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Recent trends in economic research

From farm to fork: Is food tourism a sustainable form of economic development?

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ABSTRACT

Food tourism events have become a large focus for economic development in rural and regional areas. Tourism has been a key driver of food festivals, where they play a role in attracting visitors and generating expenditure in the local economy. While these types of events are generally badged as enhancing sustainability, the criteria and tests for these claims are rarely specified. In this paper we explore how the sustainability of food tourism festivals can be considered and evaluated in economic terms, using a case study of the Truffle Festival — Canberra Region in Australia. A zonal travel cost analysis was conducted to measure consumer surplus, providing potential inputs into individual economic welfare and public good evaluation tests. The results estimate that the event generated consumer surpluses of $754/person and more than $8 million overall in 2016, highlighting the importance of artisan food experiences for tourism events. To further implement food experiences as an economic development strategy further consideration and linkages with agriculture, environment and community are required to ensure they are sustainable.

1. Introduction

In developed countries the economic base in rural and regional areas is shifting away from bulk agricultural production and industry output towards providing more niche outputs for consumers and tourists (Jackson and Murphy, 2006; Taylor, 1995). Many regional and rural communities have been seeking to stimulate their local economies through diversification from, agriculture to tourism and events (Goulding et al., 2014; Henderson, 2009; Walmsley, 2003). Internationally, there have been a number of approaches to generate events and tourism based on nature (Mangan et al., 2013; Prayaga et al., 2006; Sisneros-Kidd et al., 2019), culture (Higgins-Desbiolles, 2016; Lynch et al., 2010; Richards and Wilson, 2004), music (Gibson and Connell, 2007; Quinn, 2006) and food (Choo and Park, 2018; Organisation for Economic Co-Operation, 2012; Sims, 2009).

In Australia, there is increased focus on food experiences and festivals, with State Governments developing strategies based around food tourism (Destination NSW, 2018) and artisan agriculture which is often badged as an agritourism offering (Victoria, 2018). Sustainable tourism experiences or events are increasingly playing an important role in the business models of artisan producers, allowing them to eliminate intermediate steps in the supply chain, and to sell their product directly to consumers with the option to add value through tourism experiences (Smith and Xiao, 2008).

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Agriculture and food plays an important role in local economic development, with an increasing number of artisan food producers across Australia as the consumer demand for locally produced products increases (Gralton, 2007; Hajkowicz et al., 2012). In 2016 tourists spent more than $21 billion on food, wine and brewery experiences across Australia (Tourism Australia, 2018). Increases in the economic impact and value of events and festivals have been driven by a large increase in real disposable income, with people spending more money on holidays and cultural entertainment. Real income growth has been accompanied by increases in leisure time and a greater propensity to spend large sums for this purpose (Frey, 1994).

There are important linkages between developing sustainable food experiences for tourists and policies for agriculture, tourism, food production, country branding and cultural and creative industries (Getz, 2009). The multiple and integrated influences on artisan food experiences requires holistic approaches to policy development and implementation to understand the overall sustainability (Organisation for Economic Co-Operation, 2012; Veeck et al., 2006).

Although food experiences and events are emerging as a form of sustainable development for rural communities in Australia, there is limited information quantifying the economic impact (Wallstam et al., 2018) or about the viability of developing linkages and supporting components of agriculture, environment and community policy (Beer et al., 2012; Jackson and Inbakaran, 2006; Knowd, 2006). One definition of the sustainability of food tourism is when "it sustains activities, person and institutions in harmony with a place's other elements, such as natural resources, history and sociocultural values" (Rinaldi, 2017).

In an economics framework, the sustainability of food tourism events can be viewed in three different paradigms. From a regional development perspective, food tourism events play an important role in stimulating economic activity in rural centres and helping to maintain the viability of regional areas (Afandi et al., 2013; Loomis, 1995). From an economic welfare perspective, mechanisms that directly link consumers and producers are likely to improve consumer knowledge and satisfaction with foods, limit externalities associated with transport, and encourage higher quality artisan production techniques (Slocum and Everett, 2010) From a public goods perspective, the costs of hosting food tourism events, and any public subsidies that are provided, may be worthwhile if there are larger offsetting consumer surpluses generated (Ezebilo, 2016).

One approach to identifying the economic contribution of artisan food is to value the recreation benefits associated with their consumption. This is consistent with the concept that artisan foods create an experience that purchasers enjoy, and it is the experience that generates the true value to consumers. Techniques to value recreation and leisure benefits, particularly the travel cost method, can be employed for this purpose (Afandi et al., 2013; Prayaga et al., 2006; Ward and Beal, 2000; Zhang et al., 2015). This study focused on valuing one aspect of the artisan food, the sustainable food tourism aspect, through applying a travel cost analysis for the Canberra Truffle Festival.

The primary aim of this paper is to assess the economic contribution of a case study event, the Truffle Festival — Canberra Region, so as to contribute to any economic analysis of sustainability. A specialised valuation technique, the Travel Cost Method (TCM) is applied for this purpose. A secondary aim is to discuss the alignment of polices that pertain to agriculture, environment and community outcomes of food tourism events to identify any improved linkages that are required. The paper is organised as follows. The next section details the case study festival followed by the TCM methodology and its application to special events. Then the TCM analysis and the results of the study are reported. The final sections include discussion and concluding remarks.

2. Materials and methods

The Truffle Festival — Canberra Region is an annual event held throughout the truffle season from June to August each year. The 2019 season was the 10th anniversary of the festival, which is operated by the Capital Country Truffle Festival Association. The festival brings together the agriculture, tourism and hospitality industries in the region with truffle growers, restaurants, cafes, wineries, and breweries, all presenting a local black truffle experience. The event highlights the black winter truffle through six key methods. The first are restaurants which showcase the product through a set menu where the cost ranges from $30 to $120 per meal. Second, are a number of cooking schools that teach consumers how to prepare the truffles where the costs range from $150 to $198 per person. Third, are local wineries that pair truffle-infused products with wines costing around $30 per serve. Fourth, are truffle growers offering a hunt for truffles with their specially trained dogs, costing around $80- $189 per person. Fifth, are markets where chiefs demonstrate how the products can be cooked and how products are able to be purchased. Sixth, are local accommodation providers that offer truffle on the menu for their guests in a hero dish costing around $40 per meal. The locations ranged from the city of Canberra to the rural towns of Braidwood, Tarago, Sutton, and Collector.

2.1. The travel cost method

The appropriate method for valuing a good or amenity depends on various factors including the nature of the data (revealed or stated preferences), the value to be estimated (use or non-use values or both) and the characteristics of good and linkages to complementary and substitute goods (Bateman et al., 2002; Bennett, 2011; Champ et al., 2003). Revealed preference methods like the TCM are suitable for this study as data can be collected on observed behaviour. The approach applies demand theory to estimate and explain the value of a recreation choice through the simple assumption that the

value of a recreational option depends on and is relative to the travel costs (Fleming and Cook, 2008; Rolfe and Dyack, 2011; Rolfe and Prayaga, 2007). People are more likely to participate, travel further and commit more expenditure to events that provide more benefit to them (consumer surplus) than to events with lower benefits.

The TCM captures the value of a recreational asset or event by analysing the sacrifices that people make in terms of expenditure and travel time to attend. There are essentially two types of travel cost models, the individual, where the dependent variable is the number of trips per year (or per season) by individual users of a recreation site (Du Preez and Lee, 2016), and the zonal, where the dependent variable is the number of trips taken to the site by the population of a particular region or zone (Cook and Herath, 2000; Fleming and Cook, 2008; Prayaga et al., 2006). While the former is more appropriate for local, frequently visited, sites, the latter is more appropriate for sites visited infrequently by travellers from afar (Okubo et al., 2014). Given that the target application is a single event over a particular period of time, the zonal version is the model employed here (Cook and Herath, 2000; Fleming and Cook, 2008; Prayaga et al., 2006).

Application of the TCM to the Truffle Festival allows values to be estimated from the travel and other costs incurred to attend the event by visitors from their original location. The advantages of choosing the TCM to estimate benefits is:

- Data can be easily collected
- The method is relatively simple and inexpensive to apply
- The method is well established an accepted by policymakers
- The results are easily interpreted

The travel cost models are developed in three stages. In the first stage, the trip generation function (TGF) is estimated and this is then used in the second stage to estimate demand for visits by varying a hypothetical set of entry fees. Following this the estimated demand curve is then used in the third stage to estimate consumer surplus (Fig. 1). Each of these three stages has a number of components that will be discussed.

The data for the study was collected by surveys undertaken during and at the end of the festival in 2016 by The Truffle Festival Association — Canberra Region. Participants were either randomly selected and asked to complete a paper-based survey immediately after the event they attended or were sent a link to complete in their own time online through Survey Monkey. The survey was designed to collect data on the location of origin for visitors, what events they attended, if they went specifically for the festival, their length of stay in the region, what accommodation they used, and their mode of travel. Both paper-based and online survey data were pooled. In 2016 there were 491 people surveyed and this forms the data for the analysis.

The zonal TCM involves two key stages: deriving the "trip generation function" (TGF), and estimating the demand function. The trip generation function relates the visit rate to the travel costs and other variables associated with the visits such as income, occupation, the age and education of participants and the attractiveness of substitute events. The demand function is estimated from the TGF by simulating the effects on visitation rates of an increase in travel or ticket costs. The TGF for a zonal travel cost model is defined as:

$$V_{hj}/N_h = f(TC_h, X_h) \tag{1}$$

Where:

V_{hj} = visits from zone h to site j
N_h = population of zone h
V_{hj}/N_h = Visitor rate which is calculated as visits per 1000 population in each zone
TC_h = Cost of travel to the event
X_h = Event ticket cost

The second step is to derive the demand function for entry to the event from the trip generating function using a hypothetical set of additional entry fees.

This function is defined as:

$$Q = \alpha + \beta P \tag{2}$$

Where:

Q = Number of visits
P = Entry fee

The consumer surplus is then estimated by integrating the area under the demand curve. The demand function estimated by the TCM is the ordinary uncompensated demand function. The welfare measure estimated from it is, therefore, the Marshallian consumer surplus.

2.2. Identification of zones

The definition of zones is often arbitrary or influenced by the availability of population data (Bateman et al., 1996). Drawing concentric circles 50 km or 100 km width around the site is one way to identify zones. Prayaga et al. (2006) and Herath (1999) used concentric circles to define zones and then cities within the circles as the main sites or origin of visitors. Lockwood and Tracy (1995) identified zones based on postcode clusters that contained approximately equal

populations. Beal (1995) based the identification of zones on statistical divisions which were aggregated according to their approximate distance from the site. In this study, we used a combination of the Beal (1995) and Herath (1999) approaches following the method employed by Prayaga et al. (2006). First the zones were identified on the basis of statistical divisions defined by the Australian Bureau of Statistics (2016a). Then the population for each zone was calculated for the ABS 2016 consensus data. The zones used in this analysis were:

1	Canberra
2	Sydney
3	Southern Highlands
4	Riverina
5	Hunter
6	New England and North West
7	Illawarra
8	Central West and far West
9	Richmond Tweed & mid north coast
10	Brisbane, Adelaide, and Interstate

Overseas visitors can be treated in various ways; the option taken in this paper was to omit them from the sample (Carr and Mendelsohn, 2003; Fleming and Cook, 2008; Zhang et al., 2015).

2.3. Cost variables

The next issue concerns the definition and treatment of costs of travel and time. There are several complexities underlying these treatments, such as subjectivity of choices, the varying nature of durable goods needed for travel and the debate about the inclusion and treatment of opportunity costs (Casey et al., 1995; Shaw, 1992). There are three common options for the estimation of travel costs.

1. To use the petrol costs estimated from the travel distance
2. Use full car cost which includes insurance and registration, maintenance etcetera.
3. Ask visitors for their perceived costs of travel.

Bennett (2011) argues that the most appropriate measure is the perceived costs of travel, although Prayaga et al. (2006) note that participants often under-report costs. In this study self-reported costs were not available, so costs were estimated, consistent with other Australian travel cost studies such as Prayaga et al. (2006), Rolfe and Prayaga (2007) and Rolfe and Dyack (2011). For this study travel costs were estimated as a product of distance travelled by the cost per kilometre. The latter was calculated as 88 cents per kilometer by averaging across all car types from the Australian Bureau of Statistics (2016b) data. This rate allows for the total running cost of the car which includes petrol, insurance, depreciation, servicing and repairs (Fleming and Cook, 2008; Zhang et al., 2015).

Visitors who had travelled from other capital cities were separated into two different groups. If the visitor came for other activities and the truffle festival was not the sole purpose of the trip they were treated like a local visitor. However, if the visitor had come specifically for the event from any interstate location, they were assigned the Canberra local travel costs and in addition to this a return flight cost of $400.

Although expenses on meals and lodgings may be considered as part of the trip costs, variations in utility could be generated by the expense of staying in different classes of accommodation. To simplify the assessment, participants were asked to select out of the options of: hotel/motel, camping/caravan, staying with friends, B&B or serviced apartments, so that accommodation costs could be assigned more accurately. The median value of the accommodation was the applied for each of the accommodation options. The average room rate of $147 reported by the Australian Hotels Association (Price Waterhouse Cooper, 2009) was used for the hotel/motel and B&B options, the camping or caravanning was $15 per night and the staying with friends option did not incur a cost. This cost was only included as a trip cost if the visitor specifically came for the festival.

2.4. Opportunity cost of time

Economists recognise the role time plays in the decision to participate in recreational activities and often incorporate the opportunity cost of time as a component of travel costs in recreational demand models. Time is likely to be at least as constraining as money in making a decision about recreational activities. The opportunity cost of time could be applied to both the time spent travelling to the recreational demand site and the on-site time. However, given that visitors' leisure time on weekends is generally outside their normal work, time spent on-site was considered to be exogenously determined and the marginal utility derived from it would be equal to that derived from the alternative activities it was assumed that the opportunity costs of travel and on-site time were zero, consistent with Ward and Beal (2000) and Whitten and Bennett (2002). This has the benefit of generating more conservative estimates of values and avoiding risks of over-estimation.

2.5. Substitute sites

The prices of substitute sites and events have an impact on the estimation of recreational demand. These variables are rarely included in recreational demand models because it is both expensive and difficult to collect and include such data. Siderelis and Moore (1995) studying rail trails found that there were no other rail trails close enough to the site in question that could be considered substitutes. Given that there are only two other Truffle festivals in the country, one in Western Australia and one on the Mornington Peninsular outside Melbourne, substitute events were considered to have limited relevance. Consequently, variables for substitutes were excluded from the model.

2.6. Multi-purpose trips

A primary assumption of the travel cost method is that the trips were made with a single purpose and single designation only. The treatment of the multi-destination trips is complicated because it is difficult to allocate cost shares specifically related to recreational activities in question (Casey et al., 1995; Fleming and Cook, 2007). One procedure for estimating travel costs for multi-destination trips for which the site was not the primary destination is to estimate only a one-way travel cost, while estimating return trip costs for single purpose visitors (Rolfe and Dyack, 2011).

There were some visitors to the festival whose place or origin was not known (due to missing data). For the analysis both these groups of visitors were considered local (within 100 km of the event). Coupal et al. (2000) studied the degree to which inclusion of visitors with different reasons for recreation affected the value of the recreational activity. They found significant variation in consumer surplus estimates when the heterogeneous nature of the visitors was considered. However TCM can still generate reasonably accurate and policy-relevant estimates of consumer surplus in spite of the researcher' inability to disaggregate travel costs accurately or the unavailability of a procedure to allocate the trip costs to other trip purposes or sites (Stoeckl et al., 2011).

In this study, 62% of the visitors in 2016 said they came specifically for The Truffle Festival — Canberra Region. This included many interstate visitors, because people with a keen interest in Truffles and gourmet foods often make an annual visit to the festival. The analysis was performed on the assumption that visitors made the trip for the single purpose of attending the festival. This assumption may mean that consequent estimates of consumer surplus are biased upwards.

The choice of a functional form in Travel Cost Analysis is important because it significantly affects the size of the consumer surplus estimates (Crooker et al., 2000; Vicente and De Frutos, 2010). The TGF Eq. (1) and the demand function Eq. (2) could be specified as different functional forms: namely, linear, linear–log, log–linear and double log (Fleming and Cook, 2008). Economic theory is not entirely clear as to the preferred choice of functional form for either of the two functions that have to be estimated (Hanley and Spash, 1993). The choice of the correct functional form is important in order to obtain accurate and unbiased estimates of CS, irrespective of whether the travel costs are measured correctly or not (Stoeckl and Natalie, 2003). Factors such as model fit and predictive validity are typically employed to identify the best functional model for each step in the analysis (Prayaga et al., 2006).

3. Results

The present study uses the ordinary least squares to estimate all the models, and the preferred model is then tested for heteroskedasticity. If heteroskedasticity was present then the Generalised Least Squares (GLS) procedure was used to re-estimate the model.

The value of the travel cost variable was calculated by using the following formula:

$$TC = (p * g) + (Distance * 2 * 0.88) + [(n_j * accommodation) + (Flights * 2)],$$

where TC is the travel cost per group, P is the average ticket price across events of $80, and g is the average number of people in each group which was assumed to be two. Distance is one-way distance to the festival and $0.88 is the average car cost per kilometre (Australian Bureau of Statistics, 2016b; RACQ, 2019). If visitors came specifically for the festival and stayed in a hotel or apartment; n was the number of nights multiplied by the accommodation cost of $147. Similarly for Zone 10 participants the flights cost of $400 return was multiplied by cost per group of two.

To estimate the visitation generation function average income and population for each zone was calculated from the census data for 2016 Australian Bureau of Statistics (Table 1). 'Income' was defined as the average of the mean weekly household income for each zone as given in the ABS census 2016 (Australian Bureau of Statistics, 2016b).

To obtain the trip generation function the visit rate (V/N) was regressed against travel cost and income, gender, first time visiting, if they specifically came for the festival and the marketing approaches. None of the socio-demographic variables were significant, even at the 10% level, and were removed from further analysis. As there is no theoretical reason for choosing one functional form over another, linear, linear–log, log–linear and log–log equations were estimated, with the subsequent model selection based on its accuracy of prediction along with the strength of the model, based on adjusted R^2, F-statistics, and significance of the coefficients. Against this criteria, the functional form of the preferred model was found to be the double log model: $\text{Ln(VR)} = \beta_0 + \beta_1 \text{ln(TC)}$. (See Table 2.)

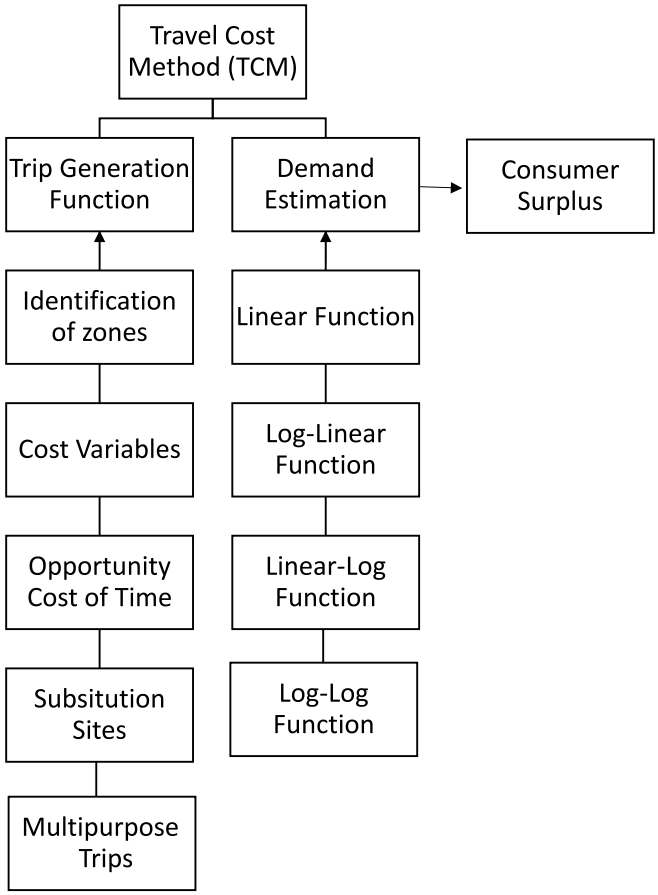

Fig. 1. Development of travel cost models.

Table 1
Zones and visitation function.

Zone		Population	Population/1000	Visitors	V/N
1	Canberra	224,288	224.29	187	0.83
2	Sydney	4,694,459	4,694.46	196	0.04
3	Southern highlands	150,676	150.68	43	0.29
4	Riverina	159,794	159.79	11	0.07
5	Hunter	269,668	269.67	2	0.01
6	New England and North West	245,164	245.16	1	0.00
7	Illawarra	303,701	303.70	10	0.03
8	Central West and far West	327,557	327.56	4	0.01
9	Richmond Tweed & mid north coast	216,002	216.00	2	0.01
10	Brisbane Adelaide and Interstate	224,288	224.29	35	0.16

Notes: 491 participants were surveyed. 2016 ABS population data was used to estimate visitation.

Table 2
Regression statistics for comparison of the four functional forms of demand, 2016.

Model type	R^2	F	P-Value	β_0	β_{TC}	β_0 significance	B_{TC} significance
Linear	0.453	6.617	0.033	0.516004	0.00042	0.011	0.033
Linear Log	0.697	18.384	0.003	2.6303	−0.3733	0.002	0.003
Log–Linear	0.525	7.733	0.027	−0.5306	−0.0029	0.594	0.027
Log–Log[a]	0.638	12.33	0.01	11.7523	−2.228	0.027	0.01

Note: β_0 = constant β_{Tc} = Travel Cost$n$ = 491.
There was no change to variables assessed between the functional forms.
[a]Preferred model form.

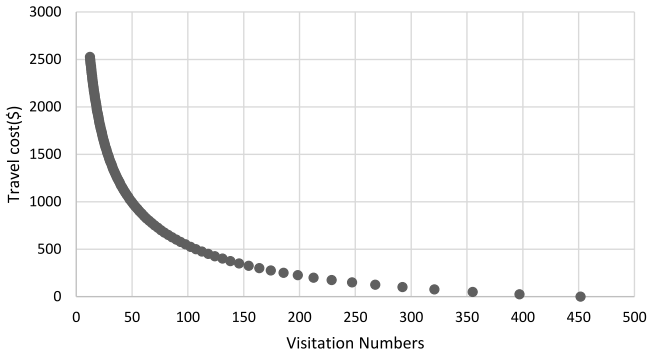

Fig. 2. Demand curve for travel cost.

Table 3
Regression statistics for the truncated demand functions.

Model type	R^2	F	P-Value	β_0	β_{TC}	β_0 significance	B_{TC} significance
Linear	0.611	157.36	0	1744.222	−6.591	0.000	0.000
Linear Log	0.952	1982.778	0	4120.247	−754.73	0.000	0.000
Log Linear	0.962	2490	0	7.66	−0.011	0.000	0.000
Log–Log[a]	0.93	1309.625	0	10.48	−0.96	0.000	0.000

Notes: Note: β_0 = constant, β_{Tc} = Travel Cost.
[a]Preferred model form There was no change to variables assessed between the functional forms. Model truncated at 4000 visitors at total number of visitors was 10,720.

3.1. Demand function and consumer surplus

To estimate the demand function from the chosen TGF model, the travel cost was increased through raising the potential ticket price and sequentially adding this to the average cost for each zone. The visitation rates from each zone under these additional costs are predicted from the TGF, and the total expected number of visitors at each hypothetical entry price computed (See Fig. 2).

To estimate the demand function the number of visits was regressed against the hypothetical increase in entry fees. As with the trip generation function, the choice of the appropriate functional form is based on consistency with economic theory and strength of model fit (See Table 3).

The log–log demand function is again the preferred functional form $\text{Ln(VR)} = 10.48 + -0.96$ (entry fee). The demand schedules were truncated at 4000 as the demand function is an exponential function and by nature is asymptotic to both axes.

Consumer surplus is calculated as the area under the demand curve. The demand functions for the Canberra Truffle festival were estimated in terms of the additional fee visitors would be willing to pay and above the ticket price that they had already paid, so the entire area under the demand curve is consumer surplus. The consumer surplus per person was estimated to be $754. As the total number of visitors in 2016 was 10,720 people, the per person surplus was then extrapolated to achieve the total consumer surplus of about $8 million.

4. Discussion

The travel cost method employed in this analysis provides estimates of consumer surplus of the truffle festival of $754 per person. The total consumer surplus estimate of $8 million provides a basis for evaluating whether any public or private subsidies for the event can be justified. This allows a public goods test of sustainability to be conducted. The high consumer surplus per person that has been generated also provides some indication that consumers are generating much higher economic welfare from the festival compared to normal consumer goods, satisfying an economic welfare test of sustainability.

Although comparing these results is difficult given each event's unique attributes, the estimates of the direct and indirect use value of a musical event by Andersson et al. (2012) is a useful point of comparison. The authors found an indirect use value (similar in nature to the recreational value here) for a Swedish music festival visitors of around $215 per person once converted into Australian dollars. The valuation of the Christmas Markets in Meran Italy also provide a useful comparison of AUD$188 per person (Brida et al., 2017). The Gemfest event in Central Queensland, Australia was valued to be $1.5million in 1998 (Prayaga et al., 2006). These comparisons provide some indication that the estimates found in this paper are plausible which is important from a policy perspective as it provides validation for government funding.

However there are other dimensions of sustainability to be considered regarding the linkages of food events to agriculture, environment and social policies. In relation to agricultural policy a key characteristics of niche industries such as truffles is the high value that the product derives from the market is reliant on small volumes being produced. If the industry and therefore the festival was to grow further it may change the authenticity of the event and the overall luxury status of the product (Rinaldi, 2017).

Considerations of biosecurity legislation for agriculture and implications of tourism events require coordination between agricultural policy and tourism development to ensure diseases, weeds and pest are not bought by tourists on-farm or transferred from one farm to another (Blake et al., 2003) impacting both agriculture and tourism (Hall, 2011). Similarly, environmental policies regarding waste management, water management and protected species needs to be considered in the planning and implementation of events. The current policy linkages between tourism, agriculture and environment are relatively weak in Australia and the transition from food production to food tourism requires careful planning (Everett, 2012).

For social and community linkages there is evidence to suggest that tourists develop brand loyalty after food events with destinations (Folgado-Fernández et al., 2017). This indicates that the Canberra community could potentially develop the area further for food tourism products and events (du Rand and Heath, 2006), although this would require further stakeholder engagement and strategic planning regarding the seasonality of produce grown in the region. It may also result in landholders shifting from being farmers to tourism operators which may impact how the production is perceived and if it represents an authentic experience. The event is in close proximity to the large population bases of Sydney and Canberra, which have higher levels of income than other regions. Not all artisan industries or food events would be fortunate enough to have access to such large and high income population centres.

5. Conclusions

This paper aimed to better understand the economic sustainability of introducing food tourism events to regional and rural areas using the Truffle Festival — Canberra Region as a case study. The results demonstrate that food tourism does provide an opportunity for economic development for rural and regional areas. The economic analysis provided in this paper reveals that a truffle food tourism event generates significant consumer surplus values that underpin benefits to individual visitors as well as to the host regions. The analysis suggests that these types of events have an important role to play in maintaining sustainable regional communities and artisanal agriculture.

However, there are a number of improvements to be made to align agriculture, environment and community policies and legislation to ensure that food tourism presents a sustainable tourism pathway. Communities also need to be made aware that the transition may shift landholders who are food producers to landholders who operate tourism experiences and changes will be required to facilitate this. The policy linkage between agriculture and tourism would required to be more integrated to ensure that there are planning process that consider the different aspects in their totality.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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