

## **PUBLIC GOODS AND SUSTAINABLE TOURISM: THE CONSTRUCTION OF WHITE ELEPHANTS**

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*In this paper, following the seminal paper of Robinson and Torvik (2005), we analyze the effects for a sustainable tourism of the construction of white elephants. We present a formal definition and the main characteristics of white elephants. In particular, we introduce this concept in the framework of tourist activities and describe some examples in this economic sector. We show that white elephants are a particular type of investments projects with negative surplus and that it is the very inefficiency that makes them politically attractive. Finally, we analyze the rationality of this kind of investment on the tourism sector showing the existence of a double rationality in the construction of a white elephant: the rationality of politicians that use these investments to obtain electoral benefits and the social rationality based on economic efficiency.*

*White elephants, sustainable tourism, tourism policy, public goods*

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### **INTRODUCTION**

Looking at the definition of sustainable tourism may prove to be useful in the context of the construction of white elephants. The World Tourism Organization defines sustainable tourism as “tourism which leads to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems” (Furrer, 2007:25; McMin, 1997). Sustainable tourism in its purest sense is an industry, which attempts to make a low impact on the environment and local culture, while helping to generate income, employment, and the conservation of local ecosystems. It is responsible tourism, which is both ecologically and culturally sensitive.

The main purpose of this paper is to analyze, from the point of view of the sustainable tourism, the investments on the so called white elephants in tourist places. The concept of white elephant is given in. We introduce this concept in the framework of tourist activities, and we analyze the rationality of this kind of investment on these activities. We show that this rationality is supported by political and “myopia” considerations rather than by a rational economic behavior of the whole society. This is confirmed by the fact that investments on white elephants increase in electoral times. It is in these times that the political party in exercise tries to remain in power by using, if necessary, public resources to capture votes. Certainly, this rationality (which may be considered as the rationality of underdevelopment) has negative consequences for the sustainable tourism and for the future of the

tourist region. White elephants only benefit a small part the population (and in some cases for a short time) and their high costs are supported by the whole society. Serious damage to the environmental quality can result from the investment on white elephants in a tourist place. These damages can be irreversible. We show some examples of white elephants in different tourist destinations. The examples are mainly based on the experience in non-ASEAN countries (except Korea). But explaining the white elephants stories from the different countries in the world, to understand a lesson learned from white elephants construction in other countries which have similar cultural diversity

The paper is organized as follows. In section 2 we define the sustainable tourism, public tourism policy and its characteristics. In section 3 we introduce the notion of white elephant. Section 4 presents some examples of white elephants in tourist destinations and in section 5 we analyze the rationality of investments on white elephants. Conclusions and future developments are summarized in the last section.

### **SUSTAINABLE TOURISM, PUBLIC TOURISM POLICY AND CHARACTERISTICS**

Sustainable tourism is about refocusing and re-adapting. A balance must be found between limits and usage so that continuous changing, monitoring and planning ensure that tourism can be managed. This requires thinking long-term (10, 20+ years) and realizing that change is often cumulative, gradual and irreversible. Economic, social and environmental aspects of sustainable development must include the interests of all stakeholders including indigenous people, local communities, visitors, industry and government (www.sustainable tourism.net, Bramwell and Lane, 1993). Sustainable Tourism as defined by the Organization of Eastern Caribbean States (OECS) is “ the optimal use of natural and cultural resources for national development on an equitable and self sustaining basis to provide a unique visitor experience and an improved quality of life through partnership among government, the private sector and communities. ” Sustainable tourism is based on the three ‘pillars’ of sustainability (economic, social and environmental) and is simply defined by the World Tourism Organisation 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” (WTO, 2007).

Characteristic of the sustainable tourism are (<http://www.gdrc.org/uem/eco-tour/whatis-sustour.html>):

- *It's informative.* Travellers not only learn about the destination, they learn how to help sustain its character while deepening their own travel experiences. Residents learn that the ordinary and familiar may be of interest and value to outsiders.
- *It supports integrity of place.* Destination-savvy travellers seek out businesses that emphasize the character of the locale in terms of architecture, cuisine, heritage, aesthetics, and ecology. Tourism revenues in turn raise local perceived value of those assets.
- *It benefits residents.* Travel businesses do their best to employ and train local people, buy local supplies, and use local services.
- *It conserves resources.* Environmentally aware travellers favour businesses that minimize pollution, waste, energy consumption, water usage, landscaping chemicals, and unnecessary nighttime's lighting.
- *It respects local culture and tradition.* Foreign visitors learn about and observe local etiquette, including using at least a few courtesy words in the local language. Residents learn how to deal with foreign expectations that may differ from their own.
- *It does not abuse its product.* Stakeholders anticipate development pressures and apply limits and management techniques to prevent the “loved to death” syndrome. Businesses cooperate to sustain natural habitats, heritage sites, scenic appeal, and local culture.
- *It strives for quality, not quantity.* Communities measure tourism success not by sheer numbers of

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visitors, but by length of stay, money spent, and quality of experience.

- *It means great trips.* Satisfied, excited visitors bring new knowledge home and send friends off to experience the same thing - which provides continuing business for the destination.

### **Sustainable Tourism Principles**

Sustainable tourism principles are (Burns and Holden, 1995:219-220; Hornagold, 2004):

- The environment has an intrinsic value, which outweighs its value as a tourism asset. Its enjoyment by future generations and its long-term survival must not be prejudiced by short-term considerations.
- Tourism should be recognized as a positive activity with the potential to benefit the community and the place as well as the visitor.
- The relationship between tourism and the environment must be managed so that the environment is sustainable in the long term. Tourism must not be allowed to damage the resource, prejudice its future enjoyment or bring unacceptable impacts.
- Tourism activities and developments should respect the scale, nature and character of the place in which they are sited.
- In any location, harmony must be sought between the needs of the visitor, the place and the host community.
- In a dynamic world some change is inevitable and change can often be beneficial. Adaptation to change, however, should not be at the expense of any of these principles.
- The tourism industry, local authorities and environmental agencies all have a duty to respect the above principles and to work together to achieve their practical realization.

While not all governments have sustainable tourism plans, most will have an “official position” towards tourism. There will be common factors to most statements of government intentions concerning, or philosophy about, tourism that will define the characteristics of that destination’s tourism. These are likely to encompass the following:

- Visitor arrival targets,
- The importance of having a clear idea as to the purpose of tourism and,
- Planning, building and/or zoning rules and regulations.

Ten principles of sustainable tourism management are (Govender-van Wyk, Wilson, 2006:17):

- The approach sees policy, planning and management as appropriate and, indeed essential responses to the problems of natural and human misuse in tourism.
- The approach is generally not anti-growth, but it emphasises that there are limitations to growth and that tourism must be managed within these limits.
- Long-term rather than short-term thinking is necessary.
- The concerns of sustainable tourism management are not just environmental, but also economic, social, cultural, political and managerial.
- The approach emphasises the importance of satisfying the human needs and aspirations, which entails a prominent concern for equity and fairness.
- All stakeholders need to be consulted and empowered in decision-making, and they also need to be informed about sustainable development issues.
- While sustainable development should be a goal for all policies and actions, putting the ideas of sustainable tourism into practice means recognizing that in reality there are often limits to what will be achieved in the short and medium term.
- An understanding of how market economies operate, of the cultures and management procedures of private sector businesses and public and voluntary sector organisations, and of the values and attitudes of the public is necessary in order to turn good intentions into practical measures.

- There are frequently conflicts of interest over the use of resources, which means that in practice trade-offs and compromises may be necessary.
- The balancing of costs and benefits in decisions on different courses of action must extend to considering how many different individuals and groups will gain or lose.

There must be close cooperation between the players involved in the local industry, that planning and should recognize the symbolic link between tourism and the host community and, finally, that local people should, in a sense, be seen as shareholders in the industry with regular reports from planning authorities on progress and future plans. Proper planning of the physical, legal, promotion, finance, economic, market, management, social and environmental aspects will help deliver the benefits of tourism development (Burns and Holden, 1995:189).

### **Sustainable Tourism Components for Public Tourism Policy**

The following components may be considered by governments and responsible city/region authorities that wish to turn the public tourism buildings into an example of sustainable practices (adapted from Brodhag and Talière, 2006:138).

**A long-term strategy:** The public building projects must be set in a 15-20 year span. Sustainable development principles must be integrated into all phases of the project's plan: conceptualization, feasibility, strategic and operational planning, operations and dissolution.

**An integrated and realistic approach:** Tourism public buildings venues and infrastructures must be planned in conjunction with the strategic urban planning of the host city and region. The buildings may be used as a tool for positive change - for example to revitalize a part of the host city - but should not be considered a panacea for all urban ills afflicting the host city's residents.

**Policy integration:** National strategies must evolve thoroughly integrated approaches and plans that give due consideration to all three pillars of sustainable development, being environmental, economic, and social concerns.

**Partnerships for sustainability:** Sustainability is a collective effort and strong public-private partnerships are essential.

**Stakeholder participation:** The participation of stakeholders is necessary for the achievement of sustainable development. Stakeholders may include businesses, labour unions, and non-governmental organizations, and should take part, along with government representatives, in decision-making processes responsible for designing and implementing national strategies.

**Early inclusion of the projects into sustainable urban and regional strategies:** The city or region which contemplates hosting a public project must develop a vision for the sustainability and blend it together with its overall vision for the future of the city and region. The key questions are "why does my city or region need this project, building etc.", "what can this bring to us" and "what will be our contribution to the project and to the world through this project"?

**Analysis and assessments:** Integrated assessment tools should be used to identify all costs and benefits — environmental, economic and social — of policy and strategy options being considered.

**Indicators and targets:** National strategies for sustainable development should be based on a well-structured system of indicators. Such a system can be of considerable assistance in monitoring progress and can serve as a quantitative target.

**Coordination among institutions:** A wide range of institutions, including government departments and agencies, need to be involved in the formulation of national sustainable development strategies and their implementation. The overall responsibility should be located at the highest government level, such as in the office of the Prime Minister, or its equivalent.

**Local and regional governance:** Local and regional authorities must be fully involved in the development of national strategies, and certain aspects may be devolved to subnational governmental levels.

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**Use of sustainability monitoring and reporting tools:** The design of specific indicators that measure progress across all three dimensions (social, economic and environmental) of sustainable development will support assessment of sustainability performance by the building authorities and responsible city/regional authorities. Such tools will also help benchmark the building or project with other projects and other similar cities' development. Monitoring and reporting should be performed in conjunction with partners such as universities, public or private research institutes and independent watchdogs should be appointed to accompany all efforts towards sustainability. Use of sustainability monitoring and reporting tools should lead organizers and city leaders to inform the public and other stakeholders about the results.

**Balance among carrying capacities:** To provide balance among economic, social, and environmental needs in all tourism planning and development programs;

**Define the limitations:** To define the limitations to tourism development in terms of both physical and social carrying capacity of each destination;

**Quality:** To develop high-quality environmental impact assessments for both existing and proposed tourism developments; to maintain the local culture and promote the image of its values, heritage, traditional way of life, indigenous behavior, and local sociopolitical fabric; and

**Education:** To enhance the development of the human resource base in tourism through management education and training. Government may play an active role in promoting the integration of sustainable principles within the curricula of tourism planning and management in higher education.

### WHITE ELEPHANTS

White elephants are investment projects (large-scale developments such as roads, ports, and power plants) that provide targeted economic benefits to salient political constituencies, even when the aggregate economic benefits of such projects such as increased output or service quality do not cover the economic opportunity costs borne by the broader polity. They are public investment with negative social surplus and are a particular type of inefficient redistribution, which are politically attractive when politicians find it difficult to make credible promises to supporters (see Robinson and Torvik, 2005, where the reader can find a dynamic model with partisan politicians of the construction of white elephants). Very well known examples of white elephants are those big constructions of public investment that are announced strategically in electoral times to satisfy political interests. These constructions don't have some planning that assures a social welfare and does not take care of damages to the environmental quality or to the cultural patrimony or traditional architecture of the place where it will be constructed.

The term "white elephant" is derived from Thailand. The expression comes from a legendary former Siamese custom whereby an albino elephant, considered sacred, could only be owned by the king. The king would bestow such an animal on a subject with whom he was displeased and wait until the high cost of feeding the animal, which could not be slaughtered, ruined the owner. The story was told in England in the 1600s, and in the 1800s the term began to be used figuratively.

White elephants can have a very negative impact on the environment and causes damages to the economic activities of the tourist destination where is located. These kinds of constructions are supported by privileged particular groups looking only after their own welfare, generally contrary to the social welfare. The main characteristics of white elephants are:

1. They are included in investment projects with negative social surplus, especially for the sustainable tourism;
2. Their construction is part of an exchange relationship between politicians and voters. This action gives important advantages to the incumbent party, and some immediate benefit to the voters, local

inhabitants or builders;

3. White elephants projects are often large and expensive to build and take longer than originally estimated.

These socially inefficient investments or white elephants intend to represent spectacular investments in an electoral period. The benefits implied to the population by their construction are partial and do not take care of the economical future of the region or of the local populations. The objective of these constructions is to obtain the electoral support of the small social group that obtains immediate privileges. Then, their construction ends up harming the rest of the society and the future of the local population. The approval to this construction by the local inhabitants in some cases is related with a lack of perception of the future (myopia). The construction of a white elephant implies future losses in the welfare and economical potentiality of a tourist place. Note that, for example, a luxury hotel development proposal in an area not assisted by air travel is likely to become a white elephant if developed.

Some of the main problems of white elephants projects are:

- Goals of project are always unclear and are dominated by post-project justification;
- There are political interference in setting the project goals;
- Limited initial or independent evaluation of the project's viability so that expectations are over optimistic;
- Often supply rather than demand driven;
- Poor risk analysis;
- Sunk costs effects: the project is continued because of previous unrecoverable past expenditures;
- Budgets are poorly described;
- Long lead times so that their full impacts can not appreciated till project is fully completed.

Of course, white elephant projects are not limited to the public sector. Examples in the tourism industry include the construction by various entrepreneurs during the late 1980s and early 1990s of numerous 'prestige' and 'iconic' resorts up and down the Queensland coast. Most ran at huge losses and were usually on-sold several times at a fraction of their original development costs. Indeed, many of these resorts today, although apparently viable, are only profitable in terms of their operating, rather than full capital costs and have become viable by considerable changes in their scope and range of activities. Development of strata title units for on-selling has been one strategy used for these tourism developments. What really make some projects white elephants is that they become expensive to maintain because of poor design and confused role. These problems are most explicitly seen in projects of tourism such as art galleries and museums where even in the best of circumstances purpose is often ill-defined and clear criteria for success, difficult to articulate. Such buildings are characterized by a failure to meet anticipated attendance levels and frequently need repeated and expensive refurbishments that often cost more than their original construction.

When a ruling politician undertakes the construction of a white elephant, he is searching to obtain advantages in the result of the election, which means favoring certain social groups in exchange for their votes, even if the social cost of the project is larger than the obtained benefit. Also, obtaining a larger number of votes, through the construction of a white elephant, implies a decrease in the social welfare of the tourist region. The rationality of the construction of a white elephant is supported in a bounded vision of the future by the politician and/or local inhabitants and builders. This bounded vision can be explained by means of the existence of a small discount factor in the inter-temporal utility functions of these social groups or individuals. This kind of myopia implies an evaluation of the immediate future rather than that of the mediate or remote future. By assuming that the society will take care of the future, this myopic point of view is in contradiction with the position that the society as a whole should evaluate the future by means of a greater discount factor. In this way it is possible

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to explain the “rationality” of a white elephant. At the same time, these constructions can raise the credibility of the promises of some politicians, specially the promises of those who can obtain public resources to begin the construction of a white elephant. As a result, this possibility gives this group a strategic advantage in the electoral dispute. Socially efficient projects do not have this effect since all politicians can commit to building them, thus having a symmetric effect on political outcomes (Robinson and Torvik, 2005).

Hence, the white elephants are:

- (a) Part of an exchange relationship between politicians and voters (clientelism) given important advantages of incumbency,
- (b) A politician’s commitment offering policy favors in exchange for the votes of the social groups interested in the construction of the white elephant (Besley and Coate, 1998; Dixit, 2003), and
- (c) This commitment may lead to inefficient forms of redistribution of the social wealth.

### EXAMPLES OF WHITE ELEPHANTS IN THE TOURISM SECTOR

White elephants are investment projects (large-scale developments such as roads, ports, huge buildings, public tourism complexes and power plants) which are public investment with negative social surplus. In this section the examples are mainly based on the experience in non-ASEAN countries. But explaining the white elephants stories from the different countries in the world, to understand a lesson learned from white elephants construction in other countries which have similar cultural diversity. The white elephants examples are Ryugyong Hotel in North Korea, World Trade Center México, Mexico City, National Wine Centre of Australia in Adelaide, Miami Arena, Millennium Dome in London, Kurtköy Formula Track in Ýstanbul. The methodology of the finding examples is internet web page search. We use snowball sampling method for reaching the examples. Snowball sampling is a technique for developing a research sample where existing study subjects recruit future subjects from among their acquaintances. Thus the sample group appears to grow like a rolling snowball. As the sample builds up you gain enough data to use for your data. This sampling technique is often used in hidden populations which are difficult for researchers to access.

#### **Ryugyong Hotel in North Korea**

In some tourist destinations we can see a large number of hotels whose construction was only justified by the subsidies given by a politician with the purpose of convincing local inhabitants and investors to support his political party in an election. However, the situation may change after the election and the hotels are no longer a good business, then some will be abandoned or the construction stopped. A good example of this situation is the Ryugyong Hotel in North Korea (TIME, Monday, Sep. 30, 2002). The Ryugyong Hotel is a towering, empty concrete shell intended for use as a hotel in Sojang-dong, in the Potong-gang District of Pyongyang, North Korea. The hotel’s name comes from one of the historic names for Pyongyang: Ryugyong or “capital of willows”. If the building were ever completed it would be the world’s tallest hotel, and the seventh largest building in the world. Today, however, it remains unfinished and uninhabited. Construction on the pyramid-shaped hotel began in 1987. A firm, the Ryugyong Hotel Investment and Management Co., was established to attract an estimate of 20 million euro in foreign investment. A representative for the North Korean government promised relaxed oversight, saying, “the foreign investors can even operate casinos, nightclubs or Japanese lounges if they want to.” The basic structure is complete, but it has never been certified as safe for occupancy. As a result, no windows, fixtures or fittings have been installed. The concrete used in building the Ryugyong Hotel is of unsuitable quality and therefore unsafe. The building is sagging so badly that it will never open as presently constructed. The construction of this hotel in Pyongyang consumed 2% of the Gross Domestic Product of the country. Originally intended to rival

Western bloc greets such as the Sears Tower, the building now sits as an unfinished, windowless concrete shell. As the building is seen as being structurally unsound, it will likely never be completed.

#### **World Trade Center México, Mexico City**

The WTC México is a building complex located in Mexico City (Mexico), which includes a convention center, cultural center, parking facilities and the 52-story Torre WTC. The WTC México began its existence as the Hotel de México, a building and complex that never really performed their intended functions. The Hotel de México project included, of course, a hotel building as well as a cultural center housing the Polyforum Cultural Siqueiros, parking facilities and its most famous and recognizable feature, the 52-story, 172m high Torre WTC. It also includes several other facilities aimed at making the complex a hub for business, culture, tourism and architecture. Slated to be ready for the 1968 Olympics with 80 floors, the project ran over schedule and over budget, and, although the main tower was completed in 1972, it never really functioned as a hotel then, due to political and economical reasons, the tower and the rest of the complex were left unfinished, except for the Polyforum. Ever unfinished was used only on the convention center & the top rotating floor areas, at the end of the 70's a panoramic elevator was installed & some years later the top cylindrical volume was an entertainment zone with thousands of lights. With the construction industry boom caused by the 85's earthquakes, WTC project restarts in 1992 with the demolition of peripheral constructions, the foundation of the building was reinforced but a lot of complications must be saved. Finally the building has three kinds of construction systems and now has a local TV station, Convention Center, Cinemas, and Hospital & Retail Area. The WTC México reopened in November 1994. This project highlights the issue that public icon projects are frequently launched without an adequately identified business need. In fact, unlike private-sector projects, taxpayer funded projects are frequently conceived and defined to meet a political need or justification while the business need is cobbled together to 'legitimize' the expenditure of significant public funds. This is not to say that a political need is not legitimate, but the 'what?' and 'why?' questions must be clearly stated and agreed by all stakeholders if large, complex projects are to have any chance of proceeding successfully. In some cases, a white elephant can be built and continue operating if the ruling party wins; however, in other cases, after the election, the activities related with this white elephant are suspended.

#### **National Wine Centre of Australia in Adelaide**

The National Wine Centre in Adelaide was conceived and built for the purpose of focusing national and international attention on the Australian wine industry and South Australia as a principal wine-growing and wine-making state (DiGirolamo and Plane, 2002). The business need as set out in the South Australia's National Wine Centre Act 1997, stated that the purpose of the centre was to conduct a range of functions, 'including the promotion and development of the Australian wine industry and the management of a wine exhibition. Under the Act a board of directors was established to control and direct the centre with the board responsible to the appropriate Minister. The opening of the National Wine Centre has given wine connoisseurs and tourists a birds-eye view of the production, history and huge variety of winemaking across Australia. Predicted to attract 170.000 international and domestic visitors annually and help drive export sales already worth more than 1 billion euro a year the building uses steel, timber, and glass in a strikingly original way (Scott, 1992).

The building is designed and uses building materials to reflect items used in making wine. Construction of the National Wine Centre in Adelaide was problematical enough with cost overruns and time delays, but those difficulties were overshadowed by the crippling losses that the Centre made on operations subsequent to its opening for business on 7 October 2001. The original business need for the National Wine Centre could be questioned. Less than two years after its opening under State government ownership, operation of the debt-ridden facility was handed over to the Winemakers' Federation of Australia. After a number of problems with funding, management and profitability, the



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Wine Centre operation was taken over by the University of Adelaide on 1 July 2003 for 1 million euro. It now offers some of the university's oenology courses, as well as the public face of the wine industry in Australia. Its development by the State Government was shrouded in controversy and it was labelled as a white elephant by the opposition. It was also described as the 'cash-burning' National Wine Centre. The Department of Treasury and Finance of Australia had estimated that the Wine Centre would lose 2 million euro per year, at best if it continued under previous operating conditions.

### **Miami Arena**

The so named "Pink Elephant" was built by the city of Miami to land NBA & NHL franchises in the early 1980's (Mahtesian, 2000). Construction delays prevented the opening until 1988 with significant cost overruns. While the original design for the stadium was a factor in Miami receiving an expansion team in basketball, the completed arena's limited seating capacity (under 15,000) and lack of many luxury seats, made the building obsolete. Unable to have a fixed team that uses the field, the arena has remained mostly inactive. At one time, the Miami Arena was home to the NBA's Heat, the NHL's Panthers, as well as college basketball, concerts, wrestling, ice shows, and tractor pulls, among other events that typically end up in 15,000-seat buildings. The arena was sold in a public auction in Miami Arena Tickets 2004 to Glenn Straub, an investor from Palm Beach County, Florida, for 20 million euros less than the 45 million euros the city of Miami paid for its original construction.

### **Millennium Dome in London**

The world's biggest dome was built on the Meridian Line (the prime meridian of the world) in Greenwich to celebrate this historic event. The dome is the largest single roofed structure in the world. Externally it appears as a large white marquee with twelve 95 m-high yellow support towers, one for each hour of the day, representing the role played by Greenwich. The overall cash budget for the project was 1115 millions euros as agreed by the Government and the Millennium Commission. The Millennium Dome was one of the UK's most controversial public projects. Like the Great Exhibition of 1851 and the 1951 Festival of Britain, it was meant to be a portrait of the nation but faced harsh criticism. As agreed by the New Millennium Experience Company and the Millennium Commission, Millennium Dome visitor number targets were "ambitious and inherently risky". The Millennium Dome pulled in 6.5 millions visitors last year and this is only just over half the original target of 12 millions, but organizers have defended the beleaguered Greenwich attraction, saying it was still the most popular in England. The total visitor numbers included more than one million non-paying visitors, most of whom were children on school trips. The project was largely reported by the press to have been a flop: badly thought-out, badly executed, and leaving the government with the embarrassing question of what to do with it afterwards. During 2000 the organizers repeatedly asked for, and received, more cash from the government. The Dome is now normally closed. The failure of the project became and remains a continuing embarrassment to the Labour government. It is still of interest to the press, the government's difficulties in disposing of the Dome being the subject of much critical comment. The amount spent on maintaining the closed building has also been criticized. In Pfanner (2005) there is a detailed description about this very well known white elephant.

The Millennium Dome it has also become known as possibly the world's most spectacular white elephant, bringing in the new millennium with rows over its cost, over its content, and over what should happen to it when the last spent millennium fireworks finally flopped out of the sky. The largest single-roofed structure in the world, the Millennium Dome would become, according to Tony Blair, "a triumph of confidence over cynicism, boldness over blandness, excellence over mediocrity". Instead, despite the hype, the fireworks, the stage show devised by Peter Gabriel, and the building's undoubted presence, the Dome became a science-fiction folly that has lain largely unused, costing the taxpayer more than 44 millions euro to maintain since it closed at the end of 2000. Since then, it has

hosted only a handful of sporting or music events, not to mention Christmas 2004, when it was adopted as a temporary shelter for the homeless.

### **Kurtköy Formula Track in Istanbul**

Istanbul Park auto race track is in Kurtköy, near Tuzla, about 62 km (38 miles, a one-hour drive) southeast of the center of Istanbul on the Asian side of the Bosphorus near Sabiha Gökçen Airport. Built in 2005 at a cost of €80 million, the 5.378-km (3.34-mile) track was rushed to completion for the Formula 1 Grand Prix at Istanbul in August 2005, and is thus one of the world's newest and most modern auto race tracks. It will host the next Formula 1 Grand Prix on 9-10-11 May 2008. Built on four ground levels, the anti-(counter-) clockwise track has 14 corners (eight left, six right), a top speed of 320 km/h (199 mph), and can host about 125,000 fans for a race ([http://www.turkeytravelplanner.com/special/auto\\_racing/istanbul\\_park.html](http://www.turkeytravelplanner.com/special/auto_racing/istanbul_park.html)). Kurtköy formula track is not a white elephant now but if it doesn't manage carefully it will be a white elephant at the near future, because it has management problems.

### **RATIONALITY IN THE INVESTMENT IN WHITE ELEPHANTS**

Democratic societies delegate the power to tax and provide public goods to the elected representatives. A common complaint made by citizens and by the press is that a large fraction of public spending is not devoted to projects of genuine public interest. The redistribution of the wealth associated with a large part of these projects does not seem to improve the social welfare, and then they become white elephants (Lizzeri and Persico, 2001). However, local inhabitant and certain groups of citizens agree, at least for a short period of time, with the construction of the white elephant. This situation could be understood if we consider this construction as the result of a one shot game, similar to prisoner's dilemma (about the Game Theory and its applications, see Osborne, M.; Rubinstein, A, 1994). People looking for their own welfare obtain a Pareto dominated situation. However, this result can be different if the participant in the game, politician or these groups of citizens, looks at the game as an infinitely repeated game. These games capture the idea that the behavior of each player has an effect in the future behavior of the others, and phenomena like cooperation, revenge, and threats appear. However, even in this case, it is possible to improve the situation if the discount factor of this people is large enough, in other cases we obtain the same result, i.e. the white elephant is built. This is a rational result if we look for the interest of the player. However, the rest of the population is also interested in the game, and from the society's point of view this result is not rational because it can be Pareto improved. In many cases it makes no sense to consider the possibility of repeating the game, so the rationality of this white elephant is based on the rationality of a one shot game. However, we can distinguish between situations where all interests (agent and politician) remain reasonably well aligned even after the white elephant is built, and those involving unavoidable posterior conflicts. This is the case when one of the players is myopia and there exists ex-post repentance.

Consider the following situation: two different political parties have two different projects for a tourist region, and suppose that both of them are white elephants. The winner in an electoral dispute decides the project that will be operating after the election. It could happen that the most inefficient project from an economic point is the one in execution, because this was the most efficient from the political perspective. Hence, the construction of a white elephant related with tourist activities can obtain a larger number of votes, thus imply a serious damage in environmental quality and a decrease in social welfare.

### CONCLUSIONS

More on the rationality of investments on white elephants, we show the existence of a double rationality in the construction of a white elephant, first rationality is from the political point of view, with the purpose of winning the election rather than obtaining economically efficient projects. This political rationality prevails over the economical rationality. The other rationality is the rationality of the game theory, basically the rationality of the one shot game.

To strengthen the development of sustainable tourism, destination planning, and building construction in tourism major aims will be:

- First of all, develop public sustainable tourism principles in the country and destinations.
- In public investment on tourist facilities consider the sustainable carrying capacity of environmental, social and economic and demand
- Define sustainable tourism incorporating its various components of natural facilities, activities and services,
- Develop a specific statistical database for tourism to help establish product availability, development possibilities, planning and market information,
- Propose a strategic plan, which would set clear objectives and targets for sustainable and eco-tourism development and marketing,
- Address key issues of research, training provision, networking, quality product development, and innovation.
- To avoid building white elephants constructions in tourism destinations.
- Develop functional links with key players in the market place.
- The kind of infrastructure should be small-scale projects that support local communities, rather than convention centers that might end up as white elephants.

The following recommendations may be considered by governments and responsible city/region authorities that wish to turn the public tourism buildings into an example of sustainable practices (adapted from Brodhag and Talière, 2006:138, Hassan, 2000:244 ):

- The public building projects must be set in a 15-20 year span. Sustainable development principles must be integrated into all phases of the project's plan: conceptualization, feasibility, strategic and operational planning, operations and dissolution.
- Tourism public buildings venues and infrastructures must be planned in conjunction with the strategic urban planning of the host city and region.
- National strategies must evolve thoroughly integrated approaches and plans that give due consideration to all three pillars of sustainable development, being environmental, economic, and social concerns.
- Sustainability is a collective effort and strong public-private partnerships are essential.
- The city or region which contemplates hosting a public project or a building must develop a vision for the sustainability and blend it together with its overall vision for the future of the city and region.
- Integrated assessment tools should be used to identify all costs and benefits — environmental, economic and social — of policy and strategy options being considered.
- National strategies for sustainable development should be based on a well-structured system of indicators. Such a system can be of considerable assistance in monitoring progress and can serve as a quantitative target.
- A wide range of institutions, including government departments and agencies, need to be involved in the formulation of national sustainable development strategies and their implementation.
- The design of specific indicators that measure progress across all three dimensions (social, economic and environmental) of sustainable development will support assessment of sustainability performance by the building authorities and responsible city/regional authorities.

- Promoting an awareness and understanding among key stakeholders (e.g., citizens, developers) of the critical link between any tourism development effort and sustaining the environment;
- Promoting equity in the development opportunities among local and international developers of quality tourism projects;
- Maximizing tourist satisfaction through the delivery of total quality experience;
- Developing and sustaining the quality of life for the local communities;
- Providing balance among economic, social, and environmental needs in all tourism planning and development programs;
- Defining the limitations to tourism development in terms of both physical and social carrying capacity of each destination;
- Developing high-quality environmental impact assessments for both existing and proposed tourism developments;
- Maintaining the local culture and promote the image of its values, heritage, traditional way of life, indigenous behavior, and local sociopolitical fabric; and
- Enhancing the development of the human resource base in tourism through management education and training.

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