



AN ASSESSMENT OF THE POTENTIAL OF HOT SPRING TOURISM IN LIMPOPO PROVINCE OF SOUTH AFRICA: A DELPHI STUDY.

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Abstract: *Tourism is regarded as a modern-day engine of growth globally. Considering this, the South African government aims to increase tourism's contribution, both directly and indirectly to economic growth. The economic growth fallout from COVID-19 affected many industries, including South Africa's tourism sector. A decline in revenue from domestic (resident) visitors and inbound (non-resident) visitors, exacerbated by stringent travel restrictions, saw a fall in tourism trips, tourism-related expenditure, and employment. The purpose of the study was to assess the sustainability of hot spring tourism in Limpopo Province regarding their competitiveness and potential to contribute to the economy of the country. The study employed a Delphi technique which is designed as a group communication process that aims to achieve a convergence of opinion on a specific real-world issue. The research developed a set of appropriate indicators that determines hot spring destination competitiveness. Data were collected through two sets of questionnaires administered and addressed to experts in the Limpopo Department of Economic Development and Tourism, academic staff in the Department of Tourism at the University of Venda, and tourism managers and practitioners in the tourism hot spring sector. From the findings of the study the strategies to make hot spring destinations competitive and sustainable as a tourism activity in the Limpopo Province is not strategized and regarded as of significant importance.*

Keywords: Sustainability; Tourism; Destinations; Competitiveness and Indicators



1. INTRODUCTION

This paper reports the findings of a Delphi survey designed to provide tourism policymakers and other stakeholders with plausible indicators to make hot spring tourism in Limpopo province sustainable and competitive. The paper is premised on the assumption that the sustainability and competitiveness of any tourism sector depend on certain identifiable factors, the understanding of which is a prerequisite for formulating successful strategies for the sector. South Africa in general and the Limpopo Province in particular, is endowed with pristine hot spring sites which can be developed as viable tourist destinations in the SADC region (SA Tourism Industry, 2010:13). In Limpopo, poor management of some hot spring sites, particularly in the former so-called “self-governing” homeland area of Venda, has led to a decline in tourism visitation and tourism’s contribution to the economy. The key issue in this paper, therefore, is how hot spring tourism in Limpopo Province can be developed and managed, to be economically competitive and benefit the local population, while conserving the environment on which hot spring tourism depends at the same time.

2. Importance of Tourism

The South African government has identified the tourism sector as a key focus for economic development due to its potential for substantial contributions to the economy (South African Tourism Industry, 2010, p.12). According to the South African Tourism Industry (2012, p.12), tourism in South Africa offers both natural and cultural attractions to visitors, alongside a pleasant climate and favourable social and political environments.

Statistics South Africa reported that the volume of tourists dropped by 72,6% from 10 228 593 in 2019 to 2 802 320 in 2020 and declined by 19,5% between 2020 and 2021. The volume of tourist arrivals increased by 152,6% from 2 255 699 tourists in 2021 to 5 698 062 tourists in 2022 (StatsSA, 2022).

The contribution of tourism to employment was 9.9 % in 2018 and 4.5% in 2018 (about 1, 554, 000 jobs). This is expected to have risen to 0.2 % in 2019 to 1,557,000 jobs and is estimated to rise by 3.8 % per annum to 2,260,000 jobs in 2019 (11.9 % in total) (World Travel and Tourism Council (WTTC), 2019:2). The direct contribution of tourism to GDP in 2020 was 3% about 130.1billion rands. The tourism industry in South Africa employs about 4.5. % of the total



workforce and it employs more workers than the mining industry (tourism with 712 000 and mining 462 000) (Statistics South Africa, 2020:1)

Tourism is also an important consumer service with enormous local and international implications which includes a variety of visitors, including personal as well as business travellers and conventions, stretched over a wide range of duration of stays. According to Ashley, de Brine, Lehr and Wilde (2007:11-12), the “growth of tourism reflects the rise in disposable income among the segment of South Africa and the world population”.

In the Limpopo Province, the cultural and natural hot spring heritages of the province are assets that can enable the province to compete with the rest of the world as a viable tourism destination (Richardson, 2010:8). At the same time tourists can also love the environment to death impairing the very thing that attracts them and bringing about its deterioration and destruction (Wunder, 1999:13-14).

Therefore, resolving the challenges of sustainability in many hot springs sites in Limpopo Province as tourist destinations, while maintaining their environmental ambience, is important to the tourism industry and tourism researchers alike, especially given a limited and dwindling supply of pristine hot springs, and with tourism demand expected to grow into the future (Choi and Sirakaya, 2005:1276).

The key issue in this paper, therefore, is how hot spring tourism in Limpopo Province can be developed and managed, to be economically competitive and benefit the local population, while conserving the environment on which hot spring tourism depends at the same time.

3. Research objectives

The main questions this paper seeks to address are: what destination resources and attractions are available in hot spring sites in the Limpopo province; and what are the factors that can influence the attraction of tourists to these hot spring destinations

3.1. Hot Spring Resources in Limpopo Province

Spring is described as a concentrated release of groundwater that appears at the surface as a current of flowing water. Springs that discharge water that has temperatures above that of the normal local groundwater are called thermal or hot springs (Todd, 1980:369375).

Limpopo has a rich source of natural hot springs, around which several full-health spas have been developed. Olivier et al (2011:427-436) maintain that “over 90 hot springs have been



identified in South Africa, of which the Limpopo Province has 20, more than any other province. A few of them have been developed for recreational and tourism purposes. They occur in two main regions, namely in the Waterberg region in the south and near the Soutpansberg in the north. Several of them remain in private hands for exclusive use by the landowner. However hot springs such as Tshipise tsha Sagole which was economically fully developed and which is in the former homeland of the “Republic of Venda” continue to deteriorate as far as infrastructure and tourist visits are concerned.

4. Literature Review.

Factors that influence the attraction of tourists to a destination must be understood before attempting to relate them to the local destination of interest in a study. Literature searches have revealed that the three most popular models for analysing destination competitiveness are Porter’s model, the Crouch and Ritchie model and King & Lee model, complemented by social exchange theory, these models can be used to identify the main factors influencing hot spring tourism destination attractiveness. These theories are discussed below.

4.1. Porter’s Diamond model

The Porter (1990) model for competitiveness identifies four factors that determine the competitiveness of a nation at the sectoral level, they are (1) Firm strategy and Rivalry; (2) Factor (input) conditions; (3) Demand conditions; and (4) Related and Supported Industries; these factors are interrelated and form a “diamond” shape

1. Firm strategy and Rivalry

In global competition, successful firms compete vigorously at home and pressure each other to improve and innovate. According to Porter (1990), without local rivals, a firm in a nation with factor advantages tends to rely on them and deploy factors less efficiently. Upgrading and moving towards higher levels of competitive advantage is driven by the need to compete against successful rivals, and competitive intensity is a major determinant of competitive advantage.

2. Demand Conditions

According to Porter, the home market of a nation has a disproportionate impact on a firm’s ability to perceive and interpret buyer needs because their attention is better, the understanding and communication are less costly, and pressure from buyers is felt more accurately. Size and



quality are two important elements in a sector/nation's home demand structure. The importance of size derives from the fact that the large home market receives much more attention than smaller ones. Quality is important because nations have an advantage where home demand gives a clearer picture of buyer needs.

3. Factor (Input) Conditions

Porter's model argues that to sustain the competitive advantage of a nation, basic factor advantages are not sufficient since they can easily be copied and outcompeted by other nations. However, these basic factors should form the basis upon which advanced factors are created. For example, the World Wide Web sites are increasingly providing sites to market tourism destinations, accommodation and related services.

4. Related and Supporting Industries

Related and Supporting Industries play an important complementary role in the development of competitiveness of an industry or sector. These are companies that sell goods or services complementary to the goods or services produced in each industry. In the case of Limpopo Province, the hotel accommodation as well as local cultural artefact serve as complements in the development of hot spring tourism. Therefore, the presence of Porters Related and Supporting Industries can influence the competitive structure of an industry (Porter, 1990:46). The potential of the above factors differs from industry to industry (Porter, 1990:47). However, they jointly determine the profitability of an industry because they shape the prices which can be charged, the costs which can be borne, and the investment required to compete in the industry.

4.2. The Crouch and Ritchie model

According to Crouch and Ritchie (2003:2), "competitiveness is based upon destination's resource endowments (comparative advantage) as well as its capability to deploy resources (competitive advantage). Together the nation's comparative advantages and competitive advantages in tourism create an overall ability to compete in the tourism marketplace. Limpopo province has a relative comparative advantage in the endowment of hot spring sites capable of being developed as tourism destination. The model also recognises the impact of global macro-environmental forces (e.g. global economy, terrorism, cultural and demographic trends)".

4.3. Brian King and Cheng Fei Lee's model of destination competitiveness.



The King-Lee model focuses on the determinants of destination competitiveness in the context of three major domains: tourism destination resources and attractors, tourism destination strategies, and tourism destination environment. Each domain encompasses several sub-sets of elements of destination competitiveness (57 in all) drawn from the previous models of Dwyer & Kim, (2003:369-414) and Enright and Newton, (2004:342343), and Crouch and Ritchie (2003:45).

4.4. Social exchange theory

Social exchange theory is complementing the three models, which posits that for sustainable and destination competitiveness of hot spring tourism to occur in a community, certain exchanges must occur. Residents or entrepreneurs must attract tourists to their community because of the desire to improve their economic and social conditions. However, residents must understand that to get the benefits, they should reciprocate (Kaynak & Marandu, 2006:229). Inskeep (1991:203) argues that “resources that the resident or local communities would be required to give in return, include participation in the planning, development, and hospitality to tourist attractions, extending their friendliness, courtesy, and hospitality to tourists, and tolerating inconveniences caused by tourism, such as queuing for goods and services, sharing local facilities, overcrowding and traffic congestion”. From an economist’s viewpoint “hot spring tourism is basically an economic activity on the part of the host country or community which comes with benefits. Its main benefit is that it generates employment, income and foreign exchange inflows” (Archer, Jaftar and Wall, 1996:17).

4.5. A Model of Destination Competitiveness

The reviewed theories reveal many complementary and competing theories that may be used to develop a framework for research in hot spring tourism and tourism in general. Each of these theories emphasizes a different strand in discerning the main factors influencing the potential for hot spring tourism development. Borrowing from the theories, the model below is developed for assessing the competitiveness and sustainability of hot spring tourism in the Limpopo province.



ADAPTED MODEL OF DESTINATION COMPETITIVENESS

Broad indicator	Details
Destination resources and attractions	Plentiful natural hot springs
	Abundant natural scenery
	Comfortable climate
	Guided cultural tours
	Notable historical landmarks
	Special landmarks festivals
	Quality and comfortable accommodation
	Accessibility to hot spring
	Transportation services and personal safety
Destination strategies	Marketing
	Human resources
	Pricing
	Education and training programmes
	Leadership co-ordination
	Industry innovation
	Licensing
	Uniform grading for hot springs
	Incentives for entrepreneurial investment
	Professional competency
	Maintenance of hot spring facilities and equipment
Destination environments	Economic growth
	Intra –industry
	Demand conditions
	Active community participation



Health –leisure activities

Media reports on travel and tourism

Source: Adapted from King and Lee (2009:243-257).

5. METHODOLOGY

The main aim of this study is to assess the potential of hot spring sites in Limpopo as a tourist destination. Given this context, one needs a technique or method that asks the question about what should/ought to be done for hot spring sites to qualify as a tourist destination. Such a question can objectively be answered by seeking the opinions of experts in the tourism sector/industry using the Delphi approach.

5.1. The Delphi Technique

According to Dajani, Sincoff and Tally, (1979:83-90) and Harold and Murray, (1975:10), the Delphi technique is a widely used and accepted method for gathering data from respondents within their domain of expertise. The technique is designed as a group communication process that aims to achieve a convergence of opinions on a specific real-world issue. Predicated on the rationale that “two heads are better than one” the Delphi technique was developed by Dalkey and Helmer, (1963:458-467) at the Rand Corporation (in the USA) in the 1950s. Whereas common surveys try to identify “what is” the Delphi technique attempts to address “what could/should be” (Miller, 2006:46).

As Rand Corporation (1971:2) believes, Delphi marked the beginning of a whole new field of research, which it labels “opinion technology”. The Delphi method is well suited as a means and method for consensus-building by using a series of questionnaires to collect data from a panel of experts. In contrast with other data gathering and analysis techniques, the Delphi method employs multiple iterations designed to develop a consensus concerning a specific topic.

As Ludwig, (1994:55) indicates: Iterations refer to a feedback process. The process is viewed as a series of rounds, in each round every participant works through a questionnaire which is returned to the researcher who collects, edits and returns to every participant a statement of the position of the whole group and the participant’s own opinion. A summation of comments



makes each participant aware of the range of opinions and reasons underlying those opinions”. (Ludwig, 1994:55).

5.2. Delphi Technique Process.

The Delphi survey technique is conducted through a series of rounds. The first round involves allowing expert panellists to freely identify what they consider to be important to the development of a hot spring site as a potential destination for tourists. The responses are then consolidated and used to produce a structured questionnaire. In this study, twenty (20) panellists were identified of which 12 were female and 8 were male and they comprised four (4) academics who are currently lecturing tourism at the University of Venda, six (6) tourism practitioners in the Limpopo Department of Economic Development, Environment and Tourism (LEDET), five (5) tourism practitioners at Mphephu hot springs and five (5) members of the civic community at Tshipise Tsha Sagole hot spring.

5.2.1. Round one

Through an open-ended questionnaire, the expert panellists were asked to identify as many indicators as possible, for the development of a hot spring site as a potential tourist destination. At the end of round 1 of the survey, the panellists identified several indicators that could contribute to hot spring destination competitiveness. The responses were synthesized and categorized into eight broad factors that were used to produce a structured questionnaire for the next round of the Delphi survey as follows:

Tourism destination resources and attractions, Tourism Infrastructure both (social and physical) Tourism destination marketing strategies, Determinants of the rates to charge at hot spring destinations, Environmental management policies to be put in place in hot spring destinations, Government support necessary for the development of hot springs, Economic factors that increase visitation to hot springs, Local community activities that complement the attractions to hot springs.

5.2.3. Round two

The questionnaire in round 2 consisted of hot spring development indicator statements to which the respondents gave their opinions according to a five-point Likert scale, where 1 equalled strongly disagree, 2 disagree, 3 uncertain, 4 agree, and 5 strongly agree. The use of the Likert scale approach allows the researcher to compute statistical measures of consensus. The main purpose of the second round was to allow the expert panel to revise their opinions and to reach



a consensus on the important indicators for competitive hot spring tourism destinations. The level of consensus reached after each round determines the need for another round in the Delphi research approach. Literature survey on the Delphi approach indicates that in most Delphi survey applications, two to three iterations of the rounds of the Delphi survey data collection are enough to reach a consensus among the panel of experts (Kalaian & Shah, 2006:226-232).

5.2.4. Level of consensus.

In classical Delphi studies, consensus measurement has primarily been based on descriptive statistics. To determine the level of consensus or level of agreement among respondents, many statistical measures of central tendency were computed from the responses obtained in round 2 of the Delphi survey. These measures of consensus and the associated criteria for determining the level of consensus, identified in the literature, and which have been applied in this study are as follows:

Table 1: Decision criteria used in determining the level of consensus.

The decision	Decision rule for determining consensus
1. Coefficient of variation	$0 \leq V \leq 0.5$ Good degree of consensus, no additional round variation
	$0.5 < V \leq 0.8$ Less than satisfactory consensus, need for another round
	$0.8 \leq V$ Poor degree of consensus, need for an additional round
2. Standard deviation	$0 \leq x \leq 1$ High level of consensus
	$1.01 \leq x \leq 1.49$ Reasonable/ fair level of consensus
	$1.5 \leq x \leq 2$ Low levels of consensus
	$2 \leq x$ No consensus



3. Mean/Median ranking 3.0 to 4.9 high level of consensus, no need for more rounds

Source: von der Gracht (2012:1526-1536)

6. STUDY FINDINGS

The data from the second round of the Delphi survey was analysed using SPSS version 23. The results of the various measures of consensus computed for the eight broad factors of hot spring destination potential and their associated indicators are presented in Tables 2 to 9.

Table 2. Indicators of Destination Attractions with High Impact on Hot Spring Tourism.

Factor Indicators	Mean	S Dev.	C.V
Beautiful and clean natural scenery	4.500	0.607	0.135
Availability and accessibility of swimming pools	4.350	0.813	0.187
Braai facilities	4.450	0.759	0.171
Comfortable climate	4.350	0.745	0.171

S Dev. Standard Deviation

C.V. Coefficient of Variation

Source: Author’s compilation from SPSS output.

From Table 2 above, the mean ranging from 4.35 to 4.5 indicates a high level of agreement or consensus among respondents on the average of a five-point Likert scale of consensus concerning indicators of specific attractions at hot spring destinations. The low standard deviation values (<1.0) ranging from 0.607 to 0.803, together with low values of the coefficient



of variation (<0.5) ranging from 0.135 to 0.187, further confirm that there is a high level of consensus among panel members, and therefore the need for no further additional rounds in the Delphi process.

Physical and natural attributes in hot spring sites define its character. Together, these create that natural environment within which tourists experience the destination. These natural attributes include, among other things, landscape and scenery, flora and fauna.

The very existence of natural hot springs in the Limpopo Province is a comparative advantage from an economic viewpoint. These hot springs must be utilised to bring about regional and local economic development. A comfortable climate sustains and supports touristic activities, especially in the Limpopo Province where the winter season is warmer than the rest of the country. Therefore, tourists can pilgrimage to Limpopo hot springs during the winter season thereby boosting the regional GDP.

According, to Dupeyras and MacCallum (2013:8) and Balan, Balaure, and Vegas (2009:2) to be competitive in the global tourism marketplace, a destination must maintain and develop its attractiveness and distinctiveness. They further suggest that to monitor the competitiveness of a destination it is appropriate to introduce a group of indicators dealing with the notion of attractiveness.

Indicators such as beautiful and clean scenery, availability of swimming pools, comfortable climate and braai facilities lead to the creation of employment opportunities that could also contribute to the growth of the hot springs tourism sector.

Table 3. Indicators of Infrastructure (social and physical) with high impact on hot spring tourism.

Factor indicators	Mean	S Dev.	C.V
Adequate and maintained roads	4.450	0.826	0.186
Leisure activities	4.400	0.821	0.187
Overnight accommodation	4.700	0.470	0.100
Adventure sports	4.400	0.940	0.214
Signage	3.600	0.821	0.228

Source: Author's compilation from SPSS output.



From Table 3 above, the mean ranging from 3.6 to 4.5, together with the low standard deviation values (<1.0), as well as low coefficient of variation values (<0.5) indicates a high level of agreement among respondents on the five-point Likert scale of consensus concerning indicators of **Infrastructure (social, physical) to make hot springs attractive destinations** and consequently the need for no further additional rounds in the Delphi process.

These results are in agreement with March (2004:4) “who maintained that the extent and quality of infrastructure facilities and processes must be as such to attract and sustain visitation to a destination”, and also Holloway (1998:45) who said that “infrastructure included amenities and facilities to cater for the tourists, which includes accommodation and food, local transport, information centres and the necessary infrastructure to support tourism consisting of roads, public utility services and parking facilities. He further added that in some cases amenities themselves may be the attraction and these include resort hotels which offer a comprehensive range of in-house attractions”.

Table 4. Indicators of Strategies to market hot spring with high impact on hot spring tourism in Limpopo Province

Factor indicators	Mean	S Dev.	C.V
Media (newspaper, radio.)	4.650	0.671	0.144
Social media (WhatsApp, Facebook)	4.650	0.671	0.144
Brochures and flyers	4.150	0.933	0.225
The partnership between hot springs in the province	4.400	0.883	0.201

Source: Author’s compilation from SPSS output



In line with our interpretation of the results from the previous table, in Table 4 above, the mean ranging from 4.15 to 4.65, together with the low standard deviation values (<1.0), as well as low coefficient of variation values (<0.5) indicates a high level of consensus among respondents on the five-points Likert scale of consensus concerning indicators measuring **strategies to market hot springs in Limpopo Province**, and consequently the need for no further additional rounds in the Delphi process.

The study finding supports a similar finding by Bojanic (2007:32-39) who opined that “marketing efforts help enhance the appeal of particular attractions, whereas managerial activities are likely to strengthen the competitive position of a destination price”. Furthermore, the results of this study are in support of the study by Samantha Foster, Spa Business Trends in Asia, Spa finder Wellness (2014:2) who concluded that “China’s strategic marketing is the key to any spa’s or hot spring’s success and this is evident through China’s main marketing strategy which uses a unique selling proposition (USP) to entice foreign spa lovers to China. They added that to market a destination such as a hot spring one must find a Market Watch that will appreciate most, the value of what a hot spring offers. The Chinese hot spring market has developed its unique selling positions to define the essence of what the business is all about to effectively communicate its advantages to the most profitable market opportunities currently available”.

Table 5. Determinants of the rate to charge tourists at hot springs.

Factor indicators	Mean	S Dev.	C.V
Location	4.300	0.801	0.186
The popularity of hot springs	4.450	0.826	0.186
Infrastructure availability	4.350	0.933	0.215
Safety and security	4.450	0.686	0.154
Maintenance of hot	4.450	0.999	0.224



springs

Attractive

4.500 0.827 0.184

surroundings

Availability

of

4.500 0.827 0.184

swimming pools

Source: Author’s own compilation from SPSS output.

From Table 5 above, the mean ranging from 4.35 to 4.50 together with the low standard deviation values (<1.0), as well as low coefficient of variation values (<0.5) indicates a high level of consensus among respondents on the five-point Likert scale of consensus concerning the indicators measuring factors **that determine the rates to charge tourists at hot springs**, and consequently the need for no further additional rounds in the Delphi process.

These findings find resonance with Cernat and Gourdon (2007:27) who emphasised that price competitiveness is one of the factors on which rates should be based. They further concluded that attractiveness could also depend on how well-qualified the population is and on the general security situation of the country. Brown (1992:34) concluded that “fee prices should be based on visitor demand for access. He further emphasised that prices at hot springs are demand inelastic and therefore to improve revenue, prices can always be increased with no adverse effect on demand”. In this study, popularity (demand) for hot springs was found to be a major factor for pricing hot spring destinations with a mean ranking of 4.450 which indicates a high level of consensus among the panel members.

The study of consumer loyalty perceived value by Monroe and Chapman (2009:60) is supported by the findings of this study which indicated that safety and security are among the best predictors for re-visit intentions, and in some locations, infrastructure availability has played an important role in the hot spring consumer behaviour as well as the purchase decision-making. Hence, it might be concluded from our findings that when guests place a positive value on hot spring service performance, they are likely to be loyal tourists and are willing to revisit.

Table 6. Indicators of Environmental management policies to be put in place to have a high impact on hot spring tourism in Limpopo.



Factor indicators	Mean	S Dev.	C.V
No littering signage	4.700	0.571	0.122
Entry must be monitored	4.500	0.688	0.153
Provision of refuse bags	4.450	0.887	0.199
Prohibition of fire anywhere	4.250	0.716	0.169
Responsible tourism	4.550	0.759	0.167

Source: Author’s compilation from SPSS output.

In line with our interpretation of the results from the previous table, in Table 6 above, the mean ranging from 4.25 to 4.70, together with the low standard deviation values (<1.0), as well as low coefficient of variation values (<0.5) indicates a high level of agreement among respondents on the five-point Likert scale of consensus concerning indicators of **environmental management policies to be put in place to conserve and preserve hot springs**, and as a result, they need for no further additional rounds in the Delphi process.

Our study findings in this regard, support the findings by Mihalic (2000:65-78) and Emerton (2014:1-10) who suggested that “destination environmental management should be carried out with the establishment of environmental codes of conduct, self-developed environmental practice certified or awarded best practice, and accreditation schemes of which amongst them are environmental accreditation schemes which are found to be more effective because they provide specified criteria for environmental management and well-known marketing logo”. This study’s findings further support Hassan (2000:239-240), and Stabler (1997:43) who believe that “tourism destination competitiveness is determined by the extent to which it is concerned with sustainability, contending that self-regulation actions of the hot spring tourism



industry and a compulsory set of public policy measures are managerial efforts which minimize the environmental impacts and manage environmental quality”.

In a similar fashion Norris (1995:1-3), and Diedrich (2007:985-996) maintain that “tourism, particularly hot spring tourism, is one way of conserving the natural environment and at the same time providing an income to those who own the land and live near the resource, i.e. eco-tourism”.

Table: 7. Indicators of Government assistance desired for the development of hot springs in Limpopo province

Factor indicators	Mean	S Dev.	C.V
Research findings	4.300	0.979	0.228
implementation			
Salary subsidy for tour guides	4.350	0.933	0.215
Advisory services	4.200	0.768	0.183
Parking area	4.450	0.686	0.154
Road maintenance	4.550	0.759	0.167
Fencing	4.650	0.587	0.126
Developing the hot springs	4.250	0.639	0.150
Marketing the hot springs	4.550	0.605	0.133

Source: Author’s compilation from SPSS output.

From Table 7 above, the mean ranging from 4.20 to 4.65 together with the low standard deviation values (<1.0), as well as low coefficient of variation values (<0.5) indicates a high level of consensus among respondents on the five-point Likert scale of consensus concerning indicators of **Government assistance for the support of hot springs development in Limpopo Province**, and consequently the need for no further additional rounds in the Delphi process.



Developing new hot springs in Limpopo for tourism and economic purposes is an effort to potentially develop or expand tourism in a destination. Since in Limpopo the Minwamadi and Siloam hot springs are not developed for tourism purposes, there is a significant part of development potential stemming from tourism activities that are lost. This, according to Cernat and Gourdon (2007:8) is what is called “leakages or missed opportunities. They described leakages as a loss of foreign exchange and other hidden costs deriving from tourism-related activities”.

The findings of our study are in solidarity with the findings of Ryan (1991:34) who believes “hot spring tourism may also bring a greater awareness of environmental legislation to an area or encourage governments to introduce new legislation to improve pollution prevention in hot springs”. Environmental pollution is as much aesthetic as physical, said Holloway (1998:46) who maintains that there is a need for the government to protect the scenic beauty of the areas which attract tourists and not allow the natural landscape to be lost to tourist development.

Table 8. Economic indicators with high impact on tourist visitation to hot spring destinations.

Factor indicators	Mean	S Dev.	C.V
Availability of transportation	4.400	0.681	0.155
Affordable prices	4.550	0.605	0.133
Attractions and accommodation	4.650	0.587	0.126
Political stability	3.700	0.865	0.234
Fewer crimes	4.250	0.550	0.129
Creation of jobs	4.500	0.688	0.153
Adequate roads	4.450	0.759	0.171
Availability of tower	4.300	0.865	0.201

Source: Author’s compilation from SPSS output.

From Table 8 above, the mean ranging from 3.70 to 4.65 indicates a high level of agreement or consensus among respondents on the average of a five-point Likert scale of consensus



concerning indicators of **economic factors that increase tourists to hot springs destinations**. The low standard deviation values (<1.0) ranging from 0.550 to 0.918, together with low values of the coefficient of variation (<0.5) ranging from 0.129 to 0.234, further confirm that there is a high level of consensus among panel members, and therefore the need for no further additional rounds in the Delphi process.

These findings agree with Smith (1995:35) who indicated that hot spring tourism is an important generator of employment in the economy and Archer (1984:517-518) said that “a given level of revenue or capital investment creates many more jobs in tourism, and the economy of the region in particular, than the same level of revenue or investment, would in agriculture, or automobile manufacturing or petrochemicals (Multiplier effect). Additionally, hot spring tourism can stimulate other economic sectors in a country such as agriculture, manufacturing, construction, and the service industry”. Furthermore, Holloway (1998:45) viewed the multiplier as a phenomenon that affects income in a region thereby increasing employment in that hot spring destination development gives rise to jobs in shops, schools and hospitals for local people.

Table 9. Indicators of Local community activities that complement attraction to hot spring tourism destinations

Factor indicators	Mean	S Dev.	C.V
Cultural activities	4.350	0.813	0.187
Annual celebration	4.350	0.671	0.154
Music celebration	4.150	0.875	0.211
Community cleaning campaign	4.200	0.768	0.183

Source: Author’s compilation from SPSS output.

In line with our interpretation of the results from the previous tables, in Table 9 above, the mean ranging from 4.15 to 4.35, together with the low standard deviation values (<1.0), as well as low coefficient of variation values (<0.5) indicates a high level of consensus among respondents on the five-point Likert scale of consensus concerning indicators of **local community activities that complement attraction to hot springs destinations**, and consequently the need for no further additional rounds in the Delphi process.



The responses to this question from the expert panel are in line with Dupeyras and MacCallum (2013:34) who stated that “cultural and creative resources are important elements of the tourism product and key drivers of attractiveness for a destination. They further opine that destinations that can offer travellers access to unique experiences through the local culture and the creative economy have a competitive advantage. Our findings are also in agreement with similar findings by Murphy (1988:56); Sheldon and Abenoja (2001:435-443); and Gutierrez, Lamoureux, Matus & Sebunya (2001:37) who contend that “there must be community-wide participation and continual assessment of resident perceptions to ensure that tourism destination development remains consistent with local character and values”.

7. Conclusions

The study sought to investigate the potential of hot spring tourism destination competitiveness in Limpopo Province. The Delphi technique was used to elicit the opinions of a panel of experts from government, industry and academia. The expert panel reached a consensus on many of the important indicators required to promote Limpopo hot spring sites as competitive and sustainable tourist destinations. From the findings, many conclusions were reached:

1. It is concluded that a destination with an abundance of core resources and attractors, but lacks adequate supporting factors and resources, may find it very difficult to develop its tourism industry. The hot spring tourism industry in Limpopo has a great deal of untapped potential to enable it to become more attractive and competitive. It is further established from the study findings that infrastructure, both social and physical, is necessary to make hot springs attractive.
2. Regarding marketing strategies in hot spring site development the study concludes that creative marketing must be used to attract new money into the Limpopo Province and rural communities where most of these hot springs are situated
3. From the study findings it is concluded that several factors are key elements in the pricing of entry to hot spring destinations.
4. It is also concluded that for hot spring tourism to be sustainable, there must be adequate environmental management. This means that where ecologies are fragile, numbers and activities must be tightly controlled, pollution must be prevented and local cultures protected so that numerous untapped benefits in hot spring sites can be realised. Concerning government



assistance for the support of hot springs in Limpopo, it is concluded that hot springs must be funded and environmental regulatory policies must be put in place.

5. Furthermore it is concluded that in Limpopo Province, the Vhembe district where there are few manufacturing jobs, hot spring tourism will offer an alternative avenue for the creation of jobs. Unlike manufacturing jobs, visits to a specific locale cannot be shipped offshore and tourism is not finite like primary resources, such as petroleum or minerals. It is further concluded that the tourism industry will be an essential method to reinvigorate local economies.

6. It is also concluded that local community activities such as annual celebrations and music festivals can complement hot spring tourism in Limpopo and will bring money into the local economy, thereby benefitting these communities.

The bottom line is that hot spring tourism is an export commodity that can also become an economic and educational development tool bringing wealth to the local economy while protecting its cultural ecology.

8. Recommendations

Based on the findings and conclusions of the study the following recommendations are made.

- Concerning specific attractions at hot spring destinations to encourage tourists to visit, it is recommended that there must be partnerships between the private sector and public sector to attract tourists to a hot spring destination, such as the provision of braai facilities, because private sector hot spring tourism provides most of the services to attract visitors such as attractive scenery while the public has fewer attractions and activities that are put in place to attract visitors although partnerships between hot springs and government are visible in infrastructure, such as roads.
- With regards to infrastructure (social, physical) to make hot springs attractive, it is strongly recommended that hot spring destinations must have human resources skills development such as in-service training for tour guides and tour operators. The study also suggests that traveller mobility such as accessibility of swimming pools to physically challenged tourists, adequate transport and availability of Wi-Fi hot spots is important and therefore plays an important role in defining the competitiveness of a destination.
- Regarding strategies to market hot springs in the Limpopo Province, it is proposed that the Province must vigorously promote and brand hot spring tourism destinations to



create a tourism identity, such as in the Western Cape for its beautiful Table Mountain and comfortable climate, and KwaZulu-Natal for its beautiful beaches and uShaka marine, that can be a vital tool which can catch the attention of tourists both domestic and international.

- With regards to factors that determine the rates to charge tourists at hot springs, the study recommended that entrance fees and prices of associated products or services in hot spring destinations should be based on the level of provision of adequate safety and security since they are the key elements of attractiveness identified by the study.
- Concerning environmental management policies to be put in place to conserve and preserve hot springs, the study proposes that the National Department of Tourism should also advocate for local government to adopt policies and offer incentives that reward hot spring destinations that can demonstrate they have explicit policies and practices to expand economic opportunity in their local communities where they operate (Ashley et al, 2007:22). An example of such commitment is found in Arkansas in the USA where hot spring sites demonstrated the commitment to nature and the environment by incorporating parking gardens, rain gardens and other visually appealing techniques to manage water and pollution into all new developments and redevelopments. (Kaltenborn, Nyahongo, and Kidenghesho, 2011:132-148).
- Regarding government assistance for the support of hot springs in the Limpopo Province, the study recommends that both political leaders and community members must shape political attitudes towards the contribution that hot spring tourism might make in helping to stimulate economic and social development and the resultant quality of life at the destination. This resonates with Crouch (2007:20) who argued that “political will can support or hinder destination competitiveness”.
- Concerning economic factors that increase tourism to hot springs the study recommends that hot spring destinations must be equipped with adequate infrastructure and attract tourists through affordable prices because tourism’s value to Limpopo’s economy is of vital importance.
- With regards to local community activities that complement the attraction to hot springs the study recommends that special events such as annual celebrations, music festivals and sports events be held regularly, as this can create high levels of interest and



involvement which can serve as a cornerstone of hot springs competitive strategy. Moreover, entertainment such as the comedy festival industry can be a major supplier to the hot spring tourism sector. It is further recommended that communities interested in economic success, such as job creation and an increase in local GDP, should recommend public improvements of projects surrounding the hot spring.

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