

Sustainable Tourism Planning by using the VICE Model (Applied on Minia Governorate)

Asmaa Abdul-Rauf Abdul-Mugod

Tourism Studies Department, Faculty of Tourism and Hotels, Minia
University

Abstract

The VICE model is a crucial topic for the global tourism industry, along with government authorities, academic institutions and planning and policy makers in international organizations. Tourism industry has received continuing criticism for either its lack of sustainable planning and management of tourism development. This research aims to identify the Visitors, Industry, Community, and Environment (VICE) model as a critical success factor in the sustainable development. The VICE model is used to identify the profiles, demands, and needs of the visitors, the role and impact on the industry and businesses, the impact on community and environment. How these elements should synergize with a view to ensure sustainability in Minia governorate. The field study focuses on the key characteristics of components of VICE Model. The methodology used for this study is a questionnaire that was designed on a range of related studies, Its final form included 24 questions. The findings of this study have many benefits that result from the application of the model in Minia governorate, including the preservation of the tourism attraction , provide the best service to the visitor, preserving the environment. Finally, suggestions for further research and practical implications are discussed.

Keywords:

Sustainable tourism development, Tourism planning, VICE model , Attractions in Minia.

Introduction

VICE model means Tourism planning which based on the principles of sustainability. It recognizes that, tourism in a destination is the interaction between (Neikerk & Coetzee, 2011):

- 1- Visitors.
- 2- The Industry that serves them.
- 3- The Community that hosts them.
- 4- The Environment where it all takes place.

The following VICE model (Fig.1) got its name by visitor, tourism industry, community and environment.

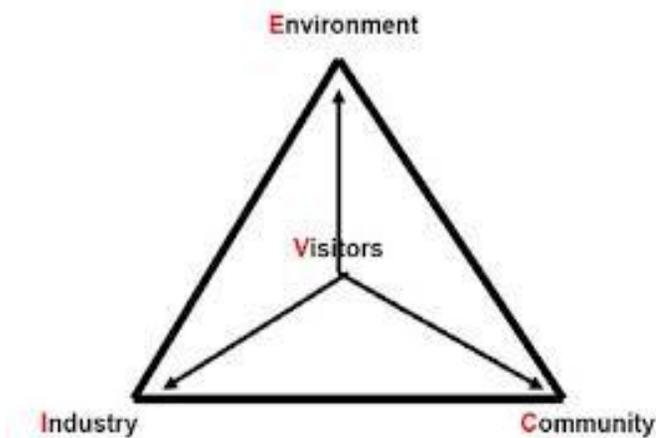


Fig. 1 The VICE model for sustainable tourism

Source: English tourist board and tourism management institute, 2003, p:6.

Its name is derived from the initial letters of its constituent elements. The aim is to create a kind of framework for the classification of the sustainability-related aspects of the tourism-related developments. The environment is a central element of the model, in addition to the local community and visitors of the area, as well as the tourism industry (Karlovit, 2015).

Visitors: are people arriving to the destination; mainly tourists, but may also include workers in a particular area for an extended period of time.

Tourism industry: all of the organizations and businesses in the tourism sector of the area in question.

Community: all of the residents and occupants of the area over long period of time.

Environment: this category includes all of the built and natural factors.

Simmons, 2006 identified a successful and sustainable tourism strategy as follows :

- Welcome, involve and satisfy visitors.
- Achieve a profitable and prosperous industry.
- Engage and benefit host communities.
- Protect and promote the local environment

Literature Review

The VICE model provides an applied framework from which destination managers can positively create a destination management plan which serves visitors, tourism industry, community and environment (Atfield & Kemp, 2013).

Components of VICE Model

Table 1 shows the components of VICE Model as following:

Table (1) Components of VICE Model

VISITORS- want a satisfying visit that meets their needs and expectations so that they want to repeat and will recommend.	
<p>Visitors need:</p> <ul style="list-style-type: none"> - Inspiration - reasons to visit - Information - Experiences - To have their expectations met - Quality and customer service - Value for money 	<p>Implications - we need:</p> <ul style="list-style-type: none"> - Good market intelligence, including the monitoring of customer satisfaction - Developing products that focus on the market, including quality and customer service initiatives. - Experiences to offer – varied, including events - Clever, targeted communications - Easy-to-access, rich information
INDUSTRY - needs profitable customers so that businesses can flourish and invest.	
<p>Industry needs:</p> <ul style="list-style-type: none"> - Profitable income, spread across the week/year - A good environment for business investment. - Distribution routes to market. - Public-funded support for the visitor economy (i.e. public realm, safety, transport, public-funded culture/leisure) 	<p>Implications - we need:</p> <ul style="list-style-type: none"> -To understand which visitors will be the most profitable, and target them. -To provide businesses with the information and support they need to invest. -Coordination of public-sector services. -Partnership between public and private sectors.

Table (1) Components of VICE Model *Continued*

COMMUNITY - need visitor spend that supports local facilities, services and jobs, and visitors who do not have a negative impact on residents' quality of life.	
<p>Community needs:</p> <ul style="list-style-type: none"> -Tourism creates jobs for local community. - Support for local economy and local services. - Year-round spread of visitors. <p>Pride of place.</p> <ul style="list-style-type: none"> - Local environment protected by the visitor economy. 	<p>Implications - we need:</p> <ul style="list-style-type: none"> -To attract visitors who will travel outside peak times, support local businesses, favour local produce and respect local culture. -To involve local people in planning for visitors. -To work with businesses to make sure they can provide what these segments need. -To work with businesses to use local supply chains.
ENVIRONMENT - must be protected from the negative impacts of increased volume of visitors.	
<p>Environment needs:</p> <ul style="list-style-type: none"> - Local supply chains supported. - Visitor payback schemes. - Informed/educated visitors. - Year-round spread. - Green business schemes. - Alternatives to the car. 	<p>Implications - we need:</p> <ul style="list-style-type: none"> -To attract visitors who will respect the environment, are able to travel. -Outside peak times, and may use alternatives to the car for some of their trip. -Develop visitor management strategies. -Provide realistic alternatives to car travel.

Source: Hampshire Country Council(HCC), 2011.

Sustainability and VICE-model components

Sustainable tourism development is defined as "meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems" (Cernat&Gourdon, 2007, p:1). As a concept, sustainable tourism's underlying principles understood very well : it is about managing visitor impacts on the local destination's economy, communities and environment to benefit all stakeholders both in the present and the future. The

principles of sustainable tourism apply to all tourism destinations, wherever they are, and to all forms of tourism. Indeed, sustainability is necessary for the successful future of tourism itself (English tourist board and tourism management institute, 2003).

Sustainability and Visitor

The importance of preserving of natural and cultural resources and other approaches for the sustainability of future use, while enabling present generations to benefit from them, and look the importance of sustainable development approach here is that the survival of the tourism industry depends on the survival of the possibilities of attracting the relevant natural heritage and environmental and historical and cultural tourists of an area. If the environmental conditions ceased to exist and deteriorated, it means the loss of the elements of the tourism industry, and the preservation of tourism resources can be improved often through the development of tourism, Sustainability of cultural features are important in preserving the cultural heritage of the region matters What the maintenance of tourism resources means that the local population will become more aware and conscious of the value of their heritage and the support for plans to protect these resources (Okazaki, 2008).

Sustainability and Industry

In recent decades the scientific community and various international organizations have provided a range of guidelines towards the development of more sustainable tourism. Sustainable tourism is not a discrete nor a special form of tourism. Rather, all forms of tourism should strive to be more sustainable. Making tourism more sustainable is not just about controlling and managing the negative impacts of the industry (Oliveira & Silva, 2016). Tourism is in a very special position to benefit local communities, economically and socially, and to raise awareness and support for conservation of the environment. Within the tourism sector, economic development and environmental protection should not be seen as opposing forces but they should be pursued hand in hand as aspirations that can and should be mutually reinforcing. Policies and actions must aim to strengthen the benefits and reduce the costs of tourism. Further massive growth is predicted for tourism between now and 2020, providing excellent opportunities for spreading prosperity but presenting considerable challenges and potential threats to the environment and local communities if not well managed. There is also an increasing appreciation of the potential role of tourism in addressing

world poverty, by bringing sources of income to the heart of some of the poorest communities (UNWTO, 2005).

Sustainability and Community

Community participation in the tourism planning process is advocated as a way of implementing sustainable tourism (Okazaki, 2008). There are many different ways for communities to attain a more sustainable future. The sustainability of a community depends on creating and maintaining its economic and environmental health, promoting social equity, and fostering broad-based citizen participation in planning and implementation. Communities that engage citizens and institutions to develop sustainability principles and a collective vision for the future and that apply an integrative approach to environmental, economic, and social goals are generally likely to be more successful. Job creation, energy use, housing, transportation, education and health are considered complementary parts of the whole. Since all issues are interconnected they must be addressed as a system. The process includes (Sustainable Communities online, 2016):

- Broad and diverse involvement of citizens.
- The creation of a collective vision for the future.
- The development of principles of sustainability.
- An inventory of existing resources and additional assets that would benefit the community.
- Clear, measurable objectives.
- The development of community indicators to assess progress.

Sustainability and Environment

Environmental sustainability is about making responsible decisions that will reduce your business' negative impact on the environment. It is not simply about reducing the amount of waste you produce or using less energy, but is concerned with developing processes that will lead to businesses becoming completely sustainable in the future. Currently, environmental sustainability is a topical issue that receives plenty of attention from the media and from different governmental departments. This is a result of the amount of research going into assessing the impact that human activity can have on the environment. It is generally agreed that the risk is high enough to merit an immediate response. Businesses are expected to lead in the area of environmental sustainability as they are considered to be the biggest contributors and are also in a position

where they can make a significant difference. Businesses can potentially cause damage to all areas of the environment (Sampathkumar, 2016) .

Stakeholders in sustainable tourism and The VICE model

Sustainability has become an important topic and concept in relation to tourism planning and development. For sustainable tourism development to be successful stakeholders must be involved in the process (Byrd, 2007). Also Many different stakeholders can benefit from tourism being made more sustainable that represent VICE-model components which are (Dodds, 2005):

A- Tourism enterprises, while seeking long term profitability, should be concerned about their corporate image, the relationship with their employees, and their impact on the global environment.

B- Tourists or visitors are seeking a high quality experience in safe and attractive environment.

C- Local communities are seeking increased prosperity but without exploitation or damage to their quality of life.

D- Environmentalists are concerned about the harmful impacts of tourism but also see it as a valuable source of income for conservation. Sustainability relates to areas of public concern—air, water, natural and cultural heritage and the quality of life. Moreover, many of the relevant resources are managed by governments.

E- Governments play a leading role seeking more sustainable tourism, governments must recognize the different positions and motivations of these stakeholders and work with them to achieve common goals, If government can provide incentives for investors more people will relocate to the destination (Niekerk, 2014). Local government manages the natural and cultural resources that tourism relies on, provides core infrastructure, attractions and facilities, and often funds regional marketing and visitor information (Simmons, 2006, p:10).

Attractions in Minia

Minia is one of the most important and interesting tourist destinations in Upper Egypt. The remarkable history of Minia including ancient Egyptian, Hellenistic, Roman and Arab periods has not yet received the full attention from scholars. It has a great wealth of archeological sites with monuments dating from at least the Old Kingdom until the end of the Islamic Period. It has the tombs of Beni Hassan, Tell El-Amarna, Tuna El-Gabal, Ashmunien, Isstable Antar, Bahnasa, Deir El-Bersha, and

Deir El- Adra (the monastery of the Virgin Marry). Minia Governorate is made up of nine administrative centers with many elements of the tourist attractions (Egyptian Tourist Authority et al., 2015).

Deir- Mawas

It is a western bank district on the Ibrahimia canal. It includes the village of Tell – El Amarna (Akhet-Aton) which lies at the eastern bank of the Nile.

Mallawi

Mallawi has an interesting museum containing archeological material from Hermopolis magna, Tuna-El- Gabal and Meir areas, including many mummies, sarcophagi and statuettes of Ibises which were worshipped there together with baboons as animals sacred to The God THOTH, and also glass, pottery, faience, domestic equipment and numerous papyri.

Abu- Qurqas

It lies on the western bank of the Nile, and it has the rock tombs of Beni-Hassan.

Minia

It is the chief town of the governorate. It is a commercial and industrial town and is located on the two banks of the Nile. It has monuments like the old mosque of El-lamati mosque from the Fatimid period. A big pyramid-shaped museum called " the Aton museum " is being established on the eastern bank of the Nile.

Samalut

A district situated about 25 km north of Minia on the eastern bank of the Nile. At the mouth of a side valley on the bank is seen a steep rocky hill, Gebel-el-Teir ,on the flat of which is the Coptic monastery of Deir- el-Adra (Monastery of the Virgin).

Bani-Mazar

Bani-Mazar located just 60 kilometers north of the city of Minia and has the archaeological site of El-Bahnassa.

Mghagha

It is located just 67 kilometers north of the city of Minia, at this area is the ancient Philae hippnos, near which are Coptic cemeteries (8th century).

Other attractions

Palaces and houses and old buildings, such as Abdul Majid Pasha Palace, the Palace Fortanah Mallawi (early twentieth century), the Palace of Haiat El-Nefous - Minia early twentieth century.

Research Methodology

Sample

The current study took place during the first quarter of 2016 and the data were collected using questionnaire that were personally distributed. The size of this sample is 50 usable questionnaire. The questionnaire was distributed to the organizations, which are located in Minia governorate. Participants were employees of Egyptian Tourist Authority and Minia governorate (Department of Tourism management- Department of International Relations - Department of Planning- Sub-offices of the governorate). The number of participants from Egyptian Tourist Authority is 8 respondents, Department of Tourism management is 15 respondents, Department of Planning is 9 respondents, Department of International Relations is 8 respondents and Sub-offices of the governorate are 10 respondents.

Measures

The questionnaire was designed on a range of related studies (Youngcourt et al., 2007). Its final form included 24 questions. These questions were translated into Arabic to avoid misunderstanding of specific terms. The first part of the questionnaire consisted of demographic information, while the second part included the following 4 dimensions that represent the Components of VICE Model:

Visitor: Seven items were used to assess participants "quality of tourism services, availability of tourist information, the availability of means of transportation, the diversity of tourism programs, the availability of good infrastructure, quality of hospitality, availability of security and safety".

Industry: Four items were used to assess participants "the availability of a good environment for Tourism Investment, partnership between the public and private sector, the creation and development of public sources of income, provide opportunities for the establishment of local projects that provide services".

Community: Five items were used to assess participants "tourism creates jobs for local community, tourism supports the local economy, tourism helps to maintain the handicraft industries, community participation in tourism investment decisions, over the analysts' awareness of the importance of the tourism sector".

Environment: Four item were used to asses participants "ensure the protection and conservation of natural and cultural resources, tourism contributes to reducing pollution, focus on raising environmental awareness, The EEAA take the necessary measures for the management of eco-tourism measures".

Participants used a third –point Likert scale ranging from " Disagree, Nutral, Agree " to respond to the items. For statistical analysis, SPSS (version 18.0) was used to analyze the preliminary data, including: descriptive statistics and chi-square test.

Results and Discussion

The findings of this study have been organized according to The VICE dimensions (Visitor- Industry- Community- Environment), table 2 shows the percentages of respondents' ranks of VICE dimensions.

Table (2) Percentages of respondents' ranks of VICE dimensions

Dimensions	Percentage				Mean	Std. Deviation
	Disagree	Nutral	Agree	Missing		
Visitors						
Quality of tourism services	16	80	4	---	1.88	.435
Availability of tourist information	34	54	12	---	1.78	.648
The availability of means of transportation	44	48	8	---	1.64	.631
The diversity of tourism programs	42	50	8	---	1.66	.626
The availability of good infrastructure	40	56	4	---	1.64	.562
Quality of hospitality services	10	62	28	---	2.18	.595
Availability of security and safety	22	46	28	4	2.06	.726
Industry						
The availability of a good environment for Tourism Investment	30	52	18	---	1.88	.689
partnership between the public and private sector	44	44	12	---	1.68	.683
The creation and	22	66	12	---	1.9	.580

development of public sources of income						
Provide opportunities for the establishment of local projects that provide services	38	58	4	---	1.66	.557
Community						
Tourism creates jobs for local community	16	46	38	---	2.22	.708
Tourism supports the local economy	18	46	36	---	2.18	.719
Tourism helps to maintain the handicraft industries	30	34	36	---	2.06	.818
Community participation in tourism investment decisions	60	28	8	4	1.64	.650
Over the analysts' awareness of the importance of the tourism sector	50	38	12	---	1.62	.696
Environment						
Ensure the protection and conservation of natural and cultural resources	30	62	8	---	1.78	.581
Tourism contributes to reducing pollution	50	30	20	---	1.7	.788
Focus on raising environmental awareness	50	34	16	---	1.66	.745
The EEAA take the necessary measures for the management of eco-tourism measures	30	62	8	---	1.78	.581

The results of "Visitor" dimension: Table 2 shows the percentages of respondents' ranks of "Visitor" dimension, when analyzing the finding , it reveals that the majority of respondents rate three items as "Disagree". These items are the availability of means of transportation, the diversity of tourism programs and availability of tourist information. However, the other items receive more than 55% of respondents choosing "Neutral" as

a rank. These items are the quality of tourism services, quality of hospitality services and the availability of good infrastructure.

The results of "Industry" dimension: the majority of respondents rate two items as "Neutral". These items are the creation and development of public sources of income 66% and Providing opportunities for the establishment of local projects that provide services 58%. However, the other two items receive less than 45% of respondents choosing "Disagree" as a rank. These items are the availability of a good environment for tourism investment and partnership between the public and private sector.

The results of "Community" dimension: The first notice is that the majority of respondents rate two items as "Disagree". These items are community participation in tourism investment decisions (60%) and Over the analysts' awareness of the importance of the tourism sector (50%). However, the other items receive more than 45% of respondents choosing "Neutral" as a rank. These items are tourism creates jobs for local community and tourism supports the local economy. The second notice is that the majority of respondents rate "tourism helps to maintain the handicraft industries" as agree (36%).

The results of "Environment" dimension: Table 2 shows that the item "Ensure the protection and conservation of natural and cultural resources" received (62%) as "Neutral", "Tourism contributes to reducing pollution" received (50%) as "Disagree", also "Focus on raising environmental awareness" received (50%) as "Disagree", and "The EEAA take the necessary measures for the management of eco-tourism measures" received (62%) as "Neutral".

The results of std. deviation and mean, all of the questions have low value std. deviation while the mean scores of items range from (M=1,64) to (M=2,22). The fact that ratings fell between 1,67 to 2,33 on The 3–point Likert scale, So the result mean attitude is neutral. It also reveals that According to the previously display and the opinions of the respondents, it found that there is a possibility to apply the vice model in Minia governorate, which is beneficial to the satisfaction of tourists, achieve the objectives of tourism industry, local community and preservation of the environment.

Chi-Square test

This part shows the relations between some important items in the field study by cross tabulations, it also shows the significance differences between some of these items with use chi-square test, and find in these part correlations between the items of the study.

Find chi-square value by this equation:

$$X^2 = (O-E) / (E).$$

O: Observed Number

E: Expected Number

Count Degree of freedom (D.F) by this equation:

Degree of Freedom (D.F) = (columns -1) (rows-1)

Table (3) Chi-Square Test results of the relationship between Availability of security and safety & The availability of a good environment for Tourism Investment.

Sig.(P.Value)	X ²	Degree of Freedom
.001	18.415	4

The previous table reveals that the value of the chi square (18.415) and the abstraction probability (.001), a value less than 0.05 which means that there is statistical significance between the two items.

Table (4) Chi-Square Test results of the relationship between Provide opportunities for the establishment of local projects that provide services & Tourism creates jobs for local community.

Sig.(P.Value)	X ²	Degree of Freedom
.048	9.612	4

The previous table reveals that the value of the chi square (9.612) and the abstraction probability (.048), a value less than 0.05 which means that there is statistical significance between the two items.

Table (5) Chi-Square Test results of the relationship between The creation and development of public sources of income & Tourism supports the local economy.

Sig.(P.Value)	X ²	Degree of Freedom
.000	20.407	4

The previous table reveals that the value of the chi square (20.407) and the abstraction probability (.000), a value less than 0.05 which means that there is statistical significance between the two items.

Table (6) Chi-Square Test results of the relationship between Over the analysts' awareness of the importance of the tourism sector & Ensure the protection and conservation of natural and cultural resources.

Sig.(P.Value)	X ²	Degree of Freedom
.002	16.892	4

The previous table reveals that the value of the chi square (16.892) and the abstraction probability (.002), a value less than 0.05 which means that there is statistical significance between the two items.

Conclusion and Recommendation

The present study examines the vice model and its components that include visitor, industry, community, and environment, also it shows the relationship between Sustainability and VICE-model components and Stakeholders in sustainable tourism. Minia governorate has many attraction, It is necessary to apply the vice model to ensure sustainability in Minia governorate.

The results of field study show that there are many benefits that result from the application of the model in Minia, including the satisfaction of tourists, achieving rising living standards, increasing environmental awareness in local communities, preserving the environment and preserve the rights of future generations. This in turn leads to the prosperity of and the recovery of tourism and increase tourist demand for Minia Governorate. So the results lead to some recommendation that can be summarized in the following paragraphs.

First, it is important to establish a committee composed of members from the Ministry of Tourism, Ministry of Environment, and the Ministry of Planning and International Cooperation, to put plans based on the application of sustainable tourism planning model.

Finally, forming a specialized team that includes those responsible for the management of tourism in Minia governorate, in addition to the members of the local community and private sector, it is important to coordinate between the different roles of each of them for the implementation of sustainable tourism planning model.

Limitations and Future Research

The VICE model is not yet known in the world and more studies should be done to determine the effectiveness of the model in determining sustainability. The environmental side of the model can be done in a more comprehensive way to ensure sustainability of the environment.

References

Atfield, R. and Kemp, p. (2013), "Enhancing education for sustainable development in business and management, hospitality, leisure, marketing tourism", the higher education academy, UK.

Byrd, E.T. (2007), "Stakeholders in sustainable tourism development and their roles: applying stakeholder theory to sustainable tourism development", the journal of tourism review, Vol 62.

Cernat, L. and Gourdon, J. (2007), "Is the concept of sustainable tourism sustainable? Developing the sustainable tourism bench marketing tool", united nations conference on trade and development, New York, USA.

Dodds, R. (2005), "Calvia, Spain: Local Agenda 21 & Resort Rejuvenation' in making tourism more sustainable", available online <https://www.researchgate.net/publication/266141945> accessed (June 21-2016).

Egyptian Tourist Authority and Minia general department of tourism (2015), "Attractions in Minia", Minia governorate.

English tourist board and tourism management institute (2003)," Destination management hand book: a sustainable approach", published by the English tourism council, London.

Hampshire country council (HCC), (2011),"Implications of the vice approach to sustainable tourism", working paper 4, UK.

Karlovitz, J.T.(2015), "Sustainable tourism destination management strategies: using the EVIDENCES model for evaluating TDM tenders" kantz gyula faculty of economics, szechenyi istvan university.

Niekerk, M.V. and Coetzee, W. (2011), "Utilizing the vice model for the sustainable development of the innibos arts festival", journal of hospitality marketing& management , Vol 20: 3-4,347-365.

Niekerk, M.V. (2014), "The role of the public sector in tourism destination management from net work relationship approach", journal of tourism analysis, Vol.19.

Oliveira, F. and Silva, F. (2016), "Tourism as a tool of community development: an ecotourism project in cantanhez, guinea- bissan", journals of sustainable tourism, Vol 139.

Okazaki, E. (2008), "A community- based tourism model", journal of sustainable tourism, Vol 16.

Sampathkumar, S. (2016), "Principles of management: goal of becoming more environmentally efficient", available online [https://www. Social cause. Org.](https://www.Socialcause.Org) accessed(June 21- 2016).

Simmons, D. G. (2006), "Tourism planning toolkit", the journal of tourism recreation research and education centre ,Lincoln university.

Sustainable communities online (2016), "About Sustainable communities", available online [https://www. Sustainable communities. Org.](https://www.Sustainablecommunities.Org) accessed(June 21- 2016).

UNWTO (2005), "Tourism micro finance and poverty alleviation" , WTO, Madrid.

Youngcourt, S. S., Leiva, P. I. and Jones, R. G. (2007), "Perceived purposes of performance appraisal: correlates of individual- and position- focused purposes on attitudinal outcomes", *Human Resource Development Quarterly*, Vol.18, No.3