



Destination Regeneration: Transforming Overtourism Hotspots into Smart Eco-Regions

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Abstract – Tourism around the world has grown quickly, but it's often caused problems for local people, the environment, and culture. This write-up checks out overtourism—when too many tourists swamp a place. This hurts its stuff, society, and nature. It suggests a fix: Smart Eco-Regions. These spots would use new ideas to mix tech, rules, being green, and helping locals. The aim is to rethink travel destinations as spaces where people can live together well without hurting longevity and come up with cool ideas. By taking a close look at places hit hard by overtourism like Venice, Barcelona, Machu Picchu, and Santorini, the research points out ways to stop just reacting to problems and start fixing places up before they get ruined. Some important moves are changing how things are run, getting locals involved, using green ways of doing tourism, and adding digital stuff. The paper gives a plan for turning trashed tourist traps into nice, green places to be. These places would balance what visitors want with keeping the environment and people healthy for a solid amount of time.

Keywords – Overtourism; smart eco-regions; destination regeneration; sustainable tourism; digital infrastructure; community engagement; environmental impact; urban resilience; tourism governance; visitor management; regenerative development; heritage preservation; case studies; Venice; Barcelona; Machu Picchu; Santorini.

I. INTRODUCTION

In recent years, many places have struggled with the negative sides of tourism growth, which can bring unexpected issues. These overtourism hotspots are seeing more public frustration and negative feelings toward tourism and tourists. Places that were once known for beautiful scenery and real culture are changing, with a focus on monitoring and control. Some are trying to find long-term solutions by rethinking their whole approach to tourism. But this is tough because people who helped build up these tourist spots are now feeling the pinch from recent tourism problems.

To deal with heavy tourism, we need to turn public complaints into policies that reshape how people think and feel about tourism in a place. We can use ideas and tools from different fields to come up with creative solutions. Looking at unconventional ideas about tourism can give us fresh perspectives on overtourism. By asking bigger questions about hospitality, inclusion, limits, and how tourists fit in, we can create new ways to understand tourism in these places. With these ideas in mind, we can create alternative policies that reshape how destinations grow and develop smart eco-regions to handle tourism growth.

By showing what's happening in overtourism hotspots and suggesting a new way for destinations to change, we can achieve social sustainability by finding new ways to use different fields and methods that aim for growth and well-being. This is an alternative to unplanned growth and ideas about criminalizing tourism. Hopefully, future studies will use this approach in their own areas and communities and bring out their own creative ideas that they haven't used before.

Understanding Overtourism

Tourism has good and bad sides. It often brings in money, creates jobs, and drives investment. It can also improve international relations and lead to richer cultures and better living standards. There are many ways tourism can help society, the economy, and the environment. So, from a public point of view, tourism can be a positive thing.

But tourism can also have downsides. For instance, it can cause crowding and anger local people. This is what we call overtourism. Overtourism is when too much tourism in a place negatively affects the quality of life for residents, the experience for visitors, and the natural environment. Overtourism can lead to a mass market that is not good, sustainable, or enjoyable. Many cities and places facing this issue have more visitors than residents. These places need to find ways to spread tourism to new smart eco-destinations and focus on keeping things sustainable, livable, and able to coexist. Many areas also have historic and cultural spots that are UNESCO World Heritage sites. These places need tourism management strategies to protect the communities so future generations can enjoy them.

So, this text will focus on what overtourism is, how it affects local communities, and suggest a new way to protect beautiful natural places by using an eco-region strategy. It will also give tips on how to avoid chronic overtourism and give cities travel guidelines and community planning advice to actively create livable communities that focus on preservation.

Definition and Causes

The word overtourism has become common in recent years. It describes when a place sees a huge rise in tourist numbers, leading to bad results like crowded infrastructure, damage to cultural sites, pollution, and a lower quality of life for people who live there. Places now seen as overtourism hotspots include well-known cities like Venice, Dubrovnik,



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and Barcelona, and even whole areas like the Dalmatian coast in Croatia. The main reason for overtourism is that places are trying to attract more tourists to boost their economies. There's a lively tourism scene focused on growth by creating new experiences and expanding places to stay. This leads to more effort and money being spent on attracting new types of tourists.

But it might be possible to manage tourism growth to avoid or lessen the effects of overtourism. We can spread tourists out over different areas and times by attracting new groups of visitors. We can reduce crowding at popular spots by managing traffic, like they do at sports events and attractions. We can also use social media to promote lesser-known places and experiences. This could also mean investing in things like better hotels to make a city more competitive. Finally, cities can try to limit tourism growth by controlling things like airport slots. Better destinations will still play a key role in attracting visitors and staying competitive. But overtourism is also a problem that can get worse on its own. If a place has too much tourism, it might become known as an overtourism hotspot, leading to social and political problems.

Impact on Local Communities

Smart eco-regions around the world are taking action to lessen the effects of climate change on society and the economy. At the same time, the world is dealing with mass tourism and overtourism, which can hurt destinations socially, culturally, and environmentally. Smart eco-regions are trying to prevent mass tourism, control overtourism hotspots, and transform destinations into smart eco-regions for everyone's benefit.

Bruges has been called a dream city that many leaders would want to have. But tourism is a mixed bag for this popular city. The big growth in tourism that started in the late 1990s was like a storm that damaged the peaceful living environment. Locals are protesting mass tourism increasingly. Major problems in Bruges are now being reported in national and international news. But everyday innovation is still lacking. People with new ideas are being held back by bureaucracy and outdated policies. The expensive infrastructure that stops unrestricted housing development doesn't leave room to quickly respond to growing demand.

On the other hand, history, heritage, and nature are very important. They attract many people, but they're also the biggest challenges. Something needs to be done to bring back peace. That's why there have been recent tourism protests. How can we fight this threat? What can we do? If possible, how can a historic city like Bruges change into a renewed city that leads the way to sustainable tourism? Turning overtourism hotspots and their surroundings into smart eco-regions is seen as the best way to reform governance and policymaking. The focus is on destination management, policies, and governance that take different forms depending on local authorities.

Environmental Consequences

Some travel destinations have so much tourist traffic that there's no real peak or off-season. These places show signs of being over-touristed, including run-down urban areas and social intolerance, which can lead to a distorted image of the place. Some spots have been affected in ways that block views of landscapes.

Tourism development can also harm protected natural areas. Too much tourism in national parks can make them depressed. Fast city development can also lead to problems, and old commercial issues, like prostitution or drugs, might reappear. Overtourism can be measured and compared financially, socially, and environmentally.

The environmental impact of these places can be tracked in terms of sustainable tourism. We can describe the transportation network and visiting routes. Looking at the direct environmental effects, measuring sustainable tourism development, and understanding both increased visits and the people who visit can help. Sorting out environmental impacts can help with counterstrategies for sustainable tourism development. Understanding the environmental needs of destinations would help protect them from overtourism and identify what makes a place good for the environment.

We can also look at the environmental consequences of social structures in these places. Working with decision-makers and stakeholders in the tourism industry could help study the different interests of these groups. We could also address local benefits from tourism investments and how they affect local communities. Community development funded by tourism investment might also be shown by creating jobs and developing skills.

II. SMART ECO-REGIONS: AN OVERVIEW

Smart eco-regions are like smart cities that operate under a regenerative development approach, which is part of a nature-based view. They promote social inclusion, prosperity, sustainability, development of the region, quality of life, and positive relationships with the natural environment and human society. Smart eco-regions have: 1) a smart entity with 20 qualities and 40 indicators; 2) a multi-level city-region governance covering the economy, society, ecology, and daily life. Smart eco-regions have 20 qualities that are socially and digitally inclusive, have a service-based economy, encourage community innovation and social resilience, offer spaces for relaxation, tourism, and sports, encourage learning and sharing, have equal access to resources, build health resilience, offer nature-based experiences, are people-focused, have ecosystem integrity, are carbon neutral, have pleasant travel, have both physical and virtual spaces, are business-friendly, are open for green and smart city investment, are globally connected, and develop based on the local identity.



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This idea identifies key qualities and trends, looks at the basic framework of development and governance, helps mutual learning and problem-solving, and gives a new theoretical view on the well-being of cities and regions. It also promotes a development culture that moves away from engineered smart cities with a strict top-down approach.

Concept and Principles

Regeneration and Sustainable Development of Over Tourism Hotspots: Smart Eco-Regions 55- Concept and Principles. The idea of a Smart Eco-Region has three connected parts. First, an eco-region is a territorial unit of at least 1,000 km² that has at least one tourism destination and source region that is energetically self-sufficient by using renewable resources mostly produced locally and considering the carrying capacity of ecosystems, allowing humans and wildlife to do well. A smart eco-region is a group of sustainability experts that aims for the regeneration and sustainable development of a given eco-region. Members cooperate on agreements that benefit everyone at two levels: agreements on each work package and delivery of work packages helped by a mutual support plan, where knowledge is shared. Each work package leader reports on progress, problems, and issues at agreed times, usually every month through video calls, and at least once a year in a seminar. Meetings, communication, or forums can offer ways to raise, discuss, and decide on issues as the cooperation grows. Infrastructure systems, data sets, and services need to be bought and maintained, usually through public tenders. It helps for members to pledge money to an emergency fund or share savings from not hiring external parties. All members give notice of travel periodically to make sure planned visits happen as scheduled. Problems with planned travel are investigated to avoid future issues and waste resources.

III. TECHNOLOGICAL INNOVATIONS

Technological innovations as enablers of smart eco-regions are part of the immaterial economy, which relies on big data, digital infrastructures, and processes governance, allowing for cost-effective service matching. An experimental part is needed to collect data in real scenarios. Some recent studies in tourism using big data sources and finding causal knowledge are looked at.

Using data and knowledge together is changing social interactions and increasing their impact on economies, making them more relevant for the service sector. The idea of an immaterial economy is used, which creates new wealth in the knowledge, data, and information age with qualities like intelligent environments, business intelligence, and data management and governance. These qualities can enable the creation of sustainable smart cities. Tourism is a great economy for people, providing a good life, but also a global problem related to uncontrolled growth and social and environmental damage.

The goal of making a tourism plan is to balance the economy benefits from tourism and conserving local

resources, while using the precautionary principle. The goal is to develop a decision support system for a massive tourism project on an island that is about to start. Stakeholders in tourism developments on islands have conflicting interests and tensions between economic, social, and environmental values. They would benefit from increased collaboration because of the risk of costs.

IV. CASE STUDIES OF OVERTOURISM HOTSPOTS

Lately, many places that are dependent on tourism for economic growth face a crisis. Locals feel overwhelmed by the increasing number of tourists, sparking debates about overtourism. These problems in destinations worldwide are rooted in bigger issues related to how tourism grows, especially concerning social, cultural, and environmental factors. A research plan is suggested to better understand tourism's growth. It supports focused, detailed studies on the connection between tourism and society's ability to sustain it. Venice and Dubrovnik have attracted tourists since the 1800s but are now some of the most crowded places, seeing millions of visitors yearly. Getting World Heritage status helped bring international attention back to their historic centers. Still, both cities are said to face threats from tourism, which has caused disagreement between locals and some groups, and businesses like big tour companies.

It seems harder to achieve tourism that is good for both locals and businesses. The overtourism discussion mainly addresses issues like reducing tourist numbers through cruise restrictions, stay-away days, limiting souvenir sales, and controlling access to sites or guides. The idea of creating smart eco-regions to help these cities relies on many policy papers that suggest investing in eco-friendly projects, protecting the environment, and trying to broaden how tourism is managed by creating action groups.

Venice

Venice, about 3.5 feet above sea level, is a unique environment. It features a complex system of more than 118 islands connected by 178 canals, some navigable and some not, within just 3.5 square miles. This unusual setup adds to the city's rich history. Without regular streets, Venice is a maze of bridges over waterways. This uniqueness has made Venice a popular spot, attracting 23 million visitors each year, with 90% being day-trippers. Tourism brings in over four billion euros annually, which helps fund much of the infrastructure, but it can also create stress for locals (John Connor et al., 2015).

The Venice Biennale, held every other year since 1895, is a well-known event for modern art. Over 80 countries participate, inviting artists to create displays that interact with the city's environment. In its 56th year, the 2015 Biennale needed to address issues of safety and sustainability in Venice through an informative exhibition in the Central Pavilion. By presenting Canal Grande: a Temporary City, the Biennale showed problems hidden by



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entertainment. Plans to reduce flooding and construct large docks for cruise ships led to protests involving many people. The gaps between tourists and locals grew wider, leading to distrust and disappointment.

At the same time, the Biennale aimed to encourage discussion, rally support, inspire action, and convince doubters about the serious threats facing both visitors and residents, by using art to provoke and excite. Educational projects called Civic Actions were also used to replace negative feelings with local pride. Can design show the benefits of the environment that are hidden by infrastructure? What are the social results of fixed service ports? How do extreme weather events change how tourists behave? How do visitors find their way around? Information meant for locals was taken over by tourists.

Barcelona

In 1952, plans to open Barcelona to tourism began with the rise of jet travel. This was closely tied to changing the city's role internationally after World War II. Barcelona aimed to transform from a dull, isolated city into an open, Mediterranean city, using its pleasant weather and beaches as attractions. The 1992 Olympic Games boosted investments in the years before the event, with construction projects aimed at changing the city in the Olympic Village area. Organizing the Olympics led to big investments in infrastructure, transportation, and housing, positively opening the city to the Mediterranean Sea, as well as making it a point of reference for urban planning. Once tourism was seen as a key part of the new economy, groups began to voice concerns about the problems it caused, citing the negative effects of mass tourism and asking for a change in approach (Martins Martins, 2018). The plan's goals, and specific actions, foresaw trends that would later be recognized in the future strategy, not only in Barcelona, but also in the southern Europe resort cities.

Still, they did not see short-term plans with specific actions, even though they agreed on the idea of managing tourism and suggested ways to plan for it. It could be said that there was work left undone, or a chance missed, regarding what went wrong in the 2000-2005 period (Gron, 2018). There wasn't a chance or desire to step back, look ahead, and think critically about the situation. There was more worry about completing the major changes promised in the Santiago de Compostela Plan than about the negative aspects of tourism in Barcelona. The strategic issues recognized in the 2005-2006 Agenda were not expanded upon.

Machu Picchu

Machu Picchu is an Incan site from the 15th century located on a 2,430-meter (7,970 ft) peak in the Andes Mountains in Peru, which you can also visit after visiting Taquile Island. This important archaeological site was built in the mid-15th century during the reign of the Inca emperor Pachacuti. The site has over 200 structures, like temples, terraces, and living areas, and is often known as the "Lost City of the Incas." Hiram Bingham, a French explorer, brought the

ruins to international attention in 1911, and it became a UNESCO World Heritage Site in 1983.

Machu Picchu is not only the most important cultural tourist destination in Peru but also one of the most visited tourism sites in the world. The site was declared one of the New Seven Wonders of the World on 7 July 2007 and currently holds the title of Wonder of the Modern World by the Swiss company New7Wonders. Before the global pandemic, Machu Picchu had about 1.5 million visitors each year, with up to 6,000 visitors each day during peak seasons. Tourist numbers have grown quickly since the opening of the Machu Picchu train service in 1999 and the creation of the Inca Trail Machu Picchu tourist route in 2001 (Segundo Ospino Castrillo et al., 2019).

This fast growth in tourism has put a lot of pressure on how the site is managed, raising concerns about overcrowding and the quality of the visitors' experience. Because of this, the Peruvian government announced new rules in July 2017 to control access to Machu Picchu. New fees, entry times, and ticket controls were introduced, and the number of people allowed in the Inca city was limited to 2,500 visitors per day. The maximum visit time was also reduced from four hours to two hours (Asmat Uceda et al., 2017).

Santorini

By seeing the challenge as a chance, Santorini can become a valuable market that focuses on sustainable tourism by using new technology, rethinking how goods are supplied, and creating new ways to travel. Technology should include new sensor tools that can better pick up on the details and chances in Santorini. This goes with rethinking the tourist experience. In this case, services that combine advanced technologies should be looked at, such as mobile apps that combine capacity management with parking and consumption tracking, the design of small trips using tools, eco-friendly deals that offer rewards like discounts and environmental credits, social media interactions such as augmented reality tours, or health activities on boats.

Changes to supply chains should start before the trip. Similar services should be explored through software in new transportation. Niche markets should also be explored, working with startups and platforms that focus on high-quality sustainable experiences like food tourism, wellness, and cultural tourism.

All these experiences should be brought together through platforms that combine hotel information, event schedules, and traffic management, making them more helpful for visitors. Also, promotion should focus on providing information rather than advertising in exhibitions and other events.

It's important to talk with residents to prevent overcrowding in hidden spots and improve communication, making it easier for locals to know about their own neighborhoods. Most importantly, annual limits should be considered, setting caps on overnight stays and day trips. Closing hours should also be investigated. Santorini should not aim for the



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constant growth encouraged by tourism laws. A renewed Santorini can be a model for sustainable tourism.

V. STRATEGIES FOR TRANSFORMATION

There's been a lot of talk about how to fix overtourism in popular spots, but not much action to fix things. Here are seven ideas to think about when trying to bring life back to these areas in a smart, eco-friendly way:

1. Set up a way to manage things.
2. Figure out the specific areas to concentrate on.
3. Look at how tourism affects the area, how things are now, and if it can last.
4. Figure out what could be improved and what to do first.
5. Make plans to get things done.
6. Make sure those plans are followed.
7. Get people on board with good advertising. (Benner, 2019)

You can't just use the same solution everywhere because every place is different. When planning how to fix and improve things, you must think about the culture, history, buildings, environment, and economy of specific places. To do any of this work, you need support from politicians, people involved in the area, skilled workers, and money. If the government doesn't support it, it won't work. If the people who live and work there aren't involved, things won't really change. You need trained people to make plans, and you need money to pay them and to get things started with investments in things like buildings and services that will help the area recover for the long haul.

The way these management systems are set up will differ based on the governments in charge. The people starting the destination management group will have to look at these systems and figure out what works. This is one of the first steps in creating a group that works together and is committed to honestly figuring out what needs to be done and how to make it happen. The criteria for choosing who gets to participate will need to consider the geographic areas involved. Participants will need to be officially chosen as a group of connected groups working together, but each is still doing its own thing.

Community Involvement

Tourism is a big business that's growing all over the world. International tourist visits grew from 25 million in 1950 to 1.3 billion in 2016, and tourist money rose from \$2.1 trillion to \$1.5 trillion. Tourism is the main business in the Spanish islands, bringing in about 149 billion euros each year. In 2018 alone, there were about 250 million tourist trips, and by 2030, it's guessed that there will be 1.8 billion international tourist visits per year, mostly in countries that are still growing. Too much tourism that isn't sustainable has created issues, like damage to the environment and problems for the people who live there.

We urgently need ways to manage destinations to lessen the bad things that happen and to help these places get better. Changing things around can fix overrun tourist spots,

turning them into better places to live, work, and visit. The following strategies are for turning over-tourism hotspots into smart eco-regions, based on a closer look at the effects of tourism on Tenerife. Instead of stopping tourists from coming, the idea is to control the ways tourism affects the people and the environment. (Benvinda Ramos Gomes, 2017)

Governments, leaders, companies, and schools should all be part of putting plans in place to turn tourist hotspots into smart eco-regions. It's suggested to create a partnership between the government and private groups that includes: (1) a Local Intelligence Hub (LIH), (2) citizen journalism, and (3) digital setups using AI. These could help places recover by letting people come up with new ideas and improve how things are managed and designed in the areas around cities and in the countryside, and by testing new ideas and technologies related to smart regions. Local knowledge and planning from the ground up may help the process of destination recovery.

Sustainable Tourism

Plans to put ideas into action for tourist destinations need to consider: 1) making those involved more aware of the problems; 2) figuring out the unique things about the destinations, like culture, nature, and environment, and connecting them with chances for tourism that is sustainable; and 3) thinking about how the destination is managed to make sure the changes happen. (George, 2019) Besides these common requirements, other things are also important in figuring out what's wrong with over-tourism spots and coming up with local actions. We also need to think about fringe tourism destinations to include more spots and areas. These can be places that are already known by some, contacted by specific tour companies. These spots can be found in discussions or are hard to get to.

Policy

Because overtourism is a common issue, many cities are struggling to balance tourism with what the city offers. We need solutions for each place instead of using the same ones everywhere. A thorough method is suggested to look at the issue of overtourism and suggest solutions. From past experiences of creating the Tourist-led Urban Regeneration (TLUR) framework, the TLUR principles are being turned into Policy Frameworks (PFs) to deal with the problems of overtourism in smarter cities. Considering the different situations of smart cities, the PFs can smartly help deal with the problems of too many tourists in ways that improve life and economic growth. (Benner, 2019) The PFs have five key areas that are inclusive. Places may face slow growth even with overtourism if travel is not well-connected. So, it's important for a good tourism policy to create a well-connected tourism offer before trying to get more visitors. Destinations should also properly look at what people want and what is available.

Destination management is as important as advertising on smart destinations. Smart ways to manage destination brands may involve international people, so it's important



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to be legitimate. Destinations could also map out changes in visitors' behaviors that help the destination instead of breaking it apart. Balancing tourism with other city activities to avoid problems is key to sustainable tourism. New PFs to balance tourism and city use, and investments in urban and health care can make the system stronger. Overtourism is a growing trend, and we need more research to understand it and find solutions. We don't have good strategies or tools, especially within the smart city idea, to understand overtourism and design solutions.

VI. TECHNOLOGY'S ROLE IN REGENERATION

In this changing world, tourism improvement should depend on new tech, not just to advertise places, but to protect their cultures and nature. This tech can create a new way of life where locals can share information about their home. To make this happen, we need to use tech to digitize everything in a region, selling stories, changing services, and connecting everyone involved. This means building a simple 3D system and connecting all parts of a region, like nature, culture, and people, on one platform. This needs today's and tomorrow's computer tech, plus a good social media plan so everyone can work together (Díaz Domínguez et al., 2017).

Before using fancy methods, we should think about what we want to put online, what tech to use, and what could happen because of these connections. Then, we can set rules for local tech projects, especially digital ones. We need to bring back the background and past of the area, not just the tourism part. The buildings and style should match the local feel, be ready for the future, and handle unexpected changes with new tech.

If we see tech as the main part of making things better, we should know what should and shouldn't be done online, and how that will change lives. Digital copies that change, the meaning of digital copies, and how to use new tech as decided by locals can help give better service, ads, and buildings. With feedback from users to help make the experience, these plans should create more talk and build communities, helping save time and money and finding new ways to do things.

Using Data to Make Choices

A smart destination is a tourist spot where cool experiences make money by using what we learn from the data we collect from tourists and the area. We also need to protect the special culture and nature. But we need to study this idea more closely (Díaz Domínguez et al., 2017). Using data, like the location, shape, and timing of things in an area, is important to create smarter destinations. Data-driven means we do things based on what we see in the data. This is used to fix problems and make tourist areas work better.

We can use math to design a smart destination system to see how the area acts and create ways to watch and control it using data. People who work in the area can then use this

system. The data-driven system has a platform that uses real-time traffic data, sensors, and what people post online. It also has a control system that uses data from different places and times. This system can help us find important times, know what parts of the area have problems, and give advice to managers.

Smart Buildings

A smart eco-region is better when tech projects and city plans work together. This can make a public platform for location data and apps. A community process should control data sharing, making sure data owners keep their rights and get paid for sharing their data. Requests for new apps will make a feedback loop for apps and data (Díaz Domínguez et al., 2017). In a smart eco-region, talk, databases, sensors, and programs should all work together. We can organize the apps into levels, each building on the last. The bottom level has strong, cheap devices for local data processing. The next level has micro-servers that process data from the devices and stop too much data from going to the cloud. Smart apps should balance data and processing based on location, people's involvement, and how hard the task is. Then, the system should give advice on plans, tech, and money for studies over different times, from days to years. Each system has steps to account for changes and differences over space and time.

Managing Visitors

Changes from too many tourists are clear in many places. But many towns and leaders have said no to this trend, choosing to create ways to protect their places, nature, and culture that include everyone, are smart, and fair. As tourism stops in some spots and we learn to live with COVID-19, many tourism groups, marketing teams, local leaders, and others are using this chance to think about how to run destinations and create a system to manage visitors. This section looks at how we can change destination management into a visitor management system that lasts, not just after COVID-19, but in a way that protects our locations, nature, and culture.

We're laying out new parts of destination management, like what they do, and how we can be clear about data and digital stuff. We're also talking about ways to affect how a destination runs. New tech gives destination management groups and local governments the tools to make this real. A destination can work with locals and tourists to make a single online spot that only tourists see before they visit. Smart contracts control who gets in, and bad actions are punished automatically. AI checks each attraction, and we watch data about how many people an area can hold. This gets rid of differences between generations, keeps supply steady, and protects places, nature, and culture. After COVID-19, we can give labels for being safe, open, and sustainable based on data. This pushes destination leaders to be clear and invest in following the rules.



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VII. WORKING TOGETHER

To go from crowded spots to smart eco-regions, everyone needs to work together. The first step is to talk to the locals in the destination, get the right people involved, and set up the right conditions for them to work together. We need to map out everyone involved and see why they're helping compared to what we want to achieve. This will help us know how to get them involved. Destinations need everyone to work towards a shared goal, turned into a plan with good management. It's important to have strong reasons and clear roles, mainly when starting from scratch (Díaz Domínguez et al., 2017).

At the destination, working together means different things, like sharing ideas, making deals that define roles, creating shared beliefs, acting loyal to joint promises, and feeling connected to each other (Ammirato et al., 2014). The conditions for working together offer boundaries that, if used, lead to some form of teamwork. Conditions give tips on how to turn teamwork feelings into action and make good actions happen. Good conditions happen at different times, actions, and levels and can be put into action with clear steps and ways to measure success. Good reasons are likely to come from repeated actions and conditions. One result should be a map of everyone in the destination, which, along with looking at why they're there, should help us better understand why they want to work together.

Working with the Public and Private Sectors

Smart eco-regions are hard because they mix old knowledge with tech. If we don't build these systems carefully, the bad things we've seen in tourism could get worse. To run smart eco-regions in a good way, governments, businesses, researchers, groups, locals, and tourists need to be involved. We need to think long-term to rebuild smart eco-regions and handle how they start and change. Since government work is tied to private work, the public and private sectors need to work together over time to fix overloaded ecosystems. Destination management groups need to be part of everything, like tourist growth, landscape care, buildings, supply quality, and teamwork.

Public-private partnerships (PPP) are a good part of the social economy that can offer answers to social needs and community services, like social services and building. This plan for private involvement in the public sector makes providing goods and services better while growing money outside of budgets. The public sector starts projects of interest and writes the rules for changing destinations. The public sector starts deals for projects. An idea for the destination, supported by leaders, starts promotion through ads. We're securing deals with the media to push success and win tourism awards (Ammirato et al., 2014).

PPP in tourism can give a tourist product to an interested company and control its use. They can create a joint fund to rebuild public buildings by the public sector and for money by the private sector (Grigorescu, 2008). They can build a platform to advertise and help with PPP projects in tourist

areas. They can set up functions for construction, building, and later leasing. They can cut the costs of a region and offer programs to support PPP projects.

Local Government Helping

With Wisier tourism growing, local government help is key to deciding what happens in current tourist spots. Wisier tourism needs local government, agents, hotels, services, and locals. Local governments need a strong plan that's changed for each spot with locals, agents, and the industry. A plan needs locals, agents, economies, and services. We need to change management to be more teamwork-based, with local governments enabling tourism experts and locals to take more roles, like marketing and planning. A strong tourism group needs knowledge to manage and market the area well. Locals, experts, and staff can make Wisier tourism happen. Wisier tourism needs more people involved in making plans for Wisier tourism. Locals can create the experience by connecting their concerns and organizing online for help from leaders and tourism experts (Šegota, 2019).

Local governments need to stop looking down on others and involve more people when talking about plans (Díaz Domínguez et al., 2017). Tourism data can connect with info on how locals feel about tourism and their involvement, used for smart plans. We can use skills by making data collection fun. We need to use the wisdom of locals by creating places to get ideas for smart tourism. Local governments need to invest in a trustworthy place. These places can grow local tourism by improving skills, networks, and teamwork that aligns tourism and local well-being.

NGO Help

Practicing permaculture in tourism can cut down on the harm to the environment. Tourists are aware and want to act in ways that cut back on their ecological footprint while growing their experience. Permaculture projects offer hands-on activities. Activities like gardening, farming, soil prep, planting, pots, compost, and worm farms are popular. Also, local permaculture courses connect practitioners, targeting community action. New networks promote designs and connect permaculture hubs. Working with these organizations on projects and running gatherings for practitioners is a great way to share skills (Benvinda Ramos Gomes, 2017).

Green plans make sure there's a network of areas with environmental value that connect systems and fix landscape problems. The ERAM project looks at coastal towns in the Valencian region and finds strategies for work through collaboration (José Tuset Davó, 2017).

VIII. MEASURING SUCCESS

Tourist spots often get too crowded. When there are too many people, it can be a problem. Places worry that overtourism will ruin the experience for visitors and reduce the good things that come from tourism. Continuing as



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usual won't work when things are getting worse. So, how can a place that's too crowded become more sustainable? By changing how we think about tourism and using La Palma in the Canary Islands as an example, we might learn how to make tourism better for the economy, society, and environment (Díaz Domínguez et al., 2017).

The first thing to do when planning a strategy is to know your starting point. You can measure how healthy a tourist spot is with different methods. Here are seventeen things to look at, divided into five groups: population changes, tourist pressure, economic impact, cultural impact, and environmental impact. The main questions are: Is the place too crowded? Is it just about making money? Is it fake? Or is it wasteful? The goal is to make each tourist spot special and the best it can be. There are plans to help improve each type of place. For example, places that are too crowded can limit the number of visitors per year, create a system to make the experience better outside the most popular areas, and encourage ways to share income fairly. Lucrative places, on the other hand, can use various things to measure how valuable their tourism offerings are, protect their brand to avoid boring experiences, and work with everyone involved to avoid extreme steps. Fake aspects can be reduced, noted, and, most importantly, understood. The same goes for places that are losing their appeal.

How do you measure if a tourist spot is doing well? You can start by looking at how it scores on each of the seventeen things mentioned earlier. The final score is a combination of up to ten of these things. Discussions at conferences each mention different ways to create smart eco-regions and their unique aspects, along with different thoughts on the difficulties ahead to become better places. Research changes through discussions, which then leads to new ideas.

Keyways to Measure Success

Keyways to measure success (KPIs) show how well a place or company is doing in reaching its goals. To check specific things, you need to define them well, and each one might have smaller parts and specific goals. These measures can be numbers, like how many people use public transport versus cars, or descriptions, like what people think about transportation. Usually, these measures are in a table, with extra information if needed. For the more complex measures, you should explain how they are calculated. While knowing the exact numbers is important to see how a place is doing now, it's good to show these measures as growth rates if you want to see changes over time and deal with uneven data (Díaz Domínguez et al., 2017). Growth rates show the yearly change in something as a percentage. You can find them with this formula:

$$p = (X_f - X_i) / X_i / t$$

* X_i is the starting value

* X_f is the final value

* t is the time in years between them

People from UCLG and WTAS have been talking since 2014 to finish the system for measuring success. After checking the system carefully, they added two keyways to

measure success, shown together by each group based on some ideas they agreed on. The first part, under destinations, checks all parts of what tourism offers in a place and how much cultural traditions are respected, practiced, and used for actions that help the community and the place. Based on what was done earlier, the second part has two things to measure: complaints about tourism development. Generally, these added measures are supposed to show how well a place's tourism is doing from a closer look. The final system has two charts with 82 measures in nine groups (Ernesto Pérez León et al., 2015).

Ways to Get Feedback

Introducing smart eco-policies should cause locals and visitors to change their behavior for a long time. To get to a new balance, you need systems that watch and send information to the rules and management of tourism, hospitality, and leisure. The proposed city balance model looks at four eco-indicators that depend on each other, with ways to measure and compare them. In eco-regions, a set of indicators can measure these things with the rules and technologies at the same time. The indicators and why they were chosen are shown. After being friends with many people in tourism, hospitality, and leisure for a long time, there's a critical but hopeful view of how worse climate change and human-made disasters affect things (Benner, 2019). Everywhere in the world, more people moving around have changed tourism behavior, how businesses work, and the rules of leisure. Many good economic and social results have balanced the bad side effects of mass community damage, too much crowding, and unhappy residents. COVID-19 changed the growth of tourism, service availability, and regional welfare right after the peak of the Evolutionary Wave. Some tourist spots became too popular and polluted, while others were 'ant tourism' or just 'slow tourism' even after the pandemic. Eco-friendly tourism control policies are reportedly being used to fix the balance broken by unplanned tourism. As a start, adapting the eco-region technology to post-COVID situations is suggested.

IX. PROBLEMS AND THINGS IN THE WAY

Humanity is facing big problems from population growth, development, and using fossil fuels: poverty, inequality, unemployment, conflicts, climate change, pollution, overtourism, and urbanization are linked global problems affecting regions and the world (Díaz Domínguez et al., 2017). Tourism, as we know, started about 200 years ago when big parties turned into regular visits from rich people, changing the surroundings. From the Grand Tour of noble families, leaders decided to make tourism free, and it became an industry with 1985 million international visitors in 2019. Tourism helped cities with a difficult past and unused areas. However, tourism flow isn't sustainable; more people and crowding make public things unavailable, polluting the air and soil, and changing prices, along with other problems. At the same time, the tourism industry focused on reaching out to the public to hide what happened



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to important things and real life, supported by social media, brands, and promotions (Maxim, 2021). Having destination governance is left out in how destination management groups work. This causes problems in measuring destination management decisions and issues with analysis, which could be helped by smart destination ecosystems.

Not Wanting to Change

Mass tourism causes growth and changes in cities but also causes social, economic, environmental, and community issues. It's important to see the rational and social values of these changes. The pandemic makes us ask about the future of mass tourism in cities, but it depends on politics and capitalism. Economic forces cause these social changes. Mass tourism grows by creating new things to see and uses more space and time. Mass tourism is a result of capitalism. Its current peak shows capitalism's peak, like the 1980s and early 1900s. It's thought that mass tourism will come back after the pandemic. This might not be true because 1) the pandemic is the first global problem from before capitalism, and capitalism will change without mass tourism. 2) Changes need time to grow, which makes economic forces combine and change before any new model can take hold.

Money Problems

Analysis showed that municipalities near the Adriatic Sea face a critical thing: limited money for tourism. This has effects in terms of managing tourism and planning, stopping potential development, underusing EU funds, and creating a chance for places with no commitment to grow their tourism. Resources for tourism are low in EU countries like Croatia, Slovenia, and Greece, usually under 100,000 euros per year, except for a few spots. Most municipalities don't even have money for tourism, a problem for future tourism (Benner, 2019).

Having millions of euros in countries like Montenegrin and Albania could be bad if they don't spend it well. Funds aren't used well in EU candidate countries, so this could help local ports, but the issue will stay relevant. There's good knowledge for managing tourism in universities (Rukuižienė, 2014). EXPO 2020 was a short chance for branding the Adriatic and Ionian region, so a longer project would help. Cooperation frameworks were used during the model development.

Thinking About Culture

The smart eco-region idea should be seen as an idea that tells us about planning, not a checklist. It has many parts and ideas. So, the basic idea will be different in different places. Different regions will have different ideas and focus on different things. The examples show how the same idea can be different even in the Nordic area. These differences are needed because smart eco-region plans should show the values of regions in planning and give destinations their uniqueness.

To be specific, it would help to know how cultural sensitivity is understood in different places. For example, what do tourism people think about the concept, and what

can be learned from their practices? At the same time, tourism research should listen to scientists, officials, and tourism people to find trends and problems.

Given the global issues affecting travel, there will be more chances to study destination-based smart eco-regions. Data should be collected from different views. New destinations should be studied, and studies should focus on the similarities and differences in how the concept is developed in different places.

X. FUTURE WAYS OF TOURISM

COVID-19 hurt tourism, with a 95% drop in visitors in April 2020. Regulations and bans are hurting tourism. However, tourism won't disappear. There will be more interest and chances in tourism in society. As things change, tourism will change for the future. Because of what we've learned, making new eco-regions with technology is planned (Díaz Domínguez et al., 2017).

Nature is the main tourism resource. However, nature alone won't satisfy people. A trend is to protect nature with cities, but overtourism happens. The main thing causing overtourism is the imbalance of supply and demand (Paraskevopoulos, 2017). Many spots saw crowding because of their status. However, COVID won't end tourism. Virtual tourism is successful in revisiting tourism. Smart devices will replace destinations. This helps society in intelligence and access. Smart tourism uses history and culture and needs data.

Recovering From the Pandemic

More awareness of COVID on tourism has made recovering the sector a top thing in talks on how to reshape economies (Jeyacheya and P. Hampton, 2022). On World Tourism Day (September 27, 2021), the UN said we need to fix tourism as a pillar of development. The Travel Recovery Action Plan was seen as a good response to the pandemic. Countries said they would use recovery to build back better. However, we need to make sure that lessons are learned, and growth is equal. Island tourism has been hurt by COVID-19 (Bulchand-Gidumal, 2022). So, islands need to connect with regions using a smart tourism destination (STD) framework with actions for the short, medium, and long term. We need research on the impact of COVID-19 on islands. Guessing tourist flow with high uncertainty is hard. Also, using an STD framework is hard because there are many people involved. Finally, we need a global STD framework with smart tourism and sustainability measures.

New Tourist Spots

New tourist spots are areas that are growing fast because of investments and promotions to growing markets. These spots have new things to see or redesign existing things, such as Macau. Infrastructure is improved with tourism, so destination management groups should be created. However, new tourist spots have a higher chance of failing. Not having enough money, people, technology, and information has caused some spots to fail, wasting things.



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For example, some islands disappeared from the market after being discovered, which forced closures (Díaz Domínguez et al., 2017). To create a successful new spot, study and adapt models from established spots. Before joining, tourism planners should determine the area's target market. Research should then find areas with well-connected airports that want tourism, along with consultants. Location-targeting spots competed for decades, and some replicate tourism, but climate change is affecting these spots.

XI. CONCLUSION

The urgent need to fix tourism after COVID-19 has made us see emerging practices from different fields to find problems and chances for a healthy region. The conclusion shows a framework to turn overtourism spots into smart eco-regions and gives ideas for regional development. We can change overtourism spots by using resources and new technologies for managing attractions with control. Local people, such as organizations, businesses, and communities, must rethink their roles in growing tourism and work with neighboring regions. By using marketing and management, both tourists and locals can enjoy traditions. This approach is better than overtourism destination management, which is supply biased. Using this framework needs changes: a focus on marketing with investment and technology supported by people and authorities. Ideas for regional responses include unproven practices and those with potential. Desired outcomes are given for each idea to think about the topic. The latter is expanded in terms of components, and nine questions guide the management of smart eco-regions. These questions teach people about their tourism region and help them manage it.

REFERENCES

1. Benner, M. From overtourism to sustainability: A research agenda for qualitative tourism development in the Adriatic. (accessed 2019). [PDF]
2. Andres Coca-Stefaniak, J. Marketing smart tourism cities – a strategic dilemma. (accessed 2019). [PDF]
3. Mombeuil, C. Interaction from tourism development in Port-au-Prince, Haiti. (accessed 2018). [PDF]
4. Hernandez-Maskivker, G.; Ferrari, S.; Nathalie J. Cruyt, A. Exploring community stakeholders' perceptions of mass tourism: the case of Bruges. (accessed 2019). [PDF]
5. Baros, Z.; Denes Dávid, L. ENVIRONMENTALISM AND SUSTAINABLE DEVELOPMENT FROM THE POINT OF VIEW OF TOURISM. (accessed 2007). [PDF]
6. Díaz Domínguez, C.; Revilla Hernández, M.; Santana Talavera, A.; Parra López, E. Smart island tourism and strategic marketing: the case of the island of El Hierro. (accessed 2017). [PDF]
7. Ammirato, S.; Michele Felicetti, A.; Della-gala, M. Tourism Destination Management: A Collaborative Approach. (accessed 2014). [PDF]
8. John Connor, C.; Stephen Hanna, T.; Alexander Van Rensselaer, W.; Raymond Wingerter, Z. Safe and Sustainable Tourism: Managing Venice's Millions of Visitors. (accessed 2015). [PDF]
9. Martins Martins, M. Tourism Planning and Tourismphobia: An Analysis of the Strategic Tourism Plan of Barcelona 2010-2015. (accessed 2018). [PDF]
10. Gron, S. Projects for the new found city: energies, tensions, differences and needs. (accessed 2018). [PDF]
11. Segundo Ospino Castrillo, C.; Saccatoma Tinco, L.; Teresa Suárez Balarezo, M. Planeamiento estratégico del sector turismo en el Perú. (accessed 2019). [PDF]
12. Asmat Uceda, D.; Vargas Yong, J.; Román Cortina Mendoza, R.; Pinillos Romero, F. et al. Plan estratégico de marketing de turismo arqueológico Ruta Moche. (accessed 2017). [PDF]
13. Benvinda Ramos Gomes, F. Kiulu farmstay study case. Environmental education program for kiulu communities. (accessed 2017). [PDF]
14. George, A. Impacts of Responsible Tourism in Environmental sustainability issues: A Case Study in Kerala, India. (accessed 2019). [PDF]
15. Grigorescu, A. Models of public – private partnership projects in tourism industry. (accessed 2008). [PDF]
16. Šegota, T. Deconstructing mass tourism with “upscale, all-year-round” tourism: local residents' perspective on mechanisms for mitigating seasonality. (accessed 2019). [PDF]
17. José Tuset Davó, J. Green Coastal Zones: Nodes and Connectors as Strategy of Urban Regeneration. (accessed 2017). [PDF]
18. Ernesto Pérez León, V.; Hernández, A.; Guerrero, F.; Amparo León Sánchez, M. et al. Sustainability Ranking for Cuban Tourist Destinations Based on Composite Indexes. (accessed 2015). [PDF]
19. Maxim, C. Challenges of world tourism cities: London, Singapore and Dubai. (accessed 2021). [PDF]
20. Rukužienė, R. SUSTAINABLE TOURISM DEVELOPMENT IMPLICATIONS TO LOCAL ECONOMY. (accessed 2014). [PDF]
21. Paraskevopoulos, S. THE NEED FOR A SUSTAINABLE TOURISM DEVELOPMENT. (accessed 2017). [PDF]
22. Jeyacheya, J.; P. Hampton, M. Pathway choice and post-Covid tourism: Inclusive growth or business as usual?. (accessed 2022). ncbi.nlm.nih.gov
23. Bulchand-Gidumal, J. Post-COVID-19 recovery of island tourism using a smart tourism destination framework. (accessed 2022). ncbi.nlm.nih.gov