage enhancement. The starting point will be the identification of extant literature regarding the FT in historical, national, and international documents and regarding similar cultural phenomena.

To support the elaboration of exhibitions and scientific papers, an inventory matrix for the registration of information and a digital repository for storage and access of information in a practical and uniform way will be created. Interviews will be conducted to gather collective and individual biographies. Through oral testimonies, an attempt will be made to map meanings and the memories of a given object or collection, evaluating the diversity of perspectives and identity self-knowledge.

Through a multidisciplinary approach, the following activities aim to contribute to change the state of the art, stock-taking and spreading cultural, scientific and technical knowledge in collaboration with partners, populations, and communities, in order to share the benefits resulting from the implementation of the model: the accomplishment of itinerant thematic exhibitions in the municipality of Tomar, with traditional and interactive contents; the creation of an online platform that enables the dissemination and promotion of the FT as a heritage phenomenon, empowering and revitalising traditional arts and crafts and providing access to indispensable information to the identification of the ICH and the definition of safeguard strategies; the operationalisation of training actions in the municipality of Tomar for the transmission of traditional arts and crafts associated with the FT, which integrate craftsmen and new creative industries; and the organisation of a national seminar regarding the ICH and FT itself and the elaboration of didactic publications about the FT.

## **5.2. Task 2: Identifying, involving, analysing and educating stakeholders**

A stakeholder analysis will be conducted in order to identify which actors are involved in the FT. The understanding is that a stakeholder is any group or person whose interests may affect or be affected by the outcomes of an event. Hence, the objective is to identify the social, economic, and cultural actors (in articulation with Task 1) involved in the planning and execution process of the FT.

The analysis of the stakeholders is a participatory investigative method in which researchers propose to: (1) identify the stakeholders; (2) classify them, and (3) verify the relationships between them. To identify a stakeholder, it is necessary to understand who engages with a certain aspect of the organisation, management or execution of the event. To do this, it is advisable to use qualitative methods, such as the focus group method.

Focus groups aim, in a relaxed atmosphere, to acquire information on an investigative theme by utilising a qualitative methodological tool, such as a semi-structured interview (Ritchie and Goeldner, (1994); Altinay and Paraskevas, 2008). After the implementation of the focus groups, a classification of the stakeholders and their inter-relationships will follow. Through the latter it will be possible to identify, from the stakeholders' point of view, what the needs of the festival are, the positive and negative points, and how to improve the social, economic, cultural, and environmental management of the event under consideration, and the participation of the local community. This task will be monitored by researchers assigned to Task 4.

It is also expected the use of the Delphi methodology to obtain the critical opinion of specialists or experts in specific areas (which may be relevant for Tasks 2 and 3). These experts will be selected according to their high knowledge of the subject or research area. This is a method of collecting opinions from a group of experts through a series of questionnaires that are answered in successive rounds anonymously and with as much autonomy as possible in order to reach a final consensus on the subject under study. This qualitative technique is very flexible and can give additional rigour by addressing the types of questions and issues that are difficult to research using more conventional methods.

Apart from using the focus group and the Delphi technique, semi-structured interviews to the different agents of the tourism supply sector and visitor surveys are planned, aiming to maximise their satisfaction with the event, in a triangulation of qualitative and quantitative methodologies. The definition of the indicators and agents of the tourism supply to be studied will follow the recommendations of the Tourism Satellite Account of the National Institute of Statistics (INE, 2016).

Once the main constraints related to the referred event are identified, analysed and ascertained, the next step will be the integrated planning of workshops or seminars (common to Tasks 1, 2, and 3) and their implementation with the target

audience considered in the previous processes, in order to respond to the gaps most glaring throughout the diagnosis derived from the application of the methodologies mentioned above, with the perspective that this training will be able to mitigate and even, hopefully, eliminate them.

### **5.3. Task 3: Benchmarking of good practices in event sustainability**

Benchmarking is a systematic and continuous process of measuring and comparing organisation practices with those of world leaders, in order to obtain information that helps improve its level of performance (Clarke and Raffay, 2013).

Accordingly, this task aims to implement a sustainable quality management of the FT in order to achieve the first objective of this model, which is the maximisation of positive impacts and the minimisation of negative ones at the economic, socio-cultural, and environmental levels.

In order to achieve this objective, an analysis and evaluation of the structure of the event industry in Portugal, Europe, North America, and Asia will be necessary. This task foresees a comparative analysis between hallmark events, in whose typology the FT is inserted. It may also be possible to establish virtuous synergies with other similar events in Europe.

The researchers in charge of this task, in order to make an evaluation and benchmarking of similar events, will have to study and analyse them in depth, looking for reliable information (comparators) that will enable them to extend their knowledge about the best practices in events, having as the objective the subsequent transference of the acquired knowledge for the benefit of the stakeholders of the FT (it is foreseen in this scope an articulation with Task 2).

Special emphasis will be put on best practices in terms of flow management (one of the negative impacts of the festival) with the possibility of creating strategically located honey pots (Williams, 1998). These should act as interceptors in planned locations of the event, consisting of car parks, information spots, and food and beverage stands. Thus, themes such as spatial zoning and the concentration and dispersion of visitors will be specially highlighted, seeking to adopt the best national and European practices in this matter.

Therefore, face-to-face visits to events that offer success stories are planned in order to assess the state of the art regarding the quality of these tourism products. This activity is, therefore, articulated with Task 4 regarding the adoption of a conceptual model of benchmarking of hallmark events. In this scope, it is intended to accomplish several reports regarding the technical visits made and an audio guide that can be downloaded to mobile phones from this device (i.e. the Interactive Panel with Augmented Reality) or from platforms such as Audite. These will be provided in several languages (e.g. access according to the MOATI Model). The use of simple QR code technologies is also foreseen, which will lead to simple textual information



(without the need for Internet access), together with links to a website, images or videos. The intention is to associate these ideas to the principles of environmental preservation and accessible tourism.

Regarding the management of visitor flows at the FT, these can be undertaken through mobile phone geolocation, so the researchers can produce flow maps, through points (each point on the map would be a mobile phone), having access only to the device IP and to the mobile phone number at the most. Thus, data privacy would be always safeguarded and with this method the researchers could create interactive maps using SIG tools. These flow maps can be generated later to support the studies and conclusions or in real time (e.g. release an online interactive map, via the institutional page of the event and via the potential APP specific to the FT and also, in an integrated way, in interactive urban panels together with the City Council of Tomar).

#### **5.4. Task 4: Managing and monitoring the model**

Given the characteristics of this model, it is necessary to manage and monitor the planning in order to meet and fulfil the expectations of all groups involved – formally and informally: institutions, entrepreneurs, associations, tourists and visitors, local community, etc. Therefore, it is essential to articulate the research process, with the social partners, in order to ensure the pursuit of the proposed and expected lines. To this end, it is essential to monitor and evaluate the development of the tasks that comprise this model, in order to gather a global perspective of the action in progress and, if necessary, adopt corrective measures in an objective and efficient way.

The purpose of this task is to constantly monitor all the activities inherent to and resulting from the implementation of the model, in order to provide an updated dataset to the entire research team, whenever necessary. It is understood that this information is crucial to correct any anomalies or unexpected situations, given the planned application, as well as to optimise the use of available resources.

It is intended to conduct the “Management and monitoring of the model” through actions directed towards the collection and systematisation of information on the activities developed within the different tasks of the model, the holding of meetings with representatives of the tasks, and the reporting, shared with the whole team, aiming at sustainable planning during the course of this research.

## **6. FINAL REMARKS**

Sustainability has become a global concern, particularly in the tourism industry. Hence, mass tourism must be avoided because it tends to be insensitive to the social, environmental, and economic impacts of tourism on communities.

Sustainable planning and organisation of the FT, considering good governance criteria, will be able to create policies that can guarantee the maximisation of benefits to local communities while minimising negative impacts (WTO, 1998).

The management model to achieve the sustainability of the event will balance the socio-economic needs of the communities with the demands of visitors and the tourism industry, while conserving the environment and cultural resources of the community. Therefore, the sustainable development of the FT can avoid the negative effects of tourism on the local community and is based on four dimensions: social, cultural, economic, and environmental sustainability (see Fig. 2).

The present model intends to be a strategy to fight the imbalances caused by the tourist seasonality associated with the FT. It is also intended to improve the international perception of the image of the FT and of Tomar as a tourist destination (WTO, 2011).

Finally, it will be important to attract tourist segments more receptive to the global development goals, namely goal 11 (“Sustainable Cities and Communities”); goal 12 (“Responsible Consumption and Production”), and goal 17 (“Revitalize the global partnership for sustainable development”) (United Nations, n.d.).

The limitations of this text are due to the fact that it is still a conceptual paper without the proper empirical concretisation. Nevertheless, the author believes that it can become a guiding document for a future project, to be undertaken by local development organisations and actors, in order to intensify the multiplying effects arising from the FT, but also to implement the 4 dimensions of sustainability associated with this event (cultural, economic, environmental, and social) so that the impact of the FT is not confined to a little more than one week every 4 years, but can become an enduring tourist product of Tomar.

One of the challenges that the researchers will face is the communication, promotion and dissemination of the results of the model implementation, which is an essential tool in the relationship, not only among the partners, but above all within the society in terms of mobilisation and public information. The model’s digital platforms will be constantly updated with information about the project development stages, as well as with intermediate results. The results of the model implementation are expected to take 3 years to implement, which corresponds to the interval between two FT editions.

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## BOOK REVIEW

**LUMMINA G. HORLINGS (Ed.)<sup>1</sup>, *Sustainable place-shaping: what, why and how. Findings of the SUSPLACE program Deliverable D7.6 Synthesis report, 2019, 85 pages***

The book titled *Sustainable place-shaping: what, why and how* edited by L. G. Horlings is a scientific report from SUSPLACE – a Project within Marie Skłodowska-Curie Actions Innovative Training Network funded by the European Commission. The main goal of the SUSPLACE project was to train Early Stage Researchers in innovative, interdisciplinary approaches to study sustainable place-shaping practices.

One of the main ideas of the project was to find and analyse 15 different research projects related to sustainability. They were divided into groups called inclusive places, resilient places, connected places, greening economies, and pathways to sustainability. Analysing those examples, the authors focused on answering the following questions: a) What are place-based resources? b) What are the practices of shaping a place that can support sustainable transformation? c) How can the full potential of places and people's abilities be used to stimulate the process of creating places? And d) How can researchers support such processes? The project was implemented between 2015 and 2019 and brought together

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<sup>1</sup> With contributions from: L. Axinte, J. van den Berg, E. Felcis, S. Grenni, L.G. Horlings, O. Husain, A. Moriggi, M. Nieto Romero, A. Papangelou, K. Pearson, S. Pisters, M. Quinn, M. Quinney, C. Rebelo, D. Roep, D. Soares da Silva, K. Soini, A. Šuvajevs, A. Taherzadeh, G. van der Vaart, S. Valente, A. Vasta, and A. de Vrieze.

6 academic partners (Wageningen University, University of Aveiro, University of Latvia, Cardiff University, KU Leuven, Natural Resources Institute Finland) and 7 non-academic ones (from the Netherlands, Lithuania, Latvia, the United Kingdom, Portugal, and Finland).

The book is structured well. It is divided into 7 parts including an introduction, a summary and an annex. It is a collection of chapters thematically organised as follows: 1) Introduction, 2) What is place and why does it matter? 3) What is sustainable place-shaping? 4) How to shape sustainable places? 5) Mastering complexity: SUSPLACE as a joint learning journey, and 6) Lessons learnt and implications.

The authors of the book emphasised the role of conducting research in places. Researchers can engage in those investigated communities and assume different roles and functions, e.g., agent of change, reflective researcher, etc. That is a key point for understanding the context of a place, especially when one tries to transform a place through sustainable development.

All research projects are described in the book in special sections called 'Textbooks.' They are intertwined with the text of the various chapters. The descriptions of the analysed examples were prepared by different persons involved in each notion of interest. In my opinion the most interesting example is 'Common lands in Galicia.' The researcher Marta Nieto Romero who investigated the Spanish example tried to answer the questions *What are the commonlands?* and *How can commoning help to revitalise rural communities?* In this textbook there is also a link to a 15-minute video clip which makes it easier to understand the discussed issue.

The part called 'Annex' reveals what were the other intellectual outputs of the SUSPLACE project. It contains, for example, a description and links to a toolkit called 'Arts-Based Methods for Transformative Engagement.' The tools support new ways of thinking about the implementation of the sustainability initiative. There are some descriptions with links to publications, leaflets, or on-line platforms.

The report may be interesting reading for researchers with different backgrounds for further analyses and studies within the field of sustainability. Written in an intelligible way, the book shows many good examples of different aspects of sustainable place-shaping practices in Europe.

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