

# THE CONTRIBUTION OF THE WACKY WINE FESTIVAL TO THE LOCAL ECONOMY

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**Abstract:** The Wacky Wine Festival in Robertson is unique, due to the fact that there are 48 wine farms on an existing wine route that participate in the festival. Each one of these farms is offering its own unique products and entertainment programme as part of the festival in general. This article aims to determine the economic contribution of the festival to the local economy, by using a detailed spending analysis and multiplier analysis. Two surveys were conducted in June 2010, where 400 questionnaires were handed out to the visitors and 48 questionnaires to the wine farmers. To determine the direct spending due to the event, non-resident spending was isolated from local spending. Additionally, spending incurred by wine farmers in preparation for the festival is included in direct spending. Multiplier analysis was used to determine the economic contribution and it is estimated that the festival contributes R27.2 million to the local economy.

**Key phrases:** *economic value, expenditure, South Africa, wine festivals, wine tourism*

## 1 INTRODUCTION

### 1.1 Introduction to the Wacky Wine Festival

The Wacky Wine Festival started in 2004 in the Robertson Wine Valley which is situated in the Breede River Region. The Robertson Wine Valley consists of 48 wine farmers (see Figure 1). What makes this festival unique is that all of these wine farmers participate in the festival and have their own entertainment programme. Therefore the festival represents the wider region. Six years after its inception in 2010 the Wacky Wine Festival has been cited as being the largest regional wine festival in South Africa (Route 62 2010:Internet). According to an investigation undertaken by Saayman and Krugell (2010:3), the festival has grown substantially with visitor numbers that increased from 2 400 in 2004 to 16 076 visitors in 2009. Therefore, due to its size, the Wacky Wine Festival has the potential to make a contribution to the local community of Robertson.

Robertson is a small town with no other major attractions besides the wine farms, which is the main attraction in this area. It is therefore of great importance for Robertson to get a return on their investment from the Wacky Wine Festival. This investment refers to the community who invest their time and money in their enterprises to make it more appealing to tourists. The result of the festival's economic contribution will be an indication as to whether the community's investment was worth

their while. The economic contribution of tourism refers to spending on tourism-related products or services that contribute to the Gross Regional Product, household income and employment in the region (Dwyer, Forsyth & Dwyer 2010:213-214).

There are many reasons for hosting a wine festival and these include the following (Hall & Sharples 2008:6, Lickorish as cited by Mason 2008:45, O`Neil & Charter as cited by Galloway Mitchell, Getz, Crouch & Ong 2008:950, Page & Connell 2006:343, and Swarbrooke & Horner 2001:76):

- to generate income for the host region
- to create job opportunities in the region
- to generate tax revenue for local and central government
- to stimulate prospective investment in the wine industry
- to stimulate wine purchases in the area
- to contribute to regional development
- to increase the number of visits to the region
- to position the area
- to create awareness of regional trends
- to build customer loyalty.

## 1.2 Festivals and the economy

From the above it is apparent that the economic aspects of festivals are key drivers for introducing such events and the potential economic contribution that these events generate is often cited as a reason for hosting festivals. According to Dwyer *et al.* (2010:11) the indirect and direct economic contribution of tourism measures the size and overall importance of the tourism activity, in this case a festival, within an economy.

The level of the economic contribution not only determines a region`s success, but also its competitive advantage in the tourism industry and the image of the destination. The role players are therefore keen to know the benefit that the event will generate for them. For example the local enterprises need to know how they can benefit from this festival in terms of profit. If they realise that business is much better

during the festival than at other times, they will support the festival by allocating more of their time and money towards the event. This is identified by Dwyer *et al.* (2010:441) as part of the new injected expenditure: the expenditure that takes place in a host community due to the festival that takes place. The same goes for the wine farmers; they need to know that the effort and money they spend to participate in the festival will show a return on their investment. This will result in more positive attitudes towards the festival, and role players will put more of their time and money into the event, which will lead to a stronger economic contribution. Mason (2008:55) stated that perceived positive economic benefits due to tourism create support for tourism development.

Hall, Johnson and Mitchell (2000:271) mentioned that as wine tourism continues to grow, further research needs to be done to keep up with the change in customer profiles and the impact a wine event has on a destination. In this regard a variety of topics on wine tourism have been investigated in South Africa, such as key success factors of managing a wine festival (Marais 2009), the influence of a wine festival on tourists life satisfaction (Rootenberg 2009:1-137), an investigation into the wine industry's attitude towards wine tourism (Kirkman 2009:1-283), determinants of visitor spending at the Wacky Wine Festival (Saayman & Krugell 2010:153-170), Selling wine or a good time: tourism by Boom (2002:44-46) and Wine tourism and regional brand building (Bruwer 2009:52-53).

Based on the above it is evident that no known research in South Africa on the contribution of a wine festival to the local economy has yet been undertaken. In terms of events in general, various economic impact studies have been conducted in South Africa. These include amongst others: economic impact studies of the Klein Karoo National Arts Festival in Oudtshoorn (Van Schalkwyk 2004:1-113), of the Cricket World Cup on the local economy of Potchefstroom (Du Plessis 2004:1-155), of the Aardklop National Arts Festival in Potchefstroom (Van Heerden 2003:1-121), of the Cape Argus Pick `n Pay Cycle Tour (Saayman, Rossouw & Saayman 2008:100-122) and the FIFA 2010 Soccer World Cup (Saayman & Rossouw 2008:1-14). Most research of this topic only focuses on the demand side. Therefore the main aim of this research is to determine the contribution of the Wacky Wine Festival to the local economy.



## 2 THEORETICAL BACKGROUND

Hall, Sharples, Cambourne and Macionis (2000:1) argue that there has been a special relationship between wine and tourism for many years; however it is only recently that researchers, government and industries themselves have become aware of this connection. Galloway, Mitchell, Getz, Crouch & Ong (2008:950) defines wine tourism as tourists who visit vineyards, wineries, wine festivals and wine shows, with the primary motivating factors being grape wine tasting and experiencing the attributes of a grape wine region. Wine festivals create the opportunity to generate wealth for the host community and the success of the festival often depends on the contribution that it makes to the local economy.

The reason for determining the contribution to the local economy is to trace the flows of spending at this wine festival (Stynes 1999:2). Money at any event usually gets spent in three different ways (Page & Connell 2006:353):

- Direct spending: tourists that spend money on services they need during the festival for example accommodation, food and activities.
- Indirect spending: the tourism businesses that spend money on goods and services such as entertainment for the visitors and food for their staff.
- Induced spending: for instance residents in the community that re-spend the income they received from local tourism businesses and tourists during the festival on goods and services in the local economy.

According to Mathieson and Wall (as cited by Page & Connell 2006:343) as well as Saayman (2000:114), the size and scope of the economic benefit that an event creates are influenced by a number of factors:

- Type of tourism facility and attraction of tourism.
- Volume and level of tourist spending.
- Level of economic development in the region.
- Extent to which tourist spending is maintained and circulated in the region.
- Extent of seasonality in the region.

- Number of tourists.
- Length of stay of tourists.

## 2.1 The economics of wine tourism

From this it is evident that there are various role players involved during the spending process which all revolve around the wineries. Wineries are the core attraction of a wine festival although they cannot stand alone – the different role players need each other to function effectively (Getz & Brown 2006:147, Hall & Lew 2009:87, Stynes 1999:1). The Wacky Wine Festival has direct role players the wine farmers and the tourists/visitors. The festival also has a number of indirect role players such as the organising committee, the local community, suppliers, local restaurants and other service providers. This interdependence is mainly of an economic nature since all the role players add value to the visitor experience being offered. Hall and Sharples (2008:11) state that all festivals, in this case the Wacky Wine Festival, have an economic element to the event as parties involved can gain financially from the festival in some other way.

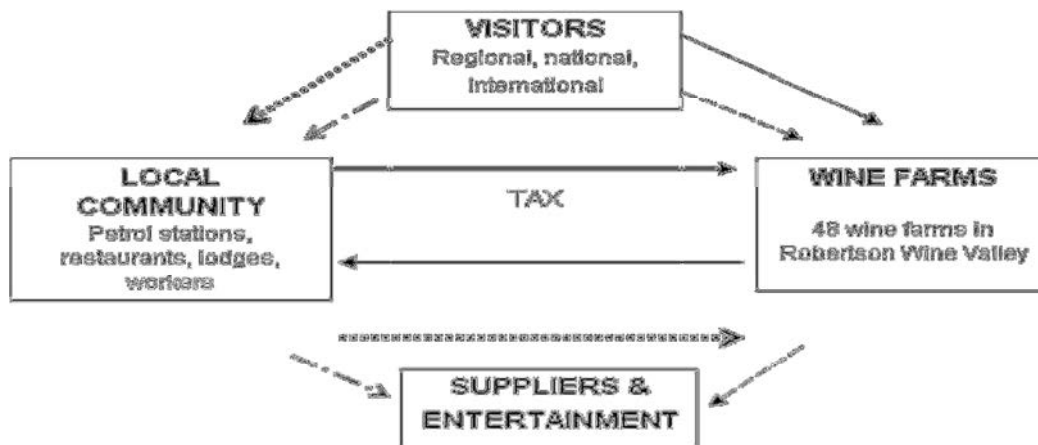
This economic relationship between the different role players is shown in Figure 2 which it indicates the interdependencies of the role players as they spend money. The figure also shows the impact of the tourism product – in this case the festival – on the different role players, and this impact can be either positive or negative. The most important spending is that of the visitors and the wine farmers, which determine whether the overall contribution will be positive or negative.

Figure 2 depicts how money flows from one role player to another in return for a product or a service rendered at the Wacky Wine Festival. For example visitors spend money on wine purchases at a wine farm. The money starts a cycle of spending, which then circulates repeatedly thereafter, forming cycles of spending which diminishes in size based on the extent of leakages from the local economy. For example:

- Visitors spend money on wine purchases at wine farm (direct spending).
- Wine farmers use that money to pay the additional workers during the festival (indirect spending).

- The workers use that money to buy groceries at the local grocery store (induced spending).
- The local grocery store uses the money to pay its workers and suppliers and the second cycle starts.

FIGURE 2: ECONOMIC RELATIONSHIP BETWEEN ROLE PLAYERS



Source: Adapted from Saayman 2000:98

These cycles create what is known as the multiplier effect. The multiplier effect describes “the number of times that each rand, or portion of a rand, is re-spent within a community before it moves completely out of the community” (Hall & Lew 2009:103). Saayman and Krugell (2010:4) also refer to the multiplier effect as the spillover effect by stating that “the aim of a wine festival is to increase the revenues of the wine producers in both short and long term, while the spillover effects benefit the community in the area.” Again it shows that the role players are interdependent on one another and other industries that complement tourism will be affected as their business will increase (Dwyer *et al.* 2010:220). Hall *et al.* (2000:197) state that wine tourism is mostly concentrated outside metropolitan areas; hence they play a critical role in regional development, employment generation, business growth, tourism and corporate investments, thereby making a contribution to the local economy.

## 2.2 Leakages and negative costs associated with festivals

The magnitude of the multiplier depends on the leakage that occurs during the spending process. In this case the leakage would be of an economic and expenditure nature. Economic leakages occur when money immediately leaves the local economy,

for example spending on imported goods (Tribe 2005:268). Expenditure leakages include potential visitors to a region like Robertson which decided not to visit the region due to the festival, locals that visit other attractions in a different region or spend less in a region due to the festival (Dwyer *et al.* 2010:414-415). According to Leeworthy, Wiley, English and Kriesel (2001:94) the estimated amount of direct spending by tourists is not equivalent to its total contribution to the economy. Some portion of this spending leaks immediately from the local economy, for example the wine farmers that rent décor from enterprises that are situated outside of the Robertson Valley. Dwyer *et al.* (2010:220) stated that regions such as Robertson that are smaller have greater leakages due to their limited industrial industry.

Other issues that negatively affect the contribution to the local economy of Robertson can be summarised as follows:

- Opportunity cost: the community spends money on facilities and services to attract festival visitors, instead of using the money for other purposes, for example training and health. Therefore the issue is the return on their investments.
- Possible costs caused by congestion if there are too many visitors for the area to carry (capacity) (Swarbrooke & Horner 2001:76).
- Inflation: food and accommodation rates that increase when tourists place more demand on these services during an event (Mason 2008:46).
- Over-dependence on tourism that occurs in small communities where the local government sees tourism as the core resource for development and income (Mason 2008:46).

From the literature review it is clear that tourism can make an economic contribution to a local community. The most important factor that determines this contribution is the spending of the different role players and how much money remains in the local economy.

### **3 METHODOLOGY**

The research focuses on two key players, wine farmers and visitors, to determine the economic contribution of the festival. Without the wine farmers there would be no



product to offer to the visitors. Therefore two surveys were conducted, one for each role player on both the demand and supply side.

### **3.1 Survey 1: The visitors**

#### **3.1.1 Sampling**

The researchers and fieldworkers approached the visitors that were attending the festival to fill in the questionnaire. Four hundred (400) questionnaires were handed out to visitors at the Wacky Wine Festival at the 48 wine farms. Most of the questionnaires were handed out at the Arabella, Graham Beck and Van Loveren wine farms as these farms attracted the most visitors. The reason for this number of questionnaires is to secure sufficient number of completed questionnaires in order to do the economic analysis. The field workers distributed the 400 questionnaires over two days. 200 questionnaires on 4 June 2010, and the other 200 questionnaires on 5 June 2010.

#### **3.1.2 Questionnaire**

The questionnaire used in this research was based on previous research by van Schalkwyk (2004), du Plessis (2004) and Saayman, Kruger, Slabbert, Saayman and Rootenberg (2009). The questionnaire consists of three sections: Section A: Demographics such as age and gender; Section B: Motivation factors, for example asking visitors their reasons for visiting the festival, and Section C: Spending behaviour. For the purpose of this research, the information contained in Sections A and C are used in the analysis.

### **3.2 Survey 2: Wine farmers**

#### **3.2.1 Sampling**

The total population of wine farmers formed part of the sampling as they are the key role players on the supply side of the festival. Firstly, the 48 wine farmers' consent was obtained to conduct the survey by means of electronic mail and telephonic calls. After gaining their permission, the farmers were approached after the festival via e-mail to obtain the necessary information with regard to their expenses during the festival.

### **3.2.2 Questionnaire**

A questionnaire was electronically forwarded to all 48 wine farmers for completion. The purpose of the questionnaire was to determine how much money was spent by the wine farmers inside and outside the local community of Robertson and if more jobs were generated due to the festival. The wine farmers were given two weeks to complete the questionnaire and then send the completed questionnaires back via e-mail. The reason for the questionnaire being sent after the festival, was to obtain the total amount spent during the festival, because there will always be extra costs during and after the festival that need to be covered. Twelve questionnaires (25%) were returned.

## **4 ANALYTICAL FRAMEWORK**

All data derived from the questionnaires were captured on a Microsoft® Excel® spreadsheet for processing to assist in determining the visitors' and wine farmers' expenditure patterns. Tribe (2005:118) defines consumer expenditure as the total expenditure on goods and services for direct consumption. An analytical framework adapted from Saayman and Saayman (2004:633) was used to analyse spending at the festival and to calculate the contribution of the Wacky Wine Festival to the local economy (see Table 1). The framework focuses on capturing the spending that takes place within the local community due to the festival and a multiplier is then applied to the spending in order to determine the indirect and induced effects that arise due to the festival.

There are a number of methods that can be used to determine the magnitude of the multiplier, including input-output analysis, social accounting matrices and computable general equilibrium models. Since Robertson is a small, rural economy with insufficient economic data available and since the economy of Robertson does not represent the available provincial economic models, the multiplier applied was rather chosen based on a review of the literature and previous research in small rural areas.

In the analytical framework (Table 1), two types of expenditure is defined, namely spending by festival attendees ( $S_j$ ) and spending by wine farmers ( $S_k$ ).  $S_j$  denotes the total expenditures of attendees on product/service  $j$  and the average expenditure of a

visitor on this expenditure category  $j$ , is represented by  $\alpha_{i,j}$  (equation 1). Equation 1 also makes provision for various categories of visitors, represented by  $S_i$ . In this research, attendees to the festival are divided into two groups, namely locals ( $L$ ) and non-residents ( $V$ ).

TABLE 1: EQUATION DESCRIPTION FOR DETERMINING THE LOCAL ECONOMIC IMPACT OF THE WACKY WINE FESTIVAL

Equation	Equation Description	Equation number
$S_j = N \sum_i S_i \alpha_{ij}$	Expenditure by all (N) festival attendees on spending item $j$	1
$S_k = n v_k$	Expenditures by all (n) wine farmers on spending item $k$	2
$V_e = \varphi N$	Number of non-residence as a proportion of the total attendees	3
$S = \sum_j S_j + \sum_k S_k = V_e \sum_j \alpha_{V,j} + \sum_k S_k$	Total expenditure by visitors and wine farms due to the festival	4
$\lambda_{V,j} = \beta_j \alpha_{V,j}$	Portion of average expenditure on category $j$ that takes place in the local community	5
$\lambda_k = \beta_k S_k$	Portion of average expenditure on category $k$ that takes place in the local community	6
$DS = V_e \sum_j \lambda_{V,j} + \sum_k \lambda_k = V_e \sum_j \beta_j \alpha_{V,j} + \sum_k \beta_k S_k$	Total direct expenditure	7
$TS = \mu(V_e \sum_j \beta_j \alpha_{V,j} + \sum_k \beta_k S_k)$	Total direct, indirect and induced expenditures	8

Source: Adapted from Saayman & Saayman (2004:633)

$V_e$  represents the number of non-residents that attend the festival as a portion of the total visitors ( $N$ ). The ratio of non-residents to residents is given by  $\varphi$ , in this case representing 87% of total attendees (equation 3). Only non-residents were included in this article because that it could not be determined whether the residents of Robertson increased their spending due to the festival. By not including the local community's expenditures, it was possible to verify the total amount of money that is injected into the Robertson economy.

$S_k$  is used to specify the total expenditure of  $n$  wine farmers on good or service  $k$ , since it is argued that their spending would not have taken place if it were not for the festival. Equation 3 shows that the total expenditure on category  $k$  is derived by multiplying the average expenditure of wine farmers on the good or service (denoted by  $v_k$ ) by the number of wine farms ( $n$ ).

$S$  indicates the total expenditure that takes place due to the event by both the visitors and wine farmers (see equation 4). Again note that local spending is excluded from this calculation. However, not all spending accrues to the local community, since some spending takes place before the event, or outside the periphery of the Robertson area. Therefore some adjustments have to be made to average expenditure on category  $j$  (i.e.  $\alpha_{V,j}$ ). The proportion,  $\beta_j$ , of average spending by visitors on category  $j$  that remains in the Robertson community is indicated by the symbol  $\lambda_{V,j}$  (equation 5). Similarly, not all spending by wine farmers accrue to the local economy and  $\lambda_k$  indicates that part ( $\beta_k$ ) of spending by wine farmers on category  $k$  that remains in the local area (see equation 6).

The total direct expenditure ( $DS$ ) that accrues to the Robertson area due to hosting the festival is the sum of spending that takes place in the Robertson economy by attendees (here defined only as non-residents) and by wine farmers. Equation 7 indicates the components of total direct spending and this can be thought of as the “new money” that entered the local economy due to the event. Total spending ( $TS$ ) is then defined as direct spending ( $DS$ ) multiplied by the multiplier,  $\mu$ . Total spending therefore represents the sum of the direct, indirect and induced effect of spending due to the event (Saayman & Saayman 2004:633).

## 5 ANALYSIS AND RESULTS

The results were derived from the data that were captured on Microsoft® Excel® and calculated according to the equations in the previous section. The profile of the visitor, as seen in Table 2, gives one a more specific idea of the type of tourist that visits this event and why they visit.

The majority of visitors originate from the Western Cape Province which explains why most tourists are day visitors since the Wacky Wine festival is located in the same province. This could also be the reason why the visitors indicate that they buy wines from the wine farmers. Visitors that travel fairly long distances to get to the festival such as visitors from Gauteng would most likely stay more than one day. This could also be due to the fact that the festival is taking place across 48 wine farms.

TABLE 2: VISITOR PROFILE

Description	Results
Gender	56% female, 44% male
Age	Average of 35 years
Language	72% Afrikaans, 27% English
Occupation	Professional (29%), Students (18%)
Province of origin	Western Cape (84%), Gauteng (8%)
Size of travelling group	Average of 5 persons
Persons paid for in group	Average of 2 people
Number of days attended	Average of 2 days
Nights spend in Robertson	Average of 1.5 nights
Accommodation	Day visitors (27%), Bed & Breakfast /Guesthouses (24%) & Friends and family (20%)
Number of visits to the festival	Average of 2 times
Next year's attendance	91% will definitely attend the festival again

Source: Authors' compilation from survey data

## 5.1 Direct contribution

Dwyer *et al.* (2010:11) stated that the direct contribution of an event focuses only on the immediate effect of spending made by visitors and role players. As previously mentioned the visitors spending depends on the number of tourists that attend the event, (i) and (ii) the magnitude of their spending (iii). This information will be used to determine the total direct contribution (iii). These items will now be described.

## 5.2 The number of tourists

Wacky Wine "passports" were sold to gain entrance to the 48 wine farms for the duration of the festival and all visitors needed to obtain such a passport. The number of passports sold is used as an indication of the number of visitors that attend the festival. In total 16 870 Wacky wine passports were sold for the 2010 Festival, indicating the total number of visitors ( $N = 16870$ ). The survey showed that 87% ( $\varphi = 0.87$ ) of these visitors are not residents of Robertson and 13% are situated in Robertson.

Since the survey can be regarded as random, this distribution of visitors is used to split the total visitor numbers between locals ( $L$ ) and non-residents (or visitors,  $V$ ). Therefore, a total number of 14 677 visitors ( $V_e$ ) can be viewed as non-locals and are used in this article for more accurate results. The reason for excluding locals is

based on the assumption that the residents would have spent the same amount of money on goods and services whether or not the festival had taken place (Dwyer *et al.* 2010:412).

### 5.3 The magnitude of spending

The magnitude of spending per visitor represents the additional spending that creates a local economic contribution. Table 3 indicates the average spending per visitor group to the Festival. It is important to know on which items the visitors spend money, in order to determine which sectors also gain financially from the event. In Table 3 the expenditures of residents and non-residents were split and only non-residents were taken into account. The reason for excluding the residents of Robertson is because it was not possible to define whether they spend more in the local economy due to the Wacky Wine Festival. As the analytical framework stipulates  $S_j$  is used to calculate the total expenditures on a category. Table 3 indicates that respondents mostly spend money on wine sales (R503.27) as expected.

Other expenditures include food and beverages (R464.20) and accommodation (R499.83), since these are basic needs. The "Other" category (R225.34) mainly refers to expenses on recreation in the region. The average spending per group (non-residents) at the Festival is R2 499.85. The average spending for residents and non-residents differs by R1 338.89, as seen in Table 3. In the survey the respondents indicated that they are paying for an average of 2 persons during the festival. Spending per person is calculated by taking the total average spending per group (non-residents), and dividing it by 2. Therefore, based on the survey, one can derive that a Wacky Wine Festival visitor spends an average of R1 249.95 during the festival.

The expenditures of the wine farmers forms the second component of spending used to determine the economic impact of the festival. Table 4 shows that the wine farmers spend the most on additional salaries, décor, decorations and entertainment, as this is used to attract and impress the visitors. The category "Other" refers to merchandise, meals for staff, security and cutlery.

TABLE 3: AVERAGE SPENDING PER PERSON

Items	Residents (L)	Non-resident (V)
Wine Passport	R137.60	R122.57
Accommodation	R0.00	R499.83
Food and Beverage	R298.2	R464.20
Shopping at stalls	R136.20	R165.08
Retail shopping (Excluding food & beverages)	R113.93	R114.25
Transport to Wacky Wine	R137.59	R405.31
Wine sales	R283.79	R503.27
Other	R53.57	R225.34
<b>TOTAL</b>	<b>R1 160.96</b>	<b>R2 499.85</b>

Source: Authors' compilation from survey data

TABLE 4: AVERAGE SPENDING PER WINE CELLAR

Items	Average spend	% spent in Robertson
Entertainment	R27 961.11	29%
Décor & decorations	R264 087.80	5%
Souvenirs/Free gifts for visitors	R7 321.50	28%
Salaries (additional staff)	R46 565.00	53%
Marketing	R6 810.93	39%
Other	R11 657.93	53%
<b>TOTAL</b>	<b>R364 403.70</b>	<b>34.48%</b>

Source: Authors' compilation from survey data

#### 5.4 Total direct contribution

The total spending of visitors can be calculated by multiplying the average of spending (R1 249.95) by the number of visitors (14 677). This amounts to R18.3 million. Secondly, spending by wine farmers should be taken into consideration. Table 4 shows that a typical wine cellar spends an average of R364 404 during the event, which, if multiplied by the 48 wine farmers ( $n=48$ ), leads to a total amount of R17.5 million. Therefore total spending (S) due to the Festival amounts to R35.8 million (equation 4).

As mentioned earlier though, not all spending takes place in the Robertson area and therefore adjustments needs to be made to validate the amount of total direct spending. For visitor spending, the adjustments were applied to transport, since it can be assumed that visitors fill their vehicles before departing to the festival in Robertson and again before returning to their place of residence. The analytical framework

stipulates that  $\beta_j$  indicates the percentage of average expenditure on category  $j$ , in this case transport, which remains in the local community. An adjustment factor of 50% ( $\beta_{transport} = 0.5$ ) of transport cost is therefore used and the amount spent on transport was adjusted according. Taking this into account the total direct contribution of visitor spending is estimated on R16.7 million.

The second source of direct spending is the wine farmers spending. As indicated in Table 4, the average spending per wine farmer was R364 404. However, only 34.48% (average of  $\beta_k = 0.3448$ ) of that amount was spent in the Robertson. If the average spending per category is multiplied by the relevant adjustment factor (as indicated in Table 4) average spending per wine farm that accrues to the local area amounts to R56 878. For the 48 wine farms, the result is direct spending of R2.7 that accrues to the local community.

As a result of the festival the spending in the local economy of Robertson increased by an estimated total of R19.4 million. This is then also the direct contribution of the festival to the local economy indicated by  $DS$  in the analytical framework (equation 7).

### 5.5 Indirect and total contribution

As mentioned earlier money spent in an economy creates cycles of the additional spending, which leads to further spending in an area; this is referred to as the indirect and induced contribution of spending and is measured by means of a multiplier. There are five types of multipliers identified by Cooper, Fletcher, Fyall, Gilbert and Wanhill (2005:151-166) as well as Vanhove (2005:185-187):

- Tourism income multiplier.
- Employment multiplier.
- Output multiplier.
- Government revenue multiplier.
- Sales multiplier (transactions).

In this article the sales multiplier will be used because that it focuses on the sales that result from the direct and indirect spending of tourists (Vanhove 2005: 187). Robertson is a very small economy and there is no formal economic model available.



Therefore an estimated size of the multiplier is set based on previous research done for the National Arts Festival in Grahamstown with a multiplier of 1.15, the Klein Karoo National Arts Festival in Oudtshoorn with a multiplier of 1.43 and the Aardklop in Potchefstroom with a multiplier of 1.52 (Saayman & Saayman 2006:579). The average of these multipliers of 1.4 was used. Therefore the direct contribution was multiplied by 1.4 to calculate the total contribution.

TABLE 5: THE ECONOMIC CONTRIBUTION OF THE WACKY WINE FESTIVAL 2010

Item	Rand	Analytical framework
Total visitor spending	16 678070	$V_e \sum_j \lambda_{V,j} = V_e \sum_j \beta_j \alpha_{V,j}$
Total wine farmer's spending	2 730122	$\sum_k \lambda_k = \sum_k \beta_k S_k$
Direct contribution	19 408192	$DS = V_e \sum_j \lambda_{V,j} + \sum_k \lambda_k$
Indirect and induced contribution	7 763277	= TS - DS
TOTAL CONTRIBUTION	27 171469	$TS = \mu(V_e \sum_j \beta_j \alpha_{V,j} + \sum_k \beta_k S_k)$

Source: Authors' compilation from survey data

As seen in Table 5 it is estimated that the total (direct, indirect and induced) contribution for the local economy is R27.2 million. The difference between the total contribution and the direct spending gives an indication of the indirect and induced effect that this initial spending have in the local economy.

## 5.6 Other benefits and costs

Dwyer *et al.* (2010:222) stated that the benefits from tourist consumption cannot always be measured in terms of monetary value. An example of the positive impact of the Wacky Wine Festival is job creation. Given the information from the wine farmers an average of 5 additional job opportunities were created per wine farm. Therefore taking the average per wine farmer and multiplying it by the 48 wine farmers, an average of 240 job opportunities were created during the festival. One should note that even though these jobs are only temporary they make a difference in income. According to Stabler, Papatheodorou and Sinclair (2010:205) tourism creates employment and this employment is generated from tourist expenditures. Employment also comes with a cost as Laws (1995: 89) explains that: employment during a tourism event such as a festival can be seasonal and people from outside the local community fill the vacancies.

As discussed earlier the wine farmers need to know what difference the event can make in their annual income. Forty-four percent (44%) of the wine farmers pointed out that the festival has led to a slight increase in their annual income, followed by 25% who showed that it leads to a significant increase and the other 22% that the festival has no impact on their annual income. This means that the wine farmers see the festival making a positive contribution to their annual income and will therefore keep participating in the festival.

## **6 CONCLUDING REMARKS**

The purpose of this article was to determine the contribution of the Wacky Wine Festival to the local economy. To answer this research question a quantitative study was conducted by means of questionnaires handed out to the tourists and wine farmers participating in the festival. The contribution of the festival was determined using multiplier analysis, based on direct spending estimates resulting from the festival.

The key input into any economic impact study is the direct spending due to the event, since this represents the initial stimulus on which the impact estimates are based. In order to determine the initial spending stimulus that accrues to the local economy, an extensive spending framework was used. Spending by attendees was divided into two groups, residents and non-residents, and only non-resident spending was used in the analysis, since this represents the “new money” that enters the economy due to the festival. Additionally, wine cellars spend money in preparation of the festival. Since this spending would probably not have taken place if it had not been for the festival, it is also included in the analysis. Care was taken to include only spending that accrues to the local economy and this entailed weighting spending categories. Given these adjustments, spending that accrues to the local economy is approximately half of what it would be if not taken into account, which would lead to inflated spending and economic impact values.

Due to the lack of research studies on the economic contribution of wine festivals it is difficult to evaluate the magnitude of influence of this wine festival. Therefore, the Wacky Wine Festival is compared to other festivals, such as art festivals, to evaluate its significance to the local economy. While the direct spending due to the festival is

estimated on R19.4 million, applying a realistic multiplier of 1.4 reveals that the Wacky Wine Festival contributes R27.2 million to the local economy of Robertson. This result compares favourably to that of some of the national arts festivals held in the country.

2010 was the Wacky Wine Festival's sixth year running and the impact derived is comparable to an art festival such as Aardklop National Arts Festival, which had a total economic contribution of R18.3 million in 2003 – its fifth year (Van Heerden 2003). This result also compares favourably to South Africa's largest arts festival: the Klein Karoo National Arts Festival in Oudtshoorn (Van Schalkwyk 2004: iii) that had a total economic impact of R76.72 million in 2004, although it was already running for its ninth year, is already a well-known festival by tourists and spans for a period of eight days. In other words, the event is four times the length of the wine festival.

This article contributed to the wine festival industry with regard to its economic contribution on the host community. Before this recording, little was known about the impact of a wine festival on the local economy and, in particular, about the impact of the Wacky Wine Festival in Robertson.

Furthermore, this research shows that the inclusion of both visitor spending (i.e. demand side) and wine cellar spending (i.e. supply side), contribute to derive a more complete picture of the value of such an event for the local economy. However, this research excludes all other local spending although it may be argued that some locals remain in the area to take part in the event and therefore their spending should be included. Future research could therefore investigate this aspect in the spending framework and in wine tourism more intensively. As is typical with an economic impact study, this research focuses on the positive aspects associated with the increased spending due to the festival. Future research could expand on this aspect by also including displacement of tourists who would have visited the area but do not due to hosting the festival. Comparative research would also benefit this discourse on wine festivals and wine tourism, especially in South Africa with its variety of wine routes and festivals.

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