Chapter 7: Mega-Events as Catalysts for Sustainable Development: The Role of Event Greening to Hosting Cities

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Abstract

There is currently very stiff competition between countries and cities to host mega-events. Mega-events such as international church conferences, sporting events like the Zonal Games, the Africa Cup of Nations, the UEFA Championships League and FIFA World Cup and the Olympics Games have a common feature of pulling large crowds. These mega-events have become catalysts for sustainable development in these countries and cities that would have won the stiff competition to host them. These events bring with them wide coverage by global media houses with a global reach. They also bring in much investment and the most needed foreign exchange. According to Kenney and Varrel (2011:1), the motivation to host mega-events is based on the following factors:

1. A successful hosting offers global exposure, prestige and legitimacy to the host city and the entire country, which is especially desired by emerging economies eager to prove that they have become major players on the global stage;
2. Hosting a mega-event rests on the promise of an economic windfall, coupled with a substantial urban makeover; and
3. Staging a mega-event offers a unique opportunity for the host cities not only to present themselves to the world and achieve economic development, but there is also the possibility of creating a “green legacy” in some sectors, which will help these cities face their future development challenges.

The precondition for the creation of a green legacy is the “greening of the event”, the process of incorporating socially and environmentally responsible decision-making into the planning, organisation and implementation of, and participation in, an event. Borchers *et al.* (2010:16) argued that event-greening has two key dimensions:

1. The mitigation of the direct environmental impact, or "footprint" of the event, including carbon dioxide emissions and waste created, water and energy used and biodiversity threatened; and
2. The potential of the event to catalyse a broader societal, political and economic shift towards more sustainable lifestyles and production patterns and to leave a positive legacy.

The hosting of a mega-event puts severe pressure on the urban infrastructure and services related to transportation, water and energy consumption, or waste management and can have significant consequences. Infrastructure projects and the presence of a high number of tourists and spectators will cause a significant increase in greenhouse gas emissions during and after the event. This chapter aims to investigate the involvement of mega-events as catalysts to sustainable development, their footprints in the greening of the environment. Case studies of mega-events such as church gatherings of the Apostolic Churches that conduct open ground gatherings, sports tournaments like the 2010 Soccer World Cup in South Africa and political rallies during election campaigns in Zimbabwe and other developing countries are going to be highlighted.

INTRODUCTION

Mega-events can be defined by their impacts and complexity in organisation and delivery. Due to their size and international scale, mega-events like the FIFA World Cup, the Olympic Games and international church convergences present serious challenges regarding the management of transport, energy supply, emissions, noise, water, waste, construction activity and other aspects. This is especially so when venues of such events are spread out over a country and touch remote and often untouched areas. They risk leaving behind a significant environmental footprint. Mega-events broadly fit into two categories; sporting and cultural (Mintel, 2010). In essence, Bowdin *et al*. (2006) believe that mega-events are those events that affect whole economies and have repercussions in global media attention. These events are developed mainly in competitive spheres and include events such as the Olympic Games, the FIFA World Cup, the UEFA Champions League and African Cup of Nations (AFCON) football tournament and world athletics championships. Hallmark events, according to Bowdin *et al*. (*ibid.*), refer to events that become so closely identified with the place that they become strongly linked. Among classic examples of hallmark events are the Carnival in Rio, the Tour de France, the Edinburgh International Festival, the Jazz Festival of Juan les Pins in Antibes and the International Motorcycle Rally in Faro. Such events are culturally unique and distinctive, with resident communities contributing to the tourism revenue, creating a sense of local pride and international interest. With time, these events become inseparable from the destination. For instance, it is difficult to imagine the Rio de Janeiro Mardi Gras occurring in a city other than Rio de Janeiro or the Zimbabwe International Trade Fair happening in any other town than Bulawayo.

The growth of mega sports events might be ascribed to three most important reasons:

1. Modern technologies of mass communication that help to reach almost the population the world;
2. Sport media business alliance creation, which completely changed professional sport in the late 20th century; and
3. These mega-events offer a variety of benefits to cities, regions and countries, where they are hosted (Horne and Manzenreiter, 2006).

In Zimbabwe international church gatherings, especially by apostolic sects that utilise open grounds which have not been developed to host such events, attract congregants from all over Africa. At these open grounds there are no ablution facilities, water, power and refuse collection facilities, to name a few of the environmental concerns. On a positive note, the Zion Christian Church (ZCC) an apostolic sect, converges annually at their shrine in the Masvingo Province where they have built a state-of-the-art infrastructure that includes a high school. Their church was proclaimed a national monument by the government. Tourists, both locals and foreigners visit, the site to view the beauty.

To limit potentially negative effects and turn these gatherings into opportunities, it is necessary to “begin with the end in mind” and from the very start carefully plan the social and environmental legacy that the event will leave behind. These events can be a powerful social influencer with unique channels and responsibilities offering a communication platform to actively engage event visitors, suppliers, local communities and the public.

The reasons most countries and cities campaign and contest to host these events are addressed in this chapter. More attention is given to specific countries that hosted such mega-events as the Olympic Games, the FIFA and the Rugby World Cups Specific examples of mega-events at national level, like church convergences, political rallies and other organised sports tournaments are also going to be considered in the case of Zimbabwe. There are some theoretical underpinnings that have encouraged nations to fight for the hosting of such events.

THEORETICAL FRAMEWORK GUIDING THE HOST CITIES' EXPECTATIONS F HOSTING MEGA-EVENTS

Hosting, or organising, a mega-event is a form of destination branding. It is a way to generate the leveraging process of the event itself and promote the image of a location. Besides, these events put a destination in the spotlight, attracting the attention of the public and the media, thereby enhancing its image nationally and internationally. Mega-events are useful marketing communication tools, even more effective than traditional ones. They can create significant opportunities in terms of destination branding and positioning (Brown, Chalip, Jago & Mules, 2004; Kotler, Haider and Rein, 1993; Morgan, Pritchard and Pride, 2005).

After they are done, these events leave behind long-lasting effects, such as the attraction and stimulation of investments, urban regeneration, advanced facilities and equipment, in addition to the improvement of accommodation, services and infrastructures in host cities and nations. The mega-events could have a positive impact on the local economy, also over years. The most important outcomes from these events deal with intangible legacy, or rather social, cultural and political effects that are difficult to identify and measure. They can modify the local identity and image. However, the costs of hosting such events is very high. When South Africa hosted the FIFA World Cup in 2010, new (world standard) sporting facilities (stadia) were built, and transport road networks and other sorts of infrastructural developments were undertaken.

MOTIVATION TO HOST THE OLYMPICS AND THE FOOTBALL WORLD CUP

Regional development was the main goal behind Norway applying for the 1994 Winter Olympics. The intention was to use the Games as a massive catalyst to a stagnating region, starting a dynamic development process and creating an international tourism destination. That vision was based on the idea that tourism is a growth industry, to which mega-events should strongly contribute. The Winter Olympics were deemed suitable, as there is a close linkage between winter sports and winter tourism (Socher and Tschurtschenthaler, 1987). However, Crompton (1995) claimed that because of their short-term nature, such "one-off" events in general are unlikely to generate lasting employment and they will probably produce only short-term effects on tourism.

Repeated events at the same location, as with many festivals, may create several waves of development that strengthen each other through a diffusion process. One reason for sustained growth is that the catchment area of tourists will increase as awareness of a regular festival spreads to other areas over a long period (Bolin, 1996). One-off events, such as the Olympics, will not have the same diffusion effect over time. The Winter Olympics last no more than 14i16 days. Application, planning and preparation, however, often take 10-15 years or more. Thus, impacts on the host town or region occur over a long period, with the event season itself only a short boom. The tourist development theory, which covers the total project period from initial idea to final implementation, generally follows one of two basic forms: a new plateau scenario; or a "back to normal" alternative.

The new plateau theories assume that a mega-event has lasting post-event effects on tourism, because of improved awareness, attractions and accessibility created directly or indirectly by the event. The cumulative effects from such changes give the host community and region increased competitiveness in tourist markets, lifting demand to a new level. According to this theory, the total effect depends on the degree of improvements compared with other tourist destinations. The Lillehammer community based its tourism planning on a new plateau scenario (Næringsselskap, 1990), expecting a 125% increase in traffic between the host election year in 1988 and the year 2000 (up 7% annually). Regional tourism planning was also based on very strong growth, up 102% from 1989 to 1995 or 11% annually (Oppland Fylke, 1989). A local scientist was even more optimistic and claimed a steady regional growth rate of 15% annually because of the Olympics (Kamfjord, 1990). One of the major national research institutes predicted clear effects at a national level too, with foreign tourism up 10% for at least 10 years after the 1994 Games and even more if the 1994 Games were a success (Aasheim *et al.*, 1990).

The "back to normal" scenario is a bell-shaped pattern of tourist flow over time, based on a theory of only preliminary impacts. This theory relates changes in tourist flow to the growth before and decline afterwards in media attention and economic stimulus from the event. A bell-shape also assumes that improvements in competitiveness are not very important or only preliminary. The economic stimulus from preparation and media attention will then be the dominating forces and continue during the immediate post-event years but disappear quickly later on. A significant rise and decline in the awareness level was reported after the 1988 Olympics in Calgary (Ritchie and

Smith, 1991). Skewed bell shapes are also linked to the host community's need to accommodate experts and workers during the planning and development period. The volume of preparation-related traffic depends on the degree of self-support; the smaller the host community the greater the need to import personnel. However, work-related traffic would be relevant initially and disappear afterwards.

According to Matheson (2006), studies of mega-events have shown that economic benefits overestimate the actual ex-post benefits by wide margin. Authors such as Matheson (2004) and Bull (2005) contest the theory that hosting mega-events can have a significant economic impact for the host area. According to Hall (1997) and Malta *et al*. (2004,) mega-events require significant investment, targeting an international market and involving the extensive participation of mass media (cited in Bull, 2005). Yet, Getz (2008), Gratton *et al*. (2005) and Roche (2001) define a mega-event by its long-term economic benefits, impact on a destination's image and identity and effects on destination regeneration (cited in Bull, 2006). Bowdin (2001) underlined that mega-events are events that have enormous impact on economies on whole and that they are quite recognisable and influential in the world of global media. According to Bull (2006), small events rely on local resource only, involve zero opportunity costs, but are less visible in terms of marketing knowledge, because of their small scale and interests.

ADVANTAGES OF HOSTING A MAJOR EVENT

There are some common advantages to countries and cities that host mega-events and include the following:

1. RAISING THE PROFILE OF THE CITY/COUNTRY

Raising the profile of a city can lead to lasting economic benefits. For example, cities which host the Olympics can be assured of lasting recognition and tourism. Barcelona, Sydney and Beijing are good examples of cities that have benefitted tremendously from hosting the Olympics. For a country like China with a controversial human rights record, hosting a major sporting event can be a way of gaining greater international acceptance. When South Africa hosted the Rugby World Cup and, later the FIFA football World Cup, it was a defining moment in highlighting the new "post-apartheid" South Africa. This raised profile can be important for economic benefits, such as attracting tourists and business investment. The importance of this point depends on the particular city. For South Africa, the World Cup made a big difference about perceptions the world had of South Africa. For a city like London, which already has a very strong reputation, hosting the Olympics will be less influential. However, even hosting the Commonwealth Games can be beneficial for a city like Manchester.

2. Long term investment

A significant benefit is the long-term investment that comes from preparing for a major event. The city/country will have a legacy of improved sporting venues. Also, cities will usually invest in infrastructure and transport to cater for an influx of tourists. For example, there was significant investment in public transport projects around London since the 2012 Olympic Games. This left a lasting legacy for residents of London, especially East London. East of London benefited from improved public transport.

3. Jobs and Investment

Several years of planning and investment help create jobs and revitalise depressed cities. This was an important claim of the London Olympics, choosing a site in East London. The London Olympics 2012, created 8 000 full-time jobs and led to a boost in economic output of close to £2billion.

4. Enthusiasm

It is often easy to find reasons not to host a major sporting event, too much debt, more important priorities. But, a major sporting event can create enthusiasm and excitement for such an event. It can help promote uptake of sport which has lasting benefits for the nation’s health. Also, a major sporting event can lead to a rise in volunteerism which promotes civic virtues.

5. Short-term Economic Benefits

The Olympics will see a surge in visitors, athletes and media. This will provide an increase in spending and injection of money into the local economy. However, this injection of money will only be short term (a few weeks) and make little overall impact on the wider economy. Also, the injection of foreign visitors may be offset by locals leaving to avoid the influx and over-crowding.

Disadvantages of Hosting Major Sporting Events

Besides the stated advantages, there are a plethora of disadvantages, especially in developing countries. These are:

1. THE COST OF BUILDING STADIA

To host a major sporting event like the Olympics costs significant sums of money, which must be met by the taxpayer. Costs of Olympics have a tendency to rise over time and be much greater than expected. It is estimated that to hold the Montreal Olympics cost $120 million in 1970, rising to $310 million in 1973. The final cost was $1.6, around 13-times greater at. It took 30 years to pay off the Olympic debt.

2. SHORT-TERM USE

Many facilities built for the Olympics are never fully used again after the games. For example, an 80000 athletic stadium will rarely be full outside of the Olympics. This can be mitigated by careful planning. The London Olympic Stadium is now being used by English Premier League side, West Ham United and was used for athletic events such as the 2017 World Championships. Other Olympic facilities, like the Olympic village, was converted into affordable housing. However, some cities which failed to plan for the legacy of the Olympic were left with unused giant stadia.

3. POTENTIAL FOR NEGATIVE PUBLICITY

If things go well as planned, a city will benefit from positive publicity and, conversely, if things go badly, it the opposite will be true. For example, the Winter Olympics has received adverse publicity because of corruption and cost overruns. The FIFA World Cup in Qatar could backfire if players complain about the heat and conditions of migrant workers. Delhi suffered negative publicity over the state of its facilities at the Commonwealth Games.

4. COST OF SECURITY

Major sporting events must increasingly implement higher levels of security. This is both costly and can restrict freedom of movement of local citizens during games.

SOUTH AFRICA'S 2010 SOCCER WORLD CUP

The decision that the 2010 FIFA World Cup would be held in South Africa was made on 15 May 2004. There followed a lengthy preparatory process of building and renovating venues, upgrading public transport, airports and infrastructure, readying the tourism industry and marketing the country and event and the team's preparations on the football field. Part of this organisational process was the development of a greening programme, although it was relatively low profile and did not command a separate budget stream. The event took place from 11 June to 11 July 2010 in nine host cities.

The 64 matches were played at 10 stadia in various host cities, five of which stadia had been newly constructed and the other five had been upgraded for the event. Stadium capacity varied between 40 000 and 95 000.

THE SOUTH AFRICAN WORLD CUP BUSINESS MODEL

The overarching objective of both FIFA and that of the host country is the delivery of a successful event. Swart (2010) argued that at the highest level, FIFA and the host country objectives are not entirely not the same.

Table 1: *Key world cup pillars of FIFA and of the host country* (Swart, 2010)

FIFA Objectives	South African Legacy Objectives
A world-class event	Economic benefits
All infrastructure necessary to support the event in place	Strengthen South African and African image
Financially profitable	Social benefits (including jobs)
	Football development

Basing on information in the Table 1, it can be argued that the business models for FIFA and that of the host country, in this case, South Africa, are significantly different. The World Cup is FIFA's biggest event and is, therefore at the heart of their business model. FIFA must generate enough direct financial income to pay current costs and to sustain itself over the period to the next World Cup, including reserve accumulation and expenses involved in setting up the next event. The host country, however, does not link success exclusively to direct financial returns, but relies on less quantifiable benefits, many of which are not even tangible. Tourists spend into the economy and brand value is among the benefits and the legacy aspects of infrastructure improvements, job creation and skills development through World Cup projects.

IMPACT OF THE 2010 FIFA WORLD CUP

Much has been said and written on the costs and benefits of hosting such a mega-event as the soccer World Cup. This section is aimed at assessing whether the resource allocations represented a good investment for the country, were they responsible in terms of environmental legacy and maximised the benefits of social, economic and environmental aspects of sustainable development.

1. ENVIRONMENTAL IMPACT

The host city agreement that was signed included a commitment to sustainable development and environmental protection. According to Section 6.7 of the agreement, the host city undertakes to carry out its obligations and activities under this Agreement in a manner which embraces the concept of sustainable development that complies with applicable environmental legislation and serves to promote the protection of the environment.

In particular, the concept of sustainable development included concerns for post-competition use of stadia, infrastructure and other facilities and

In practical terms, many host cities do not have the resources to engage with environmental sustainability or sustainable development aspects (Konrad Adenauer Stiftung, 2011). They are challenged enough just to deliver the basic infrastructure and logistics to host thetournament. Other than the major infrastructure projects such as transport and stadia construction (some of which left powerful legacies) required to host a successful event, support from national government in this regard was lacking. Given the seriousness of imperatives such as global warming, it can be summarised that FIFA nad the South African government should have better. The 2010 FIFA World Cup carbon footprint was huge because it was generally not regarded as a priority by the key stakeholders from the initial stage of planning.

2. **ECONOMIC IMPACT**

Initial estimates of the number of visitors that would visit South Africa during the World Cup were over-optimistic. It was estimated that 450 000 tourists would visit but 309 554 tourist actually visited the country. This had a negative ripple effect. The event's economic impact was felt mainly by those sectors that were not directly linked to the event, as there was a large redirection of existing national wealth (i.e. public funds in national treasury coffers) rather than creation of new wealth. Small businesses and informal traders were pushed out of business as there were trading restrictions in areas surrounding the FIFA controlled event. The World Cup period was supposed to be one of the potentially significant times in which small businesses could have benefitted, but their exclusion from the setup alianeted them from the expected benefits and chances for the supposed growth brought about by the event.

3. SOCIAL IMPACT

Employment creation is any nation's key priority and, as such, mega-events come as an employment boost for hosting countries and cities. In South Africa, the FIFA World Cup brought with it hopes of new jobs, especially in the stadium and road construction industries. According to Thornton (2009), it was believed that the World Cup would create about 695 000 jobs, of which

280 000 would be sustained in 2010 and 174 000 would be added because of economic activity in 2011. IDASA (2010) argued that these figures were regarded with suspicion and they appeared to be over-estimated. Around 41 000 police officers, trained and employed for the World Cup, were retained permanently after the event. However, the majority of direct and indirect jobs created for the event disappeared once the infrastructure projects were complete.

It is also argued that mega-events divert national resources from more important needs of the country, detracting from their national development plans. In the case of South Africa, a country plagued by a big shortage of residential accommodation, the money used to host the event could have been used to build half a million low-income houses.

The benefits of the World Cup to South Africa and the host cities can be viewed through two lenses. On the positive side, the country was left with an improved transport system, hope for lasting economic benefits, a boosted national confidence and pride and an improved international image. Many local and international fans were entertained. On the negative side, the poor remained poor, unemployment has been addressed only slightly, cities have been burdened with expensive and oversized stadia and, in practical economic terms, benefits will never match the expenditure of the public money. FIFA’s model for the World Cup appears geared for developed countries and inappropriate for developing countries like South Africa. Host cities had very little decision-making power in the implementation of projects and were, in general, implementers of the prescribed framework for the event.

There was little room in the FIFA model to prioritise South Africa’s development needs and while there was some resource allocation to legacy projects and clear benefits that resulted from the many of the infrastructure projects, lasting benefits to the country should have been greater given the magnitude of the expenditure. It also clear that FIFA is not taking the global climate change crisis seriously. This is irresponsible given the urgency of the problem and large carbon footprint their events generate.

Promoting and hosting an event require high costs, especially in new infrastructures, for security and in facilitation for VIPs (Matheson, 2004). These huge costs are often borne by the public (Kasimati, 2003). New infrastructures mean more taxes and may represent less investment by the governments in other critical areas (e.g. health or education); the so-called opportunity costs). In the case of a mega sport event, huge are the costs for new infrastructures, with a possible risk of over indebtedness and yet, there are also bidding costs to secure the right to host the mega-event (Matos, 2006).

Some events could adversely affect local business or cause private damages (Davidson and Rogers, 2006; Getz, 2005). In fact, referring to “displacement” effect caused by mega-events, Getz (2005) pointed out that some activities associated with mega-events, such as traffic congestions, closed roads, higher security or restricted access to some public areas in the city, could seriously distract “normal business” activities (non-touristic). Yet, displacement effects could lead residents (runaways or changers) to avoid the area or even to leave the town. For example, Hultkrantz’s (1998) review of the economic impact of the World Athletics Championships, noted that while Gothenburg’s visitor arrivals were boosted by the event, overall Sweden arrivals fell as travellers, named “avoiders” by Preuss (2004), avoided the country as a reaction to the champion shops. Similarly, in Carlton’s (2002) discussion of the Salt Lake City Olympics, it is noted that while Salt Lake City hotels were fully booked , the area’s ski resorts suffered significantly as skiers avoided the destination(cf. Leeds, 2008).

Finally, during the US Democratic Convention, not only was every hotel room in Boston booked, but cruise ships were also used to house the overflow. However, as noted by Blanton and Caffrey (2004), restaurants and shops fared poorly, as non-delegate tourists avoided the city due to the lack of hotel rooms and locals stayed far away.

EVENT-GREENING AND ENVIRONMENTAL SUSTAINABILITY

The need for event-greening can never be over-emphasised. Event-greening is the process of incorporating socially and environmentally responsible decision-making into the planning, organisation and implementation of, and participation in, an event. It involves sustainable development principles and practices at all levels of event organisation and aims at ensuring that an event is hosted responsibly. It represents a total package of interventions at an event and needs to be done in an integrated manner. Event-greening should start at the inception of the project and should involve all key role players, such as clients, organisers, subcontractors and suppliers. It aims to achieve the following:

1. To improve the resource efficiency of the entire event and supply chain management;

2. To reduce negative environmental impacts such as carbon emissions, waste ending up on landfill sites and the effect on biodiversity;
3. To increase economic, social and environmental benefits (triple-bottom line);
4. To enhance the economic impact such as local investment and long-term viability;
5. To strengthen the social impact such as community involvement and fair employment;
6. To improve sustainable performance within an available budget;
7. To present opportunities for more efficient planning and use of equipment and infrastructure,
8. To reduce the negative impact on local inhabitants;
9. To protect the local biodiversity, water and soil resources;
10. To apply the principles of eco-procurement of goods and services; and
11. To raise awareness of sustainability issues.

Part of the 2010 soccer World Cup organisational process was the development of a greening programme. The greening programme took on a relatively low profile and did not command a separate budget stream. Host cities signed a FIFA agreement in 2006 that included a broadly worded commitment to environmental protection, in which they undertook to carry out their role in a manner which embraces the concept of sustainable development that complies with applicable environmental legislation and serves to promote the protection of the environment (Mander & Roberts, 2010).

This commitment was eventually embodied in the Green Goal 2010 programme, inspired by the example of the 2006 German World Cup Green Goal initiative, which had been sponsored by UNEP and claimed to have delivered a carbon-neutral event and substantial water, energy, transport and waste efficiencies (UNEP, 2005). The Green Goal 2010 programme also sought to mitigate the adverse environmental impacts of the tournament, but placed a greater emphasis on using the greening initiatives to inspire and promote sustainability in the country and securing a positive environmental, social and economic legacy for the tournament (DEAT, no date, p. 86).

The Department of Environmental Affairs and Tourism (DEAT) produced a National Greening 2010 Framework which, formed “an integral part of the response to adapting, as a nation, to the challenges of global climate change and more sustainable growth and development" (DEAT, 2009:3). It detailed six focus areas of waste, energy, transport, water, biodiversity and responsible tourism, together with four cross-cutting themes of carbon off-setting and emissions reductions, sustainable procurement, job creation and communication and outreach. The envisaged outcomes of the strategy were to reduce the environmental footprint of the event, to leave a green legacy, to communicate the importance of environmental management to citizens and to reduce carbon emissions (DEAT, 2009:11).

However, this framework arrived rather late in the preparatory process, and had a limited impact on the programmes of the host cities. It did set out a comprehensive and ambitious vision for the greening of major international events. The concept of the Green Goal initiative was developed by the German World Cup hosts in 2006. Their widely praised programme had proclaimed the event to be carbon neutral through large accredited emissions offset projects in India and South Africa and impressive local successes in waste minimisation and getting people out of cars and onto public transport, bikes and pedestrianised routes (Schmidt, 2006; UNEP, 2005).

The context of the 2010 South African World Cup was very different. First, social and economic development was a greater priority than environmental mitigation. Sustainability assessments for the new stadia explicitly highlighted the triple bottom line of economic, social and environmental dimensions (UEMP, 2010,:5) and hopes were high that the tournament would deliver jobs, infrastructure improvements and a tourism boost. Secondly, it was recognised from an early stage that the carbon dioxide emissions of the 2010 World Cup would vastly exceed those of the 2006 World Cup. Consultants estimated the tournament would produce 896 661t CO_2e, more than eight times the estimated emissions of the 2006 FIFA World Cup in Germany, with an additional 1 856 589t CO_2e contributed by international air travel (Econ Po¨yry, 2009:5). This increase was due largely to the absence of high-speed rail links in South Africa (meaning most visitors flew between host cities), the anticipated increased time spent in rented accommodation (as international tourists stayed for longer) and the need to construct five new stadia and renovate five others (Econ Po¨yry, 2009:5–6). The cost for off-setting this carbon footprint has been variously estimated at between $5.4 and $12 million, even excluding the emissions from air travel and whereas in 2006 FIFA contributed to the costs of off-setting the tournament, in 2010 there was little enthusiasm for off-setting the national carbon footprint (Cape Town, 2008:17; Econ Po¨yry, 2009:6, 57; Nord and Luckscheiter, 2010,_21-22;

Ozinsky, 2010-8). A further defining feature of the 2010 greening programme was the marked absence of strategic leadership or a coherent vision from national government (at least until quite late in the process, when the National Greening 2010 Framework was released) or from FIFA or the Local Organising Committee. Most of the initiatives for the Green Goal 2010 programme, therefore, came from the host cities and were managed by the existing structures of municipal government.

According to the National Greening 2010 Framework, "the primary task of implementing Greening 2010 lay with the nine cities which hosted the 64 matches of the World Cup", and the host cities also had the primary responsibility of funding the programmes (DEAT, 2009:22-23). Thus, in the aftermath of the tournament, the DEAT conceded that the success of Green Goal "differed from host city to host city as they had varying levels of technical and financial capacities" (Modise, 2010). As a result, there were huge discrepancies in implementation between very active municipalities such as Cape Town and Durban and less proactive host cities such as Rustenburg or Mangaung (Bloemfontein), many of which lacked the resources to devise and implement a substantial greening programme (Ozinsky, 2010). The absence of a coherent and driving national vision behind the Green Goal project from an early stage, or an integrated communication, branding and marketing strategy, doubtlessly detracted from the catalytic potential of the World Cup mega-event.

The environmental legacy opportunity presented by implementing a Green Goal programme is two-fold. Firstly, the high media profile of the World Cup can be leveraged to create awareness for the environment, leading to changed behaviour patterns and reduced consumption of critical resources such as water, electricity and fuel, and biodiversity protection. The second legacy opportunity is concerned with infrastructural improvements, including city beautification and tree planting, new public open spaces and a modern new stadium with a significant green profile. (Cape Town, 2008:1).

It will not be acceptable to run a mega-event with a poor environmental profile. Such an event would simply not be called "world-class"' (Cape Town, 2008:3). There must exist a wide-range of pre-existing initiatives to promote environmental sustainability. The World Cup had "an impetus to enable the aggressive implementation of these plans" (Cape Town, 2009:10). Cape Town's Green Goal programme comprised approximately 43 separate projects, from waste minimisation and recycling initiatives, to biodiversity protection and education campaigns, to city beautification and public transport improvements. Durban's greening programme also spent large amounts of money and set ambitious goals, with the greening of new stadia receiving considerable attention (Durban, 2010; Mander and Roberts, 2010). The preparatory processes in cities like Cape Town and Durban, which drew on earlier experiences of event greening (such as the strategic environmental assessment for the 2004 Cape Town Olympic bid and the 2006 ICLEI World Congress), provided impetus and direction for the subsequent (and rather reactive) National Greening 2010 Framework (Interview, Gerrans, 2010; Interview, Granger, 2010). Projects implemented under the Green Goal 2010 initiative across South Africa:

1. Waste
2. Energy
3. Transport
4. Water
5. Biodiversity
6. Responsible tourism
7. Carbon off-setting and emissions reduction
8. Sustainable procurement
9. Communications and outreach
10. Governance

Questions have, of course, been raised about how appropriate it was to spend millions of rands on iconic stadia when many of South Africa's population lacked safe and secure housing. The economic sustainability of these venues has also been questioned, given that previous experiences in Japan and South Korea after 2002 revealed a propensity for World Cup venues to become expensive white elephants (Pillay and Bass, 2008:337-338). The fact that Cape Town, for example, already had large stadia in Athlone and Newlands and that local soccer teams cannot attract crowds anywhere near the size to make Green Point profitable, was a source of public concern both before and after the tournament. This was exacerbated by the suggestion that it was FIFA's desire to have the iconic Table Mountain in the background that led to the controversial decision to build a new stadium at Green Point, rather than renovate or expand existing stadia (Alegi, 2008; Bob and Swart, 2009; Schoonbee and Brummer, 2010).

The spectacle of vast sums of taxpayers' money being siphoned into world class stadia in prime areas of still deeply divided South African cities, seemed, for many, to encapsulate the reality of the 2010 World Cup, namely the overriding preoccupation with ensuring a successful mega-event, with corresponding neglect of longer-term considerations of sustainability, justice and equality. There were calls for social movements to protest against the forms of inequality and exclusion that were perpetuated by the tournament, drawing inspiration from the "World Conference against Racism (WCAR) and World Summit on Sustainable Development (WSSD) when thousands took to the streets" (Desai and Vahed, 2010:164). For many social movement activists, the very suggestion that the World Cup could be made environmentally and socially sustainable was laughable. As such, they saw the Green Goal initiative as little more than "green-wash".

The tree-planting and recycling bins associated with the Green Goal project did little to mitigate the adverse effects of a mega-event characterised by the diversion of scarce public funds into white elephant stadium construction, the forced removal of communities, the quasi-imperial control of FIFA and their multinational partners over every aspect of the tournament marketing and the over-hyped anticipation of economic benefits and national unity (Be´nit-Gbaffou, 2009; Pillay and Bass, 2008). It seemed inevitable that those who gained most from the World Cup would be the wealthiest communities and the largest corporations (Desai and Vahed, 2010:157). It was further alleged that the distraction of the World Cup had also meant that departmental budgets not related directly to 2010 were being slashed and that FIFA's demand that hosts "render the city as attractive as possible" meant that planned infrastructure replacements or upgrades had to be shelved for quicker and cheaper repairs, prioritising short-term appearances ahead of longer term sustainability and value for money (Cape Town, 2010:27). From such a perspective, the 2010 World Cup appeared to be a disaster for environmental politics in South Africa and for broader visions of progressive sustainable development.

DIVESTMENT AS A WAY OF EVENT-GREENING AND ENVIRONMENTAL SUSTAINABILITY

Many mega-events are not repeat editions for hosting nations and cities. They are designed for a single "one-time-only" purpose. Repeat editions such as garden festivals, international trade fairs and church conventions whose purpose maybe regeneration, may recur in the same place twice or annually. As for non-repeat editions that are designed for a single "one-time-only" mega-events that do not recur regularly such as the Olympic Games and soccer world cups may leave substantial legacies in terms of buildings and facilities, some will only leave social legacies.

If the event has been a one-off, with regeneration or re-use in mind as objectives for the site, there is need for divestment. The divestment needs to be planned into the process at the onset. It will be essential to hand over, not just the site, but also the knowledge that goes with it, about its nature, utilities, environment, problems and limitations. The type of post-event use of an event site, where regeneration or re-use has been planned, may vary, as may the kind of organisation taking over the site. In the case of the series of garden festivals held in the United Kingdom in the early 1990s, most sites were handed over to local development agencies, whose task was to re-use the sites to create employment and other positive development outcomes and to retain part of the site as public open space parkland or nature reserves. For more recent development of event sites, such as the Millennium Dome site and parts of the Hanover 2000 site, development companies were allowed to purchase these with various projects in mind. In the case of the Dome, perhaps to create a casino (the latest, in 2004, of a long line of unfulfilled proposals)

CHAPTER CONCLUSION

There is currently very stiff competition between countries and cities to host mega-events. Mega-events such as international church conferences, sporting events like the Zonal Games, the Africa Cup of Nations, the UEFA Championships League and FIFA World Cup and the Olympics Games have a common feature of pulling large crowds. Some events could adversely affect local business or cause private damages (Davidson and Rogers, 2006; Getz, 2005). In fact, referring to "displacement" effect caused by mega-events, Getz (2005) pointed out that some activities associated with mega- events, as traffic congestions, closed roads, higher security or restricted access to some public areas in the city could seriously distract "normal business" activities (non-touristic).