

## **Evaluation of Sustainable Tourism Investment in Tourism Businesses: Evidence from Egypt**

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### **Abstract**

Sustainable tourism investment is one of the important topics imposed by environmental challenges to reduce the negative effects of tourism investment on the environment. Sustainable tourism investment is the investment in all tourism activities to achieve tourism development, sustainable development goals, and apply economic, social, and environmental dimensions. This research aims to evaluate sustainable tourism investment practices in Egypt. Data were collected from 356 managers through a questionnaire, which was distributed in various tourism businesses such as travel agencies, hotels, eco-lodges, diving centers, and protected areas. The results revealed that tourism businesses in Egypt apply sustainable tourism investment practices. In addition that the eco-lodges are the most tourism business in Egypt that apply sustainable tourism investment practices. On the other hand, travel agencies are the least viable tourist businesses for sustainable tourism investment practices. Moreover, the results of the research indicated that Egyptian private investment projects are the most committed types of investment in implementing sustainable tourism investment. The results of this research hold important implications for the research community and tourism businesses in Egypt.

**Keywords:** Investment, Sustainable tourism investment, Tourism businesses, Egypt.

### **1. Introduction**

Sustainable tourism development has emerged since the late 1980s and has attracted the interest of many academics and researchers in the field of tourism studies (Zolfani, 2015). Sustainable tourism is a development that targets all forms of tourism, tourism management, tourism investment, and marketing, taking into account the economic and social dimensions, preserving the environment, ensuring its survival for future generations (Sofronov, 2017) and contributes to meeting the needs of tourists, the host community, and the environment (OECD, 2018). Tourism investment is any investment that helps in developing the tourist supply of tourism products and services provided to the tourist (Allen Consulting Group, 2011). It is one of the important elements in achieving sustainable tourism development (Paramati et al., 2018).

Sustainable tourism investment is largely responsible for achieving all aspects of sustainability, which include economic, environmental and social aspects (Ng, 2019). Sustainable investment also plays a major role in supporting the shift towards sustainable tourism (OECD, 2018). Although the importance of sustainable tourism investment in improving the environment of the tourist destination, there are no studies that dealt with this issue in Egypt.

Accordingly, this research aimed to assess the practices of sustainable tourism investment in Egypt and to what extent tourism businesses have adopted these practices. This goal achieved by answering the following questions:

- a) To what extent sustainable tourism investment practices have been achieved in tourism businesses in Egypt?
- b) Is there a difference in implementing practices of sustainable tourism investment based on tourism business type (hotel, travel agency, eco-lodge, diving center, or protected area)?
- c) Is there a difference in implementing practices of sustainable tourism investment in Egypt based on tourism investment type (foreign, private, local)?

## **2. Literature Review**

### **2.1 Definition of sustainable tourism investment**

Sustainable investment has emerged in recent decades and has evolved to include many concepts and terms that are used interchangeably (Fulton et al., 2012). Sustainable investment is a multidimensional concept term that associated or synonymous with many concepts such as environmental investment, socially responsible investment and green investment (Marinoni et al., 2009; Inderst et al., 2012; Bajpai, 2013; Utz et al., 2015; De la Torre et al., 2016; Yang et al., 2019). Sustainable investment can be defined as the investment which contributing to minimizing greenhouse gases and pollutions, taking into account the volume of production and consumption processes not affected (Eyraud et al., 2011). In this context, Gutsche and Ziegler (2019) added that sustainable investment considering environmental, social, and ethical interests plays a vital role in the economy. In a simple definition, Escrig-Olmedo et al. (2017) defined sustainable investment as an investment process that has a positive influence on sustainable development. From another hand, sustainable investment according to ILG (2014) is the process by which capital can be invested in green assets, including companies, infrastructure, and projects that aim to reduce carbon emissions, combat pollution, waste management, improve energy efficiency and other innovative processes that contribute to solving environmental problems and achieving sustainability.

Based on the above, all the definitions for the concept of sustainable investment focused on the three dimensions of sustainable development and the achievement of its goals, and agreed that sustainable investment is an investment directed to serving the goals of sustainable development dimensions. Accordingly, sustainable tourism investment can be defined as the investment in all tourism activities to achieve tourism development, sustainable development goals, and apply their economic, social, and environmental dimensions.

### **2.2 Importance of sustainable tourism investment**

Sustainable tourism investment is one of the activities that supporting tourism and achieving economic development (OECD, 2017a). Sustainable tourism investment also contributes to reducing the risks facing the economy, achieving economic stability, and shifting towards a green economy (ILG, 2014).

The importance of sustainable tourism investment is not only economic but also extends to the environment. Therefore, sustainable tourism investment contributes to improving energy efficiency, healthy and safe management of water and waste, preserving biodiversity, and protecting the ecosystem. Tourism investment also contributes to increasing tourism revenues, which makes tourist destinations able to innovate and achieve sustainable growth (Jackson et al., 2009). Sustainable Tourism investment not only contributes to tourism growth but also contributes significantly to reducing carbon emissions and improving the performance of tourism activities. Hence, sustainable tourism investment helps reduce the negative impacts of tourism on the environment (Alam and Paramati, 2017).

In the same context, Sustainable investment helps directly or indirectly to preserving the environment, whether by using green technology or improving environmental practices, and this concept is based on the green economy in developing countries (Bajpai, 2013). Sustainable tourism investment supports to solving social problems by including the local community in the investment process and directing the returns of tourism investment to poor areas (GSIA, 2018). Sustainable tourism investment helps to generate more jobs for many segments in energy, water, and waste management services, which helps create job opportunities for many segments of society (UNEP and WTO, 2012). This type of job called green jobs as International Labor Organization (2012) mentioned. International Labor Organization (2012) defined green jobs as jobs that reduce negative impacts on the environment and make businesses and countries more sustainable. These jobs also decrease energy consumption, reduce carbon emissions, minimize waste, and contribute to protecting the ecosystem. Therefore, the tourism industry must include green jobs in all components of tourism to achieve sustainable tourism investment.

### **2.3 Sustainable tourism investment and 17 SDGs**

In 2015, the United Nations put in its 70th general assembly a 17 goals called the Sustainable Development Goals (SDGs) or the 2030 Agenda for Sustainable Development, to complete what has not been achieved from the Millennium Development Goals\* (United Nations, 2015; OECD, 2017b ).

The SDGs aim to eradicate poverty in the year 2030 and include a set of new issues such as economic inequality, sustainable consumption, peace, justice, innovation, and climate change, and other issues as shown in Table (1). The main difference between the SDGs and the MDGs is that the SDGs focused on the role of private investment and its importance in promoting sustainable development (Eurosif, 2018).

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\* The Millennium Development Goals (MDGs) are 8 goals set by the United Nations in September 2000 with the participation of 189 countries aimed at improving the lives of peoples. These goals included: 1) eliminating poverty and hunger; 2) empowering all children with primary education; 3) achieving gender equality and empowering women; 4) Reducing child mortality; 5) improving maternal health; 6) controlling diseases; 7) ensuring environmental sustainability; 8) building a global partnership for development (Hwang, and Kim, 2017).

Tourism contributes greatly to achieving the 17 sustainable development goals if these goals are incorporated into decision-making in the tourism industry (WTO and UNDP, 2017). Bajpai (2013) indicated also that sustainable investment goals are a part of sustainable development goals and include achieving balanced sustainable economic development, conserving resources at the present for future generations, and environmental protection.

Accordingly, UNWTO and OAS (2018) and Doncheva (2019) indicated that sustainable tourism investment contributes directly in achieving the goals **6, 8, 12, 14** of the SDGs which including maintaining sanitation and clean water, decent work and sustainable economic development, production and sustainable consumption, and responsible use of marine resources and oceans. They emphasized also that sustainable tourism investment not only directly contributes to the above four goals of the SDGs but also indirectly contributes to the all 17 goals of the SDGs as shown in table (1).

**Table (1): Sustainable tourism investment and 17 SDGs**

No.	17 SDGs goals	Role of Sustainable tourism investment
1	End poverty	Tourism investment projects can contribute to employing the poorest groups as a source of income for them to eradicating poverty.
2	End hunger	Investing in sustainable agriculture to produce the food needed for hotel consumption can help provide healthy food and eliminate hunger.
3	Healthy lives and well-being	Allocating part of the taxes that are collected from tourism investment projects to improve health care services, as well as part of the fees for tourist attractions and protected areas.
4	Achieving quality education	Tourism needs trained workers, and these workers need adequate education in order to perform its work properly.
5	Gender equality and empower women	Tourism directly helps to create jobs for women in the tourist and hotel businesses. This contributes to the empowerment of women.
6	Sanitation and clean water	Tourism investment requires the provision of infrastructure such as water and sewage facilities to maintain sanitation.
7	sustainable energy	The use of clean and renewable energy in tourism investments contribute greatly to reducing greenhouse gases and mitigating climate change.
8	Sustainable economic growth and decent	Tourism provides decent work opportunities for youth and women and reduces the negative social and economic impacts on society, which contributes to sustainable economic growth.
9	Infrastructure and innovation	Tourism investment provides good infrastructure and make it more sustainable and innovative, which contributes to attracting foreign tourism investment and attracting tourists.
10	Reduce inequality	Sustainable investment can be a tool to reduce the unfair distribution of the benefits of tourism by engaging the society in tourism development, and contributing to the development of urban and rural areas.
11	Sustainable communities and cities	Sustainable tourism investment contributes to providing green infrastructure that reduces pollution and making tourist cities more sustainable for tourists and community.
12	Sustainable consumption and production patterns	Tourism needs to rely on sustainable production and consumption, which contributes to supporting sustainable tourism investment and accelerating the transition towards sustainable development.

13	Combat climate change	Sustainable tourism investment contributes to reducing carbon emissions resulting from tourism activities, especially tourism transport, which plays an important role in mitigating climate change.
14	Responsible use of marine resources and oceans	Sustainable tourism investment should be part of managing coastal tourism areas, to preserve sensitive marine ecosystems such as coral reefs and promote the sustainable use of marine resources.
15	Protect the biodiversity of life and land	Sustainable tourism investment contributes to investment in sensitive areas, such as nature reserves, to preserve its biodiversity.
16	Peaceful, justice and build strong institutions	Tourism activities and sustainable tourism investment as a tourism-based activity contribute to promoting tolerance and understanding between cultures and religions and achieving peace.
17	Building a global partnership for sustainable development	Tourism and sustainable tourism investment are linked to many other sectors, so partnerships with all these other sectors must be built at the regional and international levels to cooperate in achieving the 2030 agenda for sustainable development.

**Source:** Adapted from UNWTO (2013); Hwang and Kim (2017); Berenberg (2018); UNWTO and OAS (2018) and Doncheva (2019).

## **2.4 Fields of sustainable tourism investment**

There are specific fields for investment in green tourism or sustainable tourism investment, which includes 5 main fields represented in energy, water management, waste management, conservation of biological diversity, and cultural heritage (UNEP and UNWTO, 2012; OECD, 2013; OECD, 2018).

### **2.4.1 Energy efficiency**

Energy consumption increasing in tourism activities such as accommodation, transportation, and other tourism activities contributes to an increase in greenhouse gas (GHG) emissions and the negative impact of tourism on the climate (UNEP and UNWTO, 2012). All aspects of the tourism industry are totally or partially related to energy efficiency. Although the hotel industry is most closely related to energy in the tourism sector, energy efficiency must be improved in the hotel sector and in other tourism activities to make tourism more sustainable (Csapo, 2013). Energy efficiency is one of the main contributors to sustainable tourism development and includes the use of the least energy limit to provide the same service that was provided with greater energy (Mensah, 2013). Investing in energy is an important aspect of sustainable investment and includes investing in improvements that provide energy-saving devices in hotels such as refrigeration, air conditioning, televisions, heating, and laundry (OECD, 2013). Tour operators, service providers, and hotel managers should be encouraged to invest in renewable energy to enhance energy efficiency and achieve sustainable tourism investment (Marunda et al., 2013).

Energy efficiency is the key to energy and sustainable tourism development in Egypt (Aladassy et al., 2016). For example, El Gouna which located in Red Sea Governorate depends on the incorporation of renewable energy sources, so the city invested in the construction of a 50 MW solar power plant to feed the power grid. The city administration also encourages hotels and homeowners to use solar heaters (Meier et al., 2017).

#### **2.4.2 Water management**

Tourism is one of the industries is characterized by a high use of water (McLennan et al., 2014). In this regard, the tourism industry should bear its responsibilities of water conservation. Therefore, the owners of tourism projects should invest in treating water in a sustainable way to reach safe and clean water necessary for the continuation of tourism activities (UNEP, 2003). Investing in water includes using water-saving technologies in accommodations, restaurants, tourist facilities, attractions, parks, golf courses, and swimming pools, as well as investing in gray water reuse and rainwater system management (OECD, 2013; Saito, 2013). Managing water and reducing its consumption saves money, improves the reputation of the destinations, and preserves natural resources (Invest Northern Ireland, 2018).

In Egypt, El Gouna city relies on desalination to supply the city with potable water. Water is desalinated using reverse osmosis technology by electric power instead of the distillation process to save energy. El Gouna has a central sewage system that includes two sewage plants. Water is treated with the secondary treatment system for use in irrigation through irrigation networks (Meier et al., 2017).

#### **2.4.3 Waste management**

Over the past decades, tourism has evolved considerably to become one of the most dynamic economic activities and has become one of the most productive activities for waste. Neglecting the management of these wastes had negative environmental, social, and economic impacts (Ezeah et al., 2015); therefore sustainable waste management has become a concern of many tourist destinations (Murava and Korobeinykova, 2016).

In the tourism sector, large quantities of waste are generated from hotels, restaurants, tourist facilities, parks, attractions, and conference halls, which can negatively affect the environment of the tourist destination (UNEP, 2003). Investing in waste management contributes to improving resource efficiency, increasing the attractiveness of destinations, and increasing the sustainability of tourism (OECD, 2018). Sustainable waste management starts from reducing the source of waste when purchasing raw materials or providing services, and then \ the process of waste management through recycling, recovery, treatment, or final disposal (UNEP, 2003).

In Sharm El Sheikh, waste generation is estimated at 100 tonnes/day. In 2011, waste management was undertaken by Sharm Environmental Services Company. In 2018, the municipal government issued 5 contracts to private waste collecting companies that cover the city's residential and hotel areas in 5 blocks. In Sharm El Sheikh, hotels and waste collection companies support to improve sorting at source and recycling which is currently only at 18%, which could be considerably increased. The city is planning to rehabilitate its controlled dumpsite into a landfill and to establish a recycling facility (GEF, 2018).

#### **2.4.4 Biodiversity**

Biodiversity is the diversity between the living organisms that live on Earth and includes all terrestrial, marine, and water ecosystems. It starts from the genetic level to the ecosystem level (Hall, 2010; CBD, 2015). Biological diversity refers to the different types of flora and fauna in the various environments on Earth (Adom et al., 2019).

There is a mutual relationship between tourism and biodiversity. Biodiversity is the main attraction for tourists in some tourist destinations (CBD, 2015). The protection of biodiversity requires planning and development in a manner that takes into account the nature of areas with environmental sensitivity, preventing and reducing the damage that may occur to biodiversity in those areas, in addition to maximizing the benefits to tourism from preserving biological diversity (WTO, 2010). Maintaining biodiversity is one of the bases for sustainable tourism. Therefore, tourism service providers such as tour operators and hotels should respect the rules for safeguarding natural resources and biological diversity to maintain environmental systems within the tourist destination. Investing in preserving biodiversity is important and profitable, and contributes to preserving sensitive ecosystems that are a source of tourism attraction (OECD, 2013; OECD, 2018).

Egypt's main environmental objective is to focus on developing and maintaining natural reserves in an attempt to protect its biological diversity. To date, there are 30 natural protectorates in Egypt, covering approximately 140,000 km<sup>2</sup> (nearly 13.9 percent of the total area). Egypt remains committed to environmental conservation, including the protection of Red Sea coastal areas, particularly the endangered coral reefs and mangroves. Egypt has actively deployed efforts to ensure the sustainability of its terrestrial ecosystems and to protect its biodiversity (Ministry of Planning, Monitoring and Administrative Reform, 2018).

#### **2.4.5 Cultural heritage**

UNESCO defines cultural heritage as the tangible and intangible legacy of society from previous generations and is preserved today for future generations (Nilson and Thorell, 2018). Cultural heritage is one of the assets that societies and destinations can benefit from attracting tourists and increasing tourism income, and preserving this cultural heritage contributes greatly to sustainable development (Vegheş, 2018). Cultural heritage includes archaeological sites, historical buildings, monuments, handicrafts, customs, traditions, culture and the arts (Mergos and Patsavos, 2017).

Sustainable tourism investment includes not only economic and environmental aspects, but also socio-cultural aspects. Investing in preserving cultural heritage contributes to the welfare of society, improving the quality of life, and promoting sustainable economic development. It also contributes to supporting heritage tourism, generating income, creating job opportunities, reviving handicrafts, and restoring old buildings, which contributes significantly to achieving sustainability (Gražulevičiūtė, 2006).

Investment to preserve cultural heritage is among the most important and profitable investments which contributes to the sustainability of tourism. It needs synergy between society, tourism decision-makers, and the private sector (OECD, 2013). In Egypt, The Government has embarked on a new project to renovate Cairo’s downtown district, to restore the area’s original Khedival architectural style by reconstructing buildings and facades, to turn the area into an open museum. The project also includes the development of 12,000 m2 of the surrounding pedestrian streets. About 200 buildings have been renovated so far (Ministry of Planning, Monitoring and Administrative Reform, 2018).

### **3. Methodology**

#### **3.1 Procedures and measurement**

The research depended on the quantitative method. Data were collected through a questionnaire to answer research questions. It was designed electronically on Google forms and distributed through LinkedIn. The study randomly selected a sample of 600 managers working in hotels, Eco lodges, travel agencies, protected areas, diving centers, in addition to managers in other tourism-related places such as gift shops and restaurants. The questionnaire designed based on previous studies to measure the extent to which tourism projects adopt sustainable tourism investment policies. Sustainable tourism investment was measured by six phrases, based on studies by Inderst et al. (2012) and Tseng et al (2019). The data collection took place between December 2019 to February 2020. Only 356 responses were valid for statistical analysis.

### **4. Results and Discussion**

#### **4.1 Sample profile**

As can be seen from Table 2, the managers involved in the sample were mostly under 35 years old (50.3%), followed by 35-45 years old (34.3%). As for their gender, a significantly higher proportion of males were recorded (approx. 90%). For education, most of the managers have a bachelor's degree (72.8%). The table also shows that most of the managers in the sample have more than 15 years of experience (41.9%). This contributes to obtaining accurate responses. Moreover, the majority of managers work in hotels (45.5%), and 38.8% work in travel agencies. Furthermore, the majority of sample was privet Egyptian investment (57.9%).

**Table (2): Sample profile**

No.		Item	Freq.	%
<b>1</b>	<b>Gender</b>	Male	320	89.9
		Female	36	10.1
<b>2</b>	<b>Age</b>	Less 35 years	179	50.3
		35- 45 years	122	34.3
		46- 55 years	45	12.6
		More than 55 years	10	2.8

		Bachelor	259	72.8
		Diploma	28	7.9
3	Education	Master's degree	43	12.1
		Doctoral degree	15	4.2
		Others	11	3.1
		less than 5 years	41	11.5
		5-10 years	110	30.9
4	Experience	11-15 years	56	15.7
		More than 15 years	149	41.9
		Travel agencies and Airline	138	38.8
		Hotels and Tourist villages	162	45.5
5	Place of work	Eco lodge	9	2.5
		Diving centers	15	4.2
		Protected areas	7	2
		Other	25	7
		Foreign investment	115	32.3
6	Investment type	Private Egyptian investment	206	57.9
		Local investment	35	9.8

#### **4.2 Validity and Reliability**

To ensure the validity of the study instrument, the questionnaire was presented to academics in tourism studies to find out its validity. Their opinions were largely in agreement with the questionnaire items. Accordingly, the questionnaire was prepared in its final form and distributed to the research sample. The researchers calculated the reliability of the questionnaire by using Cronbach's alpha coefficient. The results concluded that Cronbach's alpha coefficient was 0.92, as shown in Table (3), which is higher than 0.6. Cronbach's alpha coefficient is considered acceptable if its value more than 0.6. This indicates the reliability of the questionnaire used in the research.

**Table (3): Cronbach's alpha for study variable**

Variable	No. of Items	Cronbach alpha
Sustainable tourism investment (STI)	6	0.922

#### **4.3 Descriptive statistics for Sustainable tourism investment**

As shown in table (4), respondents strongly agreed with the statement **“Our business contributes to increasing employment living standard”** with 47.2% and agreed with this statement with 28.4%. The value mean was 4.07 and the standard deviation was 1.12. This means that the respondents accepted the statement. Concerning the statement **“Our products and services suit with green concepts”**, the percentage of acceptance was 69.1% as 40.7% of the respondents strongly agreed and 28.4% reported agree. The mean value was 3.89 and the standard deviation was 1.20. This means that the respondents accepted the statement

According to the results shown in table (4), respondents agreed on the phrase "**Our business saves energy and uses renewable resources**". 39% of respondents strongly agreed with this phrase and 30.3% agreed. The mean value for this phrase was 3.92 and the standard deviation was 1.13. This indicates that businesses of the study save energy and use renewable resources. Concerning the statement "**Our business reduces water consumption**", the percentage of acceptance was 71.4% as 41.3% of the respondents strongly agreed and 30.1% reported agree. The mean value was 3.96 and the standard deviation was 1.13. This means that the respondents accepted the statement.

Concerning the statement "**Our business manages waste effectively**", the percentage of acceptance was 58.2% as 31.2% of the respondents strongly agreed and 27% reported agree. The mean value was 3.58 and the standard deviation was 1.92. This means that the respondents accepted the statement. Regarding the statement "**Our business conserve the biodiversity of the environment**" as shown in table (4), the percentage of acceptance was 62.1% as 33.4% of the respondents strongly agreed and 28.7% reported agree. The mean value was 3.70 and the standard deviation was 1.23. This means that the respondents lightly accepted the statement.

**Table (4): Descriptive statistics for Sustainable tourism investment practices in Egypt**

Items			1	2	3	4	5	Mean	SD
STL1	Our business contributes to increasing employment living standard	Freq.	17	21	49	101	168	4.07	1.12
		%	4.8	5.9	13.8	28.4	47.2		
STL2	Our products and services suit with green concepts	Freq.	20	35	55	101	145	3.89	1.20
		%	5.6	9.8	15.4	28.4	40.7		
STL3	Our business save energy and use renewable resources	Freq.	14	32	63	108	139	3.92	1.13
		%	3.9	9	17.7	30.3	39		
STL4	Our business reduce water consumption	Freq.	15	29	58	107	147	3.96	1.13
		%	4.2	8.1	16.3	30.1	41.3		
STL5	Our business manage waste effectively	Freq.	33	44	72	96	111	3.58	1.29
		%	9.3	12.4	20.2	27	31.2		
STL6	Our business conserve the biodiversity of environment	Freq.	25	40	70	102	119	3.70	1.23
		%	7	11.2	19.7	28.7	33.4		
STI	Sustainable tourism investment							3.85	1.00

According to Table (4), the total mean for sustainable tourism investment items is 3.85. This indicates that respondents agree on their businesses' application of sustainable tourism investment practices. The results showed that the institutions under study save energy, reduce water consumption, and efficiently manage waste. This confirms the application of sustainable tourism investment practices. These results are in line with GSIA (2018) that sustainable tourism investment contributes to solving some social problems such as job creation and income increase.

ILG (2014) argued that sustainable tourism investment includes green assets and contributes to creating green products and services. Moreover, Jackson et al. (2009) stated that sustainable tourism investment includes water and waste management, energy-saving, and conserve biodiversity.

***Consequently, sustainable tourism investment practices are achieved in Egypt. This result represents the answer to the first question.***

***4.4 The difference in implementing practices of sustainable tourism investment based on tourism enterprise type***

As shown in Table (5), the P-value = 0.00, which is less than 0.05. This means that there are differences between tourism businesses towards applying sustainable tourism investment practices. According to the mean rank, the results showed that eco-lodges are the most applied to sustainable tourism investment policies, while travel agencies, airlines, and other businesses, such as restaurants and bazaars, are the least applied to sustainable tourism investment practices. ***These results clarify the answer to the second question.***

**Table (5): Kruskal-Wallis test for the difference in implementing practices of sustainable tourism investment based on tourism enterprise type**

Enterprise Type	N	Mean Rank	Chi-Square	Sig.
Travel agencies and airlines	138	140.61	43.861	0.000
Hotels and Resorts	162	209.84		
Eco-lodge	9	246.11		
Diving Centers	15	208.07		
Protected areas	7	200.50		
Other	25	136.34		

***4.5 The difference in implementing practices of sustainable tourism investment in Egypt based on tourism investment type.***

**Table (6): Kruskal-Wallis test for the difference in implementing practices of sustainable tourism investment in Egypt based on tourism investment type**

Type of Investment	N	Mean Rank	Chi-Square	Sig.
Foreign investment	115	179.47	12.369	0.002
Privet Egyptian investment	206	187.59		
Local governmental investment	35	121.83		

Table (6) shows that p-value = 0.002, which is less than 0.05. This indicates that there are differences between tourism businesses in the application of sustainable tourism investment practices based on the type of investment. The results indicate that local private investment is the most applied to sustainable tourism investment practices, while governmental investment is the lowest in implementing sustainable tourism investment. ***This result answers the third question of the research.***

## **5. Conclusion**

The study aimed to assess sustainable tourism investment practices by tourism institutions in Egypt. In this regard, the results indicated that Egyptian tourism businesses have good practices in adopting sustainable tourism investment policies. Sustainable tourism investment in Egypt included five main areas: energy efficiency, water management, waste management, biological diversity protection, and cultural heritage preservation. The results showed that tourism businesses contribute to increasing living levels and its products or services suit green standards. Additionally, the results showed that the businesses of the study save energy, reduce water consumption, and efficiently manage waste. These results asserted that tourism businesses adopt the policies of sustainable tourism investment practices.

The results proved that there is a difference in implementing practices of sustainable tourism investment based on tourism enterprise type (Travel agencies, hotels, eco-lodges, diving centers, and protected areas). Also, the results showed that eco-lodges are the most applied to sustainable tourism investment policies, while travel agencies, airlines, and other businesses, such as restaurants and bazaars, are the least applied to sustainable tourism investment practices. The results revealed also that there is a difference in implementing practices of sustainable tourism investment in Egypt based on tourism investment type (Foreign investment, private Egyptian investment, and local investment). Furthermore, the results indicated that local private investment is the most applied to sustainable tourism investment practices, while governmental investment is the lowest in implementing sustainable tourism investment

In light of the research results, the researchers suggest that local tourism businesses in developing countries should adopt sustainable tourism investment policies and encourage the private sector to expand on these practices.

## **References**

- Adom, D., Umachandran, K., Ziarati, P., Sawicka, B. and Sekyere, P. (2019). The Concept of Biodiversity and its Relevance to Mankind: A Short Review, *Journal of Agriculture and Sustainability*, 12(2):219-231.
- Aladassy, A., Mosaad, G. and Tarabieh, K. (2016). Towards optimum energy performance measures for existing hotels in Egypt, *WIT Transactions on Ecology and The Environment*, 201:189-200.
- Alam, M. and Paramati, S. (2017). The dynamic role of tourism investment on tourism development and CO2 emissions, *Annals of Tourism Research*, 66:183–215.
- Allen Consulting Group (2011). Framework guide to facilitate tourism investment: companion report, Allen Consulting Group, Australia.
- Bajpai, J. S. G. (2013). Green Investment: A strategy for Sustainable Economic growth and Investment. *East African Journal of Science and Technology*, 3(1):

144–149.

Berenberg (2018). Understanding the SDGs in sustainable investing, A BERENBERG ESG OFFICE, pp.1-27. Accessed on 4/4/2020, Available at: [https://www.berenberg.de/files/ESG%20News/SDG\\_understanding\\_SDGs\\_in\\_sustainable\\_investing.pdf](https://www.berenberg.de/files/ESG%20News/SDG_understanding_SDGs_in_sustainable_investing.pdf)

CBD (2015). Tourism Supporting Biodiversity, CBD, Montreal, Canada. <https://www.cbd.int/tourism/doc/tourism-manual-2015-en.pdf>

Csapo, J. (2013). Energy Efficiency in Tourism – Towards a More Sustainable Travel Industry, *Geographical Locality Studies*, 1 (1): 44–57.

De la Torre, O., Galeana, E., & Aguila-socho, D. (2016). The use of the sustainable investment against the broad market one. A first test in the Mexican stock market. *European Research on Management and Business Economics*, 22(3): 117–123.

Doncheva, D. (2019). Economic dimensions of sustainable tourism in Bulgaria, *Trakia Journal of Sciences*, 17(1): 400-411.

Escrig-Olmedo, E., Rivera-Lirio, J. M., Muñoz-Torres, M. J., & Fernández-Izquierdo, M. Á. (2017). Integrating multiple ESG investors' preferences into sustainable investment: A fuzzy multicriteria methodological approach. *Journal of Cleaner Production*, 162: 1334–1345.

Eurosif (2018). SDGs for SRI investors, Eurosif, Brussels, Belgium, Accessed on 5/4/2020, Available at: <http://www.eurosif.org/wp-content/uploads/2018/01/Eurosif-SDGs-brochure.pdf>

Eyraud, L., Zhang, C., Wane, A. A., & Clements, B. J. (2011). Who's Going Green and Why? Trends and Determinants of Green Investment. *IMF Working Papers*, 2011(296): 1-41. Accessed on 25/3/2020, Available at: <https://doi.org/10.5089/9781463927301.001>

Ezeah, C., Fazakerley, J. and Byrne, T. (2015). Tourism Waste Management in the European Union: Lessons Learned from Four Popular EU Tourist Destinations, *American Journal of Climate Change*, 4(5):431-445.

Fulton, M., Kahn, B. M., & Sharples, C. (2012). Sustainable Investing: Establishing Long-Term Value and Performance. *SSRN Electronic Journal*, Accessed on 27/3/2020, Available at : <https://doi.org/10.2139/ssrn.2222740>

GEF (2018). Green Sharm El Sheikh, Accessed on 11/5/2020, Available at: [https://www.thegef.org/sites/default/files/web-documents/10117\\_PIF.pdf](https://www.thegef.org/sites/default/files/web-documents/10117_PIF.pdf)

Gražulevičiūtė, I. (2006). Cultural Heritage in the Context of Sustainable Development Environmental research, engineering and management, 3(37):74-79.

GSIA (2018). Global Sustainable Investment Review. Global Sustainable Investment Alliance, Accessed on 25/3/2020, Available at: [http://www.gsi-alliance.org/wp-content/uploads/2019/03/GSIR\\_Review2018.3.28.pdf](http://www.gsi-alliance.org/wp-content/uploads/2019/03/GSIR_Review2018.3.28.pdf)

Gutsche, G., & Ziegler, A. (2019). Which private investors are willing to pay for sustainable investments? Empirical evidence from stated choice experiments. *Journal of Banking and Finance*, 102: 193–214.

Hall, C. (2010) Tourism and biodiversity: more significant than climate change?, *Journal of Heritage Tourism*, 5(4): 253-266

Hwang, S. and Kim, J. (2017). UN and SDGs: A Handbook for Youth, UNESCAP, Accessed on 4/4/2020, Available at: <https://www.unescap.org/resources/un-and-sdgs-handbook-youth>

ILG. (2014). The moral, financial and economic case for action About the ILG. University of Cambridge Institute for Sustainability Leadership (CISL), Cambridge, England, Accessed on 2/4/2020, Available at: <https://www.cisl.cam.ac.uk/resources/publication-pdfs/ilg-the-value-of-responsible-investment.pdf>

International Labor Organization (2012). Sustainable Tourism and Green Jobs for Indonesia, ILO Country Office Jakarta, Indonesia.

Inderst, G., Stewart, F., & Kaminker, C. (2012). Defining and Measuring Green Investments: Implications for Institutional Investors' Asset Allocations. OECD Publishing. Paris, Accessed on 20/3/2020, Available at: <https://doi.org/10.1787/5k9312twnn44-en>

Invest Northern Ireland (2018). A Practical Water Efficiency Guide for Businesses in Northern Ireland, Belfast, Northern Ireland, Accessed on 20/4/2020, Available at: <https://www.investni.com/sites/default/files/documents/static/library/invest-ni/documents/water-efficiency-guide-a-practical-guide.pdf>

Jackson, M., Brown, C., Hywood, G., Collins, K., Jacobs, K., Eslake, S., Kennett, J., Hingerty, M. and Lambert, J. (2009). The Jackson Report on behalf of the Steering Committee: Informing the National Long-Term Tourism Strategy. Commonwealth of Australia, Canberra.

Marinoni, O., Higgins, A., Hajkowicz, S. and Collins, K. (2009). The multiple criteria analysis tool (MCAT): a new software tool to support environmental investment decision making, *Environmental Modelling & Software*, 24 (2):153-164.

Marunda, E., Sai, J. and Muchenje, B. (2013). Challenges facing use of energy in the tourism and hospitality industry in Zimbabwe and policies that can promote the sustainable use of renewable energy and tourism development, *International Journal of Development and Sustainability*, 2 (2): 472-484.

Mclennan, C., Becken, S. and Stinson, K. (2014). A Water-Use Model for The Tourism Industry In The Asia-Pacific Region: The Impact Of Water-Saving Measures On Water Use, *Journal of Hospitality & Tourism Research*, 41(6): 746-767

Meier, A., Tutwiler, R., Dessouky, N. and Zayad, H. (2017). Planned Communities with a Sustainability Focus, SRTP-2017-2.2, Sustainability Research and Training Program, University of California, Davis, California.

Mensah, I. (2013). Hotel Energy Efficiency towards Sustainable Tourism, *Journal of Hotel & Business Management*, 3 (1): 108.

Mergos, G. and Patsavos, N. (2017). Cultural Heritage and Sustainable Development, Technical University of Crete, Chania, Greece.

Ministry of Planning, Monitoring and Administrative Reform (2018). Egypt's National Voluntary Report 2018, Accessed on 11/5/2020, Available at: [https://sustainabledevelopment.un.org/content/documents/20269EGY\\_VNR\\_2\\_018\\_final\\_with\\_Hyperlink\\_9720185b45d.pdf](https://sustainabledevelopment.un.org/content/documents/20269EGY_VNR_2_018_final_with_Hyperlink_9720185b45d.pdf)

Murava, I. and Korobeinykova, Y. (2016). The analysis of the waste problem in tourist destinations on the example of Carpathian region in Ukraine, *Journal of Ecological Engineering*, 17(2):43–51.

Ng, A. (2019). Socially Responsible Investing in Sustainable Development. In W. Leal Filho (ed.), *Encyclopedia of Sustainability in Higher Education*, Springer Nature Switzerland AG, pp. 1-5.

Nilson, T. and Thorell, K. (2018). *Cultural Heritage Preservation: The Past, the Present and the Future*, Författarna och Halmstad University Press, Halmstad, Sweden.

OECD (2013). *Green Innovation in Tourism Services*, OECD Tourism Papers, OECD Publishing: Paris, France.

OECD (2017a). The education sustainable development goal, In *Education at a Glance 2017: OECD Indicators*, OECD Publishing, Paris.

OECD (2018). *OECD Tourism Trends and Policies 2018*, OECD publishing, Paris, Accessed on 20/3/2020, Available at: <http://dx.doi.org/10.1787/tour-2018-en>

OECD. (2017b). *Leveraging Investment for Sustainable and Inclusive Tourism Growth*. OECD publishing. Paris.

Paramati, S., Alam, M. and Lau, C. (2018). The effect of tourism investment on tourism development and CO2 emissions: empirical evidence from the EU nations, *Journal of Sustainable Tourism*, 26 (9): 1587-1607

Saito, O. (2013). Resource Use and Waste Generation by the Tourism Industry on the Big Island of Hawaii, *Journal of Industrial Ecology*, 17 (4): 1-12.

Sofronov, B. (2017). Impact of sustainable tourism in the travel industry, *Annals of Spiru Haret University, Economic Series*, (4), pp. 85-94.

Tseng, M., Tan, P., Jeng, S., Lin, C., Negash, Y. and Darsono, S. (2019). Sustainable Investment: Interrelated among Corporate Governance, Economic Performance and Market Risks Using Investor Preference Approach. *Sustainability*, 11(2108): 1-15.

UNEP and WTO (2012). *Tourism in the Green Economy – Background Report*, UNWTO, Madrid.

UNEP (2003), *A Manual for Water and Waste Management: What the Tourism Industry can do to improve its Performance*, UNEP, Paris, Accessed on 10/4/2020, Available at:

<http://www.unep.fr/shared/publications/pdf/WEBx0015xPA-WaterWaste.pdf> .

United Nations (2015). Transforming our world: the 2030 Agenda for Sustainable Development, A/RES/70/1, Accessed on 4/4/2020, Available at: [https://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/70/1&Lang=E](https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E)

UNWTO (2013). Sustainable Tourism for Development Guidebook, UNWTO, Madrid, Spain.

UNWTO and OAS (2018). Tourism and the Sustainable Development Goals – Good Practices in the Americas, UNWTO, Madrid, Spain.

Utz, S., Wimmer, M., Steuer, R.E., (2015). Tri-criterion modeling for constructing more-sustainable mutual funds, *European Journal of Operational Research*, 246 (1): 331-338.

Vegheş, C. (2018). Cultural Heritage, Sustainable Development and Inclusive Growth: Global Lessons for the Local Communities Under a Marketing Approach, *European Journal of Sustainable Development*, 7(4): 349-360.

WTO (2010). Tourism and Biodiversity – Achieving Common Goals Towards Sustainability, World Tourism Organization, Madrid, Spain.

WTO and UNDP (2017). Tourism and the Sustainable Development Goals – Journey to 2030, Highlights, UNWTO, Madrid.

Yang, D., Xiao, T. and Huang, J., (2019). Dual-channel structure choice of an environmental responsibility supply chain with green investment. *Journal of Cleaner Production*, 210: 134-145.

Zolfani, S., Sedaghat, M., Maknoon, R. and Zavadskas, E. (2015). Sustainable tourism: a comprehensive literature review on frameworks and applications, *Economic Research*, 28(1): 1-30.

## تقييم الإستثمار السياحي المستدام في المؤسسات السياحية: مصر نموذجاً

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### الملخص العربي

يعد الإستثمار السياحي المستدام أحد الموضوعات الهامة التي فرضتها التحديات البيئية للحد من الآثار السلبية للإستثمار السياحي على البيئة. الإستثمار السياحي المستدام هو الإستثمار في جميع الأنشطة السياحية لتحقيق التنمية السياحية وأهداف التنمية المستدامة وأبعادها سواء الإقتصادية أو الإجتماعية أو البيئية. يهدف هذا البحث إلى تقييم ممارسات الإستثمار السياحي المستدام في مصر. لتحقيق هذا الهدف اعتمد البحث على المنهج الكمي. تم جمع البيانات من خلال توزيع استبيان علي مديري المؤسسات السياحية مثل وكالات السفر والفنادق والفنادق البيئية ومراكز الغوص والمحميات الطبيعية. تم تجميع 356 استبيان صالحين للتحليل وتحليل تلك البيانات باستخدام برنامج SPSS V.16 للوصول إلى نتائج البحث. أوضحت النتائج أن الشركات السياحية في مصر تطبق ممارسات الإستثمار السياحي المستدام. كما أظهرت النتائج أن الفنادق البيئية هي أكثر المؤسسات السياحية في مصر تطبيقاً لممارسات الإستثمار السياحي المستدام. من ناحية أخرى ، فإن وكالات السفر هي المؤسسات السياحية الأقل إلتزاماً بممارسات الإستثمار السياحي المستدام. علاوة علي ذلك، كشفت نتائج البحث أن المشاريع الإستثمارية الخاصة المحلية هي أكثر أنواع الإستثمار تطبيقاً للإستثمار السياحي المستدام. أوصي البحث بضرورة تبني المؤسسات السياحية الحكومية لممارسات الإستثمار السياحي المستدام، وكذلك توسع المؤسسات السياحية الخاصة في تلك الممارسات لما له من أثر كبير في تحقيق التنمية السياحية المستدامة.

الكلمات الدالة: الإستثمار، الإستثمار السياحي المستدام، المؤسسات السياحية، مصر.