Incorporating Sustainable Tourism for the Olympic Games

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What is Sustainable Tourism?
The United Nations World Tourism Organization defines sustainable tourism as “Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities”.

Importance of Sustainable Tourism
• Hospitality has a history of displacing communities and wasting natural resources to establish unique and unexplored destinations for adventurous tourists (MacNeill & Wozniak, 2018).
• The tourism industry has impacted their natural environments through their extensive use of nonrenewable resources, construction of recreational facilities, and displacement of locals. Local residents must compete with major tourist destinations for resources such as water, food, land, and energy resources (Tourism and Poverty Alleviation – UNWTO, 2019).
• There is a need to develop sustainable tourism practices among communities to maintain ecological processes, conserve natural heritage, and biodiversity (UNWTO).
• Hospitality industry must respect the social and cultural values of host communities by assimilating the culture of the local residents and not exploiting their culture for the tourism industry (UNWTO).
• Sustainable tourism promotes the well-being of local communities by creating "viable long term economic operations, stable employment, incoming earning opportunities to host communities” (UNWTO).

Sustainable Strategies of Past Olympic Games

The Olympic Candidate Process
• The International Olympic Committee (IOC) released a sustainable strategy for future host cities to promote sustainable development for Olympic Games (Bach, 2017).
• Because the Olympics are hosted every four years, there is more knowledge about sustainability and encourages the "reuse and diffusion of knowledge from previous events” (Müller, 2015, p. 206).
• Host cities present a bid to IOC to host a successful Olympic Games and to create a sustainable legacy for their communities (Independent environmental assessment: Beijing 2008 Olympic Games, 2009, p. 11).
• The chosen Host City has seven years after approval from IOC to construct Olympic Stadiums and necessary services for athletes and spectators.

Construction of Sustainable Olympic Venues & Accommodations
• Incorporating renewable energy resources and technology to power large properties.
• Utilizing sustainable methods for water supply, sewage management, HVAC systems (Sloan, Legrand, & Chen, 2013, p. 14).
• The Vancouver 2010 Olympic Park Venues collected rainwater to irrigate landscaping from roofs of the stadiums and nearly seventy percent of the heating for the Olympic Village came from waste heat recovery systems, including heat from sewage (Facts and figures - Vancouver 2010, p. 3).
• Organizing venues within the same vicinity to promote public transportation and shorter distances on the transport route.
• Reusing existing facilities to host smaller Olympic competitions and training grounds.
• The Velodrome from the London Summer Olympics was the arena for all cycling competitions and was built with one hundred percent sustainably sourced timber.
• Constructing buildings that follow environmental standards from the host city’s government, NGOs, and local community (Facts and Figures - Vancouver 2010, 2011).

After the Olympic Games
• Transformation of Olympic venues to be training facilities and competition sites for local and international sports teams (Independent environmental assessment: Beijing 2008 Olympic Games, 2009, p. 46).
• The Water Cube from Beijing’s 2008 Olympic Games was transformed into a water park that features 12,000 square meters of recreational activity with 13 water slides and rides, a wave pool, a lazy river and spa area (Chin, 2010).
• Continued use of environmental regulations to decrease pollution and conserve nonrenewable resources.
• Materials used to construct temporary venues were recycled for other construction projects.
• The sustainable legacy after the Games is the most valuable feature of the development because it provides the host an opportunity to better their community for future generations.

Environmental Impact of Sports Tourism and Olympic Games

Winter Sports
• Winter sports such as snowboarding or skiing need ample snow and unique slopes; these mountains may face some deforestation and landscape alteration to remove trees and rocks from the course (Stanishev & Deknopp, 2005).
• These snow machines require ample amounts of local water and electricity to transform mountains into snow-filled slopes.
• Water is needed to increase the melting point of snow and prevent it from melting quickly (Stanishev & Deknopp, 2005).
• Sochi’s major mountain stream, Mzymta, was damaged from the Olympic construction alongside and in the riverbed.
• These changes were made to "make room for ski jumping hills and snow reserves, in case there is unusual snow available during Games” (Koerkamp, 2014).

Displaced Communities
• A unique problem in host international events, they must beautify their cities by quickly solving the problem of their low income residents living on the streets or in informal settlements.
• The Brazilian government had to relocate or hide their impoverished slums or favelas from the mass media during the 2016 Rio Olympic Games.
• An invisibilisation strategy that Russia used was the forced removal of inhabitants in the remote outskirts of the city of Barra as well as the demolition of their buildings (Steinbrink, p. 134).

Analysis
• The International Olympic Committee’s sustainable plan is vague and covers a wide range of environmental problems such as resource conservation and recycling of existing facilities.
• Each host city has unique environmental characteristics and challenges prevents a singular plan to cover every aspect of sustainability.
• Each city is given the challenge to make Games better than previous editions, “enabling the creation and implementation of a national green building standard where none existed before” (Müller, 2015, p. 206).
• Host cities struggle to meet deadlines and extra features for the facilities may be replaced with cost friendly alternatives that may not follow the sustainability plans they created.
• As the Olympic venue ages, the organizations that are placed in charge of the property must handle all the maintenance if anything goes into disrepair.
• If these repairs are not completed the sustainability of the facility will degrade and may start impacting the environment.
• Olympic Sustainability Development plan lacks the proper enforcement required to inspect sustainable objectives when the host cities are building their facilities.
• Ineffective governance, an absence of institutional controls, both at the domestic and at the international level, and high pressure to create may lead to irreversible environmental damage, oversimplified and benefits” (Müller, 2015, p. 206).
• The International Olympic Committee needs to select Olympic host cities earlier from seven years to planning to ten years to mitigate time pressure of constructing the Olympic Games.

Recommendations
• These laws will regulate any construction activity and protect any endangered species or natural landmarks.
• The collaboration between all members of IOC, NGOs, Olympic host city organizing committees, and governmental bodies are necessary for the successful completion of the Olympic Games.
• Keep citizens and local organizations educated and aware of Olympic Games construction to prevent destruction of valuable natural resources and landscape.

This project reviewed past Olympic Games as case studies to review strategies for sustainability and sustainable tourism.

Conclusions
• Sustainable tourism emphasizes the hospitality industry’s economic, social, and environmental impact on host cities and their communities.
• Mega-Events such as the Olympic Games require services from the hospitality industry such as lodging and competition venues.
• Previous Olympic Games failed to incorporate sustainable tourism in the construction because of time, budget, and lack of resources.
• The host city must plan, organize, and execute a successful Olympic Games in addition to creating a city that will positively impact their community.
• All the stakeholders that are involved in the Olympic planning process must actively support and hold host cities responsible for fulfilling their sustainable goals.
• Sustainable tourism is important because it protects the well-being of the natural environment, local citizens, and hospitality businesses.

Sustainable Olympics Timeline

10 years before Olympic Games
• International Olympic Committee selects a Candidate City to host future Games
• Olympic planning committee is created for host city that includes environmentalists and representatives from NGOs
• Construction plans are created for future stadiums & other structures

2-3 years before Olympic Games
• Local government creates legislation that protects natural resources landscapes, and local communities
• Construction of major stadiums, venues, and Olympic Village begins
• NGOs and IOC work with Olympic planning committee to maintain sustainability plan

During the Olympic Games
• International interviews and spectators gather to participate in the Summer/Winter Olympic Games
• Newly renovated Infrastructure successful supports increased number of tourists

1 year before Olympic Games
• Construction of sustainable venues are finalized
• Careful financial and sustainable planning keeps Olympic planning under-budget

1-year after Olympic Games
• Permanent facilities are given to local organizations for future sports events and competitions
• Temporary venues are deconstructed and raw materials donated to low income housing construction
• Community members and government benefit from new infrastructure and economic boost from international and domestic tourism