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**Large Scale Sports Events:
Event Impact Framework**

Report to UK Sport

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CONTENTS

1	Introduction	1
2	Considering monitoring and evaluation	3
2.1	Nature and scale of events	3
2.2	Undertaking monitoring and evaluation: considerations	4
3	Sports events: presumed impacts	6
3.1	A logic model	6
3.2	Economic or social capital?	7
4	Environmental Impact: the ‘dark side’ of economic impact	9
4.1	Introduction	9
4.2	The multiplier	10
4.3	Environmental Impacts	13
4.4	Conclusions	15
5	Publicity and place marketing: indirect economic benefits	17
5.1	From viewing to visiting	17
5.2	Approaches to measurement	21
5.3	Conclusions	22
6	Volunteers: part of the ‘soft-infrastructure’	23
6.1	The ‘soft-infrastructure’ of sports events	23
6.2	The economic value of volunteers	23
6.3	Collecting data	24
7	Sports development	25
7.1	Introduction	25
7.2	General participation	25
7.3	Sports-specific development	26
7.4	Conclusions	28
8	Intangibles: the new ‘soft economics’ agenda?	29
8.1	From economic impact to psychic income	29
8.2	Contingent valuation method	29
8.3	Opinion surveys	31
9	Conclusions and recommendations	33

A postscript	36
References	37
Literature Reviewed	41
Table	
Table 1: Summary of expected environmental impacts in London	10
Figures	
Figure 1: Sports events: a scoreboard	6
Figure 2: Wider economic benefits: the Economic Multiplier	11
Figure 3: Media coverage and (presumed) impacts	17

1 Introduction

Although large scale sports events can act as a catalyst for wider urban regeneration schemes, there is substantial scepticism about the claims made for the direct and indirect economic impact of such events. This scepticism relates both to the motivations of those making such claims (mostly as part of the lobbying process in advance of the event) and a series of technical, econometric, concerns about the basis of such calculations and the use of multipliers.. Perhaps for this reason increasing emphasis is being placed on ‘non-economic’, intangible benefits, benefits (Johnson and Sack, 1996). For example, Dwyer et al (2000 176) argue that ‘many events incur a financial loss to organisers but produce net benefits to the community’.

For example, Crompton (1995; 2004) lists such benefits as increased community visibility, enhanced community image and psychic income to city residents. Another reason for this increased emphasis is a growing need to secure public support for often very large scale investments – to emphasise the public good nature of such investments which are nearly always subsidised from taxation or Lottery funds by people who will have very little direct contact with the event.

However, work on so-called intangibles is not well developed (especially in relation to sports events). There is a substantial body of academic literature reviewing what we do not know (which is a lot). Further, what we need to know is much too comprehensive and methodologically sophisticated for a user-friendly manual and the nature of available monitoring and evaluation budgets (e.g. Ritchie, 1984; Gibson, 1998; Getz, 1998; Hunn and Mangan, 1999; Mules, 1999; Fredline et al, 2003).

There is also a substantial body of literature on the negative impacts of large scale sports events, ranging from attacks on civil rights, the harassment of the homeless, the destruction of low cost housing and property price inflation (Centre on Housing Rights and Evictions, 2007a; 2007b) to crowding out of local residents, increased crime, prostitution and traffic congestion and disruption of business.

However, this is not intended to be an academic exercise and is more of an attempt to explore the possibility of the development of a user-friendly, practical and feasible guide to measuring some of the impacts of various scales of events. Consequently, the emphasis is largely on the immediate and (hopefully) positive non-economic impacts of events – although any such measurement will inevitable also include some negative assessments.

Because of the issues to be addressed, the literature drawn on is wide-ranging and diverse, with most of the key development work being in the areas of tourism studies and the more general event-management literature. For this reason this does not claim to be a comprehensive state-of-the-art review of the wide ranging (and often technical) debates and perspectives to be found in the academic literature - this would require an expert in each field (something to bear in mind if you decide to proceed with a manual) Rather, what follows is based on a reasonably informed selection relating to the core claims about the non-economic impacts of sports events and a broad review of limited research and related issues.

Also, because so little directly relevant research has been undertaken, at points we explore *theoretical* issues. We have done so because it is imperative that any research and evaluation is based on some degree of understanding of the assumptions being made – undertaking monitoring and evaluation without some understanding of what is being assumed leads to poor design and wasted investment. Also such understanding is central to the interpretation of data and the issue of attribution of cause is an issue throughout.

2 Considering monitoring and evaluation

2.1 Nature and scale of events

The nature of any monitoring and evaluation, and the extent to which it is feasible or economic to undertake, will depend largely on the nature and scale of the event. In this regard it is worth outlining the typology of sports events produced by the Leisure Industries Research Unit (e.g. Gratton and Taylor, 2000; Gratton et al, 2001; Shibli and Gratton, 2001; UK Sport, 1999; UK Sport, no date). These publications bring some clarity and precision to the often overly generalised debates and assertions about the economic importance of sports events. They do so by identifying *four broad types of sporting events*, based on the scale of the event, the nature of media coverage and the balance between spectators and competitors. For our purposes, it is also worth considering the balance between local and non-local spectators (which is also a central concern for economic impact studies).

The four broad types of events are as follows:

(i) Spectator-dominated mobile events

The most lucrative events are those over which there is so much competition - irregular, one-off major international *spectator-dominated* events. These include the World and European championships in certain sports (e.g. athletics), the World Cup and European Football Championships (usually based on existing or upgraded facilities), and the Olympic Games and Commonwealth Games - usually requiring major infrastructural and facility development. Such events often act as a catalyst for substantial urban regeneration, require the recruitment and training of large numbers of volunteers, attract world-wide media coverage (sometimes associated with systematic strategies of re-imaging/re-branding), attract a large proportion of non-local spectators and are associated with an expectation of longer term tourism development.

(ii) Spectator-dominated fixed events

The second tier of events is usually not subject to bidding and includes major *spectator events* that are part of an annual domestic cycle (and usually have a fixed location) – in the UK this includes the FA Cup Final, Six Nations Rugby matches, Wimbledon and cricket Test Matches. Because these are fixed and regular events it is relatively easy to predict the number of spectators, the extent of media coverage and, broadly, where spectators come from (with a large proportion of non-local spectators). Consequently, such events provide a relatively stable and predictable environment to explore some aspects of non-economic impacts. In this regard they would also provide a useful environment to pilot a proposed manual.

(iii) Equal mix of spectators and competitors

The third tier tend to have a more *equal mix of spectators* and (usually low spending) *competitors* – world and European Championships in a range of less popular events (e.g. gymnastics, badminton). The importance of these events is that they are the ones that most cities (or countries) are able to bid for and may often form part of a broader

strategy to establish a ‘city of sport’ image. However such events have uncertain economic impacts, spectator numbers and media interest and judgements about monitoring and evaluation will be event (or strategy)-specific.

(iv) Participant dominated

The final tier, with limited economic activity and little media coverage, are those events which tend to be *participant dominated* (with families, friends and coaches) – national/regional championships in any sports. Although these are low cost, they produce limited economic activity, little media interest (especially outside the local area) and a limited number of non-local spectators. It seems unlikely that it would be feasible to undertake substantial monitoring and evaluation of such events (unless they are part of a broader development strategy), although certain limited aspects of impacts may be of interest.

2.2 Undertaking monitoring and evaluation: considerations

The event typology indicates that judgements about monitoring and evaluation will depend on the nature and scale of events (and their place in broader development strategies). In particular, the issue of costs and benefits is a core consideration – it is unlikely that small investments in a one-off small event would provide a justification for a substantial programme of monitoring and evaluation (although a user-friendly manual might greatly reduce the costs). In this regard, Valerio (1999) offers a rough guide of 1 per cent of a marketing budget as a budget for monitoring and evaluation. Although there is no *rule*, the Scottish Executive would commit between 4 and 5 per cent of a total budget to monitoring and evaluation. But, again, much will depend on the role of the event in wider and longer-term strategies.

Consequently, a number of issues need to be considered before a decision is made to commit to a programme of monitoring and evaluation. These include:

- (i) Is the event part of a systematic strategy (e.g. sports development; tourism development), or is simply part of a hopeful ‘trickle down’ approach, in which the supposed benefits of an event are simply assumed?
- (ii) Does the event have a precise set of aims and objectives that can provide the basis for systematic, and therefore cost-effective, monitoring and evaluation?
- (iii) Is the presentation of the event (especially via media coverage) part of a systematic approach to *place marketing* and re-imaging? Is there an attempt to promote a destination rather than an event or venue?
- (iv) If it is part of a re-imaging strategy, is this aimed at specific target groups (e.g. young ‘sports tourists’), or is it simply a more general ‘shot gun’ approach?
- (v) It is a one-off event or part of a more general programme of events? For example, Valerio (1999) argues that, except for the most exceptional

events 'it usually takes prolonged and more extensive marketing ...to shift perceptions'.

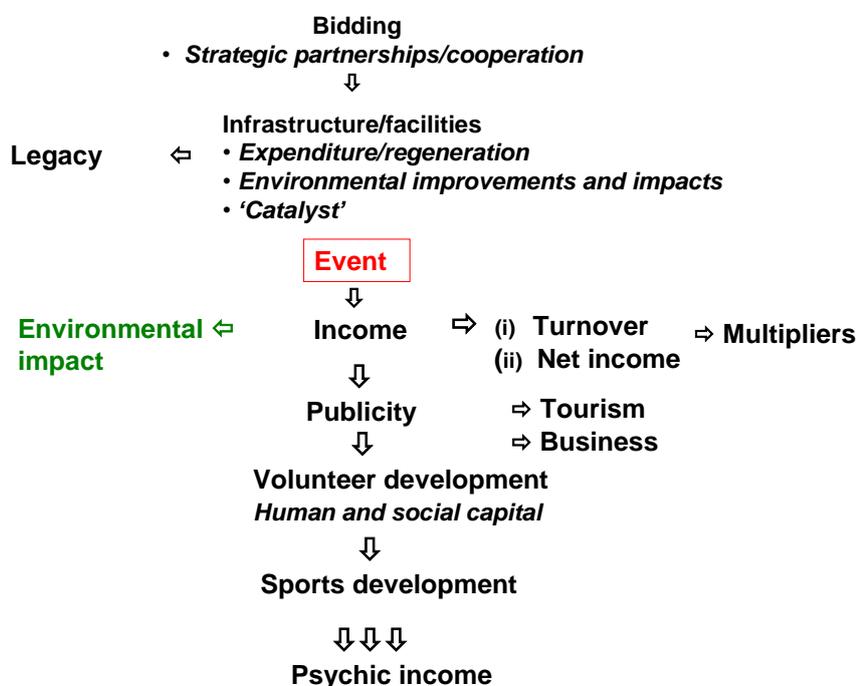
- (vi) What is the scope and range of outcomes that could reasonably be included as 'event effects'?
- (vii) What is the presumed geographical area for the impact of the event?
- (viii) What is the timescale for the measurement of such effects (e.g. tourism visits)? For example, Preuss (2004: 42) suggests that it can take up to 18 years after an Olympic Games to make a final estimate of the associated income increases- 'long after the Games there will be increased demand depending on the amount of long-term investments. These are, for example, the operation and the maintenance of sports facilities or the increased visitor numbers due to up-valued attractions and the Olympic image'.
- (ix) To what extent are you concerned with 'dis-benefits', such as environmental impacts? For example, two key works by Higham (1999) and Fredline (2005) place great emphasis on the negative aspects – crowding, infrastructural congestion, exclusion of residents due to costs, disruption of local lifestyle, perceived loss of control over local environment and suppression of human rights (a feature of many Olympic preparations). Fredline et al (2003) developed a 42 item list of perceived social impacts of events.

3 Sports events: presumed impacts

3.1 A logic model

Figure 1 presents a logic model for the range of impacts often associated with sports events. It is useful to relate this to the typology of events outlined above. Clearly for the large, international spectator-dominated events the impacts start long before the actual event – bidding for the Olympics begins up to 10 years before the event and the development phase lasts for at least seven years. Consequently, as Figure 1 indicates, the processes of coalition building and partnership formation associated with the initial bidding process may contribute to the development of various forms of new networks, social capital and certain types of commercial and planning expertise - even an unsuccessful bid can have positive longer. Further, for major events the development of the physical, economic and environmental impacts associated with infrastructural and facility development precede the actual event. Such events are viewed as having a catalytic effect, with Preuss (2004) suggesting that the Munich Olympics (1972) accelerated urban development plans (especially for transport) by 15 years and Barcelona’s already existing extensive redevelopment plans were advanced by 10 years. In the short term many of these impacts are likely to be negative (e.g. disruption of business and daily life; displacement of businesses and homes and so on), although the theory is that they lay the basis for the longer term physical and environmental legacies (although the evidence is that this rarely occurs without careful long term planning).

Figure 1: Sports events: a scoreboard



However, for the majority of events this ‘pre-event’ stage is minimal or non-existent and concern is concentrated on more directly event-related impacts. The immediate one is clearly the income derived from the event, although there are a number of

debates about how such economic impacts should be measured (with simple turnover being regarded as a deficient and misleading measure). Associated with events is also the ‘dark side of economic impact’ – the additional environmental consequences of travelling to events and the energy consumption and waste products generated by visitors. The key rationale for many events is hope that the associated publicity will raise the profile and ‘brand recognition’ of cities (although media coverage will vary substantially according to the type and scale of the event). This media coverage is then assumed to lead to increased tourist visits in both the short and long term.

Most sporting events require volunteer labour (rarely taken into account in estimates of the economic cost) and they often have to undergo some sort of training and development. This can be regarded as an event-related contribution to the development of a local social and human capital (although this is most likely to be of value if there is a longer term volunteer development programme). Although rarely the key rationale, it is often assumed that sporting events will make a contribution to developing the relevant sports and encouraging increased participation. Finally, there is the issue of so-called ‘psychic income’. Partly because of the need to generate public support for investment in large scale events and growing scepticism about the scale of economic impacts there has been an increased emphasis on so-called intangibles, or the ‘soft economics agenda’ – the ‘feel good’ factor, the sense of civic pride and perhaps increased social cohesion which are presumed to result for such events.

In the rest of this report we explore these various impacts in more depth, especially our ability to measure them.

3.2 Economic or social capital?

One non- (or quasi)-economic outcome at the bidding, planning and development stages is often the *strategic partnerships* and extended social and business networks associated with bidding or staging events. In this regard Solberg and Preuss (2007) refer to the development of the knowledge, skill and partnerships necessary to bid for events. As part of the ‘soft-infrastructure’ - which also may result in an ability to sell such expertise to others.

Further, it could be argued that such partnerships and skills are more important if they are used for wider, non-sporting purposes, such as regeneration programmes. For example, Glasgow City Council are claiming that the partnerships established for the Commonwealth Games bid will be maintained and used for community development and regeneration purposes – however, this has yet to be proven.

Nevertheless it is clear that the partnerships and alliances required to bid for and stage events provides the possibility of the development of forms of both *bridging* and *linking social capital*, which the current government regards as being central to processes of community and economic regeneration. In other words it is possible that, properly organised, sports events can contribute to much more than physical regeneration. For example, Misener and Mason (2006), in an analysis of the Manchester Commonwealth Games, argue that such processes can be developed to maximise their impact on social regeneration: (i) community values should be central to all decision-making processes – i.e. sporting events need to embrace the core

values of residents, community groups and neighbourhood associations; (ii) various stakeholders, particularly community interest groups, should be involved in strategic activities related to events (i.e. bid process, management, legacy); (iii) collaborative action should empower local communities to become agents of change, ensuring linkages between community members and local elites and power structures (this can provide knowledge and a framework for further participation in community building); (iv) open communication and mutual learning throughout strategic activities related to events to minimise power brokering and community exclusion

Business leveraging

Related to this is the issue of business networking or business leveraging (O'Brien, 2006) – i.e. using sports events for business networking and the facilitation of international trade links. The template here seems to be *Business Club Australia* (BCA), established for the Sydney Olympics by the Australian Trade Commission.

BCA is a free membership-based business-matching programme that has been designed to create international business opportunities around the staging of major sporting events. The BCA has also operated at the Rugby World Cup 2003, Melbourne Commonwealth Games, the 2006 Melbourne Cup Carnival and the 12th FINA World Swimming Championships.

BCA claim that events organised prior to and during the Melbourne 2006 Commonwealth Games included 32 industry and country-themed events in Australia (during the Games) and 25 events across 11 countries (in the lead up to the Games). It is claimed that the business outcomes of these events include A\$7.0 million in export sales by 25 companies. These included training and development packages (Sri Lanka) and wine (Singapore), 13 companies having verbally confirmed sales, while a further 141 expect sales in the following three years.

In terms of lobbying and learning, the documentation of such processes should be relatively simple. However, it probably only has value as part of a programme of events - of course issues of attribution and measurement of effectiveness present some challenges.

4 Environmental Impact: the ‘dark side’ of economic impact

4.1 Introduction

We have combined these two themes because, although our main concern is not with the measurement of economic impact – this is dealt with via the UK Sport Measuring *Success* publications – these issues are closely related and use broadly similar data. From a methodological viewpoint it is useful to view environmental impacts as the ‘dark side’ of economic impact. Whereas economic impact and multiplier studies estimate the level of retained income spent on goods and services at an event, environmental impact studies use similar data to estimate the environmental impact of visitor’s *resource and energy consumption*. Therefore, the data in economic impact studies are viewed not in terms of expenditure, but in terms of the consumption of energy and the production of waste. Consequently, although it is unlikely that many events would commission a specialist environmental impact study, those who undertake an economic impact study will collect much of the data required for the additional impact work.

Most discussions of environmental impacts, especially in relation to large scale events, tend to emphasise the longer term infrastructural and environmental improvements. For example, Preuss (2004) points out that both the Rome and Tokyo Olympics led to new water supply systems and for the Seoul Olympics the Han River was cleaned and an environmental development plan led to 389 new parks. This approach is also related closely to arguments about sporting legacy and access to a range of high quality sports facilities. It is a relatively simple matter to list such improvements and does not require a manual to aid data collection.

However, there is increasing concern with the possible negative environmental consequences of large scale events. For example, recent statements about the restriction of car travel to the London Olympics and the Glasgow Commonwealth Games indicate an increased concern with broad environmental impacts. That this is an emerging area of concern is indicated by Laesser et al’s (2003: 146) work to develop an *impact scoreboard* for the economic, social and ecological impacts of seven Swiss sports events. Their relatively simple *ecological scoreboard* consists of the following:

- Transport: overall distance (person kilometre).
- Transport: overall distances per person
- Energy: overall use of energy
- Energy: overall use of energy per person
- Waste deployment at event
- Waste deployment at event per person

The precise methodologies for data collection and analysis are not listed in the published material. However, it would appear that most of it was collected via surveys of organisers, ‘auxiliary personnel’ and spectators. It is relatively clear how issues of transport and waste can be assessed. It is not clear how overall energy was assessed (although we will address this issue below).

The recent PricewaterhouseCoopers' (2005) report for the DCMS on the impact of the London Olympic Games addresses a much wider range of ecological concerns (see Table1).

Table 1: Summary of expected environmental impacts in London

Impact	Pre-event (2005-2011)	During event (2012)	Legacy/post-event (2013-2020)
Land/water/air	Negative	Positive	Positive
Biodiversity/ecology	Negative	Negative	Positive
Energy	Neutral	Positive	Positive
Waste	Negative	Negative	Positive
Culture/heritage/built form	Neutral	Positive	Neutral

It is worth noting that in Table 1 the preparation for the event largely generates substantial negative impacts, with only two out five factors also negative during the period of the Games. As we did not have access to the main report we cannot comment on the nature of the assumptions/methodologies underpinning these estimates - or the precise meaning of positive/negative. However, we can explore some of the methodological issues via a study of the ecological impact of the 2004 FA Cup Final between Manchester United and Millwall at the Cardiff Millennium Stadium (Collins et al, 2007).

Before turning to this study it is worth taking a brief diversion to consider some current issues relating to the assessment of economic impacts (especially of larger scale events) as the resolution of these have implications for assessing environmental/ecological impacts. As we are not econometricians this discussion is inevitably lacking in technical detail (an issue which would need to be addressed in any subsequent manual)

4.2 The multiplier

Once we move beyond simple (and misleading) use of volume of sales and/or turnover to estimate the 'economic impact' of an event, the key mechanism via which events are supposed to produce economic returns is known as the *multiplier*. Figure 2 illustrates that multiplier analysis is based on the notion of a *chain of spending and re-spending*. The construction of facilities and the holding of large scale events involve spending in the local economy (e.g. wages, purchase of materials, spectator expenditure). In turn, this expenditure becomes income to others (local workers and businesses), who in turn spend their (possibly increased) wages in the local economy and this becomes someone else's income and so on.

Figure 2: Wider economic benefits: the Economic Multiplier

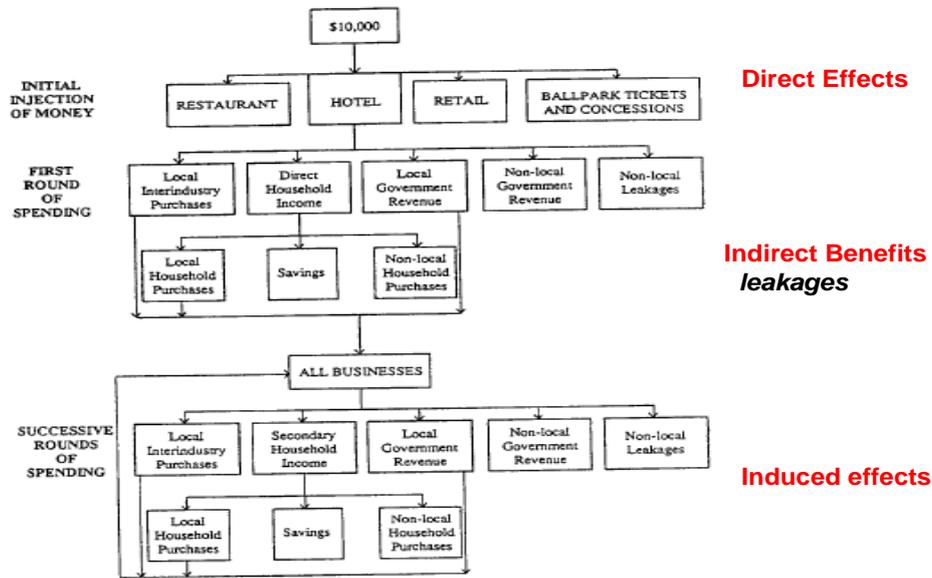


Figure 1 — Illustration of how the multiplier concept operates.

Crompton (1995) and Szymanski (2002) provide comprehensive critiques of the limitations of many such economic impact studies and here it is worth listing six of Crompton’s (1995) 11 ‘common misapplications’.

- The use of total volume of sales instead of household income multipliers. This ignores the issue of *leakages*, as only money which remains in the host community should be counted.
- Using incremental instead of normal multiplier coefficients. Whereas the normal multiplier expresses the total income created as a multiple of the initial cash injection (and includes leakages), incremental multipliers express the total income created as a multiple of the direct income, providing a higher total and making a better, if misleading, case (Szymanski, 2002).
- Failing to define accurately the impacted area. To quote Crompton (1995: 25) ‘conventional wisdom posits that the larger is the defined area’s economic base, then the larger is likely to be the value added from the original expenditures and the smaller the leakages that is likely to occur’.
- Including local spectators. The true economic impact of an event relates solely to the *new money* injected into an economy by visitors. Only spectators who reside outside the relevant area and who visit for the express purpose of attending an event can be included – local residents’ expenditure is a recycling of money which would have been spent elsewhere in the local economy. This, of course also raises, the issue of *time-switchers* and *casuals* and the *crowding out* of visitors and residents.

- Using ‘fudged’ multiplier coefficients. Crompton (1995) argues that although multipliers *should be calculated for each event*, limited resources and/or expertise often lead to the adaptation of other frequently high and misleading multipliers. For example, research suggests that it may be misleading to make revenue projections based on *average tourist spend* as there is some evidence that sports tourists spend less (French and Disher, 1997) and are less likely to visit popular tourist destinations (Economic Research Associates, 1984).
- Measuring benefits while omitting costs. Most assessments of the economic impact of events ignore such things as the negative impact of increased congestion on business and tourism (before and during games), increased accommodation and food prices, *environmental damage*. In other words, economic impact studies are not cost-benefit analyses.

Multipliers are derived from *Input-Output tables*, which break the economy down to display transactions of all goods and services between industries and with final consumers, within a given time period. It shows the various sectors or industries that make up the national/regional economy and how these industries inter-link their purchases and sales relationships. The calculations are based on the *value-added* at each stage of production (to avoid double counting the value of goods at each stage). The application of input-output analysis involves using the information on demand (e.g. surveys of participants/ business surveys) to run the input-output model.

Multipliers provide a guide to the level of flow-on expenditure that can be expected to be generated by a one-off event. Related to this is the issue of *leakage* – at each stage in this cycle part of the original spending is not re-spent in the local economy. For example, goods and services might be imported from outside the local economy (especially if it is a small area), wages might be spent outside the local economy, profits (e.g. in national or international hotels) exported and some of the increased income will go in tax and/or be saved. In such circumstances the proportion of the *additional visitor spend* retained in the economy may be low (e.g. Gratton and Taylor (2000) used a multiplier of 0.2 for their work on events on Sheffield, Glasgow and Birmingham – assuming that only 20 per cent of the additional income was retained).

However, there is widespread dissatisfaction with this approach (Crompton, 1995; Jones and Munday, 2004; Hunn and Mangan, 1999; Mules, 1999) associated with a range of highly technical concerns which we are not equipped to explore. However, a key concern relates to the difficulty in allocating the various different rounds of expenditure to various industry-sectors (and assessing the multiplier) - the tourism industry does not have easily identified borders and is not identified as such in input-output tables.

Jones and Munday (2004:119) refer to:

“...the paucity of necessary statistical information on the size and transactions of industries with a significant degree of tourism dependencethe difficulties in assessing the size and contribution of tourism activity ultimately lead to uncertainty over the role of tourism in strengthening the development prospects of regions.”

In this regard it should be noted that many experts suggest that input-output multipliers tend to over-estimate the economic impact of events and prefer the more expensive and complex *computable general equilibrium models* (Mules, 1999). For example, this is the approach used by Adam Blake (University of Nottingham) and reported in the PricewaterhouseCoopers study for the DCMS and which caused such controversy by illustrating that the Olympics would draw resources away from the regions, rather than vice versa.

To address some of the limitations of input-output analysis, DCMS and the North West Region Development Agency, have commissioned research to develop sets of *tourist satellite accounts* for the UK and the English regions. This approach should assist greatly the development of accurate multipliers and also provide a more accurate basis for event-specific environmental accounting

4.3 Environmental Impacts

Whereas economic impact and multiplier studies estimate the level of *new retained income* spent on goods and services associated with an event, environmental impact studies use similar data to estimate the environmental impact of visitors' consumption of energy for various goods and services and the production of waste.

Based on the work of Collins et al (2007), the required data are similar to that collected as part of an economic impact study:

- Travel to the event venue. The distance and mode of travel produce various levels of *carbon emissions* (much more than would be generated if spectators had stayed in their home area).
- The use of local transport (again with its *emissions*).
- Food and drink. Although this is a major component of economic impact analyses, from this perspective it is viewed in terms of the extent to which it is produced locally and is *processed* (highly likely with convenience foods) and a high energy consumer. The packaging also produces substantial waste.
- Merchandise and associated energy production and transport costs (some estimation is made as to the extent that this is imported from outside the region and therefore not part of the local environmental impact).
- Accommodation. All types of accommodation make demands on local energy (water, electricity).
- Infrastructure and event venue. Estimates can be made based on the type of materials and the life-span use

Although much of these data can be collected via an *economic impact survey*, the Cardiff study also collected information from bus and local transport companies, local businesses and tourist accommodation data (which are relatively easy to obtain from local tourist boards in a standardised form).

There are two broad approaches to such estimates – *environmental input-output (ENVIO) analysis* and *ecological footprint analysis*. ENVIO analysis is broadly similar to economic impact/multiplier analysis in that it seeks to examine the indirect and induced effects of event expenditure. For this perspective the input-output framework is used to generate the direct and indirect volume of the given pollutant generated by changes associated with the increased demands generated by event visitors – ‘the framework allows one industry’s production to be linked to another industry’s pollution creation’ (Collins et al, 2007: 462).

Collins et al (2007) developed input-output tables for Cardiff via a reduction of the Welsh tables (from 74 industries to 12). They applied regional pollution coefficient developed by the Environment Agency to the Cardiff tables to assess the impact of the additional spending and consumption associated with the FA Cup Final. The final estimates are as follows:

Input-output approach (locally produced good/services): Carbon emissions

- ⇒ £1.5 million locally produced goods ⇒ 123 tonnes
- ⇒ Indirect output: 250 tonnes
- ⇒ Additional household consumption: 187 tonnes

Total additional carbon emissions: 560 tonnes

Ecological footprint analysis

Here it is best to quote Collins et al (2007: 463):

“The starting point for the ecological footprint concept is that there is a limited amount of bioproductive land on the planet to provide for all human resource demands. The footprint is measured using a standardised area unit equivalent to a world average productive hectare, or ‘global hectare’ and is usually expressed in global hectares per person. The ecological footprint is derived for a defined population usually for one year by estimating the area of bio productive land and sea required to support their resource consumption using prevailing technology – for example the demands of that population in terms of their food, travel and energy use.”

Therefore Collins et al (2007) seek to estimate the environmental impact of visitor resource consumption via data on their transport, food and drink, waste and also stadium infrastructure

National Footprint Accounts are calculated based on a country’s domestic production, imports and exports of primary and secondary products plus an estimate of the embodied energy of secondary products. It is also possible to estimate intermediate resources flows to be assigned to final consumption. The total UK footprint is disaggregated by economic sector and reallocated to final demand via input-output analysis. It is also possible to breakdown final demand categories to include detailed household consumption activities – enabling sub-national calculations (and providing

a basis for comparison of tourist consumption with average home based consumption, to estimate *additional* consumption).

The ecological footprint of tourists takes the form of a satellite account and, in the case of the FA Cup Final, a bottom-up approach was used via the locally collected data. The final estimates (which are regarded as under-estimates) are as follows:

Ecological footprint

- ⇒ Additional footprint: 2633 global hectares/0.0364 gha/visitor
- ⇒ Overall: 7 times greater than at home location
- ⇒ Travel: 55% of footprint, 14 times greater
- ⇒ Food and drink: 4 times greater than average
- ⇒ 59 tonnes of waste

The above ecological impacts need to be assessed in the context of the fact that the *retained additional income* from the FA Cup Final was estimated to be £1.5 million.

We will leave the assessment of the relevance of these approaches to Collins et al (2007:468) who argue that:

“Understanding consumption and its environmental impact can potentially assist decision-makers and those managing events to plan and organise them in such a way as to limit their impact. The monetary input-out-put approach underpinning both methodologies means that changes in event-related expenditure patterns could be explored. This could assist in exploring the impact of different policy scenarios and developing future sustainable consumption policies (for example, trade-offs between the footprint reduction and local economic effects such as requiring visitors to travel to events by public transport rather than cars.”

4.4 Conclusions

As any event will have *some* environmental impact, this approach serves to sensitise policy makers and providers to areas where impacts can be reduced. Although the above calculations seem somewhat complex, the conclusions are rather simple – reduce the use of private transport (although air travel to large events poses a problem), change the nature/wrapping of the food which is supplied and adopt relevant waste disposal/re-cycling policies. Some recognition of this is indicated by the promotion of a car-free Olympics and Commonwealth Games (although this seems more to do with local congestion than a comprehensive public transport policy).

However, it is somewhat doubtful if a manual is required to promote such thinking. One approach might be to extend UK Sport’s *Measuring Success* publication and to include a worked example of how such data can be used to make similar calculations. This approach also moves the emphasis way from simple economic impact towards the preferred *cost-benefit analysis*.

However, it is unclear as to the extent to which such impact analysis would be undertaken for most events. In this regard it is worth noting some of Laesser et al's (2003: 146) criteria for an economically and ecologically 'successful' event:

- The organising committee makes – economically, ecologically and socially – maximum use of existing local resources.
- The event involves a maximum number of actors who are able to travel to the venue from a distance below 500km (and thus be able to do without air transport for the trip).
- The event attains a high regional value-added effect, above all when a large number of people (participants and spectators) spend several nights in the region.
- The traffic generated by the event is mostly absorbed by public transport, on the basis an extensive range of possibilities.
- The event is characterised by express eco-management, particularly with regard to interference with the natural environment and the generation of waste.

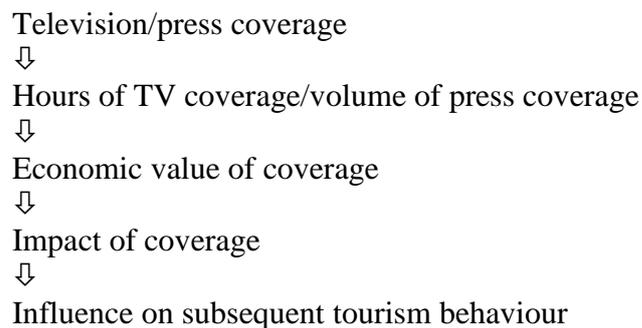
Perhaps some version of the above check-list is sufficient and a Manual to assess each event's environmental impact unrealistic.

5 Publicity and place marketing: indirect economic benefits

5.1 From viewing to visiting

It is reasonable to argue that the key rationale for staging most events is the event-related publicity and the desired subsequent impact of increased tourism - best regarded as *indirect economic impact*. This relates to notions of name recognition, place marketing and re-positioning of cities (or regions) via the media coverage associated with large scale events (or a series of smaller events). The measurement of such impacts and outcomes involves the various stages outlined in Figure 3

Figure 3: Media coverage and (presumed) impacts



It is clear that the monitoring and evaluation of this chain of events, and establishing cause-and-effect relationships, gets progressively more difficult and expensive. Further, the extent to which each of these issues is a concern will vary depending on the size of the event, marketing strategies and associated media coverage.

Estimating the volume of media coverage

The first part of the process – estimating the volume of media coverage - is relatively straightforward. Many local authorities have press cutting services and there are agencies that can provide a comprehensive coverage of printed media. In relation to the probably more effective television coverage, the Broadcasters' Audience Research Board (BARB) produces weekly detailed information on audience figures for all programmes. All BARB subscribers pay an annual registration fee (currently £5,420) and a quarterly subscription fee, or licence appropriate to the subscriber's category of business.

BARB viewing estimates are obtained from panels of television-owning households representing the viewing behaviour of the 24+ million UK households. The panels are selected to be representative of each ITV and BBC region. The service covers viewing within private households only (probably a major limitation for certain sports events). Video playback is measured if it takes place within 7 days of the original broadcast. This time-shift viewing is added to the live data to produce the final, minute-by-minute consolidated audience, available 8 days after the original transmission date.

The data can provide information on the total number of hours of coverage, the areas covered and the size of audiences. In addition to simple volume coverage, these data provide rather crude measures of 'market penetration';

- (i) The percentage share of people watching TV at that time who watched the programme.
- (ii) The percentage of people with access to a TV who watched the programme.

However, care needs to be taken in using such information in a cumulative way – i.e. the ‘total audience’ for the programme over (say) three days. This will provide a cumulative total in which there will inevitably be substantial double/treble counting – events tend to attract a relative stable, interested, audience who will watch most event broadcasts.

Estimating the ‘value’ of media coverage

In addition to this simple quantification, it is possible to estimate the ‘value’ of such coverage i.e. how much would it have cost to purchase equivalent advertising time? This figure is then often compared with the amount invested to stage the event, providing some estimate of ‘value for money’.

However, there are two main problems with such calculations:

- The economic value of such estimates is often over-inflated by assuming a full tariff value – a rate which is rarely paid, as cost is usually subject to negotiation.
- More fundamentally, there is the issue of *equivalence*. An approach which totals the hours of television coverage and implicitly assumes that fragmented mentions and images (often of name boards in indoor stadia) are equivalent to (say) a 30 second focussed ad, greatly over-estimates the value and impact of such coverage (which is largely unknown).

This takes us to the third stage of this model – the impact. This raises a number of major conceptual and methodological issues.

Estimating the impact of media coverage of an event

The first key consideration is the type of coverage and the nature of the images portrayed in the media. While it might be possible to increase simple ‘name recognition’ via an event, it is highly unlikely that this will result in an increase in general tourism visits without some additional reinforcement via positive imagery. For example Oldenboom (2006), via telephone surveys in five European countries and the host cities, found that, although Euro 2000 raised awareness of the host cities (in Belgium and the Netherlands), more than half (55%) of the respondents did not remember the names of the host cities one year after the tournament. Only 10 per cent of the respondents in France, Italy and Spain remembered where Euro ’96 had been hosted! On the other hand Preuss (no date) quotes research indicating that, as a result of the Winter Olympic Games, the unaided recognition of Calgary increased to 40 per cent as Edmonton’s remained at 6 per cent during the same period. However, he emphasises that *awareness is not equivalent to image*.

Smith (no date) reports on 54 semi-structured interviews with a representative sample of potential tourists to explore the extent to which sports-based strategies of Birmingham, Manchester (prior to the Commonwealth Games) and Sheffield have established a 'holistic image' of the cities (i.e. beyond a simple sports event). The research indicated that for Birmingham recent sport initiatives do not appear to have had any significant impact on the city's image; in the case of Manchester, holistic image change appears to have been assisted by the city's various sports events initiatives (e.g. Olympic bids) and, most importantly, *the presence of Manchester United*; among this sample Sheffield's recent sports events did not produce a revised representation of the city. Interestingly Smith concludes that simply bidding for high profile events can lead to a positive perception of a city as progressive, where 'something is happening'. However, existing research illustrates that it is impossible to generalise – studies have illustrated increased *awareness* of a host city (Oldenboom, 2006; Ritchie and Smith, 1991), while others have illustrated mixed results or no impact (Chalip et al, 2003; Rivenburgh et al, 2003).

Post-carding

Consequently, marketing professionals refer to *events plus* - 'post cards' – i.e. images of a destination which convey positive and picturesque imagery offering more positive images than (say), athletic stadia, indoor arenas and swimming pools. For example, Edinburgh is staging the World Cross Country Championships in Holyrood Park and using the imagery of Arthur's Seat and the associated views of the city. At the Barcelona Olympics the diving competition was held with the city as a clear back drop. McCartney (2005), in a study of participants at the Action Asia Challenge in Macao, concluded that 'a sole destination attribute for first time (or a few times) visitors would need additional destination attributes to encourage repeat visitation'.

In addition to this, is the issue of 'autonomous image formation agents' (Gunn (1998) quoted in Smith (2001:134)), which refers to independent reports, documentaries, movies and news articles often produced by non-sporting press and media representatives attracted to the city by large scale sporting events. The presumed importance of such information is that it is often more effective as it is regarded as unbiased (i.e. not reflecting deliberate promotional campaigns).

Here it worth considering the case of the Sydney Olympic Games. Preuss (2001) quotes an Australian Tourist Commission survey which indicated a significant positive shift in 14 countries in *inclinations* to holiday in Australia as a result of the Olympics. However, Preuss (2001: 6-7) points out that:

“This increased interest in Australia is not only due to the coverage of the Games, but also the result of ATC's four year strategy program which was supported by US\$7.6 million from the Australian government and included: a visiting journalist program, servicing 50,000 international media inquiries, providing a specialist internet for media, bringing international broadcasters to Australia before the Games, working with international TV to provide stories, quality and sound resources of all parts of Australia, providing international magazines with stories and photography and offering a non-accredited media centre in Sydney.”

More than an event

The point of the above is that any consideration of the impact of media coverage of sports events must be undertaken within the context of a broader marketing and media strategy – undertaking any such assessment for (say) short term indoor events, with little ‘post carding’, would seem to be inappropriate. For example, Getz and Fairley (2004) argue that, if place marketing and tourism development are concerns, there is a need for close working relationships between the event and destination marketing organisations and recognition of the importance of media relations in the promotion of events and *destinations*.

If we think of this in terms of theories of behaviour change, the attempt to increase ‘name recognition’ is like an intervention in the *pre-contemplation phase* – i.e. you are providing information about the possibility of a ‘place’. The viewer then possibly enters the *contemplation phase* (which contains many more variables than simple ‘recognition’ and is also related in highly complex ways to the *decision/determination* and *action* stages. For example, a workshop of tourism experts identified 70 different factors influencing travel decision-making (Valerio, 1999). In other words, there are substantial issues related to the nature of the relationship between various types of media coverage and subsequent decisions to *travel to* the destination

The issue of the relationship between a sports event and ‘post-carding’ is illustrated by Chalip et al (2003). In a study in the USA and New Zealand of media impacts of coverage of the Honda Indy 300 in Queensland they found no direct effect on intention to visit and that any effects on intention to visit were through the effect on *destination image*. This led them to conclude that ‘if dimensions of destination image that are affected by an event are not those that drive destination choice, then there will be no effect on visitation’ (Chalip et al, 2003). One of Laesser et al’s (2003) criteria for a successful event is that the event and the activities connected with it are not at variance with the image of the host region. In this regard Chalip et al (2003) found that the images of the Gold Coast’s natural environment (a key attraction) were affected negatively by the staging of the motor race. Given the previous discussion, it is worth noting that in 1996, KPMG estimated that the media exposure for the IndyCar event would have cost \$15 million to buy at normal commercial rates – a good investment?!

Kaplandidou (2007), in a survey of visitors to the 2004 Athens’ Olympics, illustrates a closely related issue - the need to be aware of market segmentation and relevant ‘affective destination images’. While most events tend to adopt a relatively homogeneous approach to destination branding (often driven by limited budgets and rather crude assumptions about name recognition), Kaplandidou (2007) found that perceptions and attitudes were affected by age and by distance travelled. For example, European respondents had lower emotional image perceptions of Athens than North Americans, Asians and Australians and the research suggests that different communication strategies are needed for each target market

The overall conclusion from much of the research is that the decision to select a destination can rarely be attributed to one factor, such as a sports event. The issues

here are clearly stated by Valerio (1999: 48) in work for Australian Bureau of Tourism Research:

“We do not have the research tools that enable us to link any single activity directly with visitor numbers and expenditure...a consumer’s decision to select a destination can rarely (if ever) be attributed to one factor.”

5.2 Approaches to measurement

The above research raises very difficult questions about attempts to measure rates of ‘conversion’ – i.e. those visiting a destination as a result of their attendance at an event, awareness of the event/location or media representation of an event/location. In truth such approaches are often rather crude.

- Occupancy rates

One approach is to use easily available *hotel occupancy rates* during a specified period following the event (such data are produced by all regional and local tourist boards). However, this approach has a number of limitations, such as not taking account of *day visitors* and the more fundamental one of attribution. The use of occupancy figures after major sporting events does not paint a wholly optimistic picture. For example, the European Tour Operators Association (no date) report that after the Sydney Olympic Games hotel occupancy fell and ‘for three years afterwards international visit arrivals in Australia decreased’ and 10 Sydney hotels were turned into residential accommodation. This led the Australian Tourism Export Council to conclude that ‘the Sydney Olympics had few long term positive impacts beyond 2000 on the growth of Australian tourism’- partly indicated by the rather exasperated slogan ‘Where the hell are you?’. Although much is made of the catalytic impact of the Barcelona Olympics, the European Tour Operators Association claim that its tourist growth was less than Venice, Florence and Lisbon – indicating the complexity of causes and the problems associated with interpreting occupancy (or more general tourism) data. Consequently, care needs to be taken in the interpretation of occupancy data.

- Tourism inquiries

A relatively easy way to monitor the possible impact of a sports event on subsequent tourism is via the monitoring of tourism inquiries. In this approach those making inquiries can be questioned about the extent to which the event (or events) influenced their decision to inquire about/visit the location. Although this will not be a representative sample, it can provide a limited indication of event impact (and the lasting nature of any effect).

- Intention to visit

Often surveys undertaken at the event (e.g. economic impact) can include *intention to visit* questions – which almost always elicit very positive responses. However, such responses are regarded as weak predictors of subsequent behaviours. For example, Mules (1999), in a study for the Australian Bureau of Tourism Research, stated that

he knew of no robust research to test whether expressed intention to visit had resulted in subsequent visits.

- Surveys of tourists.

There are several national, regional and local surveys of tourists (and specific tourist attractions). It would be relatively cheap to include appropriate questions in such surveys for a relevant period after an event to examine the extent to which the event was an element in the decision to (re) visit the area.

5.3 Conclusions

Although the full evaluation of the value and impact of media coverage is a complex (and under-developed) area, there are a number of relatively simple and cheap approaches to estimating elements of the chain of effects (although issues of interpretation need to be borne in mind at each stage).

- The volume of coverage can be undertaken via monitoring of printed media and the use of BARB data. In this regard it is worth considering the establishment of a *UK Sport media monitoring service*, providing such information for local, regional and national televised events. It is unlikely that most events could invest in this service for one-off occasions.
- Some limited estimate of the ‘value’ of this can be compared with the level of investment in the event.
- There are a number of approaches to estimating ‘conversion’ – ranging from intention to visit questions via occupancy data to special tourist surveys. There are questions about the timescale over which event-related impacts should be measured and each of the approaches has its own limitations and interpretation issues.

Any manual would need to provide worked examples to illustrate issues relating to access to and interpretation of such data. However, as it is unlikely that most events would undertake such analysis and larger event would employ market research companies, the rationale for a manual must be questioned.

6 Volunteers: part of the ‘soft-infrastructure’

6.1 The ‘soft-infrastructure’ of sports events

Solberg and Preuss (2007) refer to the development of a pool of volunteers as part of the ‘soft-infrastructure’ benefits of events. By this they mean enhancing the knowledge and skills - the human capital - of residents. Like sport in general, all sports events depend heavily on volunteer labour – a major hidden subsidy which raises significant (and often unexamined) questions about the nature and scale of economic impacts. Smaller events probably draw such volunteers from governing bodies and local sports clubs, but large scale events recruit and (importantly) train substantial numbers of volunteers. For example, 46,000 volunteers were recruited for the Sydney Olympic Games (with an attrition rate of only 2%) and 10,000 volunteers (selected from 22,000 applicants) were required for the Manchester Commonwealth Games.

As in other areas, the extent to which monitoring and evaluation is considered a useful investment will vary. It is very doubtful if such outcomes are significant for those relatively small or regular events which simply draw on existing ‘sporting capital’, via governing bodies and clubs. However, where there is a substantial bid (or series of bids) and the recruitment and *training* of substantial numbers of volunteers, there is a clear value in measuring and documenting such outcomes.

Many events are adopting a more systematic approach to the recruitment, training and retention of volunteers – using events as a catalyst to establish broader volunteer programmes and develop forms of ‘social capital’ (a key government priority). After the Manchester Commonwealth Games local volunteers were given the opportunity to take part in the Post Games Volunteer Programme (PGVP). The aim was to keep to the volunteers involved in community projects - develop forms of social capital - and forthcoming events and festivals (for example, some volunteered as city guides for the 2003 UEFA Champions League final) The PGVP continues to offer support to volunteers seeking to gain new skills and experience, or looking for a route back into employment.

However, if the intention is to argue that sports events can be used to contribute to an increase in volunteers and forms of *social capital*, this would need to be reflected in recruitment strategies. Most of the evidence from research on sports volunteering (e.g. Manchester Commonwealth Games) indicates that a high proportion is active sports participants and is relatively well educated (e.g. university students compiling experience and CVs). While such volunteers might add to the stock of *sporting capital*, the contribution to wider policies for social inclusion and social regeneration is less obvious.

6.2 The economic value of volunteers

Another element of Laesser et al’s (2003) ‘social dimension scoreboard’ is the *unpaid voluntary labour in days*. Closely related to this is an approach which attributes a value to volunteer labour via the use of a ‘shadow wage’. Chalip (1999) estimated that the volunteers at the Sydney Olympics would work approximately 5,450,000 hours and that this had an economic value of Aus\$109,756,925 – a saving of about 4.5

per cent on the total budget (not including the costs of uniforms). When the cost of uniforms is included Chalip estimated that for every dollar invested in the volunteer programme, almost Aus\$10 dollars labour would be generated.

Solberg (2003), in a case study of the 1999 World Ice Hockey Championship (in Oslo, Hamar and Lillehammer) illustrates two approaches to allocating a value to the work of volunteers. The *opportunity cost approach* (OCA) assesses the value of the displacement of other goods and services elsewhere in the economy (e.g. if volunteering was done during work time, leading to reduced productivity). Because few would have undertaken other work, the opportunity cost was low. The *market price equivalency model* (MPE) is similar to the 'shadow wage' approach and evaluates the cost of purchasing equivalent services at market prices based on official data for the recreational, cultural and sports sector. This amounted to 1.7 million euros, considerably higher than the estimated opportunity cost. Interestingly, like many others, Solberg (2003) emphasises the high level of enjoyment and satisfaction experienced by the volunteers.

Clearly, the estimates based on a shadow wage, or the MPE approach, would be relatively straightforward and would provide useful information both for evaluation and lobbying.

6.3 Collecting data

Recruitment and retention data

Clearly this is a relatively easy area in which to collect information. Volunteer recruitment (and any training) will be undertaken systematically with personal profile information collected from each volunteer and a register established. It would be very simple to design a standardised questionnaire (e.g. based on the questionnaire used in the evaluation of the Manchester Commonwealth Games) and a simple analysis package provided to assess volunteers' assessment of the contribution which the experience made to their personal development. Laesser et al (2003), in their work on the impact of sports events in Switzerland developed a 'social dimensions scoreboard' which includes *the levels of satisfaction of volunteers with regard to their work*.

Subsequent tracking of volunteers could also be undertaken relatively cheaply (e.g. as part of a student project).

Active People's Survey

A more general source of information might be Sport England's biennial Active People's Survey. This collects information on sports volunteering and although attribution will be very difficult (probably impossible for a small scale, single, event) over time it can be used as a way of evaluating any systematic strategies for promoting sports volunteering.

7 Sports development

7.1 Introduction

Perhaps paradoxically the contribution of sports events to sports development has rarely been a major rationale, until Lord Coe's somewhat emotional presentation in Singapore. However, even here it is clear that the supposed key to increased participation will not be the Olympics per se, but the associated development programmes – the Olympics as a catalyst, not *cause*. Here it is essential to distinguish between *general participation* and more formal *club-based* sport.

7.2 General participation

There are several research reviews (Coalter, 2004; Murphy and Bauman 2007; Veal, 2003) which indicate that there is no evidence that large scale events lead to measurable increases in general levels of participation. Further, it is argued that the assumption that such events will lead to general increases in participation is based on flawed theories of the impact media, role models and behaviour change (Coalter, 2004). Some of the difficulties can be illustrated by data from the Australian 2006 Exercise, Recreation and Sport Survey (ERASS), which included questions about the impact of the 2006 Melbourne Commonwealth Games. It reports that more than a quarter of *participants* increased their participation during this period – because of concerns about their *health and age*. ERASS asked people who spent more time participating to nominate not only the main reason for the increase, but also to indicate if the Commonwealth Games had influenced their decision. Before the Games, 6 per cent of those who had increased the time spent participating (i.e. not new participants) said the Games influenced that decision and 8 per cent in the period after the Games. The following quote from ERASS illustrates the rather enigmatic nature of the findings and the difficulties of interpretation that we face:

“...around 5% of participants (5.0% pre-Games and 6.0% post-Games) who took up a new activity said that the Commonwealth Games had influenced their decision, *although the Games had not been the main reason for taking up that activity* (emphasis added).”

However, depending on the scale and type of the event(s), if it was decided to measure impacts on general participation, then there are two possible approaches. Firstly, specially designed household surveys of the type commissioned by UK Sport both before and after the Manchester Commonwealth Games could be used (although on the basis of this experience and wider theoretical concerns this is probably not advisable).

Secondly, and more economically, Sport England's biennial Active People Survey has samples of approximately 1,000 per local authority. These permit some degree of tracking of changes in general participation trends and club membership, although not by individual sports.

However, there are two clear limitations with each approach. First is the key methodological issue of *sampling error*. In any random sample there will be a sampling error i.e. a difference between the actual population and sample measures)

of at least 3-5 per cent. This makes it very difficult to measure changes in participation over short periods of time – changes in excess of five per cent are unlikely. A related issue is the period of time permitted to assess any impacts. There are arguments for and against the assumption of immediate impacts, but even if there is some immediate impact, the issue of sustainability is significant (remember the ‘Wimbledon effect’). Secondly, as with tourism visits, the attribution of changed general behaviour to a single event is very difficult – especially in the context of increasing public sector interventions to promote exercise (although this can partly be addressed via specially commissioned surveys in which questions about the awareness and impact of the events are asked). In general, the cost and methodological limitations of measuring (and attributing) general changes in participation seem to preclude the use of this approach.

7.3 Sports-specific development

One might expect certain events to have a more direct effect on organised club sport, especially in relation to *specific sports* – although having an annual two week event, with wall-to-wall television coverage of the best players in the world, seems to have done little for British tennis (except for the following two weeks – when many are on holiday).

A New Zealand study (Hindson et al, 1994) examined the impact on sports club membership of the general publicity and preparations surrounding the 1992 Albertville Winter Olympics and Barcelona Olympics Games. The evidence for a ‘trickle down effect’ was minimal, although the authors point to supply-side failures, in which both the governing bodies of sport and clubs failed to capitalise on the marketing opportunities presented by the media publicity surrounding the games. A more focussed study of the impact of the highly publicised curling Olympic gold medal on participation in curling in Scotland concluded that:

“...the success has had the greatest impact on those who were already active in sport. Consequently, care should be taken when asserting that success on the world stage in sport has an impact on general levels of participation.”

The RFU and the World Cup

The most widely reported claims of an ‘event-effect’ relate to England’s victory in the 2003 Rugby World Cup and substantial increases in club membership. However, the World Cup victory was preceded by the launch of the RFU’s IMPACT strategy and, in advance of the 2007 World Cup, they launched their Go Play Rugby strategy (with a target of 6,000 new adult players). This illustrates a clear strategy of strengthening the supply side to seek to capitalise on the potential catalytic effects of the World Cup.

However, because of the RFU’s foresight in launching such high profile strategies prior to the World Cup, it would be very difficult to quantify the ‘event impact’ on the basis of available data. For example, in the report *One Year On* (i.e. 2004) there is no mention of the impact of the World Cup victory, but we are provided with detailed documentation of a wide-ranging set of supply-side initiatives - Tag Rugby; new partnerships, new facilities, club/school links, volunteers, mini/midi rugby. Although

this seems like a model of ‘best practice’ – i.e. combining large scale events with a systematic sports development programme - we are still unable to disentangle the ‘event effect’. On the other hand, it might be possible to explore the impact of the World Cup (both victory and defeat) on participation.

The RFU seems to be an ‘information-rich’ organisation. For example, its website records that 20,000 people have searched for places to play on the www.goplayrugby.com website or texted their postcode to find their nearest club. Further, the RFU undertakes a very comprehensive on-line annual survey of Section 1 clubs (those in full membership of the RFU, with a senior adult 15 playing at least 20 fixtures per year), which achieves an 85-90 per cent response rate. Section 2 and 3 clubs are not included in the findings – although they do receive and return questionnaires (these are often university teams, armed forces teams and non-league teams that play less than 15 games per year). Although the RFU is clearly a cash-rich organisation, some version of their annual on-line survey could be used to monitor certain large event-effects for specific sports (the RFU database is probably robust enough to explore regional effects).

Other governing bodies should be encouraged (with initial financial support) to adopt a similar systematic data collection approach and strategic thinking in relation to events (the content of an on-line questionnaire could easily be standardised). However, my recent experience exploring the impact of the Sudirman Cup (badminton) indicates that some governing bodies might be very reluctant to adopt such event-related analyses. Probably quite correctly, most view such events only as one element of a much broader development strategies and are concerned about the dangers of highlighting the (non) impacts of such events (with a possible negative effect on future funding of events).

Paralympic World Cup and Manchester

An example of using an event as a *catalyst* is provided by the annual Paralympic World Cup (PWC) in Manchester which was first held in 2005. It is claimed that spectators increased from 6,000 in 2005 to 12,000 in 2007 – although this could also be accounted for by the doubling of organised school groups, plus an increase in participants and associated relatives and friends. The local authority commitment to the Cup has led to the funding for a Disability Officer whose role is to set up and run events and clubs for young people in the city and to promote the PWC. This has led to the establishment of 13 clubs and a community holiday programme. A series of events have been developed, including a BPA Coaches conference, EFDS conference, Paralympic Day, IWBF Classification clinic and MESH meetings.

It is claimed that this has led to increased exposure of the city / region through a number of different events, more attendance in the city, more economic benefit and media exposure. However, in the city of Manchester United and the Commonwealth Games the validity of such claims must be doubted. Nevertheless, in terms of sports development, it seems the Paralympic World Cup (and its presumed associated benefits) acted as a *catalyst* and provided the basis for a comprehensive development strategy. However, to attribute sports development in any simple and direct way to this event is clearly misleading.

This type of development has been referred to as *event product extensions* (Dwyer et al, 2000). Of course the evaluation and attribution of such ‘extensions’ requires analysts’ judgements as to the likely catalytic effects of the event (Dwyer et al, 2000)

7.4 Conclusions

There are major methodological limitations associated with measuring and attributing changes to general participation to a single event (or even a series of events). Without expensive, one-off, event-related, relatively large household surveys which collect specific information on the possible impact of events, it is not possible to relate changes in participation to an event. Except for the largest events, this is probably not a viable option. However, even if it was an option it is highly likely that such work would be undertaken by a market research company, reducing the requirement for a manual (although some guidelines regarding commissioning research and evaluating results might be useful).

The measurement of the impact of events on specific sports and sports clubs is clearly a more viable (and sensible) option. However, if the event acts as a catalyst and is embedded in a broader development strategy the precise ‘event-impact’ will be very difficult to identify.

8 Intangibles: the new ‘soft economics’ agenda?

8.1 From economic impact to psychic income

Because of increasing scepticism about the direct economic impact of the large scale sports events, the failure to undertake cost-benefit analyses and the motives of those involved (Crompton, 1995; 2004) there is an increased emphasis on so-called intangibles, or the ‘soft economics agenda’ (Johnson and Sack, 1996; Humphreys, 2001; Crompton, 2004; Atkinson and Mourato, 2005).

The list of possible intangibles includes increased civic pride, social cohesion (which can be addressed as part of the volunteers’ agenda) and ‘psychic income’ (or consumer surplus). Despite being rather nebulous, such claims frequently provide the rationale for investment in events, in part because they are the ‘event effects’ most likely to affect the majority of the population (most of whom will have little direct contact with the event, but whose taxes or lottery monies subsidise it). Of course, the other side of this coin relates to ‘dis-benefits’ – congestion, crowding out, cost inflation, expensive tickets, crime, prostitution and so on. Perhaps it is because of such potential dis-benefits that we get such an emphasis on civic pride – everything has a price. Also, the increasing importance of such impacts is indicated by the growing interest in measuring and quantifying a range of ‘intangibles’. In this regard, Humphreys (2001:37) argues that, ‘the decision to finance the construction of professional sports facility should depend solely on the value that taxpayers place on the consumption benefits flowing from professional sports.’

8.2 Contingent valuation method

Because of the increased emphasis on intangibles and an increasing need to quantify such effects, a number of research projects have been undertaken to assess the value of *contingent valuation method* (CVM) – essentially this explores what people are willing to pay for a public good such as a sports event. This is also referred to as the ‘stated preference’ method, because it asks people to state their values, rather than inferring values from actual choices/consumption – their *revealed preference*. CVM involves asking people how much they would be willing to pay for a specified public good (e.g. the retention of an ice hockey team; the London Olympics). It is called ‘contingent’ valuation, because respondents are asked to state their willingness to pay, *contingent* on specified hypothetical scenarios and descriptions of the precise investment. The fact that CVM is based on what people say they would do, rather than what they are observed to do, is the source of its greatest strengths and its greatest weaknesses.

This approach can be illustrated via two sports-related examples.

The Pittsburgh Penguins

Johnson et al (2001) used CVM in a household survey in Pittsburgh (35.6% response rate) to explore the value placed on the Pittsburgh Penguins of the National (Ice) Hockey League. They collected data on attendance at team games, TV watching, reading and discussing of team matters, levels of interest in the team, how their quality of life would change if the Penguins left and their evaluation of the team and

willingness-to-pay – e.g. if keeping it in Pittsburgh was important - and various tax-related options to ensure that the team remained permanently. Nearly threequarters of respondents identified themselves as Penguins’ fans and just over half indicated that they would be willing to pay for hockey-related public goods rather than lose them. The data suggested that residents were prepared to pay between \$1.9 and £5.3 million per year. However, as with other researchers who deal with such issues, Johnson et al (2001) are unsure if the value of such public goods generated by sports teams is large enough to justify high public subsidies.

The London Olympics

Atkinson, Mourato and Szymanski (2006) undertook a CVM study for DCMS relating to the London Olympics, before the announcement of the bid result. The study was undertaken via face-to-face interviews in London (n: 602), Manchester (n: 152) and Glasgow (n: 151). Respondents were asked to consider intangible benefits and costs of the Games to themselves and their households.

The intangible *benefits* were assessed on:

- Uniting people/feel good factor/national pride
- Improving awareness of disability
- Motivating/inspiring children to play sports
- Legacy of sports facilities
- Environmental improvements
- Promoting healthy lifestyles
- Cultural and social events

The intangible *costs* were:

- Crowding
- Increased risk of petty theft
- Increased safety and security risks
- Local disruption during construction
- Transport delays during Olympics
- Excessive media coverage of Olympic events.

Respondents were asked if they were willing to pay something towards the costs of staging the Olympics (4%-5% said ‘no’). If they said ‘yes’, then they were presented with a ‘payment ladder’ and asked to select an amount between £1 and £100. Not surprisingly, the annual mean ‘willingness to pay’ per household declined by distance (i.e. as immediate benefits and costs declined) and was £22 per year in London, £12 in Manchester and £11 in Glasgow. These sums are taken to imply that in total UK households would be willing to pay roughly £2 billion over 10 years. Interestingly, London respondents were offered Council Tax as a method of payment, whereas Manchester and Glasgow were offered contributions to a voluntary fund!

Clearly, the CVM approach provides a way of estimating and valuing the amount of ‘psychic income’ associated with sports events and is clearly much more robust than simple expressions of support (people will express support for practically anything if a cost is not specified). Although this is a relatively cheap method, it is unlikely that

it would be considered for anything other than large scale events (although it would make for interesting student projects). Nevertheless, it is clear that this approach provides one possible solution to quantifying an aspect of intangible benefits widely used in rationales for staging sporting events – civic pride; public support; ‘psychic income’ However, Crompton (2004) raises certain concerns about the CVM approach (which should be minimised via good design):

- (i) Is the question framed in such a way that respondents understand the information and are not biased in the way it is presented?
- (ii) Does the question cause a bias because it suggests a reference range for the appropriate value?
- (iii) Do respondents respond strategically, hoping to influence the outcome to be based on the survey results but not expecting to bear the full consequences of their own bids?

In this regard Crompton (2004) argues that the implementation of the CVM method requires technical expertise – which probably refers more to design than to data collection.

8.3 Opinion surveys

Clearly, the CVM approach is much more sophisticated than the measurement of the perceived social value and impacts of events via a range of simple surveys (telephone, household, street). However, there are some examples of such surveys that have been used to extend out understanding of residents’ values and attitudes and which should be considered in the design of any opinion surveys. Fredline et al (2003), via a review of literature and focus group discussions, developed a 43 item generic scale to measure the various perceived social impacts of events – ranging from excessive drinking and/or drug use to property values. The aim was to develop, test and validate an instrument that can be used to compare the social impacts of a variety of events. They developed a range of potential impacts under six broad headings – economic, tourism/commercial, physical, sociocultural, psychological and political. The research instrument was tested via random sampled postal surveys in the Melbourne area related to one sporting event (2002 Grand Prix), one cultural and one community – although the response rates were very low. Via factor analysis the authors concluded that there was some potential for developing a compressed scale with about 10-12 items, although they argue that ‘substantial effort will need to be expended on pilot testing such a scale to ensure construct and content validity’ (Fredline et al (2003: 36).

Gursoy and Kendall (2006) explored key factors affecting residents’ perceptions of the 2002 Winter Olympics in Salt Lake City. They undertook street interviews and used structural modelling to test a number of hypotheses and the interaction between: the relationship between perceived benefits and costs and support for hosting event; the relationships between community attachment and the perceived costs and benefits; the relationship between attitudes to the environment and perceived costs and benefits. Perhaps not surprisingly they found that those with high levels of attachment to their communities were more likely to view the event positively and those with strong environmental views were more likely to pay attention to costs

Ohmann et al (2006) undertook a household survey (n: 130) in Munich to explore perceived social impacts of the 2006 World Cup. The findings indicated that the event had strengthened respondents' sense of community and improved relationships between different ethnic groups. Further, the feared 'dis-benefits' such as crime, prostitution and fan behaviour were much less of a concern than expected.

Preuss and Solberg (2006), in secondary analyses of 117 polls of urban and national residents in countries that either have hosted or applied for 54 sports events, reveal that about three quarters of residents supported hosting the events. Respondents in nations where the public sector had an economic deficit in the years before the poll were more sceptical than others. This pattern did not apply to heavily populated nations, where event related costs represent only a 'drop in the ocean' on a macroeconomic level. Preuss and Solberg's (2006: 408) conclusions also outline a potential alternative interpretation of residents' view of sporting events (which has substantial policy implications):

“Surprisingly, the support was strongest in low-income nations. This indicates that the hosting of a major sporting event cannot be regarded as a luxury good, which is a common assumption for sports goods. People are aware the events can influence the production of other goods and services in society. Hence, their opinions are not only a matter of consumption, but also of production.”

Clearly, such pre- and post-event surveys have some value and can be rationalised as part of the new emphasis on public consultation and securing public support for events. Further, Gursoy and Kendall (2006) suggest that these findings can inform communications strategies that address community and stakeholder concerns. Whether they can be designed generically to form part of a manual is another question. Further, as referred to above, it is highly likely that such work would be undertaken by a professional market research company.

9 Conclusions and Recommendations

We are not wholly convinced that there is a need for a single manual to measure the non-economic impacts of sports events, although much depends on the nature and content of a ‘manual’. Our reservations relate to the diversity of the information and the differing methods via which it would need to be collected. This can be illustrated by examining each area of data collection in turn.

Environmental impacts

This is simply a version of economic impact studies and would be best as part of UK Sports’ *Managing Success*. Further, given the work currently being undertaken on tourist satellite accounts and associated attempts to improve the accuracy of multipliers, the development of this should be undertaken in close collaboration with experts in this field. It might also be possible to develop some broad sets of guidelines for the eco-management of events, similar to the rather vague ones developed by Laesser et al (2003).

Publicity and place marketing

While it is relatively easy to monitor coverage of events via printed media, the BARB data is only relevant for televised events and does not have general relevance. Secondly, even for the larger events, the cost of this service seems to be rather high. Perhaps there is an argument for UK Sport to subscribe to this service to enable relevant events to obtain access to these data.

However, as any effective image/branding impact of sports events will only occur if it is undertaken in partnership with tourism marketing organisations, it is highly unlikely that the subsequent monitoring and evaluation of any ‘tourism effect’ will be undertaken by event organisers. One presumes that the tourism organisations will have the expertise to access relevant surveys of tourists, occupancy data and visitor enquiries to enable the monitoring of the, limited, impacts.

As with many other areas, the key issues (and tensions) relate to the interpretation of such data. The combination of political pressure to misrepresent and over-inflate the meaning of media coverage, the major methodological problems in interpreting occupancy/visitor data and the need to take account of the relevant range of factors which might explain increases (or decreases) in visitors present formidable challenges. Much depends on whether there is a desire for robust monitoring and evaluation, or simple ‘top line’ public relations information.

Volunteers and the ‘soft-infrastructure’

One presumes that all events will have some register and basic information about their volunteers. It would be possible to design a standard form for such information (e.g. sports participants/club members versus non-participants; education; children) and also a short follow-up questionnaire to collect data on their satisfaction, some social capital questions and their commitment to further volunteering. Such information would be most valuable for medium to larger events, which are forced to go beyond sports club members to recruit volunteers. In some areas (e.g. Manchester and,

perhaps, Glasgow) such information has formed the basis of a larger register of volunteers. Subsequent tracking of volunteers could also be undertaken relatively cheaply (e.g. as part of a student project).

It is very doubtful if any ‘event impacts’ could be identified via Sport England’s biennial Active People’s Survey (which does not permit robust analysis by sport).

Sports development

The substantial methodological limitations associated with measuring and attributing changes on *general participation* to a single event (or even a series of events) seem to preclude the need for measurement. Without expensive, one-off, event-related relatively large household surveys which collect *event-specific information*, it is not possible to relate changes in participation to an event. Except for the largest events, this is probably not a viable option.

However, even this approach was undertaken, it would probably need to be done by a market research company, reducing the requirement for a manual.

The measurement of the impact of events on *specific sports and sports clubs* is a more sensible option. However, if the event acts as a catalyst and is embedded in a broader development strategy the precise ‘event-impact’ will be very difficult to detect.

Intangibles: the new ‘soft economics’ agenda

It is clear that some of these ‘intangibles’ can be measured. This can range from the general public relations surveys of attitudes and opinions to the use of the contingent valuation method to quantify psychic income and consumer surplus – the *welfare* that people gain from the consumption of goods and services; the difference between the total amount that consumers are willing and able to pay for a good or service and the total amount that they actually do pay.

However, because of the *contingent* nature of the approach, it is probable that each event would need to specify some event-specific issues – precluding the design of a completely generic approach. Also, as Crompton argues, this requires technical expertise and would probably need to be undertaken by a specialist company (or academics). Finally, it is unlikely that it would be considered for anything other than large scale events.

A manual?

Although it is difficult to make the case for a comprehensive ‘manual’ to permit event organisers to undertake monitoring and evaluation, there seems to be a clear need for something which encourages clearer and more systematic thinking about the presumed outcomes of various sizes of events. Such systematic clarification might, of course, assist in increasing the ability of events to achieve some of their desired outcomes. This could consist of a systematic, step-by-step check-list of questions to be asked before proceeding with monitoring and evaluation (including cost-benefit considerations). This might contain some illustrative worked examples and indicative questions and approaches. In part, it would seek to illustrate that planning for

outcomes must come before attempting to measure such outcomes. However, we return to the core issue that, in many relevant areas, methodologies and understanding of the causal mechanisms are under-developed

A postscript

During the research we identified one attempt to produce a comprehensive manual for evaluating event performance. This is the *Encore Evaluation Kit* (Cooperative Research Centre for Sustainable Tourism Pty Ltd), which was initially commissioned by Arts Victoria. Although this is concerned wholly with *event performance*, rather than event impact, it may provide a useful model for some of your concerns (especially for small events which are unlikely to have wider impacts). It aims to enable organisers and sponsors to undertake an evaluation of their events without the cost of hiring consultants. We have not had direct access to this because of price (Aus\$400), but if a decision is taken to proceed with the production of a manual (or even a ‘check list’), then this should be purchased and examined. On the basis of secondary information, the following aspects of the kit have been identified.

- Data are collected from *attendees*, competitors, exhibitors and organisers via standardised questionnaires – i.e. it is concerned with performance and not subsequent impact.
- It collects data on demographics, marketing and satisfaction, economics and ‘user initiated’ information.
- It provides standardised questionnaires and data entry templates to install on the user’s computer and produces data in tabular and graphical form which can be imported into Word for reporting.
- In terms of economics, the kit only seeks to measure *direct inscope expenditure* i.e. the new expenditure which would not have occurred without the event. It does not seek to assess *economic impact* (partly because of a concern with the limitations of input-output multipliers and the costs of developing computer general equilibrium models – often required for each event). Nevertheless this presumably relatively straightforward system (with its standardised templates and data analysis programmes) might be a useful tool for collecting reasonably basic information about the economics of events.

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