The Development of an Appropriate Tool for Measuring the Economic Impacts of Sports Events
A case study of the Kwazulu-Natal Province of South Africa

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1. Introduction

The management of Tourism KwaZulu-Natal (TKZN) have decided to issue occasional papers to the tourism trade on the core findings of its research and other projects. The purpose of these papers is to stimulate more debate regarding the findings or progress of such projects, as well as to ensure wider awareness of key research findings.

Tourism is considered to be one of the largest contributors to the world economy. In 2011 tourist arrivals reach 980 million (UNWTO 2012 p1). In South Africa tourism is recognised as one of the more important sectors in the economy in terms of Gross Domestic Product (GDP) (South African Tourism Annual Report 2011). In 2011, tourism generated R79.5bn in foreign exchange for South Africa. Currently this sector employs over 380 000 people permanently (Tourism KwaZulu-Natal 2012). Further, tourism is seen as a driver of economic development in this region (Department of Environmental Affairs and Tourism 2002). One of the mandates for Destination Marketing Organisations (DMOs) is to increase the number of tourists to the destination. This is done using various attractions. These attractions can be natural, cultural and heritage or events.


2. Background

The White paper on the development and promotion of Tourism in South Africa of 1996, (White Paper) made clear the importance of tourism and the role that tourism must play in the economic development of the new South Africa.
The UNWTO (2007 p3) recognises the importance of a strategy by which the destination can increase tourism arrivals, increase awareness of the destination, and increase the of tourism contribution to the GDP. These objectives must be led by a DMO. One important strategy that a successful destination uses is that of events. In order to determine the value of an event to the destination or that the event is achieving the objectives it claims to be, an economic impact assessment is one way of achieving that.

In addition, the UNWTO (2007 p65) stresses that events can be a powerful tool to offset the impact of negative tourism flow typical of periods of economic downturn, such as the recent global economic recession, and to reduce the impact of seasonality.

This paper aims to provide the background for the development of a tool for local government officials to conduct event impact assessments in a consistent and uncomplicated manner. The tool aims to provide these officials with basic benchmarked tools to provide information of events held in their areas of responsibility in order to provide feedback that is reliable and consistent to their political principles.

3. Literature Review

Some reasons for conducting economic impact assessments

The economic impact of an event is used to justify holding the event or the use of public funds allocated to the event (Getz 2005 p379). Crompton et al (2006 p67) suggested another reason to have a credible methodology for assessing the economic impacts of events. They assert that many economic impact assessments are commissioned to legitimize political positions. They further add that procedures and methods are either ignored or applied incorrectly to obtain favourable results. Thus event impact assessments are and can be used to achieve various objectives. This also illustrates the need for decision-makers to be familiar with the principles used in the conducting of economic impact studies of events, because the decision-makers may not be aware of the reasons why the results of the various studies differ. This especially applies to the community, whose approval for many large events is sought by government officials. Standardised methods are needed to ensure that the result of an economic impact study of an event remains objective.

There are various objectives for evaluating events. For example, an objective can be to determine the impact of an event on the community (Bob and Swart 2009) or the environment (Sport and Recreation 2008). Economic impacts dominate the literature (Bohlmann and van Heerden 2005, Dwyer, Forsyth and Spurr 2006, Crompton, Lee and Shuster 2001, Jackson et al 2005, Tyrrell and Johnston 2001), but researchers have begun to investigate the impact of events from a more holistic perspective (Centre for Tourism Research in Africa, 2007, Ntloko and Swart 2008, Bob and Swart 2009). When conducting economic impact studies, in many cases there is an objective to meet sponsors’ goals, to improve the event, or to determine the worth of the event (Getz 2005 p380). Determining the economic impact of an event on a region is but one way, and a very common way, of determining the impact of an event. Tyrrel, Robert and Johnston (2001 p94) say that the validity of the economic impact results of events depends on a variety of methodological issues. As indicated earlier different objectives and methods provide different results.
In his paper, Matheson (2006) shows that economic impacts are important for making decisions. These decisions include whether the event should be hosted again and whether the event had the desired outcomes. Economic impact studies attempt to measure what a designated economy would be missing had an event not occurred (DEAT 2002), that is, what is the economic return going to be? These are the questions asked because it is usually public money that is used to host these large events Baumann, R., Englehardt, B., Matheson, V.A. 2009 (2009 p2) goes onto say that the economic impact of an event can be measured by looking at visitors’ spend and then applying a multiplier, or by using the payments to workers and suppliers to measure the indirect economic impact.

Events as a tool to achieve South Africa’s National Imperatives

The South African government has introduced strategies and plans to achieve the objectives of reducing poverty and decreasing unemployment. Tourism is one way to assist in achieving these objectives. Events, is a useful tool in attracting tourists. The need to assess the impacts of events are thus important.

Tourism is an important economic sector in South Africa (S. A. Government:1996, S. A. Government:2012). This section shows that there are three broad areas in which tourism can have an impact. These areas have been identified in the Industrial Policy Action Plan 2011/12 – 2013/14 (IPAP2), Medium Term Strategic Framework 2009 – 2014 (MTSF) and the National Tourism Sector Strategy 2012 (NTSS) documents. These areas are employment, contribution to economic development and rural development. Tourism at a national and provincial level plays an important role in achieving these broad national objectives.

In 2010 South Africa’s New Growth Plan was approved and tourism is one of the six pillars of growth. The other pillars are infrastructure development, agriculture, mining, green economy and manufacturing.

IPAP 2 is the second such plan of this nature. This plan consolidates and builds on the progress made with IPAP 1(2011 p09). The department of Tourism is now one of the national departments that takes responsibilities for some actions and programmes of IPAP 2. The MTSF is a guide to planning and resource allocation across all spheres of government. The NTSS is a strategy, by which the National Department of Tourism aims to achieve the objectives of job creation, increasing tourism’s contribution to the economic (2012 pii), promote accelerated growth in the tourism sector (2012 piv).

In the medium term, the Medium Term Strategic Framework (MTSF) 2009-2014 considers tourism as one of the economic sectors that can meet the needs of South Africans and be competitive on a global scale (2009:p11). Unemployment and inequality remains high and the MTSF has a target of halving unemployment and poverty by 2014. One of the ways the MTSF wants to achieve this target is to promote the arts and culture, as well as sports to consolidate community and national pride, positive social values as well as economic development. As seen with the1996 African Cup of Nations, the 1997 and 2007 rugby world cup and the 2010 FIFA soccer world cup sport can and does bring about national pride.

The DG continued by indicating that business and event tourism are highlighted as growth areas within the NTSS. The department recognised the importance of events to promote and stimulate domestic tourism (V:2012).

According to IPAP2 the key investment areas to ensure tourism growth are:
Niche tourism development (this is where events can play an important role as can be seen in the destination competitiveness literature)

Tourism export development and promotion

Airline pricing structure investigation

The KZN Tourism Master Plan (TMP) recognizes the importance of events through one of the strategic thrusts that focuses on a strategy for Business, Sport, and Events Tourism (DEDT 2012:slide 44). The One of the main objectives of the TMP is to improve the niche tourism market (DEDT 2011 p16).

Events can be used to assist in achieving the objectives of national government at a local level and thus the measuring of the economic value or impact of that event for that area is vitally important.

Economic Impact Literature review

In order to achieve these national imperatives the destination has to be competitive. Internationally the competition for tourist dollars is intense. Tourists can choose where to spend their money. Understanding how the destination can be competitive is important.

Ritchie and Crouch (2000 p1) indicated that a destination’s competitiveness is wide and complex. They go on to illustrate that, due to the increasing competitiveness and growth of tourism, destinations have begun to take competition very seriously. Competition among tourism destinations has also escalated in other growing travel and tourism sectors including business travel, gaming, resort areas, nature-based tourism, festivals and cultural tourism and major-events tourism. (Ritchie and Crouch 2000 p2)

Destination competitiveness, says Heath (2003 p7), is linked to the ability of a destination to deliver goods and services that perform better than other destinations on those aspects of the tourism experience considered to be important by tourists. He (2002 p335) cites d’Hartserre (2000) who says that competitiveness is the ability of a destination to maintain its market position and share and/or to improve upon them through time”.

Some destinations have pursued the development of special events as a cornerstone of their competitive strategy (Crouch 2007 p27). Destinations have also pursued attracting events for their actual and potential contribution to tourism development and marketing (Henderson, Foo, Lim and Yip 2010 p60). A number of destinations have developed sports event strategies.

Events are an important part of a destination’s competitiveness. The SWC that was held in South Africa in 2010 was an example of how an event attracted visitors. SAT, in their 2010 annual report, showed a marked increase in visitor arrivals to South Africa for the event (SAT 2010 p6,9).

Allan, Dunlop and Swales (2007 p63) suggested that there is a growing interest in the economic impacts of small-scale sports events. These events differ from mega-events in that they use existing infrastructure, need less public fund support and they are run at times of the year in accordance with national and international requirements and not in line with tourism seasonality. Allan, Dunlop and Swales (2008 p65-66) also indicated that there is not much research conducted on neither small-scale sports events, nor seasonal sports events. They attempt to determine the impact of the soccer season and the supporters of Celtic FC and Rangers FC have on the economy of Glasgow and Scotland. None of this type of research has yet been done in South Africa.
What existed before
TKZN have used a methodology that was not taking important aspects into consideration. One is including domestic respondents in the calculation. Another is allowing respondents to determine if they were locals or visitors to the defined area of impact, by asking the question are you a local or visitor, instead of asking where do you live/come from and the researcher is able to determine if the respondents is a local or a visitor.

What is offered now
Researchers often differ on which methods and models to use when conducting an economic impact assessment. Jackson et al (2005 p361) said that it is difficult to perform comparisons between events, due to the different objectives of the studies. Within all these different ways of conducting economic impacts of events there are certain criteria that are common. These are:
- Define area of impact
- Measure Spend
- Define who is a visitor
- Decide on the inclusion or exclusion of residents in the economic impact calculation.

One of the objectives of the study was to provide some sort of tools for local government officials to manage and the economic impact assessment process of their own local events. These tools are in the form of a excel spreadsheet which allows officials to enter the basic information and the calculations will be done through the use of formulae that have already been inserted. There is also an MS Access based data capture form that is based on the questionnaire supplied. The questionnaire needs to adjusted for the specific event being surveyed.

However the application of these criteria the literature differs.

Define area of impact
Jackson et al (2005 p362) state that the regions of interest need to be closely defined. The smaller the region the larger the income from outside the region. The DEAT Strategy (2002) cites Crompton (1995) who said that one of the reasons why impact assessments are inaccurate is that they fail to define the area of impact accurately. Defining the area of impact has critical repercussions in that visitors and locals are defined, organiser spend can be added, leakages can be identified.

Measuring spend
Tyrrell and Johnston (2001 p94-95) and Crompton (2006 p67) say that the event must have a net impact. Crompton (ibid) adds that it is the return that residents receive, rather than only the proportion of the total return, that filters back to local government. The event must generate more money from visitors than locals would have spent on event imported merchandise. Money is usually spent in all phases of the trip, getting to the event and getting home again. This money is not necessarily spent in the area where the event is taking place. Without considering this spend the economic impact will be over-estimated.

Yu and Turco (2000 p140) feel that it is important to measure the impact of the event on local businesses. This researcher was of the view that, depending on the size of the event and the size of the region, the impact on local industries will differ. The impact of a regular season sports event will not have the same impact of a once-off mega event. This study
used the food, beverage and accommodation spend indicated by respondents to determine the impact on local hospitality businesses.

Visitor Expenditure
Measuring visitor spend at an event is important in determining the economic impact of an event. Tyrrell and Johnston (2001 p95) measure the impact of events by using the expenditure of spectators and sponsors. However there is some disagreement about what type of visitor should be included or excluded. Yu and Turco (2000 p139) say that it is a mistake to leave out visitors whose primary reason for visiting the area was not the event. These visitors would spend money on the event grounds and this spend should be considered as new money. They continue to say that the spend of visitors who extend their time (casuals) or plan their visit to coincide with the event (time-switchers) must be taken into account. Jackson et. al. (2005 p362) includes visitor who would not have come to the region but for the event, visitors who made an extra trip to the region for the event, and those who extended their stay for the event.

Crompton, Lee and Shuster (2001 p81) on the other hand exclude what they call time-switchers’ and casuals. Time-switchers are those visitors who time their visit to the region to coincide with the event. Daniels (2004 p77) and Crompton (2006 p73) do not include the expenditure of visitors who indicated that the primary purpose for the visit was not the event. These visitors are termed casuals. Casuals are those who are already in the area and decided to attend the event. They indicated that time-switchers would have come to the city at another time and switched their visit to coincide with the event. Their spending therefore cannot be counted because that spend cannot be attributed to the event. That spend would have taken place anyway, just at a different time. They say that casuals spend cannot be taken into account because either the event is not the reason they are in the area. Their money would have been spent in the area anyway. Bond (2008 p6) cites Frechtling (2006), who says that the future benefits of time-switchers cannot be guaranteed, whereas the benefits accruing from actual attendees at the event are tangible and it is therefore legitimate to include them in estimates of the economic impact of the event.

Residents’ Expenditure
There is also disagreement on should residents be included in the economic impact calculation. Jackson et. al. (2005 p362), Yu (2000 p139) and Tyrrell (2001 p95) agree that it is important to include residents’ spending at the event. Crompton (2001 p81) and Daniels (2004 p77) disagree, stating that local residents should be excluded as a source of expenditure. Dwyer, Forsyth and Spurr (2005 p352) also do not include locals when estimating the economic impact of an event. Jackson et al (2005 p362) said that import replacement expenditure is from residents who stay in the region rather than doing another activity outside the region. Allan, Dunlop and Swales (2007 p69-70) in their study of the soccer matches that included Rangers and Celtic football clubs, used residence as one of the variables to determine economic impact of the spectators. They only measure spectators who come into and area where the soccer match is played. Bond (2008 p6) asserts that the inclusion of locals attending an event has gained some acceptance in the literature. Yu and Turco (2000 p139) suggest that the spend of residents also need to be taken into account. Their reasoning is that it is assumed that if residents had not spent money at an event, that money would have
been spent elsewhere. However, if the event was a special one, residents may spend their money locally rather than outside the region. Yu and Turco call this import substitution. Excluding this income may underestimate the impact (2000 p139). Greig and McQuaid (2003 p5) only include the net spending of local residents. That is, money over and above what they would have normally spent.

4. Findings and Discussion

Two Super 14 Rugby matches which were surveyed are used as case studies. The Sharks vs Force match was surveyed using the TKZN questionnaire. This questionnaire did not take any of the literature into account. This was the current questionnaire that was being used by TKZN when conducting economic impact assessments. The Sharks vs Stormers match was surveyed using a newly developed questionnaire based on the literature. It also is desirable that the methodology used to survey such events is accessible and relatively easy to apply (Jackson et al 2005 p361).

The target population of this study was all the spectators who attended the rugby matches on the 8th (Sharks vs Stormer) and 14th (Sharks vs Force) May 2010. A sample was selected using previous studies as a guide. In the TKZN surveys, a minimum of 200 respondents per event were interviewed. Two Super 14 rugby matches were surveyed, each having 200 respondents.

With regards to the Sharks vs Stormers match, 40% of the respondents were visitors to Durban. However in order to define who a visitor is, it is important to establish the area of impact as indicated in the literature review. Further, establishing the primary reason for being in Durban is also important. This is because although respondents may be visitors to the region and their primary reason for being in Durban may not the match, but their spending should be included in the calculation of the economic impact assessment as discussed in the section on visitor expenditure. However, just on 19% indicated that rugby was not the primary reason for being in Durban and that going to the rugby match was an additional activity. This shows that events do act as a way for visitors to participate in additional activities while in the destination for other reasons.

Determining if local residents should be included in the economic impact calculation is a point of debate. In order to include locals their expenditure would have had to stay in the region rather than leaving. Therefore it is important to determine if locals would have travelled out of the region for another match. Thus those who would have, their expenditure is included, because they would have spent money in Durban over and above what they would have normally spent even if the event was not held.

Included in the calculation of the economic impact of the Sharks vs Stormers match, was all the visitors to Durban (including those whose primary reason was not the match) as well as locals who would have travelled outside of Durban to attend the event.

This study thus used these identified constructs which formed the basis of the questionnaire.

1. Define the area of impact, which is Durban.
2. In line with the area of impact determine who is a visitor to the area and who is a local. This study has done this by asking respondents for the postal code in which they live. The researcher then defines who is a visitor are local based on residence.

3. Locals who would have travelled away to a similar event or who would have not spent that money in the area are included in the economic impact calculation.

4. Visitors who are time-switchers and casuals are also included. The calculation of casual spend has been done by asking respondents how much money was spent at the match.

The t-test was conducted using the mean spend of each match, which indicated that there are significant differences between the two methodologies with regards to the variables 'mean spend'.

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<td>333.05</td>
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Table 1: Total Spend

5. Conclusions and Recommendations

The conducting of economic impacts of events need not necessarily be complicated especially for small towns and cities in developing countries. The skills and knowledge needed to implement and conduct economic impact assessments that are suggested in the literature is not always available. Also the funds needed to procure the skills through consultants is not always available as well. This tool kit will provide an opportunity for officials to improve their skill set thus saving money. However there are advantages and disadvantages of the tool kit.

Disadvantages:
Not for mega events. Mega events such as the FIFA Soccer World Cup and the Olympic Games are much more complicated, thus making the assessment of the economic impacts more complicated. Issues such as crowding out, substitution and heightened leakages are expected to occur with mega-events. However with smaller local events these issues do not exist or are much smaller and thus easier to determine.

It does not take organisers and local business income spending into consideration. Local business income would be estimated from the expenditure questions found in the survey questionnaire. Organisers spend, especially in smaller cities and towns consist of significant leakage. Services and equipment is sometimes secured from providers outside the area of...
impact. Interviews with organisers can be used to determine what percentage of their budget was spent within the defined area of impact.

Advantages:
Studies that use the tool kit will be comparable with each other. Therefore officials can confidently say of the event has improved over the previous year or not, thus making easier to ask for public funds in the future.

The tool kit is easy to implement as the official will use the tools provided. The most important part of the process is the fieldwork. The information that is captured will determine the quality of results. Therefore an understanding of the methodology and terms used is vitally important.

A minimal amount of training will be needed to familiarise the official with the tool kit. The training will consist of conducting fieldwork, how to capture the data and to extract the relevant information from the database.

There will be no need to use expensive database systems such as SPSS. MS Access is provided with the Microsoft suite of software packages.
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