

The Dialectic Relationship Between the Sustainable Development of Tourism and Economic Challenges in Jordan

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Abstract: This study aims to explore tourism supply and demand data before and after the Corona pandemic to determine the extent of the tourism sector's contribution to the gross domestic product in Jordan. It also aims to adopt tourism as an economic, media, and cultural interface that should be developed and sustained through specialized cadres in tourism work. The study relied on an analytical-descriptive approach. The Pearson correlation coefficient was used to study the relationship between tourism income and spending. The findings revealed a direct average relationship between the two variables before the pandemic, which was about (+0.55). In contrast, the relationship became stronger after the pandemic by about (+0.97), indicating the sector's rapid development. The study concluded that the tourism sector supported the balance of payments by supplying the state treasury with hard currency and increasing the national product. The geographical distribution of the sites of this sector provided tourists with access to its spatial diversity in Jordan. It also contributed to providing job opportunities directly through hotels, restaurants, etc., and indirectly by stimulating employment in activities related to the tourism sector, such as the industrial and agricultural sectors, which contributed to reducing unemployment rates to some extent and providing them with spatial and economic development, which necessitated preserving their sustainability.

Keywords: sustainable development, tourism, tourism supply, tourism demand, Jordan.

1. Introduction

Tourism involves behaviors that are directly related to the population, such as having awareness of tourists who accept others with their culture and practices in the country that they visit to spend a planned period. This gives the tourist conviction in their desire to return to the country or not, in addition to the level of services and facilities provided. The embassies of the tourist country also play a role in promoting the various tourist attractions in their country that are displayed in a way that harmonizes the human senses in the countries where the embassy of the tourist country that promotes its tourist attractions is located.

In order to work on tourism development, it is necessary to find economic and social development that includes the entire area of the country to provide job opportunities with financial returns for the individual in various sectors at the service, industrial, and commercial levels, which encourages interest in the tourism industry because of its great role in the national economy of the country, as it makes this role similar to that of tourism feedback in the sense that it finances its sector through its resources derived from the tourists' expenses for the many and varied tourist facilities over the entire area of Jordan. It meets the diverse feelings of any tourist according to his desires and whims and according to his cultural background. This gives continuity to the development and prosperity of tourism year after year in order to raise it to the level of satisfying the tastes of tourists in order to attract them to the place and encourage them to revisit it, in addition to encouraging their acquaintances to visit it.

Other economies' sustainable development has requirements that may differ from some developmental details in the tourism aspect, which creates a kind of conflict between the two developments on an ongoing basis, depending on their specificity. This conflict brings the two developments to their best form. As philosopher Hegel says, this dialectic does not stop: "There is an idea, and it has a contradiction that results in a new structure, and this dialectic does not stop." [1].

Jordan's many tourism potentials attract tourists from all over the world, leading to a question such as "Why do not we support the weak link between tourism development's details and other economies' overall development?" For this study, a main scientific hypothesis was formulated: "The basic components involved in the tourism industry are different from other industries because they are a natural cultural heritage that represents an accumulated human product, in addition to the geographical location and natural features, which makes it a different industrial idea from the rest of the traditional industries. Whether in their production or marketing, they are also affected by global variables and

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pandemics".

This study aimed to adopt tourism as an economic, media, and cultural interface that should be developed and sustained through specialized cadres in tourism work, as well as reveal the contributions of the tourism sector to the levels of supply and demand that determine the impact of the tourism sector on the balance of payments and gross domestic product (GDP) to determine the extents of the relationship between tourism income and spending on it.

This study relied on the analytical-descriptive approach by collecting data and information to identify tourism supply and demand data. The statistical tables issued by the Ministry of Tourism and Antiquities and the Central Bank of Jordan constituted the main tools for addressing this study.

2. Literature Review

Extensive research has dealt with the impact of tourism on development in many countries from different points of view. Al-Ma'aitah referred to the lack of infrastructure in many tourist areas in Jordan, which led to the concentration of hotel tourism activity in Amman and Aqaba [2]. Al-Ta'amneh states that the tourism sector in Jordan is one of the most important economic activities capable of attracting hard currency, in addition to its contribution to the gross domestic product (GDP) of 10.59% in 1998, which is a large percentage when compared to other economic sectors [3]. Fischer et al. studied the Jordan tourism cluster. They concluded that Jordan faces challenges due to its location in a volatile region and regional instability, making it highly vulnerable to the loss of tourists [4]. Kreishan's study concluded a positive relationship between tourism development and economic development in the long term. It also revealed a long-term, unidirectional causal relationship between tourism and economic growth [5]. Holzner examined data from 134 countries from 1970 to 2007. He concluded that countries dependent on tourism do not face real distortions in the exchange rate or deindustrialization. However, they have economic growth rates which might be higher than average [6]. Also, Kreishan's study showed that the response of tourism supply in Jordan was consistent with the level of tourism demand. The tourism market's development was reflected in tourism's contribution to the Jordanian economy [7].

Furthermore, Mohammad pointed out that sustainable tourism development requires consistency and integration between the utilization of environmental resources, technological development, and the flow of investments in order to achieve the goal of linking the present with the future to meet various desires [8]. Ibrahim revealed that society has a narrow view of tourism, despite its importance as an economic activity that drives development in the country [9]. Al-Azzam concluded that there is a positive relationship between the per capita share of tourism income and the per capita share of GDP, as an increase in per capita tourism income of 1% leads to an increase of about 0.42% of the per capita share of GDP [10]. Qamouri's study showed weak tourist demand and supply in Morocco and high prices in some areas, which led some Moroccans to spend holidays outside the country at a lower cost [11]. What distinguishes the present study is that it took the indicated period before and after the Corona pandemic to identify the extent of the growth and development of the tourism industry in Jordan.

Sustainable Development

Sustainable development plays an effective role in developing various aspects of life by achieving acceptable growth rates, raising the population's standard of living, and meeting their various needs. It also contributes to solving economic problems, facing challenges, and achieving the desired economic progress based on various efforts [12]. All economic sectors of the country come together and interact with each other to achieve spatial development. When these sectors take future dimensions in developing their performance and work mechanisms for local competition to improve regional competition and transcend it towards international competition, they will have achieved the sustainable dimension in their production that is in demand outside the local circle.

The tourism sector was one of these with a different dimension regarding the nature of its requirements and the mechanics of working with it, as it only marketed advertising for it. The demand for it is in its ability to provide attractive places in harmony with public taste at all levels, which moves man's curious desire to see these places. The more people come to them, the more this industry develops and flourishes, adding a sustainable dimension [13].

Tourism Development and Its Local Implications

Tourism development plays a prominent role in revitalizing the local dimension of the country that is interested in this vital sector through a set of vital indicators that include many opportunities to improve the country's performance, namely [14]:

1. Creating job opportunities in tourism through its industry involves a variety of mechanisms that all contribute to the activation and expansion of this industry, whose leadership necessitates more workers with various qualifications, resulting in an increase in individual income and its ramifications on society in general, and the higher the level of

tourism services. This leads to an increase in tourist spending, and this is a requirement targeted by tourism in order to improve its performance.

2. Raising the performance of the balance of payments: The balance of payments is linked to the financial values leaving the country and the financial values entering it to determine the surplus or deficit in this balance. Therefore, tourism contributes to the flow of foreign tourist capital into the host country. This contributes to the improvement of tourism projects within the country. In addition to supporting its economy, linking the tourism sector with its counterparts from other economic sectors ensures that all sectors work together like gears interlocking with one another, to successfully manage the wheel of economic development in the country in which tourism and its branches of industry are active. Depending on tourist demand, this brings more foreign currency into the country. This is linked to the level of tourism supply to meet the quality and levels of this demand, which promotes an increase in the national product and economic construction. This is reflected in the revitalization of this industry and the impact of its returns on wide segments of society. With this dialectic, whose idea represents tourism development, its opposites in other sectors generate new developmental ideas that improve the tourism industry and its performance.
3. Tourism activity increases investment and the profitability of the state by encouraging local and foreign investment and creating opportunities for competition in its development to outperform tourism in its neighbouring regions. This explains the Kingdom of Saudi Arabia's orientation towards this important tourism industry, which was taken from NEOM. To compete with its neighbouring tourist areas, a smart tourist city has taken up residence near the entrance to the Gulf of Aqaba, so the competition in this area must be intense in finding the best alternatives and presenting them to the tourists. Investors will be attracted to minds with future theoretical and applied dimensions. Because natural energy resources do not last forever, the tourism alternative is the new financial stock that enhances the state's economy.
4. Tourism develops the cultural levels of the population who practice their work and services in those places, improving their standard of living, increasing their incomes, and enabling them to learn different languages to deal with different tourist nationalities.

Tourism Characteristics

The tourism industry is unique from the rest of the industries and other vital activities that would enhance the country's economy, so the following characteristics stand out in the tourism industry [12]:

1. It is located in places that were once civilized centers and have now become tourist attractions despite being located at great distances from currently inhabited areas, and it attracts some handicrafts, souvenirs, and food stalls, and the establishment of accommodation near it serves tourists in the region.
2. It arouses pleasure, curiosity, and discovery among visiting tourists and those taking memorial photos, and the locations, antiquities, and ancient civilized buildings indicate that the area previously suitable for human settlement is no longer suitable for what it was, and these tourist places provide the visitor with psychological comfort and energy renewal.

The Correlation Cogwheel between Sustainable Tourism and the Overall Sustainable Development of Other Economies in Jordan

Many countries, such as Jordan, face economic pressures, particularly those that lack oil and gas energy sources. Petrol is regarded as one of the important variables in economic and social development due to its numerous financial returns. The economic policy in Jordan focuses on investing in these minerals to increase its exports, in addition to expanding the mining sector to meet local needs and the commercial sector, which increases the movement of local capital and maintains the trade balance of Jordan. It can also be noted that the local industry thrives to enhance national and local income and that these gears are linked to each other to enhance the construction and building sectors thriving in Jordan.

It appears that Jordan works based on the theory of constraints, which searches for the weakest link and works to strengthen it so that the entire chain works strongly to maximize profitability by addressing weaknesses in the chain without making a fundamental change in the cost structure and improving production as much as possible [15]. Since this series is incomplete, Jordan turned to a very important industrial sector, the tourism industry. As soon as it employed its energy to enhance income in 2022, it raised its income by 78%, as its income from tourism amounted to 3.3872 billion dinars, equivalent to \$4.7754 billion compared to 2021 [16].

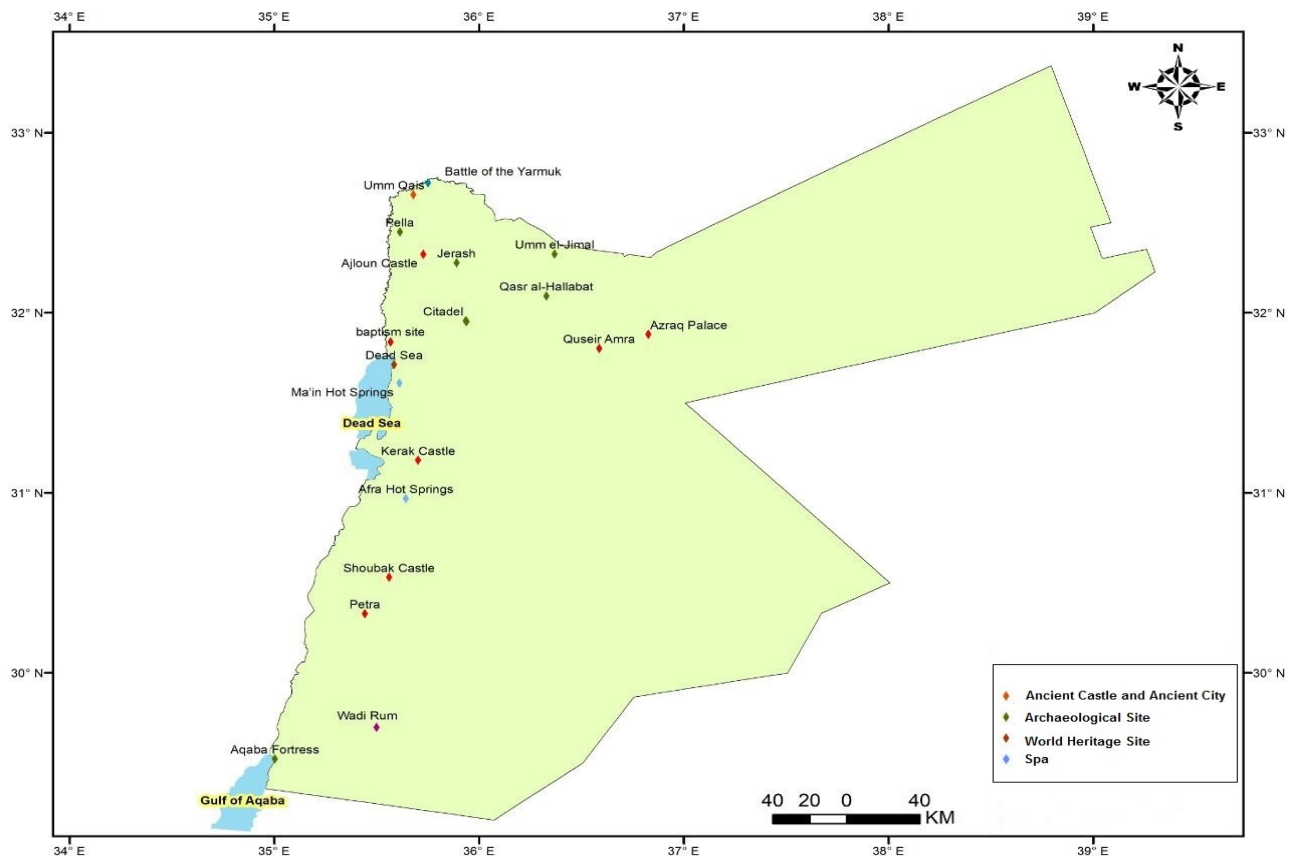
Development depends on mobilizing all of Jordan's energies and preparing all its requirements of funds, expertise, integrity, and strategic planning to notice its manifestations on the ground and its benefit to the country's population. The more it is strengthened with additional and diverse sources, the more it contributes to sustainable development.

Geographical Distribution of Tourist Places

Jordan is located in southwest Asia between longitudes 34° 59" and 39° 12" east and latitudes 29° 11" and 33° 22" north. It enjoys favourable climatic conditions with a clear tourist dimension with its mild summers, bright sun, and relatively cold winters. Because its lands are below sea level, they are popular tourist destinations in winter. The area of Jordan is about 89,342 km². Iraq, Syria, Palestine, and Saudi Arabia border it. It is climatically affected by the Mediterranean climate and sometimes by the Red Sea due to its close location. Jordan's location made it populated; its location is also the reason why it has many archaeological sites from various civilizations, which are now invested as tourist destinations [17].

The tourist attractions are distributed on the land of Jordan in different areas of its topography, which constitutes the Jordanian Badia, the largest proportion of the area of Jordan, as its area is estimated at 75% of its current area. Many population centers are located in this region. Also, the Jordan Valley stands out as a clear landmark in Jordan. It is a rift valley that extends from north to south after the course of the Jordan River and descends from a height of 1500 meters at the Golan Heights to a 272-meter-low area centering on the Dead Sea. There are mountainous heights, some of which are arable, especially those surrounding the Jordan River. Furthermore, the central part of it, such as the Balqa Heights, stands out. It starts from the Zarqa River in the north to Wadi Al-Hasa in the south and then comes the Al-Sharah Mountain range, whose highest peaks reach 1854 m in the south [18].

This Jordanian landscape has resulted in the distribution of tourist facilities in places of diversity and distinction between one tourist area and another, as shown in the (Figure 1). There is a cluster of historical sites in the northern region of Jordan because it is closer to the entrances of the civilizations that lie in the north and centre of the country. It has a conglomerate in the northern region of Jordan because it is closer to the entrances of the civilizations that lie north of it and is less dense in the centre of Jordan. Then it is limited to two sites in the south, but they are of tourist importance because of the dazzling cultural manifestations, such as Petra and fun places like Wadi Rum and Aqaba Beach.



Source: [19]

Fig. 1: The most Important Touristic Sites in Jordan

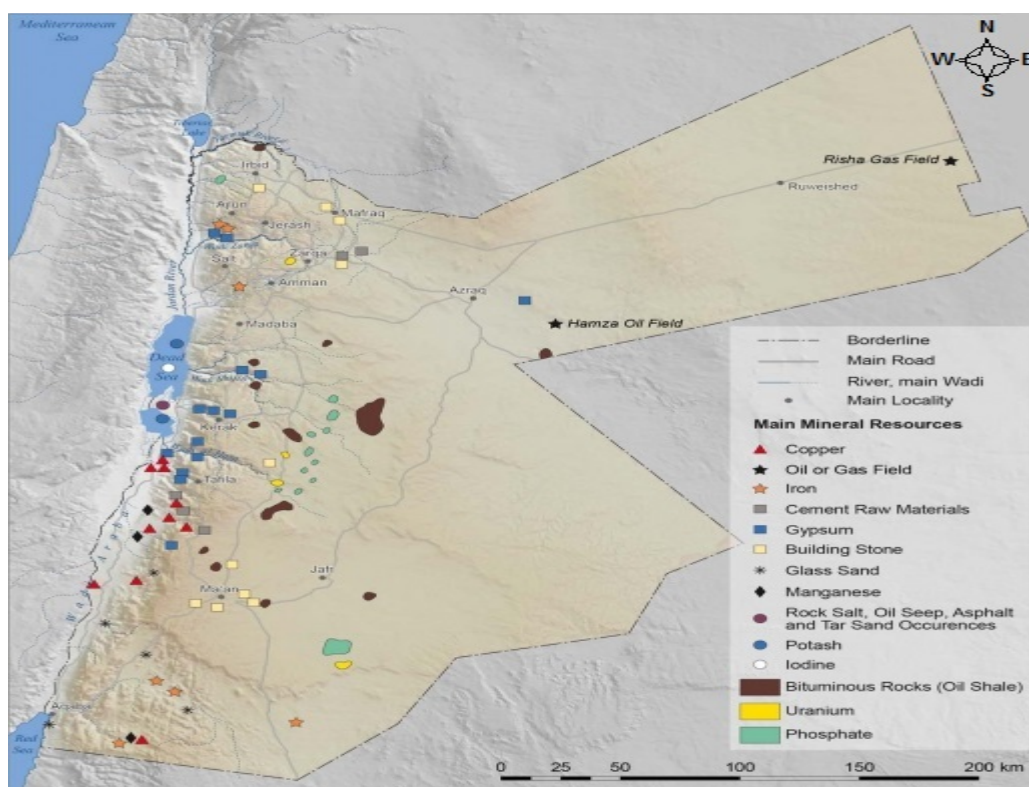
It seems that the land roads in Jordan lack a modern railway that represents the mainstay of transportation between all tourist attractions, and this would enhance the tourism industry and its sustainability, given that it is able to transport

large numbers of tourists to those attractions according to the schedules of companies that adopt the transportation of their groups tourist.

Economic Challenges in Jordan

Diversity and wealth disparity vary from country to country. What appears in Jordan's data indicates that it is a country that is almost poor compared to other regional and international countries, despite its possession of many mineral resources (Figure 2). However, its investment requires a large amount of capital in order to extract, manufacture, and market the resources, or perhaps the available quantities are not economical, in addition to the restrictions imposed by the international political situation that may prevent extraction at present.

As a result of the challenges associated with the poor natural resources, which are reflected in the decline of the industrial base, resulting in a small volume of domestic production, which resulted in the existence of unemployment as well as an increase in indebtedness, Jordan was forced to shift largely toward a market economy in order to increase its revenues by lifting subsidies, implementing privatization, and setting laws that encourage local, regional, and foreign investments [20]. Such challenges demonstrate the need to pay attention to the tourism industry, whose primary material represents the natural and cultural sites that spread in Jordan in a way that contributes to strengthening the Jordanian economy and attracts many workers. Therefore, this dialectic emerged between tourism and natural resources, which led to these challenges Jordan faced by investing in the tourism sector at its maximum capacity because of its significant financial returns in enhancing the domestic product and improving the balance of payments.



Source: [21]

Fig. 2: The Main Mineral Resources in Jordan

3. Results and Discussion

3.1. Analysis of Tourism Supply Data in Jordan During 2010–2019 Before the Pandemic

The tourist offer is a necessary and important element for the development of the tourism movement in the country by providing various means of tourist attractions to visitors. It is defined as all that the tourist area offers in terms of elements, natural or historical attractions, and services and goods that affect individuals' decisions to visit a particular country and their preference over another [22]. Among the most important data about the tourism offer in Jordan are the following:

3.1.1 Elements of Tourism in Jordan

Jordan abounds with many tourism elements that qualify it to be a major attraction in the world (Figure 1) as follows:

3.1.1.1 Natural Qualities

Jordan is distinguished by its wealth of beautiful natural and touristic qualities, making it a popular tourist destination throughout the year. Some landforms attract tourists and allow them to practice various activities and hobbies, such as gorges, canyons and others [18]. Jordan's climate is also important in attracting tourists, as the climate is characterized by moderate temperatures in April, May, and June; the sunny weather for most days of the year is a reason to create pleasant tourism opportunities. Additionally, Jordan is attractive to tourists in the winter, as the weather is also sunny even in winter, in addition to the warmth of the Jordan Valley areas.

3.1.1.2 Geographical Location

With its prominent geographical location, Jordan constitutes a meeting point for the continents of Asia, Africa, and Europe, making it a center for transportation, communications, and transit tourism, in addition to its proximity to tourist attractions in the Middle East and southeastern Europe. Such advantages of the geographical location helped tourists and tourism agencies place Jordan among their tourism programs when they visit any country in the region [18].

3.1.1.3 Archaeological, Historical, and Religious Elements

Jordan is an archaeological, historical, and religious museum that reflects the history and civilizations of the nations in this region. Several civilizations have succeeded in the land from ancient times to the present day, the effects of which remain and bear witness to their presence in Jordan [10].

3.1.2 Tourist Facilities

Tourist facilities are a major pillar in the tourism business, and they constitute an important element for investments in the country due to their large size and spread in most regions, as well as their contribution to the size of employment and the large economic return. These investments are considered a tourist and economic factor supporting other economic activities in Jordan, and they constitute, with their components, the tourism supply that changes according to tourist demand [3]. (Table 1) All tourist activities have increased year by year except for some fluctuations in the number of tourist guides and car rental offices. On the other hand, the number of tourist transport companies has not changed over the past ten years, which indicates that the development of the tourism industry needs more publicity through internal and external media to increase the number of tourists.

Table 1: The development of tourism offers in Jordan during the period 2010-2019

Activity \ Year	Hotels	Family	Touristic restaurants	Tourism and travel offices	Oriental souvenir stores	Tourist transport companies	Tourist guides	Car rent offices
2010	487	46141	802	727	304	8	988	256
2011	490	46860	804	763	312	8	1140	256
2012	496	47339	868	779	351	8	1181	255
2013	519	50142	963	806	368	8	1181	252
2014	536	51867	983	856	375	8	1188	252
2015	558	52928	1006	868	385	8	1123	252
2016	573	53811	1014	872	392	8	1138	252
2017	601	57483	979	898	305	8	1035	252
2018	588	55607	991	905	315	8	1075	252
2019	604	56131	1031	908	314	8	1229	253
Total	5452	518309	9441	8382	3421	80	11278	2532

Source: [19].

3.2. Tourism Demand Data in Jordan During the Period 2010–2019 Before the Pandemic

Tourism demand refers to the total number of people who travel, or want to travel, to use tourism facilities and services in places far from their places of work and residence [23]. The demand for tourism is affected by several factors that determine the size and type of tourism demand. Uysal's 1998 study summarizes the main determinants of tourism demand, the most important of which are [24];

- Economic factors include per capita income from the gross domestic product, the currency exchange rate, etc.
- Social and psychological factors include paid vacations, free time, travel preferences, etc.
- External factors (the business environment), such as economic growth and stability, levels of development

(infrastructure and superstructure), and epidemics, another variable, the subjective variable of the person's mood, can be added.

The methods used by McIntoch and Gupta to measure tourism demand are among the most important economic indicators that affect the volume of tourism revenues for the country, which is represented by the number of tourists and the number of nights spent by the tourists [25]. The growth in the number of tourists coincides with the growth in the average number of tourist nights, as the development of the average number of tourist nights is linked to the development of the number of tourists (Table 2). It is also noted in the same table that the number of tourists increased from 4,207,406 in 2010 to 4,488,407 in 2019, as the average growth during this period was 6.6%, as a result of the government's promotion and propaganda to attract the largest possible number of tourists from different countries of the world, as well as signing agreements with low-cost airlines [26].

The number of tourists also witnessed fluctuations during the period 2011-2016, between a decrease and an increase, as a result of the political crisis that affected the region due to the so-called Arab Spring, in addition to the emergence of the Islamic State (ISIS) in northwestern Iraq and northeastern Syria in 2014. Jordan's limited participation in missions with the international coalition against ISIS has created a false impression among tourists that Jordan is unstable. Before the Arab Spring, many tourists used to take joint package trips to Jordan, Syria, Egypt, Palestine, and Lebanon, and the fact that the political situation was unstable in the region encouraged tourists to search for other destinations, such as Greece, Cyprus, and Turkey [27].

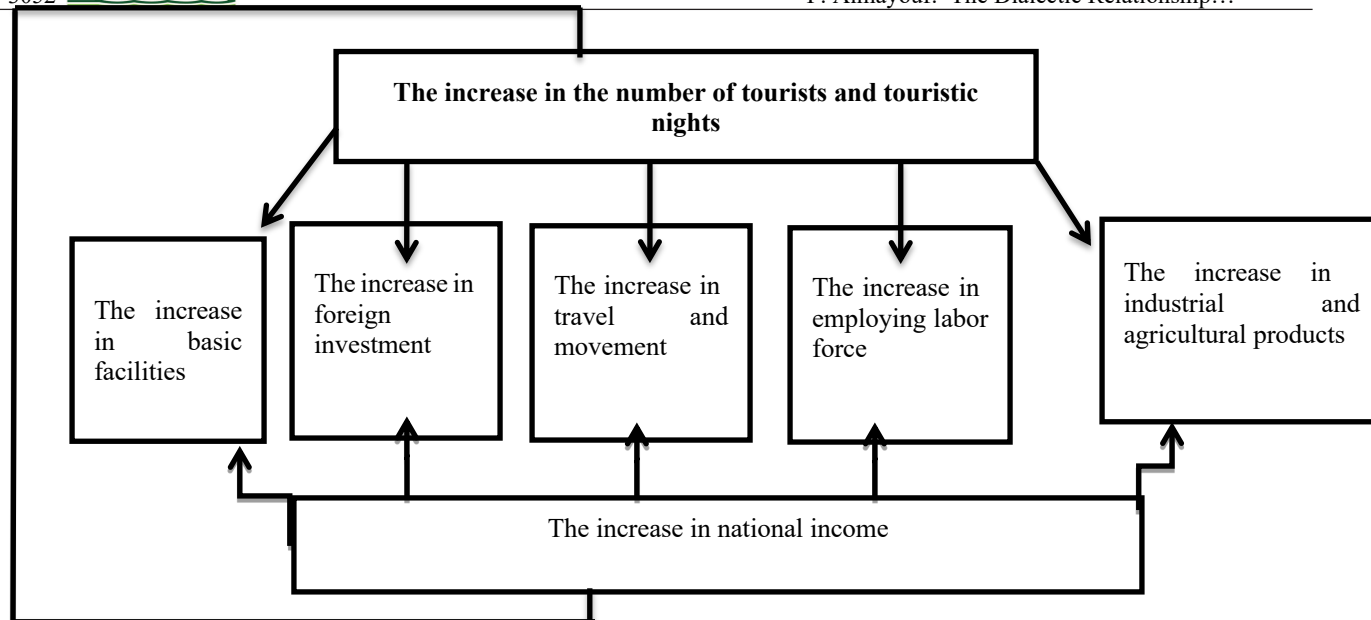
Table 2: The development in the number of tourists and the average number of tourist nights in Jordan during the period 2010-2019

Activity Year	Number of tourists	Average touristic nights
2010	4.207.406	4.5
2011	3.959.643	4.3
2012	4.162.367	4.2
2013	3.945.360	4.3
2014	3.989.913	4.6
2015	3.761.072	3.7
2016	3.567.195	4.2
2017	3.843.533	4.6
2018	4.150.173	4.7
2019	4.488.407	4.8

Source: [19].

In the same context, the number of nights tourists spend in Jordan is an important indicator of the return on tourism investment for the country (Figure 3). The increase in the number of tourists and tourist nights contributes to an increase in the demand for the consumption of agricultural and industrial products, as well as an increase in foreign investment in tourist facilities that need human resources, in addition to an increase in basic services. All such increases require modern networks of roads and transportation. Increasing the effectiveness of each of the other activities of the state leads to a rise in national income, which will contribute to the financing and development of activities that serve the tourism sector. This will result in a significant increase in the number of tourists and the average stay period, which will be reflected in the increase in tourist nights [28].

(Table 2) shows that that the highest rate of the average number of nights was recorded in 2019, while the lowest rate was recorded in 2012 and 2016, with about 4.8 and 4.2 nights, respectively The table also indicates that the average number of nights spent by tourists in Jordan amounted to approximately 4.4 nights during the study period. The European countries are ranked first in the average number of nights, followed by Arab countries during the same period, which amounted to about 5.5 and 3.6 nights, respectively, and most of their stay was concentrated in Amman, Aqaba, and the Dead Sea [16].



Source: [28].

Fig. 3: A feedback loop between the increase in the tourism sector and other activities and the increase in income

3.3 The Impact of Tourism on the Jordanian Economy Before the Pandemic

Tourism contributes a major role in revitalizing the economies of countries receiving tourism, as the tourism movement affects employment levels, tourism sector revenues, the balance of payments, and others [3]. In this aspect, the focus will be on three main dimensions, which are among the most important contributions that tourism makes to any developed or developing economy:

3.3.1 The Contribution of the Tourism Sector to the Gross Domestic Product

Tourism is one of the most important sectors witnessing rapid development due to its economic importance, as seen in the high growth rate during the study period (Table 3). It increased from 2545.2 million dinars in 2010 to 4108.2 million in 2019, with an increase of 61.4%, as this was in normal conditions before the Corona pandemic. In terms of tourism's contribution to the gross domestic product, (Table 3) and (Figure 4) show a clear fluctuation in percentages, with the highest GDP recorded in 2010 at 13.5% and the lowest one in 2016 at 10.3%, This drop in the GDP might be attributed to the negative effect of the political unrest in the neighbouring countries as well as to the absence of tourism marketing in Jordan.

The average contribution of the tourism sector to the GDP during 2010–2019 amounted to 12.1%, exceeding 10%, which is the percentage recommended by the World Travel and Tourism Council [12]. This increase indicates the development and progress of the tourism sector in Jordan as a result of the adoption of several strategies by the Ministry of Tourism and Antiquities, contributing to the advancement of the tourism sector. The most important is the National Tourism Strategy for 2004–2010, the National Tourism Strategy for 2011–2015, and the Ministry of Tourism and Antiquities' strategic plan for 2018–2020, which included improving tourism marketing, supporting competitiveness, and developing the tourism product among its main objectives [16].

It can be said that the relative importance of this sector could not be underestimated in the Jordanian economy during the ten years preceding the pandemic, so this sector works to stimulate the rest of the other sectors in the country to develop craft and souvenir industries, meaning that it creates new ideas that deal with the tourism concept of the tourist's taste and desires. Moreover, this, in turn, is reflected in the development and prosperity of tourism. With this permanent dialectic between the tourism sector and the rest of the sectors, all sectors are strengthened and developed for the better, which drives the country's economic wheel.

Table 3: shows the direct contribution of tourism to the GDP during 2010–2019

Year	Tourism Income in Million JD	Gross domestic product (current prices)*	Relative importance of tourism sector (GDP%)**
2010	2545.2	18828.9	13.5
2011	2431.5	20524.3	11.8

2012	2883.6	21964	13.1
2013	2923.1	23868.4	12.2
2014	3106.6	25595.8	12.1
2015	2886.1	26925.1	10.7
2016	2870.9	27829.6	10.3
2017	3293.6	28903.4	11.4
2018	3726.6	29984.2	12.4
2019	4108.2	31098.7	13.2

(*) Source: [29].

(**)Materiality is equal to tourism income divided by GDP multiplied by 100.

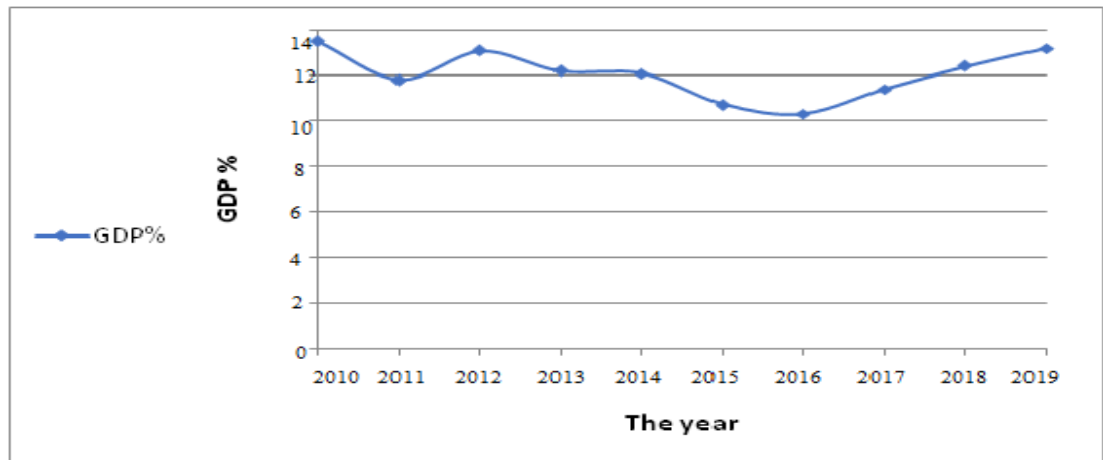


Fig. 4: The relative importance of the tourism sector (GDP) during the period 2010-2019

3.3.2 The Contribution of the Tourism Sector to the Balance of Payments

The economic importance of tourism is measured by its effects on the balance of payments through the tourism revenues that the state obtains from tourists’ remittances and their spending within the state [28]. The tourism balance positively impacts the balance of payments through its persistent surplus. It is noted in (Table 4) that the net tourism balance achieved clear growth during 2010-2019, as it increased from 1534.7 million dinars in 2010 to 3070.5 million dinars in 2019. During the same period, it witnessed a growth of about 100%, which indicates that the tourism sector in Jordan was able to attract the largest number of tourists in addition to its ability to compete internationally.

On the other hand, it is noted that the contribution of the tourism sector to total exports has increased, and it constituted an average of 55.5% of the value of exports, which indicates the importance of tourism to the Jordanian economy through its acquisition of more than half of the total exports during the study period. The percentage of its contribution to exports in 2019 was about 69.6%. Hence, it constituted more than two-thirds of exports, and this is due to the political unrest that took place in the countries neighbouring Jordan, which resulted in the closure of the northern border with Syria and the eastern border with Iraq. This contributed to a decrease in exports to these countries, so the percentage of tourism income's contribution to total exports increased. On the other hand, it recorded the lowest percentage of contribution to exports in 2011, at a rate of about 43%, due to the Arab Spring revolutions that took place in late 2010 and early 2011 and continued until 2019. Nevertheless, tourism accounts for large proportions of the total exports, and here the importance of the tourism sector is evident, which should be given attention to and developed as it is an important part of Jordanian exports, which in turn is reflected in the balance of payments and the trade balance [10].

Table 4: The contribution of tourism to the balance of payments and exports during the period 2010–2022.

Year	Tourism Income in Million JD (*)	Tourism Expenditure in Million JD (*)	Tourism Balance in Million JD	Exports in Million JD (**)	Ratio of Tourism Income to Exports (%)
2010	2545.2	1010.5	1534.7	4990.1	51
2011	2431.5	823.9	1607.6	5654.1	43
2012	2883.6	811.9	2071.7	5598.7	51.5
2013	2923.1	778.3	2144.8	5616.6	52

2014	3106.6	810.7	2295.9	5953.6	52.2
2015	2886.1	823.4	2062.7	5558.4	51.9
2016	2870.9	892.9	1978	5331.4	53.8
2017	3293.6	984.0	2309.6	5303.1	62.1
2018	3726.6	984.6	2742	5518.5	67.5
2019	4108.2	1037.7	3070.5	5902.2	69.6
2020	1000.3	270.7	729.6	5639.7	17.7
2021	1899.6	627.0	1272.6	6643.8	28.6
2022	3387.2 ^(***)	794.4	2592.8	8107.5 ^(****)	41.8

Source: (*) [29].

(**) [30].

(***) Tourism income up to the third quarter of 2022.

(****) The value of exports during the first eleven months of 2022.

To find out the type of relationship between tourism income and tourism expenditure before the Corona Pandemic (2010-2019), the researcher used Pearson correlation coefficient, which is calculated according to the following equation [31]:

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

Whereas:

r = correlation coefficient.

n = number of observations.

$\sum x$ = the total value of touristic income.

$\sum y$ = the total value of touristic expenditure.

$$r = \frac{10 \times 27823034.8 - 30775.4 \times 8957.9}{\sqrt{[10 \times 97085157.3 - (30775.4)^2] \times [10 \times 8111861 - (8957.9)^2]}}$$

$$= \frac{2547392.3}{4555429.5}$$

$$= 0.55 +$$

It is clear from the result of the equation that there is a moderate correlation between tourism income and tourism expenditure, i.e., a positive relationship. The higher the tourism income, the higher the tourism expenditure.

3.3.3 The Contribution of the Tourism Sector to Job Creation

Tourism is characterized as a growing economic activity, especially concerning the use of labour, as it needs large numbers of human resources. However, it varies in size and quality according to the level of tourism activities. The workforce associated with the tourism sector is classified into four categories [32]:

1. The first category includes permanent workers who directly work in the field of tourism and work in hotels, restaurants, tourism agents, tourist resorts, etc.
2. The second category is supporting workers who work in tourism and promotional activities.
3. The third category includes seasonal workers who work during peak tourism seasons.
4. The fourth category is "induced employment," which includes people working in various sectors that benefit from tourism, such as construction, catering, and agricultural workers.

The first category constitutes the main focus of the tourism industry, and tourism activities vary in their need for human resources according to their nature, level of performance, and degree of importance to the comfort of tourists [32].

(Table 5) and (Figure 5) show an increase in the number of workers in the tourism sector from 41,900 workers in 2010 to 53,488 workers in 2019, a growth of about 27.6%. It should also be noted that the volume of employment in tourist restaurants accounted for the largest share of employment, followed by hotels from 2010 to 2015, while hotels ranked first in the volume of operations from 2016 to 2019. This is due to the increase in the volume of investments in this sector, which amounted to about 3.5 billion Jordanian dinars. The demand for investment in it came due to the lack of sufficient hotel rooms to cover the demand in Jordan and the security and stability that Jordan enjoys compared to other countries in the region [33]. When comparing the size of employment between sectors, it is clear that tourist restaurants ranked first (around 40.1% of the total workforce) followed by the hotel sector in second place (38.2% of the total workforce). Travel and tourism offices came in third place with a rate of 10%; the other sectors obtained around 11.7%.

It is worth noting that the number of workers mentioned in the same table does not reflect the actual size of job opportunities generated by the tourism sector, as the sector creates indirect job opportunities in the economy, especially in industry, agriculture, and other sectors related to the tourism sector [2]. It is difficult to know for sure the numbers of those who managed to get jobs as a result of the multiplier effect of tourism on the economy.

Table 5: The number of workers engaged in tourism activities during the period 2010-2019

Item	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Hotels	15080	15174	15419	18307	18644	19058	19298	20670	20670	20918
Touristic restaurants	17345	16855	18439	19512	19450	19508	20260	20195	20380	20701
Tourism and travel offices	4351	4582	4719	4783	4971	4975	4981	4885	4885	4793
Car rental offices	1520	1489	1489	1476	1476	1476	1476	1755	1755	1902
Souvenirs stores	791	814	870	940	1003	1023	1043	848	848	862
Touristic guides	988	1140	1181	1200	1136	1123	1138	1054	1054	1229
Caravan escorts	713	713	713	713	713	713	713	413	413	528
Touristic travel companies	939	939	939	1047	1047	1047	1047	1047	1047	2050
Diving centers	48	48	48	48	48	48	148	148	148	150
Water sports	125	125	125	125	125	125	255	255	350	355
Total	41900	41879	43942	48151	48613	49096	50359	51270	51550	53488

Source:[16].

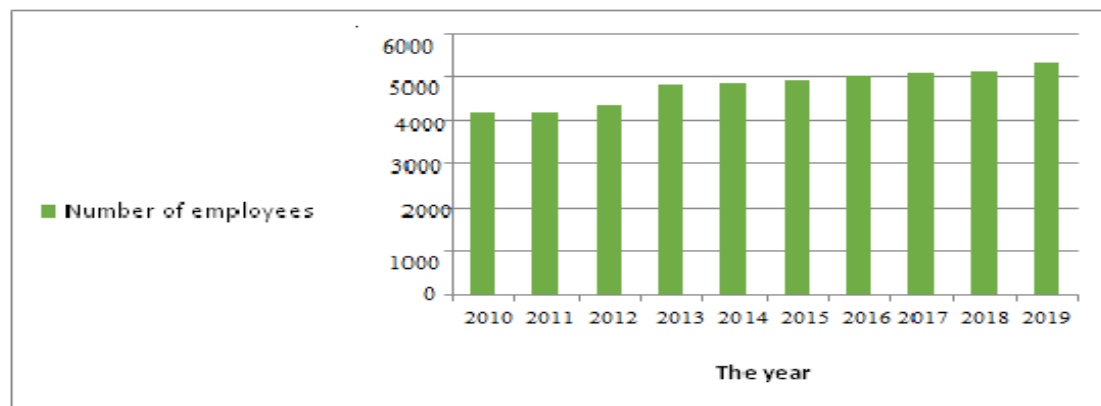


Fig. 5: The evolution of the number of workers in the tourism sector during the period 2010–2019

3.4 The Tourism Situation after the Corona Pandemic

After the tourism situation was analyzed and explained before the Corona pandemic, it was necessary to analyze the tourism situation after the pandemic to identify the impact of this pandemic and how Jordan was able to overcome it by examining some statistics that were available for research and were not more than three years old 2020 , 2021 , 2022, but they gave a useful statistical indicator. Although there were no significant increases in variables, gave a correlation

of (+0.97), noting that it was before the pandemic (+0.55) and this means that the tourism sector was able to return to its previous activity at a speed that contributed to revitalizing the rest of the other sectors to strengthen the national economy, as it reached approximately (4,123,6) billion Jordanian dinars, despite the short period after the pandemic for the year 2022 (Table 4). This indicates the importance of this sector, as the country's tourism revenues always exceed spending on it, which indicates its profitable importance, as the exports of this sector in 2022 amounted to about (8107.5) million Jordanian dinars, which increased over the years that took place. It preceded it in the years before the pandemic, which necessitates relying on it and developing it for its sustainability in supporting the rest of the industrial and agricultural sectors, as tourism represents the main cog for managing the economic wheel in Jordan. This is what appears in its arrangement among the countries of the world in terms of the tourism situation, as it is ranked (64) out of a total of (117) countries, (figure 6) [34].

The Pearson's correlation coefficient also showed that there is a strong correlation between tourism income and tourism spending, i.e., a direct (positive) relationship amounting to (+0.87) during the period 2010-2022, that is, before and after the Corona pandemic.



Source: [34].

Fig. 6: The score and ranking of some countries on the Travel and Tourism Development Index 2021

4 Conclusions

The importance of the dialectical relationship between the tourism sector and other sectors in developing the national economy has emerged, and the spatial distribution of geographical diversity greatly impacts attracting tourists to get to identify the cultural stock of Jordan. The tourism sector witnessed a clear development in the number of tourists, accompanied by a noticeable increase in the number of hotels, tourist restaurants, and other tourist facilities. The tourism sector's contribution reached (13.2%) of the GDP in 2019 and increased to (16.5%) in 2022. It accounted for (69.6%) of total merchandise exports in 2019 and decreased to (50.9%) in 2022. The contribution of this sector after the pandemic was (16.5%) of the gross domestic product (The gross domestic product until the third quarter of 2022 was about (25,046) billion (source: Central Bank of Jordan, (2023) unpublished data)), and its tourism revenues amounted to (50.9%). This decrease in the contributions of the tourism sector compared to the average before the Corona pandemic is evidence of the return of activity in this sector after the epidemic stopped the reasons for the sustainability of other economic sectors.

Furthermore, the tourism sector supported the balance of payments by supplying the state treasury with hard currency and increasing the national product. It also contributed to providing job opportunities directly through hotels, restaurants, and other services related to tourism and indirectly by stimulating employment in activities related to the tourism sector, such as the industrial and agricultural sectors, which contributed to reducing unemployment rates to some extent. On the other hand, the political turmoil that ravaged the region during the Arab Spring period and the Corona pandemic played a prominent role in deepening the crisis of the tourism sector through the decrease in the number of tourists coming to Jordan, which negatively affected the volume of revenues for this sector.

This study recommends developing and supporting the traditional industries sector (traditional handicrafts), given the association of the products of this sector with tourism activity, which will contribute to increasing sales and income and creating job opportunities. The study also recommends establishing a crisis management center related to the tourism

sector to mitigate the repercussions of regional and global political conditions that might affect this sector in case any such crises occur.

Conflict of interest

The author declares that there is no conflict regarding the publication of this paper.

Reference

- [1] Maybee, J. "Hegel's Dialectics", Stanford Encyclopedia of Philosophy Archive, First published, (2016).
- [2] Al-Ma'aitah, S. Analytical Study of the Tourism Sector and its Effect on the Jordanian Economy during the period 1970-1989, Unpublished Master's Thesis, University of Jordan, Amman, 117, 31-34, (1991).
- [3] Al-Ta'amneh, M. The Role of Tourism in the Economic Development in Jordan between 1980-1999, unpublished Master's Thesis, University of Jordan, Jordan, 53, 47, 48, 80, (2001).
- [4] Fischer, J., et al. Jordan Tourism Cluster, Microeconomic of Competitiveness (Report), (2009).
- [5] Kreishan, F. Tourism and Economic Growth: The Case of Jordan, European Journal of Social Sciences, Vol. (15), No. (2), (2010).
- [6] Holzner, M. Tourism and economic development: The beach disease, Vol. (32), No. (4), (2011).
- [7] Kreishan, F. The Economics of Tourism in Jordan: A statistical Study during the Period 1990-2011, Arab Economic and Business Journal, Vol. (9), No. (1), (2014).
- [8] Mohammad, W. The Economic Impact of Green Tourism in Achieving Sustainable Development in the Egyptian Economy - A Case Study in the Red Sea Region, unpublished doctoral thesis, Ain Shams University, Egypt, (2015).
- [9] Ibrahim, A. The role of the tourism sector in economic development in Sudan during the period 2005-2014, unpublished Master's Thesis, Al Neelain University, Sudan, (2015).
- [10] Al-Azzam, I. The Contribution of Tourism in Economic Growth in Jordan: Empirical Study during the Period 1990-2014, Unpublished Master's Thesis, Yarmouk University, Jordan, 14, (2016).
- [11] Qamouri, M. Tourism and its Role in Achieving Economic Development, Morocco a Model, Journal of Economic Growth and Entrepreneurship, Vol. (4), Issue (1) ,(2021).
- [12] Bo Dirbala, R. The Role of the Tourism Sector in Economic Development - An Analytical Comparative Study between Algeria and Jordan, Unpublished PhD Thesis, Alarbi Ben M'hidi University, Oum El Bouaghi, Algeria, 102, 67, (2017).
- [13] The World Tourism Organization, (2021).
- [14] Safouri, Q. The Role of the Tourism Sector, Facilities and Services in the Jordanian Economy from: 'from Sector Workers Point of View', Unpublished Master's Thesis, Yarmouk University, Jordan. 22-23, (2006).
- [15] Al-Nour, O & Al-Ajab, A. The impact of the integration of the theory of restrictions and the value chain to reduce production costs in Sudanese industrial companies, Global Journal of Economics and Business, Vol. (11), No. (2), 189, (2021).
- [16] <https://www.mota.gov.jo>.
- [17] Makhamreh, Z., et al. Geography of Jordan, Dar Wael for Publishing, 3rd edition, Amman, Jordan, 13, 15 ,(2015).
- [18] Bathatho, I. The Jordanian Tourism in a Hundred Years, Ministry of Culture, Jordan, 25-27, 23, 20-21, (2021).

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- [19] The Ministry of Tourism and Antiquities. Department of Planning and Studies, Unpublished Data, (2022)
- [20] Mohammad, I. Internal and external challenges affecting the national security of Jordan in the period (1999-2013) "case study", Unpublished master's thesis, Middle East University, Amman, Jordan, 71, (2013).
- [21] <https://books.openedition.org/ifpo/docannexe/image/7688/img-1.jpg> .
- [22] Elias, S., et al. Marketing of Tourism Services, First Edition, Dar Al masirah for Publishing and Distribution, Amman, Jordan, 11, (2002).
- [23] Mathieson, A & Wall, G. Tourism: economic, physical and social impacts, Longman Scientific and Technical, Harlow, Essex. 16, (1982).
- [24] Stephen, J. (2007). Tourism Management: managing for change, 2nd edition, Elsevier Butterworth-Heinemann. 68-69, (2007).
- [25] Mcintosh, R & Gupta, Sh. Tourism: Principles, Practices, Philosophies, Third Edition, Ohio, (1980).
- [26] <https://ar.visitjordan.com>.
- [27] Economic and Social Council of Jordan. State of the Country Report: Tourism, Amman, Jordan, 6-7,(2018).
- [28] Monji, I. Continuous Tourism Development from the Perspective of its Relationship to the Environment, Egyptian Journal of Development and Planning, Vol. 10, No. (1), Cairo, p. 134, 128-135 (2002).
- [29] The Central Bank of Jordan. (2022, 2023). Unpublished data, Amman.
- [30] The Central Bank of Jordan, Annual Reports, 2010-2021.
- [31] Al-Daman, M. The Fundamentals of Scientific Research, first edition, Dar Almassira for Publishing and Distribution, Amman, Jordan, 215, (2007).
- [32] Shawky, M. Geography of Tourism, First Edition, Dar Al Wafaa for Publishing, Egypt, 145-146, (2011).
- [33] Jordan Hotels Association, (2021).
- [34] The World Economic Fourm, (2022).