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Articles

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Mission

ATINER is a *World Non-Profit Association* of Academics and Researchers based in Athens. ATINER is an independent **Association** with a **Mission** to become a forum where Academics and Researchers from all over the world can meet in Athens, exchange ideas on their research and discuss future developments in their disciplines, **as well as engage with professionals from other fields**. Athens was chosen because of its long history of academic gatherings, which go back thousands of years to *Plato's Academy* and *Aristotle's Lyceum.* Both these historic places are within walking distance from ATINER's downtown offices. Since antiquity, Athens was an open city. In the words of Pericles, **Athens"...*is open to the world, we never expel a foreigner from learning or seeing".* (**"Pericles' Funeral Oration", in Thucydides, *The History of the Peloponnesian War).* It is ATINER's **mission** to revive the glory of Ancient Athens by inviting the World Academic Community to the city, to learn from each other in an environment of freedom and respect for other people's opinions and beliefs. After all, the free expression of one's opinion formed the basis for the development of democracy, and Athens was its cradle. As it turned out, the Golden Age of Athens was in fact, the Golden Age of the Western Civilization. *Education* and *(Re)searching* for the 'truth' are the pillars of any free (democratic) society. This is the reason why *Education* and *Research* are the two core words in ATINER's name.

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President's Message

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Before you submit, please make sure your paper meets some basic academic standards, which include proper English. Some articles will be selected from the numerous papers that have been presented at the various annual international academic conferences organized by the different divisions and units of the Athens Institute for Education and Research.

The plethora of papers presented every year will enable the editorial board of each journal to select the best ones, and in so doing, to produce a quality academic journal. In addition to papers presented, ATINER encourages the independent submission of papers to be evaluated for publication.

The current issue of the Athens Journal of Tourism (AJT) is the first issue of the sixth volume (2019). The reader will notice some changes compared with the previous issues, which I hope is an improvement. An effort has been made to include papers which extent to different fields connected to Tourism and Hospitality, and will further promote research in the specific area of studies.

Gregory T. Papanikos, President
Athens Institute for Education and Research

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12th Annual International Conference on Mediterranean Studies, 15-18 April 2019, Athens, Greece

The Center for European & Mediterranean Affairs organizes the **12th Annual International Conference on Mediterranean Studies, 15-18 April 2019, Athens, Greece**. The aim of the symposium is to give the opportunity to all academics and researchers to exchange their teaching and researching knowledge and experience. You may participate as stream leader, presenter of one paper, chair a session or observer. Please submit a proposal using the form available (https://www.atiner.gr/2019/FORM-MDT.doc).

Academic Members Responsible for the Conference
- **Dr. Yannis Stivachtis**, Director, **Center for European & Mediterranean Affairs** and Director & Professor, International Studies Program Virginia Tech – Virginia Polytechnic Institute & State University, USA.
- **Dr. Gregory T. Papanikos**, Honorary Professor, University of Stirling, UK.
- **Dr. David Philip Wick**, Professor of History, Gordon College, USA.

Important Dates
- Abstract Submission: **4 March 2019**
- Acceptance of Abstract: 4 Weeks after Submission
- Submission of Paper: **18 March 2019**

Social and Educational Program
The Social Program Emphasizes the Educational Aspect of the Academic Meetings of Atiner.
- Greek Night Entertainment (This is the official dinner of the conference)
- Athens Sightseeing: Old and New-An Educational Urban Walk
- Social Dinner
- Mycenae Visit
- Exploration of the Aegean Islands
- Delphi Visit
- Ancient Corinth and Cape Sounion

Conference Fees

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Athens Institute for Education and Research
A World Association of Academics and Researchers

15th Annual International Conference on Tourism
10-13 June 2019, Athens, Greece

The Tourism, Leisure & Recreation Unit of ATINER organizes its **15th Annual International Conference on Tourism, 10-13 June 2019, Athens, Greece** sponsored by the Athens Journal of Tourism. The aim of the conference is to bring together academics and researchers from all areas of Tourism. You may participate as stream leader, presenter of one paper, chair a session or observer. Please submit a proposal using the form available (https://www.atiner.gr/2019/FORM-TOU.doc).

Important Dates
- Abstract Submission: **29 April 2019**
- Acceptance of Abstract: 4 Weeks after Submission
- Submission of Paper: **13 May 2019**

Academic Member Responsible for the Conference

- **Dr. Valia Kasimati,** Head, Tourism, Leisure & Recreation Unit, ATINER & Researcher, Department of Economic Analysis & Research, Central Bank of Greece, Greece.
- **Dr. Peter Jones**, Co-Editor, Athens Journal of Tourism & Professor of Management, University of Gloucestershire, UK.

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Sustainable Development Goals and the World's Leading Hotel Groups

By Peter Jones[*] & Daphne Comfort[†]

A number of trade organisations within the tourism and hospitality industry have argued that the industry can play a major role in contributing to the Sustainable Development Goals (SDGs). This paper examines if, and how, the world's leading ten hotel groups have begun to address the SDG's and offers some general reflections the industry's engagement with the SDGs. The paper reveals marked variations in the ways in which the world's leading hotel groups have begun to address the SDGs. As such, the authors suggest that the world's leading hotel groups have some way to go if they are to play a leading role in contributing to the SDGs. More generally, the authors suggest that the leading hotel groups are to fulfill that contribution they must focus more explicitly on the SDGs themselves, adopt a more comprehensive approach to drawing up their priorities for the SDGs, and address the issues of measurement, independent external assurance and the tensions between business imperatives and sustainability.

Keywords: Sustainable Development Goals, Leading Hotel Groups, Business Priorities, Reporting, External Assurance.

Introduction

The United Nations (UN) Sustainable Development Goals (SDGs), launched in 2015**,** *'are the blueprint to achieve a better and more sustainable future for all'* and they look to *'address the global challenges we face, including those related to poverty, inequality, climate, environmental degradation, prosperity, and peace and justice'* (United Nations 2018). At the same time, the United Nations Global Compact (2018) argued that meeting these goals *'will take an unprecedented effort by all sectors in society'* but emphasised that *'business has to play a very important role in the process.'* The tourism and hospitality industry is a major player in the global economy, and a number of its trade organisations have emphasised the role the industry can play in contributing to the successful achievement of the SDGs such as The World Tourism Organisation and the United Nations Global Compact Network Spain (2016), for example, argued *'tourism is one of the most dynamic and far reaching economic sectors, and can make a decisive contribution to the achievement of the SDGs.'* Further, the World Tourism Organisation and the United Nations Development Programme (2017) *'are committed to inspire leadership and facilitate collaboration to inspire stakeholders to advance the contribution of tourism to the SDGs.'* At the same time the International Tourism Partnership suggested that the SDGs *'send out a clear call to action for the wider industry about the critical importance of using*

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the UN SDGs as a focal point to drive responsible business in hospitality' (International Tourism Partnership 2018).

From outside the industry, Jones, Hillier and Comfort (2017) argued *'potentially the leading companies within the tourism and hospitality industry are in a powerful position to contribute to the successful achievement of the SDGs'* but that in looking to make a meaningful contribution they needed to *'address a number of challenges.'* These challenges included identifying priorities, the decision to develop new sustainability strategies specifically to meet SDGs or to map existing strategies on to the SDGs and the tensions between sustainability and commitments to business development and continuing economic growth. With these thoughts in mind, this paper examines if, and how, the world's leading ten hotel groups have begun to address the SDGs and offers some general reflections on the industry's engagement with the SDGs.

The main body of the paper begins with an outline of the frame of reference for the paper, which outlines the characteristics of the top ten hotels and the method of enquiry, which draws its information from a search of the hotel's corporate websites. This is followed by the findings of this search, which review the different ways in which the selected hotels addressed the SDGs. The authors then offer a reflective discussion, which raises issues interpretation and terminology, business priorities, metrics and measurement, business reporting and communication and the relationships and tensions between business imperatives and sustainability.

Frame of Reference and Method of Enquiry

In an attempt to undertake an exploratory review of if, and how, the world hotel industry has begun to address the SDGs the *'Top Ten Leading Hotel Groups'* (Tourism Review 2017), as ranked by revenue, were selected for study. The ten hotel groups are given in Table 1. As the largest players within the hotel industry, the selected companies might be expected to reflect innovative thinking in their approach to the SDGs.

Table 1. *Top Ten Leading Hotel Groups*

	Hotel	**World Capacity (in Beds)**	**Number of Countries**
1	Marriott International	1, 200,000	110
2	AccorHotels	570,000	96
3	Wyndham Hotels and Resorts	723,000	75
4	Hilton	894,000	103
5	Hyatt Hotels Corporation	182,000	54
6	Jin Jiang International Hotel Management Company	800,000	67
7	Shangri-La Hotels and Resorts	38,000	22
8	Melia Hotels International	99,000	40
9	Intercontinental Hotel Group	776,000	100
10	NH Hotel Group	53,000	30

Source: Various Trade Sources

The hotel groups listed in Table 1 had some 5.3 million bedrooms and while many had a global reach, some operated more on a regional international level. While comprehensive market share data, covering all the selected hotel groups, is not available, Marriot International, has approximately 14% of the market, while the corresponding figures for Hilton, Hyatt Hotel Corporation and Shangri-La Hotels and Resorts, are 7%, 2.5% and 1.25% respectively (MarketWatch 2018).

Marriott International is a US multinational hospitality company, headquartered in Bethesda, Maryland, and owns some 6,500 properties in over 120 countries. AccorHotels is a French multinational company that owns, manages and franchises hotels, resorts and vacation properties and operates over 4,000 hotels in 100 countries. The Wyndham Hotels and Resort is the world's largest hotel franchise company and trades as a number of brands, including Wyndham, Ramada and Days Inn, in over 70 countries. Hilton is a major US based Hospitality Company, and either owns, manages or franchises over 570 hotels and resorts in 85 countries. The Hyatt Hotel Corporation is headquartered in Chicago, US, and manages and franchises over 700 hotels, resorts and vacation properties in some 50 countries. The Jin Jiang Hotel Management Company is a Chinese state owned tourism and hospitality company, and while it has some 6,000 hotels in over 60 countries, its main operating base is in China. Shangri-La Hotels and Resorts, which has positioned itself at the luxury end of the market, is a Hong Kong based multinational company and has some 100 hotels and resorts in Africa, Asia, Europe, North America and the Middle East. Melia Hotels International, a Spanish based hotel chain, is the market leader in resort and urban hotels within Spain and operates 375 hotels in 40 other countries. The InterContinental hotel Group is a UK based multinational hospitality group and operates some 5,000 hotels across almost 100 countries. The NM Hotel group is a Spanish based hotel chain and has some 375 hotels in 29 countries, principally in Europe and Latin America.

Hotel groups have employed a range of methods to report on their sustainability commitments and achievements, but publication on corporate websites has become the most popular and the most accessible reporting mechanism (Morhardt 2009). With this in mind, the authors conducted an Internet search for information, using the phrase 'Sustainable Development Goals' and the names of each of the selected hotel groups. This search was conducted in December 2018, using Google as the search engine. The information obtained from this search process provided the empirical information for this paper. The specific examples and selected quotations drawn from the corporate websites are used for illustrative purposes, with the principal aim being to review the ways in which the selected hotel groups addressed the SDGs. The case study is based on information that is in the public domain and the authors took the considered view that they did not need to contact the selected hotel groups to obtain formal permission to use this information prior to conducting their research.

Findings

The selected hotel groups addressed the SDGs in a variety of ways. Table 2 provides a summary of number of SDGs publicly addressed by each hotel group and reveals that while two of the selected companies, Marriott International and Hilton, addressed all 17 SDGs, two of the companies, Shangri-La Hotels and Resorts and the NH Hotel Group, addressed none of them. At the individual level, SDG 8, namely Decent Work and Economic Growth, was the most commonly addressed of the SDGs. In his *'Executive Statement'* for Hilton's 2017 Corporate Social Responsibility Report, Christopher J. Nasetta, President and Chief Executive Officer, for example, suggested *'at Hilton, we're more and more inspired every day to use our hospitality for good and as a truly global company, we are serious about our role in helping the international community reach the UN SDGs'* (Hilton 2018). Hilton reported that the company had properties in over 100 countries and that the company was looking *'to harness our global hospitality mission to help drive local solutions in the communities, where we operate, aligning our action to the SDGs'* (Hilton 2018).

Hilton addressed all 17 of the SDGs by aligning each of them to specific *'targets.'* In addressing SDG1, for example, Hilton's *'target alignment'* stressed its commitment to *'eradicate extreme poverty'*, *'implement social protection systems'* and to provide *'equal rights to economic resources'* (Hilton 2018). More specifically, Hilton reported being *'committed to opening doors for 1 million young people by 2019 to connecting, preparing or employing them'* and being *'committed to connecting, preparing or employing refugees in Europe'* (Hilton 2018). Further, Hilton reported being *'on track to reach our 2019 pledge to open doors to 1 million young people'* (Hilton 2018) and that as a founding member of the Global Apprenticeship Network, the company had supported over 2,500 apprenticeships and encouraged training legislation in Egypt, Namibia, Saudi Arabia, Turkey, UK and US.

Table 2. *SDGs Addressed by Each Hotel*

	Hotel	Number of SDGs	Percentage of Total
1	Marriott International	17	100%
2	AccorHotels	10	59%
3	Wyndham Hotels and Resorts	10	59%
4	Hilton	17	100%
5	Hyatt Hotels Corporation	8	47%
6	Jin Jiang International Hotel Management Company	0	0%
7	Shangri-La Hotels and Resorts	0	0%
8	Melia Hotels International	No specific details	Not applicable
9	Intercontinental Hotel Group	7	41%
10	NH Hotel Group	No specific details	Not applicable

Hilton's target alignment to SDG 6 embraced *'access to safe drinking water'*, *'adequate sanitation and hygiene'* and *'water resource management'* (Hilton 2018). In evidencing these targets, Hilton reported reducing water consumption by 20% per square foot of hotel space since 2008, signing on for the UN's Chief Executive Officer Water Mandate and launching a number of global water stewardship pilot schemes in high risks regions in the US, South Africa and China. Hilton identified specific target alignments in addressing SDG13, namely to improve education and awareness of climate change and to promote mechanisms for climate change-related planning. In addressing these targets, Hilton reported reducing carbon emissions by 30% per square foot of hotel space and energy consumption by 20% per square foot of hotel space since 2008, activating 1,800 environmental projects in 1,000 communities during Earth Week in 2017. Hilton (2018) also reported being the first major hospitality brand to have *'science-based greenhouse gas targets approved by the Science Based Targets initiative.'*

Additionally, the Conrad N. Hilton Foundation, which funds not for profit organisations working to improve the lives of disadvantaged and vulnerable people throughout the world, illustrated some of its work in contributing to the SDGs. On the one hand, the Foundation outlined its belief that philanthropy has an important role to play in supporting the SDGs through advocacy, facilitating implementation, helping to measure success and in *training the next generation of leaders capable of promoting evidence-based solutions that address human development, health and economic and environmental needs at the core of the SDGs'* (Hilton Foundation 2018a). On the other hand, the Conrad N. Hilton Foundation has argued that *'people underestimate the universality of the global goals, assuming they only apply to developing countries'* whereas the *'we at the Conrad N. Hilton Foundation, firmly understands the relevance of the goals at the domestic level'* (Hilton Foundation 2018 b).

The InterContinental Hotels Group (IHG) claimed *'our business supports several SDGs, from reducing poverty and hunger through our economic multiplier effect, to providing quality education via our IHG Academy and decent work to hundreds of thousands of colleagues globally, and combating climate change through the IHG Green Engage system'* (IHG 2018). More specifically, IHG targeted seven of the SDGs, namely SDGs 6, 8. 10, 11, 12, 13 and 17, *'where we believe we can have the biggest impact'* (IHG 2018). In addressing SDG 8, for example, IHG (2018) suggested *'with more than 5,300 hotels globally and a further 1,600 in the pipeline, we can create a positive economic impact by providing jobs for local people'* and reported that *'during 2017, 2,133 IHG Academy programmes in 75 countries, benefitted 13,633 participants improving their employability in the hospitality industry.'* In contributing to SDG 11, IHG claimed *'our hotels provide critical economic stimulation in the communities within which they operate, including in developing countries'* and that *'we ensure our hotels are prepared and able to play an active role in supporting those impacted by disasters, helping local communities get back on their feet quickly'* (IHG 2018).

In 2018 Marriott International (2018) launched *'Serve 360'*, which the company claimed was *'guided by the UN SDGs.'* Ray Bennett, Chief Global

Officer, Global Operations at Marriott International, argued *'as the global hospitality leader with properties and associates across 125 countries and territories, Marriott International has a global responsibility and unique opportunity to be a force for good – from helping to reduce carbon and water use to providing our associates with human trafficking awareness training'* (Marriott International 2018). Four *'priority areas'*, namely *'advancing the resiliency and development of our communities'*; *'reducing the company's environmental impacts, sourcing responsibly and operating sustainable hotels'*; *'helping people prepare for jobs in the hospitality industry'* ; and *'creating a safe and welcoming world for associates and travellers alike.'*

In addressing reducing environmental impacts, for example, the company is looking to *'minimize our environmental footprint by sustainably managing our energy and water use, reducing our waste and carbon emissions and increasing the use of renewable energy. We employ innovative technologies to plan, implement, track and communicate how we operate responsibly to mitigate climate-related risk, benefiting our business and the communities in which we operate'* (Marriott International 2018). More specifically, the company has committed to reducing water use by 15%, carbon emissions by 30% waste by 45% and food waste by 50%, all by 2025, to train all associates to recognise the signs of human trafficking and to embed human rights criteria in recruitment and sourcing policies.

AccorHotels (2016) reported looking to contribute to the SDGs through its *'Planet 21'* sustainable development programme. This programme is built around four *'strategic priorities'*, namely to *'work with its employees, involve its customers, innovate with its partners and work with local communities'* (AccorHotels 2016). The company listed *'key achievements'* (AccorHotels 2016) from the programme under four headings, namely, planting for the planet, the fight against the sexual exploitation of children, eco-design and sustainable food. In evidencing the first of these achievements, the company reported *'at AccorHotels, we ask our customers to reuse their towels. Savings made on water and energy are used to fund tree planting. One tree is planted every minute'* (AccorHotels 2016). In promoting healthy and sustainable food, AccorHotels reported its commitment to *'offering healthy, balanced and high quality food'* including *'local products'* and *'products grown in our kitchen gardens'* as well as *'reducing food waste'* and *'banning the use of overfished species in our restaurants'* (AccorHotels 2016).

More generally, under the banner *'Planet 21 Research'* AccorHotels (2016) asserted its belief *'that it is our duty to help spread knowledge and promote the progress of all stakeholders in the hotel industry – both businesses and guests'* and that with this in mind *'we launched Planet 21 Research, a platform for sharing knowledge about sustainable development in the hotel industry.'* An examination of the company's socio-economic footprint in 2016 revealed that AccorHotels supported *'880,000 jobs and mainly creates wealth in our host countries'* AccorHotels 2016). A study of the environmental footprint of AccorHotels, conducted in 2011, covered the entire life cycle of the company's activities. This study revealed that the five major environmental impacts were energy consumption, water consumption, waste production, climate change and water

eutrophication. The company used the study to encourage, educate and empower its employees to initiate new ideas that reduce its environmental impacts.

In his Chairman and Chief Executive Officer's *'Message'* to accompany the Wyndham Hotel and Resorts' 2016-2017 Corporate Social Responsibility Report, Stephen P. Holmes claimed, *'with a goal of reaching one million people by 2025 in support of the UN Sustainable Development Goals, to date we have enhanced the lives of over 300,000 people through our CSR programs'* (Wyndham Hotels and Resorts 2018). Wyndham Hotels and Resorts aligned its material Corporate Social Responsibility goals to ten of the SDGs, namely SDGs 1, 2, 3 4, 5, 6, 8, 13, *15 and 17.* In aligning the company's targets with SDG 15, for example, the aim wa*s* to *'promote and expand best practices for biodiversity protection across our properties'* and to *'partner with suppliers to make a meaningful impact to protect forests'* (Wyndham Hotels and Resorts 2018). The corresponding targets for SDG 17 were to *'continue to advance sustainable development through active participation in industry initiatives with the World Travel and Tourism Council, International Tourism Partnership, Department of Energy, and other global partners'* (Wyndham Hotels and Resorts 2018).

The Hyatt Hotel Corporation claimed *'our corporate responsibility work supports the mission of the UN SDGs'* (Hyatt 2018). The company's corporate responsibility strategy embraces six key sets of issues, namely, *'our people'*, *'our communities'*, *'human rights'*, *'our planet'*, *'responsible sourcing'* and *'responsible seafood'*, each of these sets of issues is aligned to a number of the SDGs. Hyatt's commitment to *'our people'*, for example, is aligned to SDG's 5, 8 and 10, the company's commitment to *'our planet'* is aligned to SDGs 6, 7 12, and 13 and the commitment to responsible sourcing is aligned to SDGs 8, 12, 14 and 15 (Hyatt 2018). More specifically, the Hyatt's (2018) commitment to *'our planet'* includes setting goals to reduce energy and water consumption and greenhouse gas emissions at its hotels, pursuing a variety of waste management and recycling strategies and building a culture of environmental stewardship amongst hotel owners and developers.

Melia Hotels International published its *'Global Corporate Social Responsibility Model'* in 2015, which is based around six key principles, namely *'human rights and childhood'*, *'employability'*, *'local development and the fight against climate change'*, *'university and knowledge sharing'*, *'culture'*, and *'leadership and reputation'* (Melia Hotels International 2018). Further, the company claimed that it had *'integrated the SDGs that a hotel company could help to support with its Corporate Social Responsibility Model'* (Melia Hotels international 2018). More specifically Melia Hotels International (2018) claimed that the integration of the SDGs into its Corporate Social Responsibility Model would, inter alia, *'ensure a consistent management model that seeks continuous improvement'*, *'promote a model of responsible management in the value chain'* and *'make the fight against climate change a key objective in hotel management.'*

The NH Hotels Group (2018) claimed that the SDGs had been used along with other *'criteria'*, including the ten principles of the UN Global Reporting Compact and the G4 guidelines of the Global Reporting Initiative for Sustainability Reporting, to prepare its 2017 Annual Report. Here, the focus is on

the *'SDGs in which NH Hotel Group has a direct and indirect impact'* but the company's Annual Report offers no explicit treatment of its achievements against the SDGs (NH Hotels Group 2018). Finally while the Jin Jiang International Hotel Management Company published an *'Environmental Social and Governance Report'* (Jin Jiang Hotels 2017) and Shangri-La Hotels provided some information on its *'Corporate Social Responsibility Focus Areas'* (Shangri-La 2018), neither made any reference to the SDGs.

Discussion

The findings reveal marked variation in how the selected leading hotel groups have begun to address the SDGs. One group, Hilton, directly addressed all 17 SDGs, while InterContinental Hotel Group specifically targeted seven of the SDGs. Some of the hotel groups claimed that their corporate sustainability goals and targets had been aligned with the SDGs, others suggested that the SDGs had been guide for and/or integrated into development of their sustainability strategies, while two of the hotel groups made no reference whatsoever to the SDGs. That said, five sets of issues merit reflection and discussion, namely:

1. interpretation and terminology,
2. business priorities for the SDG's,
3. metrics and measurement,
4. business reporting and communication, and
5. the relationships and tensions between business imperatives and sustainability.

<u>Interpretation and Terminology</u>

Firstly, there are issues of interpretation and terminology. The majority of the selected hotel groups do not explicitly address the SDGs, rather they claim to have aligned their sustainability goals to the SDGs or to have integrated the SDGs into these strategies. Further, this process of alignment has been pursued in a general rather than a specific manner, and there has been little or no attempt to directly map corporate goals and targets to specific SDGs. Where hotel groups claim to have aligned a relatively small number of key corporate priorities to the SDGs, for example, the link to the specific SDGs can be seen to lack clarity. As such, it will be difficult for the hotel groups that have adopted this alignment or integration approach to assess how they are contributing to specific SDGs. On the one hand, such contributions become part of wider corporate contributions to sustainability and on the other this approach does not suggest that the majority of the selected hotel groups are *'using the UN SDGs as a focal point to drive responsible business in hospitality'* (International Tourism Partnership 2018). More generally, Sultana (2018) expressed surprise at the choice of the term *'sustainable development'*, which she described as being *'at the heart of this new framework of titled SDGs.'* Surprise, because she argued that *'sustainable development has been very*

contested, conflictual and contradictory in definition and reality since its uptake in the 1980's' and that *'sustainable development can mean anything to anybody'* (Sultana 2018).

Business Priorities for the SDG's

Secondly, issues about priorities can be identified at two levels. As outlined above, some of the selected hotel groups have chosen to target, either directly or indirectly, a number of SDGs that they argue are aligned with their corporate goals and business strategies and where they feel they can make the most valuable contribution to the SDGs. More generally, this approach has been called into question in that PWC (2018) surveyed some 470 companies *'to investigate how they were reflecting the SDGs'* and argued that *'many companies are engaging at a more superficial level.'* This survey revealed that many companies *'are failing to prioritise goals that need corporate support the most and to address those that could cause the biggest problems in the future if left unchecked'* and suggested the *'failure to consider the local context can also put companies at a disadvantage as they seek to do business around the world'* (PWC 2018). At the same time, PWC (2018) argued that prioritisation *'also requires a longer-term vision of, and approach to, business growth strategy and planning than some companies are used to employing. To have that longer term perspective requires an understanding of the risks that a company could face if the underlying issues that the SDGs represent are not solved, and also of the opportunities that adapting products and services towards the innovations and solutions could offer.'*
More generally, Moseley (2018) suggested that there is little evidence of the strategic prioritisation of the SDGs within the business community. In many ways, climate change is a cross cutting issue and its potentially damaging impacts may threaten the achievement of all the SDGs. The UN Framework Convention on Climate Change (2018), for example, claimed *'climate change presents the single biggest threat to sustainable development everywhere and its widespread, unprecedented impacts disproportionately burden the poorest and most vulnerable'* and argued *'urgent action to halt climate change and deal with its impacts is integral to the successful implementation of the Sustainable Development Goals.'* In a similar vein, in identifying environmental goals in the SDGs, Liverman (2018) reported that *'climate change has been identified as the one stress that could undermine the other environmental goals, as well as those on poverty or health'* but questioned *'how well do the SDGs address the climate change challenge?'*

Metrics and Measurement

Thirdly, there are issues about measurement and metrics. At one level, there are issues about the data that is required to measure progress, the collection of such data and the mechanisms and procedures that will need to be established in order to monitor progress. At the local level, for example, Sultana (2018) argued *'local data are often not collected, or are not collected properly, are frequently*

inaccurate and are expensive to collect.' More generally, the dominant approach to the measurement and monitoring of the SDGs is to identify indicators for each SDG but Bali Swain (2018) argued that *'this approach if not flawed is inadequate'* not least, in that it ignores the complex interrelationships between some of the SDGs. At the same time, the UN Division for Sustainable Development Goals (2018) acknowledged *'many important issues, such as gender equality, health, sustainable consumption and production, and nutrition, cut across goals and targets. The goals and targets are themselves interdependent, and must be pursued together, since progress in one area often depends on progress in other areas.'*

More critically, Liverman (2018) claimed that *'the expansion in the number of goals and targets especially as indicators are developed for measuring progress towards targets, will add even more calculation, monitoring and quantification to the process of evaluating development'* and that *'this is evident in the many calls to take advantage of new technologies for creating social and environmental indicators.'* This in turn led her to claim *'this can result in overly narrow assessments that direct policy towards quantifiable outcomes rather than broader but harder to measure social needs'* (Liverman 2018). Under the banner, *'should we dance with development metrics?'* Moseley (2018) questioned the value of engaging with development metrics and argued that the SDGs *'represent what is wrong with development, both in their conception and in what they measure and do not measure.'* Further, Nightingale (2018) suggested that *'for the SDGs to be effective, they need to go beyond simple statistics to account for how situated, performative aspects of life evolve, rather than as they are.'*

Business Reporting and Communication

Fourthly, there are issues about reporting. More specifically, if the major hotel groups are to contribute to the SDGs they will need to integrate their achievements into their reporting processes. The *SDG Compass*, for example, emphasised to companies that *'It is important to report and communicate on your progress against the SDGs continuously in order to understand and meet the needs of your stakeholders'* (Global Reporting Initiative/United Nations Global Compact/World Business Council for Sustainable Development (2015)). There are a number of elements within the sustainability reporting process but external assurance, a procedure employed to provide confidence in the accuracy and reliability of the reporting process, is widely seen to be a central element. However, in their review of how the world's leading hotel companies publicly communicate their approach to sustainability, Jones, Hillier and Comfort (2014) found little evidence of independent external assurance. The leading hotel chains will need to commission independent external assurance of their contributions to the SDGs or the credibility of their reporting of such contributions will run the risk of being undermined.

Without such independent external assurance, there is the danger, for example, of hotel groups being accused of what Dentsu Aegis Network (2018) described as *'SDG Wash'*, which has clear parallels with 'greenwash', the environmentally pejorative term used when green communication messages are deceptively used to promote the perception that a company's products, aims or

policies are environmentally friendly. More specifically, the argument is that if *'companies use the SDGs in their communications to expand the corporate value and sales of their own company'* then *'there is a danger that the company will receive criticism and suggestions for improvement from each stakeholder due to mistaken methods of communication'* (Dentsu Aegis Network 2018). As such, Dentsu Aegis Network (2018) argued that SDG Wash damages both *'the relationship of trust between consumers and individual companies'* as well as *'the appeal of the company as an investment and loan destination.'*

The Relationships and Tensions between Business Imperatives and Sustainability

Finally, there are issues in that many of the selected hotel groups' commitments to the SDGs are couched in terms of business imperatives, not least efficiency and continuing growth, as well as sustainability. This was reflected, for example by Ray Bennett, Chief Global Officer, Global Operations at Marriott International, who argued *'incorporating environmental and social initiatives, including human rights awareness training, into our business is not only the right thing to do, it has a direct impact on our profits and beyond'* (Marriot International 2017). On the one hand, this might be seen to resonate with the concept of shared value, which has been defined by Porter and Kramer (2011) as *'policies and practices that enhance the competitiveness of a company while simultaneously addressing the economic and social conditions in the communities in which it operates.'* However, Crane et al. (2014) identified a number of weaknesses and shortcomings in the creation of the shared value model. They argued, for example, that the model *'ignores the tensions between social and economic goals'*, that it is *'naïve about the challenges of business compliance'* and that it is *'based on a shallow conception of the corporation's role in society'* (Crane et al. 2014). In justifying this assertion, they conclude that the model seeks to *'rethink the purpose of the corporation without questioning the sanctity of corporate self-interest'* (Crane 2014). On the other hand, and arguably more contentiously, there are concerns, that the SDGs might be captured by corporate interests, and more specifically by corporate capitalism, to justify continuing economic growth despite concerns about the overconsumption of natural resources and the damaging social and environmental effects of such growth. Valenzuela and Bohm (2017), for example, argued that the term sustainability was effectively being *'captured by politic-economic elites claiming that rapid economic growth can be achieved in a way that manages to remain responsible to environment and society.'*

Conclusion

While a number of trade organisations within the tourism and hospitality industry have argued that the industry can play a major role in contributing to the SDGs, this paper reveals marked variations in the ways in which the world's leading hotel groups have begun to address the SDGs. Two of the top ten hotel groups directly addressed the SDGs directly, albeit in different measure, six of the

hotel groups claimed that the SDGs were integrated into their sustainability strategies, while the remaining two hotel groups did not address the SDGs. As such, the authors suggested that the world's leading hotel groups have some way to go if they are to play a leading role in contributing to the SDGs. The authors further suggested that in looking to fulfill that contribution, the leading hotel groups must focus more explicitly on the SDGs themselves, adopt a more comprehensive approach to drawing up their priorities for the SDGs, and address the issues of measurement, independent external assurance and the tensions between business imperatives and sustainability. That said, the leading hotel groups' contribution to the SDGs is clearly a work in progress and looking to the future, continuing to monitor and review that progress will provide a wealth of academic research opportunities for scholars in hospitality and tourism.

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The Evaluation of Tourism Marketing Model within Moroccan Public Policy Management

By Yassir Lamnadi[*]

Morocco is situated in the north western Africa facing Europe on the Mediterranean and on the other side open to the Atlantic Ocean benefiting from a favourable geographical location as Africa's gate to Europe. The country has four inscribed biosphere reserves, and nine UNESCO inscribed world heritage sites. The performance of tourism in the country kept a steady growth rate in the last decade despite being slightly affected by the 2008 world economic crisis; just to recover later by taking advantage of the unstable political situation in competing neighbour countries, after the so-called 'Arab Spring'. This improvement in the performance of the Moroccan tourism sector is also among the planned objectives of the two major tourism management plans in modern Morocco (Vision 2010 and Vision 2020). Evidently, the second strategic plan (2020) came as a continuation of the first one but with wider plans and bigger ambition. However, these management plans were not all 'la vie en rose'. The objectives of both programs were not completely achieved (2020 vision is still two years away from completing its execution but various gaps can be found in the realised points). A descriptive study was conducted to evaluate the performance of the tourism marketing practices within Moroccan public policy management. The tourism marketing strategy of both management programs was critically reviewed to identify both their strengths and weaknesses. The findings of this study show that public policy concerning tourism sector drove the country in the right development path but still, the chosen marketing strategies were not highly efficient, given the considerable various Moroccan tourism potential. Nevertheless, analysis also showed that public tourism management policy was initially designed with some inadequate approaches concerning the development of the sector. It has been suggested that the government should concentrate more on a wider marketing approach that takes into consideration the valorisation of the sustainable tourist product of the country and more importantly empowering the human potential to be centric in parallel with the touristic product.

Keywords: Morocco, public policy, tourism, tourism marketing, Vision 2020.

Introduction

As an industry, tourism is based on the supply and demand, and, obviously, a marketing policy is required in order to have a clear business vision and continuity. A good and efficient marketing policy also opens up new opportunities for the destination product to reach new potential markets and keep it operating in the long run. Usually, public agents such as tourism ministries, especially in third world countries, undertake the promotion of a country's destination. The sector's structure defines the efficiency of the marketing policy. However, there is usually a difference in managing marketing policy between private and public

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stakeholders. It depends on the available resources, destination perceptions, and target markets. In Morocco, one cannot find many differences between public and private marketing policies. In both cases, similar promotion channels and techniques are used.

As shown in Figure 1, Morocco had 11.35 million tourist arrivals in 2017 which makes it the first destination of Africa in terms of tourists' arrivals and the third in tourism receipts after South Africa and Egypt (UNWTO 2017). These figures reflect strong growth in the last ten years. It has maintained a growth line despite the recent political turbulence that has affected other North African tourist countries, especially Tunisia and Egypt. The latter has traditionally been the main tourist destination in Africa. At present tourism has a significant influence on the Moroccan economy. Between 2010 and 2013, revenues generated by international tourism accounted for 6.5% of GDP (UNWTO 2014). In summary, the last fifteen years Morocco has experienced a significant change in the economic structure with tourism being the main factor of economic development.

Figure 1. *The Evolution of Tourist Arrivals to Morocco*
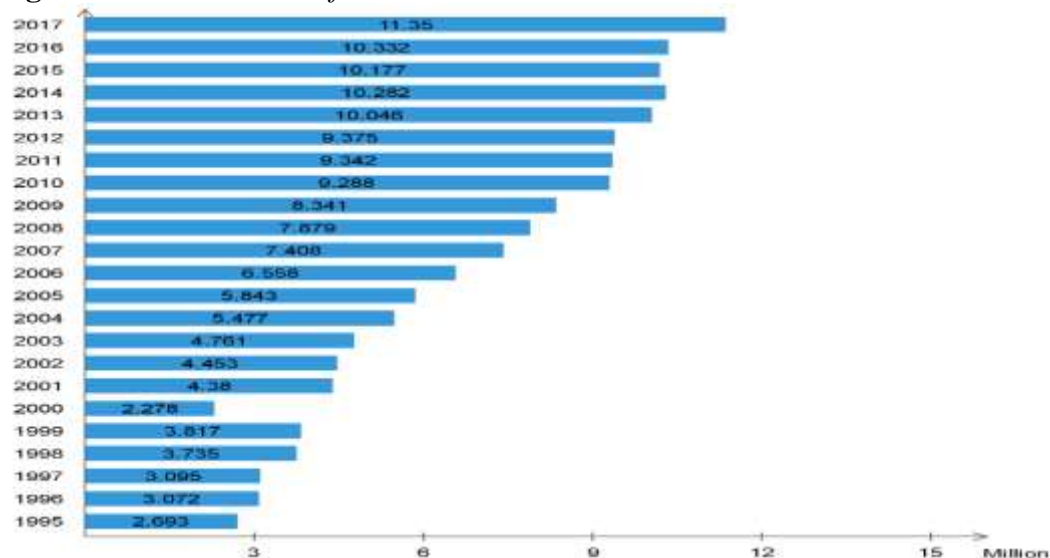
Source: Elaborated by author based on Tourism Ministry data.

However, this change in the structure of the economy might have led, in some cases, to an excessive capital production (capital accumulation). This excess capital has created a new challenge for the authorities to maintain its profitability without inflation. Some official studies, which were carried out by the government, suggested that one effective solution for this situation could lay in creating more tourist-residential housing that generates much higher return rates than the conventional hotel activity. The creation of these small-scale tourist accommodations will help the state to solve effectively the capital accumulation problem.

Management plans such as Vision 2010 and 2020 (Ministère du Tourisme 2001, Ministère du Tourisme 2010) are considered to be a perfect fit for such measures. The overall achievement rates of the drawn objectives for both plans

show some significant successes. The important increase in tourists arrivals, (Africa's first destination), tourism receipts (more than $7,000 million in 2014) or the jobs created (about 500,000 direct jobs) (UNWTO 2015, Observatoire du Tourisme 2015); are very important results. Nevertheless, the profitability for the State is questionable, if all the economic costs are taken into account, even more so if we consider the environmental and social costs.

Methodology

This paper uses secondary sources of data to analyse the Moroccan tourism marketing strategy. The collected data consisted of governmental reports and studies, tourism sector statistics, and different scientific articles and studies addressing the Moroccan tourism sector in general and specifically its marketing strategies. These data were also used to form a descriptive profile of the Moroccan tourism sector for the unfamiliar readers of the country's tourism sector. In addition, the concept and definition of tourism marketing are reviewed in order to build a coherent conceptual framework for the paper. The collected data were analysed and categorised into data sets (codes, categories and sub-categories) according to the nature and function of each variable in this paper. The main data set categories were assigned to texts themed on tourism marketing for the texts dealing with the country's marketing strategies/policies. Connected to this category, other sub-categories were assigned for texts highlighting marketing actors, marketing channels and marketing techniques. Codes were created within the sub-categories to evaluate the nature and function of each single component. The same process was carried out concerning public management data set category and connected sub-categories. Some resource illustrations had to be modified or re-elaborated without affecting its viability or significance.

Concepts and Definitions

The Chartered Institute of Marketing (CIM) of UK defines marketing as a management process responsible for identifying, anticipating and satisfying customer requirements at a profit. Kotler (2000) defines it as a set of activities directed at facilitating exchanges. In 1988, he refined the definition to the business function that identifies current unfulfilled needs and wants, defines and measures their magnitude, determines which target the organization can best serve and programs to serve these markets.

Lumsdon (1997) defines it as the managerial process of anticipating and satisfying the existing and the potential visitors' needs more effectively compared to competitors; tourism promotion is defined as the process designed to inform potential visitors about the tourism product offered, sharing with them the most attractive and innovative attributes. This process is usually integrated with distribution and implies communication activities including advertising. Promotion and marketing communication strategies are used by tourism destinations to

influence destination image (Beerli and Martín 2004). For this, different media information and communication technology (narratives/visuals) are deployed to promote a destination image in the market (Govers et al. 2007). Gallarza, et al. (2002) define a destination image as a complex concept, which is open to different interpretation and as lacking a unique meaning.

The portrayal of destination image has been always affected by various objective and subjective factors. It is, principally, feeding on the information available on that certain destination. This information has many sources including promotion (advertising and brochures), the opinions of others (family/friends, travel agents), media reporting (newspapers, magazines, television news reporting and documentaries) and popular culture (motion pictures, literature). Nevertheless, Echtner and Ritchie (2003) point out that this information is always manipulated by visitors' first hand impression: "Furthermore, by actually visiting the destination, the image will be affected and modified based upon first-hand information and experience". Another approach was introduced by Gallarza et al. (2002) by stating that despite the fact that tourism services are intangible, images become more important than reality; and the tourism destination images projected in information space will greatly influence the destination images as perceived by consumers. Tasci and Gartner (2007) present a review of destination image formation based on the works of (Alhemoud and Armstrong 1996, Bramwell and Rawding 1996, Court and Lupton 1997, Gartner 1993, Gunn 1972, and Young 1999 as cited in Tasci and Gartner (2007)). They conclude that image formation is defined as a construction of a mental representation of a destination on the basis of information cues delivered by the image formation agents and selected by a person.

This destination image research line was initially approached in two different ways: empirical studies that apply statistical instruments without developing theoretical frameworks; (Schroeder 1996 as cited in (Gallarza et al. 2002)). The other approach consisted of empirical studies that address image measurement problems while presenting methodological explanation (Carmichael 1992, Echtner and Ritchie 1993, Reilly 1990 as quoted in (Gallarza et al. 2002)). They classified destination image as a variable depending on various factors contributing to the formation of the destination image (Tasci and Gartner 2007).

Baloglu and MacCleary (1999) state that "image is mainly caused or formed by two major forces: stimulus factors and personal factors. The former are those that stem from the external stimulus and physical object as well as previous experience. Personal factors on the other hand, are the characteristics (social and psychological) of the perceiver". This formation process is addressed by two different approaches (Gallarza et al. 2002). A static one that studies the relationship between image and tourist behaviour; and a dynamic one that deals with the structure and formation of the destination image itself.

It is important to note here that tourism promotion is not a standalone factor within the destination image building process. Rather, it depends on other information sources that are projected about the destination influencing its final built image. Moreover, the variables affecting the destination image are various and can differ in type and nature; such as destination preference and visitation

intention; destination familiarity and the impact of previous visitation; tourists' geographical locations; trip purpose; situational or temporal influences; the image as projected by the destination; and tourists' sociodemographic variables (Govers et al. 2007).

The image of a destination, its formation process controlled or formed by various components, is seen by a large part of literature as dynamic rather than static. Gallarza et al. (2002) point out that this dynamism depends on variables such as distance, residents and, most importantly, time and space. Moreover, the interaction between these variables can occur on three dimensions: measuring subject's perception, objects and destinations, and image attributes and characteristics. The time variable can affect image in three different ways: length of stay in image destination, time interval between repeated visits to the same destination and the effect of previous visitation on image formation (Gallarza et al. 2002). Similarly, the space variable influences the image formation process depending on where the visit occurs and the study circumstantiality (Gallarza et al. 2002). Given the fact that the inter-relationships between these variables influence the destination image, it consequently affects the visitors' satisfaction level, as well, through a set of dependencies. Decrop (1999) as quoted in (Del Bosque and San Martin 2008) suggests that the effect of image variables on the consumer behaviour in tourism is what defines the satisfaction level. He, also, states that the cognitive and emotional approaches are highly adequate for analysing tourist decision making and behaviour processes.

In the same sense, these variables surrounding the destination ought to be rooted in any destination image promotion to portray a 'true destination identity'. Therefore, this identity is reflected in the actual tourism experience and the impression which the visitor is left with and this affects the tourist satisfaction (Govers and Go 2004). However, Echtner and Prasad (2003) note that, in this context, two significant gaps could occur if a) the tourism product and the way is promoted are not convenient with the destination's identity, or b) when the destination image is idealistically perceived through promotion causing unrealistic expectations to the tourist.

Despite the considerable progress carried out by researchers in the tourism marketing field, yet such a field is perceived to be too narrow. Most of the studies presented in this paper tend to focus on specific topics within tourism marketing literature such as destination image, internet marketing, and market segmentation. Moreover, there are, still, a number of areas, within tourism marketing literature, which have not been acknowledged or managed, due to unclear motives and are ignored by scholars contributing to this discipline of tourism research. These ambiguities may reflect gaps in the theoretical understanding of tourism marketing causing, consequently, bigger gaps between tourism research and real world practices. However, in parallel with the progress of tourism industry, general marketing theories also achieved considerable progress. Presently, the way that tourism marketing is taught and researched has been widely criticised for being done as in 1960s, but patched with decorations such as services, relationships and e-businesses. This urges a pressing need for reinventing marketing theories to fit the present and the future (Gummesson 2002).

Findings/Results

Promotion Actors

In Morocco, the main tourism agent is the ONMT (Office National Marocain du Tourism), a public administration created in 1918 in charge of the promotion and marketing of the product 'Morocco' on the national and international level. The Office plans promotion strategies as a public stakeholder, as it has become a statuary branch of the Tourism Ministry. However, it may include in its promotion strategy some of the private stakeholders as well, as a collaboration policy between public and private sector. For instance, during the last two decades, many promotion projects were implemented along with some private actors such as travel agencies, real estate investors etc. Other public/private collaborations may be involved at different levels in this promotion process (Figure 2).

Figure 2. *Structure of Moroccan Tourism Promotion*
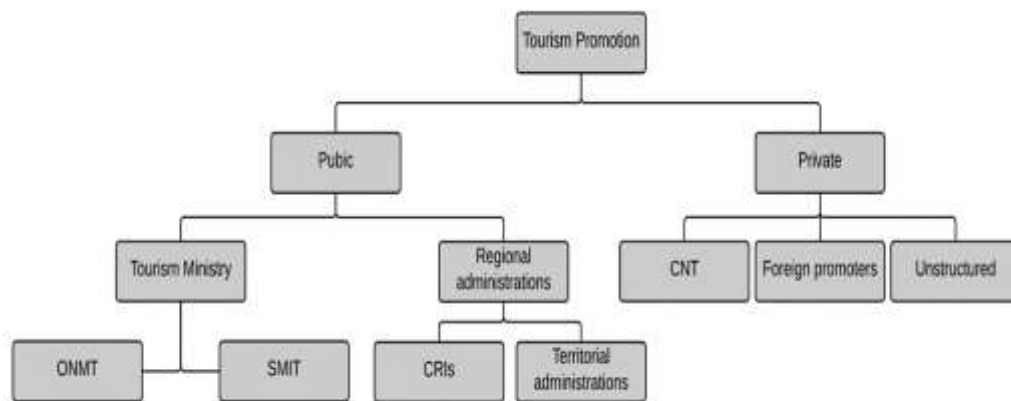
Source: Author.

The Tourism Ministry

The governmental administration is mainly supervising the tourism sector in the country, which defines itself as the governmental authority in charge of tourism. Its main mission is to elaborate and implement the government policy concerning the tourism sector and related aspects. It is designated with the following mission:

  ➢ Develop, implement and evaluate the tourism development strategy.
  ➢ Conduct studies and necessary surveys for the development of tourism at both national and regional level.
  ➢ Develop draft laws and organizational texts relating to tourism activities and ensure their application.
  ➢ Supervise and support tourism professions and activities in accordance with the reinforced regulations.

➢ Orientate, control the deconcentrated services and evaluate the necessary means for their management.
➢ Participate in the development and management of the hotel and tourism training strategy.
➢ Supervise training institutions under the Ministry of Tourism (Figure 3);
➢ Ensure the establishment and strengthening of relations in the framework of bilateral cooperation as well as with specialized organizations.
➢ Ensure the guardianship of institutions under the Ministry of Tourism.

In addition to the centrality nature of developing management plans for the sector, the ministry, also, have territorial representations in each region. These regional delegations are charged with applying the ministry's tourism policy on the local level. Despite being under the central authority of the ministry, they still possess a margin of intervention locally such as supervising the sector in the region and get involved in collaboration with local stakeholders for the sake of developing the sector, walk through new tourism related investment, and spontaneous interventions in cases of regulation breeches concerning the functioning of tourism establishments.

As shown in Figure 3, the ministry consists of three main departments: strategy and cooperation; department of regulations, development, and quality; and department of resources and formation. The ministry does not project touristic promotion directly; rather, it collaborates in developing promotion strategies with its two main affiliates; the ONMT and the SMIT

The ONMT

A public institution, with administrative character, created in 1918, and acted since then as a key player in the Moroccan tourism sector; its mission is to promote and market the product 'Morocco' both at the national and international level. It has been assigned, in addition, the creation, the development and the management of facilities that contribute to the development of tourism, including accommodation infrastructure.

The commercial dynamism, of which the promotion strategy is an essential component, was an important link in Vision 2010 with the objective of "restoring the competitiveness of Morocco's destination and product". In this sense, it was agreed to restructure the entire promotion system with the aim of developing, in consultation with professionals, a more creative and responsive promotional policy.

In order to promote the notoriety of the destination 'Morocco' in the markets carried out by the strategic positioning of the sector, the ONMT set the objective of revising its promotion strategy in the direction of articulating it around "product", especially seaside and cultural product, instead of "destination". The review of marketing and communications strategies raised comments related to the development of marketing plans, the process of allocating promotional budgets, and the implementation of these marketing plans.

Figure 3. *Tourism Ministry Structural Hierarchy*
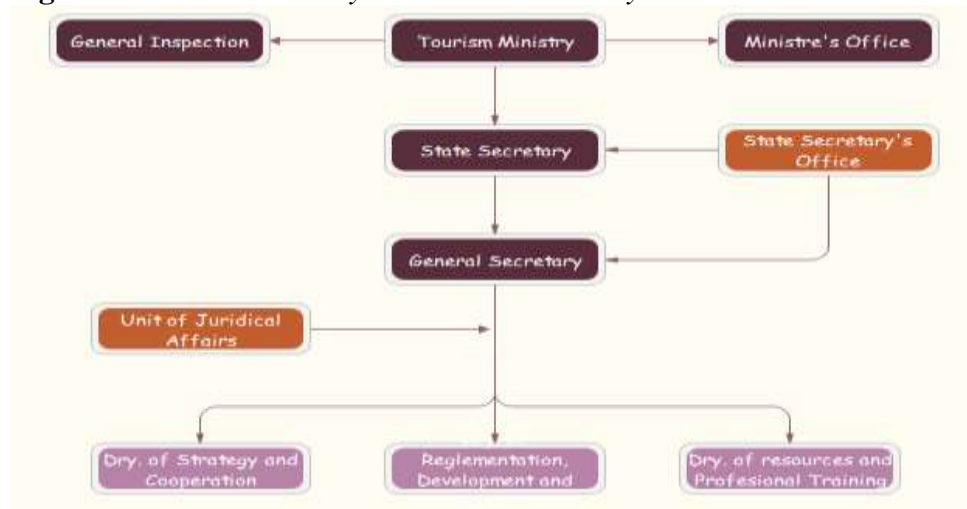
Source: Author.

ONMT's marketing and communication plans are a reproduction of the elements drawn at the level of the strategic plans. Indeed, they contain only summary elements such as the number of contracts to be concluded with Tour Operators at the level of each market, the number of fairs on which the ONMT intends to be present as well as the media to be used for institutional communication. The promotion activities to be deployed at the level of each market have also undergone a clear change compared to the marketing plan adopted initially with the start of Vision 2010, particularly for Italy, the United Kingdom and the Gulf countries in terms of institutional communication that was not originally planned.

Nevertheless, important tourism market niches, whose potential is indisputable, could have contributed positively to the said performances if they had received a particular interest. These are Moroccans Living Abroad (MRE), domestic tourism and "Meetings, Incentives, Conferencing, Exhibitions" (MICE). With regard to MREs, whose share of total overnight stays did not exceed 0.3% in 2012, the ONMT did not undertake any measures in the sense of an understanding of their profile, their tourist behaviour, their expectations and perceptions of holidays in Morocco and the possibility of converting them to the consumption of tourism products.

Under this pressure of taking Moroccan tourism to a better position, and in order to keep in line with the recent changes in the global tourism industry. The office announced in June 2015 that it is undertaking a deep change in its internal organisation structure. The new organization chart is structured around three main activities, namely the strategic activities relating in particular to the definition of Morocco's brand strategy, the operational implementation of product strategies, and the coordination of all communication actions. For their part, the operational activities consist of the distribution of the Morocco brand in the various markets, the animation of delegations abroad while guaranteeing a single interlocutor for the provision of resources, adding that the support activities represent the main

provider of financial, material and human resources and a guarantee of respect for the financial balance of the Office.

The restructure consisted of the creation of two new internal departments; as for the "Digital & New Technologies" Department, it will be in charge of the integration of new technologies in the promotion strategy of the destination Morocco to offer a better visibility on the Internet. While "Morocco and internal tourism" department will have as main missions the participation in the definition of the strategic orientations of Morocco's brand and the development of a deep knowledge and an expertise of the product Morocco. The general orientation of the new structure tends to focus on participation in the definition of product positioning, the development of awareness and the image of domestic tourism and the development of a permanent contact with tourism sector professionals in Morocco, local authorities and the press.

The SMIT

A public institution created in December 2007 by the Moroccan State with the aim of implementing the strategy of development of the tourist product in Morocco (see Figure 4). It emanates from the need to bring out a public actor in charge of the construction of the tourist product. In addition to carrying out new major projects on behalf of the State or legal entities governed by public law throughout the national territory, the SMIT has other mission such as:

➢ Conducting studies for the implementation of tourism development strategy adopted by the public authorities.
➢ Market studies for the definition of the different product ranges.
➢ Preliminary studies for the identification of tourist areas and those concerning the development and implementation of plans for the development of tourist areas.
➢ Carry out actions of promotion and tourist development with the investors and assist the public authorities in the choice of the candidatures with the calls for tenders.

In an international competitive context between tourist destinations, differentiation has become one of the major challenges of development. The SMIT states, on its official webpage, that it places attractiveness at the heart of its concerns with the aim of making the most of the assets of each touristic region to make it a true competitiveness cluster. Raising various challenges for the Moroccan tourism sector namely design the offer, identify and highlight tourist sites of interest, mobilize land, guide public and private investment, support investors and tourism operators, facilitate their development in Morocco.

Figure 4. *SMIT Internal Organization*
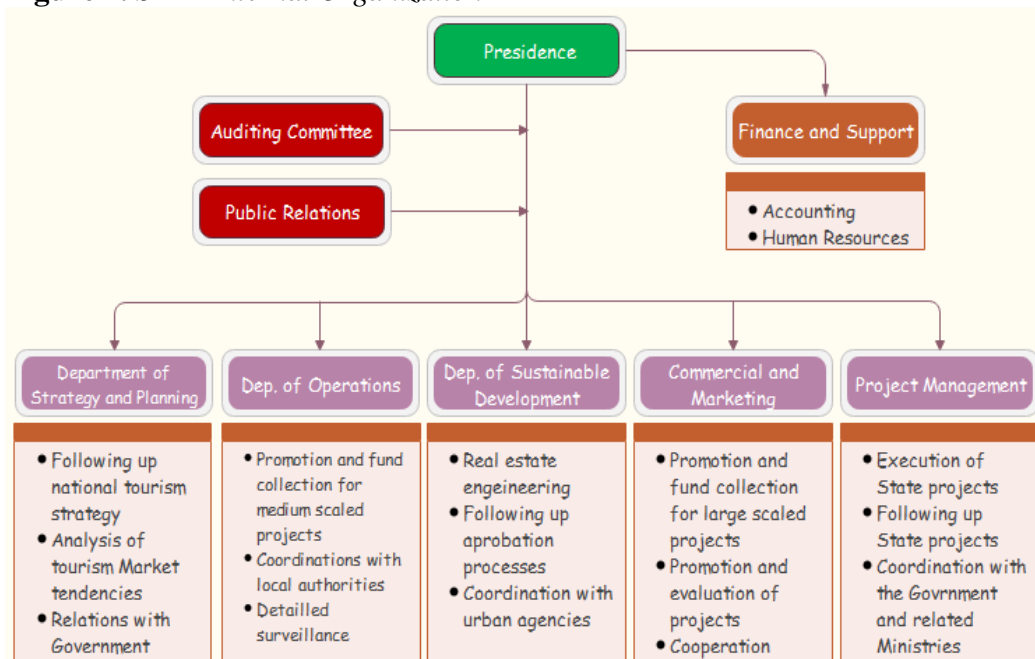
Source: Elaborated by author based on: smit.gov.ma/fr/notre-organisation/.

Throughout the years, the SMIT accumulated a solid experience in structuring and assembling flagship projects. It provides private investors, local authorities and various public stakeholders with a team of professionals and a personalized and quality service offering to support them since the initial conception of their project until they are put into operation (Figure 4). Its main objective is to support these partners to increase their economic competitiveness and thus contribute to the success of their development. SMIT's intervention focuses on the strategies of tourism projects, by defining and implementing large-scale promotional actions able to support the attractiveness of the Morocco destination as a tourist investment hub. The SMIT, also, has some considerable presence on the international level. Taking advantage from its network of international partners, it seeks to place Morocco at the centre of global tourism investment and thus make the country a key destination for tourism investments.

Regional Centres of Investment (CRIs)

The CRI (Centre Regional d'Investissement) creatred by the state in order to pursue its policy of regionalization of business creation and investment projects since October 2002. This entity has taken place at the heart of each region and provides both consultation and support in the steps that entrepreneurs or investors must take. It displays a proximity character by remaining available at any time and a professional one by participating effectively in the implementation of projects. Its main roles are business creation help, assistance and investment projects, maintaining and developing existing investments, improving the attractiveness of the region to investments in sectors with high potential. The CRI is above all a

partner for any project leader in Morocco. Figure 5 shows that structurally speaking, it consists of two main departments that form the core operation the CRIs perform nationally for help desk for starting businesses as a unique interlocutor of contact for all business starters/project holders; or the Investment Assistance Division which provides investors with all the useful information for regional investment; study all requests for administrative authorizations; and prepares all necessary administrative acts to the realization of investment projects.

Figure 5. *Casablanca Regional CRI Organization*
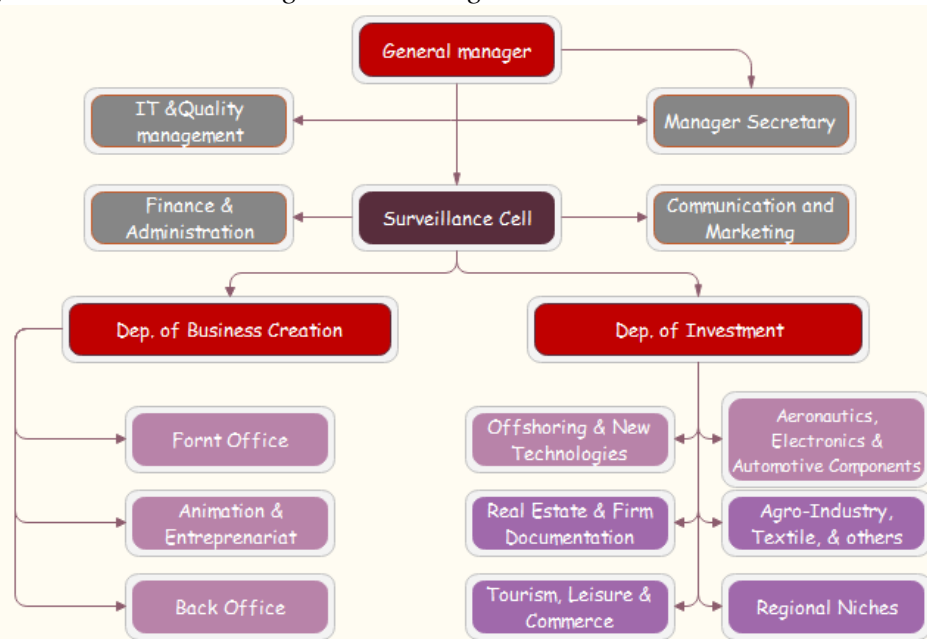
Source: Elaborated by author based on Source: casainvest.ma.

Investors willing to operate in the country on its different regions can find at the correspondent CRI alliance and partnership. In this public institution, necessary information for the creation of a business or investment in the region and a valuable help is presented. The CRI in Morocco is an intermediary entity between the project manager and the administrations that enables him to guarantee the creation of the enterprise. As part of the assessment of the experience of these centres, significant results were recorded at the level of business creation, particularly in the reduction of creation time. Court of Auditors (financial jurisdiction provided mainly responsible for monitoring the regularity of public accounts of the State), notes in a report, published in 2015, that several internal and external constraints that did not allow these entities to achieve the objectives assigned to them, including the adoption of action plans specific to each one. In addition, the report points to the lack of a special status of CRI staff, the existence of financial resources dependent on state subventions, the lack of follow-up of the companies created, and a limited role of CRIs in the implementation of national policies at the local level. The report, also, mentions the inadequacy of the IT interconnection of CRIs with their partners, the limited representation of administrations within the interlocutor and the absence of a single system for the

payment of creation costs, as well as a legal framework that governs the Regional Investment Commission.

National Confederation of Tourism (CNT)

Created in 1995, its main mission is to bring together all the tourism professions and contribute to the reinforcement of the structures of the various professions for greater efficiency and participation at the regional level namely Regional Federations of Tourism (FRT). Initially, the CNT was under the supervision of its mother federation, the CGEM (Confédération générale des Entreprises du Maroc), of which it was externalised since 2007 but remains statutorily attached to it. The CNT acquires a new ambitious structure turned towards its members: Regional Federations of Tourism) and National (National Federations of Tourism Professions). The following are the seven National Federations of Tourism professions included in the confederation: 1) National Federation of Hotel Industry; 2) National Federation of Moroccan Travel Agencies; 3) Association of Touristic Investors; 4) Federation of car rental companies without a driver in Morocco; 5) National Federation of Restaurants owner; 6) National Federation of Tour Guides and Mountains Guides; 7) National Federation of Tourist Transporters. The CNT designates its intervention in the sector on three main strategic axes; the strategic interlocutor of the entire sector to the public authorities and to all decision-makers; achieving the deployment of the 2020 vision; provide real services to members.

Travel Agencies (Tour Operators)

One other of the most vital actors contributing to the national tourism sector is the network of Tour Operators (TO) providing trips and circuits services along with accommodation and other leisure products. These agencies could be categorised to many sets according to their nationality (national/foreign), operating cities, and provided products. In their majority, the present ones are the national TO focusing their products on the desert and imperial cities. In general, these are the product most acquired by tourist arriving to Morocco. Within this network, a set of criteria might affect the each TO's sales on the market. These could be product type, pricing, operating cities, and coherence or variety of the circuits. The major tour operators in the country may be found in the table below (Table 1).

Hotel Industry

The hotel industry or accommodation services providers in general follow the same distribution logic of TO across the country. Large or international hotel chains are focused on Marrakech and Agadir, which both contains 46% of the total accommodation capacity of the country (Tourism Ministry 2017). The categories distributed on the two cities may differ from high-end luxury resorts to humble houseguest or small-scale apartments. The most represented hotel chain in Morocco is, with no doubt, the French group Accor (which is dominant in luxury

as well as in low-cost category). This group also manages other subgroups that are considered of its brand too such as: Ibis, Fairmont, Banyan Tree, L'univers Sofitel, Pullman, etc. across the major Moroccan cities (Marrakech, Agadir, and Casablanca) where the majority of accommodation capacity can be found. To illustrate more on this point, detailed information concerning dominant hotel chains can be found in Table 2 below.

Table 1. *Major Tour Operators in the Country*

Tour Operators	Operating cities	Products
National Travel Agencies		
Aventure Berebere	Marrakech	+Tours for group of people, a family, individuals (from 2 people), even travel agencies, tour operators. +Trekking circuits all around south and south-east Morocco, 17 different circuits. +Thematic tours such as 4x4 circuits, Riyads-Hotels, Autotour, Family Stay, etc.
Amaris Voyages	Marrakech	+Five categories of travel. Trekking circuits, Family Travel, School Travel, Solidary Travel, and Nature-Culture Travel.
Top Desert	Erg Chigaga, Erg Chebbi and Erg Lihoudi	+Private transportation, camel trekking, sandboarding, events organization. +Private tours to the Sahara desert and to all-important Morocco destinations.
Atlas Voyages	Marrakech, Agadir, and Essaouira.	+Each destination, the main hotels in the city and their main accommodation offers. +Organised trip to south Morocco + Days circuit between Ouarzazate and Merzouga cities inculing food, accommodation and may other cultural activities.
Majestic Tours	Rabat	+Travel packages to Istanbul, Cairo and Dubai. +Three-days circuit 'Marrakech - Terres D'Amanar - Ourika – Oukaimeden' as product for Moroccan Destination. +'Excurssion' which consisits of circuits between various Moroccan cities; Agadir, Marrakech, Casablanca, Fes, Ouarzazate, Essaoouira, Tanger, Rabat, etc.
Marisar Manar Travel	Rabat, Casablanca, and Marrekech	+Easter Holidays which is a 9 days/ 8 nights circuit organised between the cities of Marrakech - Ouarzazat - Tinghir - Merzoga - Midelt - Ifrane - Fés - Meknes - Rabat – Casablanca. +Athentic Desert, 8 days/7nights tour including the cities Marrakech - Ouarzazate - Zagora - M'hamid El Ghizlane. +Desert and Sea another 8 days/7nights circuit focusing on the seaside. +Morocco Tour 15 days/14 nights visiting 16 cities: Casablanca - Rabat - Tanger - Tetouane – Chefchaoune - Meknes - Volubilis – Fes - Erfoud - Rissani – Zagora - Ouarzazate - Taroudant – Agadir - Essaouira– Marrakech.
OLE Voyages	Dakhla	+'Dakhla Discovery'. A four-days stay at the Atlantic city known for its surfing shores. +Three circuit programs featuring Merzouga and Ouarzazate mainly.

Foreign Tour Operators		
Fram	Marrakech, Casablanca	+Local receptive, responsible for ensuring all logistics (Organization of stays, group management, home, animation, etc.) in France, Morocco, Tunisia and Senegal.
Look Voyages	Major Moroccan destinations	+Different tour covering the major cities of the country with numerous options in tour duration and quality.
Thomas Cook	Marrakech, Agadir, and Fez	+The stretched streets of Old Fez, as well as hiking in the Rif Mountains. +Tours in south of the country to explore the product desert. Its most used trips are the +Short ones between Marrakech and Agadir due to the potential of the two cities and their fame among tourist as the most wanted destinations in Morocco
Nouvelles Frontiers	Moroccan imperial cities	It offers many +Circuits destined to European visitors in general and especially French. +The tours are varied between 4 x 4 tours between Moroccan imperial cities with round flights, accommodation, and meals included. The pricing policy is based on the European model since it is destined to Europeans.

Source: Author.

Table 2. *The Major Dominant Hotel Providers in Morocco*

Hotels	Desciption
Louvre Hotels Group	The Golden Tulip hotels: Present in Morocco since 2006, Louvre Hotels Group currently has 7 establishments, including 6 Golden Tulip and 1 Tulip Inn, managed within a local structure. the Group has set up a real strategy of tailor-made development, in both in the economic hotel and in mid-range and luxury hotels. The Group has plans to establish its first-class brands in the major economic centres of the country (Casablanca, Marrakech, Rabat, Tangiers, and Fez) as well as in medium-sized cities like El Jadida, Meknes and Oujda to address both the international and local clientele.
Kenzi Hotels	The leading Moroccan hotel group, offering excellent service and high-profile professionalism in the Moroccan hotel industry. The group entered the Moroccan market to compete on the same level with foreign hotel chains in luxury products. As stated on the group website, its vision is to be the hallmark, the ultimate reference and the landmark of fine hotels in today's Modern Morocco; to be known as a well-reputed brand, its standards of excellence consistent in all locations, well known and prominent for its high-quality service and its excess of guest experiences and gastronomic art. The group is present with 10 establishments distributed between Casablnca, Marrakech, Tanger, Agadir and Errachidia.

Relais and Châteaux	High-end French-style hotels established in 1954, an association of more than 550 landmark hotels and restaurants operated by independent managers, chefs, and owners who perform under the name of the brand. The group uniquely formulates its hotels services in parallel with the country's culture values. It offers an introduction to a lifestyle inspired by local culture. They stress on protecting and promoting the richness and diversity of the world's cuisine and traditions of hospitality as well as preserving local heritage and environment. It has 5 establishments in Fes, Rabat, Essaouira, and 2 in Marrakech.
Hyatt Hotels Corporation	A luxury hotel in the Old Medina of Casablanca, The hotel has a 255 rooms, including 223 deluxe king and twin rooms, 11 junior suites, 19 executive suites and 3 royal suites, and 8 conference rooms accommodating from 20 to 400 people. Its restaurants, such as Cafe M, Dar Beida, Bissat and the outdoor Les Bougainvillées cater in Moroccan, fusion or Parisian cuisine. They have a special line of accommodation called 'King Rooms' cover 31 square metres with extreme luxurious equipments and privelages intended to VIPs and high-profile guests like politicians and diplomatic bodies.
Mandarin Oriental	Located in the heart of 20 acres of Moroccan gardens and olive groves, Mandarin Oriental, is a hotel five stars located just minutes away from Marrakech city centre. With its excellent facilities and world-class cuisine, it allows to discover all the country's qualities. This hotel brand is only present in Marrakech but it's one of the most famous accommodation facilities in the country. It usually hosts the national and international conferences, sports events, and different festivals. its view on the Atlas Maintains in the background gives it such a privilege. Its offer varies from luxurious villas, spacious suites, and exceptional spa. Along with a wide choice of innovative restaurants.
Hivernage Collecion	This hotel collection includes five stars: the Hivernage Hotel & Spa, The Pearl Marrakech, Riad Marrakech by wintering and Palm Villa by Hivernage. It offers an exclusive offer and terraces offering views of the medina, the Atlas Mountains and ancestral monuments. Located in the centre of the city, the prestigious hotels of the Group Winter Collection are high-end of Moroccan luxury hotels. The various units of the group are in the neighbourhoods and the most exclusive places in the Kingdom. The Winter Collection Group also offers world gastronomy restaurants that are distributed on major imperial cities of the country.
Angsana Riads Collection	A sub brand of the Banyan Tree Holdings Limited which is a large international tourism investments group based in Singapore. Originally from Thailand, the company operates more than 26 luxury hotels and resorts, 65 spas, 70 retail outlets and 3 golf courses worldwide under the brand names Banyan Tree and Angsana. In Morocco it is present as Agsana Riads in major Moroccan cities (Marrakech, Rabat, Agadir, etc) with 10 establishments in total.

Source: Elaborated by author.

Promotion Channels

Once the promotion strategy is drawn, the actors included (private and/or public) tend to establish a work plan based on the drawn strategy guidelines. Depending on the nature and function of each actor, their intervention in terms of projecting a certain promotional material may vary. In addition, the techniques used to transmit the promotion of the destination may differ largely. This section highlights the main channels through which promotion actors project their promotional image. This projection is executed principally on three levels; 1) direct information, 2) public relations, and 3) touristic advertisement.

1. Direct information refers to the general and basic information about a given destination available for tourists and easily accessed. It could be acquired at tourism information centres that represent a permanent form of information to the public. This presentation could be done through engaging in interaction with visitors, animation of the visitors' in parallel activities while presenting the destination product, or by facilitating the purchase of stay/service to visitors. By all means, this channel is the most traditional one but still the most reliable in third world destination due to lack of modern technologies used in the process.
   a. Moreover, direct information about a destination could be found also in documentation tools/ tourism diffusion. This includes informative brochures and folds made at visitors' disposal at either booking points or while on arrival. In addition, Mailing old clients or potential new ones, could be diffused in travel agencies, tourism offices, or at national representation in foreign countries.
2. Public relations with similar importance as information projection or advertisement, PR inside tourism must be planned and coordinated with other promotion forms, which touch the public directly, or with a press intermediate using read, spoken, or visual press. Big tourism enterprises use this method. Another way of using press as promotion channel could be aired interviews, press conferences, or even journalists travel.
   a. Direct relation with the public without involving cooperation of the press, so that many promotion actors could be directed to other opinion formers. These direct promotional forms could be many and diverse such gastronomy, diffusion of static or animated image (movies, expositions.).
3. Touristic advertisement, like any other advertiser, tourism ones should follow the same strategy based on five crucial decisions while projecting their destination image.
   i) Theme: the offer must seek, in a persuasive manner, a simple message and within the possible rather than a choice of arguments or propositions. It must take into consideration that a

          potential client does not excel at choosing between highly varied propositions.

ii) Target: On different markets, where touristic accommodation competition is intense, product suppliers seek to conquer new potential clientele. These suppliers, often, focus more on clientele adaptation to their products sections more than the preadaptation of the product to fit different clienteles. Market study in this case is conducted only to sensitive points to tackle in potential clients, since the clientele range is already known to the suppliers.

iii) Support: the choice of collaborating media (establishment, TV channel, Radio station...) is carried out considering the level of pricing process, capacity of product supply, and the mode of commercialisation applied by the competitors in the same aspect. However, knowing the precise features of the clienteles group such as dominant gender, age, economic status... could be crucial in the choice of marketing support.

iv) Campaign: the preparation of a promotion campaign should take in consideration, imperatively, the projection timeframe. For instance, the period and duration of campaign, frequency and emission dates should be performed in parallel with high seasons or most busy months of the year. These parameters are crucial in determining the success of the campaign. It really relies on the precise knowledge of the potential clientele.

v) Announcement (Emission): focusing on the good pricing, it must be stated the most important feature. It could be also useful to use precise facts and avoid generalisation or other common used ones, the idea here is to be special, unique, attractive. Not to mention the creativity in product projection and offer variation. The emission must focus, more importantly, on the best argument the supplier has and make it the leading motive.

These techniques are, in general, the ones deployed actually on the promotion in the Moroccan tourism sector. However, they might be used differently depending on the nature and function of the actors using them. However, the promotional material is conveyed through various distribution channels such as travel agencies, trade and tourists exchange, professional associations, press releases, web-based portals.

Promotion Techniques

Since the Moroccan state, in the tourism development process, acts as a planner, manager, and promoter; it is the main actor who is in charge (directly or indirectly) of the realisation of vision 2010 objectives. Among the main points of this vision is the promotion of destination Morocco with diversified product and to

new markets. The initial action plan (2010) concerning promotion was focused on the following points:

- Product: triple classified accommodation capacity replying to international standards
- Transportation: activate the open-sky policy and open various new airlines with European capitals.
- Marketing: communication, commercialisation, adapted and efficient promotion policy. Repositioning of destination Morocco. Anticipation on the market of responsible tourism programme.
- Institutional organisation: creating organs of consultation and coordination between public and private sector actors; on regional and national level.
- Formation (professional training): professionally prepare 72,000 qualified personnel for the national tourist reception.
- Tourism environment: applying a set of general measurements to enhance tourist reception (airports, indication system, and access to information).
- Sector restructuration: Quality responsible and sustainable tourism

The ONMT (Office National Maroccain du Tourisme) is the main (public) promoter of tourism in the country. Its main mission is the promotion and Marketing of destination Morocco locally and internationally. The office follows a triple strategy in order to achieve the points mentioned above: 1) Product strategies: hard focus on seaside segment, by extending the seaside offer to a more diversified one and distributed as well on the Mediterranean coast consisting mainly of building new resort such as in Saidia, Alhoceima, Tetouan, Tangier. Surely, this will go in parallel with the repositioning of cultural product to make a more complete one and representing the real Moroccan potential. 2) Price strategy: improve relationship quality/price of destination Morocco; this policy suggests coordinated pricing process between professional conventions, and pricing reference network. Pricing quality coordinated with quality labels, as part of the legislative and regulatory provisions, the establishment of a quality label for all tourist-oriented businesses located in tourist development zones. 3) Promotion strategy: restriction of promotion scheme, restructure the whole of the operative part of the promotion of the destination with the objective of designing, in consultation with professionals, a policy of promotion more creative, responsive and adapted to the needs. Strengthen the OMNT's financial means and refocus the activities on promoting the image of Morocco abroad. Restructuring the entire tourism tax system so that collected taxes can be invested into tourism promotion. Charge the costs of staff trained under the OMNT supervision to ministry. Restructure the OMNT by amending its denomination and developing its mode of operation, to associate representatives of the profession into decision-making bodies.

As an ultimate objective, the state increased the promotion budgets by creating a promotion fund managed by the ONMT and powered by the tax of tourism promotion and the State budget with participation of the private sector in proportions to be defined on future agreements between all parties. The set

objective was an annual share of 500 million dirhams (45 Million €) in the horizon of 2020, exclusively intended for the promotion. The state reached an agreement between different implied actors in the sector on the need to schedule this effect an increase of the product of the TPT (Taxe de Promotion Touristique) and predict the contribution of other institutions (private or public) benefiting from tourism revenues.

Discussion

Since the late 1990s, Morocco started to empower tourism as an economic levitator for the country (Sbai 2012). This process of bringing tourism to the front of the economic situation started much earlier than that. Its very first aspects were implanted as soon as the dawn of independence (Berriane 2002), with the creation of the Sherefian committee of tourism as the first Moroccan public institution charged with tourism. This committee will be transformed later to the ministry of tourism (Stafford 1996).

However, this long turn in the Moroccan tourism policy from a neglected sector to one of the main economic pillars of the country witnessed various ups and downs through its progress line. This progress line can be divided into many different periods. Almeida and Chahine (2016) divide it into three periods: 1) pre-Fordist starting from after independence in 1956 when the majority of public investments were focused on agriculture and water infrastructure. For tourism, in this period, there were few resorts creating plans in the north and historical cities as part of the Triennial Plan; 2) Fordist period which started in the early 1970s, there was a shift in the public tourism policy towards attracting mass tourism. Promotion agencies were created to target international tourists and especially European market. However, this period went through a critical drop in tourists due to the Gulf War and other political/economic events in the area. This situation led to start the privatization process of considerable public supply accommodation; and 3) post-Fordist, with the beginning of the new monarchy period in 1999, tourism was put in priority for the economic development of the country. Public policies were pointed towards creating strategic plans that focuses on international investments and liberating air space and the creation of large holiday resorts. This new policy direction was translated later to what is known as the major tourist development strategy in the country, i.e. Vision 2010 and vision 2020 in continuation.

Despite the considerable position of Morocco destination among its regional competitors, the ambitious objectives set to be realised by the end of 2020 (Vision 2020) are still stuck to the previous vision 2010 expectations. After more than 7 years of its completion, tourists' arrivals are still hanging in the 10 million interval. However, the surrounding or external circumstances affected to some extent the growth of the Moroccan tourism sector, especially for European countries given the fact that Europe is the first tourist transmitter to Morocco. The late economic crisis back in 2008/2009 affected severely European investment in the country. Many corporations had to sell or withdraw their shares in resort projects that

belonged to Plan Azur (2010 and 2020). Also, the latest terrorist attacks in various European cities (Paris, London, Berlin, Brussels) led to spread fear among the public about visiting any country in the region; even though Morocco marked a clean security record during the last decade (since the last terrorist attacks in Casablanca 2003). This wrong idea formulated to the European public is due to the misleading media propaganda. The non-efficient promotion of Moroccan destination to those areas allows those wrong ideas of chaos and insecurity to spread quicker and wider. In addition to this factor, essential points that make promotion of the product Morocco inefficient.

The poor optimization of communications established by the ONMT has not managed to get into regional and international dynamics. There is no regionalization of promotion through the CRTs. In this context, Laws 1995 (cited in Cox and Wray 2011) proposed five key phases of destination marketing which ease the path to development objectives. 'diagnosis phase' in which destinations must assess the market situation through inspection of existing tourist facilities, identification of tourists' preferences and behaviours about the destination, and identification of competitor destinations. Then comes the "prognosis phase", which seems to have more futuristic view, regarding the planning of destination's development. The other three phases consist of setting objectives for the regional destination; implementing marketing strategy; and monitoring marketing performance. However, in the Moroccan tourism context we can notice the absence of some of these phases in the country's tourism marketing plans especially the first one (the diagnosis phase). This absence lays in the sector invariant facilities as well as the inconsistent competitive performance compared to similar product based destinations in the area.

In parallel with the external promotion efforts, the ONMT has also future plans to regionalize the touristic promotion; that is to say that the office will carry out this mission (the institutional image of destination Morocco) so that each region can execute the promotion and marketing of its own territory. Concerning the financial aspect, part of the budget drawn for the operation ought to stay at the ONMT and another will be transferred to the regions with the support of CRIs and sector professionals. The benefits for the regions from this regionalized promotion are the expected investments that will generate jobs. It is also the role of the regionally elected councils to promote their destinations and boost the economy of their regions.

Cox and Wray (2011) point out that destination marketing, in its traditional perspective, has focused on image creation and promotion aimed at achieving growth in domestic and international arrivals rates. Adding that recently carried out research tend to recommend more emphasis on adopting a sustainable marketing approach that combines sustainable destination management and development objectives. This approach explicitly suggests that destination marketing should act as a strategic tourism management tool which creates some kind of balance between the market objectives of stakeholders and the destinations sustainability. In addition, the World Tourism Organization (UNWTO 1999) proposed a sustainable model for marketing destinations. This model consists of generating a detailed record of existing tourism attractions and facilities of the

destination as well as identifying potential competing destinations. Based on this perception, the UNWTO (1999) then recommends destinations to clarify the aspirations of local communities from tourism activities. These steps aim to develop a promotional strategy that seeks matching existing facilities with the needs of the market in question and the objectives of its local community.

Nevertheless, the ONMT, as the main promoter of tourism in the country, does not present a quantified assessment of its policy to professionals, whose performance is already shattered by incoherent promotion policy and weak marketing means especially for the seaside product for which competition is very strong. To tackle this point, the office started lately to project its promotional material for the destination Morocco using French media, according to the ONMT this campaign will allow promoting the Moroccan destination in general to achieve high performance and reaching in the French market. The priority markets to conquer in Europe are UK, France, Spain, Germany, Netherlands, Belgium and Italy. The office carried out studies to assess these markets and evaluate new tendencies, hotel industry actors must play along to win the concurrence.

In parallel, Buhalis (2000) and Prideaux and Cooper (2002) as cited in (Cox and Wray 2011) note that there are multiple actors involved in the destination marketing, and confirmed that destinations which are based on many products and attributes require consequently many marketing activities. For this sake, an efficient level of cooperation must be developed between private and public sector actors' within the tourism sector. This integrality is considered to be critical in the effectiveness and success of marketing strategy (McDonald 1999). In the same sense, the registered relative weak occupation rates in accommodation units might be due to the missing of this integrality in the marketing policy targeting customers rather than the product-market relationship.

From the big new strategies followed by the ONMT is the creation of a new digital directory (web-based) to go along the rise of internet in the tourism industry. This strategy is not only for international tourism but part of it will be dedicated to domestic tourism as well. This strategy is also based on the modernization of ONMT's functioning mode, human/financial resources management using advanced IT. Accordingly, the Tourism Ministry relies on social media to promote sustainable tourism in the framework of the celebration of the international year of sustainable tourism for development, and aims to sensitize the community about the notion of sustainability touristic in the country.

Conclusions and Recommendations

The current situation of tourism promotion in Morocco requires a general reorientation of the actual tourism policies. A deep understanding of the country's tourism potential including its strengths and weaknesses compared to its direct and indirect competitors in the area. The country promising potential is tied up by various structural and management challenges. These challenges could be easily overcome by innovative plans and retargeted interventions. Starting with a complete and general diagnosis of the Moroccan tourism sector and highlighting

the most affecting factors, its full potential, and the best practice that could be carried out will be the best strategy. A key element here, after the identifying the sector fully, may be the identification of similar practices in competing destinations with similar potential.

Morocco must use competitive advantages over its direct competitors in the area currently, such as Turkey, Cyprus, Tunisia and Egypt. Therefore, Moroccan policymakers and tourism industry leaders ought to re-draw their management strategy to reach the maximum exploitation of the country's tourism resources. In this sense, many applicable steps could be taken into account like resetting the tourism image of the country - portrayed through the official promotional materials - via diversifying the offer to contain other promising products especially outside the typical imperial cities of the country. There is a considerable touristic potential in areas like the North of Morocco or the marginal areas of the Atlas with splendid natural resource. If correctly managed, these 'forgotten' regions could make a huge difference in the performance of the Moroccan tourism sector.

Marketing of tourism in Morocco still sticks with the same destination image created by first world agencies or worst from the colonial period. Even in some recent promotional media, they concentrate on the product desert as the main theme of the destination. The depiction of Moroccan tourism product in official promotional media is still highly superficial. It does not show the real identity of the destination. In some cases, the exhausting use of local culture elements for the sake of tourism led to some kind of reluctance towards their own culture compositions. For instance, in the city of Chaouen, the excessive exposition of cultural artefacts covering all the blue beautiful walls of the city, making it all about a large artefacts market. In this sense, from the image existing on the ground it seems that the Moroccan public policies have led to centring the touristic activity solely around the touristic product; totally neglecting the human factor. Absence of empowering of the Moroccan Man within the destination make the tourism activity appear as any normal trade with product and consumers.

This reorientation process requires a serious implication of all actors and stakeholders implied in the marketing of the destination Morocco. Both public and private sectors have to develop a shared vision that could function as a roadmap for a new promotion strategy that empowers the full-diversified potential of the country. To facilitate achieving this objective, some short- and long-term tactics and strategies should be deployed. Such as directed investments at improving the content and quality of the Moroccan promotional and marketing techniques and channels; also, a cooperative effort between the private sector and the public sector is needed in order to systematically promote the tourism and cultural image of Morocco through hosting well-orchestrated international fairs and exhibitions. Such a strategy should focus on improving the competitiveness of the different aspects of Moroccan tourism as a standalone destination generally, and its interior major sub-destination as the core competing product that will reset the country as a leading destination in the region. Finally, the Moroccan government must reconsider its commitment and national priority in relation to the tourism industry.

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Tourists' Satisfaction and Loyalty to Tourism Product of Ardabil City: Emphasizing on Demographic and Social Characteristics

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The tourism industry requires that people have enough awareness of issues and factors affecting the economic, social and cultural aspects in each region. Thus, an effective factor on all elements of development, more than ever, needs to be studied. In tourism literature, satisfaction and loyalty to the tourism product based on socio-demographics has never been analyzed and discussed. The purpose of this study is to evaluate tourists' satisfaction and loyalty to tourism products, such as attractions and facilities, based on socio-demographic factors (gender, age, education level, marital, and occupation). In order to assess tourists' satisfaction with Ardebil city, a tourism product questionnaire was used as a survey instrument. The validity and reliability of the survey was based on content validity of Cronbach's Alpha value in SPSS software Version 24, the amount of which is estimated to be 85%. On the whole, 384 questionnaires were distributed through a sampling method among tourists in the summer of 2016 in the township of Ardebil. The results indicated that tourists experienced different levels of satisfaction with the tourism products of Ardabil city. Analysis of the results also showed that there is a relationship between socio-demographic factors and tourists' loyalty.

Keywords: *Tourist, satisfaction, Ardabil city, Tourist loyalty, Socio-demographic characteristics.*

Introduction

During the past half century, tourism activities have become widespread, and each year the number of passengers, who travel for a variety of motives, is increasing (Eftekhari et al. 2011: 23). Tourism is thus an important part of the economic sector (Lopes 2011: 306), and it is an activity that has many social and cultural influences in addition to its economic and employment benefits (Hazar Jaberi and Najafi 2012: 134).

In addition to this general increase in global tourism, Iran also has the benefit of being one of the most spectacular countries in the world. Therefore, our country is one of the top 10 countries in terms of tourism attractions (cultural), one of the first five countries in the world in terms of tourism diversity (regarding the natural environment), and is one of the first three countries in the world in terms of handicrafts (Zangi Abadi et al. 2006: 131). Iran has such great potential for

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tourism because it is the eighteenth largest country in the world in terms of area. It is located in the southwestern area of Asia and covers land area of more than 1,648,000 km^2. Moreover, a review of 3167 tourist attractions found that Iran is rich in cultural and natural tourism resources, many of which are unique in the world (Zeinali et al. 2014: 68).

Tourism has become one of the important sectors of the global economy accounting for 11% of global gross domestic product (GDP) and employing 200 million people. In Iran, tourism is estimated to account for 5.6% of the country's total GDP, 5.1% of the country's total employment, 2.9% of the country's total capital investments, and 2.8% of the country's total exports (WTTC 2013). However, tourism in Iran faces eight considerable challenges: (1) global competition in the growing tourism industry; (2) an economic system that traditionally does not emphasize the quality of services and products; (3) a high level of contradiction in the tourists' decisions; (4) low accessibility to destinations; (5) lack of systematic maintenance of tourism attractions; (6) a low level of creativity of tour operators, authorities and decision makers; (7) lack of marketing programs; and (8) short-term economy investments (Zainli and Goujali 2015: 68).

Ardabil is located in a vast plain, 45 km long, on the slopes of Mount Sabalan. The weather in Ardabil city is moderate and cool in spring and summer. Handicrafts and souvenirs from the region include Glim, Jajim, Shal, Varni, Masnad, Pottery, Wood Industries, Leather and Carpet artifacts, and its other souvenirs are honey, black halva and local sweets. Historic monuments and tourist attractions of the city include the monument of Sheikh Safiuddin Ardabili, a monument related to the Ilkhani-Safavi era, the Ardabil indoor arena with arched vaulted ceilings, Mirza Ali Akbar mosque related to the Qajar period, the Friday mosque belonging to the Saljoughi period, the Shorabil Tourist Complex, Neur Sea Lake, 48 km south-east of Ardabil, warm water and Sardabeh waterfall, Shatar Gonbadi Tower in Soma Village, Sheikh Gabriel Tomb, Sheikh Safiuddin Ardabili's father in Kalkhoran neighborhood (Cultural Heritage, Handicrafts and Tourism Organization of Ardabil Province 2016). Given that a comprehensive research on the impact of demographic characteristics on the satisfaction of tourists in Iran has not been done, especially in the Ardabil province, the need for this research is felt very strongly. Therefore, the main objective of this research is to find the effect of demographic characteristics on tourism satisfaction in Ardabil city. In this regard, the hypotheses considered are as follows:

> H$_1$ Tourists experienced different levels of satisfaction based on demographic characteristics (age, gender, marriage, education, employment) from the tourism products of Ardabil.
> H$_2$ Demographic and social characteristics are influential on the future behavioral habits of tourists.

Tourism Satisfaction, Demographics and Social Features

Tourist satisfaction is obtained when the appropriate processes are designed in such a way that the services provided meet the expectations of the tourist (Gholipoor and Rashidi 2008: 3). Satisfaction of the tourist plays an important role in the success of the tourism destination's marketing, because it influences the choice of destination, the consumption of tourism goods and services, and the decision to return to the destination (Yoon and Uysal 2003: 47).

Bardin (1977) divides 33 elements of tourism satisfaction into five major groups:

- Access, including road conditions.
- Costs, including tolls and fuel or tickets, accommodation, food, recreation and entertainment.
- Natural attractions.
- Artificial attractions, including bars, restaurants, shopping malls, cinemas, artworks, art and religion.
- Infrastructure, including housing, access to information, communications, roads, health and safety (Oliveira 2011: 235).

Kotler (1999) was the pioneer in developing the term "customer satisfaction" in the business and marketing sectors (Forozia et al. 2013: 4332). He states that discontent occurs when customers experience significant differences between their expectations and the quality of services they receive (Forozia et al. 2013: 4333).

Demographic characteristics are some of the main factors for assessing the satisfaction of tourists. Thus, with a survey of market segmentation, five social and demographic dimensions are chosen (Zeinali et al. 2014: 69). These are as follows. First, gender is an aspect of demographic features that seems to be important in tourism research (Schofield and Thompson 2007: 329). For example, Perovick et al. (2012) showed that gender had no effect on the level of satisfaction of tourists in Montenegro. Zainli and Goujali (2015) concluded that gender had a different impact on tourists' satisfaction with the services of beach vacation villas of the ages. The second is age, which is another aspect of demographic characteristics considered to be indicative of physical fitness, level of activity, attachments and interests, and previous travel experience (Pearce 2005: 28). Some researchers have examined the relationship between age and tourist satisfaction levels. For example, Perovick et al. (2012) examined the effect of age on the level of satisfaction of tourists in Montenegro and concluded that age had no effect on the satisfaction of tourists. Third, it is clear that a higher level of education increases a person's travel tendencies and number of trips (Zeinali et al. 2014:17). Therefore, some researchers have examined the effect of level of education on the satisfaction of tourists. For example, Mellina and Aballe (2013) found significant difference in the level of satisfaction of tourists based on their level of education. Tsiotsou and Vasiotio (2006) showed that level of education can differentiate between two groups of tourists (very satisfied and less satisfied). Marital status is another demographic variable that can have a different effect on the level of satisfaction of

tourists. Finally, some researchers have shown that employment can affect perceptions of time, level of satisfaction and travel experience (Zeinali et al. 2014: 70).

Literature Review

Ebrahimzadeh and Vlashejordi Farahani (2012) in a paper titled "An Analysis of the Motives of Tourists and the Impact of the Gender and Income on it" (Case Study, Nowruz Tourists in Mahallat County) present research findings from 185 questionnaires that were analyzed by factor analysis to identify the motivations of respondents. They used T-test and one-way variance tests for the analysis of the hypotheses in order to identify the motivations. The results indicate that only four factors in the incentives of tourists can explain 1.58% of the variance of the studied items and reaches more than 90% with consideration of other factors. Among them, the relaxation factor and recreation have the highest percentage of variances. The results of the hypothesis test also indicated a significant difference in income between the motivational types of tourists.

Aminbaydokhty and Rohipour (2013) studied the effect of demographic characteristics on customers' expectations of services in the hospitality industry of Semnan province. The LADJSRO index is used to measure the quality of services. To analyze the data, factor analysis was used to reduce 26 questions to 5 dimensions of service quality; multivariate analysis of variance was used to study the effect of demographic characteristics on five dimensions of service quality and test the hypotheses. The results showed that age is the only demographic characteristic that affects customer expectations of five dimensions of service quality, while the demographic characteristics of gender, marital status, income, and educational level have no effect on customer expectations of the quality of services.

Zeinali et al. (2014), in an article on socio-demographic analysis of the satisfaction and loyalty of tourists at the Park of Eil Goli in Tabriz, showed that tourists received different levels of satisfaction from access and park stores. Factors affecting satisfaction were attractiveness, safety, respectful behavior of vendors, convenience of public transport, parking facilities and transportation costs. The results also indicated that age and income are not related to the satisfaction of tourists, but ultimately the level of education affects the decision to return to the destination.

Jabari et al. (2016) reviewed the role of demographic variables in the opinions of medical tourists regarding the quality of hospital services. This descriptive-analytical study was performed on 200 foreign patients referred to Shiraz Hospital in 2012-2013. The data collection tool was a questionnaire. Data were analyzed by an independent t-test and one-way ANOVA using SPSS software. The results of this study showed that the age group over 50 years old was more than 26%, but was lower than the other two age groups.

Research Methodology

In this research, the city of Ardabil is considered as a tourist destination. This study consists of three parts. The first part collects information about the tourist's profile. In order to determine the tourist profile of Ardabil city, the questions focused on social and demographic characteristics. Socio-demographic features include gender, marital status, educational level, age, and employment. Travel features include information sources, length of stay, residence, number of visits, and transportation. The second part of the questionnaire measures the level of satisfaction of tourists with the quality of tourism services in Ardabil city. Various options to measure the satisfaction of tourists on a five point scale. The third section examined the loyalty of tourists to the destination, as shown through the the decision to return to the destination. These data were evaluated using SPSS software version 24. The results of the Kolomographer-Smirnov test revealed the abnormal results of the research data. Non-parametric tests have been used for non-normalization of data. Therefore, the most appropriate test to measure the nominal variables is a chi-square test.

Research Findings

In total, 384 questionnaires were distributed among tourists. After collection, 360 questionnaires were used to assess and measure the opinions. In terms of gender, 55.3% of the respondents were men and 44.7% were women. In terms of age, 16.7% (a frequency of 60) were under 20 years old; 24.7% (89) between 20 and 29 years; 30.3% (109) between 30 and 39 years; 11.9% (43) between 40 and 49 years old; 8.1% (29) between 50 and 59 years, and 8.3% (30) over 60 years of age. In terms of marital status, 41.1% (148) were single, while 58.9% (212) were married. According to the level of education, 18.9% (68) had attended primary school only; 15.3% (55) had a high school degree; 9.7% (35) had taken some university courses; 38.6% (139) had a university degree; and finally, 17.5% (with a frequency of 63) had either a master's degree or PhD (Table 1). Regarding employment, we divided the studied population into several subgroups of specialists, employees, self-employed persons, workers, unemployed, collegians and students. The frequency distribution of the statistical sample according to the type of occupation in Table 1 shows that 5.6% (20) were specialists; 19.4% (70) were employees; 23.3%(84) had free occupation, those who are not government employees); 2.2% (8) were workers, 21.4% (77) were unemployed; and 28.1% (101) were collegians and students.

Table 3. *Socio-demographic Characteristics of Tourists*

Gender		Level of Education		Age		Employment	
Men	55.3%	Primary school only	18.9%	<20	16.7%	Specialists	5.6%
Women	44.7%	High School degree	15.3%	20-29	24.7%	Employees	19.4%
Marital status		University Courses	9.7%	30-39	30.3%	Free occupation	23.3%
Single	41.1%	University degree	38.6%	40-49	11.9%	Workers	2.2%
Married	58.9%	Master's and Ph.D.	17.5%	50-59	8.1%	Unemployed	21.4%
				>60	8.3%	Students	28.1%

Table 4. *Tourists Tour Profile*

Source of information	TV	27.2%	Number of trips	First time		33.3%	
	Newspapers	14.7%		Second time		0.45%	
	Friends and acquaintances	34.7%		How many times		21.7%	
	Internet	15.3%					
	Road signs	8.1%					
Length of stay	No overnight stay	14.4%	Transportation	Personal car		52.8%	
	A full day	11.7%		Bus		31.1%	
	2-3 night and day	28.3%		Airplane		10.3%	
	More than 3 nights	45.6%		Another shape		5.8%	
Residence	Hotel and hospitality	Home relatives and friends	Camp	Camping on the street	Schools	Leased houses	Hospitality Office
	32.8%	30.8%	4.4%	8.6%	4.2%	9.2%	10%

The sources of information about Ardabil based on the results (Table 2) include TV, national and local newspapers, information received from friends, relatives, websites, networks, signs and road signposts. The polls show that sources were 27.2% (98) TV, 14.7% (53) newspapers, 34.7% (125) through information received from friends and acquaintances, 15.3% (55) on the Internet and 8.1% (29) through the road signs from this destination. 33.3 percent (162) of people surveyed in Ardabil were there for the first time, while 45% (120) were there for the second time, and 21.7 % (78) for the third or more. According to the length of stay, respondents can be grouped into four levels:

(a) Those who did not have a night stay in the city of Ardabil;

(b) Those who stayed in Ardabil for one night;

(c) Those who stayed in Ardabil 2-3 nights; and

(d) Those who stayed in Ardabil for more than 3 nights. Frequently, the fourth group has the largest share among respondents.

52.8% (190) of the tourists used their personal cars to travel to Ardabil city. 31.1% (112) used buses, 10.3% (37) used airplanes, and 5.8% (21) used other forms of transport.

In terms of residence, 32.8% (118) stayed in hotels and hospitality; 30.8 (111) stayed with relatives and friends; 4.4% (16) in the park and camp; 8.6% (31) camped on the street; 4.2% (15) stayed in schools; 9.2% (33) stayed in leased houses, and 10% (36) resided in the Hospitality Office.

Testing the Hypotheses

Tourists experienced different levels of satisfaction based on demographic characteristics (age, gender, marital status, education, employment) from the tourism product of Ardabil city.

When assessing the effect of demographic variables (gender, marital status, age, occupation, level of education) on satisfaction with cultural attractions, the results of the test showed two significant values for the gifts of 0.036, which is less than 0.05 mm (P-Value = sig <0/05). Therefore, the souvenir factor for the age group under 20 years of age has a significant effect on cultural satisfaction with 95% confidence in the satisfaction of tourists. The factor of local cuisine with a value of 0.005 for the working class and the factor of the variety of activities with a value of 0.023 for men have also been impressive in satisfying cultural attractions.

The results of marital status and education emphasize the independence between the variables of cultural attractions and satisfaction. As can be seen in Table 3, the meaningful value for all indicators of cultural attractions related to marriage and education is greater than the significance level 0.05. Therefore, the status of education and marital status of tourists did not affect the satisfaction of cultural attractions (P-value = sig> 0/05).

Therefore, among demographic characteristics age, employment and gender are significant. Therefore the hypotheses derived from the main hypothesis are admitted.

$H_{1(A)}$: Tourists, based on their age, gained satisfaction from cultural attractions.

$H_{1(B)}$: Tourists based on employment received different levels of satisfaction from cultural attractions.

$H_{1(C)}$: Tourists based on gender received different levels of satisfaction from cultural attractions.

According to the statistics presented in Table 4 about the natural and historical attractions in the study site, the results of the X^2 test indicate that the status of the gardens and green spaces for respondents aged of 30-39 and 40-44 are respectively 0.042 and 0.023. The factor of historical sites and ancient monuments has a value of 0.049 for those over 60, and the urban suburban factor has a value of 0.031 for people 39-30. These factors have thus been effective in creating the satisfaction of tourists.

In addition, the results of the X^2 test for different educational periods indicate that the Satisfaction of green areas with the amount (0.026), historical sites with the value (0.046) and suburban with the value (0.032). For the Level of Education, the vegetation cover and animal and special events with the amount of (0.003) for the Master's and PhD's, have been effective in satisfying historical and cultural attractions. Among the various jobs, the worker's group was satisfied with the amount of vegetation and animals (0.035), certain natural events, landscapes (0.046), and the status of gardens and green spaces (0.018). The Employee Corps (0.006) was satisfied with the status of the booths and the green area. Individuals with free jobs (0.042) were satisfied with the climate of the city, while students (0.022) were satisfied with the green spaces and parks. Married people were also satisfied with the amount of (0.004) the status of the park and green space.

Therefore, in this hypothesis, all five demographic characteristics are meaningful. The hypotheses derived from the main hypothesis are as follows:

$H_{1(D):}$ Tourists based on age have obtained different levels of satisfaction from natural and historical attractions.

$H_{1(E):}$ Tourists based on education received different levels of satisfaction from natural and historical attractions.

$H_{1(F):}$ Tourists based on employment received different levels of satisfaction from natural and historical attractions.

$H_{1(G):}$ Tourists based on gender received different levels of satisfaction from natural and historical attractions.

$H_{1(H):}$ Tourists based on age have obtained different levels of satisfaction from natural and historical attractions.

Table 5. *Measuring the Impact of Demographic Variables on Satisfaction with Cultural Attractions*

Variables	Services and cultural facilities		Entertainment services and facilities		Variety of activities		Traditions and local customs		Souvenir		Art and Craft		Local food		Friendly behavior and hospitality of the host community	
	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
20>	0.945	1.198	0.819	2.216	0.565	3.893	0.504	4.320	0.036	11.932	0.491	4.419	0.690	3.062	0.362	5.460
20-29	0.317	5.893	0.339	5.672	0.108	9.034	0.408	5.061	0.986	0.633	0.098	9.292	1.000	0.139	0.673	3.172
30-39	0.572	3.841	0.291	6.163	0.102	9.170	0.145	8.207	0.745	2.705	0.274	6.347	0.737	2.761	0.318	5.884
40-49	0.497	4.370	0.597	3.677	0.232	6.853	0.574	3.834	0.842	2.055	0.512	4.264	0.416	5.002	0.382	5.283
50-59	0.960	1.035	0.110	9.876	0.551	3.990	0.809	2.283	0.381	5.295	0.248	6.647	0.475	3.519	0.417	3.921
60≤	0.759	1.875	0.555	3.958	0.526	4.167	0.349	5.580	0.645	2.500	0.708	2.946	0.237	6.786	0.870	1.250
Education	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
Primary school only	0.575	3.824	0.845	2.028	0.374	5.355	0.947	1.180	0.353	5.547	0.520	4.205	0.353	5.545	0.249	6.634
High School degree	0.654	3.299	0.138	8.346	0.426	4.920	0.803	2.319	0.478	4.515	0.465	4.614	0.416	5.000	0.934	1.308
University Courses	0.233	6.839	0.529	4.140	0.895	1.649	0.936	1.291	0.721	2.866	0.587	2.829	0.604	3.628	0.625	3.490
University degree	0.171	7.744	0.850	1.996	0.470	4.577	0.249	6.632	0.654	3.298	0.663	3.240	0.597	3.677	0.604	3.627
Master's and Ph.D.	0.478	4.517	0.827	2.158	0.035	11.968	0.373	0.5363	0.222	6.980	0.179	7.619	0.699	3.006	0.966	0.955
Employment	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
Specialists	0.633	3.434	0.447	2.492	0.720	2.088	0.178	4.916	0.528	2.222	0.135	7.022	0.166	6.483	0.330	4.611
Employees	0.559	3.932	0.691	3.060	0.232	6.850	0.596	3.685	0.690	3.067	0.136	8.383	0.880	1.773	0.548	4.010
Free occupation	0.913	1.502	0.054	10.85	0.358	5.497	0.303	6.035	0.877	1.796	0.960	1.036	0.542	4.051	0.935	1.299
Workers	0.446	2.667	0.292	3.733	0.018	8.000	0.406	4.000	0.349	4.444	0.777	1.778	0.005	8.000	0.587	1.067
Unemployed	0.865	1.881	0.131	8.488	0.622	3.507	0.242	6.730	0.479	4.506	0.148	8.150	0.676	3.154	0.261	6.489
Students	0.724	2.842	0.361	5.469	0.105	9.095	0.138	8.253	0.175	7.676	0.287	6.197	0.684	3.101	0.592	3.707
Gender	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
Men	0.082	9.764	0.684	3.102	0.057	10.737	0.514	4.252	0.756	2.578	0.637	3.407	0.913	1.500	0.780	2.480
Women	0.867	1.871	0.880	1.769	0.023	12.999	0.442	4.793	0.167	7.813	0.730	2.805	0.645	3.359	0.760	2.612
Marital status	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
Single	0.315	5.914	0.060	10.596	0.089	9.537	0.293	6.144	0.239	6.760	0.674	3.167	0.652	3.315	0.373	5.362
Married	0.994	0.459	0.627	3.477	0.319	5.869	0.055	10.831	0.743	2.719	0.735	2.773	0.977	0.794	0.609	0.3598

Table 6. *Measuring the Impact of Demographic Variables on Satisfaction with Historical and Natural Attractions*

Variables	Vegetation and animal and special events		Mineral hot water		Landscapes and natural scenery		Architecture		The status of parks and green space		Historical sites and ancient monument		Metropolitan area		Enjoyable weather	
Age	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
20>	0.528	3.178	0.707	2.155	0.891	1.681	0.453	4.702	0.849	1.998	0.633	3.436	0.538	3.769	0.866	1.876
20-29	0.262	6.478	0.498	4.363	0.764	2.584	0.162	7.890	0.363	5.452	0.534	4.106	0.219	7.021	0.565	3.891
30-39	0.159	7.952	0.753	2.654	0.075	10.014	0.705	2.966	0.042	11.496	0.204	7.235	0.031	12.301	0.132	8.475
40-49	0.923	1.416	0.558	3.939	0.748	2.687	0.137	8.369	0.023	12.993	0.483	4.475	0.056	10.769	0.342	5.652
50-59	0.601	3.646	0.421	4.962	0.343	5.639	0.765	2.573	0.892	1.672	0.782	2.461	0.892	1.673	0.581	3.784
60≤	0.745	2.708	0.741	1.970	0.753	2.665	0.573	3.838	0.633	3.438	0.049	9.523	0.837	2.083	0.163	7.877
Education	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
Primary school only	0.834	2.109	0.793	2.392	0.227	6.909	0.724	2.847	0.561	3.920	0.535	4.102	0.683	3.110	0.648	3.107
High School degree	0.818	2.222	0.476	4.531	0.504	4.320	0.213	7.106	0.492	4.413	0.610	3.588	0.540	4.064	0.143	8.244
University Courses	0.728	2.816	0.604	2.732	0.390	5.213	0.396	5.167	0.316	4.727	0.672	3.185	0.402	5.117	0.325	4.649
University degree	0.587	3.741	0.245	6.682	0.297	6.098	0.852	1.976	0.026	12.712	0.046	11.305	0.032	12.219	0.710	2.935
Master's and Ph.D.	0.003	17.977	0.896	1.645	0.168	7.855	0.657	3.277	0.749	2.683	0.160	7.926	0.112	8.937	0.520	4.209
Employment	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
Specialists	0.416	5.002	0.962	1.010	0.830	1.481	0.444	3.728	0.583	2.854	0.410	5.051	0.056	9.226	0.798	2.357
Employees	0.343	5.637	0.090	9.528	0.741	2.731	0.069	10.216	0.006	16.232	0.441	4.800	0.916	1.479	0.314	5.923
Free occupation	0.067	10.292	0.908	1.547	0.879	1.781	0.638	3.405	0.414	5.012	0.433	4.859	0.069	10.244	0.042	11.517
Workers	0.035	4.444	0.292	3.733	0.046	8.000	0.135	4.000	0.018	8.000	0.217	4.444	0.149	5.333	0.169	3.556
Unemployed	0.241	6.732	0.279	6.289	0.064	10.433	0.447	4.748	0.166	7.833	0.620	3.525	0.501	4.342	0.397	5.155
Students	0.070	10.191	0.543	4.047	0.615	3.556	0.022	13.130	0.538	4.082	0.767	2.560	0.994	0.439	0.693	3.048
Gender	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
Men	0.320	5.865	0.053	10.929	0.137	8.373	0.451	4.723	0.114	8.872	0.884	1.739	0.748	2.689	0.640	3.393
Women	0.358	5.504	0.332	5.746	0.554	3.967	0.245	6.691	0.002	18.468	0.202	7.261	0.147	8.173	0.269	6.407
Marital status	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
Single	0.062	10.528	0.749	2.682	0.753	2.652	0.595	3.687	0.290	6.175	0.882	1.751	0.730	2.808	0.873	1.823
Married	0.643	3.370	0.970	0.909	0.217	7.053	0.383	5.274	0.004	17.143	0.388	5.230	0.078	9.911	0.225	6.943

Table 7. *Measuring the Impact of Demographic Variables on the Satisfaction of Infrastructure*

Variables	Accommodation facility		Restaurant and food preparation		Traffic and bustle		Tourism information centers		Destination cleanliness		Security		Toilets		Signs (signs, guides, tags, brochures, etc.)	
Age	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
20>	0.611	3.579	0.084	9.721	0.562	3.912	0.271	6.375	0.935	1.301	0.520	4.209	0.249	6.638	0.747	2.696
20-29	0.563	3.904	0.906	1.558	0.948	1.168	0.221	6.989	0.319	5.867	0.227	6.920	0.695	3.034	0.462	4.632
30-39	0.279	6.287	0.472	4.557	0.485	4.465	0.182	7.569	0.145	8.215	0.936	1.286	0.075	10.008	0.024	12.892
40-49	0.999	0.243	0.955	1.090	0.619	3.530	0.420	4.964	0.153	8.061	0.868	1.861	0.199	7.307	0.621	3.517
50-59	0.551	3.990	0.401	5.124	0.297	4.910	0.266	6.432	0.809	2.282	0.161	7.906	0.280	6.277	0.082	9.761
60≤	0.379	5.313	0.622	3.512	0.196	6.042	0.845	2.028	0.416	5.000	0.586	3.750	0.469	2.536	0.258	6.526
education	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
Primary school only	0.005	16.778	0.091	9.503	0.461	4.643	0.329	5.776	0.307	5.994	0.258	6.535	0.250	6.621	0.279	6.287
High School degree	0.505	4.317	0.469	4.580	0.915	1.484	0.807	2.292	0.070	10.205	0.915	1.482	0.193	7.401	0.327	5.792
University Courses	0.244	66.99	0.497	4.375	0.975	0.826	0.445	4.765	0.183	7.543	0.728	2.820	0.570	3.855	0.736	2.766
University degree	0.586	3.751	0.416	4.996	0.024	12.906	0.062	10.505	0.726	2.843	0.519	4.212	0.188	7.472	0.327	5.789
Master's and Ph.D.	0.573	3.837	0.152	8.077	0.314	5.920	0.462	4.633	0.133	8.451	0.673	3.177	0.471	4.565	0.573	0.3835
Employment	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
Specialists	0.425	4.926	0.509	3.300	0.646	2.492	0.707	2.155	0.296	4.916	0.709	2.941	0.245	6.685	0220	7.013
Employees	0.834	1.458	0.068	10.283	0.492	4.410	0.195	7.360	0.831	2.129	0.183	7.548	0.793	2.390	0.672	3.181
Free occupation	0.862	1.907	0.444	4.776	0.032	12.220	0.206	7.200	0.948	1.164	0.843	2.045	0.243	6.715	0.667	3.215
Workers	0.261	4.000	0.217	4.444	0.046	8.000	0.018	8.000	0.149	5.333	0.155	3.733	0.217	0.444	0.046	8.000
Unemployed	0.832	2.121	0.001	22.004	0.077	9.949	0.535	4.100	0.214	7.090	0.287	6.201	0.502	4.340	0.758	2.619
Students	0.779	2.486	0.438	4.820	0.246	6.680	0.076	9.966	0.574	3.833	0.687	3.087	0.572	3.845	0.728	2.819
Gender	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
Men	0.114	8.890	0.068	10.264	0.927	1.371	0.049	11.099	0.085	9.666	0.028	12.587	0.601	3.652	0.603	3.635
Women	0.297	6.095	0.271	6.385	0.897	1.631	0.913	1.497	0.562	3.913	0.796	2.372	0.218	7.039	0.208	7.178
Marital status	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2
Single	0.104	9.137	0.634	3.430	0.930	1.349	0.011	14.946	0.927	1.373	0.449	4.735	0.237	6.790	0.630	3.457
Married	0.241	6.731	0.863	1.896	0.886	1.725	0.730	2.803	0.223	6.962	0.708	2.950	0.643	3.373	0.654	3.301

According to the statistics and information available in Table 5 on natural and historical attractions, the X^2 test results indicate that the age group of 30 to 39 years of age agreed with the signs of guidance (0.024). Tourists with elementary education only with the amount (0.05) of the residence and and tourists with university education is satisfied with the amount (0.024) of traffic. The Workers' Corps agreed on traffic and traffic congestion with a value of 0.046, tourism information centers with a value of 0.018 and indications with a value of 0.046. Individuals with free jobs (0.032) were delighted with traffic and traffic conditions. Unemployed persons (0.001) agreed on the status of the restaurant and the provision of food, while women agreed on the informational agents of tourism and security with the values (0.049) and (0.028). Finally, single people were satisfied with the amount (0.011) of tourism information centers.

Therefore, in this hypothesis, all five demographic characteristics are meaningful. The hypotheses derived from the main hypothesis are:

$H_{1(I)}$: Tourists, based on age, obtained satisfaction from infrastructures.
$H_{1(J)}$: Tourists on the basis of education received different levels of satisfaction from the infrastructure.
$H_{1(K)}$: Tourists based on employment received different levels of satisfaction from the infrastructure.
$H_{1(L)}$: Tourists based on gender received different levels of satisfaction by infrastructure.
$H_{1(M):}$: Tourists, based on age, obtained satisfaction from infrastructure at different levels.

According to the statistics and data presented in Table 6, comparing the differences in the means of gender variables, marital status, age, occupation and education indicates that the gender variable of men is 1.2965 and of women 1.2484; in the variables for marital status, married people with an average of 1.3019 and single with an average of 1.2365 with a 99% confidence in this regard have a significant effect. The highest averages of each variable are for men and married.

Comparison of the differences in averages of different age groups suggests that the age range of 50-59 years with the highest averages of age was 1.4483 with 95% confidence in future behavioral tendencies of tourists. Other age groups are 40- 49 years old with an average of 1.3721, 39-30 years with an average of 1.3119, over 60 with an average of 1.3000<20 with an average of 1.2333 and 20-29 years with an average of 1.1461 with a confidence of 99%.

The comparison of the differences between the various jobs shows that the specialists group with the first average of 1.5 and the next level of the Worker's Corner with an average of 1.375 with 95% confidence in the relationship between satisfaction and future behavioral tendencies of tourists have a significant effect. At the next level, free occupations with an average of 1.3095, employees with an average of 1.3, unemployed 1.2338, and student with an average of 1.2079 with a 99% confidence, show a significant effect.

Among the various educational courses, the university courses with an average of 1.2857 with a 95% confidence have a significant effect (Table 7). The university degree with an average of 1.3094, high school degree with an average of 1.2909, master's and PhD with a mean of 1.2698, and primary school only with an average of 1.1912 with a 99% confidence in this regard. Therefore, it can be concluded that the significant age and occupation variables were 50-59 years and specialists and employees with high average. This result is given with 95% confidence in the future behavioral tendencies of tourists. However, in the course of studying, university courses were ranked third in terms of average value and recorded a significant effect with 95% confidence.

Table 6. *Comparison of Demographic and Social Variables (gender, marital status, age, employment and education) Relative to Re-travel*

Gender	Average	Age	Average	Employment	Average	Education	Average
Men	1.2965	<20	1.2333	Specialists	1.5000	Primary school only	1.1912
Women	1.2484	20-29	1.1461	Employees	1.3000	High School degree	1.2909
Marital status	Average	30-39	1.3119	Free occupation	1.3095	University Courses	1.2857
Single	1.2365	40-49	1.3721	Workers	1.3750	University degree	1.3094
Married	1.3019	50-59	1.4483	Unemployed	1.2338	Master's and Ph.D.	1.2698
		>60	1.3000	Students	1.2079		

In order to study the satisfaction and behavioral tendencies of tourists' future, the distribution of two variables is shown in Figure 1. As seen in the corresponding figure, 70.6% of respondents chose yes for their overall satisfaction with this destination, and 29.4% chose the no-favor option. Regarding the decision to revisit the location, 72.5% of respondents registered the yes option, and 27.5% of the respondents chose the no option (Figure 1). Therefore, the results of these variables indicate that tourists have a high sense of loyalty to this destination.

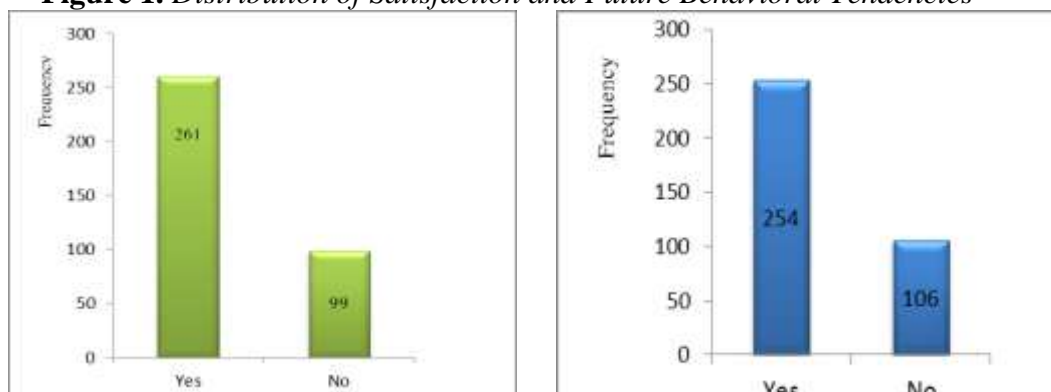**Figure 1.** *Distribution of Satisfaction and Future Behavioral Tendencies*

Table 7. *Comparison of Satisfaction and Behavioral Desires of Future Tourists Based on Gender and Marital Status*

Marital status				Satisfaction of tourists				Tend to come back			
Frequency	**Men**	Frequency	**Women**	Frequency	**Men**	Frequency	**Women**	Frequency	**Men**	Frequency	**Women**
118	**Married**	94	**Married**	144	**Yes**	116	**Yes**	131	**Yes**	107	**Yes**
81	**Single**	67	**Single**	55	**No**	45	**No**	68	**No**	54	**No**

It should also be noted that according to the statistics presented in Table 7, among respondents, the satisfaction of men was higher than that of women and, consequently, they were more willing to travel again and had a higher sense of loyalty. Referring to Table 7 and reviewing the frequency, it can be stated that in regards to marital status, married people are more likely than single people to be satisfied, among whom, men are even more than women. In sum, a review of the frequency of extracted data from the questionnaires indicates that the overall satisfaction of men, as well as married people and families, has been more than the services and facilities of tourism in Ardabil.

Conclusion

The purpose of this study was to assess the satisfaction and loyalty of tourists from the tourism product of Ardabil city with an emphasis on demographic characteristics (gender, age, marital status, employment and education). In order to study the level of satisfaction, the tourism product of the city was divided into attractions (including cultural attractions, natural attractions and historical attractions) and facilities. According to the results, the cultural attractions indicators show that the age, occupation and gender variables were effective in satisfying the souvenir factor, local food and variety of activities. Investigating the indicators of natural and historical attractions and amenities showed that tourists, based on their age, marital status, employment, education, and gender, selected different levels of satisfaction from the tourism product. In addition, in order to evaluate the loyalty of tourists, the indicator of the decision to return to destination was evaluated, the results showed that there is a significant relationship between the variables of age, gender, marital status, education, employment, and loyalty of tourists. Collecting information related to tourist satisfaction is important for planning the destination in relation to dealing with travelers, the behavior of tourists and satisfaction with the quality of services and tourism products and it is important to have a regulatory planning.

The suggestions of this research include the creation of diverse tourism activities for women, the improvement of the status of greenhouses and gardens in the city, in order to improve the satisfaction of families, diversify the services of the police, such as being in the terminal and passenger terminals, airport, historical axes, police patrols in the natural areas of tourism, in order to increase the satisfaction of tourists, especially women, the use of catalogs and photographs of the tourist attractions of Ardabil, the use of public media and coverage of the attractions of the province and specialized magazines of tourism, the creation of information offices for tourists, set up an info tourism bank and other such measures.

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Water Quality Management in the Wildlife Lodge Industry: A Multiple Case Study in South Africa, Namibia and Botswana

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Water is one the most important substances on earth as all living organisms require it to survive. It is a vital component for human survival in the form of direct consumption as well as food production. Water is equally important for the tourism industry as water is utilised throughout the tourism value chain for the provision of services to guests. Many tourism lodges in the wildlife lodge industry in South Africa, Namibia and Botswana are in remote areas where little to no infrastructure exists. These lodges are dependent on natural water sources such as rivers, dams and boreholes to supply their water demands. Another significant aspect of the lodges is that staff has to reside on the property due to the lack of nearby housing, roads and public transport. One of the challenges for the lodges is that residing staff have to use the water for domestic purposes and therefore managers have to ensure that the water quality is of such standard that it does not pose health risks for staff and guests. Water quality management in the wildlife lodge industry is one of the most important, if not the most important aspect of the industry. The authors obtained secondary data in the form of water quality analysis done at the lodges across these three countries. The study investigated whether lodges did water quality analysis at source, tap and wastewater discharge. Furthermore, the results of the water quality analysis were subjected to their adherence to the relevant water quality standards of each country. These results provided important information regarding the comprehensiveness of the water quality analysis. The frequency of water quality testing was also determined as this provides a measure of the adherence of lodges to the legal, concession or company requirements as stated in various standards and procedures. The authors concluded that the current systems can be improved to ensure that water quality is managed more sustainably in the wildlife industry. The biggest concern relates to wastewater discharge, where very little water quality at points of discharge is available; this has the potential to cause pollution and ecosystem degradation.

Keywords: *Tourism, Water Quality Management, Wildlife Lodge Industry.*

Introduction

> "*When the well's dry, we know the worth of water*" (Franklin 1746).

This was the aphorism published by Benjamin Franklin in 1746 from his Poor Richard's almanac. Since then, the world population increased from an estimate 706 million to 7.6 billion in 2017, raising the demand for water immensely. A common saying recently is: "*you can't wash dirty water*", while Ismail Serageldin (2009), president of the World Bank (1992 -2000) stated in 1995 at a conference in

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Stockholm, Sweden: *"The wars of the 21st century will be fought over water"* (Gleditsch 1997).

The tourism industry across the world requires water for basic human consumption, irrigation of gardens and golf courses, preparation of food and drinks, making snow for winter sports and general water activities such as swimming or motorised water sports (Gössling et al. 2012). It is of utmost importance that tourism ventures improve their water management and maximise the water available to them. The wildlife lodge industry in South Africa, Namibia and Botswana are no different and depend on water for their existence. In many cases, the livelihood and survival of local communities rely on the industry to provide a source of income as well as other social benefits to these communities.

Water quality management in the wildlife lodge industry involves all the processes and procedures from the abstraction point to discharging back into the environment. This will include purification systems, water recycling, sewage treatment and finally discharging back into the environment. A challenge that the lodges face is access to laboratories to conduct frequent water quality analyses. This, with other logistical challenges to do water quality analyses raises the cost of water testing and also consumes human resources to do so (W. Ozorio, Personal communication, February 12, 2017). Since the lodges source their water from natural resources, water has to be treated before it can be utilised by staff or guests. Due to the logistical challenges a major concern is that water is discharged into the environment without knowing the quality and the effect the water might have on the environment.

In this study the authors will investigate the current water quality management systems that are implemented at the lodges. The authors will determine the frequency and significance of water quality testing as well as the physical quality of the water at the lodges. The authors will make recommendations regarding the water quality management systems which would lead to continuous improvement of current systems.

Literature Study

Humans simply cannot live without water as we need water for basic consumption, hydration, and food preparation and hygiene purposes (Howard and Bartram 2003). Tourism activities contribute to water consumption and can be partially responsible for depleting water sources. This could lead to starvation in local communities, poor hygiene and health concerns as well as accelerating the spread of diseases, dehydration and ultimately death. Other health problems such as cancer, anaemia, sleeping disorders, poor appetite, constipation, vomiting, kidney problems and abdominal pain are diseases related to poor water quality (Khan et al. 2013). It is thus of utmost importance that tourism ventures preserve good quality freshwater as the well-being of staff and guests depend on the availability of good quality freshwater.

Poor water quality does not only affect human health but can also impact on the environment. Wastewater with a high nutrient content can cause eutrophication

(Gössling et al. 2015). This can result in algae blooms, including blue-green algae which is toxic to animals and can result in death. Wastewater with a high Chemical Oxygen Demand (COD) will reduce the dissolved oxygen in water courses, reducing precious oxygen available for aquatic animals to survive. A rapid decrease in oxygen levels in freshwater eco-systems could lead to a massive loss in biodiversity.

Tourism activities can also impact negatively on the quality of water increasing health problems in local communities. In Lijiang Ancient Town, China, tourist numbers increased from 2.8 millions arrivals in 2000 up to 4.6 millions in 2006. An investigation on the residents' attitudes was carried out, aimed at visually and clearly understanding the condition of water quality deterioration in the area. The results showed that the water quality from the source dropped from a grade I, which could be consumed directly by humans and animals to a grade V, the worst grade possible. Too many tourists, inefficient management of the number of shops and their activities and the poor infrastructure construction of waste water collection and disposal has resulted in the decline of water quality (Baoying and Yuanqing 2007).

The tourism industry depends on good quality drinking water to meet tourist expectations and especially where staff lives on the premises. Tourism can impact negatively on water quality if discharge is not managed properly. Wastewater and sewage discharge may contain nutrients and other pollutants such as chlorinated pool water or chemicals used to dissolve fats and oils during cleaning and in kitchens (Kuss et al. 1990). Water quality testing and analysis are usually done by external experts or laboratories since the equipment is rather expensive and the lack of scientific knowledge of staff. Grobler and Mearns (2017) stated that water quality results can be used as management tool if used properly. The authors stated that water quality analysis should be done at the following locations for the following reasons:

- **The source**: It is important to know the quality of the source as this will determine the processes required to purify the water to drinking quality.
- **After treatment**: The water quality results will indicate whether the treatment was sufficient and if the water is fit for human consumption. Over time these results can indicate maintenance requirements such as changing of membranes, filters or other issues should water quality decrease.
- **Wastewater after treatment, before discharge**: This will indicate whether the wastewater and sewage treatment processes were successful and indicate the impact the discharge can have on eco-systems or water quality should it be discharged into a water course.

Water quality is mostly measured against standards or statutory regulations. In this study the authors will use the individual country's statutory requirements and national standards to measure water quality against. For South Africa the authors will use the SANS 241: 2015 Drinking water quality standard (SABS 2015) to measure drinking water quality against. For wastewater, the authors will use the

limits as stated in the National Water Act no. 36 of 1998. For Botswana the authors will use the Botswana Bureau of Standards BOS 93:2004 (Walmsley and Patel 2011) for wastewater comparison and the BOS 32:2009 for drinking water comparisons. For Namibia the guidelines as stated in Article 140 of Act no. 1 of 1990 (Walmsley and Patel 2011) will be used to measure drinking water as well as wastewater results against. The standards for all three countries are stated in Appendix A to F individually.

Study Area and Methodology

Study Area

Lodges in South Africa, Namibia and Botswana were selected based on the availability of data. The regions from the selected lodges differs vastly from desert, swampland, coastal forest and savanna (see figure 1). The geographical locations of the lodges could possibly impact the quality of the water and could play a major part in this study. Geological features also play a major role in water quality and it is important to identify the difference in water quality from the different regions as water purifying process might need to differ to obtain a healthy standard of water for human consumption purposes.

Figure 1. *Study Areas*

Source: Google Maps, 2017.

Methodology

All data that was obtained was for the 24 month period from March 2015 to February 2017. All the lodge names have been changed to codes to ensure anonymity as per agreement with the research partners. The first letter in the code refers to the country in which the lodge is situated, whereas the number at the end was the number that the authors allocated to a specific lodge for identification, for example B3 will mean the third of the lodges whose data was analysed by the authors in Botswana. Information obtained from staff members at the camps will not be referenced and names will not be published. Any statements from staff members will only be referred to as: "a staff member". The reason for this approach is to protect the identity of any staff members.

The authors obtained secondary data in the form of water quality analysis done at the lodges. The first part in this section focussed on how many lodges did water quality analysis on its source, tap and wastewater discharge. The second part in this section focussed on the frequency of testing. The authors obtained annual/ monthly water quality results or reports from the lodges. Table 1 below stated how many lodges in their respective countries had water quality results of the source, tap and/or waste water discharge as well as how many lodges have not done any water quality testing.

Table 1. *Water Quality Results at the Lodges*

| Country	Source	Tap	Wastewater discharge	No tests
South Africa	4/8	7/8	6/8	1/8
Namibia	0/8	7/8	0/8	1/8
Botswana	5/15	5/15	0/15	10/15
All countries combined	9/31	19/31	6/31	12/31

Source: Author.

The water quality results were graphed and measured against the relevant countries' standards to determine if the quality complies with standard limits. Although the World Health Organisation (WHO) publish and update drinking water quality limits, most countries have their own adaption of water quality parameter limits and are often published in standards or legislation. It is therefore important to notice that the parameter limits used in this study was measured against the relevant standard or legislation of each country individually to ensure that the water quality was measured against the appropriate legislation. It is of great importance to notice this fact. A good example will be a pH of nine might be accepted in South Africa whereas it might not be in Botswana. It is thus advised that the limits in this study should not be used to measure legal compliance in other countries but rather be used as a guide or contrast comparisons.

Results and Discussion

Testing water at the source is an important sample point as it would determine the processes and treatment required for water to be consumed by humans at the

lodge. It will also over a period of time indicate whether there was a decrease or increase in the water quality which could determine what amendments are required to keep water quality fit for human consumption at the lodge. As illustrated in Figure 2, the results indicate that 50% of the lodges in South Africa had water quality analyses done on their water source. In Namibia none of the lodges had water quality results at the source whereas 33% of the lodges in Botswana had water quality results on their source. This result thus states that the majority of the lodges across the three countries do not test the quality of their water source. This could have impacts on the success of the water purification and treatment processes as the treatment processes are generic rather than specific to treatment needs of the specific supply.

Figure 2. *Percentage of Lodges that Conducted Water Quality Analyses at their Source*
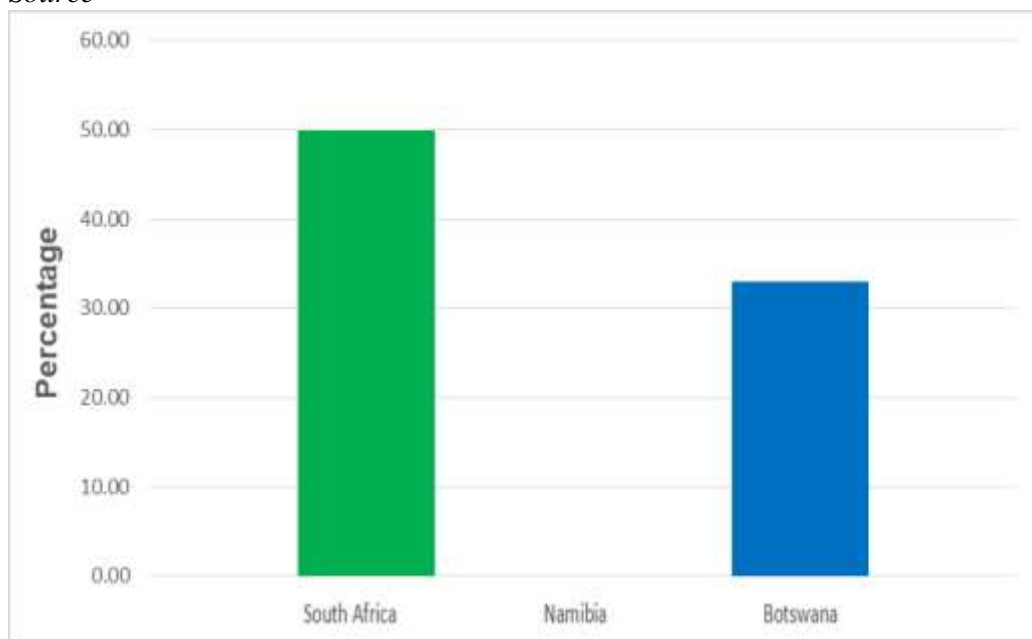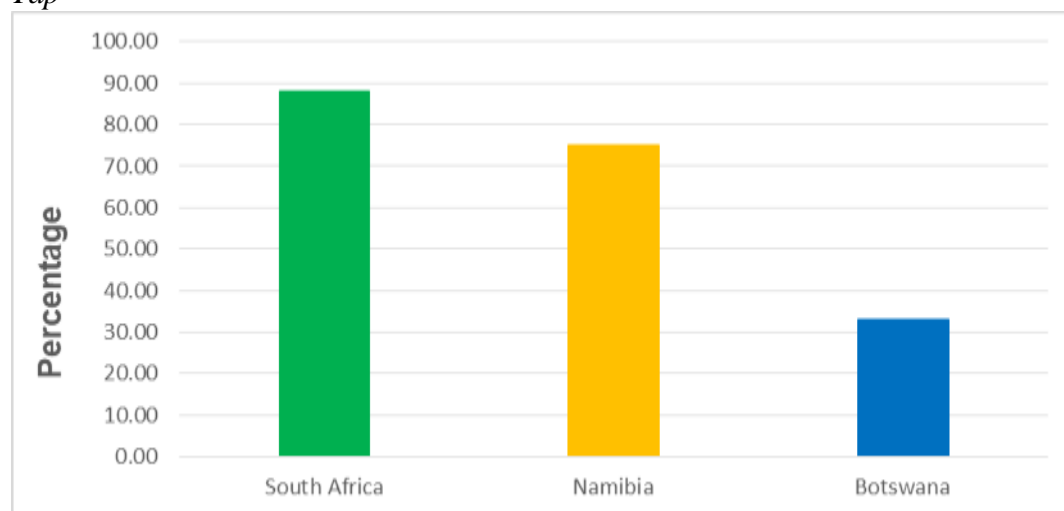

Source: Author.

Tap water is also an important sample point as this is the end point where guests and staff obtain water for their consumption. It is also an important indicator whether the treatment processes were successful and to determine if contamination occurs during the transfer of the water from the treatment plant to the end point. The results are illustrated in Figure 3.

In South Africa, 88% of the lodges had their tap water quality analysed. In Namibia 75% of the lodges had their tap water quality analysed whereas only 33% of the lodges in Botswana had done water quality analyses on their tap water. An observation at the lodges from Namibia was that 50% of the lodges had the exact same results for either two or three years in a row for all the parameters, strongly suggesting that the results were copied and pasted from the first analysis. This jeopardises the credibility of the results and the supplier.

Wastewater is another crucial sample point as it could have negative impacts on water courses such as eutrophication. It can have negative impacts on the environment and alter micro-ecosystems due to contaminants. With regards to wastewater quality, 75% of the lodges in South Africa had done wastewater quality. None of the lodges in Namibia or Botswana had done water quality analyses on their wastewater.

Figure 3. *Percentage of Lodges that Conducted Water Quality Analyses at their Tap*

Source: Author.

The water quality results were compared against the relevant country's national water standard for drinking water and wastewater discharge. The number of parameters that were tested in the analyses was compared against the required number of parameters stated in the relevant standards. In South Africa, three different service providers were used at various lodges, each testing their own set of parameters. In Namibia, all seven lodges used the same service provider and thus the results were universal for all seven lodges. The same was applicable for the five lodges in Botswana. Table 2 below states the results of this investigation with regards to drinking water whereas Table 3 states the results with regards to wastewater discharge.

Although 88% of the lodges in South Africa had their tap water quality analysed, only 25% lodges in the country tested more than 26% of the required parameters.

All seven lodges in Namibia tested only 37% of the required parameters for drinking water. Again, these reports are quite poor due the majority of the parameters not being tested. An observation with the Namibian results is that there were no microbiological analyses, only chemical analyses. This could be due to limitations from the supplier and/or laboratory in the region. However, the exact cause why there were no microbiological analyses is not covered in this study and would require further investigation.

Table 2. *Drinking Water Parameters Tested vs Parameters Required*

Country	No of lodges	Standard	Parameters tested	Parameters required	% tested
South Africa		SANS:241:2015			
Service provider 1	4		9	47	19%
Service provider 2	2		35	47	74%
Service provider 3	1		12	47	26%
Namibia	7	The Water Act (56 of 1956)	20	54	37%
Botswana	5	BOS 32:2009	16	57	28%

Source: Author.

The five lodges in Botswana only tested 28% of the required parameters for drinking water. According to a staff member the lodges had their water analysed at a university in Maun by students under supervision. Not only are the results poor but the majority of the parameters are not tested, the analyses are also not done by qualified and experienced professionals which effects the credibility of the results. According to the same staff member, there are no other water quality facilities in the province. This and other logistical challenges such as the remote locations in Botswana with limited infrastructure make water quality testing near impossible. The authors verified this information on his site visits and can appreciate the effort from the lodges that attempted to have water quality tested.

Table 3. *Wastewater Parameters Tested vs Parameters Required*

Country	No of lodges	Standard	Parameters tested	Parameters required	% tested
South Africa		National Gazette No 36820, 6 Sep 2013			
Service provider 1	4		2	5	40%
Service provider 2	2		37	5	100%
Namibia		Guidelines (461/85)	0	26	0%
Botswana		BOS 93:2004	0	34	0%

Source: Author.

Of the six lodges in South Africa that tested wastewater discharge, two complied 100% with the requirements and exceeded the required amount of parameters, whereas four lodges tested 40% of the required parameters. This means that the wastewater quality results are inconclusive at these four lodges and

that the authors could not establish whether the wastewater quality complies with legal requirements. The lodges can also not determine the efficiency of their wastewater plant as there is no results to indicate that the plant is operating successfully.

The importance of water quality has been well defined earlier in this study. In this section of the paper the authors selected eight important parameters from the water quality reports from the lodges in all three countries. The authors also stated the associated aesthetic and human health effects from each microbial-, micro- and macro-determinant. The results were also measured against the corresponding country's standard or guideline to determine if the water quality is suitable for human consumption. Although the Namibian guideline for drinking water has four categories, only category A was used in the figures below. Where a result exceeded the limit of category A, the authors referred to the other categories to determine whether the water would be suitable for human consumption or not. Only the tap water quality results were used in this section. The reason for this is a result of the limited number of water analyses conducted on the source and the wastewater sample points.

Only in the cases where determinants were measured were used in this discussion. Only one year's (2016) quality reports were used in the analyses due to unreliable data and different parameters tested from one year to another. The following parameters were analysed:

pH

The pH in water is the measurement to determine whether the water is acidic, alkaline or neutral. Although no health effects are associated with pH, it plays an important role in the treatment of water, especially water clarification and disinfection. For effective disinfection with chlorine, the pH should preferable be less than eight (8) (DWAF 1996). The taste of water, its corrosive potential and the solubility and speciation of metal ions are all influenced by pH. At a low pH water may taste sour, while at high pH water tastes bitter or soapy. The potential toxicity of metal ions and chemicals which can be protonated, for example ammonia, is influenced by pH. Changes in pH affect the degree of dissociation of weak acids and bases (DWAF 1996). This effect is of special importance because the toxicity of many compounds are affected by their degree of dissociation. The pH results from the lodges in South Africa, Namibia and Botswana are illustrated in Figure 4.

The results state that the pHs of the water at all the lodges were compliant with the relevant countries' standard or guideline. Lodge S3, S4 and N7 all had pH levels above eight, meaning that slight treatment is required to ensure more efficient and successful disinfection. An interesting observation was that all the pH levels from Botswana were below six (slightly acidic), whereas the pH levels from South Africa and Namibia were all above seven. Carbon dioxide is a common cause of acidity in water and photosynthesis, respiration and decomposition all influence carbon dioxide levels. Considering the enormous amount of aquatic vegetation in the Okavango Delta, it is most likely the cause for the acidity in the Botswana water (DWAF 1996).

Figure 4. *pH Levels from Lodges in South Africa, Namibia and Botswana*
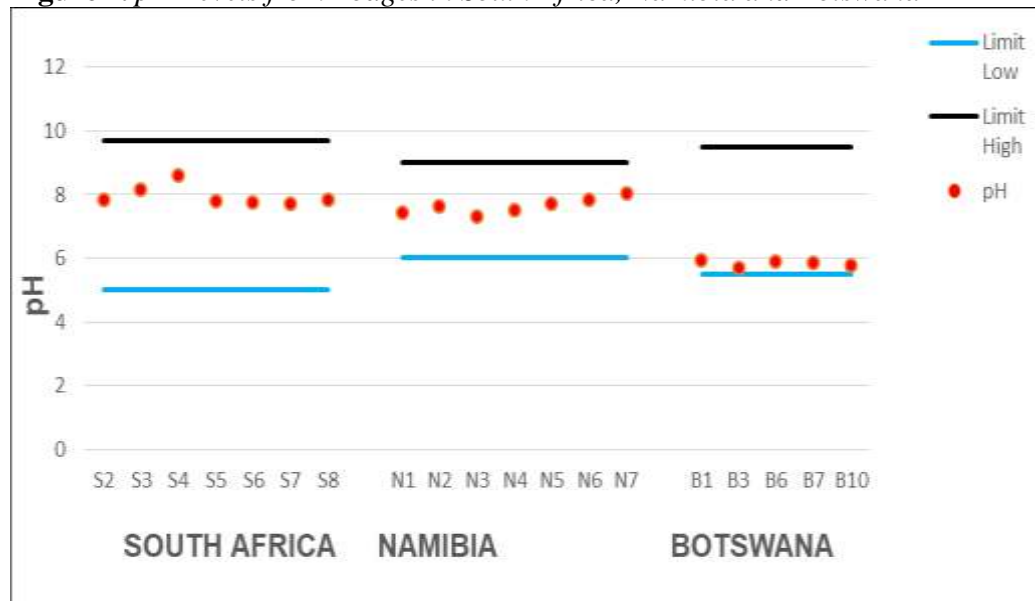
Source: Author.

Conductivity

Conductivity is the measurement to determine the transmission of electrical current in water and is an indicative of the total dissolved solids in the water. High conductivity can lead to a "mineral taste" in water and can cause severe scaling in piping and heating equipment such as geysers and kettles. No adverse health effects are associated directly to high conductivity (DWAF 1996). The results are illustrated in Figure 5.

Figure 5. *Conductivity Levels from Lodges in South Africa, Namibia and Botswana*
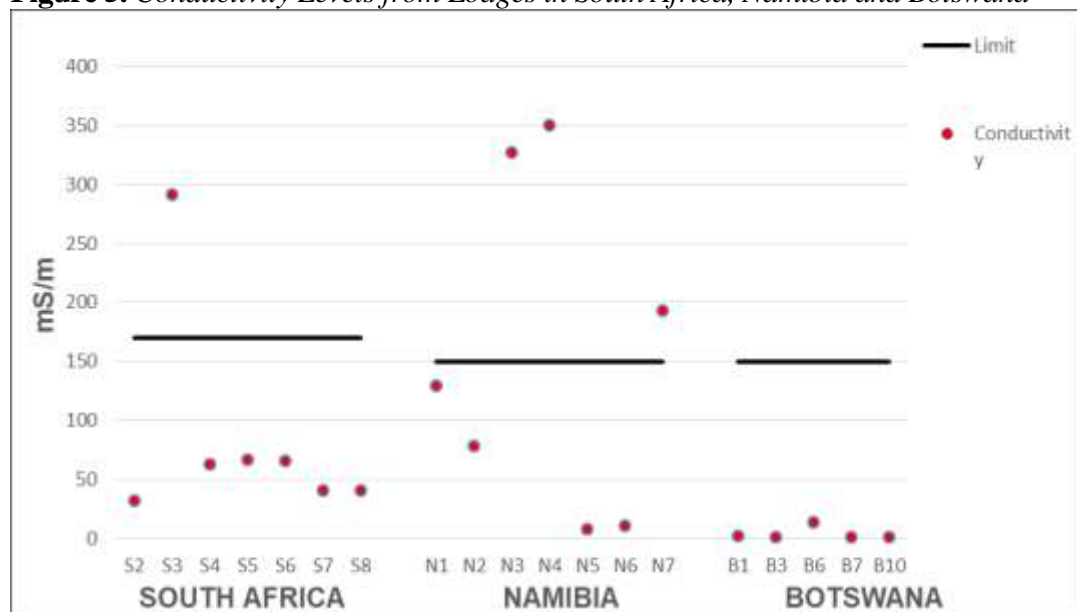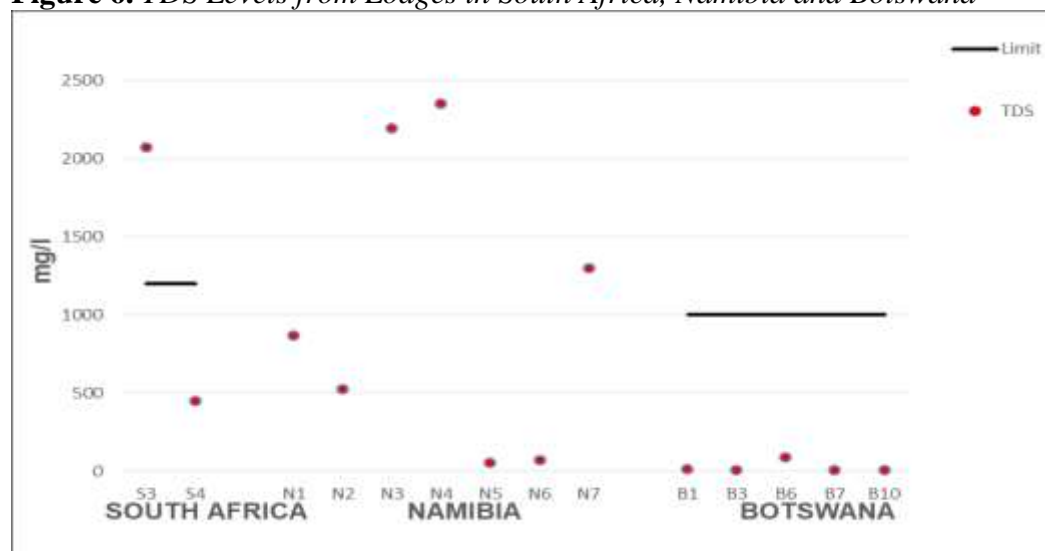

Source: Author.

The results indicate that conductivity levels are within the relevant countries' standard or guideline, with the exception of lodge S3, N3, N4 and N7. The water from lodge S3 is unsuitable for human consumption based on the SANS 241: 2015 standard. Both lodge N3 and N4 were within category C of the Namibian guidelines, resulting that there is low health risk associated with conductivity levels in the water. Lodge N7 fell into category B, which states that the water is of acceptable quality, however not excellent.

Total Dissolved Solids (TDS)

The total dissolved solids (TDS) are a measure of the amount of various inorganic salts dissolved in water. The TDS concentration is directly related to the electrical conductivity of water. Since conductivity is much easier to measure than TDS, it is routinely used as an estimate of the TDS concentration. The Namibian standard does not provide a limit for TDS, most likely due to the direct relation with conductivity. The TDS results are illustrated in Figure 6.

The results indicate the relation between TDS and conductivity as the same lodges exceeded the standard limits. Although there is no limit for the Namibian lodges, since the conductivity exceeded the limit for lodge N3, N4 and N7, the same will apply for TDS. It can therefore be assumed that lodge N3 and N4 would be within category C of the Namibian guidelines, resulting that there is low health risk associated with the TDS levels in the water. Lodge N7 would fall into category B, which states that the water is of acceptable quality, however not excellent

Figure 6. *TDS Levels from Lodges in South Africa, Namibia and Botswana*

Source: Author.

Nitrate

Nitrate (NO_3) are natural occurring ions that form part of the Nitrogen cycle. It is commonly used in inorganic fertilizers. It is also used as an oxidizing agent in

the manufacturing of explosives and purified potassium nitrate is used for glass making. Sodium nitrite is used as a food preservative, especially in cured meats. Nitrate in water is undetectable without testing because it is colourless, odourless, and tasteless. Upon absorption, nitrate combines with the oxygen-carrying red blood pigment, haemoglobin, to form methaemoglobin, which is incapable of carrying oxygen. This condition is termed methaemoglobinaemia (DWAF 1996). The reaction of nitrate with haemoglobin can be particularly hazardous in infants under three months of age and is compounded when the intake of Vitamin C is inadequate. According to DWAF (1996) the effects of Nitrate are tabled in Table 4 below whereas the results are illustrated in Figure 7.

Table 4. *The Effects of Nitrate on Human Health (DWAF 1996)*

Nitrate range as N mg/L	Effects
0 – 6	No adverse health effects
6 – 10	Rare instances of methaemoglobinaemia in infants; no effects on adults. Concentrations in this range generally well tolerated
10 – 20	Methaemoglobinaemia may occur in infants. No effects in adults
>20	Methaemoglobinaemia occurs in infants. Occurrence of mucous membrane irritation in adults

Source: Author.

Figure 7. *Nitrate Levels from Lodges in South Africa, Namibia and Botswana*
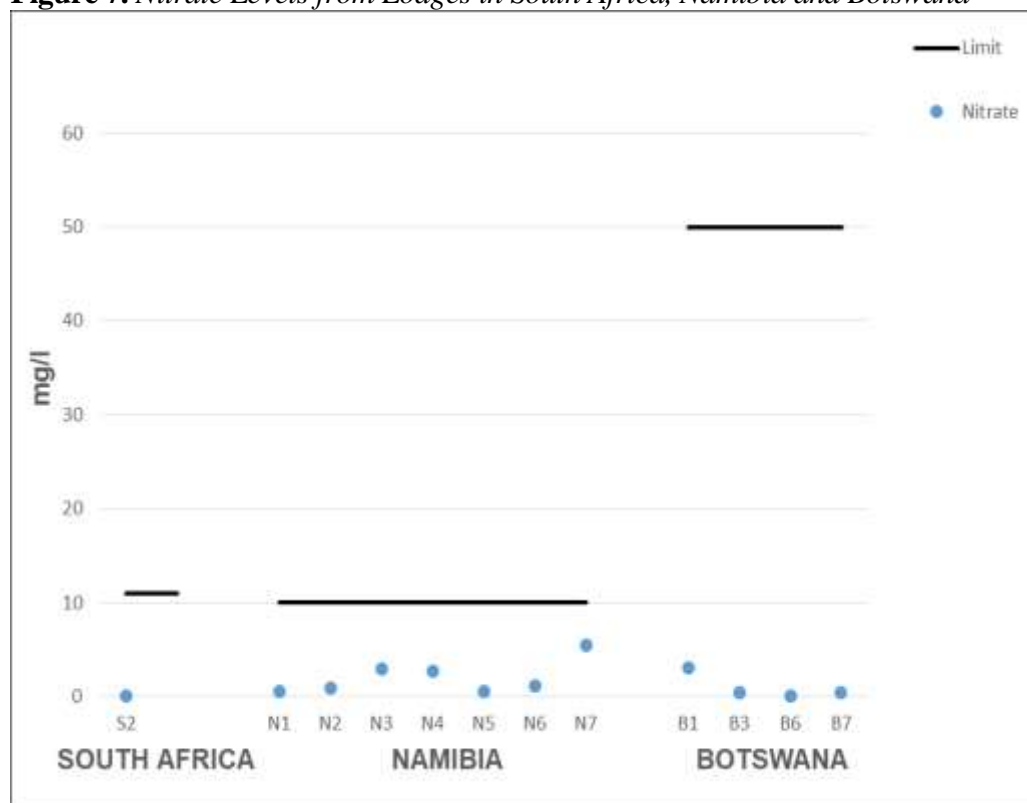
Source: Author.

    The results indicate that the Nitrate levels at all the lodges were well within the limit as per guidelines or standards. Only one lodge in South Africa (S2) had the Nitrate levels in their water analysed.
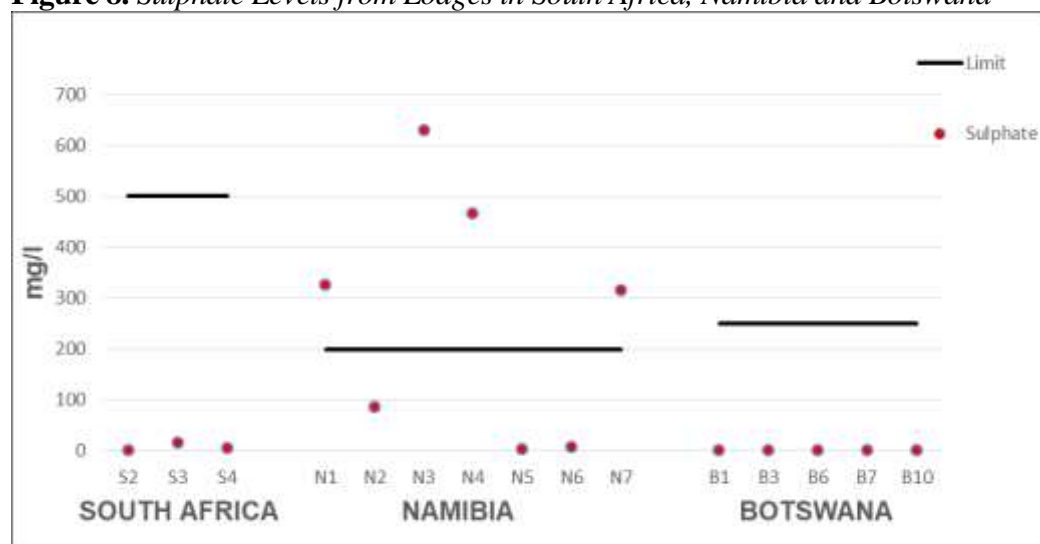
Sulphate

    Sulphate (SO**4**) is the oxi-anion of the element Sulphur and occurs commonly in groundwater. As water moves through soil and rock formations that contain sulphate minerals, some of the sulphate dissolves into the groundwater. It is also an indication of pollution such as mine drainage and effluent return flows which contains high levels of Sulphate. High levels of Sulphate can give water a bitter or astringent taste and can have adverse health effects, causing diarrhoea. Sulphate accelerates corrosion in piping and can cause metals to leach into the water (DWAF 1996). According to DWAF (1996), Table 5 below state the effects of Sulphate on aesthetics and human health whereas Figure 8 illustrates the results.

Table 5. *The Effects of Sulphate on Aesthetics and Human Health (DWAF 1996)*

Sulphate range as SO4 mg/L	Effects
0 – 200	No health or aesthetic effects are experienced
200 – 400	Tendency to develop diarrhoea in sensitive and some non-adapted individuals. Slight taste noticeable
400 – 600	Diarrhoea in most non-adapted individuals. Definite salty or bitter taste
600 - 1000	Diarrhoea in most individuals. User-adaptation does not occur. Pronounced salty or bitter taste
>1000	Diarrhoea in all individuals. User-adaptation does not occur. Very strong salty and bitter taste

Source: Author.

Figure 8. *Sulphate Levels from Lodges in South Africa, Namibia and Botswana*

Source: Author.

The results indicate that the lodges that did test for sulphate levels in South Africa and Botswana were well within the limit of the relevant standards. The majority of the lodges in Namibia exceed the category A limit. Although the sulphate levels from lodge N1, N4 and N7 falls within category B (acceptable water quality) of the Namibian standard, Table 5 above suggest that diarrhoea may occur in sensitive and non-adapted users. The sulphate level from lodge N3 fell within category C, which relates to a low health risk associated with the sulphate level and according to Table 5 may lead to diarrhea.
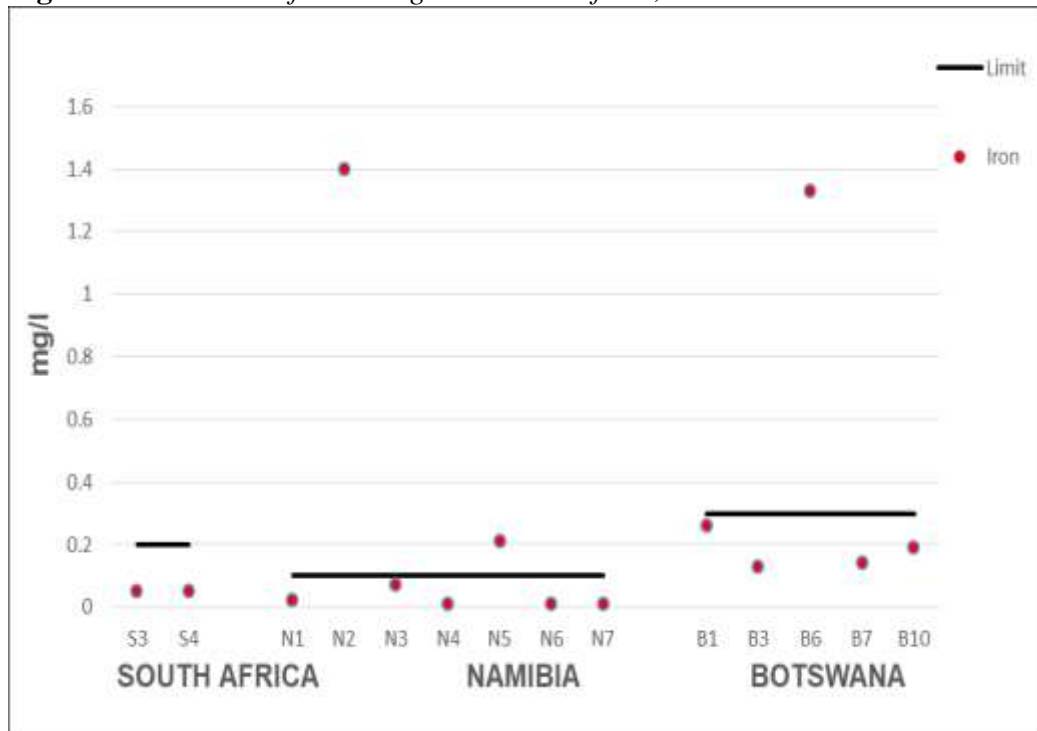
Iron

Pure iron is silvery in colour but usually appears as greyish black or brown deposits as a result of oxidation. Biologically iron is an essential micronutrient required by all living organisms. High concentrations of iron are predominantly an aesthetic concern since ferrous salts are unstable under the pH conditions prevailing in drinking water and precipitate as insoluble ferric hydroxide, which settles out as a rust-coloured silt. Excessive ingestion of iron may result in haemochromatosis, wherein tissue damage occurs as a consequence of iron accumulation. Haemochromatosis generally results from prolonged consumption of acid foodstuffs cooked in kitchenware made of iron. Poisoning is rare since excessively high concentrations of iron do not occur naturally in water. The extreme unpalatability of such water would probably prevent consumption. Further, iron in the distribution system promotes proliferation of iron-oxidising bacteria which oxidise ferrous iron to ferric iron, and manifest as slimy coatings in plumbing when the iron concentration of the water in the distribution system approaches 0.3 mg/L. Effects are predominantly aesthetic, such as the staining of enameled surfaces of baths, hand basins and lavatory cisterns/bowls and laundry (DWAF 1996). According to DWAF (1996) the effects of Iron are stated in Table 6 below whereas the results are illustrated in Figure 9.

Table 6. *Effects of Iron on Aesthetic and Human Health (DWAF 1996)*

Iron range as Fe mg/L	Effects
0 – 0.1	No taste, other aesthetic or health effects associated with consumption and use.
1 – 3	Very slight effects on taste and marginal other aesthetic effects. Deposits in plumbing with associated problems may begin to occur. No health effects; the water is generally well tolerated
3 – 10	Adverse aesthetic effects (taste) gradually increase as do possible problems with plumbing. No health effects
10 – 100	Pronounced aesthetic effects (taste) along with problems with plumbing. Slight health effects expected in young children, and sensitive individuals
100 – 300	Severe aesthetic effects (taste) and effects on the plumbing (slimy coatings). Slight iron overload possible in some individuals. Chronic health effects in young children and sensitive individuals in the range 100 – 200 mg/L, and occasional acute effects toward the upper end of this range.

Source: Author.
Figure 9. *Iron Levels from Lodges in South Africa, Namibia and Botswana*

Source: Author.

The results indicate that all the lodges that tested for Iron, with the exception of lodge N5 (category B, acceptable water quality), N2 (category C, low health risk) and B6 (not fit for human consumption), the levels were within the relevant standards or guidelines.
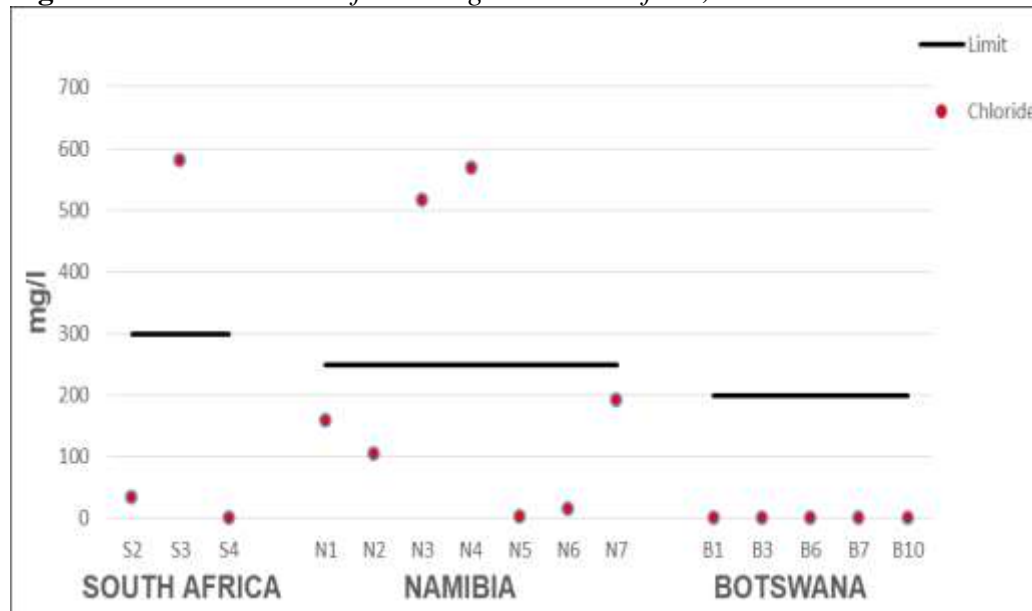
Chloride

Chloride is the negative ion (anion) of the element Chlorine and is commonly found in ground water. It generally combines with calcium, magnesium, or sodium to form various salts such as sodium chloride (NaCl). Although chlorides are harmless at low levels, groundwater with high levels of sodium chloride can damage vegetation if used for gardening or irrigation, and give drinking water an unpleasant taste. Over time, sodium chloride's high corrosion properties will also damage plumbing, appliances, and water heaters, causing toxic metals to leach into the water (DWAF 1996). Chloride toxicity has not been observed in humans except in special cases of impaired sodium chloride metabolism, e.g. in congestive heart failure. Healthy individuals can tolerate the intake of large quantities of chloride provided that there is a concomitant intake of fresh water. According to DWAF (1996) the effects of Chloride on aesthetics, household distribution systems and appliances and human health are stated in Table 7 whereas the results are illustrated in Figure 10.

Table 7. *The Effects of Chloride on Aesthetics, Household Distribution Systems and Appliances and Human Health (DWAF, 1996)*

Chloride range mg/L	Effects
0 - 100	No aesthetic or health effects. The threshold for corrosion acceleration in domestic appliances is at 50 mg/L
100 - 200	No aesthetic or health effects. Possible increase in the corrosion rate in domestic appliances
200 - 600	Water has a distinctly salty taste, but no health effects Likelihood of noticeable increase in corrosion rates in domestic appliances
600 - 1200	Water has objectionable salty taste and will not slake thirst. Likelihood of rapid corrosion in domestic appliances
>1200	Water unacceptably salty. Nausea and disturbance of the electrolyte balance can occur, especially in infants, where fatalities due to dehydration may occur.

Source: Author.

Figure 10. *Chloride Levels from Lodges in South Africa, Namibia and Botswana*
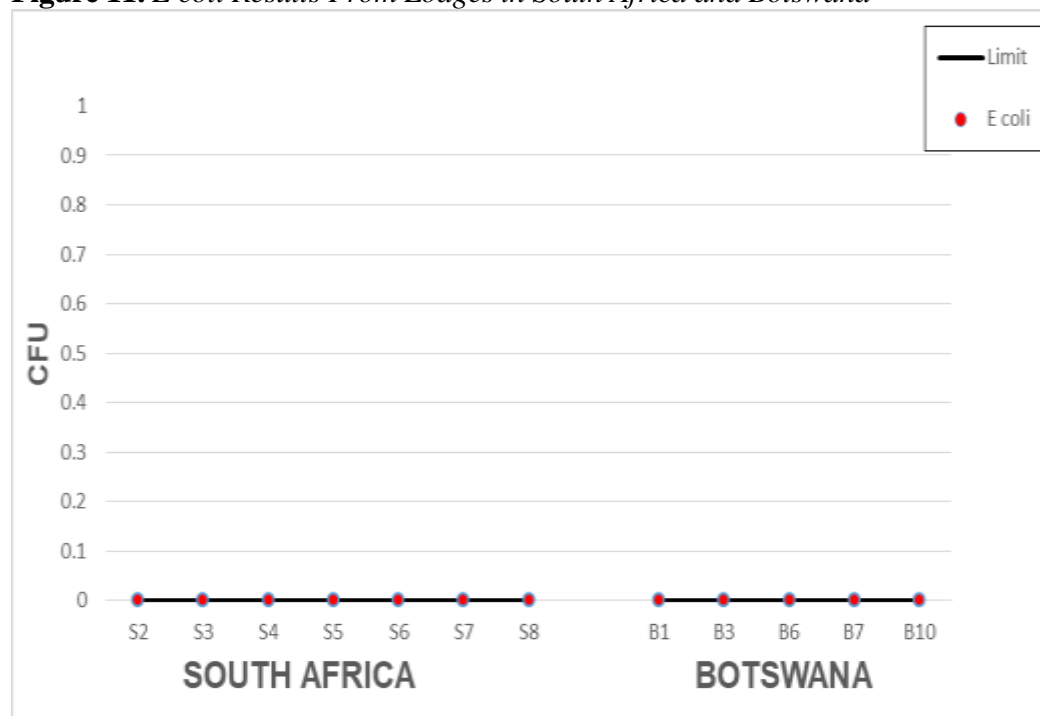

Source: Author.

The results indicate that the chloride levels at most of the lodges were within the relevant standards or guidelines. Although the chloride levels from lodge N3 and N4 were outside category A, it still fell within category B resulting in accepted water quality. The water from lodge S3 is unsuitable for human consumption in South Africa due to the SANS 241: 2015 limit. The chloride levels at all the lodges in Botswana were well within the limit.

Escherichia coli (E coli)

Escherichia coli, more commonly known as only *E coli*, is a bacteria that origins from the faeces of humans and other warm blooded animals. Many

different strains of *E coli* exist and more than 700 serotypes have been identified. The most common and dangerous serotype is *E coli* 0157:H7. Common diseases associate with *E coli* is gastrointestinal infections, diarrhoea, nausea and vomiting. In some people, particularly children under 5 years of age and the elderly, the infection can also cause a complication called hemolytic uremic syndrome, in which the red blood cells are destroyed and the kidneys fail. About 2% - 7% of infections lead to this complication. Symptoms usually appear within 2 to 4 days, but can take up to 8 days. Water containing *E coli* can be easily disinfected by adding Calcium hypochlorite (swimming pool chlorine) or Sodium hypochlorite (chlorine bleach) (DWAF, 1996). Another method to eliminate *E coli* is through an ultra violet (UV) light. The results are illustrated in Figure 11.

Figure 11. *E coli Results From Lodges in South Africa and Botswana*
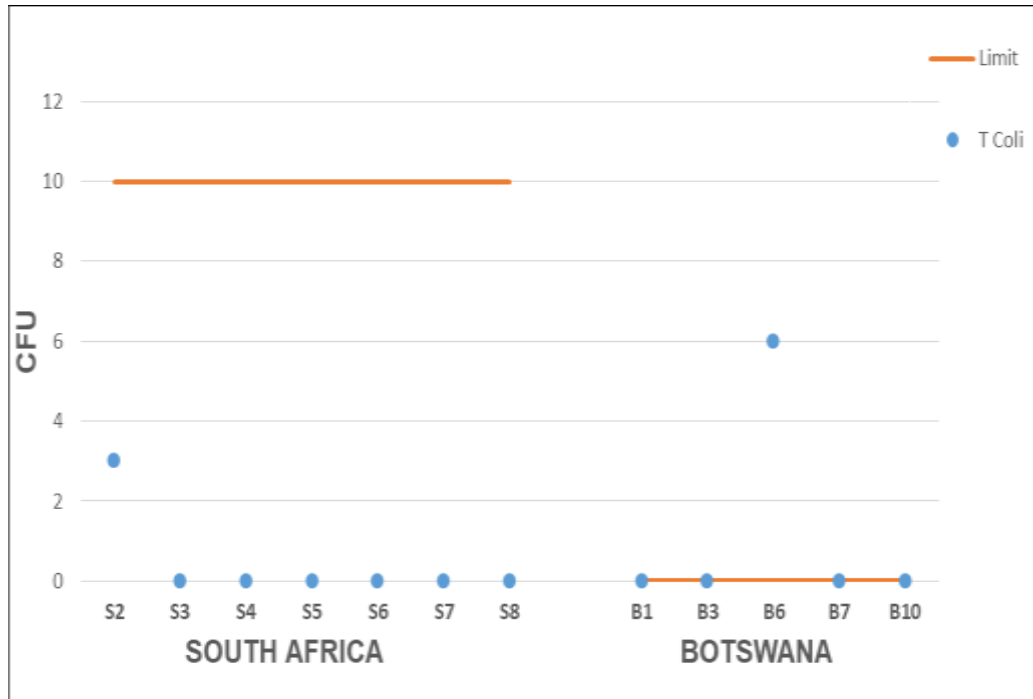

Source: Author.

The results indicate that no *E coli* were detected at any lodges that tested for the bacteria, resulting in complying with the relevant standards. None of the lodges in Namibia had their water tested for the presence of *E coli*.

Total Coliforms

Coliform bacteria are a natural part of the microbiology of the intestinal tract of warm blooded mammals, including man. Coliform bacteria can also be found in soil, other animals, insects, etc. Total coliform bacteria refer to all bacteria which produce colonies with a typical metallic sheen within 20 -24 hours of incubation at 35ºC. These tests provide an indication of the general sanitary quality of water since many of the bacteria in this group are from faecal origin. If large numbers of

coliforms are found in water, there is a high probability that other pathogenic bacteria or organisms, such as *Giardia* and *Cryptosporidium*, may be present. Water containing coliforms can be easily disinfected by adding Calcium hypochlorite (swimming pool chlorine) or Sodium hypochlorite (chlorine bleach). Another method to eliminate coliform bacteria is through an ultra violet (UV) light. The results are illustrated in Figure 12.

Figure 12. *Total Coliform Results from Lodges in South Africa, Namibia and Botswana*

Source: Author.

The results indicate that coliform bacteria were detected at lodge S2 as well as B6. The limit in South Africa for coliform bacteria is 10 CFU, meaning that the water from lodge S2 is still suitable for consumption. In Botswana the limit is 0 and therefore the water at lodge B6 does not comply with the standard requirements. No coliform bacteria were detected at any of the other lodges.

Conclusion and Recommendations

The results indicate that 88% of the lodges in South Africa do engage in water quality analysis of their tap water, however, only 25% of those lodges tested more than 26% of the relevant standard of their drinking water. There is thus no certainty in concluding that the lodge water quality is safe for human consumption at those the lodges in South Africa regardless if the parameters tested comply with limits. The same applies for Namibia as well as Botswana. In Namibia there were no microbiological tests and in Botswana only 28% of the required parameters

were tested. Although many lodges supply their guests with bottled water, the concern is the water supply to the staff. In South Africa, staff residing on the premises trigger section 8 of the National Occupation Health and Safety act, which states: "*Every employer shall provide and maintain, as far as is reasonably practicable, a working environment that is safe and without risk to the health of his employees*". It is therefore highly recommended that the lodges in all three countries engage in more conclusive and more frequent water quality testing to ensure the safety of their staff as well as guests.

Although the pH levels at all the lodges were within the limits, it is recommended that the lodges treat the pH to be as close to 7 as possible, especially the lodges the pH levels of above 8. This will ensure more effective treatment of the water especially with regards to disinfecting the water. Digital pH / TDS combo meters can be bought for less than R 500. This will allow the lodges to monitor the pH levels themselves and will ensure that the pH can be monitored more regularly.

The conductivity and TDS in the water at the majority of the lodges were within the limits. The high conductivity levels will affect the taste of the water and could cause damage to piping and heating elements. The most common way to reduce TDS and conductivity is through a reverse osmosis system. Other alternatives are distillation and de-ionizing.

The nitrate levels at the lodges were all within the required limits and do not require any treatment. Several lodges had issues with Iron, Sulphate and Chloride levels. Iron can be treated by an oxidizing process which will removed the particles through filtration. This can be achieved by devices such as fountains or chemically oxidized by dosing the water with chlorine or hydrogen peroxide. Chloride levels can be lowered through electrolysis or desalination techniques such as reverse osmosis. Desalination will also be effective to treat the high Sulphate levels (DWAF 1996).

Although *E coli* were absent at all the lodges, two lodges had small amounts of coliform bacteria in their water. This can be treated by adding disinfectants such as Calcium hypochlorite (swimming pool chlorine) or Sodium hypochlorite (chlorine bleach). Since this is such an important parameter, it is recommended that the lodges test for bacteria regularly. Test kits can be purchased for less than R 600 and will give accurate results with regards to bacteria in the water.

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