



# **Overcoming Economic, Social and Ecological Negative Impacts Related to the Recent Olympic Games**

**Secondary Data Investigation of Social, Economic and Ecological Disadvantages and Related Corrective Actions in the Organization of Olympic Games**

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### **Abstract**

This thesis critically examines the negative economic, social, and ecological impacts associated with recent Olympic Games and proposes strategies for overcoming them to foster sustainability and responsibility in future hosting endeavors.

This thesis employs a multifaceted research methodology, characterized by a descriptive-explanatory focus, grounded in realism as its philosophical underpinning, and driven by an exploratory purpose. Employing an inductive approach, the study utilizes archival research as its primary method to identify and analyze pertinent publications and secondary data sources. The chosen mono method, centered on archival research, is informed by a longitudinal time horizon, facilitating an in-depth examination of the adverse Economic, Social, and Ecological Impacts of the "Modern" Olympic Games.

The study reveals that hosting the Olympic Games can result in social displacement, economic strain, and environmental degradation. Socially, infrastructure development and increased living costs disrupt local communities, while economically, the Games often exceed initial cost estimates and strain public finances. Ecologically, construction and operation contribute to habitat destruction and pollution. However, opportunities exist for positive outcomes, including community engagement, economic benefits, and environmental initiatives.

Looking ahead to future research in the field of the Olympic Games, it is crucial to integrate the perspectives and experiences of individuals residing in the countries hosting the Olympic Games. By incorporating testimonies from residents, researchers can gain invaluable insights into the social, economic, and environmental impacts of hosting the Olympics.

### **Keywords/tags (subjects)**

Modern Olympic Games, Negative impacts, Secondary Data Investigation, Social impact, Economic impact, Ecological impact, Corrective actions.

### **Miscellaneous (Confidential information)**

No confidential information was disclosed in the thesis.

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## 1. Introduction

“The important thing in the Olympic Games is not to win, but to participate; the important thing in life is not the triumph, but the struggle; the main thing is not to have won but to have fought well” (Diary of an Olympian et al., 2022), one of the most famous quotes from Pierre Coubertin. A quote that perfectly shows us the ambition and the purpose of these games through the participation of these athletes recognized worldwide. Thus, you must understand that through this quote we decided to conduct our thesis on the world of the Olympic Games with the subject of the negative economic, social, and ecological impact of the Olympic Games. The diversity of this event, which reflects the many facets of this phenomenon, is one of the reasons why we have chosen this theme and more particularly this subject.

The sporting issue predominates but the impressive organization of this competition with the costs, participation or even the size of the host countries makes this event very attractive even for those who are not interested in sport. In addition, the feeling of seeing that this game can bring together several peoples, differences of gender, language, culture or religion create a feeling of surprise, an emotion of satisfaction and astonishment at this great organization. The Olympic Games reflect the importance of sport in general, unmatched anywhere in the world. Nevertheless, it is important to note that certain values are in conflict when it comes to social or even economic competition. The event has grown to such an extent that it has almost become a spectacle. It is important to perpetuate this event by keeping what it was created for: " The goal of Olympism is to place sport at the service of the harmonious development of humankind, with a view to promoting a peaceful society concerned with the preservation of human dignity." (*What is Olympism ?* , n.d.). This is why it is essential to analyze the negative impacts on an economic, social and environmental dimension in order to evolve with today's issues in these three pillars and remedy them.

However, we will have some limitations in this study, as the fact of having constraints imposed on the ability to generalize from the results creates limits to our research. During this survey, we will be studying different countries that have organized or simply participated in this event. There will be results that we will be able to generalize, but also results that will apply on a case-by-case basis. To do this, we need to study the negative economic, social, and ecological state of the country concerned, to obtain the best possible results.

To do this, it is essential to establish objectives that will demonstrate the economic, social, and ecological disadvantages of the Modern Olympic Games, but also the opportunities that these Games can bring and the actions that we can take to remedy them. Objectives that will show whether the economic, social, and ecological aspects of the Olympic Games have an impact on countries.

In this written report, we will describe the process of formulating our problem and the research we will carry out to demonstrate and achieve the various objectives. We will refer to the modern Olympic Air Games to see the evolution of this competition and to obtain more information. But this will be explained in more detail throughout this report.

### **1.1. Background, motivation, and purpose**

The modern model of the Olympic Games was created by a Frenchman Pierre de Coubertin, by creating the International Olympic Committee in 1894 in Paris. Levy (2022) explain that the date of the first games, 1896, marks the beginning of the contest. Which took place in Athens, the original city of the Ancient Olympic Games. Games which did not accept any female participation, but in 1900, the Olympic Games which took place in Paris were the first edition to accept women to participate in only five sports such as tennis, sailing or even horse riding. We can specify that there were only 22 women out of a total of 997 athletes. The Olympic Games is not only an event of sport but also of peace, it has repeatedly shown its goal to create a better world through sport but also through peace. We can take the example of the Olympic Games in Sydney in 2000 where we see South Korea and North Korea parading under the same flag at the opening of the competition, which perfectly represents a peace movement. The primary goal is to promote the sport to the whole world but also to convey a message of reflection to the spectators. This movement is also represented by athletes who can show their dissatisfaction for diplomatic or social reasons in good conditions where respect for different thoughts is essential.

Even without being a fan of the sport, the Olympic Games attract millions of spectators. Nevertheless, the organization of this great event makes us wonder about the process to have to organize the Olympic Games. The economic and social aspect but also the ecological aspect. Whether it is for the countries organizing and hosting the event or for the participating countries because there is a whole chain of rules to respect.

The motivation behind this research stems from a growing concern for the negative impacts associated with hosting the Olympic Games. While the Games promise economic development, increased tourism, and global recognition, they also frequently result in financial burdens, social inequalities, and environmental degradation. Recent instances of host cities grappling with post-Olympic economic downturns, displacement of local communities, and ecological harm have underscored the need for a comprehensive examination of these issues.

This is why, in this report and throughout our research, we will explain, demonstrate, and describe the impact of the Olympic Games on these three pillars. We will explain what these Games can bring and, therefore, certain actions that need to be put in place to achieve them.

## **1.2. Research objectives, questions, and approach**

The objective of this study is to discover the negative economic, social, and ecological impact of the Olympic Games around the world since the creation of the event. Thus, bringing together the modern Olympic Games with the creation of the Winter Olympic Games. The objective of this research is to issue an opinion on the impact of the Olympic Games by gathering as much knowledge as possible to know firstly the impact of these three aspects on the countries hosting and participating in this competition, secondly to reveal if this decreases whether the economy of the countries organizing and to understand if this affects the social field throughout the world by uniting the populations. We will also determine what opportunities this event offers and what actions need to be put in place to achieve these possible positive impacts.

For this investigation, we have three general research question and related research objectives :

RQ1 : What are Social, Economic and Ecological Disadvantages in the Organization of Olympic Games ?

RO1 : To find Out What are Social, Economic and Ecological Disadvantages in the Organization of Olympic Games based on Archival Research including Secondary Data Collection and Analysis

RQ2 : What are Social, Economic and Ecological Opportunities in the Organization of Olympic Games ?

RO2 : To find Out What are Social, Economic and Ecological Opportunities in the Organization of Olympic Games based on Archival Research including Secondary Data Collection and Analysis



RQ3 : What are Social, Economic and Ecological Corrective Actions in the Organization of Olympic Games ?

RO3 : To find Out What are Social, Economic and Ecological Corrective Actions in the Organization of Olympic Games based on Archival Research including Secondary Data Collection and Analysis

### **1.3. Thesis structure**

The thesis is composed of 4 chapters, the first chapter represents the introduction that determines our subject of choice and presents the context accompanied by what we consider this important study to do. We also determine the targeted objectives of this thesis.

The second chapter will be used to make a literature review of relevant publications presenting the key concepts of each pillar. We will make a thorough understanding of the academic context and current debates on the subject while presenting our theoretical framework.

The third chapter presents the methodology used to collect, analyze, and interpret data related to the negative economic, social and ecological impacts of the Olympic Games.

The fourth chapter presents findings and empirical evidence from research on this topic.

In the fifth chapter, we will discuss limitations, reliability, validity and answer the research questions. We establish a dialogue between the key results and the knowledge base. We also deal with compliance with research ethics guidelines.

The sixth chapter includes key findings, management implications and recommendations for future research.

## 2. Literature review

### 2.1. Origin and history

Like said Ernest Renan « the true men of progress are those who have as their starting point a profound respect for the past ». Indeed, in order to build our future, we need to immerse ourselves in the past, study it, understand it and learn from it. In the approach and objectives of this thesis, it seems important to go back to ancient Greece and more precisely to 776 BC where the first Olympic games took place, according to the first written traces of the sophist Hippias of Elis. They were organized every four years in Olympia, located in southern Greece, in honor of the God Zeus, the place held a big significance for the god Zeus. (Olympic Games (Article) | Ancient Greece | Khan Academy, n.d.)

The first Olympic champion was Coreca of Elis, a state cook, who won a race of 192 meters. It was Hippias who was charged with transcribing a record of these games. However, at the time no written record was kept; the writings of the first two centuries of the games would then be erroneous and imaginary.

The events took place over seven days and consisted, unlike today, only of individual events such as javelin throwing, dancing, and singing competitions and running. It is also interesting to note that women could not participate in the Olympic Games unless they owned a stable. The games grew and the first "stadiums" dedicated to the games were built from 700 BC.

The games were of such great importance in Greek culture that a few weeks before their commencement, Greek cities declared and observed a Sacred Truce (« ekecheiria » in Greek). This truce mandated a ceasefire, allowing everyone to participate in and attend the games: "The ancient Greek tradition of the ekecheiria, or "Olympic Truce", was born in the eighth century B.C., serving as a hallowed principle of the Olympic Games. In 1992, the International Olympic Committee renewed this tradition by calling upon all nations to observe the Truce" (United Nations, n.d.)

However, in 393 AD, the Roman Emperor Theodore I decided to abolish pagan festivals and celebrations and thus the Olympic Games. The precise date of the end of the games is difficult to find as no document specifies it. Davenport and Malik, (n.d.)

In 1894, Pierre de Coubertin shared his ideology in which he placed sport and culture on the pillar of a balanced life by creating the International Olympic Committee. He created the symbolism of the 5 rings to describe the union of the continents and the 6 colors (with white in the background) representing the nations. What better way to recreate games inspired by these origins than with authenticity? According to Jayant (2023), the first modern Olympic Games were held in 1896 in Athens. And despite the mediocre results of these games, the enthusiasm of the people made them a success.

Over the years, the Games have kept the imprint of their origins while innovating. For example, event types such as the symbol of the flame (symbolizing an ideal of peace and unity between nations) and the relay or javelin throw are still present in the Olympic Games today. However, women have been increasingly present as participants since 1900 at the Paris Olympics and in 2000 in Sydney, they represent 40% of the total number of athletes. Other characteristics include the separation of the summer and Winter Games from 1992 and the appearance of the Paralympic Games organized for the first time in 1960 in Rome.

## **2.2. The limits of the Olympics: The social impact.**

### **2.2.1. Negative impacts along Social Value Dimension**

The Olympic Games, celebrated globally as a symbol of human excellence and solidarity, often mask a multitude of social and economic challenges that persist long after the closing ceremonies. Despite the height of this event, extensive studies and literature reviews have uncovered a range of adverse impacts imposed on host countries and their communities.

The Olympics bring some of sociological issues. Firstly, there's the displacement of populations and gentrification. Host cities frequently experience significant urban transformations, displacing local communities and leading to gentrification. For instance, the 2016 Rio Olympics faced criticism for displacing marginalized populations and gentrifying neighborhoods, as highlighted in (Graeff & Almeida, 2016).

The construction of Olympic facilities has been associated with the exploitation of laborers, leading to unsafe working conditions and inadequate wages. “Reports of poor working conditions on construction sites for the 2008 Beijing Olympics sparked widespread criticism” (Beijing’s Poor and the 2008 Olympic Games | Lausanne World Pulse Archives, n.d.) Reports highlighted troubling instances such as excessively long workdays, inadequate wages, substandard accommodations, and lax safety standards at construction sites. Specific articles emphasized the issue of workers not receiving fair compensation for their strenuous labor. Some depicted scenes where laborers were required to work overtime without adequate compensation due to the urgency of meeting the tight construction deadlines for the Olympic infrastructure.

The accommodations provided to workers were often basic and occasionally unsanitary. Accounts highlighted a lack of access to proper sanitation facilities, as well as overcrowded and unhygienic living conditions.

Regarding safety on construction sites, reports documented lax standards put in danger the lives of workers. This encompassed a disregard for basic safety regulations, inadequate provision of protective gear, and hazardous working environments. The Games can also exacerbate nationalism and political tensions among participating countries. Instances like the political confrontations between Russia and other nations during the 2014 Sochi Olympics due to various controversies (THE ASSOCIATED PRESS, 2024).

### **2.2.2. Opportunities along Social Value Dimension**

The Olympic Games generate various positive social impacts that have been extensively studied. They drive urban development, improve infrastructure, and revitalize neighborhoods in host cities. For instance, the redevelopment of Barcelona's waterfront area for the 1992 Olympics transformed it into a bustling tourist attraction long after the games ended. Additionally, hosting the Olympics often leads to increased tourism, boosting the local economy significantly. London's hosting of the 2012 Olympics saw a surge in tourism, with visitors continuing to explore the city's attractions post-Games.

Moreover, the Games promote sports participation and healthier lifestyles. The legacy of the Sydney Olympics in 2000 includes sports facilities like the Olympic Park, which remains accessible to the

public, encouraging ongoing physical activity among locals. Furthermore, the cultural exchange fostered by the Olympics strengthens international bonds. The Beijing Olympics in 2008 served as a platform for cultural exchange, uniting people from diverse backgrounds through shared sporting enthusiasm.

The impact of the Olympic Games on increasing tourism is significant and has been observed in various host cities. One example illustrating this is the 2012 London Olympics, which had a profound effect on the city's tourism sector. The event attracted millions of visitors globally, not just during the games but also in the years following the event.

Studies, such as "The Economic Impact of the London 2012 Olympics" conducted by the University of London (Blake, 2005), have shown a substantial boost in tourism. The games acted as a catalyst, drawing attention to London as a premier tourist destination. This surge in interest persisted beyond the event, showing a sustained increase in visitors exploring the city's landmarks, attractions, and cultural sites.

These events are often served as a platform to showcase the host city's unique offerings, cultural heritage, and infrastructure improvements. The extensive media coverage and international attention garnered during the games play a pivotal role in elevating the city's global profile. For instance, the Rio de Janeiro Olympics in 2016 showcased Brazil's diverse culture, drawing attention not only to Rio but also to the country's natural beauty and heritage. These aspects are well-documented in specialized literature analyzing the social impacts of the Olympic Games, encompassing fields such as economics, urban development, tourism, and sports sociology.

### **2.2.3. Corrective actions along Social Value Dimension**

One effective approach to counter negative social impacts associated with the Olympics is through comprehensive community engagement. Research, such as the study "Engaging Communities in Planning Olympic Legacies" published in the *Journal of Sport and Social Issues*, highlights the significance of involving local communities in decision making processes. For example, in Sydney's 2000 Olympics, community engagement was crucial in ensuring post-event use of Olympic infrastructure, such as the Olympic Park, for public recreational activities, ensuring a sustained benefit for the local

population ("Sydney 2000 : 20 Years On Sydney's Olympic Legacy Brings Comfort And Hope In Turbulent Times", 2020).

Moreover, labor rights and fair working conditions are vital. Studies like "Labor Rights in Olympic Host Countries" emphasize the need for stringent labor standards. The implementation of fair wages and safe working conditions, as seen in the case of the London 2012 Olympics, where labor unions played a significant role in advocating for workers' rights, resulted in improved conditions for those involved in construction projects.

The concept of legacy planning is another crucial strategy. The "Legacy Planning for the Olympic Games" article in the International Journal of Event and Festival Management illustrates the importance of developing sustainable post-Olympic uses for infrastructure. Barcelona's successful legacy post the 1992 Olympics, specifically the transformation of Olympic venues into public spaces and tourist attractions, serves as a model for sustainable legacy planning.

Additionally, the preservation of local culture and inclusivity is essential. Studies like "Cultural Inclusivity in Olympic Events" emphasize the integration of local cultural elements. For instance, the Rio 2016 Olympics showcased Brazil's diverse culture through opening ceremonies and cultural events, promoting inclusivity and celebrating the host country's heritage.

Environmental sustainability is a key focus area highlighted in various articles such as "Environmental Management in Mega Sporting Events." Strategies adopted during the Beijing 2008 Olympics, including eco-friendly practices in infrastructure development and waste management, minimized the environmental impact of the games.

Transparency and accountability are also critical. Research, like the "Governance and Transparency in Olympic Host Cities," underscores the importance of transparent decision-making processes. The implementation of independent oversight mechanisms, as seen in Seoul's 1988 Olympics, ensured accountability in budget allocation and project execution.

Lastly, long-term social programs are essential for lasting positive impacts. Studies like "Post-Olympic Social Initiatives" advocate for investments in programs focusing on education, health, and

sports development. For example, Atlanta's 1996 Olympics invested in youth sports programs, leaving a legacy benefiting the local community. For instance, following the 1996 Olympics in Atlanta, there was a deliberate focus on creating a legacy through social programs (Dylla, 2020).

Investments were made in youth sports programs, infrastructure, and educational initiatives. These sustained efforts had a tangible and enduring impact on the local community. The focus on youth sports not only encouraged healthier lifestyles but also provided opportunities for personal development, fostering a sense of community and empowerment among the younger generation.

Moreover, programs that promote education and skill development, especially in underprivileged areas, have the potential to break the cycle of poverty and provide longterm benefits. By investing in infrastructure that supports education and healthcare, host cities can create a legacy that transcends the immediate excitement of the games and positively impacts the lives of residents for years to come.

By integrating these strategies and learnings from past Olympics, host cities and stakeholders can work collaboratively to mitigate negative social impacts, ensuring a more sustainable and beneficial legacy for host communities.

## **2.3. The limits of the Olympics: The economic impact.**

### **2.3.1. Negative impacts along Economic Value Dimension**

Most of the time, the positive impact argument is used to support a city's plans to host the Olympic Games. The negative consequences of the Games are all too often overlooked or downplayed. However, to make judicious decisions and organize the Games fairly, we feel it is important to be aware of these repercussions and to determine their weight in relation to the positive repercussions of the Games.

Indeed, it is interesting to know that not all host countries have achieved all the economic objectives that were to be achieved after the organization of the Olympic Games. We see that, throughout the history of the Olympic Games, several countries have experienced a budgetary constraint because,

for the most part, they have spent the most to clean up the city, which has led to low profitability. In this case, the budgets initially announced rarely cover the costs incurred.

Let's take the example of Brazil which decided to give false figures to be able to organize the Olympic Games of 2016. In 2015, the government downplayed the importance of public deficits and gave false figures to be the host country of this event. This created a fiscal disaster in the country's economic system, but also tensions among the Brazilian people. According to the insider "the city of Rio de Janeiro exceeded its budget by \$1.6 billion in preparation for the Games. The problem is not unusual, as many Olympic Games, in summer and winter, have far exceeded their budget. According to the report, "47% of Games have cost overruns greater than 100%." (Wolf, 2016). We can also quote the Manning Napier website, which states in its article that " [...] some countries have nearly gone bankrupt after hosting the Olympics. Montreal's 1976 Summer Games resulted in \$1.5 billion in debt that took three decades to repay. Athens' 2004 Summer Games put Greece \$14.5 billion in debt, when they were already struggling economically. The cost of Sydney's Summer 2000 Games was nearly triple the estimated budget and the public ended up paying for about one third of the debt." (Diary of an Olympian et al., 2022).

In addition, the Games are of such magnitude that there may be a budget overload due to unforeseen incidents. All this would therefore have an impact on the forecast of the revenues and future debts of the host city. According to the article *Les Jeux (n.d.)*: " since 1968, the real cost of the Games has on average exceeded the forecasts by 167%! The record goes to Beijing in 2008 with an increase of 1,130%: a budget from 2.6 to 32 billion euros! In London in 2012, the competition cost €10.9 billion, more than twice the projected €4.8 billion.".

It is essential to note that some nations have not sufficiently analyzed the cost and the rentability of certain infrastructures that may, post-event, be under-used. This could result in a loss of money for the host country, which relies heavily on upgrading infrastructure after the event. For example, the 2016 Games that took place in Rio is a good example. The total estimated cost for infrastructure was about \$12 billion. The stadium in Maracanã, which underwent major renovations to host the Games, remained inactive after the Olympic Games and was looted. The stadium was closed due to conflicts between the stadium operators, the Rio State Government, and the Olympic organizers. Other places were closed and closed for public use." (Sprawl, 2022). This is why it seems important



to analyze accurately the contribution that investment brings to an infrastructure by thinking about the contribution in the long term.

The Olympic Games could increase the exclusion of certain areas of the country. Indeed, the Olympics are usually held in the capitals of the host countries. This could only promote the economic and tourism differences of the country's small towns. This could even lead to lower economic revenues for small local businesses.

The Olympic Games are likely to create price inflation: Increased demand during the Olympic Games which can lead to higher prices for goods and services, which can harm residents, especially those with low incomes.

### **2.3.2. Opportunities along Economic Value Dimension**

Despite its negative consequences of the Olympics, it is important to analyze the economic opportunities of these games to understand why these games are interesting from an economic point of view for the host city and thus, be able to find actions that would minimize the negative impacts analyzed previously.

The Olympic Games are an international event that each year attracts millions of tourists to the host city. According to an article from the International Olympic Committee in 2022, "The number of winter tourists in China increased from 170 million for the 2016/2017 season to 254 million for the 2020/2021 season according to the Chinese Tourism Institute" (« FaCTs and Figures : How Beijing 2022 is transforming winter sport in China, 2022). Indeed, one of the main positive impacts of hosting the Olympics in a city is the tourist showcase of the city and the country. Even if the bill for the host of these Games increases, the country will be exposed to the whole world for several days, which can greatly increase their visibility and therefore the profitability of this bill. Many host cities are making architectural changes to accommodate athletes, teams, staff and spectators to achieve the expected economic objectives. This pre-event work therefore significantly increases the expenses during the organization but can be balanced with the reception of thousands of spectators which will create great profitability at the end of the Olympic Games. For example, the Paris Games in 2024 will bring in more than 10 billion euros and almost 250,000 jobs according to Capital.fr (2016).

Beyond the tourist and therefore economic leverage that the Olympics can be, the economic investment committed by the host city in the renovation and modernization of the city can be beneficial for the inhabitants but also to attract once again, of tourists and future inhabitants. Indeed, "The organization of the Olympic Games is a means of modernizing infrastructure and transport. The other Olympic structures, including the Olympic Park, which is to host and house athletes, will certainly be converted into housing." (Stockman, 2017). These actions can first, generate continued interest from visitors and residents in this city in the long term, while stimulating the development of sports activities in the region and making the construction of these infrastructures profitable by creating new opportunities for the use of modernized sports spaces.

It is also interesting to note that the Olympic Games create short- and long-term jobs. According to a study published by Le Monde, "The preparation and hosting of the 2024 Olympic and Paralympic Games should mobilize 181,000 jobs in the construction, tourism and various trades related to the organization of the event." (Coeur, 2023). These jobs could only help strengthen economic ties between tourists, the Games Organizing Committee, and local businesses. The more people involved in reception and sales, the more production capacity increases, thus promoting economic growth.

The Olympic Games encourage the development of local sport, encouraging young people to engage in sports activities. This can lead to the creation of sports clubs, sports schools and other opportunities related to the sports sector. Indeed, in the article on "Politique Internationale", François Barrouin explains for "for the territories, these Games are an exceptional opportunity to develop sport for all, to work with the State and the sports movement, to create more continuity between sport at school and associative structures, to propose new activities and thus significantly increase the share of the population practicing physical activity and sports. To encourage the emergence of young top athletes who, I would remind you, are starting their careers in local clubs." (*Les Jeux, n.d.*). This shows us that the Games allow a certain development in the sports sector which can be highly beneficial both in the attractiveness of tourists and residents and in the economic circle of the host city post-event.

### 2.3.3. Corrective actions along Economic Value Dimension

After an analysis of the negative economic impacts and opportunities of hosting the Games in a host city, it is important to go further, and determine what actions could be taken to minimize the negative consequences of this large-scale event.

First, it is important to realize and assume the financial overload that can be the hosting of the Games in a host city. "To its credit, the IOC recognizes the financial and social burden of the competition and hosting of the Olympic Games [...] The organization proposed, as part of its «Olympic Agenda 2020», that instead of continuing its open call for tenders that rewards cities that promise the most chic sites, the most luxurious accommodations and the most spectacular ceremonies, Instead, it will assess bids based on economic (and environmental) sustainability. The IOC has also indicated that it will actively court cities that it believes can successfully host the Games instead of encouraging participants from all cities." (Rescuing the Olympic Games from their own success - IMF, 2021).

It is indeed important to create reforms to remove certain selection criteria that are too "superficial" and to choose criteria that are more sustainable and fairer.

Secondly, it seems important to reduce the economic burden that the Olympic Games can represent for the capital of the host country, but also to minimize the exclusion of smaller cities from the host country, which do not seem to benefit from the positive impacts that the Olympics could have. perhaps the Games should be opened and as explained in this article, "encouraged by region rather than by city. Even a big city like Paris or Los Angeles may not have the infrastructure to host competitions in 33 different sports or accommodate the expected influx of tourists, so extending the Olympic Games to several cities can increase available sites and tourism capacity." (*Rescuing the Olympic Games from their own success - IMF, 2021*).

In its article, the Manning Napier website mentions the problem of the difference between emerging host countries and developed host countries: " most countries increase their debt and fail to repurpose the accommodations that have been built. Cities in emerging countries especially struggle to see a profit from hosting the Olympics, whereas host cities in developed markets have greater potential to make a profit by using existing structures and making minimal updates in preparation

of hosting." (*Diary of an Olympian et al., 2022*). There is an inequality between these two countries. One of the main actions that could be put in place would perhaps be to develop or manage equitable aid depending on the host country. We also think it would be interesting to consider ways of ensuring that emerging countries are not excluded from the selection criteria. They are the ones most likely to get into debt by hosting the Olympics, but they are perhaps the countries that need it most.

## **2.4. The limits of the Olympics: The ecological impact.**

### **2.4.1. Negative impacts along Ecological Value Dimension**

Whether they take place during summer or winter, the Olympic Games stand as one of the most important sporting events into the world. This prestigious event not only attracts many participants from diverse countries of the world but also necessitates the creation of extensive infrastructure, such as the construction of new stadiums and other facilities that can lead to habitat destruction, deforestation, and modifications to natural landscapes. Hosting the Olympics requires a significant number of resources, including energy and water. This increased demand can strain local resources, disrupt local ecosystems, and contribute to the loss of biodiversity. The ecological aspect becomes more and more important over time and is a controversial subject in recent years.

Growing concerns related to environmental preservation increasingly led public authorities to seek and implement protective and preventive measures. However, environmental policies often conflict with the constraints of economic activity, while the preservation of natural resources is a global issue that extends across international borders.

This controversial subject surrounding ecology stems from several factors that give rise to divergent opinions. Economic interests, particularly in sectors such as the fossil fuel industry or intensive agriculture, may perceive ecological measures as potential threats to their profits, leading to opposition against environmental initiatives. Political affiliations and ideological beliefs strongly influence perspectives on ecology, with some viewing environmental actions as excessive government intervention, while others see them as necessary for the common good.

Scientific uncertainties also play a role, as debates arise over details, priorities, and long term consequences, providing fodder for controversy. Concurrent priorities, such as economic considerations, national security, or job creation, can sometimes conflict with ecological measures, prompting arguments for necessary compromises. The complexity of ecological issues, often interconnected and multifaceted, adds to the challenge of finding simple solutions and contributes to polarized debates.

In summary, the ecology subject arises from a complex interaction of economic, political, ideological, and social factors, creating some conflicts for passionate and divergent debates.

#### **2.4.2. Opportunities along Ecological Value Dimension**

Despite advancements in Olympic sustainability, insufficient ecological measures leading to several consequences have been noted in some host countries. For example, the 2008 Beijing Olympics faced criticism for air pollution and environmental degradation, raising concerns about the lack of effective measures to decrease the environmental impact. Then, the 2014 Sochi Winter Olympics in Russia shows the environmental issues caused by extensive construction, impacting local ecosystems and biodiversity. These problems highlight the need to provide ecological strategies (Beijing Olympics 2008: An Urban Transformation | Department of Economic and Social Affairs, n.d.).

However, we observed that more and more countries started to rise to these challenges. In recent years, there has been a shift towards integrating ecological sustainability into Olympic programs. Host cities are increasingly adopting measures to minimize the environmental impact of the Games, incorporating renewable energy sources, implementing waste reduction initiatives, and focusing on long-term legacy planning.

#### **2.4.3. Corrective actions along Ecological Value Dimension**

Strategies to fight pollution and promote ecological sustainability during the Olympic Games involve multifaceted approaches. One approach is the implementation of ecofriendly measures in infrastructure development, energy use, and waste management. For instance, host cities like Vancouver 2010 incorporated sustainable practices, including renewable energy sources and waste reduction programs.

Another strategy revolves around reducing carbon emissions related to transportation, construction, and event operations. Tokyo 2020 aimed to minimize carbon emissions through efficient transportation and venue management, as highlighted in studies on carbon-neutral Olympic strategies.

Preserving local biodiversity affected by Olympic-related activities is also crucial. Efforts made by cities like Sydney 2000 to safeguard local ecosystems during and after the Games can be observed through research on biodiversity conservation in Olympic host cities.

Water conservation and responsible management of water resources are imperative. Beijing 2008 implemented water-saving technologies and promoted responsible water use, as demonstrated in studies on water management at Olympic venues.

Furthermore, designing Olympic venues with post-event sustainability in mind is vital for a lasting impact. Barcelona's 1992 Olympics repurposed structures, providing ongoing environmental advantages, as documented in studies on the legacy of sustainable venues.

These strategies, supported by academic research and studies on environmental sustainability in the context of the Olympics, aim to minimize ecological impacts and promote a legacy of environmental value in host cities. This integration of environmental sustainability aligns with the core principles of the Olympics, demonstrating that the pursuit of excellence need not come at the cost of environmental well-being. It underscores the idea that success is not solely measured by gold medals but also by the positive contributions made towards ensuring a healthier, more sustainable world for generations to come.

## **2.5. Research Gap**

In order to carry out our research in the best possible conditions and obtain as much information as possible, we have studied 5 publications to see their framework and research methods.

- L'impact sur l'économie domestique de l'organisation de grands événements sportifs: le cas des Jeux Olympiques (Merlin & Gilson, 2019) :This study examines the economic costs and benefits of

the Olympic Games in various host countries. It looks at four past editions and analyses the economic results using the theory of the value of the costs and benefits of the Games.

- Balancing conservation and development in Winter Olympic construction: evidence from a multi-scale ecological suitability assessment (Song et al., 2018) : This research focuses on the ecological implications of hosting the Winter Olympic Games. It uses spatial analysis methods to assess the ecological suitability of development in host regions.
- Impacts of Olympics on exports and tourism (Song, 2010): Song's study assesses the effects of the Summer Olympics on exports and tourism. It uses an economic gravity model to estimate these impacts.
- An evaluation of the sustainability of the Olympic games (Müller et al., 2021): This research examines the sustainability of the Olympic Games based on ex-post data on the results of the Games. It assesses the degree of sustainability of the Olympic Games using empirical data.
- Calculating the regional economic impact of the Olympic games (Preuss, 2004): This study proposes a method for assessing the economic impact of the Olympic Games at regional level. It combines cost-benefit analysis and input-output models to define the economic impact of the Games at regional level.

Our research differs from existing work in that its methodological approach is a secondary analysis, by using existing research data. We propose a method for studying archives to examine the economic impact of the Olympic Games. By meticulously analyzing archival documents, we seek to reconstruct and evaluate the economic impacts of the Olympic Games in 3 dimensions, Ecological, Social and Environment. This approach will provide a new perspective on the evolution of the economic effects of the Olympic Games over time, offering valuable lessons to guide future decisions on the organization of sporting events.

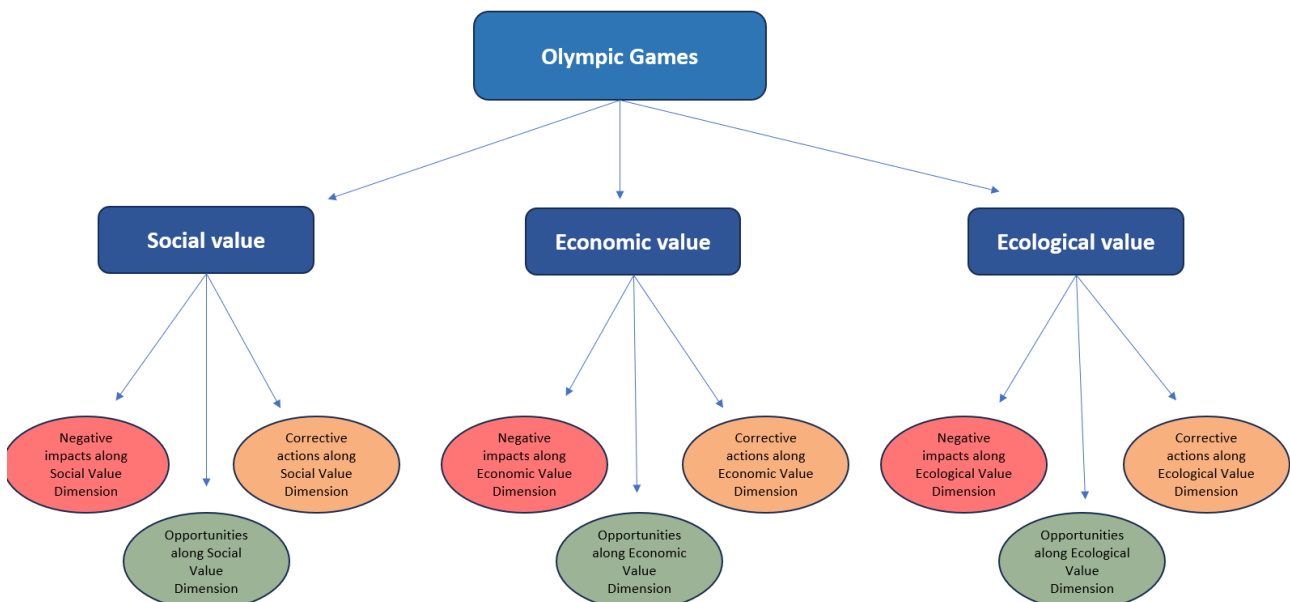
## 2.6. Research Framework

Our framework was developed by considering a number of academic studies that have examined the various dimensions of the Olympic Games, in particular their social, economic and environmental impact. Among these studies, we consulted "Study of economic, social and environmental impacts of Olympic Games on the host cities from professors and expert's viewpoint Case study: London 2012 Olympic" by Shokri et al. (2013), as well as "Evaluation of ecological civilization development in the post-Olympic times" by Yang et al. (2019).

This research has helped to shed light on the different dimensions of the impact of the Olympic Games on host countries, highlighting social, economic, and ecological aspects.

In addition, we studied several other studies through the Nvivo Tool so that we could conduct our research with all the necessary information.

Then, we created our mind map to show the three dimensions and the different types of information we gathered during our research.





### **3. Research methods and implementation**

#### **3.1. Research context**

Our thesis explores the complex interplay between the negative social, economic, and environmental impacts of the modern Olympic Games. Since their creation at the first modern Games in Athens in 1896, the Olympic Games have undergone a remarkable evolution, both in their organization and in the criteria used to select host cities, while at the same time reflecting constantly changing societal issues. Today, in 2023, our generation is driven by a deep concern for a fairer, more just and sustainable world. In this context, it has become imperative to understand, analyze and remedy the potential negative impacts of the Olympic Games on the populations and the economy of the host country, as well as on the sustainability of this mega-event. Our thesis is part of this process, taking an in-depth look at how the Olympic Games influence these three pillars, helping to inform future decisions and work towards an Olympic future that is more respectful of our planet and its inhabitants.

#### **3.2. Research design**

To be able to write this thesis, we thought that a descriptive-explanatory focus would be appropriate for our topic. We have selected and described facts and then explained them to arrive at an analysis. We wanted to gain a better understanding of the subject by focusing on three dimensions essential to the smooth running of these Games. We felt it was important to clarify and understand the impact of these three concepts on the nations hosting the Games. Thanks to this descriptive-explanatory research, we can highlight the limitations of previous studies while providing a solid basis for making decisions that will improve the impact of the Olympic Games on the economy, ecology and host populations.

##### **3.2.1. Research philosophy**

In this study, we opted for realism as a research philosophy. We have chosen a philosophical realism research approach because we thought it would be interesting to collect and analyze empirical data, to analyze and rely on tangible facts and concrete observations.

This thesis aims to study real facts to make conclusions and recommendations that could radically change the negative impacts of the Olympic Games on the 3 key concepts of our thesis: Ecological Dimension, Economic Dimension, and Social Dimension. Based on existing objective facts, we want to propose solutions to mitigate these impacts.

### **3.2.2. Research purpose**

The purpose of this research is exploratory. We will explore any possible negative Economic, Social and Ecological Impacts of the Olympic Games by identifying and analyzing qualitative data in form of relevant publications as part as our archival research. Our aim is to deepen our understanding of the negative economic, ecological, and social impacts of the Olympic Games. By analyzing hard facts, we aim to unveil the real challenges that these global events can create for host nations. This will enable us not only to highlight existing problems, but also to identify the potential opportunities inherent in the Games.

Our analysis will focus on actions to mitigate negative impacts and maximize positive benefits. By considering concrete solutions, we aim to contribute to a vision of the Olympic Games that goes beyond the commercial objective, promoting a return to the fundamental values of sport.

This approach aims to provide practical recommendations to guide Games organizers and stakeholders towards measures that promote a balance between the prestige of the Games and their implications.

### **3.2.3. Research approach**

We use an inductive approach in this research. This is an exploratory study where we start from analyzing secondary data in form of relevant publications in search of any information and knowledges related possible negative Economic, Social and Ecological Impacts of the Olympic Games. The key identified concepts in this inductive process of qualitative data analysis may become the constructs of possible emerging pre-theory.

Our analysis will begin by delving into the details and specifics of the data collected on the Nvivo tool. We have chosen to analyze existing documents to draw on current knowledge and to let ideas emerge and build our reasoning and analysis.

#### **3.2.4. Research strategy/method/s**

In this study we use archival research as a method to identify and analyze relevant publications and other secondary data sources. We assume that archival research on negative Economic, Social and Ecological Impacts of the Olympic Games will be feasible and sufficient way of identifying and obtaining the qualitative data in form of relevant publications.

We want to build on existing knowledge so that we can analyze, understand, and propose solutions that will have a positive impact on the Olympic Games.

#### **3.2.5. Methodological choice**

Our choice is a mono method based on archival research. We will only use secondary data in order to be able to analyze existing data and have a deeper knowledge of the subject to be able to propose concrete and useful solutions for future research.

#### **3.2.6. Time horizon**

In this research we use the longitudinal time horizon as we will study the negative Economic, Social and Ecological Impacts of the Olympic Games for the so-called "Modern" Olympic Games. This study will therefore study the negative impacts of the 3 key concepts over the period 1896 to 2023.

### **3.3. Data collection**

We used for our thesis predominately secondary qualitative data because we rely on existing research and data to study the topic. Although some quantitative data and results from secondary sources might be presented, analyzed, and interpreted, no primary quantitative data collection and analysis will be used in this study. This analysis of secondary data will be done with the Nvivo tool

that will allow a good analysis of existing knowledge. This will allow a better understanding of the importance of key concepts and to measure the existing impacts to date.

### 3.4. Data analysis

#### 3.4.1. Qualitative data analysis

This study conducted a secondary data analysis using Nvivo tool and developed a codebook:

Code	Definition	When to use	When not to use
<i>Social Value</i>	<p>Social value measures the positive value Olympic Games create for the economy, communities, and society.</p> <p>The units of social value measurement relate to (Equality, inclusion, community development, labor standards).</p>	<p>Use this code to identify the passages of texts that address Social Value in Olympic Games.</p> <p>Use this code to identify social values measured by relevant units.</p>	<p>Don't use for passages of texts that address other issues than social value in Olympic Games.</p> <p>Don't use for publications that talk about creation of other values than social values.</p>
<i>Negative Impacts along Social Value Dimension</i>	<p>Any negative impacts on Social Value as measured by equality, inclusion, community development, labor standards.</p>	<p>Use this code for any passage of text that describes negative impacts along Social Value Dimension.</p>	<p>Don't use this code when the text passage does not describe negative impacts along Social Value Dimension</p>

<i>Opportunities Impacts along Social Value dimension</i>	Any opportunities impact on Social Value as measured by equality, inclusion, community development, labor standards.	Use this code for any passage of text that describes opportunities along Social Value Dimension.	Don't use this code when the text passage does not describe opportunities along Social Value Dimension
<i>Corrective Actions along Social Value Dimension</i>	Any corrective actions that help to preserve or add social value as measured by equality, inclusion, community development, labor standards.	Use this code for any passage of text that describes corrective actions along Social Value Dimension.	Don't use this code when the text passage does not describe corrective actions along Social Value Dimension.
<i>Environmental Value</i>	<p>Environmental values that take into consideration reducing the impacts on natural resources and the environment.</p> <p>The units of environmental value measurement relate to (Renewable resources, low emission, charity for environmental purpose)</p>	<p>Use this code to identify the passages of texts that address environmental value in Olympic Games.</p> <p>Use this code to identify environmental values measured by relevant units.</p>	<p>Don't use for passages of texts that address other issues than environmental value in Olympic Games.</p> <p>Don't use for publications that talk about creation of other values than environmental values.</p>

<p><i>Negative Impacts along Environmental Value Dimension</i></p>	<p>Any negative impacts on Environmental Value as measured by renewable resources, low emission, charity for environmental purpose.</p>	<p>Use this code for any passage of text that describes negative impacts along Environmental Value Dimension.</p>	<p>Don't use this code when the text passage does not describe negative impacts along Environmental Value Dimension.</p>
<p><i>Opportunities Impacts along Environmental Value Dimension</i></p>	<p>Any opportunities impact on Environmental Value as measured by renewable resources, low emission, charity for environmental purpose.</p>	<p>Use this code for any passage of text that describes opportunities impacts along Environmental Value Dimension.</p>	<p>Don't use this code when the text passage does not describe opportunities impacts along Environmental Value Dimension.</p>
<p><i>Corrective Actions along Environmental Value Dimension</i></p>	<p>Any corrective actions that help to preserve or add Environmental value as measured by renewable resources, low emission, charity for environmental purpose.</p>	<p>Use this code for any passage of text that describes corrective actions along Environmental Value Dimension.</p>	<p>Don't use this code when the text passage does not describe corrective actions along Environmental Value Dimension.</p>

<p><i>Economic Value</i></p>	<p>Financial values that affect Olympic Games organizers and participants. The revenue in processes, services, and products that reduces the costs and/or increases revenue (sales) improving the bottom line of profitability.</p> <p>The units of economic value measurement relate to (Earnings, shareholder value, financial resilience)</p>	<p>Use this code to identify the passages of texts that address economic value in Olympic Games.</p> <p>Use this code to identify evidence of created economic values measured by relevant units.</p>	<p>Don't use for passages of texts that address other issues than economic value in Olympic Games.</p> <p>Don't use for publications that talk about creation of other values than economic values.</p>
<p><i>Negative Impacts along Economic Value Dimension</i></p>	<p>Any negative impacts on Economic Value as measured by earnings, shareholder value, financial resilience</p>	<p>Use this code for any passage of text that describes negative impacts along Economic Value Dimension.</p>	<p>Don't use this code when the text passage does not describe negative impacts along Economic Value Dimension.</p>
<p><i>Opportunities Impacts along Economic Value Dimension</i></p>	<p>Any opportunities impact on Economic Value as measured by earnings, shareholder value, financial resilience</p>	<p>Use this code for any passage of text that describes opportunities impacts along Economic Value Dimension.</p>	<p>Don't use this code when the text passage does not describe opportunities impacts along Economic Value Dimension.</p>

<p><i>Corrective Actions along Economic Value Dimension</i></p>	<p>Any corrective actions that help to preserve or add Economic value as measured by earnings, shareholder value, financial resilience</p>	<p>Use this code for any passage of text that describes corrective actions along Economic Value Dimension.</p>	<p>Don't use this code when the text passage does not describe corrective actions along Economic Value Dimension.</p>
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### 3.5. Ethical considerations

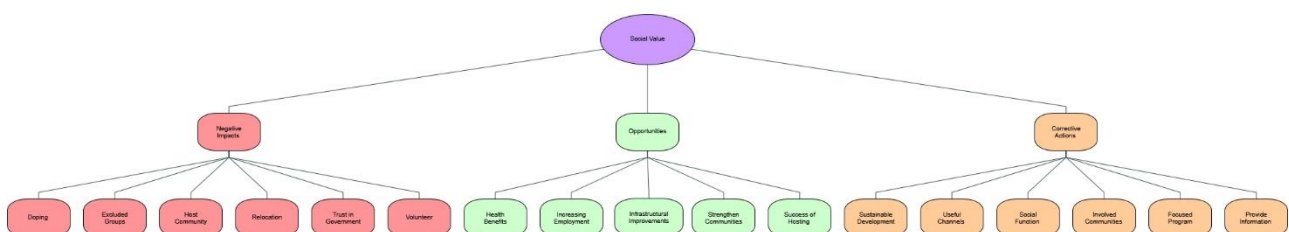
As the study will use only publicly available secondary data there is a very small if any risk of privacy and confidentiality infringement for any individual or organization. A due care will be taken to quote and cross-reference any secondary source used in this publication clearly and adequately.

## 4. Research Results

This part aims to expose the results of the research done through the codebook shown previously.

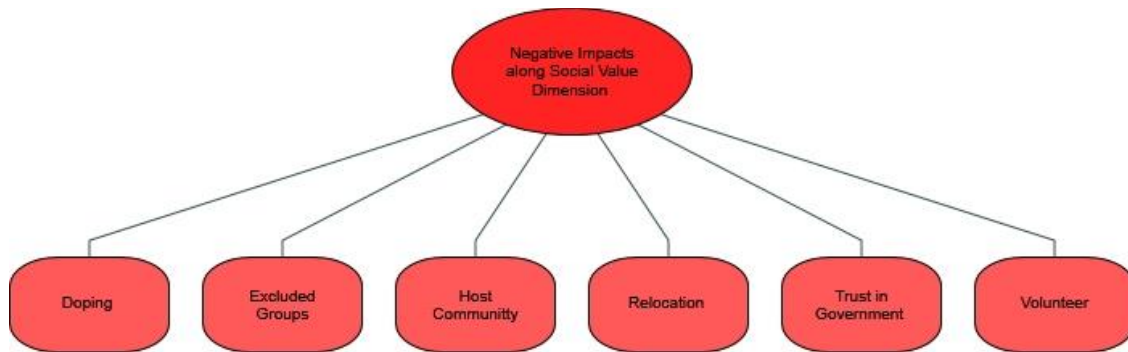
### 4.1. Social Value

In this part, we will present our research results on the negative social impact of the Olympic Games. This mind map represents the result. However, we will divide this part into 3: Negative Impacts along Social Value Dimension, Opportunities Impacts along Social Value Dimension and Corrective Actions along Social Value Dimension.





## 4.2. Negative Impacts along Social Value Dimension



When we look the Olympics on a map that shows the good things and the bad things, it helps us understand all the different parts better. It's like a big spider web with links between things like cheating in sports, leaving out certain groups, what happens in the place where the event is held, moving people around, how much people trust their leaders, and people helping for free.

### 4.2.1. Doping

The 2014 Winter Olympics in Sochi stands as a glaring example of this issue. The International Olympic Committee and anti-doping authorities are to blame for a Russian doping scandal that tarnished the 2014 Winter Olympics in Sochi, Deputy Prime Minister Vitaly Mutko said. A big scandal shook the world of sports when multiple Russian athletes were implicated and found guilty of using prohibited substances « Doping has reached systemic proportions in some countries. In 2016, the World Anti-Doping Agency found that Russia ran a coordinated doping program at the national level across most Olympic sports » (*Appendix 2.1*).

### 4.2.2. Excluded groups

In major events such as the Olympics, the spotlight often unveils inclusivity challenges that doesn't bring full participation for certain groups. «there are limitations for socially excluded groups: they are generally hard to engage and include in the volunteer experience ». (*Appendix 2.1*).

### 4.2.3. Host community

The Olympic Games often leave behind a tangible and intangible legacy, but for some members of the host community, this transition can be accompanied by a deep post-event melancholy, illustrating the nuances of the Olympic experience, and showing an attachment on the part of the communities hosting the Olympic Games. « there may be a feeling of loss experienced by many members of the host community, even a post-Games depression ». (*Appendix 2.1*).

However, despite the potential benefits, for some members of the host community the transition after the Olympic Games can be accompanied by a deep post-event melancholy. This melancholy can be the result of several factors, including the end of excitement of the Games, the disappearance of the international visitors and athletes who brought the city streets to life, and the return to daily routine after a period of celebration and festivities.

#### **4.2.4. Relocation**

The relocation of residents from countries hosting the Olympic Games is a complex and controversial issue that raises many social, economic, and ethical questions. When the Olympic Games are awarded to a city, this can trigger a process of intensive urban development, including the construction of new sports infrastructure, housing and facilities to welcome visitors and athletes from around the world. However, this often rapid and massive urban transformation can have a significant impact on local populations, particularly those living in the areas where the new Olympic venues are to be built, « private property replacement or relocation because of new facility construction, traffic congestion, environment damages, noise pollution, and a myriad of social problems such as an increase in crime and prostitution » (*Appendix 2.1*).

Residents often have to be relocated to make way for the Olympic facilities and related urban development projects. This can result in forced evictions, house demolitions and the displacement of entire communities. These forced displacements can disproportionately affect the most vulnerable populations, including people on low incomes, ethnic minorities and indigenous peoples, who may be marginalized and excluded from the decision-making process.

#### **4.2.5. Trust in Government**

Governments must also be aware of the potential repercussions of overestimating the benefits of the event. If the 'promised' benefits do not materialize during the period of the event, residents' reactions to future events may be undesirable. It is essential to recognize that unmet expectations can lead to increased distrust of government and reduced confidence in future promises and commitments.

However, there was a significant difference between the pre-event and post-event sample in terms of the negative relationship between residents' trust in government and their perception of the event. This finding highlights the importance of transparent and effective management of residents' expectations and open communication with the community throughout the process of organizing and hosting the event. « However, there was a significant difference between the pre- and post-event sample in terms of the negative relationship between residents' trust in government ». (*Appendix 2.1*).

In summary, it is crucial for governments not to exaggerate the potential benefits of an event and to proactively manage residents' expectations. Honest and transparent communication about the real implications and outcomes of the event is essential to maintaining the trust and satisfaction of residents, as well as ensuring the long-term success of future events. « the more democratic approach to mega event planning is arguably more difficult to implement and as a result less frequently adopted, or adopted in name only. » (*Appendix 2.1*).

#### **4.2.6. Volunteer**

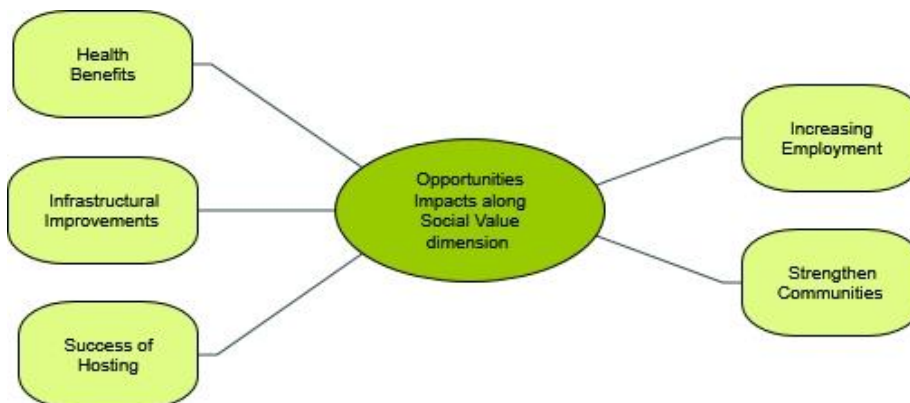
Many Olympic contractors were looking for people who were already employed, qualified, and had 'the right attitude' to work, while many long-term unemployed people and those from areas of high unemployment were unable to secure Olympic-related jobs. This disparity highlights the persistent challenges faced by marginalized populations and disadvantaged communities in accessing equitable economic opportunities.

These new employment opportunities are not always evenly distributed: "Many Olympic Games contractors were looking for people who were already employed, qualified and had 'the right attitude'". This preference for workers already established in the labour market can leave out those

who face structural barriers to employment, such as lack of formal qualifications, irregular employment histories or language barriers. « Many Olympic contractors wanted people who were already employed, skilled, and having “the right attitude” to work, while a lot of the long-term unemployed and those from areas of high unemployment were not getting Olympic jobs » (**Appendix 2.1**).

This situation important questions about fairness and inclusivity in the distribution of economic opportunities generated by major events such as the Olympic Games. Governments, event organizers and entrepreneurs must work together to put in place policies and programs to ensure that all members of the community can benefit from the positive economic spin-offs of these events, and that no one is left behind. « However, these new employment opportunities are not always evenly distributed.

### 4.3. Opportunities Impacts along Social Value Dimension



The Olympics, far beyond being a global spectacle of athletic competition, yield a multitude of social benefits. They significantly impact health, employment, infrastructure, community cohesion, and the success of host cities.

#### 4.3.1. Health Benefits

Regarding health benefits, the Olympics often increased physical activity among spectators, promoting healthier lifestyles, in a working paper. From a global perspective, it is worth noting that these positive impacts do not refer to a material legacy only (e.g. new or upgraded sports and multi-functional venues, infrastructural improvements, increased income, and occupation, etc.), as the

concept of “Olympic legacy” may as well include a relevant immaterial dimension, which is strongly related to social and human capital production.

In terms of health benefits, the Olympic Games often increase physical activity among spectators, encouraging healthier lifestyles. The Olympic Games can also have a positive impact on mental health by strengthening the sense of community and providing opportunities for celebration and national pride. « A number of authors also linked mega sporting events to mental health benefits for the host community members ». **(Appendix 2.2).**

#### **4.3.2. Increasing Employment**

Increased employment « increasing employability » **(Appendix 2.2).** Opportunities are often put forward as a reason for investing in the Olympic Games. Organizers and governments point to the prospect of job creation as one of the key economic benefits of the Games, highlighting employment opportunities in a range of sectors, including construction, hotels, catering, transport services and tourism. « Increased employment opportunities are often used prominently to justify investment in the Olympic Games. » **(Appendix 2.2).**

This promise of additional jobs often attracts considerable support from local authorities and the public, who see the Olympic Games as an opportunity not only to celebrate sport, but also to stimulate the local economy and create sustainable employment opportunities.

However, it is important to note that the actual impact of the Olympic Games on employment can vary considerably depending on a number of factors « and employment opportunities during the event period due to a spike in visitor » **(Appendix 2.2)** including the planning, implementation and sustainability of infrastructure projects, as well as the recruitment and training policies put in place to ensure that the economic benefits actually reach the local workforce.

The argument of increased employment opportunities is often used as a central part of the justification for investment in the Olympic Games, but close monitoring of the delivery of these promises is crucial to fully assess the economic and social impact of the Games on host communities.

### 4.3.3. Infrastructural Improvements

From a global perspective, it is important to note that these positive impacts are not limited to a material legacy alone. Indeed, beyond the new sports infrastructure or improvements to multi-purpose facilities, as well as infrastructure improvements and the stimulation of the local economy, there are also associated social benefits. « From a global perspective, it is worth noting that these positive impacts do not refer to a material legacy only (e.g. new or upgraded sports and multi-functional venues, infrastructural improvements ». **(Appendix 2.2).**

New sports facilities can improve access to sport for more people, encouraging a healthier and more active lifestyle within the community. Olympic residential developments, once the Games are over, can be converted into affordable housing units, meeting the housing needs of the local population, and helping to reduce pressure on the property market. « stimulating the local economy, there are associated social benefits. New sporting infrastructure may improve access to sport; Olympic housing developments may later be used as affordable housing units; and the redevelopment of run-down areas may increase feelings of safety and local pride. » **(Appendix 2.2).**

In addition, the renovation of run-down neighborhoods and their revitalization as part of the Olympic preparations can increase residents' sense of security and local pride. These urban transformations are not just aesthetic, but also help to create more pleasant and inclusive environments for residents, fostering a sense of belonging and social cohesion within the community.

### 4.3.4. Strengthen Communities

The Olympic Games are much more than just a global sporting event. Indeed, this large-scale event creates a space conducive to social and cultural exchanges between residents « The Olympic Games are much more than just a global sporting event. Indeed, this large-scale event creates a space conducive to social and cultural exchanges between local residents » **(Appendix 2.2).** It is an opportunity for the inhabitants of the host region to strengthen their identity by reconnecting with local traditions and cultures. In this way, the Olympic Games help to reinforce regional values and traditions, while fostering greater cultural understanding between local residents and tourists from all over the world. In short, the Olympic Games transcend the boundaries of sport to become a genuine catalyst for intercultural dialogue and social cohesion. It is an opportunity for the inhabitants of the host

region to strengthen their identity by reconnecting with local traditions and cultures. In this way, the Olympic Games help to reinforce regional values and traditions, while fostering greater cultural understanding between local residents and tourists from all over the world, « strengthen regional values and traditions, and even lead to cultural understanding among residents and tourists » (**Appendix 2.2**). In short, the Olympic Games transcend the boundaries of sport to become a genuine catalyst for intercultural dialogue and social cohesion.

#### 4.3.5. Success of hosting

The successful organization of a mega-event offers the host country and city an excellent opportunity to strengthen their brand image on a global scale and to gain national prestige. This has an impact on tourism within the local community, offering opportunities for greater visibility and international recognition. « effect on tourism to the local community, providing opportunities for increased international publicity and recognition ». (**Appendix 2.2**).

Indeed, the influx of visitors to this major event helps to boost tourism and promote the city on a global scale, « tourism and generally promoting the city globally » (**Appendix 2.2**). So the successful organization of a mega-event goes beyond its immediate impact to leave a lasting imprint on the reputation and tourist appeal of the host city. « Tourism and generally promoting the city globally », (**Appendix 2.2**).

#### 4.4. Corrective Actions along Social Value Dimension



##### 4.4.1. Focused program

Our analysis reveals the importance of implementing targeted programs « focused programmes, that take into account the characteristics of socially excluded groups » **(Appendix 2.3)**, that consider the characteristics of socially excluded groups in France. However, it is important to note that to date, only the city of Paris appears to have made substantial efforts to achieve these objectives through practical programs and initiatives. Recognizing the specific needs and challenges faced by marginalized communities, Paris has launched innovative approaches to foster social inclusion. Through targeted interventions and strategic partnerships, the city has made significant progress in promoting a more equitable and inclusive society. Paris' proactive efforts underline the crucial role of proactive policy measures and community engagement in tackling the complex dynamics of social exclusion in France, « but only Sydney seems to have made substantial efforts to turn these aims into practical programmes and initiatives ». **(Appendix 2.3)**.

#### **4.4.2. Involved communities**

It is imperative that the local community has the opportunity to continue to be involved in the whole process of organizing the event, « the local community needs the opportunity to continue to be involved in the overall event hosting process » **(Appendix 2.3)**. The contribution of several community groups is essential to generate public debate and promote community participation, « from several community groups to prompt public debate and promote community involvement » **(Appendix 2.3)**. By encouraging open dialogue and involving residents in the decision-making processes, we can cultivate widespread support for the organization of the games. This inclusive approach not only strengthens the sense of belonging among members of the community, but also ensures that the event meets the needs and aspirations of the local population. It is essential to place community involvement at the heart of the event's planning and implementation. «resident support for hosting the games » **(Appendix 2.3)**.

#### **4.4.3. Provide information**

Host cities are required to provide information on these impacts from the date of their bid until two years after it closes, « Host cities are required to provide information on these impacts from the date of their candidature until two years after it terminates » **(Appendix 2.3)**. This requirement underlines the importance of maintaining transparency and accountability throughout the process of organizing the event. By reporting on economic, social, and environmental impacts from the bidding



stage until several years after the conclusion of the event, host cities can ensure effective and responsible management of the event.

Re-evaluating the exchange helps residents to establish a new point of reference and determine whether or not they will support future events, « In the end, the reevaluation of the exchange help residents to establish a new reference point and determine whether or not they will support future events » (**Appendix 2.3**). This period of reflection allows local communities to step back and critically assess the pros and cons of previous events. By taking a close look at the economic, social, and environmental impacts, residents can make informed decisions about their support for future events and help shape the landscape of future events.

#### **4.4.4. Social function**

Promoting the social function of sport involves a holistic commitment that goes beyond competitions and athletic performances. It also includes their educational activities, cultural initiatives, and volunteering program. By offering educational programs that teach values such as teamwork, respect and perseverance, sport becomes a powerful tool for the personal development of individuals of all ages. In addition, cultural initiatives that celebrate diversity and promote inclusion strengthen ties within the community and encourage mutual respect. Finally, volunteering programs allow participants to give back to their community and develop a sense of belonging and social responsibility. By combining these elements with sport, we create an environment that promotes the social function of sport « promote the social function of sport » (**Appendix 2.3**), where personal development, the celebration of diversity and community involvement go hand in hand with physical activity and competition.

#### **4.4.5. Sustainable development**

Sustainable development is a holistic approach to meeting the needs of the present without compromising the ability of future generations to meet their own needs. This vision encompasses various areas, including economic, environmental, and social, with the aim of creating a harmonious balance between economic growth, environmental protection and social well-being. By adopting sustainable development practices and policies « sustainable development » (**Appendix 2.3**), we are committed to preserving natural resources, reducing carbon emissions, promoting social equity, and

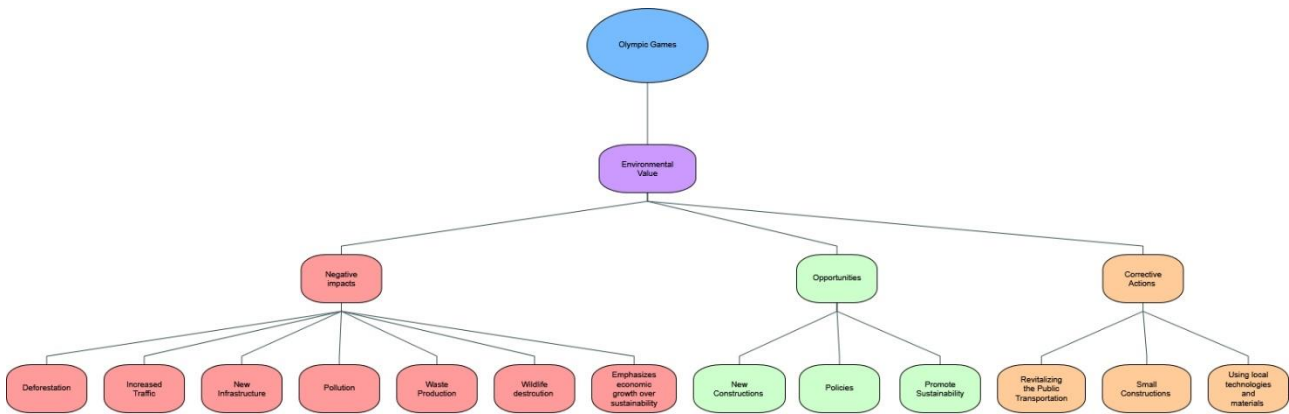
building community resilience. By placing sustainable development at the heart of our decisions and actions, we can create a prosperous and equitable future for all, where the needs of current generations are met without compromising the ability of future generations to meet their own needs.

#### **4.4.6. Useful channels**

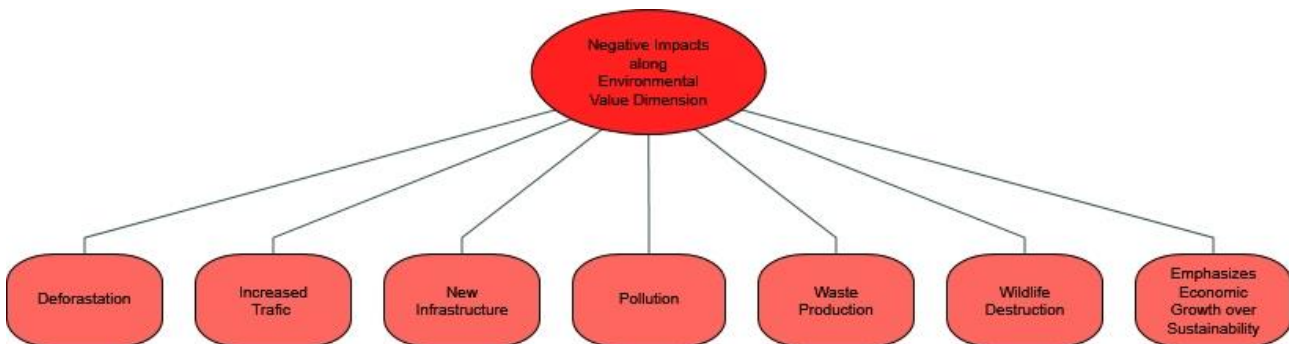
Local charities and community organizations play a crucial role in providing useful channels « Local charities and community organizations provide useful channels to engage with socially excluded groups who may lack the confidence to engage in formal decision making directly ». **(Appendix 2.3)** for engaging socially excluded groups who may lack the confidence to participate directly in formal decision-making processes. As essential mediators, these entities facilitate dialogue and the participation of community members who may feel marginalized or excluded from traditional decision-making. Their proximity to local realities enables them to understand the specific needs of these groups and to create inclusive environments where every voice counts. By working with these local actors, decision-makers can strengthen civic engagement and ensure that policies and initiatives truly reflect the needs and aspirations of the whole population, thereby contributing to a fairer and more inclusive society.

#### **4.5. Environmental Value**

In this part, we will present our research results on the negative environmental impact of the Olympic Games. This mind map represents the result. However, we will divide this part into 3 parts : Negative Impacts along Environmental Value Dimension, Opportunities Impacts along Environmental Value Dimension and Corrective Actions along Environmental Value Dimension.



#### 4.6. Negative Impacts along Environmental Value Dimension



##### 4.6.1. Deforestation

The Olympic Games, often celebrated as a symbol of unity and sporting competition, also have their share of negative impacts on the environment. These include the destruction of flora and fauna as a result of hunting, trapping and fishing intensified to meet the needs of the event. This increased activity disrupts natural habitats, threatening local biodiversity, (Andereck et al., 2005)« wildlife destruction such as a result of hunting, trapping and fishing, and disruption of natural habitat; plant destruction and deforestation » **(Appendix 2.4)**.

In addition, the construction of sports infrastructure for the Olympic Games often results in the destruction of vast areas of vegetation, leading to « deforestation and the destruction of valuable natural habitats, "and the destruction of natural areas for the construction of sports facilities such as stadiums » **(Appendix 2.4)**. Imposing stadiums and other facilities often require the conversion of previously wild land into urbanised areas, depriving many animals and plants of their natural home.

Therefore, while the Olympic Games can be a source of inspiration and admiration for millions of spectators around the world, it is essential that we recognise and mitigate their negative impacts on the environment, in order to preserve our precious ecosystem for future generations.

#### **4.6.2. Emphasizes Growth over Sustainability**

The focus on growth over sustainability has been a recurring theme in various contexts, most notably highlighted by Norwegian Foreign Minister Thorvald Stoltenberg. In his speeches, Stoltenberg drew links between terms such as 'mining' and 'environmental concerns', as well as 'growth' and 'sustainability', highlighting the commercial undertones of the Olympics. This narrative suggests that the organisers exploited the festive atmosphere of the Games to strategically manage the interplay between supply and demand for natural resources on the global Olympic stage, « instance, Norwegian Foreign Affairs Minister Thorvald Stoltenberg linked terms such as 'mining industry' and 'environmental concerns', 'growth' and 'sustainability', providing a hint of the commercial purposes of Olympic Games. It will be argued that the organisers took advantage of the festive aura of the Games to orchestrate dynamic relationships between supply and demand of natural resources, played out on the international Olympic platform » **(Appendix 2.4)**.

This dynamic relationships highlights the complex dynamics at play, where economic interests often trump environmental considerations, especially in the high-stakes environment of international sporting events such as the Olympic Games.

#### **4.6.3. Increased Traffic**

This world-class event puts additional pressure on the environment, particularly through increased traffic, « Additional pressure on the environment through increased traffic » **(Appendix 2.4)**.

Each edition of the Games attracts thousands of spectators, athletes, staff and media from all over the world. This massive influx inevitably leads to a significant increase in traffic, whether by land, air or sea. The constant movement of participants and visitors, as well as the transport of sports equipment and materials needed to build the Olympic infrastructure, leads to an increase in greenhouse gas emissions, air pollution and road congestion.

#### 4.6.4. New Infrastructure

Hosting the Olympic Games often requires the construction of massive new infrastructures, « although hosting the Olympics often implies new construction » (**Appendix 2.4**). However, despite promises of sustainability, these large-scale events are generally not environmentally friendly. The need to build monumental infrastructure to meet short-term demand leaves a deep and lasting ecological footprint, « Mega events such as the Olympic Games can hardly claim to be environmentally friendly due to its large infrastructure construction to meet a short term demands » (**Appendix 2.4**).

Mega-events such as the Olympic Games involve massive construction of stadiums and temporary infrastructure, which can have a negative impact on local ecosystems. These constructions, often unique in their function or excessively large, can be a burden on the future economic development of the city. Once the Games are over, these stadiums can become expensive and useless monuments, « construction of single function or large unnecessary stadiums would bring burden to the future economic development of the city » (**Appendix 2.4**), putting a strain on public finances and contributing to abandonment and environmental degradation.

#### 4.6.5. Pollution

Massive carbon emissions, air and water pollution are major concerns at these global events. The impressive amount of carbon emissions associated with the Olympic Games is alarming, « the huge carbon emission, air pollution, water pollution » (**Appendix 2.4**). Thousands of vehicles and aircraft carrying athletes and spectators from all over the world contribute to air pollution. Emissions from land vehicles and aircraft, combined with the increased concentration of people in a given area, lead to increased air pollution, affecting air quality and the health of local residents, « air pollution such as emissions from vehicles and airplanes; water pollution such as waste water discharge » (**Appendix 2.4**).

#### 4.6.6. Waste Production

Firstly, the Olympic Games mobilise huge quantities of resources, intended to be consumed over a short period of time, « On the one hand, vast amounts of resources, to be consumed over a short period of time » (**Appendix 2.4**). This concentration of resources to meet logistical needs, temporary infrastructures and the requirements of hosting athletes and spectators creates considerable pressure on the local environment. From construction materials to sports equipment, foodstuffs and consumer products, the Olympic Games represent a veritable bulimia of resources, often to the detriment of the environment.

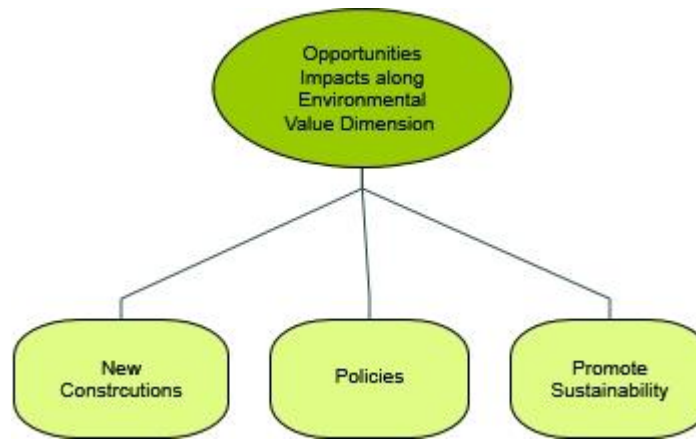
Secondly, the Olympic Games have a detrimental impact on natural ecosystems by introducing pollution and waste into biologically and culturally rich areas, « Adverse impacts on natural ecosystems by bringing pollution and waste into the most biologically and culturally rich areas » (**Appendix 2.4**). Olympic venues, often built in ecologically sensitive areas, can disturb natural habitats, degrade fragile ecosystems and threaten local biodiversity.

#### **4.6.7. Wildlife Destruction**

The Olympic Games can unfortunately lead to the destruction of local flora and fauna, an aspect that is often overlooked in the environmental impact of these global events. The construction of major infrastructure can destroy natural habitats vital to local wildlife, threatening regional biodiversity, « wildlife destruction » (**Appendix 2.4**).

In addition, other negative environmental impacts include the destruction of local flora and fauna, such as imposing buildings that destroy views, conflicting and inappropriate architectural styles, noise pollution from aircraft, cars and tourists, damage to geological formations such as erosion and vandalism, fishing lines and equipment abandoned by fishermen, and unwanted graffiti, « These include large buildings which destroy views, clashing and unfitting architectural styles, noise pollution from planes, cars and tourists; damage to geological formations such as erosion and vandalism; fishing line and tackle left by anglers; and graffiti » (**Appendix 2.4**).

#### **4.7. Opportunities Impacts along Environmental Value Dimension**



#### 4.7.1. New Constructions

The planning and construction of new structures, particularly stadiums and sports facilities, plays a crucial role in the development of a city, especially when it comes to hosting major events such as the Olympic Games, « the planning and realisation of new structures » (**Appendix 2.5**). Although the construction of these structures is unavoidable when organising such grandiose events, it is essential to approach the task with sustainability in mind.

Sensible stadium construction is of great importance to the sustainable economic development of future urban construction. Rather than focusing solely on grandiose, extravagant designs, it is imperative to prioritise efficiency, functionality and environmental considerations. Sustainable construction practices, such as the use of environmentally-friendly materials, energy-efficient systems and the integration of green spaces, can significantly mitigate the environmental impact of these structures while promoting long-term economic growth and resilience.

In addition, investing in infrastructure for multiple uses beyond the event itself can contribute to the sustainable development of the city. For example, designing stadia that can be redeveloped for community use, such as parks or cultural venues, after the event can ensure that the resources invested in their construction continue to benefit the city long after the Olympic flame has been extinguished.

In conclusion, while the planning and construction of new structures, particularly stadiums, is essential to hosting events such as the Olympic Games, it is crucial to approach these projects with long-term sustainability and economic development in mind, « reasonable construction of stadiums

is of great significance to the sustainable economic development of future urban construction » **(Appendix 2.5)**. By favouring sensible construction practices and investing in multifunctional infrastructure, cities can ensure that hosting major events makes a positive contribution to their overall development and leaves a lasting legacy for future generations.

#### **4.7.2. Policies**

In their study, Laing & Frost (2010) provided an overview and analysis of the operational issues associated with green events, highlighting the importance of developing policies and practices around waste management, recycling, traffic, energy and carbon offset schemes. They looked at some of the challenges involved in integrating green messages into the theme of an event, « Laing & Frost (2010) provided an overview and analysis of operational issues linking to green events, including the importance of developing policies and practices in waste disposal, recycling, traffic, power and carbon offset schemes. They examined some of the challenges involved in incorporating green messages into an event theme » **(Appendix 2.5)**.

Events can also stimulate the implementation of planning and administrative controls such as recycling policies and pollution control measures. For example, the Olympic Village for the London Games received an excellent green rating (Logan, 2012). Mega-events can also act as a springboard for raising residents' environmental awareness, « For example, the Olympic village for the London games obtained an excellent eco-rating (Logan, 2012). Mega events can also serve as a springboard to enhance level of environmental consciousness of residents » **(Appendix 2.5)**.

This dynamic highlights the significant impact that events can have on promoting sustainable environmental practices and raising ecological awareness within the local community. Drawing on concrete examples such as London's Olympic Village, event organisers can take inspiration from these success stories to integrate more environmentally-friendly practices into the planning and delivery of future events, helping to build a more sustainable future, « Events can also stimulate the implementation of planning and administrative controls such as recycling policies and pollution controls » **(Appendix 2.5)**.

#### **4.7.3. Promote sustainability**

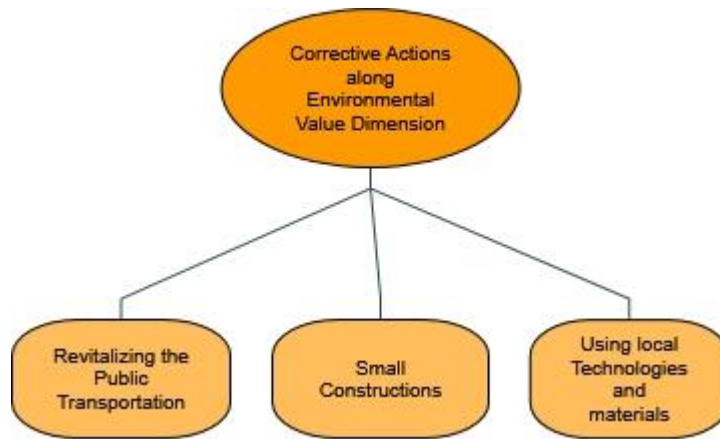


To meet today's environmental challenges, it is imperative to make significant changes in a number of areas, including adjusting the energy structure, promoting and disseminating sustainability values, and changing the structure of urban land use.

Firstly, adjusting the energy structure is essential to reduce our dependence on fossil fuels and promote renewable energy sources, « Adjust energy structure » (**Appendix 2.5**). This means investing in clean, sustainable technologies such as solar, wind and hydroelectric power, while gradually reducing the use of non-renewable energy. By adopting a more balanced and environmentally friendly approach to energy, we can help mitigate the effects of climate change and preserve natural resources for future generations.

Secondly, promoting and disseminating sustainability values is essential to raise awareness of environmentally friendly practices among individuals, businesses and communities, « promote and disseminate sustainability values » (**Appendix 2.5**). This can be done through education, awareness-raising and communication campaigns aimed at encouraging sustainable behaviour, such as recycling, reducing water and energy consumption, and promoting eco-friendly lifestyles. By integrating these values into our daily activities and decisions, we can help to create a positive cultural shift towards a more sustainable and eco-responsible way of life. Finally, changing the structure of urban land use is crucial to creating more sustainable and resilient urban environments, « Change the structure of urban land use » (**Appendix 2.5**). This means designing greener urban spaces, including parks, community gardens and biodiversity conservation areas, while reducing the ecological footprint of urban areas through effective land-use planning, densification and revitalisation of existing urban spaces. By promoting more balanced and environmentally friendly urban planning, we can create cities that are more liveable, more sustainable and more resilient in the face of environmental and social challenges.

#### **4.8. Corrective Actions along Environmental Value Dimension**



#### 4.8.1. Revitalizing the public transportation

Revitalizing the public transport system with alternative fuel bus technologies is an essential step towards creating a more sustainable and environmentally friendly transport network, « Revitalizing the public transportation system with alternative fuel bus technologies » (**Appendix 2.6**). By replacing traditional diesel vehicles with buses running on alternative fuels such as natural gas, electricity or hydrogen, we can reduce greenhouse gas emissions and improve air quality in our cities.

However, it is important to recognise that the construction of stadiums, new housing in temporary 'villages' and the adaptation of transport systems have differentiated effects across the city, « with stadium-building, new 'village' accommodation and adapted transport systems having differentiated effects across the city », (**Appendix 2.6**). These initiatives can have positive impacts in terms of job creation, economic development and strengthening urban infrastructure, but they can also lead to problems such as gentrification, congestion and pressure on natural resources.

It is therefore crucial to take a holistic approach to the planning and implementation of these projects, taking into account the needs and concerns of all stakeholders, including local residents, businesses, municipal authorities and community groups. By integrating sustainable transport solutions, such as alternative fuel bus technologies, into these urban development projects, we can create greener, more inclusive and resilient cities that meet the needs of all their residents while preserving the environment for future generations.

#### 4.8.2. Small Constructions

Small-scale construction plays a crucial role in understanding the nature and impact of a mega-event, just as large-scale construction does. Indeed, it must be emphasised that neighbourhood-level geography and time are just as relevant to understanding the impact of a mega-event.

Often, in public debate and academic discussion, the focus is on the large-scale constructions and initiatives associated with mega-events such as the Olympic Games or World Fairs, « small scale constructions » (**Appendix 2.6**). However, the importance of small-scale construction, such as temporary local amenities, support facilities, and community initiatives can have a significant impact on the daily lives of local people and the local environment, « This paper argues that neighbourhood-level geography and time are as salient as ‘mega’ scale in understanding the nature and impacts of a mega-event » (**Appendix 2.6**).

#### **4.8.3. Using Local Technologies**

When organising the Olympic Games, the use of local technology offers a unique opportunity to promote innovation and sustainable development at a local level. By taking advantage of the skills and resources available in the host region, organisers can not only reduce costs and implementation times, but also create a long-term positive impact on the local community and its environment.

Using local technology for the Olympic Games can mean adopting innovative solutions for the construction of sports infrastructure, such as using sustainable and environmentally-friendly materials from local sources, « using local technology » (**Appendix 2.6**). This not only reduces the carbon footprint associated with construction, but also strengthens the local economy by promoting employment and supporting local industries.

#### **4.9. Economic Value**

In this part, we will present our research results on the negative economic impact of the Olympic Games. This mind map represents the result. However, we will divide this part into 3: Negative Impacts along Economic Value Dimension, Opportunities Impacts along Economic Value Dimension and Corrective Actions along Economic Value Dimension.

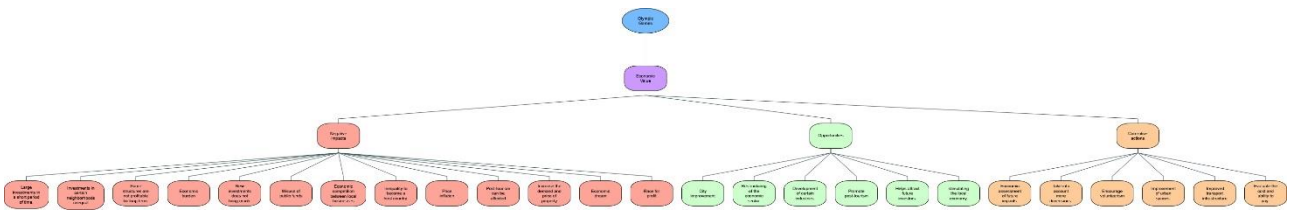


Figure 1. Mind map generated from NVivo 12 illustrating the Economic Value Dimension.

**4.10. Negative Impacts along Economic Value Dimension**

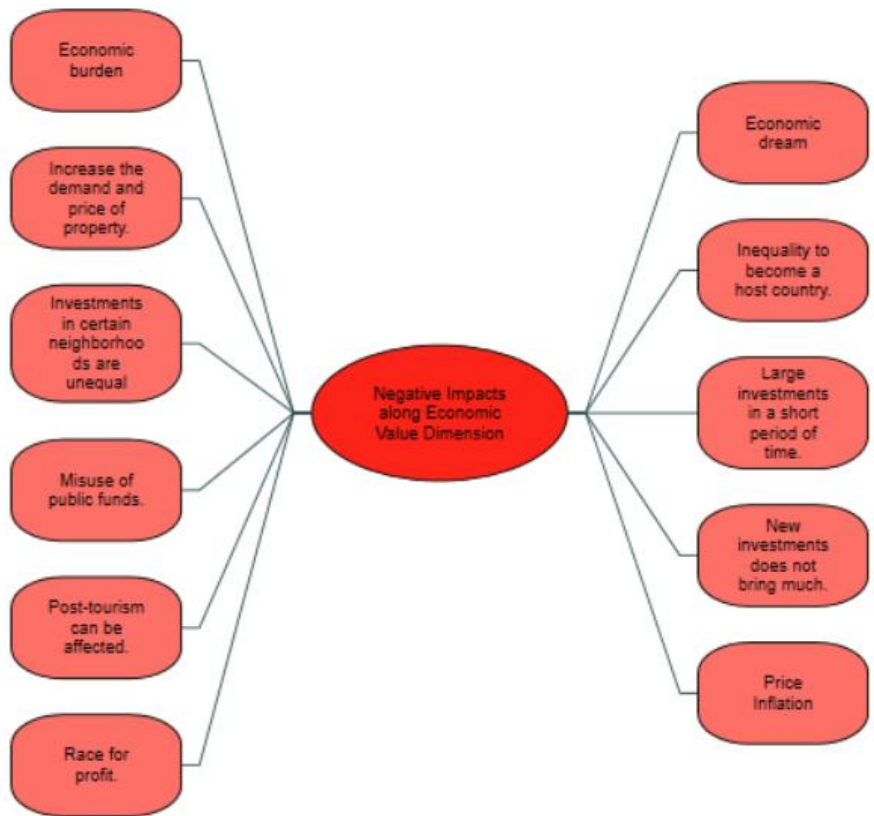


Figure 2. Mind map generated from NVivo 12 illustrating the Negative Impacts along Economic Value Dimension.

**4.10.1. Economic Burden**

Thanks to the research carried out, hosting the Olympic Games can be an economic burden for the country. Indeed, the costs are very significant and can be heavy for local residents during or after the Games, as Geng-Qing Chi et al. (2018) remind us:" However, the negative impact such as high

costs cannot be ignored [...]. Particularly, a considerable amount of investment, including human, financial and physical resources is required to successfully host a mega-event [...]". (**Appendix 2.7**)

Gursoy and Kendall (2006) support this idea: "Hosting mega events such as the Winter Olympics requires considerable investment of human, financial, and physical resources from host communities.". They explain the impact that the Games can have on prices and local taxes: and "For example, they are likely to cause price inflation and increases in local taxes to finance the facilities required to host the event. In addition, mismanagement of public funds by organizers is likely to deepen the negative economic impacts.". (**Appendix 2.7**).

Cashman (2010) also explains that taxes and costs can increase because of the organization of this event: "The supporters of an Olympic Games argue that these benefits will outweigh any negative impacts such as overcrowding, increased costs and taxes and disruption due to Olympic-related building.". He completes: "From 1980 to 2000 there was an unprecedented expansion in the size of the Games: seven new sports and 80 events were added to the program. There were many, including IOC President Dr Jacques Rogge, who believed that the Olympic Games had become too large, thereby imposing an increased burden on host cities.". (**Appendix 2.7**)

Prayag et al. (2013) add: "However, mega events also generate a number of negative economic impacts such as price inflation, increased tax burden for the local people, and mismanagement of public funds.". They explain that some cities spend astronomical sums of money, which can sometimes have serious consequences: "In 2004, Athens spent 13 billion Euros in hosting the event, accounting for around 6% of Greece's Gross National Product (GNP). Huge amount of investment does not always justify the benefits drawn from the event.". (**Appendix 2.7**)

Ritchie et al. (2009) go on to support the idea that we have already seen the Olympic Games have a major impact: "Taxes may be increased to assist the public sector to fund the costs associated with the hosting of such events, which may actually increase over time due to mismanagement. A clear example is the 1976 Montreal Olympics, which took several decades to repay the costs of hosting the mega event.". (**Appendix 2.7**)

#### **4.10.2. Demand and price property**

As well as increasing the cost of living, the Olympic Games attract countless tourists and, as a result, drive up property prices dramatically. For example, Ritchie et al. (2009) explain: “[...] but that it will be a positive influence for the economy (37.1%), and that the Olympics will increase trade for local businesses (32.4%) but that it will increase the demand and price of property (31.4%).” (**Appendix 2.7**) The Games will shine a spotlight on the city and boost its popularity. Property prices will rise and, in the long term, this will increase inequalities between the social classes. This is one of the negative effects that the Olympic Games can have on the host city.

#### **4.10.3. Investments in neighborhoods unequal**

To prepare for this event, the organizers must get ready for some major work and changes. These changes are beneficial for the districts that benefit from them, but not for those that do not. In fact, improving one neighborhood only increases the inequality with other neighborhoods. This idea is echoed by Frey et al. (2008) : “From this perspective, the planning and realisation of new structures and facilities for olympic events should pay particular attention to venue distribution within hosting areas: while a concentration of venues may fulfil organisational needs (e.g. joint logistics, back-up services, etc.), it may also work against an equitable distribution of the events’ benefits across the host city and region.[...] Still, from a financial perspective, the amount of investments required in the host city is impressive and has continued to grow rapidly over the last few editions. These investments are often concentrated in specific areas of the host city, and this may result in a disadvantage for surrounding areas not directly involved in the event.” (**Appendix 2.7**)

#### **4.10.4. Misuse of public funds**

Unfortunately, Chi et al. (2018) explained that the Games can have a negative impact on the use of public funds: “On the other hand, the negative impacts of hosting a mega-event are also well acknowledged in tourism literature. For example, it may lead to misuse of public taxes”. (**Appendix 2.7**). The exorbitant costs of building infrastructure, the pressure for extravagant size, the lack of transparency in commercial transactions, and the massive financial support from governments can lead to overspending and misappropriation of funds. In addition, the public debt resulting from these investments can compromise the long-term financial stability of host countries. Sports facilities built specifically for the Games can also become post-event financial burdens, raising concerns about the economic sustainability of these international events.

But they are not alone in describing this potential problem. Ritchie et al. (2009) explain: "Taxes may be increased to assist the public sector to fund the costs associated with the hosting of such events, which may increase over time due to mismanagement. A clear example is the 1976 Montreal Olympics, which took several decades to repay the costs of hosting the mega event." (**Appendix 2.7**).

#### **4.10.5. Post-tourism affected**

The Olympic Games can have a negative economic impact on the host city, particularly in the tourism sector, after the event is over. Firstly, the construction of massive infrastructures to meet Olympic requirements often entails high costs, generating considerable debts for the municipality. These colossal investments, although intended to improve the visitor experience during the Games, can lead to post-event overcapacity in the hotel sector. The sudden drop in tourism after the Games can lead to underutilization of these newly built facilities, contributing to high operating costs and financial difficulties. In addition, the city may face challenges in maintaining tourist enthusiasm once the event is over, as global media attention diminishes. This can lead to a drop in tourism demand, negatively impacting local businesses dependent on tourism and creating long-term economic disruption. Ritchie et al. (2009), for instance, say "[...], for instance, suggests that the success or failure of an event can affect the image of the host city." (**Appendix 2.7**). The reputation of the hosting city can be influenced by the outcome of an event, making it crucial for success or failure to be considered. In short, although the Olympic Games provide temporary global exposure, the post-event economic repercussions can be severe, compromising the long-term financial stability of the host city.

#### **4.10.6. Race for profit**

The realization of the Olympic Games is very important for each country that organizes them, even if in the beginning "the aim of Olympism is to place sport at the service of the harmonious development of mankind with a view to promoting a peaceful society concerned with the preservation of human dignity" (Le Clinche et al.,2017), the Olympic Games have changed over time. Instead of being primarily an event to promote peace and international friendship, the Games have become more focused on money and tourism. (**Appendix 2.7**). The countries that host the Games invest a lot of money in the organization, hoping to attract the world's attention, boost their economy and attract tourists. However, this economic focus can sometimes dilute the original meaning of the Games, highlighting the difficulties of reconciling the original ideals with the realities of the modern

world. In short, although the Olympic Games remain very important, their nature has evolved into an event more focused on business and tourism, to the detriment of promoting a peaceful society that respects human dignity. This aligns with Hiller's (2005) perspective that the Olympic Games serve as global media spectacles, with various networks investing significant financial resources to secure their representation. The event is becoming almost a race for profit between each country and city.

Minnaert (2010) compares the Olympic Games to "a self-serving commercial circus of property developers, construction companies, equipment suppliers, and commercial sponsors whose benefits do not necessarily extend to the local communities." (**Appendix 2.7**). This negative portrayal aligns with the hypothesis that the Olympics have become a pursuit of profits and gains, as it highlights the perception that the event primarily serves the interests of corporate entities involved in property development, construction, and sponsorship, often at the expense of the local communities hosting the Games.

Smith (2009) supports this theory: "Within critical theory, major sport events are usually deemed to be representative of a prevailing neo-liberal ideology in which cities are forced to compete with each other for investment." (**Appendix 2.7**). This idea posits that the hosting of major sports events becomes a platform for cities to showcase their economic attractiveness and viability to potential investors.

#### **4.10.7. Economic dream**

The Olympic Games, often seen as a global event celebrating sport and international unity, can also be seen as an economic dream for the host city. Organizers, driven by a desire to maximize profits, may see the Games as a unique opportunity to attract investment, boost tourism and develop local infrastructure. However, according to Popa (2019), there is a tendency to overestimate or even underestimate the projects promised: "Information is hence contextualised within the contemporary Norwegian framework, highlighting the discrepancies between intention and action". (**Appendix 2.7**). The author explains that this theory fits in with the contemporary Norwegian context, highlighting the discrepancies between initial intentions and concrete actions. Organizers can be faced with challenges such as unforeseen costs, delays in infrastructure projects and excessive public



spending, calling into question the idea that the Olympic Games are always an economic dream come true for the host city.

Some people support this theory, Müller (2015) explain: “Benefits from mega-event hosting are routinely overestimated, while costs are underestimated.” (*Appendix 2.7*)

#### **4.10.8. Inequality to become host country**

Since Pierre de Coubertin, the Olympic Games have continued to evolve, undergoing an unprecedented expansion between 1980 and 2000. Cashman (2010) say: “From 1980 to 2000 there was an unprecedented expansion in the size of the Games: seven new sports and 80 events were added to the program. There were many, including IOC President Dr Jacques Rogge, who believed that the Olympic Games had become too large, thereby imposing an increased burden on host cities. As a result, only wealthier cities can afford to stage an Olympic Games.” (*Appendix 2.7*). This statement highlights an inherent inequality in the host city selection process, where financial resources play a crucial role. The costs associated with preparing and staging the event, such as building state-of-the-art sports infrastructure, implementing enhanced security measures, and promoting Olympic hospitality, are often prohibitive for less affluent municipalities. As a result, the Olympic Games can be perceived as a privilege reserved for prosperous metropolises, reinforcing economic disparities between cities, and highlighting the challenges faced by bids from less well-off cities.

Smith (2009) also mentions the idea of a competition: “Within critical theory, major sport events are usually deemed to be representative of a prevailing neo-liberal ideology in which cities are forced to compete with each other for investment.” (*Appendix 2.7*)

#### **4.10.9. Large investments in a short period of time**

The organization of the Olympic Games often represents a colossal economic investment concentrated over a relatively short period. Frey et al. (2008) explain: "Actually, the high concentration implied by the Games in terms of time (a two-week event), space (one host city only, or even specific areas within the city) and investment (the operating and infrastructure costs of the Games are

in billions) seems to conflict with the concept of sustainable development, that calls for the distribution and sharing of environmental, social and economic impacts across time and space for spreading benefits and minimizing negative effects on the whole society." (**Appendix 2.7**). This can have significant negative repercussions on several aspects. Firstly, the budget allocated to the Olympic Games is often excessive, encompassing sports infrastructure, temporary housing, urban development, and other event-related expenditure. This high level of investment can lead to a waste of economic resources, particularly when the infrastructure built for the Games has no long-term use.

#### **4.10.10. Non-beneficial investments**

Some researchers, such as Minnaert (2010), argue that "Then there are those that propose that the Olympic Games, being primarily a sporting event, should not be expected to yield social benefits – they consider the Olympics to be a party, that places the host city in the international spotlight for a period of time, and this is the only benefit the host population can reasonably expect." (**Appendix 2.7**). The massive financial investment in Games-related infrastructure, for example, is often seen as excessive given the relatively short duration of the event, which lasts just two weeks. This criticism is based on the idea that the money spent on building stadiums and sports facilities only pays off in the short term, because once the Games are over, the influx of tourists diminishes rapidly. Indeed, the city's appeal as a tourist destination tends to diminish over time, giving way to other destinations. What's more, the scale of the infrastructure built, particularly the stadiums, is often proportional to the number of spectators expected during the Games, without taking sufficient account of the long-term potential of post-event use by tourists and residents, which tends to be lower than during the Olympic Games. This perspective underlines the economic challenges that host cities face when they invest heavily in facilities that are primarily intended for an ephemeral event.

Some facilities are also specialized infrastructures, which may seem even less beneficial. It would be necessary to think about the size and type of infrastructure in the longer term. Hiller (2005) explains "Hosting the Olympics almost always involves significant capital costs through the construction of specialised buildings and other infrastructural improvements" (**Appendix 2.7**).

Once the event was over, some of the infrastructure was left to rot. We call it a white elephant legacy. Davis (2019) defines the term: "These accounts have long been called into question as historical facts but, as the OED suggests, they underpin a second, newer definition in which the term can denote any 'burdensome or costly objective, enterprise, or possession, esp. one that appears magnificent; a financial liability'." (**Appendix 2.7**). Okada and Greyser (2018) give us an example: "For the Athens 2004 Olympic Games, in the vast 2,509-hectare (6,200 acres) land of the former international airport in south Athens, called the Hellinikon Area, the Greek government constructed the sports complex, which consisted of six sports grounds including baseball stadiums and a canoe/kayak slalom, and two training facilities. After the Games, Hellenic Olympic Properties (HOP), the government-controlled management authority for the post-Olympic use of each venue, was established and started to shape a plan for the utilization of the Olympic venues. At that time, the sports complex was unused and abandoned as were almost all of the other venues (Kasimati, 2015)." (**Appendix 2.7**).

#### **4.10.11. Price inflation**

One of the negative impacts of hosting the Olympic Games is the inflation of life in the city during and after the Games. Ritchie et al. (2009) talk about this in their research: "Prices of everyday products & sailing goods in shops will increase because of the 2012 Games and the sailing academy". (**Appendix 2.7**). This rise in prices can be attributed to increased demand for goods and services, stimulated by the influx of tourists, athletes, and spectators. Retailers, anticipating increased demand, adjust their prices, leading to temporary price inflation. Unfortunately, this inflation can persist after the Games are over, as the operating costs of many businesses have also risen in response to the Olympic hype. Therefore, while the Olympic Games can bring economic benefits, it is essential to carefully assess the long-term implications of these major events on the cost of living and economic stability of the host cities.

#### **4.11. Opportunities Impacts along Economic Value Dimension**



Figure 3. Mind map generated from NVivo 12 illustrating the Opportunities Impacts along Economic Value Dimension.

#### 4.11.1. City Improvement

Although the Olympic Games can have negative consequences, their organization can also present significant opportunities, if they are properly planned. The potential benefits are diverse, thanks to the investments made prior to the event. Indeed, the construction or renovation of certain buildings in specific areas to accommodate athletes and spectators offers significant positive spin-offs. In this way, Chi et al. (2018) explain “For instance, they can increase residents’ quality of life by developing infrastructure and sports/recreation facilities, and attracting tourists; and improve national pride by enhancing the brand recognition of the hosting city and country” (**Appendix 2.8**).

Some, such as Frey et al. (2008), even use the words urban renewal and territorial transformation: “Leaving apart the potential for economic growth, urban renewal and territorial transformation related with the wide amounts of activities and interventions on hosting areas,[...]”. (**Appendix 2.8**). Prayag et al. (2013) argue “Positive impacts include more business and employment opportunities for the local residents, increase in tax revenues for government, improvement in infrastructure such as transport facilities and building of stadiums, increase in investment and accelerated growth for the community, regeneration of urban areas, canal, and waterfront development”. (**Appendix 2.8**).

#### 4.11.2. Development of certain industries

Hosting the Olympic Games is much more than just a sporting event, as it offers a unique opportunity to stimulate economic development at various levels. Analysis by Ren (2022), which examines

the impact of the 2008 Beijing Games, shows that this global celebration generates significant growth in a few sectors. First, the construction industry is thriving, as it is being asked to build new infrastructure and develop sophisticated means of transport to meet the logistical requirements of the Games. At the same time, the manufacturing industry is also benefiting from this boom, supplying the equipment needed for the event. In addition, the communications sector is experiencing significant growth, with increasing demand for technologies and services linked to media coverage of the Games. Finally, the transport industry plays a crucial role in ensuring the smooth flow of travel for both local tourists and participants. In this way, the Olympic Games represent a real economic opportunity, boosting various industries and leaving a positive legacy for long-term development. He also mentions in his research the development of the tourism industry and commercial services to meet the needs and desires of visitors during the Games. **(Appendix 2.8).**

#### **4.11.3. Attract future investors**

Promoting urban regeneration and improvement not only attracts tourists, but also, in the long term, attracts new investors. These investors contribute to the sustainable growth of the city even after events such as the Games have taken place, encouraging its continued development. Chi et al. (2018) add “For instance, residents see boosting business and employment opportunities during the event period due to a spike in visitor numbers. An enhanced international awareness and reputation of the hosting city can further attract new commercial partnerships.” **(Appendix 2.8).**

Gursoy and Kendall (2006) support this idea: “further adds the positive impact of enhancing awareness of the region as a domestic or international destination, creating new opportunities for potential investors, and increasing commercial activity.” **(Appendix 2.8).**

#### **4.11.4. Promote post-tourism**

One of the most beneficial aspects of the Olympic Games is the positive impact they have on the tourism sector, both during the event and in the aftermath. As has been pointed out on many occasions, the host city is thrust into the spotlight, attracting worldwide attention, and arousing the curiosity of travelers. This spotlight contributes significantly to boosting tourism, as visitors are encouraged to discover the charms and attractions of the city that hosted the Olympic Games: “The

success of hosting a mega-event provides the hosting country and city a superb branding opportunity to achieve worldwide prominence and national prestige” (Chi et al., 2018). (**Appendix 2.8**).

#### **4.11.5. Restructuring of the economic sector**

Hosting the Olympic Games is much more than a global sporting event; it is also a powerful catalyst for the economic restructuring of a host city or country. The Games offer an exceptional opportunity to modernize infrastructure, stimulate innovation and diversify the economy. The massive investment in sports facilities, transport and high technologies required to host an event of this scale encourages growth in key sectors. Yang and Xu (2014) give an example “In 2007, Beijing Development and Reform Commission published <Guidance and comments of the adjustment of industry structure in Beijing> and <Decision on developing recyclable economy and conservation oriented cities> , which made reclaimed the objectives of the industry restructure, including aims to develop modern service industry, high-tech industry, modern manufacturing and modern agriculture, to improve innovation, to change the development pattern of economy, to adjust the structure of industry, to optimize space distribution, to enhance integrated competitiveness, and to improve the service ability of city (Beijing Development and Reform Commission ,<Guidance and comments of the adjustment of industry structure in Beijing> , <Action plan of expediting the development of recyclable economy and environmental friendly cities> were also implemented in Beijing in the following four years.” (**Appendix 2.8**). This period has been marked by massive investment in sectors such as infrastructure, advanced technology, and tourism, encouraging the emergence of new businesses and job creation. The Olympic Games acted as a catalyst to modernize and diversify Beijing's economy, paving the way for sustainable growth opportunities and strengthening its competitiveness on the world stage.

In addition, the global visibility of the Olympic Games attracts foreign investment, stimulates tourism, and creates jobs, generating long-term economic benefits. The economic restructuring brought about by the organization of the Olympic Games thus offers the opportunity for a profound and lasting transformation, leaving a significant economic and social legacy for the host region. During the same Olympic Games, Ren (2022) explained “On the whole, the 2008 Beijing Olympic Games created many positive effects on the local economic growth of Beijing, including a great improvement in many different industries, the direct income from hosting the Olympic Games, and an increase in number of jobs.” (**Appendix 2.8**). This observation underscores the dynamic economic

impact of hosting such global events. The preparations involved diverse responsibilities ranging from constructing state-of-the-art sports facilities to organizing logistical aspects and ensuring security measures. The surge in employment not only addressed the immediate demands of the event but also contributed to a broader economic restructuring. The creation of jobs across various sectors, including construction, hospitality, and services, stimulated local economies and provided a tangible boost to employment rates. Beyond the short-term benefits, the lasting impact of increased job opportunities during the Olympic Games preparations serves as a compelling case study for the positive economic repercussions associated with hosting major international events.

#### **4.11.6. Stimulating the local economy**

In addition to the economic regeneration that the Olympic Games bring to a host city, they offer stimulating opportunities at various stages, generating a significant economic impact. Before the Games kick off, investment in infrastructure and facilities generates local employment and boosts the construction sector. During the Games, the city becomes a global hub, attracting visitors, media and sponsors, boosting tourism and local commerce. After the Games, the redeveloped facilities provide ongoing opportunities, transforming sports venues into sustainable assets for tourism, events and long-term economic growth. Gursoy and Kendall (2006): "Research suggests communities are willing to host these events mainly because of the positive economic benefits they can bring in the form of tax revenues, jobs, and additional sources of income. [...] the positive impact of enhancing awareness of the region as a domestic or international destination, creating new opportunities for potential investors, and increasing commercial activity." (**Appendix 2.8**). In short, the Olympic Games are not just a moment of sporting celebration, but act as a catalyst for economic prosperity that extends well beyond the event itself.

Osada et al. (2016) also support this idea of stimulation by taking the Tokyo 2020 Olympic Games as an example: "Looking at the experience of host countries that were successful in generating new demand as a result of the Olympics shows that this was achieved primarily by stimulating economic activity in the private sector not only through improvements in transport infrastructure and measures to attract tourists, but also through bold urban regeneration projects and radical deregulation". (**Appendix 2.8**).

#### **4.12. Corrective Actions along Economic Value Dimension**

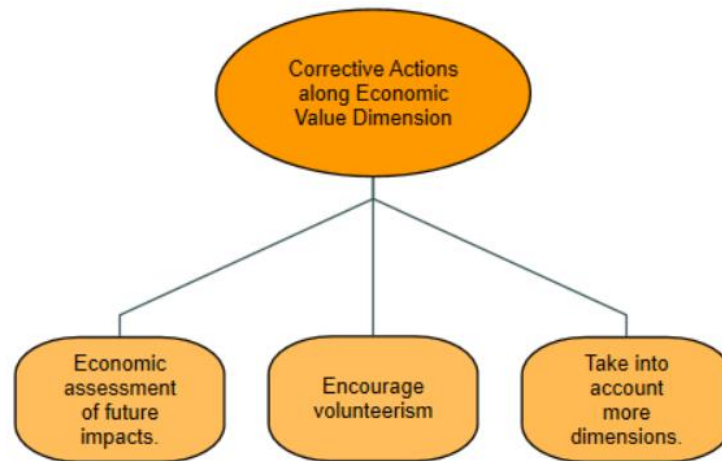


Figure 4. Mind map generated from NVivo 12 illustrating the Corrective Actions along Economic Value Dimension.

#### 4.12.1. Economic assessment of future impacts

It is vitally important to carefully analyze the impact of the Olympic Games and, consequently, to define the foundations that appear to be essential. It is imperative to consider the multiple facets of the impacts generated by this global event. Ritchie et al. (2009) explain: “A balanced appraisal of event impacts, integrating the social dimension with economic and environmental evaluation is vital, [...], particularly for those destinations that are serious about a ‘triple bottom line’ approach to event evaluation and sustainable development.”. **(Appendix 2.9)**. This approach will enable an in-depth and nuanced assessment of the consequences, providing a more informed outlook for the planning and management of the Olympic Games.

#### 4.12.2. Encourage volunteerism

Volunteering is something that we need to work on more and communicate more during emblematic events such as the Olympic Games. For example, Kemp (2002) reveals: “Volunteers were critical to the successful staging of both the Lillehammer and Sydney Olympic games events because they provided the substantial amount of unpaid additional labour that was needed.”. **(Appendix 2.9)**.



Kim et al. (2019) argue that, as explained above, the fact that volunteers are not paid represents a real saving for host cities. They also point out that, despite the lack of financial compensation, volunteers nevertheless receive intangible benefits. "Volunteers in sports may make choices in their behaviours as an exchange of various opportunities such as satisfaction in personal value fulfilment, learning new things, self-confidence, and stablishing career-related networks." (**Appendix 2.9**). It's good for the city's economy.

#### **4.12.3. Take into account more dimensions**

Clark et al. (2016) explain that they should revalue expenditure and think in terms of several pillars: "[...] there are four integral dimensions, along which scale should be considered: visitor attractiveness; mediated reach; cost; and transformative impact." (**Appendix 2.9**). Developing and undertaking this type of planning will enable various aspects to be explored, making it possible to assess the real relevance of spending on this or that infrastructure.

## **5. Discussion**

### **5.1. Limitations, reliability, and validity**

During this research, the difficulty was to find the same amount of information per dimension. A lot of research focuses on the positive impacts of the Games. Moreover, even among those that address the negative aspects, few look at potential solutions or actions to be taken to mitigate these undesirable consequences.

Then, the difficulty of this research was notably complicated by the number of documentary resources concerning the Environmental aspect which was more complicated to find than the social aspect for example.

One limitation of this research is the temporal scope it covers. We have established a period starting with the first Olympic Games in Athens in 1896 and ending with the last Games in Beijing in 2022. This gave us a broad sample of examples on which to base our analysis. However, it would also have

been interesting to research a shorter, more recent period, given that the vision of the consequences of the Olympic Games at the time was not as important as it is today, when it has become vital.

As far as the reliability of this research is concerned, the authors have always taken care to provide all possible sources. Their method of data collection has been organized in such a way as to ensure that only information from other research and documentation is given.

It is very important that the information given in this thesis is valid. This is why the authors have used a rigorous methodology to provide readers with verifiable data. Sources have been given to avoid plagiarism and to prove the information given.

## **5.2. Answering the research questions**

Throughout this research we aimed to answer three questions “What are Social, Economic and Ecological Disadvantages in the Organization of Olympic Games ?”, “ ; What are Social, Economic and Ecological Opportunities in the Organization of Olympic Games ?” and “What are Social, Economic and Ecological Corrective Actions in the Organization of Olympic Games ?”.

*RQ1 : What are Social, Economic and Ecological Disadvantages in the Organization of Olympic Games ?*

In organizing the Olympic Games, a few social, economic and ecological disadvantages can arise. In the social part, hosting the Games can result in the displacement of local communities due to infrastructure development and increased living costs, which can disrupt established social structures and lead to social inequalities. Economically, costs often exceeding initial estimates and requiring significant investment in infrastructure that may not be sufficiently used in the long term after the event. This can put a strain on public finances and divert resources from other essential services. Ecologically, the construction and operation of Olympic venues and infrastructure can contribute to environmental degradation through the destruction of habitats, increased pollution and the depletion of resources. In addition, the influx of tourists and athletes can put pressure on local ecosystems and contribute to carbon emissions through transport and energy consumption.

*RQ2 : What are Social, Economic and Ecological Opportunities in the Organization of Olympic Games*

?

Despite the challenges, there are also social, economic and ecological opportunities in organizing the Olympic Games. Socially, the Games can provide opportunities for community engagement and development, as well as cultural exchange and international cooperation. Economic benefits include revenue generation through tourism, increased business activity and job creation in sectors such as construction, hospitality and retail. From an environmental perspective, hosting the Games can act as a catalyst for sustainable development initiatives, including investment in renewable energy, waste management and green infrastructure. In addition, the Games can serve as a platform to raise awareness of environmental issues and promote conservation efforts both locally and globally.

*RQ3 : What are Social, Economic and Ecological Corrective Actions in the Organization of Olympic Games ?*

To respond to these challenges, various corrective actions can be implemented. On a social level, host cities can prioritize community engagement and consultation throughout the planning process, ensuring that local residents are involved in decision-making and benefit from the Games through affordable housing projects, vocational training programs and cultural initiatives. Economically, transparent budget planning and cost control measures can help mitigate financial risks, diversifying revenue streams beyond ticket sales and sponsorships to include partnerships with local businesses and leveraging post-event legacy opportunities for sustainability projects. On an ecological level, the adoption of sustainable practices in the construction and operation of sites, such as the use of renewable energy sources, the implementation of waste reduction measures and the preservation of natural habitats, can minimize environmental impacts and leave a positive legacy for future generations. Additionally, promoting sustainable transportation options and offsetting carbon emissions can help mitigate the ecological footprint of the Games. Overall, by implementing these social, economic and ecological remedial actions, host cities can strive to maximize the benefits of hosting the Olympic Games while minimizing the negative impacts on society, the economy and the environment.

In summary, while it is not possible to eliminate the negative impacts of hosting the Olympic Games, various strategies have been implemented to minimize these effects in social, environmental, and

economic dimensions. Through the adoption of sustainable practices and proactive measures, host cities and countries can strive towards mitigating the adverse consequences and achieving a more balanced and beneficial outcome for all stakeholders involved in the Olympic Games.

### **5.3. Dialogue between key results and knowledge base**

As explained in the Gap research, we reviewed the findings of several relevant publications, finding both similarities and discrepancies with our own results. First, we observed concordance with the findings of "The impact on the domestic economy of hosting major sporting events" (Merlin & Gilson), which highlights the importance of factors such as economic situation of the host country and the quality of existing infrastructure in the economic success of the Olympic Games.

Then, our research also joins "Balancing conservation and development in Winter Olympic construction" (Song et al., 2018) regarding the negative effects of Olympic infrastructure construction on the environment. Furthermore, our results corroborate those of "IMPACTS OF OLYMPICS ON EXPORTS AND TOURISM" (Song, 2010), confirming the positive impact of the Olympic Games on exports and tourism in the host regions.

However, our research diverges from "An evaluation of the sustainability of the Olympic games" (Müller et al., 2021), focusing on the economic impact of the Games rather than their sustainability. Finally, we agree with "Calculating the regional economic impact of the Olympic games" (Preuss, 2004) regarding the importance of the Olympic Games in creating a significant economic impact in the host regions, in particular by attracting a large number of tourists and generating additional income.

To conclude, our research adds additional nuance to the understanding of the economic impact of the Olympic Games, while confirming several key findings made in the existing literature.

### **5.4. Compliance with research ethics guidelines**

This study analyses the diverse impact of the Olympic Games, specifically focusing on their social, economic, and ecological dimensions. By utilizing secondary data from various sources, the research

explores how the Olympic Games can create negative impact on the Host country and the strategies to increase these impacts.

Ethical considerations such as privacy and confidentiality are addressed when analyzing secondary data related to the Olympics. Since much of the data used in this research is public, permissions are not required. However, strict referencing protocols are essential to prevent plagiarism and ensure proper attribution of information.

Another ethical concern addressed in this study is prejudice, particularly regarding the neutrality and credibility of selected publications. To maintain the integrity of the research, only reputable and unbiased sources are considered, with a focus on accuracy and reliability.

## **6. Conclusions**

### **6.1. Key Findings**

In conclusion, a careful examination of the negative aspects surrounding the Olympics Games reveals various challenges in terms of economics, the environment, and the social aspect. Economically, hosting the Olympics often leads to high costs, straining public finances and diverting funds from essential services. The expected long-term economic benefits often do not materialize, leaving host cities to cope with debts and underutilized infrastructure after the event.

In the environmental terms, the construction and operation of Olympic infrastructure contribute to environmental degradation through land clearing, resource consumption and increased pollution. Despite efforts to promote sustainability, the games often lead to increased carbon emissions, permanent loss of valuable rainforest and habitat destruction, increasing concerns about climate changing.

In the social aspect, the Olympic Games create socioeconomic disparities, the host cities focusing on infrastructure development in affluent areas while neglecting marginalized communities. The gentrification and labor exploitation are common phenomena, highlighting the inequalities created by mega-events.

These key findings emphasize the need to reevaluate the current Olympic model and prioritize sustainability and responsible resource management. Moving forward, stakeholders must work to decrease the negative impacts created by the Olympic Games by promoting more equitable and environmentally conscious practices that benefit both host communities and the global sporting community.

In conclusion, a thorough examination of the negative aspects surrounding the Olympic Games highlights the challenges in terms of economics, the environment, and the social aspect. The Olympic Games must give priority to sustainability and inclusivity. By doing this, we can create a more equitable and environmentally conscious future that benefits all people and firms involved.

## **6.2. Managerial implications**

Host cities and countries must plan and manage finances to cover the substantial costs associated with hosting the Olympics, including infrastructure development, site construction and operational expenses. Managers should devise strategies to increase revenue from ticket sales, broadcasting rights sponsorships to offset the significant expenses incurred and to finish, effective management is essential to ensure that investments made for the Games result in sustainable economic benefits beyond the event, such as tourism, urban development, and job creation.

For the social side, managers must prioritize community engagement and social inclusion initiatives to address negative social impacts, such as displacement, gentrification, and labor exploitation, while ensuring that local citizens benefit from the Games. Moreover, sensitivity to cultural diversity and legacy preservation is essential in managing the social aspects of the Olympics, including ensuring respectful representation of host country culture and traditions. To achieve these goals, managers need to focus on creating a positive social legacy from the Games, by investing in sports infrastructure, promoting sports participation, and fostering social cohesion and inclusion.

To finish, it is crucial to have effective management, which involves developing and implementing comprehensive sustainability plans to minimize the ecological footprint of the event, reducing carbon emissions, managing waste, and conserving natural resources. The Olympic Games have to plan some strategies by mitigating the environmental impacts of site construction such as habitat destruction, land degradation, and water pollution, through responsible environmental management

practices. Moreover, organizing this mega-event requires proactive management strategies to purpose or recycle Olympic infrastructure post-event.

### **6.3. Recommendations for future research**

Looking ahead to future research in the field of the Olympic Games, it is crucial to integrate the perspectives and experiences of individuals residing in the countries hosting the Olympic Games. By incorporating testimonies from residents, researchers can gain invaluable insights into the social, economic, and environmental impacts of hosting the Olympics.

To achieve this, active engagement with residents through interviews, surveys, and focus groups is essential. Through these interactions, researchers can gain a deeper understanding of the nuanced effects that the Games have on host communities. These testimonies can provide valuable information on various aspects, such as the allocation of resources, infrastructural developments, displacement of residents, changes in socio-economic dynamics, and overall perceptions towards hosting the Olympics.

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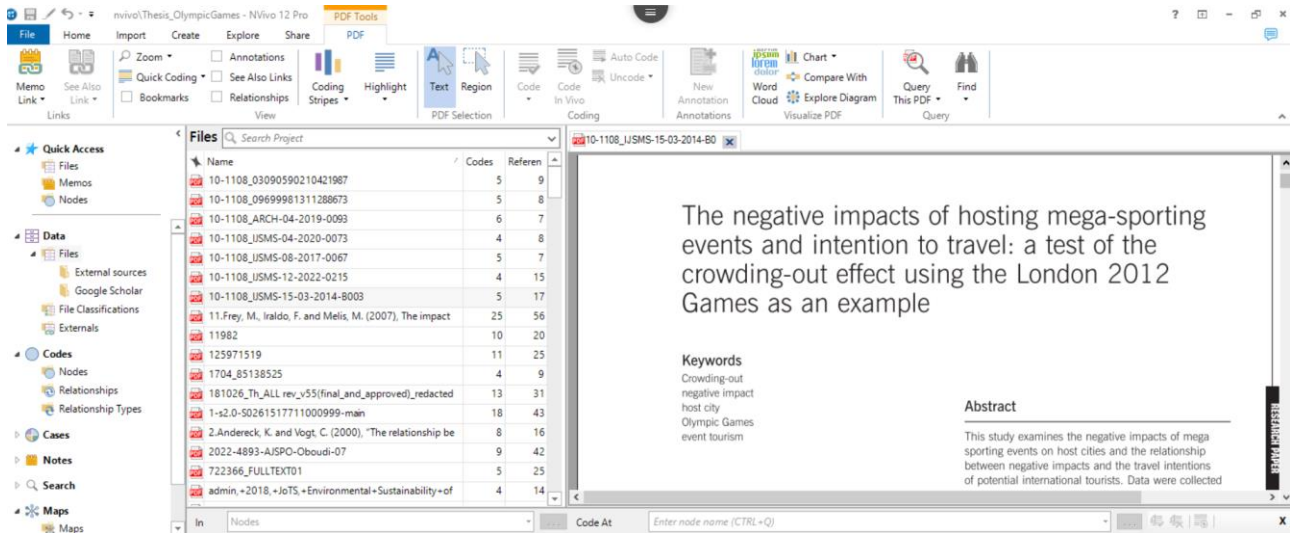
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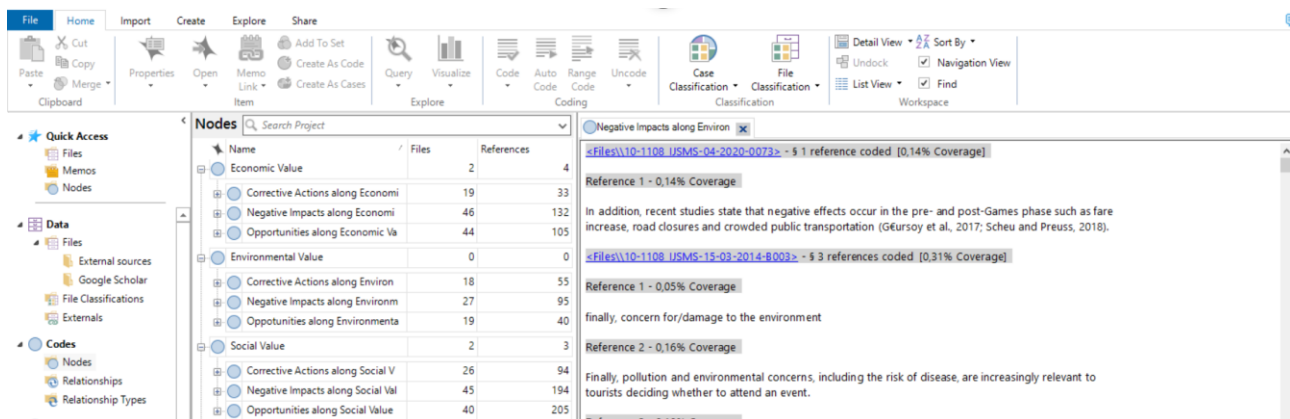
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## Appendices

### Appendix 1.1 Screenshot of the 180 documents studied on our Nvivo 12 platform.



### Appendix 1.2 Screenshot of the 180 documents studied on our Nvivo 12 platform.



### Appendix 2. Citations of the most interesting publications after results of our analysis on Nvivo 12 platform.

## Appendix 2.1

« Doping has reached systemic proportions in some countries. In 2016, the World Anti-Doping Agency found that Russia ran a coordinated doping programme at the national level across a majority of Olympic sports » (Müller, 2017)

« There are limitations for socially excluded groups: they are generally hard to engage and include in the volunteer experience » (Minnaert, 2012)

« There may be a feeling of loss experienced by many members of the host community, even a post-Games depression » (Minnaert, 2012b)

« Private property replacement or relocation because of new facility construction, traffic congestion, environment damages, noise pollution, and a myriad of social problems such as an increase in crime and prostitution »(Christina et al., 2018, p.41)

« However, there was a significant difference between the pre- and post-event sample in terms of the negative relationship between residents' trust in government »(Christina et al., 2018b, p.48)

« The more democratic approach to mega event planning is arguably more difficult to implement



and as a result less frequently adopted, or adopted in name only »(Gürsoy & Kendall, 2006, p.604)

« Many Olympic contractors wanted people who were already employed, skilled, and having “the right attitude” to work, while a lot of the long-term unemployed and those from areas of high unemployment were not getting Olympic jobs » (Minnaert, 2012c, p.363)

## Appendix 2.2

« A number of authors also linked mega sporting events to mental health benefits for the host community members » (Minnaert, 2012e, p.362)

« Increasing employability »(Minnaert, 2012f, p.362)

« Increased employment opportunities are often used prominently to justify investment in the Olympic Games » (Minnaert, 2012g, p.362)

« Employment opportunities during the event period due to a spike in visitor »(Christina et al., 2018c,p.41)

« From a global perspective, it is worth noting that these positive impacts do not refer to a material legacy only (e.g. new or upgraded sports and multi-functional venues, infrastructural improvements » (Frey et al., 2008,p.6)

« Stimulating the local economy, there are associated social benefits. New sporting infrastructure may improve access to sport; Olympic housing developments may later be used as affordable housing units; and the redevelopment of run-down areas may increase feelings of safety and local pride » (Minnaert, 2012g, p.363)

« The Olympic Games are much more than just a global sporting event. Indeed, this large-scale event creates a space conducive to social and cultural exchanges between local residents » (Christina et al., 2018d, p.41)

« Strengthen regional values and traditions, and even lead to cultural understanding among residents and tourists » (Gürsoy & Kendall, 2006b, p.609)

« Effect on tourism to the local community, providing opportunities for increased international publicity and recognition » (Gürsoy & Kendall, 2006c, p.608)

« Tourism and generally promoting the city globally » (Cashman, n.d., p.9)

## Appendix 2.3

« Focused programmes, that take into account the characteristics of socially excluded groups » (Minnaert, 2012h, p.364)

« But only Sydney seems to have made substantial efforts to turn these aims into practical programmes and initiatives »(Minnaert, 2009, p.3)

« The local community needs the opportunity to continue to be involved in the overall event hosting process » (Minnaert, 2012i, p.363)

« From several community groups to prompt public debate and promote community involvement » (Gürsoy & Kendall, 2006e, p.605)

« Resident support for hosting the games » (Mihalik & Simonetta, 1999, p.245)

« Host cities are required to provide information on these impacts from the date of their candidature until two years after it terminates » (Matheson, 2010, p.13)

« In the end, the reevaluation of the exchange help residents to establish a new reference

point and determine whether or not they will support future events » (Kim et al., 2006, p.87)

« Promote the social function of sport » (Frey et al., 2008b, p.26)

« Sustainable development » (Frey et al., 2008c,p.26)

« Local charities and community organisations provide useful channels to engage with socially excluded groups who may lack the confidence to engage in formal decision making directly » (Minnaert, 2012j, p.364)

## Appendix 2.4

« Wildlife destruction such as a result of hunting, trapping and fishing, and disruption of natural habitat; plant destruction and deforestation » (Andereck et al., 2005, p.1059).

« The destruction of natural areas for the construction of sports facilities such as stadiums »(Pourpakdelfekr & Oboudi, 2022, p.2).

« Instance, Norwegian Foreign Affairs Minister Thorvald Stoltenberg linked terms such as ‘mining industry’ and ‘environmental concerns’, ‘growth’ and ‘sustainability’, providing a hint of the commercial purposes of Olympic Games. It will be argued that the organisers took advantage of the festive aura of the Games to orchestrate dynamic relationships between supply and demand of natural resources, played out on the international Olympic platform »  
*(Earth Games: The 1994 Lillehammer Winter Olympic Games, or the Failure of the Ecological Project - ProQuest, n.d., p.2) .*

« Additional pressure on the environment through increased traffic » (Frey et al., 2008d,p.6).

« Although hosting the Olympics often implies new construction » (Frey et al., 2008,p.6).

« Mega events such as the Olympic Games can hardly claim to be environmentally friendly due

to its large infrastructure construction to meet a short term demands » (Liu & Xu,2014,p.721).

« Construction of single function or large unnecessary stadiums would bring burden to the future economic development of the city » (Liu & Xu, 2014,p.699).

« The huge carbon emission, air pollution, water pollution » (Liu & Xu, 2014b,p.127).

« Air pollution such as emissions from vehicles and airplanes; water pollution such as waste water discharge » (Andereck et al., 2005b,p.1059).

« On the one hand, vast amounts of resources, to be consumed over a short period of time » (Earth Games: The 1994 Lillehammer Winter Olympic Games, or the Failure of the Ecological Project - ProQuest, n.d.-b,p.6).

« Adverse impacts on natural ecosystems by bringing pollution and waste into the most biologically and culturally rich areas »(Tina Pourpakdelfekr et Behnam Oboudi,p.1).

« Wildlife destruction »(Andereck et al., 2005c,p.1059).

« These include large buildings which destroy views, clashing and unfitting architectural styles, noise pollution from planes, cars and tourists; damage to geological formations such as erosion and vandalism; fishing line and tackle left by anglers; and graffiti » (Andereck et al., 2005d,p.1059).



## Appendix 2.5

« The planning and realisation of new structures » (Frey et al., 2008e,p.5).

« Reasonable construction of stadiums is of great significance to the sustainable economic development of future urban construction » (Ren, 2022,p. 699).

« Laing & Frost (2010) provided an overview and analysis of operational issues linking to green events, including the importance of developing policies and practices in waste disposal, recycling, traffic, power and carbon offset schemes. They examined some of the challenges involved in incorporating green messages into an event theme » (Liu & Xu, 2014c,p.722).

« Events can also stimulate the implementation of planning and administrative controls such as recycling policies and pollution controls » (Prayag et al., 2013,p.632).

« For example, the Olympic village for the London games obtained an excellent eco-rating (Logan, 2012). Mega events can also serve as a springboard to enhance level of environmental consciousness of residents » (Prayag et al., 2013,p.632).

« Promote and disseminate sustainability values » (Frey et al., 2008f,p.6).

« Adjust energy structure » (Liu & Xu, 2014d,p.725).

« Change the structure of urban land use » (Liu & Xu, 2014d,p.726).

## Appendix 2.6

« Revitalizing the public transportation system with alternative fuel bus technologies » ((Tina Pourpakdelfekr et Behnam Oboudi,p.3) .

« With stadium-building, new 'village' accommodation and adapted transport systems having differentiated effects across the city » (Clark et al., 2016,p.87).

« Small scale constructions » (Earth Games: The 1994 Lillehammer Winter Olympic Games, or the Failure of the Ecological Project - ProQuest, n.d.-c,p.85).

« This paper argues that neighbourhood-level geography and time are as salient as 'mega' scale in understanding the nature and impacts of a mega-event » (Clark et al., 2016b,p.87).

« Using local technology » (Earth Games: The 1994 Lillehammer Winter Olympic Games, or the Failure of the Ecological Project - ProQuest, n.d.-d,p.85).

## Appendix 2.7.

" However, the negative impact such as high costs cannot be ignored (Gursoy, Yolal, Ribeiro, & Netto, 2017). Particularly, a considerable amount of investment, including human, financial and physical resources is required to successfully host a mega-event (Crompton, Lee, & Shuster, 2001; Kasimati, 2003; Kim, Gursoy, & Lee, 2006)" (Geng-Qing Chi, Ouyang and Xu, 2018)

"Hosting mega events such as the Winter Olympics requires considerable investment of human, financial, and physical resources from host communities." (Gursoy & Kendall, 2006)

"For example, they are likely to cause price inflation and increases in local taxes to finance the facilities required to host the event. In addition, mismanagement of public funds by organizers is likely to deepen the negative economic impacts (Deccio and Baloglu 2002)." (Gursoy & Kendall, 2006)

"The supporters of an Olympic Games argue that these benefits will outweigh any negative impacts such as overcrowding, increased costs and taxes and disruption due to Olympic-related building." (Cashman, 2002)

"From 1980 to 2000 there was an unprecedented expansion in the size of the Games: seven new sports and 80 events were added to

the program. There were many, including IOC President Dr Jacques Rogge, who believed that the Olympic Games had become too large, thereby imposing an increased burden on host cities.” (Cashman, 2002)

“However, mega events also generate a number of negative economic impacts such as price inflation, increased tax burden for the local people, and mismanagement of public funds (Deccio & Baloglu, 2002; Pillay & Bass, 2008).” (Prayag, Hosany, Nunkoo & Alders, 2013)

“In 2004, Athens spent 13 billion Euros in hosting the event, accounting for around 6% of Greece’s Gross National Product (GNP). Huge amount of investment does not always justify the benefits drawn from the event.” (Prayag, Hosany, Nunkoo & Alders, 2013)

“Taxes may be increased to assist the public sector to fund the costs associated with the hosting of such events, which may actually increase over time due to mismanagement. A clear example is the 1976 Montreal Olympics, which took several decades to repay the costs of hosting the mega event.” (Ritchie, Shipway and Cleeve, 2009)

“[...] but that it will be a positive influence for the economy (37.1%), and that the Olympics will increase trade for local businesses (32.4%)

but that it will increase the demand and price of property (31.4%).” (Ritchie, Shipway & Cleeve, 2009)

“From this perspective, the planning and realisation of new structures and facilities for Olympic events should pay particular attention to venue distribution within hosting areas: while a concentration of venues may fulfil organisational needs (e.g. joint logistics, back-up services, etc.), it may also work against an equitable distribution of the events’ benefits across the host city and region.[...] Still, from a financial perspective, the amount of investments required in the host city is impressive and has continued to grow rapidly over the last few editions. These investments are often concentrated in specific areas of the host city, and this may result in a disadvantage for surrounding areas not directly involved in the event.” (Frey, Iraldo and Melis, 2008)

“On the other hand, the negative impacts of hosting a mega-event are also well acknowledged in tourism literature. For example, it may lead to misuse of public taxes (Gursoy et al., 2011)” (Chi, Ouyang and Xu, 2018)

“Taxes may be increased to assist the public sector to fund the costs associated with the hosting of such events, which may increase

over time due to mismanagement. A clear example is the 1976 Montreal Olympics, which took several decades to repay the costs of hosting the mega event." (Ritchie, Shipway & Cleeve, 2009)

"Hillier (1998), for instance, suggests that the success or failure of an event can affect the image of the host city." (Ritchie, Shipway & Cleeve, 2009)

"the aim of Olympism is to place sport at the service of the harmonious development of mankind with a view to promoting a peaceful society concerned with the preservation of human dignity" (Development through Sport, n.d., para. 1)

"a self-serving commercial circus of property developers, construction companies, equipment suppliers, and commercial sponsors whose benefits do not necessarily extend to the local communities (Keating as cited in Essex & Chalkley, 1998, p. 191)." (Minnaert, 2010)

"Within critical theory, major sport events are usually deemed to be representative of a prevailing neo-liberal ideology in which cities are forced to compete with each other for investment." (Smith, 2009)

“Information is hence contextualised within the contemporary Norwegian framework, highlighting the discrepancies between intention and action”.(Popa, 2019)

“Benefits from mega-event hosting are routinely overestimated, while costs are underestimated (Müller, 2015).” Müller (2017)

“From 1980 to 2000 there was an unprecedented expansion in the size of the Games: seven new sports and 80 events were added to the program. There were many, including IOC President Dr Jacques Rogge, who believed that the Olympic Games had become too large, thereby imposing an increased burden on host cities. As a result only wealthier cities can afford to stage an Olympic Games.” Cashman (2002)

“Within critical theory, major sport events are usually deemed to be representative of a prevailing neo-liberal ideology in which cities are forced to compete with each other for investment.” Smith (2009)

"Actually, the high concentration implied by the Games in terms of time (a two-week event), space (one host city only, or even specific areas within the city) and investment (the operating and infrastructure costs of the Games are in billions) seems to conflict with

the concept of sustainable development, that calls for the distribution and sharing of environmental, social and economic impacts across time and space for spreading benefits and minimising negative effects on the whole society." (Frey, Iraldo and Melis, 2008)

"Then there are those that propose that the Olympic Games, being primarily a sporting event, should not be expected to yield social benefits – they consider the Olympics to be a party, that places the host city in the international spotlight for a period of time, and this is the only benefit the host population can reasonably expect." Minnaert (2010)

"Hosting the Olympics almost always involves significant capital costs through the construction of specialised buildings and other infrastructural improvements" (Hiller, 2006)

"These accounts have long been called into question as historical facts but, as the OED suggests, they underpin a second, newer definition in which the term can denote any 'burdensome or costly objective, enterprise, or possession, esp. one that appears magnificent; a financial liability'." (Davis, 2019)

"For the Athens 2004 Olympic Games, in the vast 2,509-hectare (6,200 acres) land of the former international airport in south Athens,



called the Hellinikon Area, the Greek government constructed the sports complex, which consisted of six sports grounds including baseball stadiums and a canoe/kayak slalom, and two training facilities. After the Games, Hellenic Olympic Properties (HOP), the government-controlled management authority for the post-Olympic use of each venue, was established and started to shape a plan for the utilization of the Olympic venues. At that time, the sports complex was unused and abandoned as were almost all of the other venues (Kasimati, 2015).” (Okada and Greyser, 2018)

“Prices of everyday products & sailing goods in shops will increase because of the 2012 Games and the sailing academy” (Ritchie, Shipway & Cleeve, 2009)

## Appendix 2.8.

“For instance, they can increase residents’ quality of life by developing infrastructure and sports/recreation facilities, and attracting tourists; and improve national pride by enhancing the brand recognition of the hosting city and country” (Chi, Ouyang and Xu, 2018)

"Leaving apart the potential for economic growth, urban renewal and territorial transformation related with the wide amounts of activities and interventions on hosting areas,[...]". (Frey, Iraldo and Melis, 2008)

“Positive impacts include more business and employment opportunities for the local residents (Bob & Swart, 2009; Zhou & Ap, 2009), increase in tax revenues for government (Decio & Baloglu, 2002; Getz, 1997), improvement in infrastructure such as transport facilities and building of stadiums (Bob & Swart, 2009; Kim & Petrick, 2005; Ritchie et al., 2009; Shone & Parry, 2004), increase in investment and accelerated growth for the community (Kim & Petrick, 2005), regeneration of urban areas, canal, and waterfront development (Shone & Parry, 2004)” (Prayag, Hosany, Nunkoo, & Alders, 2013)

“First, because of the government’s investment in infrastructure during the preparation stage of the Olympic Games, many infrastructures in the Olympic Park. The suburbs of Beijing have

been greatly improved, which led to the improvement of the business service industry and the consumer shopping environment. Second, due to the convenience of foreign athletes for consumption and in order to provide more convenient services during the Olympic Games, the use of bank cards for consumption became more popular, and the realization of credit card consumption barrier free made the development of commercial services more efficiently. Third, due to the development of tourism and business services related industries during the Olympic Games, business services have also been promoted.” (Ren, 2022)

“For instance, residents see boosting business and employment opportunities during the event period due to a spike in visitor numbers (Gursoy et al., 2011). An enhanced international awareness and reputation of the hosting city can further attract new commercial partnerships (Prayag et al., 2013).” (Chi, Ouyang, and Xu, 2018)

“Ritchie (1984) further adds the positive impact of enhancing awareness of the region as a domestic or international destination, creating new opportunities for potential investors, and increasing commercial activity.” (Gursoy & Kendall, 2006)

“The success of hosting a mega-event provides the hosting country and city a superb branding opportunity to achieve worldwide prominence and national prestige (Berkowitz, Gjermano, Gomez, & Schafer, 2007; Essex & Chalkley, 1998).” (Chi, Ouyang, & Xu, 2018)

“In 2007, Beijing Development and Reform Commission published <Guidance and comments of the adjustment of industry structure in Beijing> and <Decision on developing recyclable economy and conservation oriented cities> , which made reclaimed the objectives of the industry restructure, including aims to develop modern service industry, high-tech industry, modern manufacturing and modern agriculture, to improve innovation, to change the development pattern of economy, to adjust the structure of industry, to optimize space distribution, to enhance integrated competitiveness, and to improve the service ability of city (Beijing Development and Reform Commission ,<Guidance and comments of the adjustment of industry structure in Beijing> , <Action plan of expediting the development of recyclable economy and environmental friendly cities> were also implemented in Beijing in the following four years.” (Yang & Xu, 2014)

“On the whole, the 2008 Beijing Olympic Games created many positive effects on the local economic growth of Beijing, including a

great improvement in many different industries, the direct income from hosting the Olympic Games, and an increase in number of jobs.”

(Ren, 2022)

“Research suggests communities are willing to host these events mainly because of the positive economic benefits they can bring in the form of tax revenues, jobs, and additional sources of income (Getz 1997). Ritchie (1984) further adds the positive impact of enhancing awareness of the region as a domestic or international destination, creating new opportunities for potential investors, and increasing commercial activity.” (Gursoy & Kendall, 2006)

"Looking at the experience of host countries that were successful in generating new demand as a result of the Olympics shows that this was achieved primarily by stimulating economic activity in the private sector not only through improvements in transport infrastructure and measures to attract tourists, but also through bold urban regeneration projects and radical deregulation". (Osada, Ojima, Kurachi, Miura, & Kawamoto, 2016)

## Appendix 2.9

“A balanced appraisal of event impacts, integrating the social dimension with economic and environmental evaluation is vital, according to Fredline et al. (2003), particularly for those destinations that are serious about a ‘triple bottom line’ approach to event evaluation and sustainable development.” (Ritchie, Shipway & Cleeve, 2009)

“Volunteers were critical to the successful staging of both the Lillehammer and Sydney Olympic games events because they provided the substantial amount of unpaid additional labour that was needed.” (Kemp, 2002)

"Müller (2015) argues that there are four integral dimensions, along which scale should be considered: visitor attractiveness; mediated reach; cost; and transformative impact." (Clark, Kearns & Cleland, 2016)